Division of Land / Environmental Review

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DRAFT ENVIRONMENTAL IMPACT REPORT

VOLUME I

NORTHEAST LOS ANGELES COMMUNITY PLAN AREA

USC Health Sciences Campus Project

ENV-2004-1950-EIR
State Clearinghouse No. 2004101084

Council District 14

THIS DOCUMENT COMPRISES THE FIRST PART OF THE ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE PROJECT DESCRIBED. THE FINAL EIR, WHICH WILL ALSO CIRCULATE FOR PUBLIC REVIEW AND COMMENT, COMPRISES THE SECOND AND FINAL PART.

Project Address: USC Health Sciences Campus/1510–1520 San Pablo Street
Los Angeles, CA 90033

Project Description: The Project is proposed to occur on seven development sites within the USC Health Sciences Campus (HSC). The seven development sites are identified as Development Sites A through G. The Project consists of the development of between 585,000 and 765,000 square feet of academic and medical research facilities as well as medical clinic facilities. The development sites currently contain surface parking lots and/or are underdeveloped. Parking accommodations to support the proposed academic and medical-related uses are also included as part of the Project. The seven development sites comprise approximately 22 acres within the existing HSC. Actions requested by the applicant include: a General Plan Amendment from Public Facilities to General Commercial for Development Site C; a General Plan Amendment from Limited Industrial to General Commercial for Development Sites E and F; a Zone Change from PF to C2 for Development Site C; a Zone Change for the Development Sites to establish [Q] and/or [D] conditions; a Height District Change from 1VL to 2 for Development Site D; a Zone Change from CM-1 to C2-2 for Development Sites E and F; a Variance from the distance requirement for parking to be provided within 750 feet of the proposed use; the abandonment of Henry Street through either a merger and resubdivision or a street vacation; and possible subdivision actions.

APPLICANT:
University of Southern California

PREPARED BY:
Environmental Review Section
Los Angeles City Planning Department

May 2005

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I. SUMMARY

1. PURPOSE OF THE EIR

This Draft Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA)[1] and the Guidelines for California Environmental Quality Act (State CEQA Guidelines), as amended.[2] As discussed below, the City of Los Angeles is the Lead Agency pursuant to CEQA.

The purpose of this EIR is to inform agency decision-makers and the general public of the potential environmental effects of developing additional academic and medical-related (e.g., medical research, medical clinic, etc.) facilities within the existing Health Sciences Campus (HSC) in northeast Los Angeles (the "Project"). In accordance with Section 15121 of the State CEQA Guidelines, the EIR shall 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 mitigation measures and feasible alternatives to the Project as proposed.

In accordance with Section 15130 of the State CEQA Guidelines, this EIR also includes an examination of the effects of cumulative development in the vicinity of the proposed Project. Cumulative development includes future development expected to occur prior to or concurrent with the construction and opening of the proposed Project. The EIR also evaluates the potential impacts of four alternatives to the proposed Project.

2. EIR FOCUS AND EFFECTS FOUND NOT TO BE SIGNIFICANT

In compliance with CEQA Section 21080.4, a Notice of Preparation (NOP) was prepared by the City of Los Angeles and distributed to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties on October 20, 2004. The 30-day response period for the NOP ended on November 19, 2004. The Initial Study attached to the NOP identified those environmental topics where the proposed Project could have adverse environmental effects and indicated that an EIR would need to be prepared to document these effects.

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[1] *Public Resources Code Sections 21000-21178.*

[2] *California Code of Regulations Title 14, Chapter 3, Sections 15000-15387.*

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

- Land Use/Planning;
- Aesthetics/Views;
- Transportation/Circulation;
- Air Quality;
- Noise; and
- Utilities (Water and Wastewater)

A public scoping meeting for the EIR was held on November 4, 2004. Written and oral comments were taken at the scoping meeting and letters were submitted from interested parties. The Initial Study conducted for the proposed Project and the NOP, as well as written and oral comments received in response to the NOP, are presented in Appendix A of this Draft EIR. The City of Los Angeles determined that the proposed Project would not have the potential to cause significant impacts in the following areas: Agricultural Resources, Biological Resources, Cultural Resources, Geology/Soils, Hydrology/Water Quality, Hazards/Hazardous Resources, Hydrology/Water Quality, Mineral Resources, Population/Housing, Public Services, and Recreation. Therefore, these issues are not examined in this Draft EIR. The rationale for the finding that no significant impacts would occur for these issues is provided in the proposed Project's Initial Study, attached as Appendix A of this Draft EIR.

3. EIR ORGANIZATION

This Draft EIR is organized into the following seven chapters:

I. **Summary.** This chapter describes the purpose of the EIR, EIR focus and effects found not to be significant, EIR organization, Project background, areas of controversy and issues to be resolved, public review process, discretionary actions, and a summary of environmental impacts and mitigation measures as well as alternatives to the proposed Project.

II. **Project Description.** This chapter presents the location, characteristics, and objectives of the proposed Project.

III. General Description of the Environmental Setting. This chapter contains a description of the existing setting and a list of known related projects in the region that are anticipated for completion by 2015, the expected time of completion for the proposed Project.

IV. Environmental Impact Analysis. This chapter contains the environmental setting, Project and cumulative impact analyses, mitigation measures, and conclusions regarding the level of impact significance after mitigation for each of the environmental issues addressed in this EIR (i.e., Land Use, Aesthetics/Views, Transportation/Circulation, Parking, Air Quality, Noise, and Utilities).

V. Alternatives to the Proposed Project. This chapter provides analyses of each of the alternatives to the proposed Project, including, but not limited to, a No Project Alternative and the development of the proposed Project at an alternative site.

VI. Other Environmental Considerations. This chapter presents an analysis of the significant irreversible changes in the environment that would result from the proposed Project, as well as the growth-inducing impacts of the proposed Project.

VII. References, Preparers and Persons Consulted. This chapter lists all of the references and sources used in the preparation of this Draft EIR, as well as all of the persons, agencies, and organizations that were consulted or contributed to the preparation of this Draft EIR.

This Draft EIR includes the environmental analysis prepared for the proposed Project and six appendices, namely:

- Appendix A—Initial Study, Notice of Preparation (NOP), and NOP Comment Letters
- Appendix B—Mitigation Monitoring and Reporting Program
- Appendix C—Traffic Impact Analysis
- Appendix D—Air Quality Calculation Worksheets
- Appendix E—Noise Calculation Worksheets
- Appendix F—Water and Sewer Sanitation Reports
  - F-1 Water Infrastructure

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4. BACKGROUND OF THE PROPOSED PROJECT

The proposed Project would be developed within USC's existing Health Sciences Campus (HSC), a state-of-the-art academic and medical research and treatment campus with specific work in the fields of cancer, gene therapy, neurosciences, and transplantation biology, as well as programs in occupational therapy and physical therapy. As an example, the HSC includes the USC/Norris Comprehensive Cancer Center, USC University Hospital, the Zilkha Neurogenetics Institute, the Doheny Eye Institute, the School of Pharmacy, the Keck School of Medicine, the Center for Health Professions, and the Norris Medical Library. In addition to these facilities, the HSC contains many ancillary uses including vivariums, a contributing element to the ongoing academic and medical related activities that occur at the HSC. On June 22, 2004, the City's Zoning Administrator determined that vivariums are ancillary uses that are permitted within designated locations of the HSC.

The proposed Project includes the development of between 585,000 and 765,000 square feet of floor area. This range of development is analyzed to allow for flexibility in the ratio of uses that are developed. Since the medical clinic uses are more intensive than the academic and/or medical research uses, an increase in the medical clinic use developed would require a reduction in the academic and/or medical research facilities that could be developed. For example, should 585,000 square feet of floor area be developed, a total of 465,000 square feet of academic and/or medical research facilities would be developed, and the balance, 120,000 square feet, would be developed with medical clinic uses. In the event on-site development reaches 765,000 square feet, a total of 720,000 square feet of academic and/or medical research facilities would be developed and the amount of medical clinic development would be decreased to 45,000 square feet.

The proposed Project would occupy seven Development Sites within the HSC. Development Site A, which is approximately 2.46 acres in size, is centrally located within the HSC and is part of a 8.06-acre parcel that also includes the Center for Health Professions and the Zilkha Neurogenetics Institute (ZNI). The basement of future building(s) on Development Site A could be designed to connect to the basement of the existing adjacent ZNI building. Development Site B, a 1.13-acre site at the northeast corner of Alcazar and San Pablo Streets, is north of USC Health Care Consultation II and as such is also centrally located within the HSC. Development Site C is located in the western portion of the HSC on the north side of Zonal Avenue, between State Street to the east and Mission Road to the west across from the existing Women and Children's Hospital. This 3.68-acre site is currently used as a 548-space surface parking lot. Development Site D is an approximately 0.77-acre site located on the west side of Biggy Street between Zonal and Eastlake Avenues and is currently used as a 106-space surface

parking lot. Development Site E consists of 7.64 acres on the east side of San Pablo Street between Alcazar Street and Valley Boulevard and is currently used as an 826-space surface parking lot. Development Site F consists of 2.65 acres of vacant land on the west side of San Pablo Street. Development Site G comprises approximately 4.0 acres of the larger 8.06-acre parcel that includes Development Site A, the Center for Health Professions, and the ZNI building.

5. AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Potential areas of controversy and issues to be resolved by the City include issues known to be of concern to the community and issues raised in the response to the circulated NOP. Issues known to be of concern to the community include traffic, parking, air quality, and noise. The issue of the Project's traffic relative to the Union Pacific at-grade railroad crossing at San Pablo Street, south of Valley Boulevard, was raised during the public scoping meeting. Issues raised in response to the NOP include potential traffic impacts within an area of existing regional congestion and potential air quality impacts in an area of degraded air quality.

6. PUBLIC REVIEW PROCESS

The City of Los Angeles circulated a Notice of Preparation (NOP) for the proposed Project on October 20, 2004. During the following 30-day comment period, nine (9) letters were received. In addition, a public scoping meeting was conducted on November 4, 2004. The NOP and letters and comments received during the comment period are included in Appendix A of this Draft EIR.

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

[3] *Public Resources Code Section 21091.*

7. SUMMARY OF ALTERNATIVES

The Draft EIR examined four alternatives to the proposed Project: (1) No Project; (2) Reduced Density; (3) Alternative Land Use; and (4) Alternative Site.

Alternative 1: No Project

The No Project Alternative assumes that the Project would not be implemented and that the existing physical condition of the Project Site and existing uses at the Project Site would remain unchanged. Construction and operation of new academic and medical research facilities, as well as medical clinic facilities, within the HSC would not occur. Furthermore, construction of ancillary facilities such as parking would not occur. Thus, this Alternative reflects existing environmental conditions as discussed under the Environmental Setting section for each issue analyzed in this EIR.

The No Project Alternative would avoid the significant, unavoidable traffic, air quality and construction noise impacts associated with the proposed Project. The No Project Alternative's impacts on aesthetics, while not significant, would be greater than the proposed Project because benefits of the Project relative to policies pertaining to aesthetics as set forth in the urban design policies would not be realized. However, the No Project Alternative would not accomplish the Applicant's objectives to assist in achieving USC's goals for the HSC to become one of the nation's very top medical schools and to attract outstanding students and provide them with a rigorous, individually tailored educational experience that trains them as internationally competitive research scientists. Furthermore, support of the basic Project objectives relative to the development of centralized academic, medical research, and medical clinic facilities within the existing HSC would not occur with the No Project Alternative. In addition, the No Project Alternative would not provide the quantity and quality of laboratory space required in order to recruit new, world-renowned faculty, provide for buildout of the existing HSC site required to meet the demand for new programs, or create a pedestrian-friendly campus environment.

Alternative 2: Reduced Density

The Reduced Density Alternative includes the proposed uses as set forth with the Project, but reduces the scale of the development that would occur at the Project Site. On an overall basis, the amount of development is reduced by 30 percent, to reflect the development of between 409,500 and 535,500 square feet of floor area. Should 409,500 square feet of floor area be developed, a total of 325,500 square feet of academic and/or medical research facilities would be developed, and the balance, 84,000 square feet, would be developed with medical clinic uses. In the event on-site development reaches 535,500 square feet, a total of 504,000 square feet of academic and/or medical research facilities would be developed and the amount of medical clinic

development would be decreased to 31,500 square feet. The Reduced Density Alternative could be developed at the same seven proposed Development Sites as the proposed Project.

The Reduced Project Alternative would reduce, but not eliminate, the proposed Project's significant traffic, air quality, and construction noise impacts. However, the Reduced Project Alternative would only partially achieve the basic objectives of the Project. The Alternative would support the Applicant's mission to assist in achieving USC's goals for the HSC to become one of the nation's very top medical schools and to attract outstanding students and provide them with a rigorous, individually tailored educational experience that trains them as internationally competitive research scientists. In addition, the Reduced Project Alternative would also support the development of centralized academic, medical research, medical clinic facilities and create an on-site, pedestrian-friendly campus environment. However, since the Reduced Project Alternative would result in a 30 percent reduction in development, it would support the Project's basic objectives to a notably lesser extent than what would occur under the proposed Project.

Alternative 3: Alternative Land Use

This Alternative assumes the development of the Project Site with an alternative land use. The purpose of this alternative is to analyze a mix of land uses, different than the proposed Project, that would also result in reduced environmental impacts. Construction under this Alternative would consist of academic, medical research and medical clinic uses similar to the Project. However, this Alternative proposes development of a 200-room multi-level hotel facility with a total floor area of 200,000 square feet in lieu of academic, research and medical clinic uses (i.e. reduction of 160,000 square feet of academic and related research uses and a reduction of 40,000 square feet of medical clinic uses). The amount of academic/medical research and medical clinic uses that could occur under this alternative were determined by assuming that the number of vehicle trips generated by the three land use types collectively (i.e. academic/medical research, medical clinic and hotel) would not exceed those of the proposed Project. This alternative is selected because it proposes development of the Project Site with academic and medical related uses and represents a level of development that continues to support the existing facilities on the HSC. The hotel facility associated with this Alternative would house people with family members undergoing treatment at HSC facilities.

Under this Alternative, the Project's significant traffic impacts, after mitigation, under Parking Scenario No. 1 would be unchanged and remain at four, but the number of significant impacts, after mitigation, under Parking Scenario No. 2 would be reduced from three to two.. In addition, under this Alternative, the Project's significant air quality, and construction noise impacts would remain, although they would be less than the proposed Project. Furthermore, the Alternative Land Use Alternative would only partially achieve the Project's basic objectives. The Alternative would support the Applicant's objectives to assist in achieving USC's goals for the HSC to become one of the nation's very top medical schools and to attract outstanding students and provide them with a rigorous, individually tailored educational experience that

trains them as internationally competitive research scientists. This Alternative would also support the development of centralized academic, medical research, and medical clinic facilities; and would create an on-site, pedestrian-friendly campus environment. However, since the Alternative Land Use Alternative proposes development of a 200 room multi-level hotel facility in lieu of academic/research and medical clinic uses, it would support the basic objectives of the Project to a lesser extent than what would occur under the proposed Project.

Alternative 4: Alternative Site

This 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 alternate site selected for analysis is the Women and Children's Hospital site, located along the east side of Mission Road, generally between Zonal Avenue to the north and Marengo Street to the south in the City of Los Angeles.

Under the Alternative Site Alternative, the Project's significant traffic, air quality, and construction noise impacts would remain. This Alternative's impact on aesthetics would be greater than the proposed Project's, although it would still be less than significant. In addition, this Alternative would only partially achieve the Project's basic objectives. The Alternative would support the Applicant's objectives to assist in achieving USC's goals for the HSC to become one of the nation's very top medical schools and to attract outstanding students and provide them with a rigorous, individually tailored educational experience that trains them as internationally competitive research scientists. However, the Alternative would not support the Project's basic objectives to provide for the development of centralized academic, medical research, and medical clinic facilities which would also facilitate a synergy with existing HSC facilities, nor would the Alternative create an on-site, pedestrian-friendly campus environment, as implementation of this Alternative would not allow for the development of the seven proposed Development Sites which are currently underutilized within the existing HSC.

Environmentally Superior Alternative

State CEQA Guidelines require the identification of an environmentally superior alternative to the proposed Project and, if the environmentally superior alternative is the "No Project Alternative," the identification of an environmentally superior alternative from among the remaining alternatives.[4] An environmentally superior alternative is an alternative to the proposed Project that would reduce and/or eliminate the significant, unavoidable environmental impacts associated with a project without creating other significant impacts and without substantially reducing and/or eliminating the environmental benefits attributable to the Project.

[4] *CEQA Guidelines, Section 15126.6(e)(2).*

Selection of an environmentally superior alternative is based on an evaluation of the extent to which the alternatives reduce or eliminate the significant impacts associated with the Project, and on a comparison of the remaining environmental impacts of each alternative. CEQA requires that when the No Project Alternative is the environmentally superior alternative, another alternative needs to be selected as environmentally superior.

Based on the analysis presented in Section V of this Draft EIR, the No Project Alternative would be the environmentally superior alternative. In accordance with the procedure outlined above, the Reduced Density Alternative (Alternative 2) would be the environmentally superior alternative. While selected as the environmentally superior alternative, the Reduced Density Alternative would only partially achieve some of the Project objectives, as the amount of new facilities that would be developed would be lessened. This could potentially inhibit achievement of the Project's broader goals. It should also be noted that, other than the No Project Alternative, no alternatives would reduce the significant, unavoidable impacts, related to traffic, air quality and construction noise to levels that are less than significant.

8. SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The environmental impacts and mitigation measures for the proposed Project are summarized below.

1. Land Use

a. Environmental Impacts

Land use plans and policies applicable to the proposed Project include the City of Los Angeles General Plan Framework, the Northeast Los Angeles Community Plan, the Adelante Eastside Redevelopment Plan, and the SCAG Regional Comprehensive Plan and Guide. The Project Site is designated "Community Center" under the General Plan Framework. As such, the proposed Project supports the redevelopment and Community Center policies of these plans as it would: (a) preserve and enhance the existing HSC, a unique institutional resource of the community; (b) improve the quality of life for those who live and work in and visit the area through an expansion of existing HSC facilities; (c) create pedestrian-oriented, high activity, multi- and mixed-use centers that support and provide local identity; and (d) promote pedestrian activity via the design and siting of structures. The Project would also be consistent with the Framework's policies, which encourage development in centers and in nodes along corridors that are served by transit.

The seven proposed Development Sites are located within the established 56-acre HSC, which is developed with similar uses. Furthermore, the height of the proposed structures would not substantially contrast with the surrounding area, since the proposed structures would be consistent in scale with the existing HSC structures, as well as the other nearby institutional and public uses in the vicinity of the Project Site.

The proposed Project would not exceed the land use thresholds of significance in that the interface of the proposed Project's physical and operational characteristics would be substantially compatible with the surrounding land uses; the Project would not result in the division, disruption or isolation of an existing established community or neighborhood; and the Project would be compatible with the applicable land use plans, policies and regulations.

b. Cumulative Impacts

Development of the related projects is anticipated to occur in accordance with adopted plans and regulations. Based on the information available regarding the related projects, it is reasonable to assume that the projects under consideration in the area surrounding the Project site would implement and support important local and regional planning goals and policies. Furthermore, each of these projects would be subject to the project and permit approval process and would incorporate any mitigation measures necessary to reduce potential land use impacts. Therefore, no significant cumulative land use impacts are anticipated.

c. Mitigation Measures

As no significant land use impacts would occur, no mitigation measures are required.

d. Level of Significance after Mitigation

Land use impacts would be less than significant.

2. Visual Resources

a. Environmental Impacts

The aesthetic character of the HSC is that of a contemporary and integrated campus set into an existing urban landscape providing academic, research, hospital and medical office buildings, and parking facilities designed in a modernist style reflective of the high-tech research activity that occurs within these facilities. The surface parking lots that are designated for development currently feature limited landscaping consisting of ornamental trees and

landscaping designed as amenities to the streetscape. These sites therefore offer limited aesthetic value to the area.

The existing visual resources that contribute to the aesthetic character of the area include the existing USC Health Sciences Campus buildings and the Los Angeles County–USC Medical Center, which display high-quality architecture and landscaping. Although the proposed Project would substantially change the current appearance of the seven Development Sites when viewed from within the HSC and from the streets immediately adjacent to the Development Sites, the existing vacant and surface parking lots proposed for development feature minimal landscaping and offer limited aesthetic value to the area. It is expected that the buildings that would be developed under the proposed Project would be designed in a style reflective of the existing academic, research and medical office buildings that define the aesthetic appearance of the HSC. Also, the heights of proposed structures would be comparable to the surrounding HSC buildings. Therefore, the Project would enhance the visual character of the area and would not substantially contrast with, degrade or eliminate the existing visual character of the area.

Shadows cast by the proposed structures during the spring, summer and fall months would not extend onto any of the shadow sensitive uses in the vicinity of the seven proposed Development Sites due to the distance between the Development Sites and the shadow sensitive uses. However, during the winter months shadows cast by the proposed structure(s) on Development Sites E and F may extend onto Lincoln Park. During the winter months, Lincoln Park would only be shaded by the proposed structure(s) on Development Sites E and F for less than two hours, between the hours of 1:00 P.M. and 3:00 P.M. Shadows cast by the other five proposed Development Sites (i.e., Development Sites A, B, C, D and G) would not extend onto any shadow sensitive uses. Therefore, Project impacts to off-site shadow sensitive uses are concluded to be less than significant. Much of the shading on the HSC itself can be attributed to the density and heights of the existing development within the HSC. Shadows cast by the proposed structures would not result in additional shading of on-site shadow sensitive uses. Therefore, impacts with respect to on-site shadow sensitive uses would also be less than significant.

The proposed Project would implement policies of the Adelante Eastside Redevelopment Plan by enhancing the appearance of the seven underutilized Development Sites within the established HSC. With the implementation of Project Design features, which specifically address the City's Urban Design Policies, no significant impacts would occur relative to the applicable policies of the Adelante Eastside Redevelopment Plan. The proposed Project would be consistent with the General Plan Framework's Community Center designation for the Project Site and with the policies regarding urban form, which include promoting pedestrian activity and enhancing the livability of all neighborhoods by upgrading the quality of development and improving the quality of the public realm. The proposed Project incorporates numerous pedestrian-oriented design features including sidewalks, exterior courtyards and pedestrian

walkways. In addition, by incorporating features that support visual amenities and pedestrian-oriented design elements, the proposed Project would be consistent with the goals and policies of the General Plan Framework that pertain to these issues.

Although the signage for the proposed Project has not been finalized at this time, exterior signage for the proposed buildings would be compatible with the design of the existing signage within the HSC. The proposed signs would comply with the Division 62 (Building Code) regulations of the City of Los Angeles Municipal Code (LAMC) with regard to the placement, construction and modification of all exterior signs and sign support structures. As such, impacts associated with visual quality and light and glare during Project operations would be less than significant.

Construction of the proposed Project would involve the demolition and removal of six surface parking lots and one vacant lot within the existing HSC. All trees on those lots and street trees would be removed to allow for the construction of the proposed Project. The removal of street trees would detract from the visual character of the area and would create a temporary potentially significant aesthetic impact. However, upon completion of each building constructed, landscape plantings and trees would be installed along the perimeter of each Development Site, an improvement over existing conditions. All street trees would be replaced according to standard City requirements.

Construction fencing along streets and sidewalks would potentially serve as a target for graffiti, if not appropriately monitored. The Applicant would contract with a graffiti removal company and would monitor each construction site. Although construction activities could temporarily degrade the visual character of the area, such activities would be short-term and, if mitigated and appropriately monitored, the visual impacts of construction would be less than significant.

b. Cumulative Impacts

Several related projects are planned or are under construction in the vicinity of the Project Site. All related projects would adhere to existing General Plan and Community Plan design guidelines via their respective approval processes. Furthermore, it is anticipated that the related projects would be reviewed relative to the valued visual resources in the Project area (e.g., views of the downtown Los Angeles skyline and the distant San Gabriel Mountains, as well as views of both Hazard and Lincoln Parks), and, in doing so, it is anticipated that these view resources would not be significantly impacted. Ultimately, cumulative projects and ambient background growth would upgrade the visual character of the Project area. Continued investment in the surrounding community would meet the goals of the Community Plan and the Adelante Eastside Redevelopment Plan. Pedestrian safety, improved parking, improved campus design, and greater

interest in this older community would occur. No significant cumulative impacts upon aesthetic resources or views are anticipated.

c. Mitigation Measures

Specific design standards would be incorporated into the proposed Project to ensure an appropriate physical appearance. Compliance with the following mitigation measures would ensure that the Project would be in scale with the surrounding area and with the City of Los Angeles Urban Design policies and signage regulations.

Mitigation Measure B-1: The Applicant shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials are posted on any 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.

Mitigation Measure B-2: Building façades facing public streets shall be designed to enhance the pedestrian experience and connectivity of the HSC campus through such features as wide and well-illuminated entry areas, landscaping, and informal gathering space.

Mitigation Measure B-3: Architectural design and exterior building materials shall be compatible with the theme and quality of building design and materials used within the HSC campus.

Mitigation Measure B-4: New utilities shall be constructed underground, to the extent feasible.

Mitigation Measure B-5: Exterior signage for the proposed buildings shall be compatible with the design of the building.

Mitigation Measure B-6: All new or replacement street trees shall be selected for consistency with the existing street trees or in accordance with a street tree master plan reviewed and approved by the Department of Public Works Street Tree Division.

Mitigation Measure B-7: All mechanical, electrical and rooftop equipment shall be screened from view from adjacent surface streets.

Mitigation Measure B-8: Landscaping and/or vegetation features shall be incorporated into the design of each Development Site.

Mitigation Measure B-9: All exterior lighting shall be directed on-site or shielded to limit light spillover effects.

d. Level of Significance after Mitigation

Proposed design features, including the coordination of design with existing HSC structures, landscaping, courtyards, architectural articulation, and pedestrian amenities, which have been incorporated into the Project's building plans, together with recommended mitigation measures would further reduce the Project's less than significant visual resources impacts.

3. Traffic, Circulation, and Parking

a. Traffic and Circulation

(1) Environmental Impacts

The proposed Project is expected to generate 753 vehicle trips (613 inbound trips and 140 outbound trips) during the A.M. peak hour. During the P.M. peak hour, the proposed Project is expected to generate 774 vehicle trips (161 inbound trips and 613 outbound trips). Over a 24-hour period, the proposed Project is forecast to generate 7,715 daily trips during a typical weekday (approximately 3,858 inbound trips and 3,858 outbound trips).

In order to provide a conservative analysis of the Project's potential transportation impacts, two parking scenarios have been developed that reflect the greatest concentration of Project-related traffic on the local roadway system. Parking Scenario No. 1 assumes that parking for the Project would be provided entirely within Development Site C, the west side of the HSC. Parking Scenario No. 2 assumes that parking for the Project would be provided entirely within Development Site E or in combination of Development Sites E and F at the north end of the HSC. Growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors are assumed to be 1.0 percent per year, through 2015. This growth, in addition to known related projects, is added to determine the baseline traffic condition for 2015. Project trips were then added to the baseline condition. Under this methodology, 11 of the 18 study intersections would be significantly impacted by the development of the proposed Project under both Parking Scenario No. 1 and Parking Scenario No. 2. Nine of the 11 impacted intersections are the same under both parking scenarios.

Project impacts with regard to facilities under the jurisdiction of the Los Angeles County Congestion Management Plan would be less than significant. With regard to the Union Pacific crossing on San Pablo Street, south of Valley Boulevard, it is conservatively concluded that a Project-related potentially significant impact could occur during the periods of time when traffic

is diverted due to train(s) blocking San Pablo Street. This potential impact is very temporary in nature (i.e., occurring approximately 12 times per day and lasting in duration between less than one and three minutes about half the time and occasionally lasting up to 18 minutes) and would be alleviated once San Pablo Street is available as a through traffic route. With regard to Project access, the intersections that provide access to the Project Site are projected to operate at LOS D or better under the future cumulative analysis conditions (i.e., future with Project and Project mitigation conditions). Thus, Project development would result in a less than significant Project access impact.

As required by the 2004 Congestion Management Program for Los Angeles County, an analysis of potential Project impacts on existing transit service has been conducted. Impacts on public transit would occur if the seating capacity of the transit system serving the Project study area were exceeded. Given the relatively few number of transit trips generated by the proposed Project, less than significant impacts on existing and future transit service in the Project area are forecasted.

Temporary lane closures are anticipated during Project construction only on streets located within the HSC. It is anticipated that temporary lane closures may occur on San Pablo Street, Alacazar Street, Eastlake Avenue and Zonal Avenue. Construction impacts for these types of streets are normally limited to between 9:00 A.M. and 3:00 P.M. Detours around the construction site(s) as a result of lane closures would not be required. Flag men, however would be used to control traffic movement during ingress or egress of trucks and heavy equipment from the construction site.

Depending upon the specific nature of the construction activity (e.g., demolition, excavation, or concrete pouring), it is assumed the majority of truck traffic would be distributed evenly across the workday. Approvals required by the City of Los Angeles for implementation of the proposed Project include a Truck Haul Route program approved by LADOT and the City's Department of Building and Safety. Based on preliminary review, haul trucks and delivery trucks would generally travel along the I-5 Freeway, I-10 Freeway, Mission Road, Soto Street, Valley Boulevard, and Marengo Street to access and depart the Project Site. With the required haul route approval and other construction management practices, and implementation of construction design features, construction activities would create a temporary inconvenience to auto travelers, bus riders, and pedestrians during construction. Therefore, Project impacts with regard to construction traffic would be less than significant.

(2) Cumulative Impacts

Cumulative effects on intersection operations attributable to traffic from ambient growth and related projects have been incorporated into the above analysis of the future baseline

condition. Cumulative growth in the Project area would result in increases in traffic on street and freeway segments in the Project vicinity.

A comparison of 2015 with related project conditions indicates that based on the stated significance thresholds, cumulative development would result in four intersections operating at LOS E or F. It is conservatively concluded that cumulative development would yield a significant cumulative traffic impact on intersection operations at these locations.

It is anticipated that related projects contributing to cumulative growth would be required on an individual basis to mitigate any significant traffic impacts to the extent possible and likely to less than significant levels. Nevertheless, since no guarantee exists that mitigation measures would be implemented with those projects, it is conservatively concluded that cumulative development would yield a significant cumulative traffic impact on intersection operations.

(3) Mitigation Measures

Eleven of the 18 study intersections would be significantly impacted by the development of the proposed Project under both Parking Scenario No. 1 and Parking Scenario No. 2. Nine of the 11 impacted intersections are the same under both parking scenarios. In response to these significant impacts, the following mitigation measures are proposed under separate subheadings for Parking Scenario No. 1 and Parking Scenario No. 2:

(a) Parking Scenario No.1

Mitigation Measure C-1: Intersection No. 2: I-5 Freeway SB and Mission Road—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the A.M. and P.M. peak commuter hours. Mitigation for this intersection consists of widening the southbound off-ramp to provide an additional lane. The off-ramp would provide one left-turn only lane, one combination left-turn/through lane and one right-turn only lane. A traffic signal modification would also be required.

Mitigation Measure C-2: Intersection No. 3: I-5 Freeway NB Off-Ramp and Daly Street–Main Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the A.M. peak commuter hour. Mitigation for this intersection consists of the installation of a traffic signal at this location.

Mitigation Measure C-3: Intersection No. 6: I-5 Freeway NB On-Ramp and Marengo Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the P.M. peak commuter hour. Mitigation for this intersection consists of the installation of an eastbound right-turn only lane.

This measure will involve a lengthening of the red curb along the south side of Marengo Street west of the on-ramp.

Mitigation Measure C-4: Intersection No. 10: Biggy Street and Zonal Avenue—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during both the A.M. and P.M. peak commuter hours. Mitigation for this intersection consists of restriping the southbound approach to provide one left-through lane and one right-turn only lane and restriping the eastbound approach to provide one left-turn lane and one optional through/right-turn only lane.

Mitigation Measure C-5: Intersection No. 12: San Pablo Street and Alcazar Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the A.M. peak commuter hour. Mitigation for this intersection consists of the installation of a traffic signal at the location. Traffic signal warrant analyses have been completed for the intersection.

Mitigation Measure C-6: Intersection No. 14: San Pablo Street and Zonal Avenue—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the P.M. peak commuter hour. Mitigation for this intersection consists of installation of a traffic signal at this location.

Mitigation Measure C-7: Intersection No. 16: Soto Street and I-10 Freeway WB Ramps–Charlotte Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during both the A.M. and P.M. peak commuter hours. Partial mitigation for this intersection consists of the previously City reviewed and approved mitigation measure associated with the HNRT project. The previously reviewed and approved mitigation measure involves the widening of the I-10 Freeway Westbound Off-ramp to provide an additional right-turn only lane. The Preliminary Engineering Evaluation Report document is currently in preparation and will be submitted to the California Department of Transportation for review.

Mitigation Measure C-8: Intersection No. 17: Soto Street and Marengo Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during both the A.M. and P.M. commuter peak hours. Mitigation for this intersection consists of the removal of the raised median islands on Soto Street, north and south of Marengo Street, restriping the northbound and southbound approaches to provide dual left-turn lanes, two through lanes and one combination through/right-turn lane, as well as a traffic signal modification. This measure has only received conceptual approval at this time

Mitigation Measure C-9: Intersection No. 18: Soto Street and I-10 Freeway EB Off-Ramp–Wabash Avenue—The intersection is anticipated to be significantly

impacted by Parking Scenario No. 1 during the A.M. peak commuter hour. Mitigation for this intersection consists of restriping Soto Street, south of Wabash Avenue, within the existing roadway pavement width, to provide an additional northbound through lane.

(b) Parking Scenario No. 2

Mitigation Measure C-10: Intersection No. 2: I-5 Freeway SB and Mission Road—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the A.M. and P.M. peak commuter hours. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the I-5 Freeway SB and Mission Road intersection also would be applicable to Parking Scenario No. 2.

Mitigation Measure C-11: No. 3: I-5 Freeway NB Off-Ramp and Daly Street–Main Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the A.M. peak commuter hour. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the I-5 Freeway NB Off-Ramp and Daly Street-Main Street intersection also would be applicable to Parking Scenario No. 2.

Mitigation Measure C-12: Intersection No. 6: I-5 Freeway NB On-Ramp and Marengo Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the P.M. peak commuter hour. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the I-5 Freeway NB On-Ramp and Marengo Street intersection also would be applicable to Parking Scenario No. 2.

Mitigation Measure C-13: Intersection No. 12: San Pablo Street and Alcazar Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the A.M. and P.M. peak commuter hours. The aforementioned traffic mitigation measure recommended for the Parking Scenario No. 1 for the San Pablo Street and Alcazar Street intersection also would be applicable to Parking Scenario No. 2.

Mitigation Measure C-14: Intersection No. 14: San Pablo Street and Zonal Avenue—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the P.M. peak commuter hour. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the San Pablo Street and Zonal Avenue intersection also would be applicable to Parking Scenario No. 2.

Mitigation Measure C-15: Intersection No. 15: Soto Street and Alcazar Street—The intersection is anticipated to be significantly impacted by Parking Scenario

No. 2 during the A.M. and P.M. peak commuter hours. Mitigation for this intersection includes the installation of a second northbound left–turn lane and widening along the south side of Alcazar Street, west of Soto Street, to provide a fourth eastbound approach lane (i.e., the eastbound approach would provide one left-turn lane, one combination left-through lane and two right-turn only lanes). A traffic signal modification would also be required.

Mitigation Measure C-16: Intersection No. 16: Soto Street and I-10 Freeway WB Ramps–Charlotte Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during both the A.M. and P.M. peak commuter hours. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the Soto Street and I-10 Freeway WB Ramps-Charlotte Street intersection also would be applicable to Parking Scenario No. 2.

Mitigation Measure C-17: Intersection No. 17: Soto Street and Marengo Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during both the A.M. and P.M. commuter peak hours. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the Soto Street and Marengo Street intersection also would be applicable to Parking Scenario No. 2. This measure has only received conceptual approval at this time.

Mitigation Measure C-18: Intersection No. 18: Soto Street and I-10 Freeway EB Off-Ramp–Wabash Avenue—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the A.M. peak commuter hour. Mitigation for this intersection consists of restriping Soto Street, south of Wabash Avenue, within the existing roadway pavement width, to provide an additional northbound through lane.

(4) Level of Significance after Mitigation

After implementation of the above described mitigation measures, the impacts of the proposed Project under Parking Scenario No. 1 upon study intersections during the A.M. and P.M. peak commuter hour would be reduced to less than significant levels for all but four locations. Mitigation measures would reduce impacts to less than significant levels at all but three intersections with implementation of Parking Scenario No. 2.

Under Parking Scenario No. 1, no feasible mitigation measures are available to reduce the traffic impact to a less than significant level at the Soto Street and I-10 Freeway WB Ramps–Charlotte Street intersection (Intersection No. 16) during the P.M. peak commuter hour. Additionally, no feasible mitigation measures are available to reduce the traffic impacts to a less than significant levels at the Mission Road and Griffin Avenue–Zonal Avenue intersection

(Intersection No. 7) during the A.M. and P.M. peak commuter hours, and at the Mission Road and Daly Street-Marengo Street intersection (Intersection No. 5) during the P.M. peak commuter hour. Since the City of Los Angeles and Caltrans have not formally approved the mitigation measure proposed for the Soto Street and Marengo Street intersection (Intersection No. 17), it is concluded that a significant and unavoidable impact would also occur at this intersection during both the A.M. and P.M. peak commuter hour. Under Parking Scenario No. 2 no feasible mitigation measures are available to reduce the traffic impact to a less than significant level at the Mission Road and Valley Boulevard intersection (Intersection No. 8) during the A.M. peak commuter hour, and at the Mission Road and Daly Street-Marengo Street intersection (Intersection No. 5) during the P.M. peak commuter hour. Similar to Parking Scenario No. 1, since the mitigation measure proposed for the Soto Street and Marengo Street intersection (Intersection No. 17) has not been formally approved, it is concluded that a significant and unavoidable impact would also occur at this intersection during both the A.M. and P.M. peak commuter hour.

If the mitigation measure proposed for the Soto Street and Marengo Street intersection is approved by the City of Los Angeles and Caltrans then the potentially significant project-related impact under Parking Scenario No. 1 and Parking Scenario No. 2 during both the A.M. and P.M. peak commuter hours would be reduced to a less than significant level. The mitigation for the Soto Street and Marengo Street intersection, which is elevated above the I-10 Freeway and is entirely on a bridge structure, consists of the removal of the raised median islands on Soto Street, north and south of Marengo Street, restriping the northbound and southbound approaches to provide dual left-turn lanes, two through lanes and one combination through/right-turn lane, as well as a traffic signal modification. The traffic signal installation may require a special foundation, given that the intersection is located entirely on a bridge structure. LADOT has conceptually approved this measure, pending review of detailed design (traffic and civil) plans. Construction of the measure would only occur during non-peak hours (between 9:00 A.M. and 3:00 P.M.) during weekdays. It is anticipated that removal of the raised median islands on Soto Street would require the temporary closure of the nearest southbound and northbound travel lanes and that the traffic signal modification would likely occur during the same timeframe. As these mid-day lane closures would not occur during either the A.M. or P.M. peak commuter travel periods and would be short-term in nature (i.e., one to two weeks), potential impacts are concluded to be less than significant.

If it is determined through the design process that a special foundation for the traffic signal poles cannot be installed without structural modification to the bridge, the construction of the measure would involve median removal, roadway restriping, a traffic signal modification and potentially the closure of some I-10 Freeway mainline travel lanes during the off-peak periods. It is anticipated that removal of the raised median islands on Soto Street would require the temporary closure of the nearest southbound and northbound travel lanes and that the traffic signal modification would likely occur during the same time frame. Whereas less than

significant impacts, as described above, would result due to the construction of the Soto Street improvements, the bridge reconstruction would likely take several months to complete and potentially require the closure of some mainline I-10 Freeway travel lanes during off-peak periods. Due to the duration of impacts to the I-10 Freeway, implementation of the proposed Soto Street/Marengo Street intersection improvements may result in a significant secondary impact.

The Project is treated as resulting in a significant impact at the Union Pacific Railroad (UPRR) at-grade crossing on San Pablo Street, immediately south of Valley Boulevard due to the existing intermittent adverse traffic conditions at this crossing. These impacts, however, would be temporary in nature (i.e., occurring approximately 12 times per day and lasting in duration between less than one and three_ minutes about half the time and occasionally lasting up to 18 minutes), and would be alleviated once San Pablo Street is available as a through traffic route. Absent either enforcement of a PUC ordinance that limits the duration that trains can block at-grade crossings or a relocation of the train stoppage to a point east or west of San Pablo Street, the impact of the Project relative to this railroad crossing would be potentially significant and unavoidable. Project impacts relative to the CMP, Project access and public transit would be less than significant.

b. Parking

(1) Environmental Impacts

A net increase of 2,072 parking spaces is calculated for future parking facilities under both Parking Scenario No. 1 and Parking Scenario No. 2. Under Parking Scenario No. 1, parking would be provided only on Development Site C, and under Parking Scenario No. 2, parking would be provided in Development Site E or in a combination of Development Sites E and F. The net increase of 2,072 would exceed the Code requirement of 1,423 to 1,548 spaces, depending on the future mix of developed land uses.

The future parking supply for the USC Health Sciences Campus would increase to approximately 5,870 spaces (i.e., 3,798 existing + 2,072 net future = 5,870 spaces). Thus, the future parking supply of 5,870 spaces is anticipated to satisfy the Project's future Code parking requirement. In addition, based on a peak existing parking demand of 3,132 spaces and a future peak demand of up to approximately 1,985 spaces, a total future peak parking demand of 5,117 spaces (3,132 + 1,985 = 5,117 spaces) would result. As existing parking is sufficient to meet existing demand, and the Project would provide an increase of at least 2,072 spaces, the available parking supply would exceed the HSC's future parking demand. As such, parking impacts would be less than significant.

(2) 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 meet their respective LAMC requirements and to accommodate their own parking demand. No significant cumulative impacts to parking are anticipated.

(3) Mitigation Measures

As no significant impacts relative to parking would occur, no mitigation measures are necessary.

(4) Level of Significance after Mitigation

Impacts relative to parking would be less than significant.

4. Air Quality

a. Environmental Impacts

(1) Construction

Construction of the proposed Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and construction activities. Mobile source emissions, primarily NO_X, would result from the use of construction equipment such as bulldozers, wheeled loaders, and cranes. During the finishing phase, paving operations and the application of architectural coatings (i.e., paints) and other building materials would release emissions of reactive organic compounds. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Construction-related daily (short-term) emissions are expected to exceed SCAQMD significance thresholds for NO_X and ROC. Thus, emissions of these pollutants would result in significant short-term regional air quality impacts. Daily emissions of CO, SO_X, and PM_{10} would be considered adverse, but less than significant, since the levels of these emissions would fall below the SCAQMD significance thresholds. Emission forecasts reflect a specific set of conservative assumptions where the entire maximum entitlement (i.e., 765,000 square feet of floor area and a 2,800-space parking structure) would be built out over a very compressed three-

year time period. Because of these conservative assumptions, actual emissions would likely be substantially less than those forecasted. If construction is delayed (i.e., does not start in 2006), or occurs over a longer time period, emissions would be less due to: (1) a more modern and cleaner burning construction equipment fleet mix; and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions would occur over a longer time interval).

Potential maximum CO (1-hour and 8-hour), SO_2 and NO_2 concentrations, when added to background ambient concentrations, would not violate their respective AAQS at any of the 16 sensitive receptor locations. However, the proposed Project would result in localized PM_{10} concentrations during construction that exceed the SCAQMD's 10.4 $\mu g/m^3$ significance threshold at 13 of the 16 sensitive receptor locations. Therefore, construction of the proposed Project would result in a significant and unavoidable impact on localized air quality with respect to PM_{10} concentrations.

Toxic Air Contaminants

The greatest potential for toxic air contaminant (TAC) emissions would be related to diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. Given that grading and excavation activities would occur for only three to six months per Development Site, the proposed Project would not result in a long-term (i.e., 70 years) substantial source of TAC emissions with no residual emissions after construction and corresponding individual cancer risk. As such, Project-related toxic emission impacts during construction would be less than significant.

Odors

Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the amount of volatile organic compounds from architectural coatings and solvents. Via mandatory compliance with SCAQMD Rules, no construction activities or materials are proposed that would create objectionable odors. Therefore, no significant impact would occur and no mitigation measures would be required.

(2) Operations

Regional Operational Impacts

Regional air pollutant emissions associated with proposed Project operations would be generated by the consumption of electricity and natural gas, by the operation of on-road vehicles, and emergency generators. Regional emissions resulting from the proposed Project would not exceed regional SCAQMD thresholds for ROC, SO_X, CO, or PM_{10}. However, the proposed

Project would exceed the regional SCAQMD threshold for NO_X, and impacts associated with this pollutant would be significant.

Local Impacts

Project traffic, during the proposed Project's operational phase, would have the potential to create local area CO impacts.

The proposed Project would not have a significant impact relative to one-hour or eight-hour local CO concentrations due to mobile source emissions. Since significant impacts would not occur at the intersections with the highest traffic volumes that are located adjacent to sensitive receptors, no significant impacts are anticipated to occur at any other locations in the study area as the conditions yielding CO hotspots would not be worse than those occurring at the analyzed intersections. Consequently, the sensitive receptors that are included in this analysis would not be significantly affected by CO emissions generated by the net increase in traffic that would occur under the proposed Project. As the proposed Project does not cause an exceedance of an ambient air quality standard, the proposed Project's localized operational air quality impacts would therefore be less than significant. In addition, the operation of the proposed Project's parking structure would not cause or localize air quality impacts related to mobile sources and emissions would therefore be less than significant. Compliance with SCAQMD Rules and Regulations regarding stationary-source combustion equipment would ensure that contributions to localized PM_{10} concentrations remain below the 2.5 $\mu g/m^3$ significance threshold. As such, any potential impacts would be less than significant.

Regional Concurrent Construction and Operation Impacts

The potential exists that the later stages of proposed Project construction could occur concurrently with the occupancy of the earlier stages of development. Therefore, emissions associated with concurrent construction and operation activities were evaluated. Concurrent emissions would be their greatest in the latter stages of proposed Project construction, wherein the proposed Project would be nearly built-out, but some construction activities would still be occurring. Concurrent construction and operational emissions would exceed regional SCAQMD daily thresholds for NO_X, and ROC, but would not exceed the regional SCAQMD daily threshold for SO_X. Thus, a significant regional air quality impact due to NO_X, and ROC emissions would occur.

Toxic Air Contaminants

The primary source of potential air toxics associated with proposed Project operations include diesel particulates from delivery trucks (e.g., truck traffic on local streets, on-site truck idling and movement and operation of transportation refrigeration units), equipment used to off-load deliveries, boilers (used for water and space heating), and emergency backup generators.

These potential sources would be dispersed among the Development Sites (i.e., at multiple loading dock, boiler and emergency backup generator locations).

The proposed Project would not include any notable sources of acutely and chronically hazardous toxic air contaminants, although minimal emissions may result from the use of consumer products. As such, the proposed Project would not release substantial amounts of toxic contaminants; and a less than significant impact on human health would occur.

Odors

The proposed Project does not include any uses identified by the SCAQMD as being associated with odors. The University would employ the same odor control measures used to avoid odor complaints at existing vivaruims. Compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines would limit potential objectionable odor impacts to a less-than-significant level.

(3) SCAQMD Handbook Policy Analysis

As required by the AQMP, an analysis of the proposed Project's pollutant emissions on localized pollutant concentrations is used as the basis for evaluating Project consistency, and localized concentrations for PM_{10}, CO, and NO_x have been projected for the proposed Project. Project consistency with the AQMP is also based on the proposed Project's consistency with the population, housing and employment assumptions used in the development of the AQMP. Overall, the proposed Project would result in less-than-significant impacts with regard to CO, NO_2 and SO_2 concentrations during Project construction and operations. While PM_{10} concentrations during construction would exceed the SCAQMD 10.4 $\mu g/m^3$ significance threshold, the potential for this impact would be short-term and would not have a long-term impact on the region's ability to meet state and federal air quality standards. As such, the proposed Project would meet the first AQMP consistency criterion.

A project is consistent with the AQMP if it is consistent with the population, housing and employment assumptions that were used in the development of the AQMP. As levels of Project employment growth are consistent with the employment forecasts for the subregion as adopted by SCAG, the proposed Project would be consistent with the demographic projections incorporated into the AQMP.

Implementation of all feasible mitigation measures is recommended to reduce air quality impacts to the extent feasible. The Proposed Project would incorporate a number of key air pollution control measures identified by the SCAQMD, as described below. As such, the proposed Project meets this AQMP consistency criterion.

The proposed Project would serve to implement a number of land use policies of the SCAQMD and SCAG. For example, policies directed towards the reduction of vehicle miles traveled and their related vehicular emissions would be implemented by locating the proposed medical office and research facilities within the existing USC Health Sciences Campus would provide improved opportunities to consolidate and/or eliminate vehicle trips that would otherwise occur if such improvements were built outside of the USC Health Sciences Campus area. As a result, the proposed Project would be consistent with AQMP land use policies.

Overall, the proposed Project is found to be consistent with the AQMP criteria regarding the causing or worsening of an exceedance of an ambient air quality standard. The proposed Project would not delay the attainment of an air quality standard, it would be consistent with the AQMP's growth projections, and it would implements all feasible air quality mitigation measures. Since the Project would be consistent with the AQMP's land use policies, impacts relative to the AQMP would be less than significant.

(4) City of Los Angeles Policies

The Project would be consistent with the Air Quality Element of the City of Los Angeles General Plan. The City Air Quality Element Goals, Objectives and Policies that are relevant to the Proposed Project include less reliance on single occupant vehicles with fewer commute and non-work trips. The Project would be consistent with this goal by locating medical office and research facilities within the existing USC Health Sciences Campus, which would provide improved opportunities to consolidate and/or eliminate vehicle trips that would otherwise occur if such improvements were built outside of the HSC area. USC currently provides a tram/shuttle service on the HSC as well as a service that runs between the University Park Campus and the HSC, Union Station and the HSC, and downtown (to the Executive Health and Imaging Center) and the HSC; and provides carpool and vanpool services and information through its Transportation Services office. In addition, the current HSC location has convenient access to MTA and Foothill Transit bus services, and is located within close proximity to the future MTA Metro Gold Line Light Rail Transit line that is anticipated to be completed by 2009. The proposed Project is therefore considered consistent with this City policy.

In relation to non-work miles, the USC Health Science Campus improvements would be located within walking distance of MTA and Foothill Transit bus lines as well as being in proximity to the proposed Metro Gold Line Extension that is scheduled to be completed by 2009. In addition, USC offers a $25 per month public transportation subsidy to eligible employees that can be applied toward the purchase of a monthly pass for MTA (bus or light rail), LADOT, and Metrolink transit services. Due to these features, a higher percentage of Project-related trips would be "transit trips" than would be the case if the proposed Project were to be located farther away from convenient public transit access.

Other Air Quality Element goals include minimizing the existing land use patterns and future development to address the relationship between land use, transportation, and air quality. The proposed Project would be consistent with this goal since it has incorporated a wide array of features into its land use plan specifically targeted towards the reduction of vehicle trips and vehicle miles traveled. In addition, development of the proposed Project at the proposed site would offer the opportunity to utilize existing infrastructure to support growth in the Project area. The Project site is well served by transit and has the opportunity to encourage pedestrian activities in this area. Based upon this evaluation, it is concluded that the proposed Project would be consistent with City of Los Angeles air quality policies as it implements in a number of ways the air quality goals and policies set forth within the City's General Plan.

b. Cumulative Impacts

Construction

Of the 14 related projects that have been identified within the proposed Project study area, there are 9 related projects that have not already been built or are currently under construction. With the exception of the USC HNRT building that is currently under construction, the Applicant has no control over the timing or sequencing of the related projects, and as such, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. For this reason, the SCAQMD's methodology to assess a project's cumulative impact differs from the cumulative impacts methodology employed elsewhere in this EIR, in which foreseeable future development within a given service boundary or geographical area is predicted and associated impacts measured.

With respect to the Project's construction-period air quality emissions and cumulative Basin-wide conditions, construction-period NO_X and ROC mass regional emissions, and localized PM_{10} emissions associated with the proposed Project are projected to result in a significant impact to air quality. In addition, there is a high probability that construction-period CO and PM_{10} mass regional emissions from related projects, when combined with proposed Project emissions, would exceed their respective SCAQMD daily significance thresholds. As such, cumulative impacts to air quality during proposed Project construction would be significant and unavoidable.

Similar to the proposed Project, the greatest potential for TAC emissions at each related project would be related to diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. Given that grading and excavation activities would occur for only three to six months per construction site, the proposed Project and the related projects that have not already been built would not result in a long-term (i.e., 70 years) substantial source of TAC emissions with no residual emissions after construction and

corresponding individual cancer risk. Furthermore, any related project that has the potential to emit notable quantities of TACs would be regulated by the SCAQMD such that TAC emissions would be negligible. Thus, TAC emissions from the related projects are anticipated to be less than significant unto themselves as well as cumulatively in conjunction with the proposed Project.

Also similar to the proposed Project, potential sources that may emit odors during construction activities at each related project would include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the amount of volatile organic compounds from architectural coatings and solvents. Via mandatory compliance with SCAQMD Rules, it is anticipated that construction activities or materials used in the construction of the related projects would not create objectionable odors. Thus, odor impacts from the related projects are anticipated to be less than significant unto themselves, as well as cumulatively in conjunction with the proposed Project.

Operation

The SCAQMD has set forth both a methodological framework as well as significance thresholds for the assessment of a project's cumulative operational air quality impacts. The SCAQMD's methodology differs from the cumulative impacts methodology employed elsewhere in this Draft EIR, in which 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 SCAQMD's AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the Federal and State Clean Air Acts. Based on the SCAQMD's methodology (presented in Chapter 9 of the *CEQA Air Quality Handbook*), development of the proposed Project would have a less-than-significant air quality impact. In addition, a localized CO impact analysis was conducted for cumulative traffic (i.e., related projects and ambient growth through 2015) in which no local CO violations would occur at any of the studied intersections. Despite these conclusions, the proposed Project is more conservatively concluded to contribute to a significant cumulative regional air quality impact as the Basin is non-attainment for ozone and PM_{10}, and the proposed Project would exceed the SCAQMD daily significance thresholds for ozone precursor emissions (i.e., ROC and NO_X).[5]

With respect to TAC emissions, neither the proposed Project nor any of the related projects (which are largely residential, restaurant, retail/commercial, and medical/research developments) would represent a substantial source of TAC emissions, which are typically

[5] *This approach is more conservative than the approach provided in the SCAQMD CEQA Air Quality Handbook.*

associated with large-scale industrial, manufacturing and transportation hub facilities. As such, cumulative TAC emissions during long-term operations would be less than significant.

With respect to potential odor impacts, neither the proposed Project land use nor any of the related projects' (which are primarily hospital/medical office, general office, residential, retail, and restaurant uses) land uses have a high potential to generate odor impacts.[6] Furthermore, any related project that may have a potential to generate objectionable odors would be required by SCAQMD Rule 402 (Nuisance) to implement Best Available Control Technology to limit potential objectionable odor impacts to a less than significant level. Thus, potential odor impacts from related projects are anticipated to be less than significant unto themselves, as well as cumulatively, in conjunction with the proposed Project.

c. Mitigation Measures

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

(1) Construction

Mitigation Measure D-1: General contractors shall implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403.[7]

Mitigation Measure D-2: Disturbed areas shall be watered three times daily, which is above and beyond the SCAQMD Rule 403 requirement to water disturbed areas two times daily.

Mitigation Measure D-3: All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.

Mitigation Measure D-4: General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not in use, to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.

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[6] *According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding.*

[7] *SCAQMD Rule 403 requirements are detailed in Appendix C.*

Mitigation Measure D-5: Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used to the extent feasible.

Mitigation Measure D-6: All construction vehicles shall be prohibited from idling in excess of ten minutes, both on- and off-site.

Mitigation Measure D-7: Project heavy-duty construction equipment shall use alternative clean fuels, such as low sulfur diesel or compressed natural gas with oxidation catalysts or particulate traps, to the extent feasible.

Mitigation Measure D-8: The Applicant shall utilize coatings and solvents that are consistent with applicable SCAQMD rules and regulations**.**

(2) Operational Impacts

During the operational phase, the proposed Project would result in regional emissions that exceed regional SCAQMD significance thresholds for NO_X and ROC. Long-term mobile source emissions associated with the proposed Project shall be reduced through the following transportation systems management and demand management measures.

Mitigation Measure D-9: The Applicant shall provide public education to USC Health Science Campus visitors and employees regarding the importance of reducing vehicle miles traveled and utilizing transit, and the related air quality benefits through the use of brochures and other informational tools.

Mitigation Measure D-10: The Applicant shall, to the extent feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods.

Mitigation Measure D-11: The Applicant shall coordinate with the MTA and the City of Los Angeles Department of Transportation to provide information with regard to local bus and rail services.

d. Level of Significance after Mitigation

(1) Construction Impacts

Project construction would not result in regional emissions that exceed SCAQMD regional significance thresholds for CO, PM_{10}, and SO_X, and as such, impacts with respect to these pollutants during construction would be less than significant. With respect to NO_X and ROC emissions during construction, mitigation measures would reduce these emissions, but a significant impact would still occur.

Local air quality impacts (i.e., pollutant concentrations) during construction with respect to CO, SO_2, and NO_2 would be less than significant. With respect to localized PM_{10} concentrations during construction, prescribed mitigation measures would reduce the projected maximum concentrations by 8 percent to 38 percent. Nevertheless, the proposed Project would still result in localized PM_{10} concentrations during construction that exceed the SCAQMD significance threshold at 13 of the 16 sensitive receptor locations. Therefore, construction of the proposed Project would result in a significant and unavoidable impact on localized air quality with respect to PM_{10} concentrations.

(2) Operational Impacts

During the operational phase, the proposed Project would result in regional emissions that exceed the SCAQMD significance threshold for NO_X. Mitigation measures identified above would reduce the potential air quality impacts of the Project to the degree technically feasible, but NO_X mass daily emissions would remain above the SCAQMD significance threshold. Therefore, operation of the proposed Project following construction would have a significant and unavoidable impact on regional air quality with respect to NO_X mass daily emissions. Operational emissions would not exceed the SCAQMD significance threshold for CO, ROC, PM_{10}, and SO_2, and, thus, impacts are concluded to be less than significant for these pollutants.

No significant impacts related to local CO concentrations are forecast to occur for the proposed Project. Project development would be consistent with the SCAQMD's AQMP, and the City's General Plan Air Quality Element resulting in an impact that is less than significant.

The proposed Project is not anticipated to include any notable TAC emissions sources. However, as previously discussed, any potentially significant TAC emission sources would be required to comply with SCAQMD Rule XIV (New Source Review of Air Toxics). As such, potential impacts from proposed Project TAC emissions would be less than significant.

Via compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines, potential impacts that could result due to potential odor source(s) would be less than significant.

5. Noise

a. Environmental Impacts

(1) Construction Noise

<u>Construction</u>

Noise disturbances in those areas located adjacent to each of the seven proposed Development Sites can be expected during construction. These disturbances would occur during site preparation activities and the subsequent construction of on-site structures.

As with most construction projects, construction would require the use of a number of pieces of heavy equipment such as bulldozers, backhoes, cranes, loaders, and concrete mixers. In addition, both heavy- and light-duty trucks would be required to deliver construction materials to and export construction debris from each construction site. The timing and location of development proposed as part of the Project would be determined based on the availability of funding sources. In order to provide a conservative analysis it is assumed that construction activity could occur on any of the seven proposed Development Sites at any time. Specifically, the maximum potential construction noise impact at each sensitive receptor location was calculated by assuming that all seven Development Sites could undergo concurrent construction activity. The maximum L_{eq} daytime noise level increases with proposed Project construction are expected to range from 0.2 dBA to 16.6 dBA L_{eq} (1-hour). Construction-period noise impacts would meet or exceed the 5-dBA significance criterion at six sensitive receptor locations (i.e., USC University Hospital, USC HCCI, USC HCCII, Doheny Eye Institute, Women and Children's Hospital, and Hazard Park), and as such, impacts would be significant without the incorporation of mitigation measures.

In addition to on-site construction noise, haul trucks, delivery trucks, and construction workers would require access to the site throughout the construction duration. While construction workers would arrive from many parts of the region, and thus different directions, haul trucks and delivery trucks would generally travel to the Project Site via Soto Street from the Interstate 10 Freeway. Although residential uses are present on the east side of Soto Street, construction traffic would not be present during the noise-sensitive late evening and nighttime hours. As such, potential impacts would be less than significant, and no mitigation measures are necessary.

(2) Operation Noise (Post-Construction)

Roadway Noise

The two Parking Scenarios upon which the traffic analysis was based were analyzed to ascertain maximum potential roadway noise impacts. Under all other development scenarios, roadway noise impacts would be less since traffic volumes would be dispersed over a larger area. Under Parking Scenario No. 1, the largest Project-related traffic noise impact is anticipated to occur along the segment of Zonal Avenue, between Biggy Street and San Pablo Street. Project-related traffic would add 1.0 dBA CNEL to this roadway segment. As the incremental Project-related traffic noise level increases at all other analyzed locations would be less than 1.0 dBA CNEL, and these noise level increases are less than the 5-dBA CNEL significance threshold, the

proposed Project's roadway noise impacts are considered less than significant under Parking Scenario No. 1.

Under Parking Scenario No. 2, the largest Project-related traffic noise impact is anticipated to occur along the segment of San Pablo Street, between Alcazar Street and Valley Boulevard. Project-related traffic would add 1.9 dBA CNEL to this roadway segment. As the incremental Project-related traffic noise level increases at all other analyzed locations would be less than 1.9 dBA CNEL, and these noise level increases are less than the 5-dBA CNEL significance threshold, the proposed Project's roadway noise impacts are considered less than significant under Parking Scenario No. 2.

Stationary Point Source Noise

With the exception of Development Site C (site of an up to 2,800-space parking facility), the six remaining Development Sites would require mechanical equipment such as boilers, chillers, pumps, and emergency generators to support proposed structures. Such mechanical equipment is capable of generating high noise levels. However, project design features would ensure that all equipment noise levels comply with City of Los Angeles Noise Ordinance requirements, for both daytime (65 dBA) and nighttime (60 dBA) operation at the property line. In addition, implementation of project design features would ensure that any noise level increase remains below the 5-dBA significance threshold. As such, impacts would be less than significant, and no mitigation measures are required.

The six remaining Development Sites would all likely require a loading dock and refuse collection/recycling area, which is capable of generating a noise level as high as 75 dBA (50-foot reference distance). Most of the neighboring land uses and buildings present in areas that may potentially be affected by noise from such loading dock and refuse collection/recycling areas are located within the existing Health Sciences Campus. As such, through innovative site planning and project design features, the Applicant is anticipated to avoid potential noise impacts so as not to excessively disturb its own adjacent operations, employees and tenants. The exceptions are the neighboring land uses that surround Developments Sites E and F to the north, east and west; and the land uses that are located north, west and south of Development Site D.

Lincoln Park is located north of Development Sites E and F, and as such, could potentially be impacted by loading dock/refuse collection area noise. However, this area already experiences relatively high noise levels due to roadway traffic volumes along Valley Boulevard and railroad traffic along the Union Pacific tracks that run adjacent to Valley Boulevard. Potential impacts associated with the Project at neighboring land uses that surround Development Sites E and F would be less than significant, and no mitigation measures are necessary.

The areas located immediately north and west of Development Site D consist of Juvenile Hall uses that could potentially be impacted by nearby loading dock/refuse collection area activities since such noise levels would be clearly perceptible in comparison to the ambient noise level of approximately 65 dBA at this location. As such, potential impacts to these areas may be significant without incorporation of the mitigation measures.

Various noise events would also occur within the proposed parking structures and surface parking lots. The activation of car alarms, sounding of car horns, slamming of car doors, engine revs, and tire squeals would occur periodically. Automobile movements would comprise the most continuous noise source and would generate a noise level of approximately 65 dBA at a distance of 25 feet. Car alarm and horn noise events, which generate maximum noise levels as high as 69 dBA at a reference distance of 50 feet, would occur less frequently. The composite noise level of 60 dBA L_{eq} (1-hour) at a reference distance of 50 feet was used to represent the average parking facility-generated noise level.

With the exception of Development Sites A and G, a multi-level parking facility or surface parking lots could be constructed on any of the remaining Development Site locations. As potential noise level increases would be less than the 5-dBA significance threshold at areas adjacent to all potential Development Site locations, impacts would be less than significant and no mitigation measures are required.

The proposed Project may include one or more buildings that would require an emergency helipad pursuant to LAMC requirements.[8] As such, these helipads would be used for emergency purposes only. Due to infrequent and the emergency nature of that use, adverse noise impacts related to helipad uses would be less than significant.

The potential composite noise level impact at each sensitive receptor location was evaluated by assuming that each of the seven Development Site locations would generate a steady-state equivalent noise level of 70 dBA at a 50-foot reference distance. This 70 dBA (per Development Site) composite noise level would account for each of the individual noise sources (i.e., mechanical equipment, loading dock/refuse collection areas, parking facility, etc.) present on each Development Site. Operations-period composite noise level impacts would not exceed the 5-dBA significance criterion at any sensitive receptor locations, and as such, impacts would be less than significant.

[8] *City of Los Angeles Municipal Code Section 57.118.12 requires that buildings over 75 feet in height be equipped with an emergency helipad.*

b. Cumulative Impacts

All of the identified related projects have been considered for the purposes of assessing cumulative noise impacts. The potential for noise impacts to occur are specific to the location of each related project as well as the cumulative traffic on the surrounding roadway network.

Construction Noise

Of the 14 related projects that have been identified within the proposed Project study area, there are 9 related projects that have not already been built or are currently under construction. With the exception of the USC HNRT building that is currently under construction, the Applicant has no control over the timing or sequencing of the related projects, and as such, any quantitative analysis that assumes multiple, concurrent construction projects would be entirely speculative. Construction-period noise for the proposed Project and each related project (that has not already been built) would be localized. In addition, it is likely that each of the related projects would have to comply with the local noise ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible.

Three nearby related projects (i.e., the Los Angeles County Medical Center, Tenet Acute Care Tower, and USC HNRT) currently under construction are either on or immediately adjacent to the USC Health Sciences Campus. If these projects are still under construction during proposed Project construction, noise-sensitive uses on or adjacent to the HSC (e.g., LA County–USC Hospital) may experience a marginal noise level increase during construction due to concurrent construction. However, each project would be required to comply with the local noise ordinance, and mitigate impacts to the extent feasible. Nevertheless, since noise impacts due to construction of the proposed Project would be significant on its own, noise impacts due to construction of the proposed Project in combination with any of the related projects would also be significant.

Long-Term Operations

Each of the 14 related projects that have been identified within the general Project vicinity would generate stationary-source and mobile-source noise due to ongoing day-to-day operations. The related projects are of a residential, retail, commercial, or institutional nature and these uses are not typically associated with excessive exterior noise; however, each project would produce traffic volumes that are capable of generating a roadway noise impact. Cumulative traffic volumes would result in a maximum increase of 2.6 dBA CNEL along San Pablo Street, between Alcazar Street and Valley Boulevard. As this noise level increase would be below the most conservative 3-dBA CNEL significance threshold, roadway noise impacts due to cumulative traffic volumes would be less than significant.

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

c. Mitigation Measures

(1) Construction

As noise associated with on-site construction activity would have the potential to result in a significant impact, the following measure is prescribed to minimize construction-related noise impacts:

Mitigation Measure E-1: Prior to the issuance of any grading, excavation, haul route, foundation, or building permits, the Applicant shall provide proof satisfactory to the Building and Safety Department and Planning Department that all construction documents require contractors to comply with Los Angeles Municipal Code Section 41.40 which requires all construction and demolition activity located within 500 feet of a residence to occur between 7:00 A.M. and 6:00 P.M. Monday through Friday and 8:00 A.M. and 6:00 P.M. on Saturday, and that a noise management plan for compliance and verification has been prepared by a monitor retained by the Applicant. At a minimum, the plan shall include the following requirements:

1. Pile drivers used in proximity to sensitive receptors shall be equipped with noise control having a minimum quieting factor of 10 dB(A);

2. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site as determined by the Department of Building and Safety;

3. Program to maintain all sound-reducing devices and restrictions throughout the construction phases;

4. An approved haul route authorization that avoids noise-sensitive land uses to the maximum extent feasible; and

5. Identification of the noise statutes compliance/verification monitor, including his/her qualifications and telephone number(s).

(2) Operational

Portions of the Los Angeles County Juvenile Hall property that abuts Development Site D to the north and west could potentially be exposed to noise level increases that exceed the 5-dBA significance threshold if a loading dock/refuse collection area is located on Development Site D. As such, the following mitigation is prescribed:

Mitigation Measure E-2: If a loading dock/refuse collection area is proposed to be located on Development Site D, the Applicant shall be required to submit evidence, prior to the issuance of building permits for Development Site D, that is satisfactory to the City of Los Angeles Department of Building and Safety that noise level increases do not cause the baseline ambient noise level to increase beyond the 5-dBA significance threshold at any adjacent property line. This mitigation measure does not apply to development that may occur on Development Sites A, B, C, E, F, and G.

d. Level of Significance after Mitigation

(1) Construction

Most of the land uses present in areas that may potentially be affected by noise during construction are located within the existing Health Sciences Campus. As such, the Applicant can be expected to schedule construction activities so as to minimize impacts on its own adjacent operations, employees and tenants.

The mitigation measure recommended in this section would reduce the noise levels associated with construction activities to some extent. However, these activities would continue to substantially increase the daytime noise levels at nearby noise-sensitive uses by more than the 5-dBA significance threshold. As such, noise impacts during construction would be considered significant and unavoidable.

(2) Operations

With implementation of Mitigation Measure E-2 described above, Project development would not result in any significant noise impacts during long-term operations.

6. Utilities and Service Systems

6.1 Water

(1) Environmental Impacts

During construction, water would be used for dust suppression, the mixing and pouring of concrete, and other construction-related activities. The majority of water use during construction would be associated with dust suppression of excavated sites. This is generally performed by water trucks which derive non-potable water from offsite sources. As such, the impact on treated water from the DWP would be incrementally small and the impact on adjacent water conveyance systems. As such, no significant impact is anticipated to occur due to Project construction activities because the water demands associated with construction activities would not exceed available supplies or distribution infrastructure.

Lateral lines would be constructed from each Development Site to the existing mains in the street right-of-way. Each Development Site would require one service for domestic water and one water line for fire sprinkler and suppression systems. All water improvements within the public right-of-way would be constructed by LADWP. Impacts due to construction of water services include minor temporary traffic lane disruption during trenching, laying of pipe, backfilling, and street resurfacing. Although not within the authority of the Project, standard practices and procedures, including traffic control, are generally implemented by LADWP during construction to reduce the impact to the community to less than significant levels.

A Water Supply Assessment (WSA) has been reviewed and approved by the LADWP, in accordance with the State regulations and the LADWP Urban Water Management Plan (UWMP)[9]. The WSA evaluates the reliability of existing and projected water supplies, as well as alternative sources of water supply and how they would be secured if needed. The WSA is also consistent with the LADWP Urban Water Management Plan (UWMP). Domestic water would be required for research laboratories, restrooms, drinking fountains, landscaping, and incidental water use, such as employee dining rooms and kitchens. With respect to the operation of uses proposed for the Project, an estimated total of 208,704 to 266,304 gallons per day (gpd) of potable water would be consumed during the day in which the proposed Project is fully occupied at buildout. Conservatively, assuming the average daily demand for water is extended over 365 days per year, the projected annual consumption for the entire project at buildout would be a maximum of 97.20 million gallons annually. This represents an increase of 0.04 percent over the annual volume of water supplied by the LADWP in fiscal year 2004.

[9] *The LADWP Board of Commissioners approved the Water Supply Assessment on March 22, 2005.*

The Project falls within Senate Bill 610 size criteria in which a water supply assessment (WSA) must be evaluated and approved by the LADWP (i.e., commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space). LADWP has concluded via the Project's WSA that adequate water supplies exist to serve the maximum proposed development.

Therefore, the water demand of the proposed Project would be less than significant in relation to the UWMP and with state water statutes.

Water Infrastructure

The water conveyance system serving the seven Development Sites includes water lines in Eastlake Avenue, San Pablo Street, Alcazar Street, Biggy Street and Zonal Avenue. An analysis was completed with regard to the ability of each of these lines to convey water to the site. As the analysis concludes that these water lines have sufficient capacity to convey the Project's maximum, Project impacts on the area's water conveyance system are less than significant.

Fire Flow

The water conveyance system at the Project site would also be required to meet LAFD fire flow standards. The LAFD Fire Marshall's office requires that water lines serving the Project site provide 6,000 to 9,000 gallons per minute (GPM) during simultaneous flow from four adjacent fire hydrants. In addition, in order to meet fire flow requirements, the residual pressure during the continuous flow from four hydrants, must not drop below 20 psi. Since the existing water pressure at the Project Site is adequate to meet this LAFD fire flow requirement, the existing conveyance system is adequate and the impact of the Project relative to fire flow would be less than significant.

In summary, the Project's total estimated water demand at buildout would not exceed available supplies or distribution infrastructure capabilities, the Project would not create a significant impact relative to the existing conveyance system, and fire flow would be adequate to meet LAFD requirements. Therefore, the Project would generate a less than significant impact in relation to water supply and water conveyance systems.

(2) Cumulative Impacts

The projected potable water consumption for the proposed Project in conjunction with that of related projects (identified in Section III.b of the Draft EIR) would increase daily demand on water supplies. However, since related projects are anticipated to be constructed in accordance with State and water conservation regulations and within the build-out scenario of

the controlling Community Plans and City of Los Angeles General Plan Elements, no significant impacts due to cumulative water demand are anticipated. The Project's off-site improvements would not create additional population or induce population growth directly or indirectly and, therefore, would not result in any secondary impacts on water consumption. As such, cumulative impacts associated with off-site improvements would be less than significant.

Via the UWMP plan process as well as compliance with the provisions of Senate Bill 610, and Assembly Bill 221, it is anticipated that LADWP would be able to supply the demands of the Project and related projects through the foreseeable future and no significant cumulative impacts related to water demand are anticipated.

(3) Mitigation Measures

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

Mitigation Measure F-1.1: Water faucet fixtures with activators shall be installed that automatically shut off the flow of water when not in use.

Mitigation Measure F-1.2: Automatic sprinkler systems shall be set to irrigate landscaping during early morning hours or during the evening 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.

(4) Level of Significance after Mitigation

The total estimated water demand for the Project at buildout is not anticipated to exceed available supplies or distribution infrastructure capabilities (i.e., water infrastructure), or exceed the projected employment, housing, or population growth projections of the applicable General Plan Framework and Community Plan, as assumed in the planning for future water infrastructure needs. Therefore, no significant unavoidable adverse impacts relative to water consumption are anticipated to occur.

6.2 Wastewater

(1) Environmental Impacts

During construction of the Proposed Project, a negligible amount of wastewater would be generated by construction personnel. It is anticipated that portable toilets would be provided by

a private company and the waste disposed of off-site. Wastewater generation from construction activities is not anticipated to cause a measurable increase in wastewater flows at a time when a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Additionally, construction is not anticipated to generate wastewater flows that would substantially or incrementally exceed the future scheduled capacity of any treatment plant by generating flows greater than those anticipated in the City Wastewater Facilities Plan. As such, construction impacts to the local wastewater conveyance and treatment system would be less than significant and no mitigation is required.

Implementation of the proposed Project would only require the construction of lateral lines from the Development Sites to the sewer lines in the public right-of-way. Those portions of the laterals constructed within the public right-of-way would have impacts relative to minor traffic lane disruption during trenching, laying of pipe, backfilling, and street resurfacing, since laterals would only be required from the property line of the Development Sites to the existing lines located in the street right-of-way. Standard practices and procedures, including traffic control, would be implemented to reduce the impact to the community to less than significant levels.

The regional wastewater treatment facility at the Hyperion Treatment Plant (HTP) has been improved to provide capacity for the incremental increase in sewage generated by anticipated growth in the City of Los Angeles. Regional wastewater facilities are at least partially funded through the collection of fees. The Sewerage Facilities Charge is collected by the City of Los Angeles from owners/developers of new land uses within the City. The Project would generate an incremental increase in the sewage flow treated by HTP. The Applicant would be subject to the payment of a Sewerage Facilities Charge for the development at the Health Sciences Campus. Fees may be offset by credits should credits be available through prior uses. All projects served by the Hyperion Treatment System are subject to the Sewer Allocation program, which limits additional discharge according to a pre-established percentage rate. If the allotment for a particular time period (usually a month) has already been allocated, the project is placed on a waiting list until adequate treatment capacity has been determined. Under the allocation program, HTP has capacity to serve a particular rate of growth. Since the Project is located in an area designated for commercial and public facility uses, the Project's additional wastewater flows would not substantially or incrementally exceed the future scheduled capacity of the HTP by generating flows greater than those anticipated in the Wastewater Facilities Plan or City General Plan. Anticipated sewage flow for the Project at buildout would range from 163,050 to 208,050 gallons per day. As previously described, the Project would not be permitted prior to the availability of treatment capacity. Therefore, no significant impacts in relation to treatment capacity would occur.

The sewer conveyance system serving the seven proposed Development Sites includes sewer lines in Eastlake Avenue, San Pablo Street, Alcazar Street, Biggy Street, and Zonal

Avenue. Since all sewer lines serving the seven proposed Development Sites have adequate capacity to serve the maximum projected flow from each of the Development Sites, Project impacts relative to sewer line capacity is concluded to be less than significant.

(2) Cumulative Impacts

The Project and the related projects, which are not served by the local lines serving the Project Site, are not anticipated to cause a measurable increase in wastewater flows concurrent in time or at a point when a sewer line serving the Project Site capacity would be already constrained or that would cause a sewer's capacity to become constrained during peak service. In relation to broad growth and demand, all related projects would be subject to the City's Sewer Allocation program for the Hyperion Treatment Plant. This program limits additional discharge according to a pre-established percentage rate. Under the current allocation program, HTP has capacity to serve a particular rate of growth and prevent the occurrence of significant cumulative impacts relative to treatment capacity. Therefore, cumulative impacts to the local and regional sewer conveyance and treatment system, from the implementation of the proposed Project and related projects would be less than significant.

(3) Mitigation Measures

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

Mitigation Measure F-2.1: Prior to the issuance of any building permits, the Development Services Division of the Bureau of Engineering, Department of Public Works, shall make a determination of capacity in the sewer pipeline between each proposed Development Site and the trunk sewer. If service is discovered to be less than adequate, the Applicant shall be required to upgrade the connections to the mains and/or provide an alternative solution, in order to appropriately serve the Project.

Mitigation Measure F-2.2: The Applicant shall comply with procedural requirements of City ordinances regulating connections to the City sewer system (e.g., Ordinance No. 166,060).

Mitigation Measure F-2.3: All necessary on-site infrastructure improvements shall be constructed to meet the requirements of the Department of Building and Safety.

Mitigation Measure F-2.4: The Applicant shall apply for and comply with all necessary permits, including Industrial Wastewater Discharge Permits, if required.

(4) Unavoidable Adverse Impacts

With the implementation of the recommended mitigation measures, any local deficiencies in sewer lines would be identified and remedied and wastewater generation rates would be reduced. No significant impacts on wastewater conveyances or the capacity of the Hyperion wastewater treatment facility would occur.

II. Project Description

II. PROJECT DESCRIPTION

A. INTRODUCTION

The University of Southern California (the Applicant) is proposing to develop additional academic and medical-related (e.g., medical research, medical clinic, etc.) facilities within its existing Health Sciences Campus (HSC) in northeast Los Angeles (the "Project"). A total of up to 765,000 square feet of development is proposed, consisting of 720,000 square feet of academic and medical research facilities, and 45,000 square feet of medical clinic facilities. Additional medical clinic facilities may be developed in lieu of academic and medical research facilities. A maximum of 120,000 square feet of medical clinic floor area is proposed. Should this occur, the amount of academic and medical research facilities would be reduced to 465,000 square feet, for an overall total of 585,000 square feet of development. As such, the Project proposes the development of between 585,000 and 765,000 square feet of floor area. The environmental analysis conducted for the Project addresses the development of the full range of floor area (i.e., 585,000 to 765,000 square feet) and uses (i.e., academic, medical research and medical clinic).

The new facilities that would be constructed under the Project would be utilized by the Applicant for academic facilities, research laboratories and offices, as well as medical clinic space by tenants associated with the HSC. The Project also includes the development of parking facilities to support the proposed academic and medical-related uses. For the purposes of this EIR, the term "Project" is used to refer collectively to the proposed academic and medical-related facilities as well as the proposed parking facilities.

B. PROJECT LOCATION

The academic and medical-related facilities that would be developed in association with the Project would be located within the existing HSC on sites that currently contain surface parking lots or are underdeveloped as described in further detail below.

The HSC is located approximately 3 miles east of downtown Los Angeles, approximately 0.5 mile north of the San Bernardino Freeway (I-10) and approximately 0.5 mile east of the Golden State Freeway (I-5), as shown in Figure 1 on page 45. The HSC is located adjacent to the Lincoln Heights and Boyle Heights neighborhoods of the City of Los Angeles (City) and is within the City's Northeast Los Angeles Community Plan Area, which encompasses that portion of the City east of the Los Angeles River and north of Boyle Heights. The HSC is also within

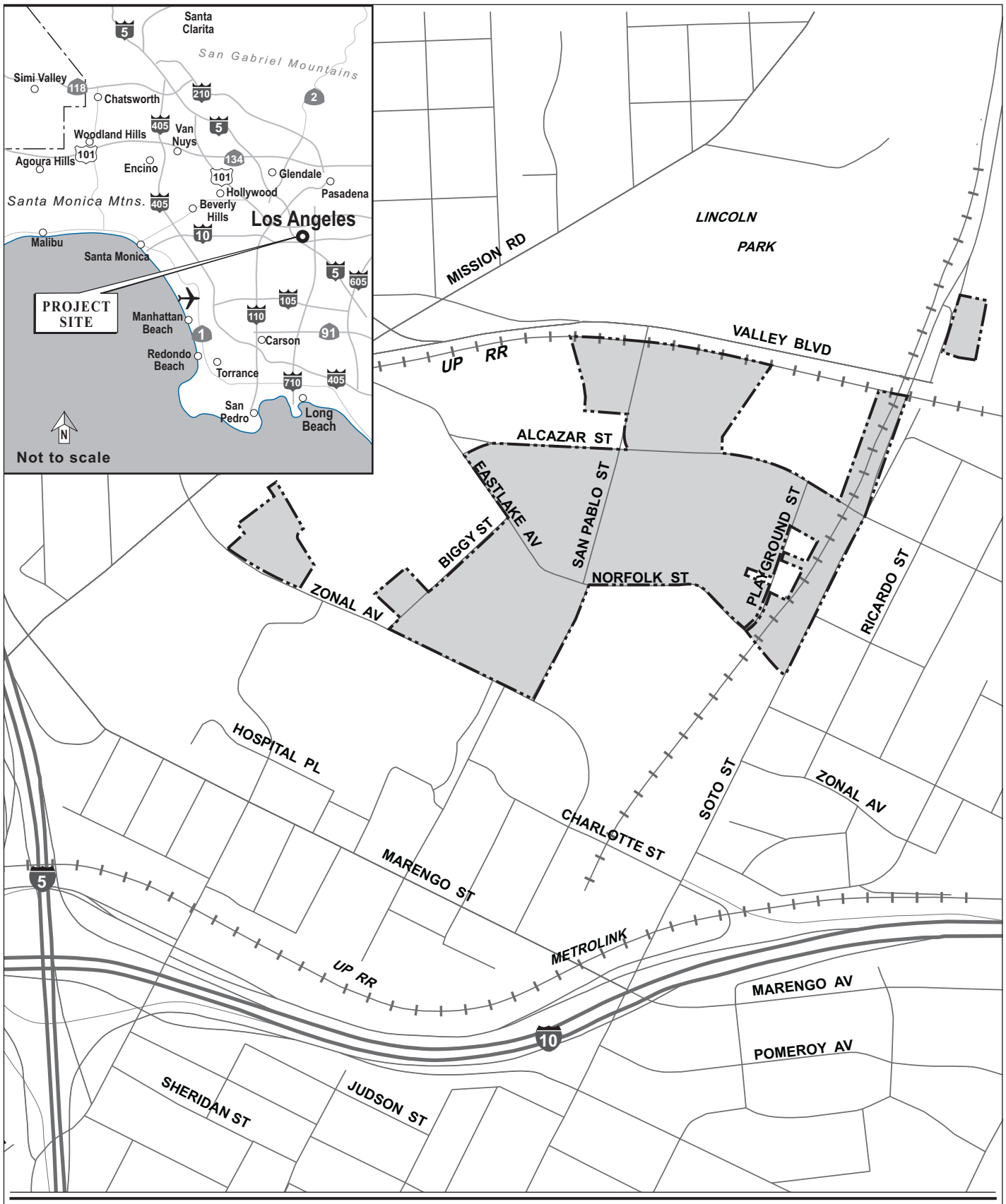


Figure 1
Regional Location Map

Source: PCR Services Corporation, 2005

the Adelante Eastside Redevelopment Project area, which is administered by the Community Redevelopment Agency of the City of Los Angeles (CRA).

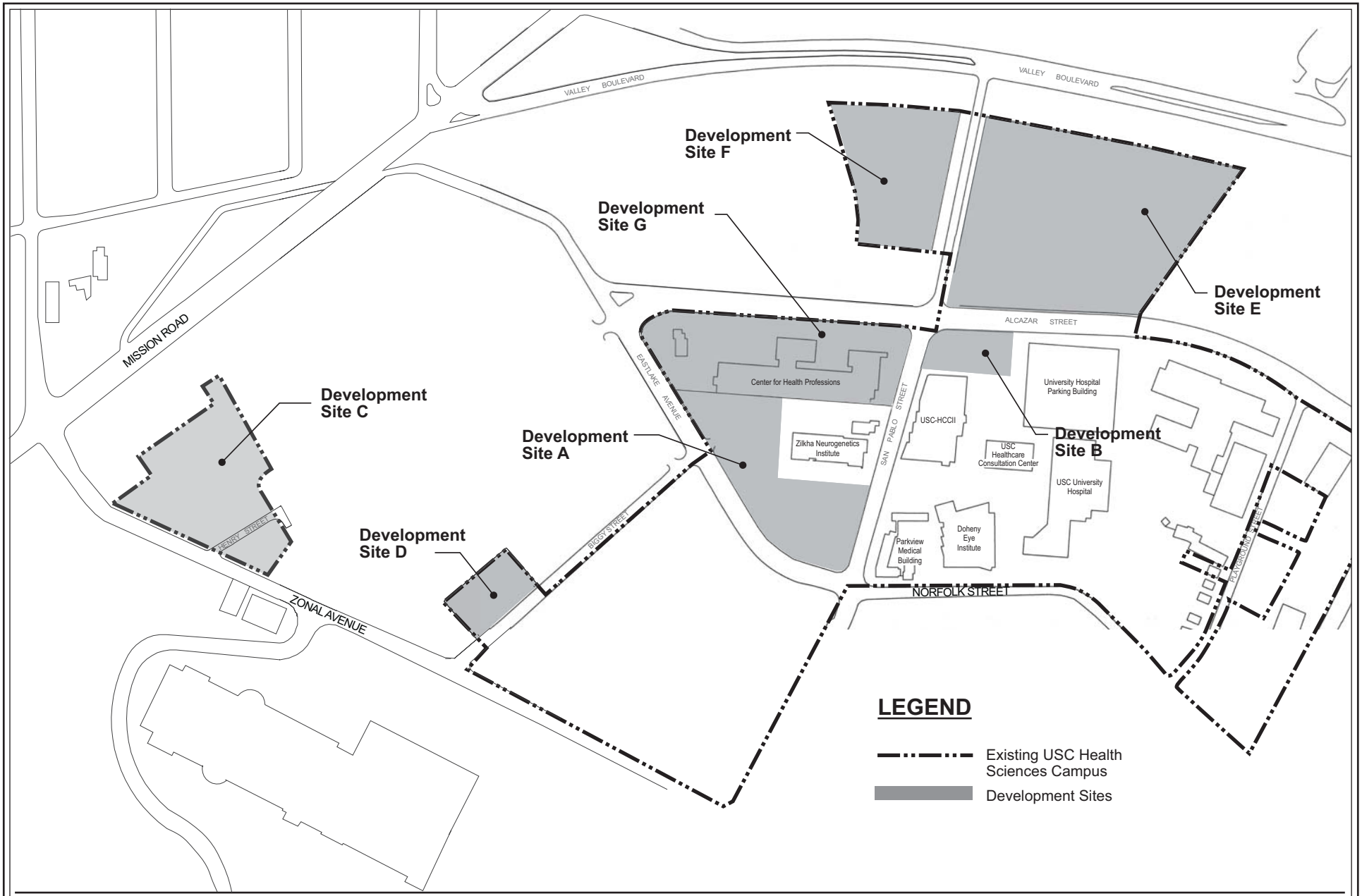
C. PROJECT SETTING

The HSC features state-of-the-art academic and medical research and treatment facilities devoted to medical research, with specific work in the fields of cancer, gene therapy, neurosciences, and transplantation biology as well as programs in occupational therapy and physical therapy. As an example, the HSC includes the USC/Norris Comprehensive Cancer Center, USC University Hospital, the Zilkha Neurogenetics Institute, the Doheny Eye Institute, the School of Pharmacy, the Keck School of Medicine, the Center for Health Professions, and the Norris Medical Library.

D PROJECT COMPONENTS

The proposed Project includes the development of between 585,000 and 765,000 square feet of floor area. Should 585,000 square feet of floor area be developed, a total of 465,000 square feet of academic and/or medical research facilities would be developed, and the balance, 120,000 square feet, would be developed with medical clinic uses. In the event on-site development reaches 765,000 square feet, a total of 720,000 square feet of academic and/or medical research facilities would be developed and the amount of medical clinic development would be decreased to 45,000 square feet.

The Project proposes development on up to seven (7) designated Development Sites. The seven Development Sites are hereafter referred to as Development Sites A, B, C, D, E, F, and G, as shown in Figure 2 on page 47 and Figure 3 on page 48. For the purposes of this EIR, the term "Project Site" is defined to include all seven (7) Development Sites. Development Sites A, B, and G are considered infill sites located within the existing HSC. Development Site C is an existing HSC surface parking lot located on the west side of the HSC. Development Site D is an existing surface parking lot located along the west side of Biggy Street between Zonal and Eastlake Avenues. Development Sites E and F consist of a surface parking lot and a vacant lot located in the northern portion of the HSC on the east and west sides of San Pablo Street, respectively. Project parking could be satisfied by parking facilities within Development Sites B, and/or C, D, E, and F, as well as within existing HSC parking facilities. The following describes each of the Development Sites that comprise the Project.



PCR

0 125 250 500 Feet

Source: University of Southern California.

Figure 2
Proposed Development Sites

PCR

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Figure 3
Aerial View of Campus

Source: Aerial: Landiscore; PCR Services Corporation, 2005

1. Development Site A

Development Site A is centrally located within the HSC. Development Site A is approximately 2.46 acres in size, though it is part of a larger, 8.06-acre parcel identified as Lot 1, Tract 24390 by the Los Angeles County Assessor. The larger, 8.06-acre parcel also includes the Center for Health Professions, the Zilkha Neurogenetics Institute (ZNI), and Development Site G (see description below). The basement of future building(s) on Development Site A could be designed to connect to the basement of the ZNI building. The maximum amount of development proposed for Development Site A would range from 120,000 square feet of medical clinic facilities to 465,000 square feet of academic and/or medical research facilities. Maximum building heights on this Development Site would be 150 feet.

2. Development Site B

Development Site B is also centrally located within the HSC and can also be characterized as infill development within the HSC. Development Site B is approximately 1.13 acres in size and is identified as Lot 5, Tract 49380 by the Los Angeles County Assessor. This Development Site is located west of the existing USC University Hospital parking structure. The maximum amount of development proposed for Development Site B would range from 120,000 square feet of medical clinic facilities to approximately 295,338 square feet of academic and/or medical research facilities. The maximum height permitted would be 150 feet. Parking may also be provided within a portion of Development Site B.

3. Development Site C

Development Site C is located in the western portion of the HSC. This approximately 3.68-acre site is located on the north side of Zonal Avenue, between State Street to the east, and Mission Road to the west, as shown in Figure 2 on page 47 and Figure 3 on page 48, and is identified as all or portions of Lots 1 and 2 of Tract 15492 and Lots 1 through 7 of Brett Tract by the Los Angeles County Assessor. Development Site C is currently used as a 548-space surface parking lot. Proposed activity on Development Site C would be limited to parking. A multi-story parking structure providing up to 2,800 parking spaces may be developed at this location and, if constructed, would provide parking that would support Project development, as well as replacement parking for the existing surface lot that currently occupies Development Site C. This proposed parking structure may be developed in two phases. The height of the parking structure would not exceed 75 feet. Due to the distance between the proposed parking structure and the buildings it serves, a parking variance may be required to implement this component of the proposed Project.

4. Development Site D

Development Site D is an approximately 0.77-acre site located on the west side of Biggy Street between Zonal and Eastlake Avenues, as shown in Figure 2 on page 47 and Figure 3 on page 48 and is identified as Lots 22 through 25 of Tract 1767 by the Los Angeles County Assessor. Development Site D is currently used as a 106-space surface parking lot and is proposed to be developed with the type of academic and/or medical-related uses that are described above for Development Sites A and B, or as parking facilities that support the proposed uses. In addition, new construction on Development Site D may be a combination of academic/medical-related uses and parking. In the event that only academic and medical-related uses are constructed, the maximum amount of development would range from approximately 59,000 square feet of medical clinic facilities to 200,000 square feet of academic and/or medical research facilities. The development of academic and/or medical-related uses would occur in structure(s) with a maximum height of 140 feet.

Parking facilities to support the Project may also occur on Development Site D. The parking facilities, should they occur, could be a mix of a multi-level structure and surface parking. The height of the parking structure would not exceed 75 feet. A maximum of 600 parking spaces could be constructed on Development Site D.

5. Development Site E

Development Site E consists of a 7.64-acre surface parking lot located on the east side of San Pablo Street between Alcazar Street and Valley Boulevard, as shown in Figure 3 on page 48 and Figure 8 on page 56. This Development Site would be developed with the type of academic and/or medical related uses that are described above for Development Sites A, B, and D. The maximum amount of development proposed for Development Site E would range from approximately 118,000 square feet of medical clinic facilities to 400,000 square feet of academic and/or medical research facilities. The maximum building height permitted within Development Site E would be 100 feet. Parking to accommodate the proposed Project may also be provided within this site in the form of a surface parking lot and/or parking structure.

6. Development Site F

Development Site F, which consists of 2.65 acres of vacant land, is located on the west side of San Pablo Street, as shown in Figure 3 on page 48 and Figure 8 on page 56. Academic and/or medical related uses that are described above for Development Sites A, B, D, and E may also be developed on Development Site F. The maximum amount of development proposed for Development Site F would range from approximately 118,000 square feet of medical clinic facilities to 400,000 square feet of academic and/or medical research facilities. The maximum

building height would be 100 feet. In addition, parking to accommodate the proposed Project may be provided within this site in the form of a surface parking lot and/or parking structure.

7. Development Site G

Development Site G is centrally located within the HSC. Similar to Development Site A, Development Site G is part of the same 8.06-acre parcel identified as Lot 1, Tract 24390 by the Los Angeles County Assessor. In addition to Development Site A, this 8.06-acre parcel also includes the Center for Health Professions (CHP) and the Zilkha Neurogenetics Institute (ZNI). Development Site G comprises approximately 4.0 acres of the larger 8.06-acre parcel. The maximum amount of development proposed for Development Site G would range from approximately 29,500 square feet of medical clinic facilities to 100,000 square feet of academic and/or medical research facilities. This development may occur either in the form of a new structure and/or as an addition to the existing CHP structure. Demolition of the CHP is not anticipated to occur as part of the proposed Project. Maximum building heights on this Development Site would be 100 feet.

E. CONCEPTUAL PROJECT DESIGN

The proposed buildings would be constructed of steel structural or concrete framework clad with pre-cast concrete panels and glass and aluminum curtain wall systems. Though the design of the proposed buildings has not been fully developed at this stage, their architectural style would be similar to the type of buildings that already exist on the HSC, such as those shown in the photographs in Figure 4 through Figure 9 on pages 52 through 57.

The Project would also include the creation of new exterior courtyards and walkways between and around the proposed buildings. These spaces would include plantings that would complement the existing landscaping program throughout the HSC. The proposed buildings would also feature signage and lighting consistent with existing HSC lighting and signage.

As described above, parking for the proposed buildings would be provided on Development Sites C and/or B, D, E, and F. Sidewalks and pedestrian walkways between buildings would connect the parking with the proposed and existing buildings within the HSC, as well as via the on-campus shuttle program. In addition, drop-off and delivery areas would be provided at each of the proposed buildings.

The view eastward from the corner of Biggy Street and Eastlake Avenue shows the new Zilkha Neurogenetics Institute (ZNI) with adjacent surface parking lots that comprise Development Site A.

The view westward from the east side of San Pablo Street shows the south facade of the Zilkha Neurogenetics Institute (ZNI) and the adjacent surface parking lots that comprise Development Site A.

PCR

Figure 4
Photographs of Development Site A

Source: PCR Services Corporation, 2004

The view southward from Alcazar Street showing Development Site B with the HCCII building to the right, the USC University Hospital parking structure to the left and the HCC building and Doheny Eye Institute in the background.

The view eastward from the corner of Alcazar Street and San Pablo Street showing Development Site B.

PCR

Figure 5
Photographs of Development Site B

Source: PCR Services Corporation, 2004

View northward of Development Site C from Zonal Avenue.

View southward from within Development Site C with County-USC Hospital visible in the background.

PCR

Figure 6
Photographs of Development Site C

Source: PCR Services Corporation, 2004

View westward of Development Site D from Biggy Street.

View eastward from within Development Site D with the USC/Norris Comprehensive Cancer Center visible in the background.

PCR

Figure 7
Photographs of Development Site D

Source: PCR Services Corporation, 2004

View eastward of Development Site E from San Pablo Street.

View westward of Development Site F from San Pablo Street.

PCR

Figure 8
Photographs of Development Site E and F

Source: PCR Services Corporation, 2004

View eastward of Development Site G from the intersection of Eastlake Avenue and Alcazar Street.

PCR

Figure 9
Photograph of Development Site G

Source: PCR Services Corporation, 2004

F. PROJECT DEVELOPMENT

The development timeframe for buildout of the proposed Project is approximately ten years, with buildout anticipated to occur by 2015. Within this timeframe the construction of individual buildings would take place over the course of two to three years. Development of the parking facilities would occur in coordination with development of the buildings to be served by the parking. The final plans and construction documents for each component of the Project would identify protocols for demolition, site preparation, staging and other activities associated with construction.

G. PROJECT OBJECTIVES

1. Applicant's Objectives

The overall purpose of the proposed Project is to provide more opportunities for USC faculty and students to work at the forefront of biomedicine while continuing to provide outstanding patient care.

The objectives of the proposed Project relate to the Project's mission, required facilities and design. They are as follows:

Mission

- To be a nationally respected provider of the highest quality, specialized, acute inpatient and outpatient health care services and translational research.
- To assist in achieving USC's goals for the HSC to become one of the nation's very top medical schools and to attract outstanding students and provide them with a rigorous, individually tailored educational experience that trains them as internationally competitive research scientists.
- To improve the quality of life for individuals and society by promoting health, preventing and curing disease, advancing medical research and educating tomorrow's physicians and scientists.
- To provide outstanding undergraduate, graduate and postgraduate academic programs of instruction for highly qualified students leading to academic degrees in the health profession.
- To conduct and publicize cutting-edge multidisciplinary research in the discovery, action, utilization and evaluation of therapeutic agents.

- To serve California and the nation in providing life-long learning to health professionals.
- To provide health leadership in the solution of complex community, regional, national and international medical problems.

Facilities

- To develop new facilities which provide the quantity and quality of laboratory space required for recruiting new, world-renowned faculty, conducting breakthrough research, and training future scientists.
- To provide the facilities and create an atmosphere that will stimulate and encourage USC students to excel academically, as community leaders and as professionals.
- To provide new research, education and patient care facilities in an amount commensurate with demand for new programs and mission objectives.
- To provide centralized facilities within the HSC to attain efficiency in the meeting of the mission objectives described above.
- To provide new facilities within the HSC in a manner that supports synergy amongst research, education and patient care.
- To provide a buildout of the existing HSC site with uses which are complementary to, and supportive of, existing site uses.

Design

- To create an on-site, pedestrian-friendly campus environment that will allow pedestrian access to the entire facility with limited vehicular interfaces by providing parking at selected locations within the HSC.
- To provide adequate parking for faculty, students, patrons and guests of the HSC.
- To provide a continuity of design between existing and new site uses to support the site's development as a unified campus.
- To develop new facilities that would spur commercial partnerships, development and jobs.

2. City of Los Angeles Objectives

In addition, the City of Los Angeles has adopted policies and objectives that relate directly to the implementation of the proposed Project. These policies and objectives are articulated in the Northeast Los Angeles Community Plan of the City of Los Angeles General Plan and the Adelante Eastside Redevelopment Plan. The manner in which the Project aids in

the achievement of these policies and objectives is discussed in more detail in Section IV.A, Land Use, of this Draft EIR. It is the Applicant's further objective to support the attainment of the City policies and objectives, as follows:

Northeast Los Angeles Community Plan

- To encourage compatibility in school locations, site layout, and architectural design with adjacent land uses and community character, by developing underdeveloped on-campus locations with a Project design that complements existing HSC development.
- To design new development projects to minimize disturbance to existing traffic flow with proper ingress and egress to parking, by providing easily accessible parking structures supported by an on-campus shuttle program.
- To strengthen contacts and cooperation between public and private sector organizations engaged in economic development activities within the community, by providing jobs for local citizens and serving the surrounding community.
- To minimize conflicts between auto-related and pedestrian-oriented activities and encourage the use of public transportation in commercial areas, by providing easily accessible parking structures located at the perimeter of the HSC and supported by an on-campus shuttle program.

Adelante Eastside Redevelopment Plan

- To improve the quality of life for those who live and work in and visit the Redevelopment Plan Area through enhanced business, employment, and educational opportunities, by enhancing existing HSC educational facilities and health care as well as by providing jobs for the community.
- To preserve and increase employment, training, business and investment opportunities through redevelopment programs, by providing additional educational and health care facilities as well as on-site employment opportunities.
- To support and encourage a circulation system that will improve the quality of life in the Redevelopment Plan Area with an emphasis on serving existing facilities and meeting future needs, by providing enhanced pedestrian facilities, easily accessible parking structures supported by an on-campus shuttle program and by providing new development that is accessible via existing mass transit systems.
- To promote and support the conservation, rehabilitation and appropriate use or reuse of existing buildings, groupings of buildings and other physical features, by developing existing underdeveloped sites within the HSC and complementing existing HSC facilities with related, synergistic uses.

- To promote a thriving commercial environment, including adequate parking and proper traffic circulation by developing underdeveloped sites within the boundaries of the existing HSC in a manner that continues the positive land use relationships that currently exist between the HSC and adjacent land uses.

H. INTENDED USE OF THE EIR AND ANTICIPATED PUBLIC AGENCY ACTIONS

This EIR is a Project EIR, as defined by Section 15161 of the State CEQA Guidelines. This EIR serves as an informational document and provides an analysis of the whole of the proposed Project. The intended use of this EIR is to assist the City of Los Angeles decision-makers in making decisions regarding the proposed Project. This EIR shall be used in connection with all permits and approvals necessary for the construction and operation of the proposed Project. This EIR shall be used by the following responsible agencies in the approval, construction, and development of the proposed Project: the Community Redevelopment Agency of Los Angeles; the City Council of the City of Los Angeles; the Department of City Planning of the City of Los Angeles; and all City of Los Angeles departments and other public agencies that must approve activities undertaken with respect to the proposed Project.

Required discretionary approvals and permits may include, but are not limited to:

1. City of Los Angeles

- Development Agreement
- General Plan Amendment from Public Facilities to General Commercial for Development Site C.
- A General Plan Amendment from Limited Industrial to General Commercial for Development Sites E and F.
- Zone change from PF to C2-2 for Development Site C.
- Zone change for Development Sites A through G to add Q and/or D conditions.
- Zone change from CM-1 to C2-2 for Development Sites E and F.
- Height district change from 1VL to 2 for Development Site D.
- Variance from the distance requirement for parking to be provided within 750 feet of the proposed use (Los Angeles Municipal Code Section 12.21.A.4(g);
- Abandonment of Henry Street through either the merger and resubdivision of Development Site C or a street vacation. In the event that Henry Street is vacated, an

amendment to the Northeast Los Angeles Community Plan Generalized Circulation Map would be required to remove Henry Street.

- Haul route; and
- Any other City of Los Angeles permits or approvals as may be required.

Required ministerial approvals from the City of Los Angeles may include, but are not limited to:

- Department of Public Works permits for excavation and shoring in public ways and the installation of public improvements;
- Department of Building and Safety permits including demolition, grading, foundation and building permits; and
- Any other City of Los Angeles ministerial actions or approvals as may be required.

2. Community Redevelopment Agency

- CRA staff review and approval of City of Los Angeles building permit applications; and
- Any other CRA permits or approvals as may be required.

3. State of California

Required discretionary approvals from the State of California may include, but are not limited to:

- Regional Water Quality Control Board issuance of National Pollution Discharge Elimination System (NPDES) permits for the control of construction runoff water quality;
- South Coast Air Quality Management District permits regarding emergency generators; and
- Any other discretionary actions or approvals from State of California agencies as may be required.

III. General Description of the Environmental Setting

III. GENERAL DESCRIPTION OF THE ENVIRONMENTAL SETTING
A. OVERVIEW OF ENVIRONMENTAL SETTING

This section provides a summary of the environmental setting for the area around the proposed Project Site, as well as an overview of existing on-site conditions for each of the following environmental issues that are analyzed in the Draft EIR: Land Use, Aesthetics, Transportation, Parking and Circulation, Air Quality, Noise, and Utilities. Each of the environmental analysis sections presented in Section IV of the Draft EIR includes a more detailed description of existing conditions as well as the regulatory framework that is applicable to the proposed Project.

LAND USE AND PLANNING

The Project Site is located within the Northeast Los Angeles Community Plan area of the City of Los Angeles. The Northeast Los Angeles Community Plan Map designates Development Sites A, B, D, and G as General Commercial, while Development Site C is designated for Public Facilities. Development Sites E and F are designated Limited Industrial. The proposed uses (i.e., academic, medical research and office buildings on Development Sites A, B, D, E, F, and/or G and potential parking facilities on Development Sites B, C, D, E, and/or F) are permitted uses under these designations. A Community Plan Amendment to change the land use designation from Public Facilities to General Commercial is required to permit the proposed development on Development Site C.

The Project Site is also located within the Adelante Eastside Redevelopment Project Plan area. The Adelante Eastside Redevelopment Plan encompasses approximately 2,200 acres of commercial and industrial properties in east Los Angeles. The principle goal of the Redevelopment Plan is to preserve the existing commercial and industrial economy of the community.

The City of Los Angeles Planning and Zoning Code (Chapter 1 of the Los Angeles Municipal Code—LAMC) regulates development through land use designations and development standards. Development Sites A, B, and G are zoned C2-2 (Commercial). As detailed in Section 12.14 of the LAMC, the C2-2 commercial zone permits a wide variety of commercial uses, including academic, medical laboratory and medical office uses and allows the provision of surface parking in support of commercial uses. Development Site C is zoned PF-1 (Public Facilities) and Development Site D is zoned [Q] C2-1VL. The [Q] condition on Development Site D prohibits 100 percent residential development, and limits residential

development, should it occur, to that permitted in the RD1.5 zone. Development Sites E and F are zoned CM-1 (Commercial Manufacturing). Thus, the proposed uses for Development Sites A, B, D, and G would be permitted uses under the existing zoning designations. Development of the proposed uses on Development Sites E and F would require a zone change from CM-1 to C2-2. Development of the proposed uses on Development Site C would require a zone change from PF to C2. There is no required minimum lot area or minimum front, side, or rear yard setback for non-residential uses in the C2 zone or CM-1 zone. In addition, a zone change for all development sites may be sought to establish a [Q] condition and/or a D condition for the purpose of implementing the Project's proposed development program.

Total floor area and height limitations are regulated by Section 12.21.1 of the LAMC. Development Sites A, B, and G are located within Height District 2 for which the applicable height limitation is defined in terms of permitted floor area. Specifically, within Height District 2, the total floor area in all buildings shall not exceed six times the buildable lot area. Development Sites C, E, and F are located in Height District 1, which limits the total floor area on a lot in a commercial zone to one and one-half times the buildable area and in a public facilities zone to three times the buildable area. Since Development Site C is zoned PF the total floor area permitted on this site is limited to three times the buildable area. Development Sites E and F are zoned CM, therefore the total floor area permitted on these sites is limited to 1.5 times the buildable lot area. Development Site D is located within Height District 1VL, and no building or structure in Height District No. 1VL shall exceed three stories, nor shall it exceed 45 feet in height. A height district change for Development Site D would be required to permit maximum development up to 120 feet in height for any building and up to 75 feet in height for a parking structure. Based on the proposed development program Development Site F requires a height district change to permit the maximum development that could occur on this Development Site. The Height District for Development Sites D, E, and F is proposed to be changed to Height District 2.

The LAMC also regulates the minimum number of parking spaces to be provided on a property based on land use and the number of units or floor area. In addition, per LAMC Section 12.21.A.4(g), a project's parking must be provided on the same lot as the proposed use or on a separate lot within 750 feet of the use. Development of parking facilities to support the new buildings would be accommodated through construction of parking facilities on one or more of the following: Development Sites B, C, D, E, and F. As the proposed parking facilities may be greater than 750 feet from one or more of the proposed Development Sites, a variance from the LAMC provisions regarding the maximum distance between a building and its parking may be required.

The existing land uses in the area are described below under the heading of Aesthetics.

AESTHETICS

The approximate 56-acre USC Health Sciences Campus is located in the northeastern portion of the City of Los Angeles. The local street pattern within the area generally follows the alignment of the Interstate 10 (I-10) and Interstate 5 (I-5) Freeways. Because of its highly developed nature, the area's aesthetic environment is generally defined by the developed land uses present in the area.

West of the Project site the aesthetic environment is defined by the large-scale institutional uses present in the area, principally the Los Angeles County–USC Medical Center and Women and Children's Hospital; the College of Nursing and Allied Health; and the Los Angeles County Coroner. The Los Angeles County–USC Medical Center is currently expanding its facilities to the south with construction occurring on the north side of Marengo Street. The existing high-rise medical buildings in this area range from approximately 4 to 15 stories in height and are older than the more modern HSC buildings. Landscaping is limited to ornamental landscaping along the building façades fronting the public roadways. Other than the Los Angeles County Coroner Building, which is constructed of brick, the surrounding buildings are constructed of pre-cast concrete with glass and metal curtain walls. With these land uses serving as a western anchor, the HSC is an adjoining institutional complex exhibiting a higher level of aesthetic quality due to a greater ability and value placed on creating such an environment by the Applicant.

The Francisco Bravo M.D. Magnet Senior High School is located to the southeast of the HSC on the east side of Cornwell Street, with the United States Army Reserve Center located on the east side of San Pablo Street south of Norfolk Street. A Los Angeles County Public Works facility is located on the north side of Alcazar Street across from the USC Kidney Center and the USC Pathology Reference Center.

From a broad perspective, two relatively large City parks are located to the north and south of the HSC. Lincoln Park is located north of Valley Boulevard and is separated from the HSC by Valley Boulevard and the railroad tracks that run parallel to Valley Boulevard. Lincoln Park offers a wide variety of youth and adult recreational programs including fishing in the lake within the park. Located southeast of the HSC is Hazard Park. Hazard Park is a 25-acre recreational resource, which contains trees, lawns, baseball diamonds, tennis courts, and a vegetated gully along an abandoned railroad spur line that bisects the park. Views of some HSC buildings are visible from certain vantage points within the two parks. However, many views of the HSC buildings from within both Lincoln Park and Hazard Park are obscured due to the topography and landscaping within the parks themselves. Views of the structures that may occur on Development Sites C and D would not be visible from Lincoln or Hazard Parks. The structures proposed on Development Site A may be visible from Hazard Park, and the proposed

structure(s) that may occur on Development Sites B, E, F, and G may be visible from Lincoln Park.

East of the Project Site, structures are principally one-story in height, older in age and constructed of wood and stucco. This area is principally residential in nature with limited commercial uses along the major arterials (i.e., Soto Street). Landscaping is limited to street trees and private landscaping. Residential uses are also located east of Development Site B along the east and west sides of Playground Avenue, which bisects the eastern portion of the HSC. Further to the east across Soto Street is an established residential neighborhood. The vast majority of these residential structures are one-story wood or stucco single family residences that are older in age. The aesthetic quality of these areas varies from residence to residence. Many of the structures have been well kept while others have deteriorated. Views to the west from these residential areas are of the existing HSC buildings. Commercial uses front Mission Road to the west of the HSC and residential uses exist further to the west across Mission Road.

The artificial light environment in the Project area is influenced by street lights as well as lighting associated with adjacent buildings and parking facilities within the HSC. Existing artificial light sources on the proposed Development Sites include security lighting for the surface parking lots. In addition, vehicles traveling on Eastlake Avenue, San Pablo Street, Alcazar Street, Biggy Street and Zonal Avenue also contribute to the existing artificial light environment within the HSC. Implementation of the proposed Project would introduce new light sources within the Project Site including streetlights, interior building lighting, exterior security lighting, and parking facility lighting; however, the proposed lighting would be typical of existing adjacent facilities within the HSC and is not expected to create unusually high levels of light.

The aesthetic character of the HSC is that of a contemporary and integrated institutional campus set into an existing urban landscape providing academic, research, hospital and medical office buildings and parking facilities designed in a modernist style reflective of the high-tech research activity that occurs within these facilities. The surface parking lots that are proposed for development currently feature minimal landscaping consisting of ornamental trees and landscaping designed as amenities to the streetscape, offering limited aesthetic value to the area. Development of theses sites may block views of the distant San Gabriel Mountains from some vantage points within the HSC. However, the San Gabriel Mountains would still be visible from other vantage points on and around the HSC.

Though the specific design of the proposed buildings to be constructed has not been fully established at this time, it is expected that the buildings would be designed in a style reflective of the existing academic, research and medical office buildings that define the visual/aesthetic appearance of the HSC, particularly existing nearby buildings such as the Zilkha Neurogenetics Institute and the Healthcare Consultation Center (HCC) and HCC II buildings. These multi-story

buildings consist primarily of pre-cast concrete with a glass and metal curtain wall system in a modernist contemporary style.

TRAFFIC, PARKING AND CIRCULATION

Regional vehicular access to the proposed Project Site occurs via the San Bernardino (I-10) and Golden State (I-5) Freeways. Local vehicular access to the proposed Project Site is via Soto Street, Valley Boulevard, Mission Road, Zonal Avenue, Eastlake Avenue/Norfolk Street, San Pablo Street, Biggy Street, and Alcazar Street. USC operates shuttles within the HSC, as well as to and from the University Park Campus and to and from other area destinations such as Union Station and downtown. The Metropolitan Transit Authority (Metro) also operates bus routes that serve the HSC, including Route 254 along Biggy Street and Alcazar Street.

Of the 18 intersections analyzed in the Draft EIR, fifteen intersections are currently operating at a level of service (LOS) D or better during the A.M. and P.M. peak hours, while the remaining three intersections currently operate at LOS E during one or the other of the peak hours. LOS is a measure used by traffic engineers to classify how well an intersection is operating. An LOS of A or B indicates free-flow conditions, while an LOS of F reflects highly congested conditions. An intersection is considered to be operating at an acceptable level if it is operating at an LOS of D or better. The three study intersections operating at LOS E include the Mission Road and I-5 Southbound Ramps intersection during the A.M. peak hour, the Mission Road and Daly Street/Marengo Street intersection during the P.M. peak hour, and the Soto Street and I-10 Freeway Westbound Ramps-Charolette Street intersection during the A.M. peak hour.

Currently, Development Site C is used as a 548-space surface parking lot, and Development Site D is used as a 106-space surface parking lot. Development Site E consists of an 826-space surface parking lot. These surface parking lots serve the HSC.

AIR QUALITY

The proposed Project Site is located within the South Coast Air Basin (the "Basin"), a 6,600-square-mile area encompassing all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The distinctive climate of this area 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 in the area. Local climatic conditions are characterized by warm summers, mild winters, infrequent rainfall, moderate daytime on-shore breezes, and moderate humidity. This

normally mild climate condition is occasionally interrupted by periods of hot weather, winter storms, and Santa Ana winds.

The Basin is an area of high air pollution potential, particularly from June through September. The poor ventilation in the Basin, generally attributed to light winds and shallow vertical mixing, frequently reduces pollutant dispersion, causing elevated air pollution levels. Pollutant concentrations in the Basin vary with location, season, and time of day. Ozone 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.

The South Coast Air Quality Management District (SCAQMD) monitors air quality throughout the Basin at various monitoring stations. The South Coast Air Basin is currently in non-attainment for ozone (O_3), and particulate matter (PM_{10}) based on federal and, thus, state air quality standards, as the state standards for California are more stringent than the federal standards.

Sensitive receptors to heightened air pollution levels include areas where children, the elderly and those that are ill congregate. Such locations are present within the HSC itself. The nearest residential uses, which are also considered sensitive receptors, are located approximately 650 feet southeast of Development Site E, approximately 700 feet east of Development Site B, and approximately 900 feet west of Development Site C.

NOISE

The existing noise environment in the Project area is characterized primarily by traffic noise from nearby roadways. Other noise sources in the Project vicinity include stationary sources (i.e., loading docks, building mechanical equipment, etc.) and the occasional noise produced from small aircrafts flying overhead. Based on field measurements conducted in preparation of this Draft EIR, it was determined that existing ambient noise levels range from 55 dBA to 64 dBA in the Project area. Residential land uses and certain institutional uses such as day care centers, schools, churches, and hospitals are considered to be sensitive noise receptors. The sensitive receptors in the immediate vicinity of the proposed Development Sites include the academic and medical facilities and a day care center within the HSC itself, with the closest residential uses located approximately 650 feet southeast of Development Site E, approximately 700 feet east of Development Site B, and approximately 900 feet west of Development Site C.

UTILITIES

Water service to the Project Site would continue to be provided by the City of Los Angeles Department of Water & Power. The City receives its water from three major sources: (1) the Owens Valley and the Mono basin on the east side of the Sierra Nevada Mountains via the Los Angeles Aqueduct (LAA); (2) Northern California and Colorado River imports from the Metropolitan Water District of Southern California (MWD); and (3) local groundwater basins, including the San Fernando, Sylmar, Central Coast and West Coast Basins. Based on these sources, existing sources of water supply appear adequate, except during periods of prolonged drought. Water conveyance systems are located throughout the HSC and include water lines within the major streets. Water mains and laterals connect these lines to the individual buildings. No known problems with the existing water conveyance system are known to exist with regard to capacity and water pressure.

Wastewater treatment services would continue to be provided to the HSC by the City of Los Angeles Department of Public Works (DPW). DPW's Hyperion Treatment Plant (HTP) provides wastewater treatment services to the area. The HTP is designed to treat 450 million gallons per day (mgd). The annual increase in wastewater flow to the HTP, however, is limited to five (5) mgd, per City Ordinance No. 166,060. Sewer lines are located within the public right-of-way for those streets that traverse the HSC. Sewer mains and laterals connect these lines to the individual buildings. No known problems with the existing sewer conveyance system are known to exist with regard to capacity.

III. GENERAL DESCRIPTION OF THE ENVIRONMENTAL SETTING
B. CUMULATIVE DEVELOPMENT

The California Environmental Quality Act (CEQA) requires that the analysis of potential project impacts include cumulative impacts. CEQA defines cumulative impacts as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts."[10] The State CEQA Guidelines further indicate that the analysis of cumulative impacts need not be as in-depth as what is performed relative to the proposed Project, but instead is to "be guided by the standards of practicality and reasonableness."[11]

Cumulative impacts are anticipated impacts of the proposed Project along with reasonably foreseeable growth. Reasonably foreseeable growth may be based on either:[12]

- A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts; or

- A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

The proposed Project is expected to be completed in 2015. Accordingly, this Draft EIR considers the effects of other proposed development projects within that time frame. A listing of the reasonably anticipated related projects, based on information on file at the City of Los Angeles Department of Transportation, is presented in Table 1 on pages 71 and 72. The locations of the related projects are shown in Figure 10 on page 73. In addition, the Project's traffic analysis conservatively incorporates a 1 percent average annual growth factor to account for additional regional growth beyond that reflected in the related projects list. The total projected development was then applied to the analysis of all environmental issues, as appropriate.

[10] *State CEQA Guidelines, 14 California Code of Regulations, § 15355, et seq.*

[11] *Ibid., § 15355.*

[12] *Ibid., § 15130(b)(1).*

Table 1

LIST OF RELATED PROJECTS
USC HEATH SCIENCES CAMPUS

Map No.	Project	Location	Land Use	Size	Status
1	99-0603	1700 Marengo Street	Los Angeles County Medical Center	Phase I: Hospital Replacement (900 beds which replace 1,450 existing beds)	Under Construction
2	00-1280	2419 Workman Street	Drugstore	15,549 SF	Proposed
3	00-1860 Freight Yard Mixed-Use Development Project	970 Third Street; Third Street at Santa Fe Avenue	Mixed-Use: Architectural School General Office Retail Multi-Family Residential	691,040 SF Total 88,096 SF 39,895 SF 188,325 SF 408 DU	Proposed
4	00-280	2600 Main Street	Convenience Store	3,000 SF	Proposed
5	Capital Mills Project	Alameda Street at College Street	General Office Retail Loft Apartments	20,000 SF 5,000 SF 30 DU	Proposed
6	Alameda District Plan	Alameda Street Corridor	General Office Hotel Apartment Retail Museum	8,200,000 SF 750 Rooms 300 DU 250,000 SF 70,000 SF	Proposed
7	00-5091 Blossom Plaza	900 Broadway (at College Street)	Condominium Sit-Down Restaurant Museum Retail Quick Service Restaurant	223 DU 9,000 SF 7,000 SF 25,000 SF 6,000 SF	Proposed
8	01-3151	2005 Fourth Street	Gas Station Fast-Food Restaurant w/ Drive-Through	8 Pumps 754 SF	Proposed
9	02-9991	1720 Cesar Chavez Avenue (White Memorial Hospital Replacement Project; sizes shown are net new)	Hospital Medical Office	9 Beds 114,000 SF	Proposed
10	03-2045	3319 Broadway at Gates Street	Restaurant	3,319 SF	Proposed
11	Zilkha Neurogenetics Research Institute	West side of San Pablo Street, between Alcazar Street and Norfolk Street	Research Center	125,000 SF	Built & Occupied

Table 1 (Continued)

LIST OF RELATED PROJECTS
USC HEALTH SCIENCES CAMPUS

Map No.	Project	Location	Land Use	Size	Status
12	Tenet New Acute Care Tower	North side of Norfolk Street, between San Pablo and Playground Street	Hospital	160 Beds	Under Construction
13	USC HCC II Building	East side of San Pablo Street, mid-block between Alcazar Street and Norfolk Street	Medical Office	150,000 GSF	Built & Occupied
14	USC HNRT	Southeast corner of Eastlake Avenue and Biggy Street	Research Center	175,000 GSF	Under Construction

Source: City of Los Angeles Department of Transportation.

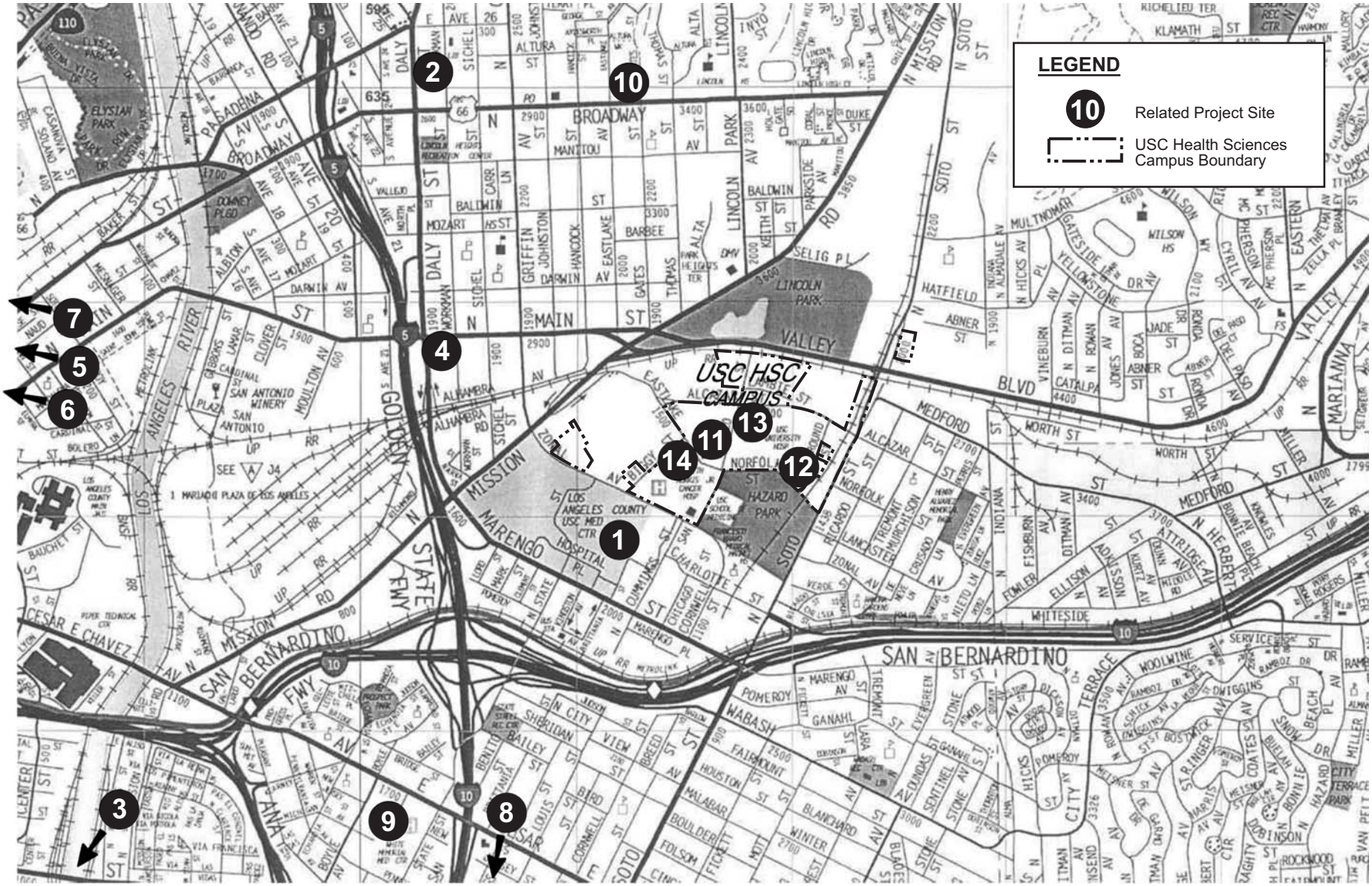

Figure 10
Related Projects Map

IV. Environmental Impact Analysis

IV. ENVIRONMENTAL IMPACT ANALYSIS
A. LAND USE AND PLANNING

1. INTRODUCTION

This section addresses the proposed Project with regard to applicable land use regulations, as well as the type and patterns of land uses in the surrounding area. The analysis focuses on whether the uses proposed are consistent with those anticipated in existing plans and whether the proposed Project would divide an existing neighborhood, community or land uses. Specific environmental effects on surrounding neighborhoods are addressed in other sections of the EIR such as Traffic (Section IV.C), Noise (Section IV.D), and Air Quality (Section IV.E).

2. ENVIRONMENTAL SETTING

a. Existing Land Uses

(1) Project Site Land Uses

The USC Health Science Campus (HSC) is located approximately three (3) miles east of downtown Los Angeles, approximately 0.5 mile north of the San Bernardino Freeway (I-10), and approximately 0.5 mile east of the Golden State Freeway (I-5) adjacent to the Lincoln Heights and Boyle Heights neighborhoods of the City of Los Angeles. The 56-acre HSC features state-of-the-art academic and medical research and treatment facilities, with specific work in the fields of cancer, gene therapy, neurosciences, and transplantation biology, as well as programs in occupational therapy and physical therapy. As an example, the HSC includes the USC/Norris Comprehensive Cancer Center, USC University Hospital, the Zilkha Neurogenetics Institute, the Doheny Eye Institute, the School of Pharmacy, the Keck School of Medicine, the Center for Health Professions, and the Norris Medical Library. In addition to these facilities, the HSC contains many ancillary uses including cafeterias, maintenance facilities and vivariums. Vivariums are a contributing element to the ongoing academic and medical related activities that occur at the HSC. On June 22, 2004, the City's Zoning Administrator determined that vivariums are ancillary uses that are permitted within designated locations of the HSC.

The Project as proposed would occupy seven Development Sites within the HSC. Development Site A is centrally located within the HSC and is part of a parcel that also includes the Center for Health Professions and the Zilkha Neurogenetics Institute (ZNI). The basement of future building(s) on Development Site A could be designed to connect to the basement of the

existing adjacent ZNI building. Development Site A is currently utilized as a 287-space surface parking lot. This site is approximately 2.46 acres in size, though it is part of a larger 8.06-acre parcel. The larger 8.06-acre parcel also includes the Center for Health Professions and the ZNI building. Development Site B is utilized as a 104-space surface parking lot and is approximately 1.13 acres in size. Development Site B is centrally located within the HSC, located west of the existing USC University Hospital parking structure and north of the HCCII Building. The building(s) that could occur on this Development Site could form a courtyard configuration with the existing Healthcare Consultation Center (HCC) and HCCII buildings. Development Site C is located in the western portion of the HSC on the north side of Zonal Avenue, between State Street to the east and Mission Road to the west across from the existing Women and Children's Hospital. This 3.68-acre site is currently used as a 548-space surface parking lot. Henry Street, a roadway that has been paved over and out of circulation for at least twenty years, bisects Development Site C. Development Site D is an approximately 0.77-acre site located on the west side of Biggy Street between Zonal and Eastlake Avenues and is currently used as a 106-space surface parking lot. Development Site E consists of 7.64 acres on the east side of San Pablo Street between Alcazar Street and Valley Boulevard and is currently used as an 826-space surface parking lot. Development Site F consists of 2.65 acres of vacant land on the west side of San Pablo Street. Development Site G comprises approximately 4.0 acres of the larger 8.06-acre parcel that includes Development Site A, the Center for Health Professions, and the ZNI building.

Photographs shown in Figure 4 on page 52 through Figure 9 on page 57 of Section II, Project Description, depict the on-site land uses currently occurring within Development Sites A through G.

(2) Surrounding Area Land Uses

The area surrounding the HSC supports a variety of institutional, public, commercial, residential, and recreational land uses. One of the dominant land uses in the area is the Los Angeles County–USC Medical Center. This facility, located southwest of the HSC, is one of the nation's largest public hospitals and the nation's largest medical training center. The Los Angeles County–USC Medical Center is currently replacing its facilities to the south with construction occurring on the north side of Marengo Street. Hazard Park is located to the southeast of the HSC and east of the Los Angeles County–USC Medical Center. Hazard Park is a 25-acre recreational resource, which contains trees, lawns, baseball diamonds, tennis courts, and a vegetated gully along an abandoned railroad spur line that bisects the park. Development Site A (the portion of the Project Site nearest to Hazard Park) and Hazard Park are located at opposite corners of the San Pablo Street and Eastlake Avenue intersection. The HSC, the Los Angeles County–USC Medical Center and Hazard Park are generally bounded by Valley Boulevard to the north, Marengo Street to the south, Mission Road to the west and Soto Street to the east. Other public and institutional uses in this immediate area include the United States

Army Reserve Center located on the east side of San Pablo Street, south of Norfolk Street and the Francisco Bravo M.D. Magnet Senior High School, which is located on the east side of Cornwell Street.

A second City park, Lincoln Park, is located across Valley Boulevard to the north of the HSC. Lincoln Park is separated from the HSC by Valley Boulevard and by the railroad tracks, which run parallel to, and along the south side of, Valley Boulevard. Lincoln Park offers a wide variety of youth and adult recreational programs. Located to the east of Development Site E is a Los Angeles County Public Works facility located on the north side of Alcazar Street directly across from the DaVita Dialysis Center and the USC Clinical Sciences Center buildings within the HSC.

Large-scale institutional uses, principally the Los Angeles County–USC Medical Center, previously described, and the Women and Children's Hospital located on Zonal Avenue define the uses west of the HSC. The Central Juvenile Hall is also located to the west of the HSC at the intersection of Eastlake Avenue and Alcazar Street. The Los Angeles County Coroner is located further to the west on the northeast corner of Marengo Street and Mission Road. The College of Nursing and Allied Health is located across Mission Road. Residential uses are located west of these uses and other institutional and commercial uses fronting Mission Road. The nearest residential uses west of Mission Road are located approximately 900 feet west of Development Site C.

The area east of Soto Street is principally residential in nature with limited commercial uses along the major arterials (i.e., Soto Street). These predominantly single-family structures are one-story in height, older in age and constructed of wood and stucco. Residential uses are also located approximately 700 feet east of Development Site B along the east and west sides of Playground Avenue, which bisects the eastern portion of the HSC. Figure 11 on page 77 shows the Project's seven Development Sites in relation to the aforementioned two off-site uses.

b. Relevant Land Use Plans and Policies

The Project Site is located within the City of Los Angeles' Northeast Los Angeles Community Plan area and within the Adelante Eastside Redevelopment Project. As such, the proposed Project is subject to the City of Los Angeles General Plan (the Plan), the Northeast Los Angeles Community Plan, the City of Los Angeles Municipal Code (LAMC), and the Adelante Eastside Redevelopment Plan, which is administered by the Community Redevelopment Agency of the City of Los Angeles. Regional agencies also involved with planning and land use issues that affect the Project Site include the Southern California Association of Governments (SCAG), via the Regional Comprehensive Plan and Guide (RCPG); the Metropolitan Transportation Authority (Metro), via the Los Angeles Congestion Management Plan (CMP); and the South

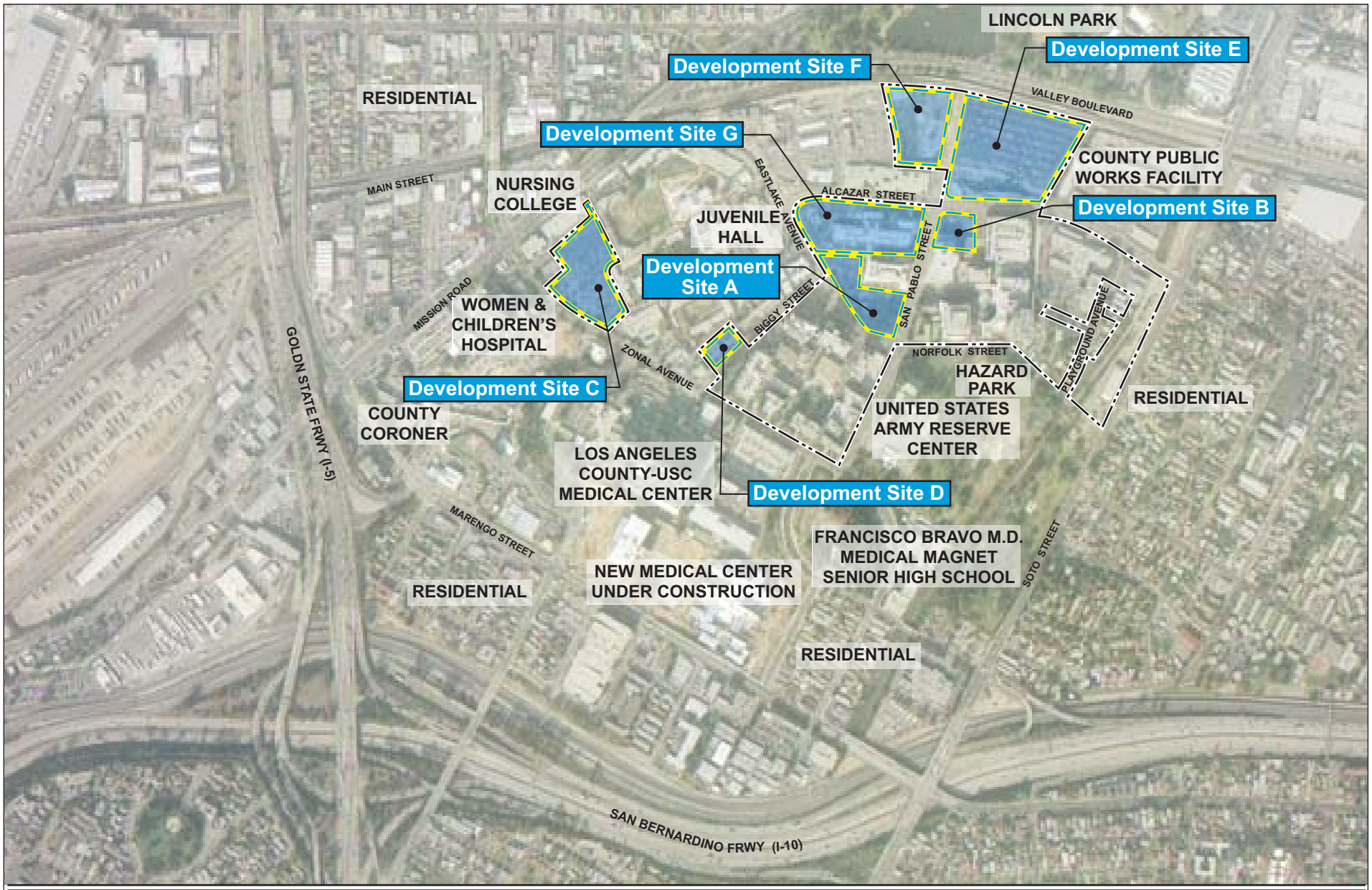

Figure 11
Surrounding Land Uses

Source: Aerial: Landiscore; PCR Services Corporation, 2004

Coast Air Quality Management District (SCAQMD), via its Air Quality Management Plan (AQMP).

(1) General Plan of the City of Los Angeles

California state law requires that every city and county prepare and adopt a long-range comprehensive General Plan to guide future development and to identify the community's environmental, social, and economic goals. The General Plan must identify the need and methods for coordinating community development activities among all units of government; it must establish the community's capacity to respond to problems and opportunities; and it must provide a basis for subsequent planning efforts. The Los Angeles General Plan sets forth goals, objectives and programs that provide a guideline for day-to-day land use policies and to meet the existing and future needs and desires of the communities, while integrating a range of state-mandated elements including Transportation, Noise, Safety, Housing, and Conservation. The City of Los Angeles' General Plan Land Use Element consists of 35 Community Plans, which provide direction for the future development of each of the City's Community Plan Areas. The portions of the General Plan that contain land use policies relevant to the proposed Project include the Framework Element and the Northeast Los Angeles Community Plan.

(a) General Plan Framework

The City of Los Angeles General Plan Framework (Framework), adopted in December 1996 and readopted in August 2001, provides general guidance regarding land use issues for the entire City of Los Angeles. The General Plan Framework sets forth a citywide comprehensive long-range growth strategy and defines citywide polices regarding land use, housing, urban form, neighborhood design, open space and conservation, economic development, transportation, infrastructure and public services. It is based on a strategy which encourages residential and commercial growth along boulevards and corridors and clustered development around community focal points and high activity centers. The General Plan Framework guides, but is not intended to either override or mandate, changes to the community plans.

The Land Use chapter of the Framework Element designates Districts (i.e., Neighborhood Districts, Community Centers, Regional Centers, Downtown Centers, and Mixed Use Boulevards) and provides policies applicable to each District to support the vitality of the City's residential neighborhoods and commercial districts. The Metro Long Range Land Use Diagram of the General Plan Framework designates the Project Site as a Community Center.

According to the Framework, Community Centers are intended to be identifiable focal points and activity centers for surrounding groups of residential neighborhoods. They contain a diversity of uses such as small offices, overnight accommodations, cultural and entertainment

facilities, schools and libraries in addition to neighborhood-oriented uses. Physically, the scale and density of Community Centers are greater than Neighborhood Districts, generally with building heights ranging from two- to six-stories depending on the character of the surrounding area. Community Centers are served by small shuttles and local buses in addition to automobiles and may be located along transit streets. Goals, objectives and policies for Community Center uses include:

- Encourage pedestrian-oriented, high activity, multi- and mixed-use centers that support and provide identity for Los Angeles' communities;
- Reinforce existing community centers, which accommodate a broad range of uses that serve the needs of adjacent residents, promote neighborhood and community activity, are compatible with adjacent neighborhoods, and are developed to be desirable places in which to live, work and visit, both in daytime and nighttime;
- Accommodate the development of community-serving commercial uses and services in accordance with the densities/intensities of uses permitted and identified in the community plans;
- Encourage the integration of school classrooms, libraries and similar academic and cultural facilities within commercial, office, and mixed commercial-residential structures;
- Determine the appropriateness of centralized and shared parking structures, and where feasible, encourage their development;
- Promote pedestrian activity by design and siting of structures;
- Require that commercial and mixed-use buildings located adjacent to residential zones be designed and limited in height and scale to provide a transition with these uses;
- Provide for the development of public streetscape improvements; and
- Require that outdoor areas be lighted for night use, safety, and comfort.

(b) Northeast Los Angeles Community Plan

Established on July 3, 1979, the Northeast Community Plan area comprises 15,000 acres and serves as a transition between downtown Los Angeles and the neighboring cities of Glendale, Pasadena, and South Pasadena to the north; the City of Alhambra to the east; and the City of Monterey Park and the unincorporated community of City Terrace to the south. The

histories of the roughly 250,000 inhabitants can be traced back to the mid-nineteenth century when the first settlements were established. By the beginning of the twentieth century the Northeast Los Angeles area was recognized as the location for the City's largest medical facility.[13]

Major developments, which include the development of the USC Health Sciences Campus within the Northeast Community Plan area, have influenced the arrangement of land uses and the relationship of the Plan area with the rest of the expanding metropolis. Distinct neighborhoods are present and to some extent are defined by local hills and watercourses as well as such man made-features as railroad tracks and freeways. Freeway development [i.e., San Bernardino Freeway (I-10) and Harbor Freeway (I-110)] has had a negative effect on development within the community plan area as it has divided former neighborhoods, altered established transportation patterns, displaced residential, commercial and industrial uses, and encouraged development of incompatible land uses in and around major transportation corridors.[14]

The HSC is located adjacent to the Lincoln Heights and Boyle Heights neighborhoods within the Northeast Los Angeles Community Plan area, an area located east of the Los Angeles River and south of the Arroyo Seco. The major land use issues in Lincoln Heights are incompatibilities among land uses and some major pockets of deterioration that occur along the transportation corridors in the area.[15] According to the Northeast Los Angeles Community Plan, the County–USC Medical Center and USC Health Science Campus provide unique challenges and opportunities for revitalization, highlighting the efforts of Los Angeles County and USC to replace County Hospital and other obsolete or seismically unsafe structures.[16]

The Northeast Los Angeles Community Plan promotes an arrangement of land uses, streets, and services that encourage and contribute to the economic, social and physical health, safety, welfare, and convenience of the people who live and work in the community. The Community Plan is intended to guide development in order to create a healthy and pleasant environment. It also seeks to enhance community identity and recognize unique neighborhoods within the Plan area. The Northeast Los Angeles Community Plan sets forth land use policies and programs in the areas of residential, commercial, industrial, public and institutional, recreational and park facilities, open space, schools, libraries, police protection, fire protection, circulation, public transportation, non-motorized transportation, historic and cultural resources, and economic development.

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[13] *City of Los Angeles Planning Department, Northeast Los Angeles Community Plan (revised June 15, 1999).*

[14] *Ibid.*

[15] *Ibid.*

[16] *Ibid*

Policies of the Northeast Los Angeles Community Plan apply to the entire Community Plan area and are frequently general in nature. Because policies can apply to public and private projects, the Northeast Los Angeles Community Plan establishes guidelines to improve the environment as opportunities for public improvements and other public or private projects that affect public spaces and rights-of-way occur. Public area guidelines are intended to guide other City departments as they develop, update, and implement their respective plans. The Northeast Los Angeles Community Plan also includes design policies for individual projects which are intended to promote positive, visually interesting streets that are pedestrian-scaled while avoiding pedestrian/vehicular conflict. Urban design policies of specific applicability include the following:

- Site Planning:
  - Providing pedestrian access from the front of buildings to rear parking for projects with wide frontages.
  - Locating surface parking to the rear of structures.
- Building Height and Design:
  - Ensure that a project avoids large, sterile expanses of building walls.
  - Ensure building materials accent or complement adjacent and nearby buildings.
  - Require a comprehensive signage program suited to the scale and character of the local environment.
- Parking Structures:
  - Utilize landscaping to screen parking structures not architecturally integrated with the main building.
  - Design parking structure exteriors to match the style, materials and colors of the main building.
- Light and Glare:
  - Install on-site lighting along all pedestrian walkways, walk-throughs and arcades, and vehicular access ways.
  - Shield and direct on-site lighting onto driveways and walkways, walk-throughs and arcades, and not adjacent areas.

The USC Health Science Campus is located at the southernmost portion of the Northeast Los Angeles Community Plan area. The Golden State Freeway (I-5), the San Bernardino Freeway (I-10), Marengo Avenue, and Mission Road separate the Northeast Los Angeles community from the Boyle Heights community. The Northeast Los Angeles Community Plan Map designates Development Sites A, B, D, and G as General Commercial, while Development Site C is designated for Public Facilities. Development Sites E and F are designated Limited Industrial. The General Commercial designation correlates with the C1.5, C2, C4, and P zones of the Los Angeles Municipal Code (LAMC). The Public Facilities designation correlates with the PF zone of the LAMC, while the Limited Industrial designation relates to the CM, MR, CSS, M1, M2, M3, and SL zones of the LAMC. In addition, the Generalized Circulation Map of the Community Plan includes Henry Street, a street that has been paved over and out of circulation for at least twenty years within Development Site C.

(2) Los Angeles Municipal Code

The Project Site is subject to the provisions of the City of Los Angeles Zoning Code, Chapter 1 of the City of Los Angeles Municipal Code (LAMC), which, in part, facilitates implementation of the Community Plan objectives cited above through land use designations and development standards. Development Sites A, B, and G are zoned C2 (Commercial), while Development Site C is zoned PF (Public Facilities) and Development Site D is zoned [Q]C2 (Commercial). Development Sites E and F are zoned CM (Commercial Manufacturing).

As detailed in Section 12.14 of the LAMC, the C2 and CM commercial zones permit a wide variety of commercial uses, including medical laboratory, and allow the provision of surface parking in support of commercial uses. There is no required minimum lot area or minimum front, side or rear yard for non-residential uses in the C2 or CM zone. Total floor area and height limitations are regulated by Section 12.21.1. Development Sites A, B, and G are located within Height District 2 for which the applicable height limitation is defined in terms of permitted floor area. Specifically, the total floor area in all buildings within Height District 2 shall not exceed six times the buildable lot area. Development Sites C, E, and F are located in Height District 1. Since Development Site C is zoned PF, the total floor area permitted on this site is limited to three times the buildable area. Parking is not considered to count towards the permitted floor area. Development Sites E and F are zoned CM, therefore the total floor area permitted on these sites is limited to 1.5 times the buildable lot area. Development Site D is located within Height District 1VL. No building or structure in Height District No. 1VL shall exceed three stories, nor shall it exceed 45 feet in height. The [Q] condition on Development Site D prohibits 100 percent residential development, and limits residential development, should it occur, to that permitted in the RD1.5 zone.

The LAMC also regulates the minimum number of parking spaces to be provided on the Project Site based on land use and floor area. Section 12.21.A.4 of the LAMC specifies the

required number of parking spaces for different use types. The parking requirement for the proposed Project (including existing spaces) is estimated to total up to approximately 5,186 spaces. Also of relevance is Section 12.21.A.4(g), which specifies that a garage or off-street parking area must be provided either on the same lot as the proposed use or on another lot not more than 750 feet away from the proposed use. Applicable parking regulations are discussed in more detail in Section IV.C, Traffic, of this Draft EIR.

Regulations governing signage in the City of Los Angeles are discussed in Section IV.B, Visual Qualities, of this Draft EIR. This section describes the permitting process and maximum height, size, type, illumination, safety, visibility of signs from freeway rights-of-way and other sign regulations. The relationship of the proposed Project's signage to existing regulations is described in detail in Section IV.B, Visual Qualities.

(3) Adelante Eastside Redevelopment Plan

The Adelante Eastside Redevelopment Plan (Redevelopment Plan) encompasses approximately 2,200 acres of commercial and industrial properties in East Los Angeles. The original plan was adopted in 1979 and most recently amended in 1999. It is one of the newest redevelopment areas established by the Community Redevelopment Agency (CRA) of the City of Los Angeles. The Redevelopment Plan area contains the areas south of Olympic Boulevard to the City limits of Vernon from the Los Angeles River to Indiana Street; North Main Street east to Valley Boulevard and Alhambra Avenue to the City Limits of Alhambra; and all east–west commercial streets in Boyle Heights such as Cesar Chavez Avenue.

The principle goal of the Redevelopment Plan is to preserve the existing commercial and industrial economy of the community. Objectives are to improve living conditions, upgrade public improvements, increase commercial choices, and revitalize the industrial base while preserving existing businesses and industry. Key objectives of specific applicability to the proposed Project include the following:

- Improve the quality of life for those who live and work in and visit the Redevelopment Plan Area through enhanced business, employment and academic opportunities.

- Preserve and increase employment, training, business, and investment opportunities through redevelopment programs.

- Support and encourage a circulation system that will improve the quality of life in the Redevelopment Plan Area, including pedestrian, automobile, parking, and mass transit systems, with emphasis on serving existing facilities and meeting future needs.

- Promote and support the conservation, rehabilitation, and appropriate use or reuse of existing buildings, groupings of buildings, and other physical features.

- Promote a thriving commercial environment, including adequate parking and proper traffic circulation, which contributes to neighborhood improvement and positively relates to adjacent land uses.

The economy within the Redevelopment Plan area has been stagnating since the early 1980s. Specifically, economic conditions reflected stagnate property values, abnormally high business vacancies and a higher than average crime rate. Limited new investment occurred through new construction and purchases of existing property between 1992 and 1998.[17]

(4) Southern California Association of Governments

The Project Site is also within the planning area of the Southern California Association of Governments (SCAG). SCAG is a Joint Powers Agency established under California Government Code Section 6502 et seq. that encompasses the following six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. These counties, an area of 38,000 square miles, have a combined population of more than 15 million people. For planning purposes this area is divided into 14 subregions. The Project Site is located within the City of Los Angeles subregion.

In 1996 SCAG adopted the Regional Comprehensive Plan and Guide (RCPG), which provides a framework for decision-making with respect to the growth and changes that can be anticipated by the year 2015 and beyond. The RCPG contains a general overview of federal, state, and regional plans applicable to the southern California region and serves as a comprehensive planning guide for future regional growth. Its chapters are divided into three categories: core, ancillary, and bridge. The core chapters include Growth Management (adopted June 1994), Regional Transportation Plan (adopted April 2004), Air Quality (adopted October 1995), Hazardous Waste Management (adopted November 1994), and Water Quality (adopted January 1995) all of which are a result of, and respond directly to, federal and state planning requirements. They constitute the base on which local governments ensure consistency of their plans with applicable regional plans under CEQA. The Air Quality and Growth Management chapters contain both core and ancillary policies.

Ancillary chapters are those on the Economy, Housing, Human Resources and Services, Finance, Open Space and Conservation, Water Resources, Energy, and Integrated Solid Waste

[17] *The Community Redevelopment Agency of the City of Los Angeles, Adelante Eastside Redevelopment Project Fact Sheet, www.ci.la.ca.us/CRA/adelante.html, April 2004.*

Management. These chapters address important issues facing the region and may reflect other regional plans. These chapters do not, however, contain actions or policies required of local government. Hence, they are entirely advisory and establish no new mandates or policies for the region. Bridge chapters include the Strategy and Implementation chapters, functioning as links between the Core and Ancillary chapters of the RCPG. The primary goals of the RCPG are to improve the standard of living, enhance the quality of life, and promote social equity. The RCPG contains policies relative to advancing these goals. Land use policies of relevance to the proposed Project are set forth in the Growth Management chapter and are as follows:

- Encouraging patterns of urban development and land use that reduce costs on infrastructure construction and make better use of existing facilities;
- Encouraging land uses that encourage the use of transit and reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled; and
- Encouraging development in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.

(5) Los Angeles County Congestion Management Program

The Los Angeles County Metropolitan Transportation Authority (Metro) administers the Los Angeles County Congestion Management Program (CMP), a state-mandated program designed to address the impact urban congestion has on local communities and the region as a whole. The CMP, last revised in 2004, includes a hierarchy of highways and roadways with minimum level of service standards, transit standards, a trip reduction and travel demand management element, a program to analyze the impacts of local land use decisions on the regional transportation system, a seven-year capital improvement program, and a county-wide computer model to evaluate traffic congestion and recommend relief strategies and actions. The primary goal of the CMP is to reduce traffic congestion in order to enhance the economic vitality and quality of life for all affected communities. The CMP guidelines specify that those freeway segments, where a project could add 150 or more trips in each direction during the peak hours, be evaluated. The guidelines also require evaluation of all designated CMP roadway intersections where a project could add 50 or more trips during either peak hour. No CMP arterials have been designated in the Project area. Monitoring Station 1014, the I-10 Freeway at East Los Angeles City limit, has been designated as a CMP freeway monitoring location. Further discussion of the CMP can be found in Section IV.C, Traffic, of this Draft EIR.

(6) South Coast Air Quality Management District Air Quality Management Plan

The Project Site is also located in the South Coast Air Basin, a non-attainment area and the nation's only area classified as extreme in its failure to meet the National Ambient Air

Quality Standards for ozone, carbon monoxide, and particulate matter. The South Coast Air Quality Management District (SCAQMD) in its Air Quality Management Plan (AQMP) sets forth an attainment program based on projected population and employment growth and air quality management and control measures. The SCAQMD is responsible for compliance with federal and state air quality legislation in the Los Angeles County area. In conjunction with SCAG, the SCAQMD is responsible for establishing a comprehensive program to achieve federal and state air quality standards. The AQMP is incorporated into the State Implementation Program (SIP), which constitutes all Air Quality Management Plans prepared by all air quality management districts in the state. The SIP is the state's plan that demonstrates compliance with state and federal air quality standards. The 1990 Clean Air Act amendments require every ozone non-attainment area classified as serious, severe or extreme to prepare a comprehensive attainment plan (i.e., California State Implementation Plan for Ozone). The California Implementation Plan for Ozone was submitted to the US Environmental Protection Agency (EPA) in November 1994 and approved in September 1996. This plan identifies six ozone non-attainment areas in California. Each non-attainment area is assigned a statutory deadline for achieving the national ozone standards. Consistency with the SCAQMD's AQMP is evaluated in Section IV.D, Air Quality, of this Draft EIR.

3. PROJECT IMPACTS

a. Methodology

The analysis of land use impacts considers both consistency of the proposed Project with adopted plans and policies that govern land use on the Project Site and the compatibility of proposed uses with adjacent land uses. The determination of compatibility is based on a survey of land uses adjacent to the Project Site, and a determination of the compatibility of the proposed Project with adjacent land uses. Adopted regulations and policies governing land use on the Project Site are also reviewed and compared with the proposed Project.

b. Thresholds of Significance

The City of Los Angeles CEQA Thresholds Guide provides guidance concerning the nature of land use impacts and recommends determining significance on a case-by-case basis with respect to the individual circumstances of each project. Consideration is given to a number of factors, including: the extent to which an area would be impacted; the nature and degree of impacts; the type of land uses within that area; and the extent to which existing neighborhoods, communities, or land uses would be disrupted, divided, or isolated, and the duration of the disruptions. In addition, consideration is given to the consistency of the project with adopted land use plans, policies, and regulations.

Therefore, for the purposes of the proposed Project, a significant impact is considered to occur under the following conditions:

- The Project would not be compatible with the existing land use plans, policies or regulations intended to prevent an impact to the environment.[18]
- The interface of physical and operational characteristics of the Project would be substantially incompatible with the surrounding land uses.
- The Project would result in the division, disruption or isolation of an existing established community or neighborhood.

c. Analysis of Project Impacts

(1) Project Characteristics

The Project proposes construction and operation of multi-level academic and medical office facilities and associated parking facilities on up to seven Development Sites within the existing HSC. These new facilities would be utilized for academic and support purposes, research laboratories, and offices, as well as medical office space by tenants associated with the HSC. The seven proposed Development Sites are currently underdeveloped or utilized as surface parking for the HSC and are surrounded by other institutional uses and parking facilities. Proposed parking facilities to support the Project could be developed on one or more of the following: Development Sites B, C, D, E, and/or F.

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

(a) City of Los Angeles

(i) General Plan Framework

A detailed comparison of specific General Plan Framework goals and policies and the proposed Project is presented in Table 2 on pages 88 to 96. Based on the analyses and conclusions presented in Table 2, the proposed Project would be consistent with the goals and policies of the General Plan Framework.

[18] *It is important to note that an incompatibility conflict with an individual land use policy or regulation does not unto itself necessarily indicate a significant impact to the environment.*

Table 2

PROJECT CONSISTENCY WITH APPLICABLE LAND USE POLICIES

Relevant Policy	Analysis of Project Consistency
City of Los Angeles General Plan Framework, Community Centers	
Goal 3: Pedestrian-oriented, high activity, multi- and mixed-use centers that support and provide identity for Los Angeles' communities.	The proposed Project would continue existing development patterns and assist in infilling the established HSC with similar uses, thereby adding to the identity of the HSC. The proposed Project would also contribute to the existing pedestrian-friendly campus environment that would facilitate pedestrian access to the entire HSC and would limit pedestrian and vehicular interfaces by providing parking at selected locations within the HSC. Sidewalks and pedestrian walkways between buildings would connect the Project's proposed parking facilities with the proposed and existing buildings within the HSC. Pedestrian amenities associated with the proposed Project would also create a safer pedestrian environment through increased activity, lighting and security. As such, the proposed Project supports this goal.
Objective 3.9: Reinforce existing community centers, which accommodate a broad range of uses that serve the needs of adjacent residents, promote neighborhood and community activity, are compatible with adjacent neighborhoods, and are developed to be desirable places in which to live, work and visit, both in daytime and nighttime.	The Project proposes to develop additional academic and medical-related facilities on sites that are currently used as surface parking lots or are underdeveloped within the existing HSC, thereby reinforcing an existing community center and promoting community activity. Development of the Project would also preserve the character of the surrounding neighborhood, as the proposed infill development would be located within or adjacent to the existing HSC. The design of structures developed as part of the Project would reflect the high quality of, and be integrated with, the existing HSC structures. This would achieve the objective relative to developing a desirable place to work and visit. As such, the proposed Project supports this objective.
Policy 3.9.1: Accommodate the development of community-serving commercial uses and services in accordance with Table 3-1, Land use standards and typical Development Characteristics, and Table 3-5, Land Use Designation and Corresponding Zones. The ranges and densities/intensities of uses permitted in any area shall be identified in the community plans.	The Northeast Los Angeles Community Plan designates Development Sites A, B, D, and G for General Commercial uses, while Development Site C is designated for Public Facility uses. Development Sites E and F are designated Limited Industrial. The proposed uses (i.e., academic, medical research, and medical office buildings on Sites A, B, D, and/or G and potential parking facilities on Development Sites B, C, D, E, and F are consistent with these designations. In addition, Project development is consistent with the densities/intensities permitted in the Northeast Community Plan. With the adoption of the proposed General Plan Amendments for Development Site C (i.e., from Public Facilities to General Commercial) and Development Sites E and F (i.e., Limited Industrial to

Table 2 (Continued)

PROJECT CONSISTENCY WITH APPLICABLE LAND USE POLICIES

Relevant Policy	Analysis of Project Consistency
	General Commercial, the proposed Project supports this policy.
Policy 3.9.2: Encourage the integration of school classrooms, libraries and similar educational and cultural facilities within commercial, office, and mixed commercial-residential structures.	The Project proposes to develop additional academic and medical-related facilities within the existing HSC. In addition, the project would be compatible with the Francisco Bravo M.D. Magnet Senior High School, which is located on the east side of Cornwell Street. As such, the proposed Project supports this policy.
Policy 3.9.3: Determine the appropriateness of centralized and shared parking structures, and where feasible, encourage their development.	The Project includes the development of centralized and shared parking facilities to support the proposed academic and medical-related uses. Sidewalks and pedestrian walkways between buildings would connect the proposed parking facilities with the proposed and existing buildings within the HSC. In addition, a USC-operated shuttle system would continue to provide transportation throughout the HSC, including the proposed buildings and parking facilities. As such, the proposed Project supports this policy.
Policy 3.9.5: Promote pedestrian activity by design and siting of structures.	The location of the proposed parking facilities would limit pedestrian and vehicular interfaces. The additional infill development represented by the proposed Project would increase the pedestrian activity on the campus. As such, the proposed Project supports this policy.
Policy 3.9.6: Require that commercial and mixed-use buildings located adjacent to residential zones be designed and limited in height and scale to provide a transition with these uses.	The proposed infill development would be located on seven Development Sites within the existing HSC. While the greater HSC is located adjacent to a residential zone, the Project's Development Sites are not. Furthermore, the height of the proposed structures would not substantially contrast with the surrounding residential areas, since the proposed structures would be consistent in scale with the existing HSC structures. As such, the proposed Project supports this policy.
Policy 3.9.7: Provide for the development of public streetscape improvements.	The Project includes the development of sidewalks and pedestrian walkways between buildings that would connect the parking with the proposed and existing buildings within the HSC. These spaces would include plantings that would complement the existing landscaping program throughout the HSC. In addition, all new or replacement trees would be selected for consistency with the existing street trees. As such, the proposed Project supports this policy.

Table 2 (Continued)

PROJECT CONSISTENCY WITH APPLICABLE LAND USE POLICIES

Relevant Policy	Analysis of Project Consistency
Policy 3.9.9: Require that outdoor areas be lighted for night use, safety, and comfort.	Pedestrian amenities associated with the proposed Project would create a safe pedestrian environment through increased activity, lighting and security. As such, the proposed Project supports this policy.
Northeast Los Angeles Community Plan	
Policy 6-1.1: Encourage compatibility in school locations, site layout, and architectural design with adjacent land uses and community character.	The Project proposes to develop additional academic and medical-related facilities on underutilized sites within the existing HSC. Though the specific design of the proposed buildings to be constructed has not been fully established at this time, it is expected that the buildings would be designed in a style reflective of the existing academic, research, and medical office buildings that define the aesthetic appearance of the HSC. Furthermore, the height of the proposed structures would not substantially contrast with the surrounding community, since the proposed structures would be consistent in scale with the existing HSC structures. As such, the proposed Project supports this policy.
Policy 10-1.2: Design new development projects to minimize disturbance to existing traffic flow with proper ingress and egress to parking.	The proposed Project would create a pedestrian-friendly campus environment that would facilitate pedestrian access to the entire facility principally by limiting pedestrian and vehicular interfaces by providing parking at selected locations and connecting these parking facilities with other components of the HSC via a USC-operated shuttle system. As such, the proposed Project supports this policy.
Policy 16-1.2: Strengthen contacts and cooperation between public and private sector organizations engaged in economic development activities within the community.	The Project proposes to develop additional academic and medical-related facilities within the existing HSC. Several other compatible medical, academic, and public uses are located in the vicinity to the HSC that would benefit from the Project's proposed improvements. As such, the proposed Project supports this policy.
Objective 2-1: Conserve and strengthen potentially viable commercial areas in order to stimulate and revitalize existing businesses and create opportunities for appropriate new commercial development.	The proposed infill development would occur on underutilized sites within the exiting HSC. The proposed academic and medical-related facilities are intended to attract outstanding students, faculty and staff to the HSC. In addition, other institutional, academic, and public uses in the vicinity of the HSC would benefit from the proposed improvements to the Project area. As such, the proposed Project supports this objective.

Table 2 (Continued)

PROJECT CONSISTENCY WITH APPLICABLE LAND USE POLICIES

Relevant Policy	Analysis of Project Consistency
Objective 2-3: Minimize conflicts between auto-related and pedestrian-oriented activities and encourage use of public transportation in commercial areas.	Providing parking at selected locations would allow pedestrian access to the entire facility with limited vehicular interfaces. In addition, a USC-operated shuttle system would provide transportation from the proposed parking facilities to the HSC buildings. As such, the proposed Project supports this objective.
Site Planning: – Locating surface parking to the rear of structures. – Providing pedestrian access from the front of buildings to rear parking for projects with wide frontages.	The proposed layout of the Project Site would create a pedestrian-friendly campus environment that would facilitate pedestrian access to the entire facility principally by limiting pedestrian and vehicular interfaces by providing parking at selected locations within the HSC and connecting these parking facilities with other components of the HSC via a USC-operated shuttle system. Sidewalks and pedestrian walkways between buildings would connect the parking with the proposed and existing buildings within the HSC. The Project would include the creation of new exterior courtyards and walkways between and around the proposed buildings. As such, the proposed Project supports this policy.
Height and Building Design: – Ensure that a project avoids large sterile expanses of building walls.	The proposed buildings would be constructed of steel structural or concrete framework clad with pre-cast concrete panels and glass and aluminum curtain wall systems. Though the design of the proposed buildings has not been fully developed at this stage, their architectural style would be similar to the same type of buildings that already exist on the HSC. These building include articulated surfaces, thereby avoiding large, sterile expanses of building walls. As such, the proposed Project supports this policy.
– Require a comprehensive signage program suited to the scale and character to the local environment	The proposed buildings would feature signage and lighting consistent with existing HSC lighting and signage and LAMC requirements. As such, the proposed Project supports this policy.
Parking Structures: – Utilize landscaping to screen parking structures not architecturally integrated with the main building.	Parking for the proposed buildings would be located at selected sites within the HSC. A USC-operated shuttle system would provide transportation among the proposed structure(s) on these sites to the HSC buildings. In addition, sidewalks and pedestrian walkways between the buildings would connect the parking with the proposed and existing buildings within the HSC. The design of the proposed parking facilities would be consistent with the HSC architectural themes and in the use of landscaping, particularly with regard to façade treatments. As such, the proposed Project supports this policy.

Table 2 (Continued)

PROJECT CONSISTENCY WITH APPLICABLE LAND USE POLICIES

Relevant Policy	Analysis of Project Consistency
Light and Glare: – Install on-site lighting along all pedestrian walkways and vehicular access ways.	The proposed Project would feature well-lit pedestrian pathways linking the HSC with the proposed parking facilities and would feature appropriate lighting in and around the proposed building and parking sites. As such, the proposed Project supports this policy.
– Shield and direct on-site lighting onto driveways and walkways.	All pedestrian, security, and landscape lighting would be directed onto driveways and walkways (see Section IV.B.1, Visual Resource mitigation measures). As such, the proposed Project supports this policy.
Los Angeles Municipal Code	
LAMC Section 12.14. The C2 zone (Commercial) permits a wide variety of commercial uses, including academic, medical laboratory and medical office uses and allows the provision of surface parking in support of commercial uses.	The proposed medical research, academic, and medical-related uses that may occur on Development Sites A, B, and G would be permitted uses under the existing C2 (Commercial) zoning designations. Development Site D is zoned [Q]C2-1VL and permits the proposed uses. Development Sites E and F are zoned CM (Commercial Manufacturing). With the proposed zone change for Development Sites E and F (i.e., From CM-1 to C2-2), the proposed uses on Development Sites E and F (i.e., academic, medical research, and office buildings or parking) would be consistent with the existing uses found within the HSC and would assist in infilling the established HSC with similar uses. With the proposed zone change for Development Site C (i.e., from PF to C2), the parking structure on Development Site C would be a permitted use under the LAMC and would, thus, comply with this LAMC section.
LAMC Section 12.21.1.A.2. Within Height District 2, the total floor area in all buildings shall not exceed six times the buildable lot area.	Development Sites A, B, and G are located within Height District 2. The Project proposes a maximum of 465,000, 295,338, and 100,000 square feet of floor area within Development Sites A, B, and G, respectively. Building Heights within Development Sites A, B, and G shall not exceed 150, 100, and 100 feet, respectively. With Development Sites A, B and G consisting of 2.46 acres, 1.13 acres and 4.0 acres of land, respectively, the maximum amount of development that may occur on these Sites would be consistent with the permitted 6:1 floor area ratio (FAR). As such, the proposed development on Development Sites A, B and G would comply with this LAMC section.
LAMC Section 12.21.1.A.1. Within Height District 1 the total floor area on a lot in a commercial zone is limited to one-and-one-half times the buildable area.	Development Sites C, E, and F are located in Height District 1. However, parking is not considered to count towards the permitted floor area. The height of a parking structure on Development Site C would not exceed 75 feet. As such, the proposed development on

Table 2 (Continued)

PROJECT CONSISTENCY WITH APPLICABLE LAND USE POLICIES

Relevant Policy	Analysis of Project Consistency
	Development Site C would comply with this LAMC section. The Project proposes a maximum of 400,000 square feet of floor area within each of Development Sites E and F. The proposed building heights within Development Sites E and F would not exceed 100 feet. Development Site E, which consists of 7.64 acres of land, would comply with this LAMC section, as proposed development would not exceed the permitted 1:1.5 floor area ratio (FAR). However, the maximum amount of development (400,000 square feet) within Development Site F, which consists of 2.65 acres of land, would exceed the permitted 1:1.5 floor area ratio (FAR). Therefore, a height district change from Height District 1 to Height District 2 would be required for the maximum amount of development on Development Site F to comply with this LAMC section.
LAMC Section 12.21.1.A.1 No building or structure in Height District No. 1VL shall exceed three stories, nor shall it exceed 45 feet in height.	Development Site D is located within Height District 1VL. In the event that University and/or medical-related uses are constructed on Development Site D, the maximum height of the structure would be 140 feet. Parking facilities to support the Project, should they occur within Development Site D, would not exceed 75 feet. The heights of the structures that could be constructed on Development Site D would be comparable to the surrounding HSC buildings. However, a height district change from Height District 1VL to Height District 2 for the maximum amount of development proposed for Development Site D would be required for the Project to comply with this LAMC section.
LAMC Section 12.21.A.4. Parking requirements.	Regulations governing parking are discussed in detail in Section IV.C, Traffic, of this Draft EIR. Parking facilities to support the new buildings that may occur on Development Sites A, B, D, E, F, and/or G would be accommodated through construction of parking facilities on one or more of the following: Development Sites B, C, D, E, and F. The quantity of parking that would be provided would be sufficient to meet the Project's code requirements and parking demand. Sidewalks and pedestrian walkways between buildings would connect the parking with the proposed and existing buildings within the HSC. As such, the proposed Project would comply with this regulation.

Table 2 (Continued)

PROJECT CONSISTENCY WITH APPLICABLE LAND USE POLICIES

Relevant Policy	Analysis of Project Consistency
Section 12.21.A.4(g) specifies that a garage or off-street parking area must be provided either on the same lot as the proposed use or on another lot not more than 750 feet away from the proposed use, as measured along the streets or other potential pedestrian pathways between the two lots.	Parking facilities would be constructed on one or more of the following: Development Sites B, C, D, E, and F. Providing parking at these selected sites within the HSC would further facilitate pedestrian access to the entire facility with limited vehicular interfaces. In addition, a USC-operated shuttle system would provide transportation throughout the HSC, including the proposed buildings and parking facilities. As the proposed parking facilities may be located greater than 750 feet from one or more of the proposed Development Sites, a variance from the distance requirement set forth in this LAMC section may be required for the Project to comply with this LAMC section.
Adelante Eastside Redevelopment Plan	
Improve the quality of life for those who live and work in and visit the Redevelopment Plan Area through enhanced business, employment, housing, shopping, entertainment, recreational, and educational opportunities.	The proposed Project would enhance the pedestrian-friendly campus environment and would allow pedestrian access to the entire facility with limited vehicular interfaces by providing parking at selected locations within the HSC. One of the goals of the Applicant is to improve the quality of life for individuals and society by promoting health, preventing and curing disease, advancing medical research, and educating tomorrow's physicians and scientists. To this end, the proposed development of academic and medical-related facilities would aid in attracting outstanding students, faculty, and staff to the HSC. The Project would therefore provide enhanced business, employment and educational opportunities for those in the community. As such, the Project supports this policy.
Preserve and increase employment, training, business and investment opportunities through redevelopment programs.	The proposed Project can be characterized as infill development within the existing HSC on sites currently used as surface parking lots or sites that are underdeveloped. Development as proposed would aid in achieving the redevelopment program objectives of enhanced employment, training and business investments. The proposed academic and medical-related facilities are intended to attract outstanding students, faculty and staff to the HSC that would assist instructors in providing outstanding undergraduate, graduate, and postgraduate academic programs leading to academic degrees in the health profession. As such, this represents an increase in employment and training opportunities, and the Project is therefore consistent with this policy.

Table 2 (Continued)

PROJECT CONSISTENCY WITH APPLICABLE LAND USE POLICIES

Relevant Policy	Analysis of Project Consistency
Support and encourage a circulation system that will improve the quality of life in the Redevelopment Plan Area, including pedestrian, automobile, parking, and mass transit systems, with emphasis on serving existing facilities and meeting future needs.	The proposed Project would be served via the nearby San Bernardino (I-10) and Golden State (I-5) Freeways, as well as by the Metro mass transit system. Parking facilities to support the new buildings would be located at selected sites within the HSC. A USC-operated shuttle system would provide transportation from the proposed parking facilities to the HSC buildings. A shuttle system also operates between the HSC and the main University Park Campus, as well as Union Station and downtown. Sidewalks and pedestrian walkways between buildings would connect the parking with the proposed and existing buildings within the HSC. The proposed site layout would create a pedestrian-friendly campus environment that would allow pedestrian access to the entire facility with limited vehicular interfaces by providing parking at selected sites within the HSC. The Project is therefore consistent with this policy.
Promote and support the conservation, rehabilitation, and appropriate use or reuse of existing buildings, groupings of buildings, and other physical features.	The proposed Project can be characterized as infill development within the existing HSC. Providing parking at selected sites within the HSC would facilitate pedestrian access to the entire facility with limited vehicular interfaces. Development would include the creation of new exterior courtyards and walkways between and around the proposed buildings. These spaces would include plantings that would complement the existing landscaping program throughout the HSC.
Promote a thriving commercial environment, including adequate parking and proper traffic circulation, that contributes to neighborhood improvement and positively relates to adjacent land uses.	The proposed layout of the Project Site would create a pedestrian-friendly campus environment that would facilitate pedestrian access to the entire facility principally by limiting pedestrian and vehicular interfaces by providing parking at selected sites within the HSC and connecting these parking facilities with other components of the HSC via a USC-operated shuttle system. As part of an established campus of related land uses, the proposed buildings would assist in infilling the established HSC with similar uses. As such, the proposed Project would support this policy.
Regional Comprehensive Plan and Guide	
Encouraging patterns of urban development and land use that reduce costs on infrastructure construction and make better use of existing facilities.	The proposed Project would develop underutilized sites within the existing HSC that are currently used as surface parking lots or are underdeveloped. With the development of the proposed Project in an established area of the City, in which existing facilities and infrastructure are already in place and would be available to the proposed Project, the cost of infrastructure

Table 2 (Continued)

PROJECT CONSISTENCY WITH APPLICABLE LAND USE POLICIES

Relevant Policy	Analysis of Project Consistency
	construction would be reduced. As such, the proposed Project would support this policy.
Encouraging development in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.	The proposed Project would develop underutilized sites within the existing HSC. The HSC is located in an older section of the City with an established redevelopment project. As such, the proposed Project would support this policy.
Encouraging land uses that encourage the use of transit and reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled.	The proposed Project is well served by the Metro, DASH, and USC shuttle system. Public transportation to the HSC is also available from Union Station. The proposed Project is located within the existing HSC enabling utilization by the USC community without additional auto trips. As such, the proposed Project would support this policy.

The Project proposes to develop academic and medical-related facilities on sites that are currently used as surface parking lots or are undeveloped within the existing HSC. These proposed uses are consistent with the uses permitted within the Community Center General Plan Land Use designation. Development of these sites would preserve the character of the surrounding neighborhood, as the proposed development would assist in enhancing the established HSC with similar uses. Also, the heights of the proposed structures would not substantially contrast with the surrounding residential areas since the proposed structures would be consistent in scale with the existing HSC structures and the overall distance between these areas and the proposed Development Sites would not be reduced. The Project would also be consistent with policies pertaining to the density of community centers given that the density of the proposed uses would be compatible with the existing HSC development, and would be consistent with the densities permitted by the Northeast Los Angeles Community Plan. Furthermore, the Project would strengthen the HSC and the surrounding commercial areas via new development that complements existing development within the HSC. Specifically, the Project would stimulate and revitalize existing businesses and create opportunities for appropriate new commercial development within the surrounding area.

The integration of the Project into the existing HSC campus would contribute to, and enhance, the existing pedestrian-friendly campus environment and further facilitate pedestrian access to the entire HSC. This would be accomplished in large part by limiting pedestrian and vehicular interfaces by providing parking at selected locations within the HSC and connecting these parking facilities with other components of the HSC via a USC-operated shuttle system**.** The Project would also include the creation of new exterior courtyards and walkways between

and around the proposed buildings. These spaces would include plantings that would complement the existing landscaping program throughout the HSC and would connect the proposed and existing buildings within the HSC. The walkways would be adequately lighted and create a sense of place to support and enhance pedestrian activity. Furthermore, while the design of the proposed buildings has not been fully developed at this stage, their architectural style would be similar to those that already exist on the HSC. On an overall basis, the Project would enhance the urban character of the Project area. With the proposed improvements as described above, the Project's land use impacts in relation to the City's General Plan Framework would be less than significant.

(ii) Northeast Los Angeles Community Plan

As shown in Table 2, the proposed Project would be consistent with the site planning, neighborhood compatibility, landscape, access, aesthetic, light and glare and transit oriented goals of the Northeast Los Angeles Community Plan. As described in greater detail in Table 2, the proposed Project has been designed to create a pedestrian-friendly campus environment that would facilitate pedestrian access to the entire facility by limiting pedestrian and vehicle interfaces by providing parking at selected locations within the HSC and connecting these parking facilities with the other components of the HSC via a USC-operated shuttle system. Though the design of the proposed buildings has not been fully developed at this stage, the architectural style would be similar to the buildings that already exist on the HSC. The proposed buildings would be constructed of steel structural or concrete framework clad with pre-cast concrete panels and glass and aluminum curtain wall systems. Articulated surfaces on building walls would avoid large, sterile expanses on building walls. As described in greater detail above, the Project would include the creation of new exterior courtyards and walkways between and around the proposed buildings. These spaces would include plantings that would complement the existing landscaping program throughout the HSC. The proposed buildings would also feature signage and lighting consistent with existing HSC operations. Through high activity, landscaping, night lighting, and other pedestrian amenities, the proposed Project would contribute to the aesthetic appearance of the campus for the community. The proposed uses (i.e., academic, medical research, and medical office buildings) that may occur on Development Sites A, B, D, E, F, and/or G and potential parking facilities on Development Sites B, C, D, E, and/or F would be compatible with the Community Plan and its policies. A general plan amendment to change the land use designation from Public Facilities to General Commercial is required to permit the proposed development of parking facilities on Development Site C. The proposed General Commercial designation for Development Site C would be compatible with the designations of the surrounding HSC parcels and would be consistent with the intent and policies of the Community Plan. In addition, the implementation of the Project with regard to Development Site C may require the vacation of Henry Street, a street that is shown on the Northeast Los Angeles Community Plan Generalized Circulation Map but has been paved over and out of circulation for at least twenty years. As the street does not exist and is entirely

internal to Development Site C, its removal has no bearing on land uses in and around the Project Site. Therefore, implementation of this discretionary action (i.e. the vacation of Henry Street) would have no land use impact. Therefore, land use impacts in relation to the Northeast Los Angeles Community Plan would be less than significant. Please refer to Section IV.C, Transportation, Circulation and Parking, for additional information regarding the potential transportation implications of vacating Henry Street.

(iii) Los Angeles Municipal Code

As shown in Table 2 on pages 88 through 96, the proposed Project generally complies with the applicable LAMC provisions. Development Sites A, B, and G are zoned C2-2 (Commercial). As detailed in Section 12.14 of the LAMC, the C2-2 commercial zone permits a wide variety of commercial uses that are pertinent to the Project, including medical office, medical laboratories, and parking structures. The proposed uses for Development Sites A, B, and G, including a potential basement-level vivarium on Development Site A that could connect to the existing vivarium located in the basement level of the adjacent Zilkha Neurogenetics Institute, would be permitted as accessory uses under the existing C2 (Commercial) zoning designation. Development Site D is zoned [Q] C2-1VL (Commercial) and permit the Project's proposed academic and medical-related facilities. A zone change from CM-1 to C2-2 is required for Development Sites E and F to implement the Project as proposed. Development Site C is zoned PF-1 (Public Facilities), which permits public parking facilities, and government buildings and offices. As the Project is proposing a private parking facility on Development Site C, a zone change from PF to C2 is required to implement the Project as proposed. The proposed zone change to C2 for Development Sites C, E and F would be compatible with the zoning designations assigned to the surrounding HSC parcels and would be consistent with the intent and policies of the Community Plan. There are no required minimum lot areas or minimum front, side, or rear yard for non-residential uses in the C2 or CM zones.

Section 12.21.1 of the LAMC regulates floor area and height limitations. Development Sites A, B, and G are located within Height District 2. Therefore, the total floor area of buildings that may occur on Development Sites A, B, and G shall not exceed six times the buildable lot area. Development Sites C, E, and F are located in Height District 1. Since Development Site C is zoned PF the total floor area permitted on this site is limited to three times the buildable area. Development Sites E and F are zoned commercial, which limits the total floor area on these lots to 1.5 times the buildable area. Development Site D is located within Height District 1VL, which limits the height of structures to three stories or 45 feet in height.

Development Site A is approximately 2.46 acres or 91,912 square feet in size. Therefore, the total floor area permitted on this site would be a maximum of 551,472 gross square feet. The Project is proposing a maximum of 465,000 gross square feet of development on Development Site A. Thus, the proposed development on Development Site A would be consistent with the existing height district for this particular site. Furthermore the potential building(s) on

Development Site A would be consistent in height with other HSC buildings that currently exist adjacent to Development Site A.

Development Site B is approximately 1.13 acres or 49,223 square feet. The total floor area permitted on Development Site B would, therefore, be a maximum of 295,338 gross square feet. The Project is proposing a maximum of 295,338 gross square feet of floor area for this Development Site. Thus, the proposed development on Development Site B would be consistent with the existing height district for this particular site. Furthermore, the location of the proposed building that may occur within Development Site B is sufficiently distant from Lincoln and Hazard Parks and off-site residential uses in the area so as to not alter the land use relationships that currently exist.

Development Site C is approximately 3.68 acres in size; however, as discussed above, parking facilities do not count toward the permitted floor area. Thus, the proposed Project is consistent with the existing height district for this particular site.

In the event that University and/or medical-related uses are constructed on Development Site D, a maximum of 50,312 gross square feet would be permitted. Because the size of Development Site D is approximately 0.77 acre, or 33,541 gross square feet, and the site is within Height District 1VL, a height district change from 1VL to 2 is required for the maximum development proposed for this site to comply with the LAMC. The proposed height district change would allow the permitted floor area on Development Site D to be six times the buildable lot area or a maximum of 201,246 gross square feet. Similar to Development Site B, Development Site D is located within the boundaries of the existing HSC, and the height of the proposed building(s) on Development Site D would be consistent with the heights of the surrounding HSC structures. In addition, the location of the proposed building(s) within Development Site D is sufficiently distant from Lincoln and Hazard Parks and the off-site residential uses in the area so as to not alter the land use relationships that currently exist.

Development Site E is approximately 7.64 acres in size and would permit a maximum of 499,198 gross square feet, while Development Site F is approximately 2.65 acres permitting a maximum floor area of 115,434 gross square feet, as both sites are located within Height District 1. Although the proposed development on Development Site E is consistent with the existing height district for this particular site, the Project proposes a height district change to Height District 2 to provide for a consistent Height District 2 across the Project. Development Site F would require a height district change from 1 to 2. The height of the proposed building that may occur on Development Site F would be consistent with the heights of the surrounding HSC structures. Furthermore, the proposed building(s) within Development Site F would be separated from Lincoln Park by Valley Boulevard and the railroad tracks that run parallel to the southern side of Valley Boulevard.

While the maximum amount of Project development that could occur on the seven development sites, when added together, would equal 1.8 million square feet, total Project development would never exceed a total of 765,000 square feet. In conclusion, development proposed for Development Sites A, C, E, and/or G would be consistent with the density permitted by the LAMC. With the adoption of the requested height district changes for Development Sites D and F, these Development Sites would also comply with the density standards established via the LAMC.

Section 12.21.A.4 of the LAMC specifies that the proposed Project would require up to approximately 5,186 parking spaces. Regulations governing parking are discussed in detail in Section IV.C, Traffic, of this Draft EIR. Development of potential parking facilities to support the new buildings on Development Sites B, C, D, E, and/or F would be accommodated through construction of multi-level parking structures and/or surface parking lots. The Project's proposed parking facilities would be sufficient to meet the Project's parking requirements per the LAMC, as well as the Project's demand for parking. Refer to Section IV.C, Traffic, for additional information regarding the Project's proposed parking facilities.

The LAMC also regulates the location of a Project's parking supply. Based on LAMC Section 12.21.A.4(g), code required parking must be provided on the same lot as the proposed use or on a separate lot within 750 feet of the use. As the distances between the proposed Development Sites and the parking facilities may be greater than 750 feet, a variance from the distance requirement may be required. Notwithstanding, the City of Los Angeles' Department of Building and Safety generally determines parking requirements for an environment such as the HSC on a campus-wide basis, rather than on a building-by-building or lot-by-lot basis. For example, a parking space on one block at the HSC may be considered to satisfy the LAMC parking requirement for a building located across the street.

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 Angeles Municipal Code (LAMC). Specific LAMC requirements and restrictions are dependant on signage type. However, general constraints on design, construction, materials, and the potential for a hazard to traffic are applicable and the Departments of Building and Safety and Transportation would not permit signage that would interfere with the safe and efficient operation of vehicles upon a street or freeway, or which create a condition endangering the safety of persons.

Although the signage for the proposed Project has not been finalized at this time, exterior signage for the proposed buildings and HSC campus identity would be compatible with the design of the existing signage within the HSC. The proposed signs would also comply with the Division 62 (Building Code) regulations of the City of Los Angeles Municipal Code (LAMC).

(iv) Adelante Eastside Development Project

The principal goal of the Adelante Eastside Development Project is to improve living conditions, upgrade public improvements, increase commercial choices, and revitalize the industrial base while preserving existing businesses and industry. To this end, as detailed in Table 2 on pages 88 through 96, the Project is consistent with the policies or goals of the Adelante Eastside Redevelopment Plan, as the Project would preserve and enhance the existing HSC, a unique commercial and institutional resource of the community. For the same reasons that were discussed above in Section IV.3.c.2.a(ii), the proposed Project's impact on the Adelante Eastside Development Project would be less than significant.

(b) SCAG Regional Comprehensive Plan and Guide

The policies set forth in SCAG's Regional Comprehensive Plan and Guide (RCPG) that are relevant to individual projects primarily encourage patterns of urban development and land use that reduce costs on infrastructure construction and make better use of existing facilities. The RCPG encourages development in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment. These policies are described in greater detail in Subsection IV.A.2.b.(4) above and are shown in comparison with the proposed Project in Table 2 on pages 88 through 96.

The HSC is located in an older section of the City with an established redevelopment project. The proposed Project would develop underutilized sites within the existing HSC that are currently used as surface parking lots. With the development of the proposed Project in an established area of the City, in which existing facilities and infrastructure are already in place and would be available to the proposed Project, the cost of infrastructure construction would be reduced. Furthermore, the proposed Project would be served through the nearby San Bernardino (I-10), and Golden State (I-5) Freeways and the Metro system. The area is also well served by public transit via the Metro, DASH and USC shuttle systems. Public transportation to the HSC is also available from Union Station. Based on the above analysis, the impact of the proposed Project on RCPG policies would be less than significant.

(c) Los Angeles County Congestion Management Plan (CMP)

The traffic impacts associated with the proposed Project relative to the CMP are evaluated in Section IV.C, Traffic of this Draft EIR. As described therein, Project development would result in a less than significant impact with regard to the CMP.

(d) South Coast Regional Management District Air Quality Management Plan

Air quality impacts associated with the proposed Project would result from stationary and non-stationary sources associated with Project construction and operations. Section IV.D, Air Quality, of this Draft EIR evaluates the air quality impacts of the proposed Project and describes air quality mitigation measures that would reduce all potential air quality impacts to a less than significant level to the extent feasible. The proposed Project would not result in an increase in the frequency or severity of an existing air quality violation or create a new violation, and the proposed Project is consistent with the population, housing and employment growth assumptions contained in the AQMP. As such, the Project would be consistent with the policies and goals of the AQMP, and no significant impacts relative to AQMP land use policies and regulations would occur.

In conclusion, the proposed Project, with approval of the requested zone change, height district change and parking variances, would be compatible with applicable local and regional land use plans, policies, and regulations. As such, Project impacts on local and regional land use plans, policies, and regulations would be less than significant.

(3) Project Compatibility with Surrounding Land Uses

The proposed Project can be characterized as infill development within the existing 56-acre HSC. The HSC is generally bounded by Valley Boulevard to the north, Zonal Avenue to the south, Mission Street to the west, and Soto Street to the east. Development Sites A, B, and G are centrally located within the HSC. Development Site C is located on the west side of the HSC, and Development Site D is located along the west side of Biggy Street between Zonal and Eastlake Avenues. Development Sites E and F are located north of Alcazar Street, on the east and west sides of San Pablo Street, respectively. These seven Development Sites are currently vacant or utilized as surface parking lots for the HSC or are underdeveloped and surrounded by other institutional uses and other parking facilities.

Development of academic and medical-related facilities on these sites would be consistent with the existing uses found within the HSC, particularly existing adjacent buildings such as the Zilkha Neurogenetics Institute and the HCC and HCC II buildings. As part of an established campus of related land uses, the proposed buildings would not physically divide an established community, but rather would assist in infilling the established HSC with similar uses. Similarly, the development of parking facilities on one or more of Development Sites B, C, D, E, and F would not result in the physical separation of any established community as the proposed uses fit the context of the Development Sites and the entire HSC.

The land uses to the north of the Project Site include Lincoln Park and a Los Angeles County Public Works facility. The Los Angeles County Public Works facility is located on the north side of Alcazar Street, east of Development Site E and directly across from the USC Kidney Center and the USC Pathology Reference Center buildings within the HSC. Lincoln Park is located approximately 0.25 mile from the nearest Development Site and is further separated from the Project Site by Valley Boulevard and the railroad tracks that parallel the southern side of Valley Boulevard and existing HSC structures. Given these factors, Project development would have a less than significant impact with regard to land use compatibility. While the Los Angeles County Public Works facility is located in proximity to the Project Site, no land use compatibility impacts are anticipated due to the industrial nature of this use and the existence of existing HSC buildings in proximity to this facility. In addition, the proposed structures would be consistent in scale and architectural design with the existing HSC structures; therefore, the proposed Project would be compatible with the existing uses to the north of the Project Site.

The area east of the Project Site across Soto Street is principally residential in nature with limited commercial uses along Soto Street. These predominantly single-family structures are one-story in height, older in age, and constructed of wood and stucco. The closest residential uses are located approximately 700 feet east of Development Site B along the east and west sides of Playground Avenue, which bisects the eastern portion of the HSC. No land use compatibility impacts between the Development Sites and these residential uses are anticipated, as existing HSC structures separate the Development Sites from these residential uses. Furthermore, the heights of the proposed structures would not substantially contrast with these residential uses since the proposed structures would be consistent in scale with existing HSC structures.

The major land use to the south and west of the HSC is the Los Angeles County–USC Medical Center. This facility, located southwest of the HSC, is one of the nation's largest public hospitals and the nation's largest medical training center. Located to the southeast of the HSC and east of the Los Angeles County–USC Medical Center is Hazard Park. The Central Juvenile Hall is located to the west of the HSC at the intersection of Eastlake Avenue and Alcazar Street. Other uses in this immediate area include the United States Army Reserve Center located on the east side of San Pablo Street, south of Norfolk Street and the Francisco Bravo M.D. Magnet Senior High School, which is located on the east side of Cornwell Street. The development of additional academic, medical-related, and academic support facilities within the existing HSC would be compatible with these surrounding institutional and public uses given their similarities in land use classification. While Development Site A and Hazard Park are located at opposite corners of the intersection, any buildings on Development Site A would be separated from Hazard Park not only by San Pablo Street and Eastlake Avenue/Norfolk Street, but also by the ornamental landscape buffer that exists directly north of Eastlake Avenue. Development Sites B, C, D, E, F, and G are located further north from Hazard Park and are separated from the park by

existing HSC buildings. As such, land use compatibility impacts with these uses would be less than significant.

The Women and Children's Hospital is located on Zonal Avenue west of the HSC. The Los Angeles County Coroner is also located further to the west of the Project Site on the northeast corner of Marengo Street and Mission Road. The College of Nursing and Allied Health is located across Mission Road, and residential uses are located west of these and other institutional and commercial uses that front Mission Road. The nearest residential uses west of Mission Road are located approximately 900 feet west of Development Site C. Given that the Development Sites are located within the HSC and the proposed structures would be consistent in scale and design to the existing HSC structures, the proposed development would be compatible with these institutional, commercial and residential uses which are located to the west of the Project Site.

In conclusion, the proposed seven Development Sites are located within the established HSC which is developed with similar uses. Furthermore, the height of the proposed structures would not substantially contrast with the surrounding area, since the proposed structures would be consistent in scale with the existing HSC structures, as well as the other nearby institutional and public uses in the vicinity of the Project Site. Therefore, the land use impacts of the proposed uses on the Project Site relative to compatibility with the nearby public, commercial, institutional, residential, and recreational land uses would be less than significant.

(4) Additional Development Scenarios

The preceding land use analysis addressed impacts associated with the regulatory framework that is applicable to the proposed Project site and the relationship between the Project's uses to those in the surrounding area. The analyses regarding the regulatory environment are based on whether the Project would be compatible with existing land use plans and the LAMC. The analysis of the Project's relationship with surrounding land use is based on whether the new development would disrupt, divide, or isolate existing neighborhoods or land uses.

The Project, as proposed, provides flexibility with regard to the types and quantities of the various uses proposed to be developed as part of the Project. The preceding land use analysis is based on the development of 765,000 square feet of academic and/or medical-related uses (i.e., 720,000 square feet of academic and support facilities and 45,000 square feet of medical clinic uses). Under the proposed Project, the amount of academic and/or medical research facilities could be reduced by as much as 255,000 square feet (a 35 percent reduction in floor area), while the amount of medical clinic facilities could be increased by as much as 75,000 square feet (an increase of 37 percent). Under this development scenario, a total of 585,000 square feet of

academic and medical research facilities would be developed. These variations would allow flexibility in the land use mix in order to respond to the future needs and demands of the HSC, the southern California economy, and changes in Project requirements.

In summary, while the exchange of uses would result in varying amounts of development (i.e., between 585,000 and 765,000 square feet), the range of permitted uses would be the same. Therefore, Project development, regardless of the amount of square footage that would be developed, would be consistent with the uses allowed under the existing and proposed C2 (Commercial) zoning designation for the seven proposed Development Sites. Similarly, the proposed building heights and the parking program that would be implemented under any of the permitted development scenarios would also be consistent with the LAMC requirements that would be in effect upon adoption of the Project's proposed discretionary actions. Due to the location of the proposed uses within the existing HSC, each of the proposed uses or combination of uses permitted under any development scenario would be compatible with the surrounding HSC buildings and the institutional, public, commercial, residential and recreational land uses that surround the HSC. In addition, there would be no substantial variation in the Project's street configurations or relationship to the surrounding community. Therefore, any Project development scenario would be consistent with all applicable land use plans and would be compatible with the adjacent uses. Thus, land use impacts associated with any Project development scenario would be less than significant.

The need for the requested height district changes for Development Site F depends on the amount of floor area that may be developed on this site. Implementation of any of the development scenarios on Development Sites C and D would require the same discretionary actions as the proposed Project. Specifically, Development Site C would require a General Plan Amendment from Public Facilities to General Commercial and a zone change from PF (Public Facilities) to C2-2 (Commercial) for the construction of a potential parking structure proposed on this Site. The height district change from 1VL to 2 requested for Development Site D would still be required, regardless of whether 59,000 square feet of medical clinic facilities or 200,000 square feet of academic and/or medical research facilities were to be developed on Development Site D. Similarly, Development Sites E and F would still require a General Plan Amendment from Limited Industrial to General Commercial and a zone change from CM-1 to C2-2. In addition, a variance from the distance requirement for parking to be provided within 750 feet of the proposed use may also be required under any of the development scenarios.

4. CUMULATIVE IMPACTS

The potential for cumulative impacts occurs when the impacts of the Project and the impacts of related projects together yield impacts that are greater than the impacts separately. Based on the information available regarding the related projects, it is reasonable to assume that

future projects approved in the surrounding area would have been found, as part of the approval process, to be in compliance with local and regional planning goals and policies. If a related project was found to be in conflict with applicable land use plans, policies and regulations, it is reasonable to assume that its approval would involve findings that the project did not have adverse land use impacts or that mitigation measures were incorporated into the project to reduce potential land use impacts to less than significant levels.

A total of 14 related projects have been identified in the vicinity of the Project Site. Four of the related projects are located within the existing HSC campus. These projects include the USC Zilkha Neurogenetics Institute located to the north of Development Site A, which is already built and occupied, the USC University Hospital Acute Care Tower located on the north side of Norfolk Street between San Pablo Street and Playground Street, the USC HCC II Building located to the south of Development Site B, which is already built and occupied, and the USC Harlyne Norris Research Tower located at the southeast corner of Eastlake Avenue and Biggy Street. Construction of the USC HRNT is currently under construction. Of the remaining ten projects, only the Los Angeles County–USC Medical Center Hospital Replacement Project located on the north side of Marengo Street is located within close proximity to the Project Site. The remaining commercial and residential projects are located further away from the HSC. The commercial projects include retail stores, restaurants, a gas station with a fast food restaurant and a drive-through, medical offices, a hotel, and a museum. The residential projects consist of a 30-unit mixed-use apartment, retail and general office project located at Alameda Street and College Street, and the 223-unit Blossom Garden Apartment Project, which also includes retail uses located at 900 Broadway at College Street.

The proposed Project would be compatible with the related projects, particularly the projects located on the HSC and the Los Angeles County–USC Medical Hospital replacement project as the scale and proposed uses are similar to the proposed Project. The other identified related projects are located further away from the proposed Project, and therefore the cumulative land use impacts of those projects and the proposed Project would be negligible. Therefore, no significant cumulative land use impacts are anticipated.

5. MITIGATION MEASURES

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

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Land use impacts prior to, as well as after, the consideration of mitigation measures would be less than significant. This conclusion applies to the full range of development scenarios that could occur under the proposed Project.

IV. ENVIRONMENTAL IMPACT ANALYSIS
B. VISUAL RESOURCES

1. INTRODUCTION

An analysis of visual resources considers both aesthetics and views. The following analysis evaluates the aesthetic values of the proposed Project, as well as the introduction of the proposed Project into the aesthetic environment. The analysis of potential aesthetic impacts focuses on the degree to which elements of the environment differ visually. Views from vantage points within and surrounding the Project site will also be evaluated to determine if an existing viewshed would be obstructed, or if its value would be diminished by the proposed Project. This analysis also addresses the blockage of direct sunlight by the proposed buildings on adjacent uses. While the following provides a clear identification of the significance thresholds that are used in the analysis, it is important to note that the analysis of aesthetics is subjective.

The Project is designed to enhance the existing campus environment through a development plan that integrates new building construction with existing HSC development. In addition, pedestrian access will be facilitated by limiting pedestrian and vehicular interfaces within the HSC via the provision of parking at selected locations within the HSC. Based on the Project's proposed development standards, building(s) that may occur on Development Sites A and B would be a maximum of 150 feet in height. Surface parking may also be provided within a portion of Development Site B. A multi-story parking structure may occur on Development Site C. The height of the parking structure, should it be constructed, would not exceed 75 feet. Future land uses on Development Site D may be a combination of University/medical-related uses and parking. In the event that University and/or medical-related uses are constructed on Development Site D, the maximum height of the structure(s) would be 140 feet. Parking facilities, should they occur, would not exceed 75 feet in height and could be a mix of a multi-level structure and surface parking. Development Sites E and F, which are located on the northern portion of the HSC, may be developed with buildings to a maximum of 100 feet in height. Surface and subterranean parking may also be provided on Development Sites E and F. Development Site G is centrally located within the HSC on the same 8.06-acre parcel as Development Site A. Maximum building heights on Development Site G are proposed to be 100 feet.

Though the specific design of the proposed buildings to be constructed has not been fully established at this time, it is expected that the buildings would be designed in a style reflective of the existing academic, research, and medical office buildings that define the aesthetic appearance of the HSC. These multi-story buildings consist primarily of pre-cast concrete with a glass and

metal curtain wall system in a modernist contemporary style. Sidewalks and pedestrian walkways between buildings would connect the parking with the proposed and existing buildings within the HSC. The Project would include the creation of new exterior courtyards and walkways between and around the proposed buildings. These spaces would include plantings that would complement the existing landscaping program throughout the HSC. Nighttime lighting would be provided to facilitate pedestrian access and safety.

2. ENVIRONMENTAL SETTING

a. Existing Visual Environment

(1) Aesthetics

The analysis of aesthetics starts with the identification of the visual resources present in the Project area and their relationship with the surrounding environment, as well as the visual access to these resources. Certain visual resources are generally perceived to possess valuable attributes. The proposed Project, as described above, would consist of new structures that would be additions to the urban landscape that would be consistent with the activities in the area surrounding the Project site. Several of these features may also be considered to be visual resources. Existing visual resources that contribute to the aesthetic character of the area include the existing USC Health Sciences Campus buildings, as well as other buildings in the vicinity of the Project Site, some of which display notable architecture, including the Los Angeles County–USC Medical Center. Landscaping associated with the HSC and other existing buildings in the Project area is also considered a visual resource. In addition, landscaping within Hazard Park and Lincoln Park contribute to the aesthetic character of the Project area.

None of the roadways adjacent to, or in the vicinity of, the Project Site are designated as a scenic highway on the Scenic Highways Element of the City of Los Angeles General Plan. The City-designated scenic highway nearest to the site is Huntington Drive/Mission Road (Scenic Highway No. 46), which is approximately one-half mile northeast of the Project Site.

A review of the Project site and the surrounding land uses serves as a baseline to determine the degree to which the proposed Project would relate to the existing aesthetic or visual character of the Project area. The Development Sites that are proposed for development are currently utilized as surface parking lots for the HSC or are underdeveloped and are surrounded by other HSC structures and facilities. The Development Sites that comprise the Project site currently feature negligible landscaping consisting of ornamental trees and landscaping designed as amenities to the streetscape, offering limited aesthetic value to the area. Development Sites A and G are centrally located within the HSC and are part of a parcel that also includes the Center for Health Professions and the Zilkha Neurogenetics Institute building.

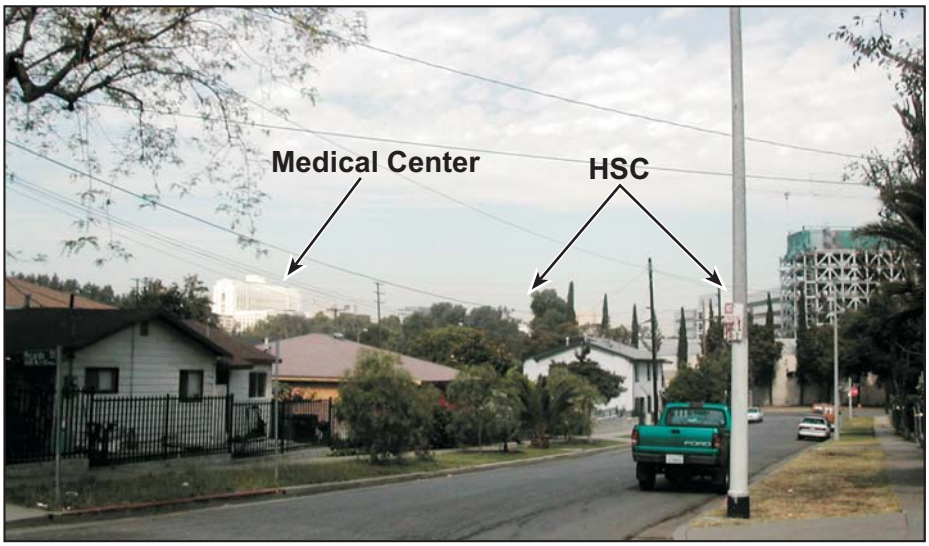
Also centrally located within the HSC is Development Site B, which is located west of the existing USC University Hospital parking structure. Development Site C is located on the north side of Zonal Avenue, between State Street to the east and Mission Road to the west. Development Site D is located on the west side of Biggy Street between Zonal and Eastlake Avenues. Development Sites E and F are located on the east and west sides of San Pablo Street, north of Alcazar Street, respectively. The aesthetic character of the HSC is that of a contemporary and integrated campus set into an existing urban landscape providing academic, research, hospital and medical office buildings, and parking facilities designed in a modernist style reflective of the high-tech research activity that occurs within these facilities. Figure 12 on page 110 is an aerial photograph that identifies the locations of the seven Development Sites as well as surrounding uses.

The aesthetic environment to the south of the Project site is defined by the large-scale institutional uses present in the area, principally the Los Angeles County–USC Medical Center and Women and Children's Hospital. Landscaping is limited to ornamental landscaping along the building façades fronting the public roadways. The Los Angeles County–USC Medical Center is currently expanding its facilities to the south with construction occurring on the north side of Marengo Street. The Los Angeles County–USC Medical Center building is 19 stories in height, while the Women and Children's Hospital is ten stories in height. Both buildings are utilitarian in design and are constructed of pre-cast concrete. The original Los Angeles County Hospital was built in 1878 and it became affiliated with the USC School of Medicine in 1885. The current hospital building was completed in 1933. Considered modern at the time, this building continues to dominate the East Los Angeles skyline.

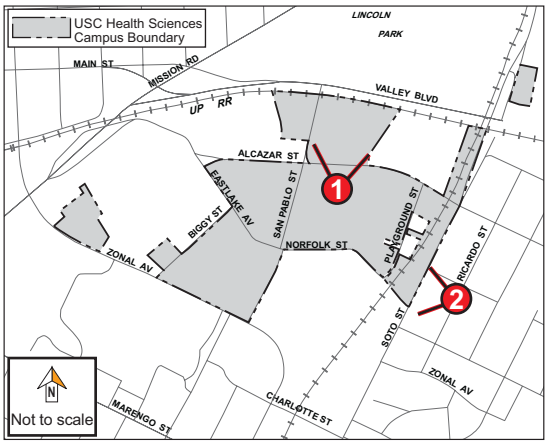
Institutional uses are also located on Mission Road to the west of the HSC. These include the Los Angeles County College of Nursing and Allied Health and the Los Angeles County Coroner. These buildings range from approximately two to five stories in height and are also older than the more modern HSC buildings. The Los Angeles County College of Nursing and Allied Health was founded in 1895 and is constructed of pre-cast concrete. The Los Angeles County Coroner building is constructed of brick. Landscaping in these areas is limited to ornamental landscaping along building façades and street trees fronting Mission Road. Residential uses exist to the west, behind the commercial uses that front Mission Road. Development Sites C and D are the nearest to these areas.

Located southeast of the HSC is Hazard Park. Hazard Park is a 25-acre recreational resource, which contains trees, lawns, baseball diamonds, tennis courts, and a vegetated gully along an abandoned railroad spur line that bisects the park. Development Site A (the portion of the Project site nearest to Hazard Park) is located at the northwest corner of San Pablo Street and Eastlake Avenue, whereas the park is located at the southeast corner of the intersection. While Development Site A and the park are located at opposite corners of the intersection, the buildings that may occur on Development Site A would be separated from Hazard Park not only by San

Photograph 1: View toward Lincoln Heights looking north from the HSC.



Photograph 2: View of the skyline looking west from the residential neighborhood located to the east of Soto Street at the intersection of Norfolk Avenue and Ricardo Street.



Photograph Location Key Map

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Figure 12
Photographs of Surrounding Area

Source: PCR Services Corporation, 2004

Pablo Street and Eastlake Avenue/Norfolk Street, but also by the ornamental landscape buffer that exists directly north of Eastlake Avenue. Development Sites B, C, D, E, F, and G are located further north from Hazard Park and are separated from the park by HSC buildings.

Adjacent to Hazard Park are the Francisco Bravo M.D. Magnet Senior High School, located to the southeast of the HSC on the east side of Cornwell Street, and the United States Army Reserve Center located on the east side of San Pablo Street, south of Norfolk Street. The United States Army Reserve Center site is comprised of one-story buildings and surface parking. A multi-story institutional structure occupies the Francisco Bravo M.D. Magnet Senior High School site, which is located south of the United States Army Reserve Center. Both sites contain limited amounts of ornamental landscaping along the building façades and street frontage.

The area east of the HSC is principally residential in nature with limited commercial uses along the major arterials (i.e., Soto Street). Residential uses are also located east of Development Site B along Playground Avenue, which bisects the eastern portion of the HSC. The residential structures in these areas are principally one-story in height, older in age and constructed of wood and stucco. Landscaping is limited to street trees and private landscaping. The aesthetic quality of these residential areas varies from residence to residence. Many of the structures are well kept, while others have been allowed to deteriorate.

Located to the north of the HSC across Valley Boulevard is Lincoln Park. Lincoln Park is also separated from the HSC by the railroad tracks that run parallel to Valley Boulevard. Lincoln Park offers a wide variety of youth and adult recreational programs including fishing in the lake within the park. A Los Angeles County Public Works facility is also located on the north side of Alcazar Street between the HSC and Lincoln Park. Development Sites E and F are the nearest to these areas.

(2) Views

A valued view resource is an area of visual interest that is within the line-of-sight or field of view from a public or private vantage point or view location. Environmental impacts occur when valued views are partially or substantially obstructed or wholly blocked by a modification of the environment (e.g., grading, landscaping, construction of structures, etc.). The State of California and the City of Los Angeles have formally acknowledged the value of access to visual resources.[19] Valued views in the Project area consist of panoramic views of the downtown

[19] *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; Nolan 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.*

Los Angeles skyline and the distant San Gabriel Mountains. 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 publicly accessible areas, such as streets, freeways, parks and vista points. Private vantage points are areas located on private property which bring specific enjoyment to residents or those who work or visit an area.

(a) Public Vantage Points

Views of the Project site from public vantage points are limited to those that occur from the public street and freeway corridors approaching or adjacent to the Project site because of the flat topography of the area. In the Project vicinity these roadways include Valley Boulevard, Zonal Avenue, Mission Road, Eastlake Avenue, Biggy Street, San Pablo Street, Norfolk Street, Soto Street, Alcazar Street, and other nearby public streets. Views from street vantage points would be characterized as urban in nature with the exception of views of Hazard Park and Lincoln Park and long range views of the San Gabriel Mountains. Public views of Hazard Park are primarily available from Soto Street, Norfolk Street, and San Pablo Street, while views of Lincoln Park are mainly available from Valley Boulevard and Mission Road. Views from within these two public City parks are also considered public vantage points.

Few scenic resources are visible at a distance due in large part to the flat topography and highly developed nature of the area. Public views from the streets surrounding the Project Site are largely confined to the land uses lining the street corridors. However, because of the flat topography of the area, views of tall buildings in the downtown Los Angeles skyline and the distant San Gabriel Mountains are not obscured by topographic features and are available from certain vantage points within the HSC and the surrounding area.

The aesthetic environment that has been created within the HSC, such as its high-quality architecture, courtyards, landscaping, and attractive building entrances, are not generally visible from surrounding public streets (e.g., Soto Street, Valley Boulevard, and Mission Road) due to topography, as well as the presence of intervening structures and landscaping. However, views of the San Gabriel Mountains and the downtown Los Angeles skyline exist from within the HSC. Photograph No. 1 in Figure 12 on page 110 depicts a view toward the San Gabriel Mountains from a vantage point within an existing courtyard adjacent to the USC Healthcare Consultation Center buildings and Development Site B.

Views of the downtown skyline or the San Gabriel Mountains are not generally available from the public streets that comprise the residential neighborhood to the east of Soto Street. Topography, intervening structures, private landscaping and street trees typically obscure these views. Some public vantage points within this neighborhood provide views of the existing HSC buildings and the Los Angeles County–USC Medical Center. In addition and as shown in Photograph No. 2 in Figure 12 on page 110, a view of the downtown skyline from the

intersection of Norfolk Avenue and Ricardo Street is available within this residential neighborhood. The tops of the HSC buildings and the Los Angeles County–USC Medical Center are visible from this public vantage point.

Views of the downtown Los Angeles skyline are not generally available from locations within Hazard Park due to the topography and landscaping within the park itself. A view from within Hazard Park toward the downtown Los Angeles skyline is presented in Photograph No. 3 in Figure 13 on page 114. The top of the Los Angeles County–USC Medical Center is also visible from this public vantage point, and views of the distant San Gabriel Mountains are available from certain vantages in the park, as shown in Photograph No. 4 in Figure 13 on page 114. Views of existing HSC buildings located on the southern and eastern portion of the campus are also available from certain vantage points within Hazard Park. However, many views of the existing HSC buildings are obscured due to the topography and landscaping.

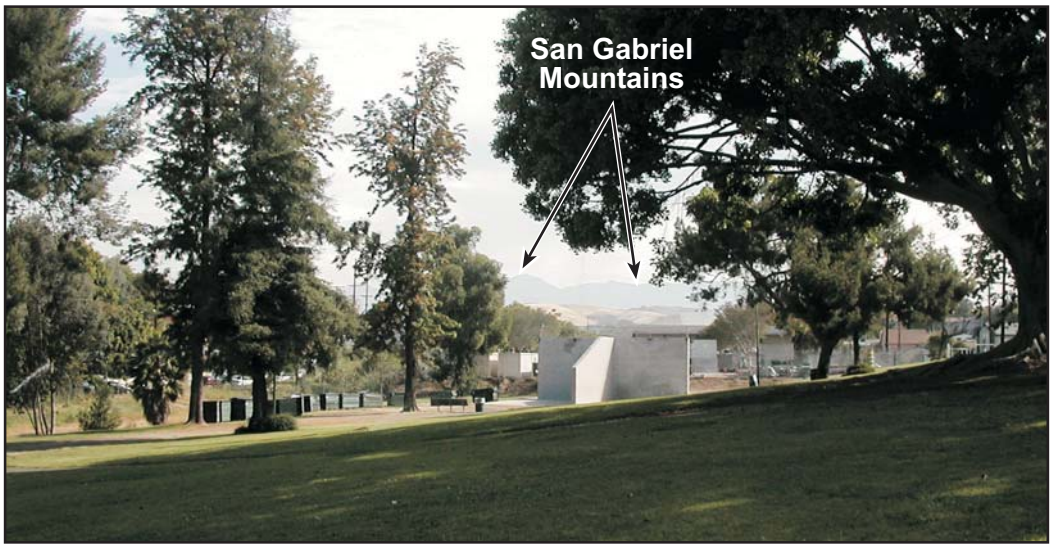
Public views of the downtown Los Angeles skyline and the distant San Gabriel Mountains are available from Valley Boulevard and from within Lincoln Park. These areas are located to the north of the HSC. Existing HSC buildings located on the northern portion of the campus obstruct views of Development Sites A, C, and D; however, Development Site D is visible from some vantage points within Lincoln Park and along Alcazar Street and Valley Boulevard. Photograph No. 5 in Figure 14 on page 115 depicts a view of the HSC and the downtown Los Angeles skyline from a public vantage point within Lincoln Park. Figure 14 on page 115 presents a public view from the intersection of Darwin Avenue and Hancock Street looking east towards the HSC. The tops of existing HSC buildings and the Los Angeles County–USC Medical Center are visible from this vantage. Intervening structures and landscaping generally obscure the views of the HSC.

Zonal Avenue and Marengo Street are two of the public roadways located to the south of the HSC. Public views of the San Gabriel Mountains from Marengo Street are blocked due to existing buildings such as the Los Angeles County–USC Medical Center. Photograph 7 in Figure 15 on page 116 shows a public view from Zonal Avenue looking north toward Development Site D. As shown in the photograph, street trees and existing structures block the majority of the views of the San Gabriel Mountains; however, the tops of the San Gabriel Mountains are visible from Zonal Avenue.

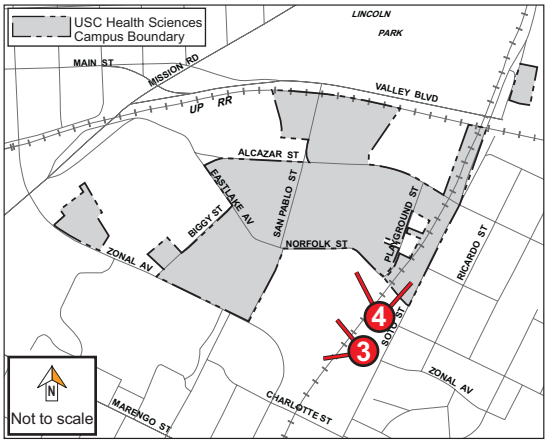
(b) Private Vantage Points

Views of the visual resources in the Project area are primarily available to HSC campus occupants from adjacent buildings within the campus interior. The existing academic, research,

Photograph 3: View looking west from within Hazard Park toward the HSC and the downtown Los Angeles skyline.



Photograph 4: View of the San Gabriel Mountains looking north from within Hazard Park.



Photograph Location Key Map

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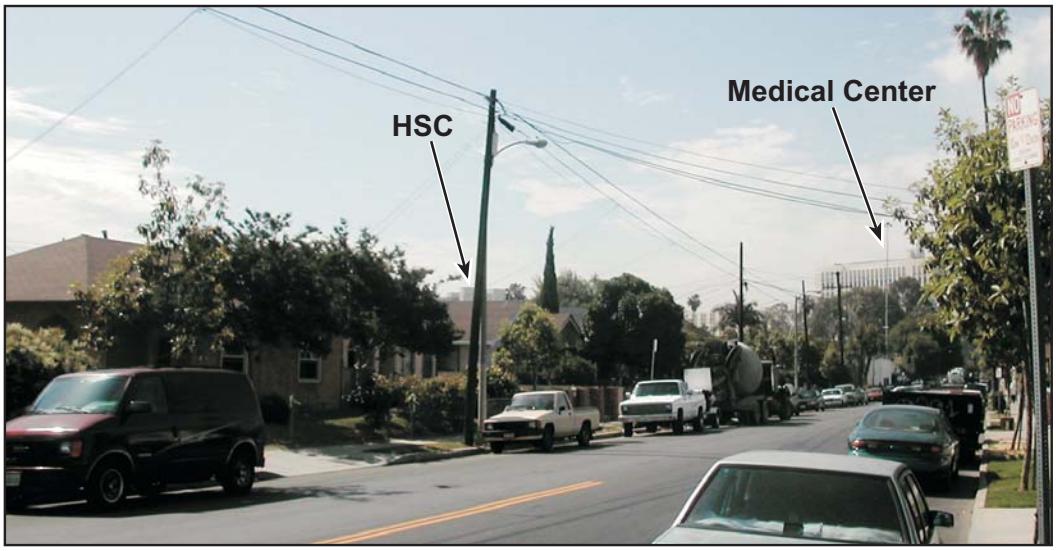
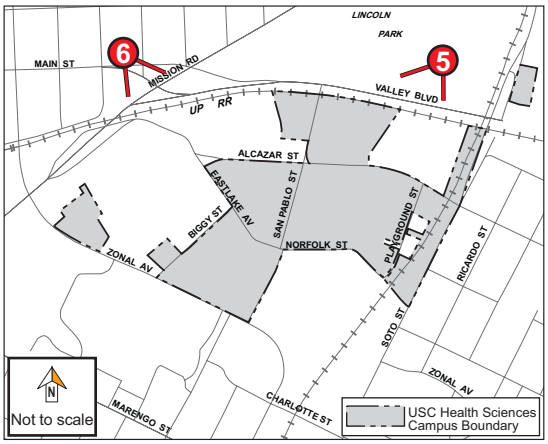
Figure 13
Photographs of Surrounding Area

Source: PCR Services Corporation, 2004

Photograph 5: View of the HSC and the downtown Los Angeles skyline from within Lincoln Park looking southwest.



Photograph 6: View looking east towards the HSC and the Los Angeles County-USC Medical Center from within the residential neighborhood located west of Mission Road at the intersection of Darwin Avenue and Hancock Street.



Photograph Location Key Map

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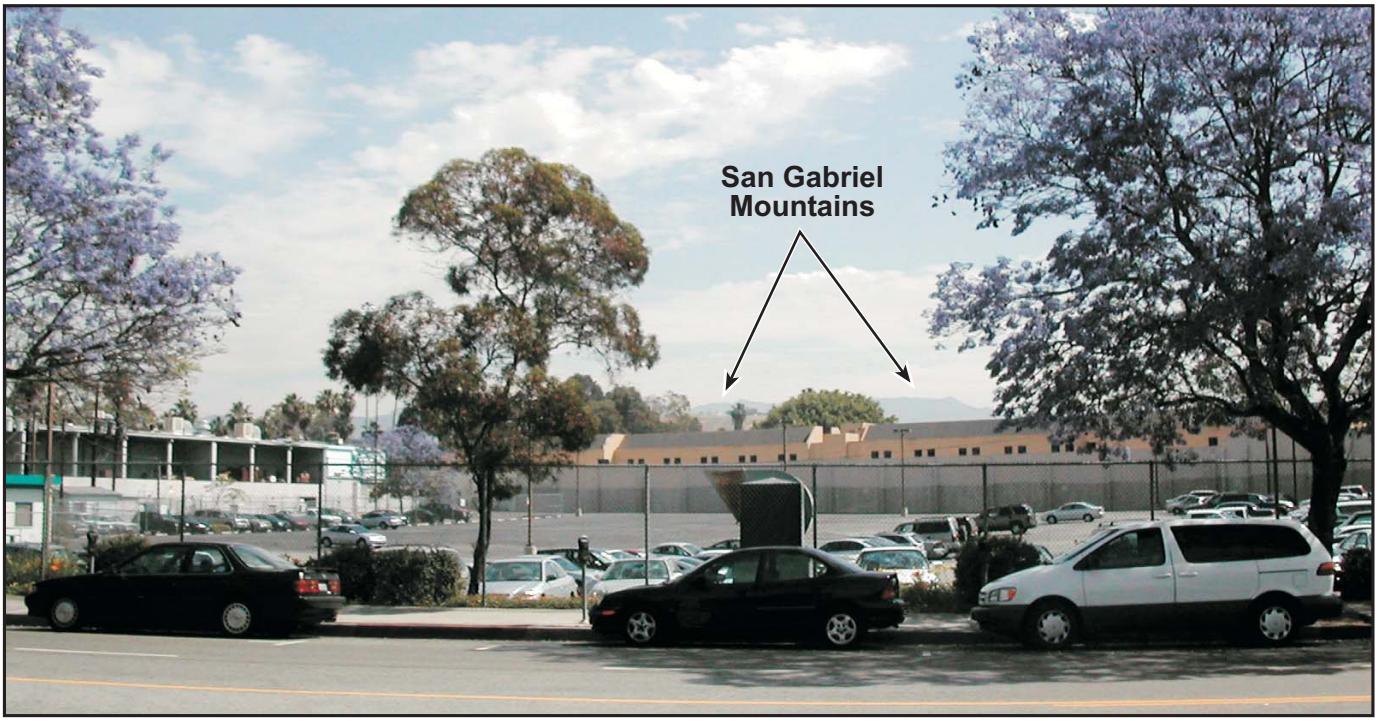
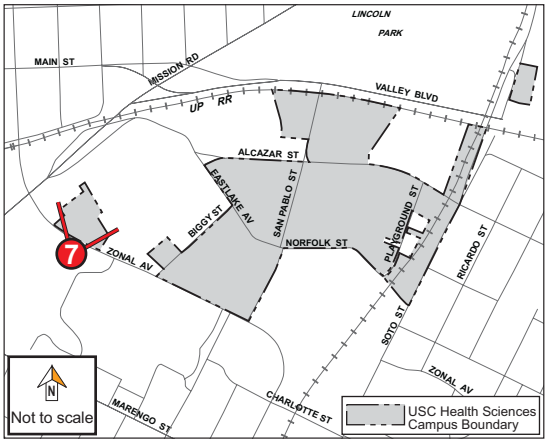
Figure 14
Photographs of Surrounding Area

Source: PCR Services Corporation, 2004



Photograph 7: View from Zonal Avenue looking north toward Development Site D and the San Gabriel Mountains.



Photograph Location Key Map

PCR

Figure 15
Photographs of Surrounding Area

Source: PCR Services Corporation, 2004

medical office, hospital buildings, and parking facilities that comprise the HSC are designed in a modernist style reflective of the state-of-the-art research, education, and patient care activity that occurs within these facilities. Set into an urban landscape, the visual character of the HSC is that of a contemporary and integrated campus with a comprehensive landscaping program. The surface parking lots that are proposed for development currently feature limited landscaping consisting of ornamental trees and landscaping designed as amenities to the streetscape. Views of the downtown Los Angeles skyline and San Gabriel Mountains are available from the windows of some of the existing taller HSC buildings. Some of the existing structures within the HSC also provide views of both Hazard Park and Lincoln Park. Views of the downtown skyline are not generally available from low-rise structures within the HSC because of higher intervening buildings and landscaping.

The Los Angeles County–USC Medical Center and the Women and Children's Hospital are the two dominant land uses located to the south of the HSC. The Los Angeles County–USC Medical Center is currently replacing its facility to the south. Views from these areas to the north toward the Project site are of existing HSC buildings located on the southern portion of the campus. Zonal Avenue separates the existing surface parking lot that currently occupies Development Site C from the Women and Children's Hospital. Views of the downtown Los Angeles skyline and San Gabriel Mountains are available from some of the windows within these multi-story structures.

As discussed above, views of the downtown skyline and the distant San Gabriel Mountains from the residential uses located east of Soto Street are not generally available due to intervening homes, landscaping and street trees that obscure these views. Similarly, views of these visual resources from the single-family homes along Playground Avenue are also not generally available for these same reasons. Views of Lincoln Park, the downtown Los Angeles skyline and San Gabriel Mountains from the County of Los Angeles Public Works facility and the other commercial uses located north of Alcazar Street between the HSC and Lincoln Park may be available from some private vantage points. Likewise, private views of these resources may be available from some of the windows of commercial businesses along Mission Road and from some of the single-family residences located west of Mission Road. Intervening structures, landscaping and street trees block many of the private views from within these areas.

(3) Shade/Shadow

The analysis of potential shading impacts focuses on how long uses, which contain routinely useable outdoor spaces, have expectations for sunlight for light, warmth, and overall quality of life. These uses are termed "shadow sensitive." Uses typically considered shadow sensitive include: residential and recreational areas, churches, schools, and outdoor restaurants.

Shadow sensitive uses in the vicinity of the Project's seven Development Sites include Lincoln Park located across Valley Boulevard to the north of the HSC. Development Sites E and F are located approximately 200 feet south of Lincoln Park. Shadow sensitive uses to the east include the residential uses located along the east and west sides of Playground Avenue that are approximately 700 feet east of Development Site B. Hazard Park is a second City Park located southeast of the HSC approximately 125 feet southeast of Development Site A. Adjacent to Hazard Park to the south and southeast of the HSC and located on the east side of Cornwell Street is the Francisco Bravo M.D. Magnet Senior High School. Other shadow sensitive uses located to the south of the HSC include pedestrian areas in proximity to the Los Angeles County – USC Medical Center and the Women and Children's Hospital. Development Sites C and D are located approximately 375 feet north of the Los Angeles County–USC Medical Center. Development Site C is located approximately 200 feet northeast of the Women and Children's Hospital. Shadow sensitive uses to the west of the HSC include pedestrian and student gathering areas in proximity to the College of Nursing and Allied Health on Mission Road. Development Site C is located approximately 300 feet from the Nursing College. Residential uses are located further west of the Nursing College. Development Site C is located approximately 900 feet east of these shadow sensitive uses.

Shadow sensitive uses within the HSC include outdoor student gathering areas and patient drop-off and pick-up areas, such as the Eamer Medical Plaza located between the exiting Healthcare Consultation Center, the USC University Hospital and the Doheny Eye Institute. A student gathering area is located just north of the Eamer Medical Plaza approximately 250 feet south of Development Site B between the two Health Consultation Center buildings. The main student gathering area on the campus is the HSC Quadrangle located south of the Norris Medical Library approximately 500 feet east of Development Site B. There is also a patio area off of the Zilkha Neurogenetics Institute building located between Development Sites A and G where students and staff congregate.

b. Policy and Regulatory Environment

(1) City of Los Angeles Urban Design Policies

(a) City of Los Angeles General Plan Framework

The City of Los Angeles General Plan Framework provides insight as to the City's vision for future development of the City. While the Framework Element does not directly address the design of individual neighborhoods or communities, it embodies neighborhood design policies and implementation programs that guide local planning efforts, thereby laying the foundation

upon which the City's community plans can be updated.[20] Urban Form objectives and policies of the General Plan Framework of relevance to the proposed Project include:

- Encourage future development in centers and in nodes along corridors that are served by transit and are already functioning as centers for the surrounding neighborhoods (Objective 5.2);

- Encourage the development of community facilities and improvements that are based on need within the centers and reinforce or define those neighborhoods (Objective 5.4);

- Enhance the livability of all neighborhoods by upgrading the quality of development and improving the quality of the public realm (Objective 5.5);

- Reinforce or encourage the establishment of a strong pedestrian orientation in designated neighborhood districts, community centers, and pedestrian-oriented subareas within regional centers, so that these districts and centers can serve as a focus of activity for the surrounding community and a focus for investment in the community (Objective 5.8); and

- Encourage proper design and effective use of the built environment to help increase personal safety at all times of the day (Objective 5.9).

(b) Northeast Los Angeles Community Plan

The proposed Project is located in the Northeast Los Angeles Community Plan area and is subject to Community Plan design guidelines, which implement the Urban Form goals of the General Plan Framework. The design policies of the Community Plan establish the minimum level of design that should be observed in individual developments and also addresses design issues such as parking and landscaping. The Community Plan states that projects should implement, to the maximum extent feasible, the applicable policies outlined in the Community Plan's Urban Design Chapter.[21] Pertinent Community Plan policies that also implement the Urban Form policies of the General Plan Framework, which are applicable to individual projects, include the following:

[20] *General Plan Framework, Urban Form and Neighborhood Design.*

[21] *City of Los Angeles Department of Planning, Northeast Los Angeles Community Plan, page V-1.*

Site Planning

- Concentrate pedestrian traffic on commercial streets by locating surface parking to the rear of structures;
- Minimize conflicts between pedestrians and vehicular traffic by providing well-lighted walkthrough arcades from the fronts of wide buildings to rear parking areas;
- Minimize the number of driveways and provide sole access to the rear of commercial lots;
- Provide well-maintained landscaped strips between driveways and walkways accessing the rear of properties; and
- Provide, where feasible, the undergrounding of new utility service.

Height and Building Design

- Require the use of articulations, recesses, surface perforations, and fenestration to break up long, flat building façades and free standing walls;
- Use building materials that accent or complement adjacent and nearby buildings;
- Require development of a comprehensive signage program, suited in scale and character to the local environment, for major ownerships, large, individual buildings and buildings with multiple tenants;
- Screen mechanical and electrical equipment from public view;
- Screen all rooftop equipment and building appurtenances from public view; and
- Require the closure of trash areas for all projects.

Light and Glare

- Install on-site lighting along all pedestrian walkways, walkthroughs and arcades, and vehicle access ways; and
- Shield and direct on-site lighting to illuminate driveways and walkways, walkthroughs, and arcades, and not adjacent areas.

Parking Structures

- Design parking structure exteriors to match the style, materials, and color of the main building they serve; and

- Utilize landscaping to screen parking structures not architecturally integrated with the main building.

Community Design and Landscaping Guidelines

The Northeast Los Angeles Community Plan also establishes urban design goals to enhance the community's identity through improvements to the streetscape and landscaping in public places and rights-of-way. The following guidelines are intended to improve the quality of the environment, aesthetically and physically, as opportunities arise in the community that include private projects that affect public spaces and rights-of-way. Pertinent Community Plan policies that also implement the urban form policies of the General Plan Framework applicable to individual projects include the following:

- Select street trees that enhance the pedestrian character, convey a distinctive high quality visual image for the streets, are drought and smog-tolerant, are fire resistant and complement existing street trees;

- Provide for the installation of street trees along public sidewalks defining the types and spacing in accordance with the City's Street Tree Master Plan;

- Install street furniture that encourages pedestrian activity or physical and visual access to buildings and which is aesthetically pleasing, functional, and comfortable, including such elements as bus and pedestrian benches, bus shelters, trash receptacles, bicycle racks, landscaped planters, drinking fountains and bollards;

- Re-pave existing sidewalks and crosswalks in principal commercial districts with brick pavers, concrete, or other safe, non-slip material to create a distinctive pedestrian environment and, for crosswalks, to visually and physically differentiate these from vehicle travel lanes and promote continuity between pedestrian sidewalks;

- Establish a consistent design for all public signage, including fixture type, lettering, colors, symbols, and logos designed for specific areas or pathways;

- Provide for distinctive signage which identifies principal entries to unique neighborhoods, historic structures and districts, and public buildings and parks;

- Ensure that public signage complements, and does not detract from adjacent commercial and residential uses; and

- Provide for signage which uniquely identifies principal commercial, cultural or historic areas in the Plan Area.

(c) Adelante Eastside Redevelopment Plan

The Project Site is located within the 2,200-acre Adelante Eastside Redevelopment Project Plan area (Project Area), administered by the Community Redevelopment Agency (CRA) of the City of Los Angeles. One of the objectives of the Redevelopment Plan is to create an attractive and pleasant environment in the Project area. According to the Redevelopment Plan, no new improvement shall be constructed and no existing improvement shall be substantially modified, altered, repaired, or rehabilitated except in accordance with the Redevelopment Plan and any such design guidelines and development controls, and in accordance with architectural, landscape, and site plans submitted to and approved by the CRA. Therefore, such plans shall give consideration to good design, open space and other amenities to enhance the aesthetic quality of the Project area. The CRA also has the authority to review and approve identification signs in the Adelante Eastside Redevelopment Plan area. Under the Redevelopment Plan, all signs shall conform to the City sign and billboard standards. The design of all signage is subject to CRA approval prior to installation.

(2) Signage Regulations and Policies

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 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 dependant on signage type. However, general constraints on design, construction, materials, potential for hazard to traffic, and the determination of such hazard are applicable. No sign or sign support structure shall be permitted which would interfere with the safe and efficient operation of vehicles upon a street or freeway, or which create a condition endangering the safety of persons.

Pursuant to Division 62 (Building Code) regulations of the City of Los Angeles Municipal Code (LAMC), no sign shall be arranged and illuminated to produce a light intensity greater than three foot-candles above ambient lighting, as measured at the property line of the nearest residential zone (the nearest residential uses are located approximately 700 feet east of Development Site B and approximately 900 feet west of Development Site C). Signage cannot contain flashing, mechanical, and strobe lights or permanent posters, banners, ribbons, streamers or spinners. Supergraphic signs are prohibited (except where permitted by specific plan,

supplemental use district, or an approved development agreement). Supergraphic signs consist of an image projected or printed onto a wall. Any modification of the City's sign regulations must be reviewed and approved by the Board of Building and Safety Commissioners according to code-specific criteria.

3. PROJECT IMPACTS

a. Methodology

(1) Aesthetics

The analysis of aesthetics is based on a three-step process as follows:

Step 1: Describe the massing and general configuration of buildings, open space and proposed landscaping treatments around the Project edges, which may be anticipated on the basis of the Project's design features.

Step 2: Compare the resulting appearance to the existing site appearance and character of adjacent uses and determine whether and/or to what extent a degrading of the visual character of the area could occur (considering factors such as changes in the appearance of natural features and open space, and the blending/contrasting of new and existing buildings given uses, density, height, bulk, setbacks, signage, etc.); and

Step 3: Compare the anticipated appearance to standards within existing plans and policies which are applicable to the Project Site (regulatory analysis).

(2) Views

The analysis of views addresses view resources and view locations relative to the proposed Project. These elements were evaluated to determine whether views of existing resources would be altered, and whether the sight of a particular view resource would be obstructed. Alterations within the view setting were compared to the existing view conditions. The analysis further considers whether there would be new Project features which would enhance viewing conditions through the creation of new resources or new view locations, and whether the proposed Project includes design features which would offset or mitigate specific impacts.

To determine whether a potentially significant view impact would occur, a three-step process is used to weigh several considerations, as follows:

Step 1: Identify the potential obstruction of view resources (attractive visual features) as a result of development on the Project Site. An assumption was made that any obstruction of a resource would constitute a change in the environment and would be considered an adverse impact regardless of effect on the overall view.

Step 2: Evaluate whether a potential obstruction would substantially alter the view. The "Substantiality" of an alteration in viewing is somewhat subjective and dependent on many factors. In this case an obstruction in the view of a particular view resource was considered substantial if it exhibited the following traits: (1) the area viewed contains a valued view resource; (2) the obstruction of the resource covers more than an incidental/small portion of the resource; and (3) the obstruction would occur along a public view area, or would affect more than a small number of private locations. Where these factors were clearly present, or could be reasonably argued to be present, the impact was considered substantial.

Step 3: Consider whether the proposed Project includes design features which offset the alteration or loss of views of a valued view resource. To be considered as a mitigating factor for a particular adverse view impact, a design feature would need to lessen the Project's impact for viewers of the specific view which was adversely affected.

(3) Shade/Shadow

Shadows are a function of the season, latitude and longitude, the height and shape of the structure casting the shadow, and topography. Due to the earth's rotation and annual revolution around the sun, the sun's position relative to any structure is constantly changing throughout the annual cycle. Consequently, shadows cast by a structure change substantially during the day, and from day to day throughout the year. Early morning shadows are quite long in westerly directions, shortening into northerly midday shadows as the sun moves from an eastern rise to a southern zenith, then gradually lengthening in an easterly direction as the sun approaches its late afternoon or evening setting location in the west. In the winter, when the period of sunlight is shorter and the sun is lower in the sky, shadows are uniformly longer than in summer for the same time of day.

In determining the effects of shading, the locations of sensitive uses surrounding the HSC are identified and the shading effects are calculated according to standard criteria. Impacts are calculated based on locating the maximum proposed building heights closest to the identified sensitive uses. In accordance with this methodology, shadows have been calculated and plotted for morning, noon, and afternoon hours, during the Spring and Fall equinoxes and the Winter and Summer solstices. These periods represent the portion of the day during which maximum seasonal shadows occur and which would be of concern to most people. Collectively, the seasonal shadow patterns define the annual shadow pattern that can be attributed to the proposed Project. During the Spring and Fall equinoxes (March 21/September 21), shading would have

approximately half the magnitude as Winter solstice shading, and approximately twice the magnitude of Summer solstice shading. Shading conditions at other times of the year can be extrapolated between these dates.

The analysis of potential shading impacts is based on the maximum potential height of the buildings that could occur in accordance with the Project's proposed development standards. This produces a shadow effect that is equal to the greatest shadow impact that might occur from Project buildings. Thus, the analysis of building envelopes results in a conservative analysis since the actual shading likely to occur would be less than that analyzed. This occurs because the buildings would be designed in a style reflective of the existing academic, research and medical office buildings within the HSC, which incorporate the use of articulations and step-backs of exterior walls.

b. Significance Thresholds

(1) Aesthetics

Based on the factors set forth in the City of Los Angeles CEQA Thresholds Guide (1998, p. L.1-3), the proposed Project would have a significant impact on aesthetics, if:

- The proposed Project would substantially alter, degrade or eliminate the existing visual character of the area, including valued existing features, natural open space or other valued resources;
- The Project features would substantially contrast with the visual character of the surrounding area and its valued aesthetic image; or
- The implementation of the proposed Project would preclude the attainment of existing aesthetics regulations as expressed in applicable regional and City planning documents.

(2) Views

Based on the factors set forth in the City of Los Angeles CEQA Thresholds Guide (1998, p. L.1-3), the proposed Project would have a significant impact on views, if:

Project development would substantially obstruct an existing view of a valued view resource from a prominent view location.

(3) Shade/Shadow

Based on the factors set forth in the City of Los Angeles CEQA Thresholds Guide (1998, p. L.3-2), the proposed Project would have a significant impact if:

- Shadow-sensitive uses would be shaded by the project-related structures 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 more than four hours between the hours of 9:00 A.M. and 5:00 P.M. between April and late October.

c. Analysis of Project Impacts

(1) Project Design Features

The Project proposes to develop research, academic and medical-related facilities on up to seven Development Sites, which are currently used as surface parking lots or are underdeveloped within the existing HSC. The Project also includes the development of parking facilities to support the proposed academic and medical-related uses.

The Project is designed to enhance the existing campus environment through a development plan that integrates new building construction with existing HSC development and facilitates pedestrian access to the entire facility principally by limiting pedestrian and vehicular interfaces via the provision of parking at selected locations within the HSC. Sidewalks and pedestrian walkways between buildings would connect the parking with the proposed and existing HSC buildings. The Project would also include the creation of new exterior courtyards and walkways between and around the proposed buildings. These spaces would include plantings that would complement the existing landscaping program throughout the HSC. A USC operated shuttle system would also provide transportation from the proposed parking structure(s) on these sites to the existing and proposed HSC buildings.

Though the specific design of the proposed buildings to be constructed has not been fully established at this time, it is expected that the buildings would be designed in a style reflective of the existing academic, research and medical office buildings that define the visual appearance of the HSC, particularly existing nearby buildings such as the Zilkha Neurogenetics Institute and the Healthcare Consultation Center (HCC) and HCC II buildings. These multi-story buildings consist primarily of pre-cast concrete with a glass and metal curtain wall system in a modernist contemporary style.

Based on the Project's proposed development standards, buildings up to 150 feet in height may be developed on Development Sites A and B. The maximum amount of development proposed for Development Site A would range from 120,000 square feet of medical

clinic facilities to 465,000 square feet of academic and/or medical research facilities. The maximum amount of development proposed for Development Site B would range from 120,000 square feet of medical clinic facilities to 295,338 square feet of academic and/or medical research facilities. Surface parking may also be provided within a portion of Development Site B.

A multi-story parking structure providing up to 2,800 parking spaces may be constructed on Development Site C. The height of the parking structure, if constructed, would not exceed 75 feet including all building mechanical equipment.

Under the proposed Project, construction on Development Site D may include a combination of University/medical-related uses and parking. In the event that University and/or medical-related uses are constructed, a maximum of 200,000 square feet of floor area may be developed, to a maximum height of 140 feet, including the height of the penthouse for mechanical equipment. Should a parking facility be constructed on Development Site D, it could be a mix of a multi-level structure and surface parking. The height of the parking structure, if one is built, would not exceed 75 feet in height including all building mechanical equipment.

Development Sites E and F may be developed with the same type of University and/or medical related uses that are described above for Development Sites A and B. The maximum amount of development proposed for Development Sites E and F is 400,000 square feet of floor area, respectively. The maximum height permitted on these development sites would be 100 feet including the height of the penthouse for mechanical equipment. Surface and subterranean parking may also be provided within a portion of these two Development Sites.

The maximum amount of development proposed for Development Site G would range from approximately 29,500 square feet of medical clinic facilities to 100,000 square feet of academic and/or medical research facilities. This development may occur either in the form of a new structure and/or as an addition to the existing CHP structure. Maximum building heights on this Development Site would be 100 feet.

(2) Project Impacts

(a) Aesthetic Impacts

The impact of the proposed Project on aesthetics is evaluated in terms of the following: (1) the contrast between proposed and existing features of the Project area's valued aesthetic image; (2) the degree to which the proposed Project would detract from the existing style or image of the area (i.e., due to density, height, bulk, setbacks, and signage); (3) the degree to which the proposed Project could contribute to the area's aesthetic value; and (4) Project consistency with applicable guidelines and regulations set forth in the City's General and

Community Plans. The analysis of potential aesthetic impacts addresses both the construction and operational phases of the proposed Project.

The aesthetic character of the HSC is that of a contemporary and integrated campus set into an existing urban landscape providing academic, research, hospital and medical office buildings, and parking facilities designed in a modernist style reflective of the high-tech research activity that occurs within these facilities. The surface parking lots that are proposed for development currently feature limited landscaping consisting of ornamental trees and landscaping designed as amenities to the streetscape, offering limited aesthetic value to the area.

(i) Construction

Construction of the proposed Project would involve the demolition and removal of six surface parking lots and one vacant lot within the existing HSC. Development Sites A, B, and D are centrally located within the campus while Development Site C is located more toward the western portion of campus. Development Sites E and F are located on the east side and west side of San Pablo Street between Alcazar Street and Valley Boulevard, respectively. Development Site G is centrally located within the HSC on the same parcel as Development Site A. Project construction would remove the existing asphalt parking lots and other on-site and adjacent manmade features such as metal fencing and sidewalk landscaping. All on-site trees would be removed to make way for construction of the proposed Project. In addition, street trees adjacent to the seven Development Sites could be removed during site clearance. The removal of street trees would detract from the visual character of the area and would create a potentially significant aesthetic impact. However, the Project's conceptual design includes landscape plantings along the perimeter of each Development Site, which would be an improvement over existing conditions. Furthermore, any street trees that would need to be removed for construction purposes would be replaced, per standard City Requirements.

Following site preparation activities would be the development of the proposed structures. Construction activities at the Project Site are expected to involve the placement of temporary barriers (i.e., fencing) designed to screen the Project's construction activity from adjacent streets and sidewalks. Where structural heights require it, a temporary covered pedestrian walkway would be provided to ensure adequate pedestrian safety and access. Pedestrian walkways and construction fencing are generally not aesthetic structures and could potentially serve as targets for graffiti, if not appropriately monitored. The Applicant would contract with a graffiti removal company and would monitor each construction site. Although construction activities could temporarily degrade the visual character of the area, such activities would be short-term and, if mitigated and appropriately monitored, the visual impacts of construction would be less than significant.

(ii) Operation (Post-Construction)

Though the specific design of the proposed buildings to be constructed has not been fully established at this time, it is expected that the buildings would be designed in a style reflective of the existing academic, research and medical office buildings that define the aesthetic appearance of the HSC. Architectural designs would incorporate the use of articulations, step-backs of exterior walls, and the accenting and mixing of façade materials, in coordination with the architectural themes of the existing HSC buildings. The parking structure(s) would incorporate the use of landscaping to screen the structure(s) and maintain a compatible theme with the existing and proposed HSC parking structure(s). The architectural use of vertical sections, crossing the horizontal layers of concrete forming the separate parking levels would enhance the structure's façades. The implementation of these Project design features would reduce the potential aesthetic impacts to the visual resources in the Project area.

The existing visual resources that contribute to the aesthetic character of the area include the existing USC Health Sciences Campus buildings and the Los Angeles County–USC Medical Center, which display high-quality architecture. Landscaping associated with these and other buildings, as well as the landscaping and natural features within Hazard Park and Lincoln Park are also visual features in the Project area. Although the proposed Project would substantially change the accustomed appearance of the seven Development Sites when viewed from within the HSC and from the streets immediately adjacent to the Development Sites, the existing vacant and surface parking lots proposed for development feature minimal landscaping and offer limited aesthetic value to the area. Therefore, the proposed structures, which can be characterized as infill development within an established campus, would not substantially alter, degrade or eliminate the existing visual character of the area. Furthermore, the proposed density, height and bulk of the proposed structures would not substantially contrast with the visual character of the surrounding area, since the proposed structures would be consistent in scale with the existing HSC structures, and would not contrast with the features in the area that represent the area's valued aesthetic image. As such, construction of the proposed Project would create an aesthetic impact that is less than significant.

(b) Views

The impact of the proposed Project on views is evaluated in terms of the following: (1) the nature and quality of the recognized view; (2) the extent of the obstruction of the view; and (3) the extent to which the project affects a length of public roadway. Separate analyses relative to views from public and private vantage points are provided below.

(i) Public Vantage Points

The proposed Development Sites are located within the existing 56-acre HSC. Public views of the Development Sites are generally limited to certain vantage points along the public roadways adjacent to each particular Development Site due to the relatively flat topography and density of existing buildings in the Project area. These streets include Valley Boulevard, Zonal Avenue, Mission Road, Eastlake Avenue, Biggy Street, San Pablo Street, Norfolk Street, Soto Street, and Alcazar Street. None of these roadways are designated as a scenic highway on the Scenic Highways Element of the City of Los Angeles General Plan. The City-designated scenic highway nearest to the site is Huntington Drive/Mission Road (Scenic Highway No. 46), which is approximately one-half mile northeast of the Project Site. The Development Sites and the HSC are not visible from this scenic highway. Furthermore, the scenic resources visible from this scenic highway would not be impacted by the proposed Project. As a result, Project development would result in a less than significant impact on designated scenic highways.

As discussed above, valued views in the Project area consist of panoramic views of the downtown Los Angeles skyline, the distant San Gabriel Mountains, and the existing HSC buildings and the Los Angeles County–USC Medical Center. Public views of Hazard and Lincoln Parks are also important visual resources in the Project area. Views of Hazard Park are primarily available from Soto Street, Norfolk Street and San Pablo Street, while views of Lincoln Park are mainly available from Valley Boulevard and Mission Road. Due to the location of the Development Sites relative to the location of the public vantage points of Hazard and Lincoln Parks, the proposed Project would not block any public views of these visual resources. Likewise, the proposed infill development would not substantially obstruct public views of the Los Angeles County–USC Medical Center since the proposed Development Sites are located within the existing HSC, and the proposed structures would be consistent in scale with the existing HSC structures.

The relatively flat topography of the area largely limits views from the streets surrounding the Project Site to the land uses that are lining the street corridors. However, because of the flat topography of the area, views of tall buildings in the downtown Los Angeles skyline and the distant San Gabriel Mountains are not blocked by topographic features and are available from certain vantage points within the HSC and from public vantage points in the vicinity of the Project Site.

Zonal Avenue and Marengo Street are two of the public roadways located to the south of the HSC. Views from these public streets are largely confined to the land uses lining these streets. Public views of the San Gabriel Mountains from Marengo Street are blocked due to existing HSC structures and the Los Angeles County–USC Medical Center. Although street trees and existing structures block the majority of the views of the San Gabriel Mountains, views of the tops of the San Gabriel Mountains from Zonal Avenue would be blocked by the 75-foot

parking structure that could be developed on Development Site C. This relatively short section of Zonal Avenue is not a prominent view location, and the degree to which the proposed Project would detract from the views of this visual resource is minimal. Therefore, impacts to the public views of the tops of the San Gabriel Mountains are less than significant.

Public views of the downtown Los Angeles skyline are not available from within Hazard Park to the south due to the topography and landscaping within the park itself, as demonstrated in Photograph No. 3 in Figure 13 on page 114. While Development Site A and the park are located at opposite corners of the intersection of San Pablo Street and Eastlake Avenue, the buildings that may occur on Development Site A would be separated from Hazard Park not only by San Pablo Street and Eastlake Avenue/Norfolk Street, but also by the ornamental landscape buffer that exists directly north of Eastlake Avenue. The proposed structures that could occur on this Development Site would not block any views of the downtown skyline or views of the San Gabriel Mountains from Hazard Park.

Views of the Los Angeles downtown skyline from Soto Street and the public roadways that encompass the residential neighborhood located to the east of Soto Street are not generally available due to the intervening single-family homes and the existing landscaping within this residential neighborhood. The tops of the existing HSC buildings and the Los Angeles County–USC Medical Center are visible from this residential neighborhood as shown in Photograph No. 2 in Figure 12 on page 110. Views of the structures that could occur on Development Sites A, B, C, and D would not be visible from within this neighborhood due to intervening HSC structures. The structures that may be constructed on Development Sites E and F may be visible from certain vantages along Soto Street, as well as from some of the public roadways within the residential neighborhood located to the east of Soto Street. However, the structures that could be built on these development sites would not substantially obstruct views of the downtown skyline or views of the San Gabriel Mountains from public vantage points east of the Project Site as the San Gabriel Mountains are located to the north of the HSC and this residential neighborhood. Furthermore, the potential construction on these Development Sites would occur within the existing HSC, which contains existing buildings of similar heights, and as a result, potential views of the downtown skyline are obscured by existing HSC structures.

Due to the existing HSC buildings, views of the structures proposed on Development Sites A, C, and D would not be visible from Lincoln Park. Views of the downtown skyline from Lincoln Park, as shown in Photograph No. 5 in Figure 14 on page 115, would continue to be available following implementation of the proposed Project. In addition, as the San Gabriel Mountains are located to the north of Lincoln Park, views of this visual resource would also continue to be available following Project implementation since the proposed Project is located to the south of Lincoln Park. Although the structures that may be constructed on Development Sites B, E, F, and G may be visible from Lincoln Park, Project development would not substantially obstruct an existing view of a valued view resource since the downtown Los

Angeles skyline visible from Lincoln Park is located to the west of the Project Site or is already obscured by existing structures. Public views of the downtown Los Angeles skyline and the San Gabriel Mountains would also continue to be available from Alcazar Street and Valley Boulevard for the same reasons.

Public views of the downtown Los Angeles skyline are generally not available from Mission Road or from the residential neighborhood streets west of Mission Road as vantage points are limited due to the buildings and the landscaping lining the street frontages. Furthermore, the location of the proposed Development Sites within the HSC in relation to the downtown skyline and the San Gabriel Mountains is such that views from the public vantage points along Mission Road would not be impacted by the proposed Project, since downtown Los Angeles is located to the west of the Mission Road and the San Gabriel Mountains are located to the north.

In conclusion, proposed Project development would not obstruct an existing view of a valued view resource from the analyzed public vantage points. As such, Project impacts on views from public vantage points would be less than significant.

(ii) Private Vantage Points

Private vantage points within the Project vicinity consist of locations within the HSC, the high-rise Los Angeles County–USC Medical Center, the Women and Children's Hospital to the south, institutional and commercial uses located on Mission Road to the west, residential uses located west of Mission Road and to the east of Soto Street and a limited number of commercial uses along Soto Street to the east of the HSC. As previously discussed, views of the seven proposed Development Sites are generally limited to certain vantage points within the HSC and along the public roadways adjacent to each particular Development Site due to the relatively flat topography of the HSC and the placement of the existing buildings within the HSC and other buildings in the Project area.

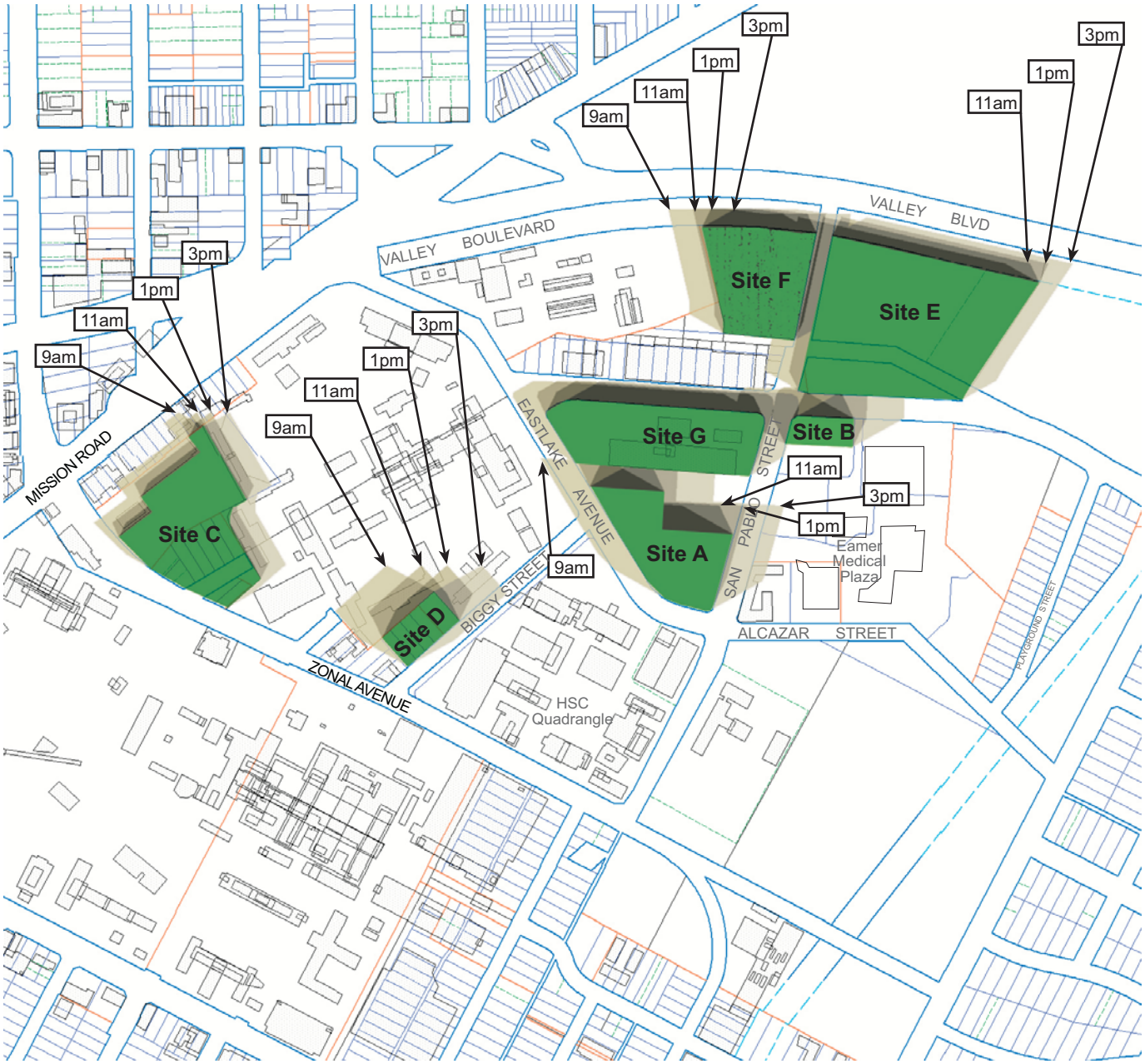
Private views of the downtown Los Angeles skyline, the distant San Gabriel Mountains, Hazard and Lincoln Parks, and the existing HSC buildings and other buildings in the vicinity of the Project Site, which display high-quality architecture, including the Los Angeles County–USC Medical Center are the visual resources in the Project area. Private views of Hazard Park are limited to the residences located east of Soto Street, the Francisco Bravo M.D. Magnet Senior High School, located on the east side of Cornwell Street, and the United States Army Reserve Center located on the east side of San Pablo Street south of Norfolk Street. The proposed Project would not impact views of Hazard Park from these private vantage points since the proposed Development Sites are not located between these private vantage points and Hazard Park. Likewise, the proposed Project would also not impact any private views of Lincoln Park as existing structures already block views of Lincoln Park from these private vantage points.

Views of the downtown Los Angeles skyline and San Gabriel Mountains from within the HSC are also generally blocked due to existing HSC buildings. However, as shown in Photograph No. 1 in Figure 12 on page 110, structures that could occur on Development Sites B, E, F, and G would block views of the San Gabriel Mountains from the courtyard located adjacent to the USC Healthcare Consultation Buildings. Existing views of the downtown Los Angeles skyline may also be obstructed by the proposed structures on Development Site A. However, due to the limited extent to which views of these visual resources would be degraded, impacts are considered to be less than significant.

Views of the downtown Los Angeles skyline from the private vantage points outside of the HSC would not be impacted by the proposed Project due to the location of the HSC in relationship to this visual resource as the Development Sites are not located between any private vantage points and this resource. Any private views of the downtown skyline from the areas to the north, south and west of the Project site would continue to be available following Project implementation. Private views of this visual resource from the residences located to the east of Soto Street or from the limited commercial uses on Soto Street do not exist due to intervening structures and landscaping or would not be blocked by the proposed structures located within the HSC. The only private vantage point of a visual resources outside of the HSC that potentially would be impacted by the proposed Project are views of the distant San Gabriel Mountains from the lower floors of the Women and Children's Hospital on Zonal Avenue. Views of these distant mountains from the lower floors may be blocked by the 75-foot parking structure that could occur on Development Site C. However, the height of the proposed parking structure would be comparable to the surrounding HSC buildings. Furthermore, the extent to which the proposed Project would detract from the views the San Gabriel Mountains is negligible. Therefore, impacts to views of the San Gabriel Mountains would be considered less than significant.

(c) Shade/Shadow

The analysis is based on the maximum building heights on each Development Site, regardless of whether 585,000 to 765,000 square feet is developed. In addition, the building footprints are presumed to encompass the entire Development Site with no setbacks or articulation in the design of the structures. Thus, the analysis is conservative since the actual shading likely to occur would be less than that analyzed. This occurs because the buildings would be designed in a style reflective of the existing academic, research and medical office buildings within the HSC, which incorporate the use of articulations and step-backs of exterior walls. Figure 16 through Figure 19 on pages 134 through 137 identify the maximum extent of shadows cast by the proposed structure(s) for each of the seven Development Sites on the Summer and Winter solstices and the Spring and Fall equinoxes. 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. As previously discussed, building(s) that may occur on Development Sites A and B would be a maximum of 150 feet in height. The height of the



Potential Buildings

N

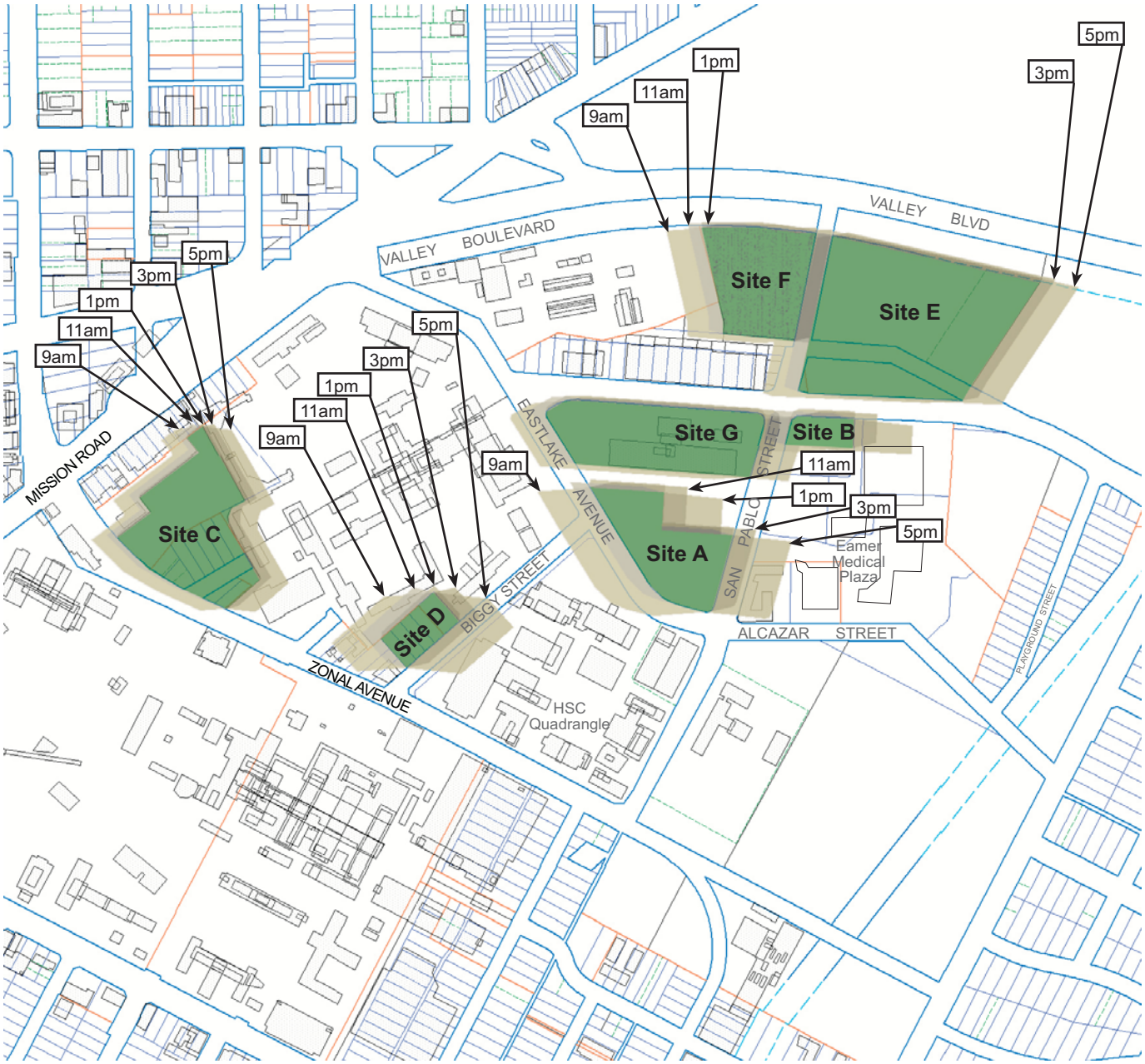
0 500 1000 Feet

NOTE: Shadows occurring on March 21 (i.e., spring equinox) differ from those on September 23 (i.e., fall equinox) due to the effect caused by daylight savings time (i.e., daylight savings is not in effect on the spring equinox, but is on the fall equinox) and slight differences in the angle of the sun relative to the Earth's surface.

PCR

Figure 16
Spring Shadows

Source: PCR Services Corporation, Nov. 2004



PCR

Figure 17
Summer Shadows

Source: PCR Services Corporation, Nov. 2004

Potential Buildings

N

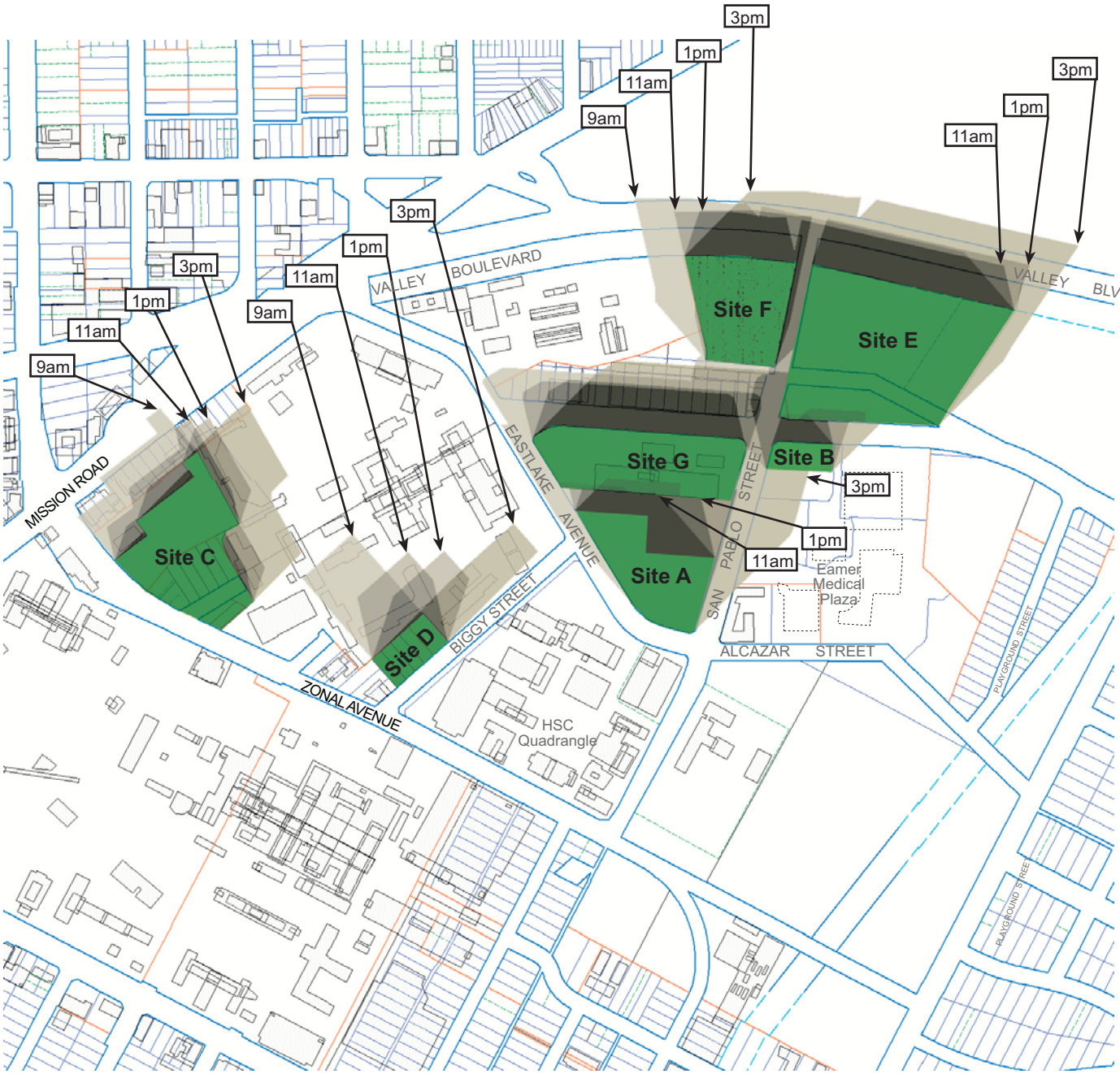
0 500 1000 Feet

NOTE: Shadows occurring on September 23 (i.e., fall equinox) differ from those on March 21 (i.e., spring equinox) due to the effect caused by daylight savings time (i.e., daylight savings is not in effect on the spring equinox, but is on the fall equinox) and slight differences in the angle of the sun relative to the Earth's surface.

PCR

Figure 18
Fall Shadows

Source: PCR Services Corporation, Nov. 2004



The analysis presented above addresses the shading impacts that occur starting at 9:00 a.m.. Information regarding afternoon/evening time periods is provided for the last full hour prior to sunset.

PCR

Figure 19
Winter Shadows

Source: PCR Services Corporation, Nov. 2004

parking structure proposed on Development Site C, should it be constructed, would not exceed 75 feet. The maximum height of any structure that could be constructed on Development Site D would be 140 feet. Development Sites E and F, which are located on the northern portion of the HSC, may be developed to a maximum height of 100 feet. Maximum building heights on Development Site G are 100 feet.

During the spring months, as shown in Figure 16 on page 134, shadows cast by the proposed structures would not extend onto any of the shadow sensitive uses in the vicinity of the seven Development Sites due to the distance between the Development Sites and the shadow sensitive uses. Likewise, as shown in Figure 17 on page 135 and Figure 18 on page 136, no Project shadows would be cast on any off-site residential areas or onto Lincoln or Hazard Parks during the summer and fall months for the same seasons. However, during the winter months, as shown in Figure 19 on page 137, shadows cast by the proposed structure(s) on Development Sites E and F may extend onto Lincoln Park. Specifically, Lincoln Park would only be shaded by the proposed structure(s) on Development Sites E and F for less than two hours, between the hours of 1:00 P.M. and 3:00 P.M., during the winter months. Therefore, Project impacts to off-site shadow sensitive uses are concluded to be less than significant.

Much of the shading on the HSC itself can be attributed to the density and heights of the existing development within the HSC. Furthermore, as shown on the preceding shadow diagrams, shadows cast by the proposed structures would not shade on-site shadow sensitive uses, such as the student gathering area located north of the Eamer Medical Plaza approximately 250 feet south of Development Site B or the HSC Quadrangle located approximately 500 feet east of Development Site B. Project shadows from the structure(s) proposed on Development Site A may be cast onto the patio area off of the Zilkha Neurogenetics Institute building. However, the Zilkha Neurogenetics Institute building already shades this patio area. Therefore, impacts with respect to on-site shadow sensitive uses would be less than significant.

(d) Policy and Regulatory Compliance

(i) City of Los Angeles Urban Design Policies

General Plan Framework

The proposed Project is consistent with the General Plan Framework's Community Center designation for the Project Site and with the policies regarding urban form, described under Subsection IV.A.2.1.b(1)(a), above. Primary Urban Form and Neighborhood Design goals of the General Plan Framework are to promote pedestrian activity and to enhance the livability of all neighborhoods by upgrading the quality of development and improving the quality of the public realm. The General Plan Framework also encourages the establishment of a strong pedestrian environment that can serve as a focus of activity for the surrounding community and a

focus for investment in the community. The proposed Project incorporates numerous pedestrian-oriented design features including sidewalks, exterior courtyards and pedestrian walkways, which are described in more detail under the Northeast Los Angeles Community Plan discussion, below.

The location of the proposed Project in an area served by the San Bernardino Freeway (I-10) and the Golden State Freeway (I-5), several metro bus lines, and the HSC Shuttle system is consistent with the goals and policies of the General Plan Framework, which encourage development in centers and in nodes along corridors that are served by transit. In addition, by incorporating features that support visual amenities and pedestrian-oriented design elements, the proposed Project would be consistent with the goals and policies of the General Plan Framework that pertain to these issues. Pedestrian amenities associated with the proposed Project would create a safer pedestrian environment through increased activity, lighting and security. The development of underutilized surface parking lots, which feature negligible landscaping consisting of ornamental trees and landscaping designed as amenities to the streetscape and offer limited aesthetic value, would assist in infilling the established campus with similar uses.

Consistent with the General Plan Framework, the proposed infill development would be compatible with the surrounding HSC buildings, as well as the other institutional buildings in the vicinity of the Project Site that define this area of the city. The proposed Project would also enhance the livability of the HSC by creating a pedestrian-friendly campus environment that limits pedestrian and vehicular interfaces by providing parking at selected locations within the HSC. This is consistent with the General Plan Framework policy to encourage the establishment of a strong pedestrian orientation so that this area can serve as a focus of activity for the surrounding community and a focus for investment in the community. Furthermore, the proposed Project would include lighted and well-marked pedestrian pathways from the proposed parking structure(s) to the existing and proposed HSC building, which is consistent with the General Plan Framework policy that encourages proper design and effective use of the built environment to help increase personal safety. As such, a less-than-significant impact would occur as Project development is consistent with the urban design policies of the General Plan Framework.

Northeast Los Angeles Community Plan

The urban design policies set forth in the Northeast Los Angeles Community Plan implement the policies of the General Plan Framework. Under the Community Plan, projects must implement, to the maximum extent feasible, the applicable urban design policies outlined in the Community Plan. Applicable Community Plan policies are outlined in Section IV.B.1.b(1)(b), above. As described in Section IV.B.3.c(1), above, the proposed Project is designed to enhance the existing campus environment through a development plan that integrates new building construction with existing HSC development and facilitates pedestrian access by

limiting pedestrian and vehicular interfaces via the provision of parking at selected locations within the HSC. Sidewalks and pedestrian walkways between buildings would connect the parking with the proposed and existing HSC buildings. In addition the Project would include the creation of new exterior courtyards and walkways between and around the proposed buildings. These spaces would include plantings that would complement the existing landscaping program throughout the HSC.

In accordance with the Community Plan, the proposed Project would develop academic and medical-related facilities on underutilized sites, which are currently used as surface parking lots within the existing HSC. The Project would provide for pedestrian access at the front of buildings and would provide a site plan which incorporates specific access details, such as pedestrian walkways, loading areas, and landscaped areas. The proposed Project would also meet the Community Plan building design requirements in the use of articulations, step-backs of exterior walls, footprint setbacks, accenting and mixing of façade materials, and in the coordination of architectural themes with the existing HSC. The conceptual Project design would also screen mechanical and rooftop equipment.

Architectural designs would also incorporate the use of articulations and surface perforations to break up flat building façades. Setbacks for the proposed Project would vary and may include broad entry courts and areas of pedestrian interest. The design of the parking structure(s) would be consistent with the Community Plan through the incorporation of landscaping to screen the structure(s), while maintaining a compatible theme with the existing and proposed HSC structures. The architectural use of these vertical sections, crossing the horizontal layers of concrete forming the separate parking levels would enhance the structure's façades.

The proposed Project would also complement the surrounding HSC buildings in architectural theme and function. The location of parking structure(s) on Development Sites C, D, E, and/or F would limit pedestrian and vehicular interfaces and increase pedestrian activity on the campus. Lighted and well-marked pedestrian pathways from the parking structure(s) to the existing and proposed HSC buildings would be included as part of the Project. This physical and visual upgrading of the area would be consistent with the Northeast Los Angeles Community Plan's policy direction to enhance the cultural and architectural character of the community. With the implementation of the Project's design features, which specifically address the city's Urban Design Policies, the proposed Project would be in character with existing development in the area and in harmony with the aesthetic objectives of the Community Plan. As such, the proposed Project would not preclude the attainment of the Community Plan's aesthetic regulations. Impacts on the aesthetic regulations of the Community Plan would be less than significant.

(ii) Adelante Eastside Redevelopment Plan

The proposed Project would implement policies of the Redevelopment Plan by enhancing the appearance of the seven underutilized Development Sites within the established HSC. The Project's architectural theme is designed to complement existing HSC structures and enhance pedestrian access by limiting pedestrian and vehicular interfaces by providing parking at selected locations within the HSC. By tying the existing underutilized sites to the highly functional and active HSC environment, the proposed Project preserves community scale. Furthermore, the heights of proposed structures that may be constructed on the seven proposed Development Sites would be comparable to the surrounding HSC buildings. With the implementation of Project Design features, which specifically address the City's Urban Design Policies, no significant impacts would occur relative to the applicable policies of the Adelante Eastside Redevelopment Plan.

(iii) Signage Regulations and Policies

Although the signage for the proposed Project has not been finalized at this time, exterior signage for the proposed buildings would be compatible with the design of the existing signage within the HSC. The proposed signs would comply with the Division 62 (Building Code) regulations of the City of Los Angeles Municipal Code (LAMC) with regard to the placement, construction and modification of all exterior signs and sign support structures. The Project's proposed signage would not significantly impact or preclude the attainment of existing City and state aesthetic regulations. Impacts of Project signage with regard to aesthetic regulations would, thus, be less than significant.

(e) Additional Development Scenarios

The preceding analysis evaluated the aesthetic values of the proposed Project, the context of the proposed Project within the aesthetic environment, and the potential impacts of the proposed Project on the aesthetic environment. In addition, the analysis evaluated view resources and view locations within the context of the proposed Project to determine if an existing viewshed would be obstructed, or if its value would be diminished by the proposed Project. This analysis also addressed the blockage of direct sunlight by the proposed buildings on adjacent uses.

The analysis provided above is based on the maximum amount of development occurring on each of the Project's seven Development Sites. The Project also allows the flexibility for limited modifications to land uses and square footages within which academic and/or medical research facilities and medical clinic facilities can be exchanged for one another. The exchange of academic and/or medical research facilities for medical clinic facilities would result in varying amounts of development. While the exchange of uses would result in varying amounts of

development relevant to building square footage, the proposed structures would be designed in a style reflective of the existing academic, research, and medical office buildings that define the aesthetic appearance of the HSC. As the maximum building height on each Development Site could occur regardless of whether 585,000 to 765,000 square feet is developed, the impacts that would occur under any permitted development scenario would be the same as that analyzed above. Thus, Project development under the permitted additional development scenarios would be compatible with the existing HSC buildings, as well as the institutional, public, commercial, and residential structures that surround the HSC. Thus, development under any of the permitted development scenarios would not detract from the existing aesthetic or visual character of the area and would be consistent with all applicable City of Los Angeles Urban Design Policies. Thus, impacts to visual resources associated with implementation of any of the permitted development scenarios would be equal to, or less than those identified above. As such, the development of any permitted development scenario would be less than significant.

4. CUMULATIVE IMPACTS

Several related projects are planned or are under construction in the vicinity of the Project Site. All related projects would adhere to existing General Plan and Community Plan design guidelines via their respective approval processes. Furthermore, it is anticipated that the related projects would be reviewed relative to the valued visual resources in the Project area (e.g., views of the downtown Los Angeles skyline and the distant San Gabriel Mountains, as well as view of both Hazard and Lincoln Parks), and, in doing so, it is anticipated that these view resources would not be significantly impacted. Ultimately, cumulative projects and ambient background growth would upgrade the visual character of the Project area. Continued investment in the surrounding community would meet the goals of the Community Plan and the Adelante Eastside Redevelopment Plan. Pedestrian safety, improved parking, improved campus design, and greater interest in this older community would occur.

Notwithstanding the above conclusion, a few of the identified related projects are of particular note including Related Project No. 1, the Los Angeles County–USC Medical Center Hospital Replacement Project. Construction of the new Los Angeles County–USC Medical Center is currently occurring on the north side of Marengo Street. This new structure would be visible from both public and private vantage points and would also cause an increase in shading within the vicinity of the Project site. Related Projects Nos. 11 through 14 consist of medical office, research and hospital facilities within the HSC. Although these related projects would also be visible from the surrounding area, view resources would not be significantly impacted and the impact to off-site shadow sensitive uses in the vicinity of the HSC would be less than significant. These projects would upgrade the visual character of the Project area. Other related projects are dispersed over a larger area and are of an infill nature. Based on the preceding

analysis, it is concluded that no significant cumulative impacts upon aesthetic resources, views or shading would occur.

5. MITIGATION MEASURES

With the incorporation of the identified Project Design Features, the proposed Project would result in a less-than-significant impact with regard to visual resources. Compliance with the following mitigation measures would ensure that the Project would be in scale with the surrounding area and with the City of Los Angeles Urban Design policies and signage regulations.

Mitigation Measure B-1: The Applicant shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials are posted on any 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.

Mitigation Measure B-2: Building façades facing public streets shall be designed to enhance the pedestrian experience and connectivity of the HSC campus through such features as wide and well-illuminated entry areas, landscaping, and informal gathering space.

Mitigation Measure B-3: Architectural design and exterior building materials shall be compatible with the theme and quality of building design and materials used within the HSC campus.

Mitigation Measure B-4: New utilities shall be constructed underground, to the extent feasible.

Mitigation Measure B-5: Exterior signage for the proposed buildings shall be compatible with the design of the building.

Mitigation Measure B-6: All new or replacement street trees shall be selected for consistency with the existing street trees or in accordance with a street tree master plan reviewed and approved by the Department of Public Works Street Tree Division.

Mitigation Measure B-7: All mechanical, electrical and rooftop equipment shall be screened from view from adjacent surface streets.

Mitigation Measure B-8: Landscaping and/or vegetation features shall be incorporated into the design of each Development Site.

Mitigation Measure B-9: All exterior lighting shall be directed on-site or shielded to limit light spillover effects.

6. LEVEL OF SIGNIFIGANCE AFTER MITIGATION

Proposed design features, including the coordination of design with existing HSC structures, landscaping, courtyards, architectural articulation, and pedestrian amenities, which have been incorporated into the Project's building plans, together with recommended mitigation measures would further reduce the Project's less-than-significant visual resources impacts.

IV. ENVIRONMENTAL IMPACT ANALYSIS
C. TRAFFIC CIRCULATION AND PARKING

1. INTRODUCTION

This section is based on the technical report *Traffic Impact Study Health Sciences Campus Project University of Southern California, City of Los Angeles, California*, prepared by Linscott, Law & Greenspan, Engineers (May 5, 2005). The traffic technical report, contained in Appendix C of this Draft EIR, analyzes the potential impact of the proposed Project on the surrounding street and freeway system. This section evaluates the traffic conditions on the existing street and highway network serving the Project Site and the impact of traffic generated by the proposed Project on the future roadway conditions.

2. ENVIRONMENTAL SETTING

a. Regional Network

The Project Site is located approximately one-half mile north of the San Bernardino Freeway (I-10) and approximately one-half mile east of the Golden State Freeway (I-5). Additional freeways providing indirect access to the Project Site area are the Pasadena Freeway (State Route 110), Long Beach Freeway (I-710), Hollywood Freeway (State Route 101), and the Pomona Freeway (State Route 60). The following are brief descriptions of the San Bernardino and Golden State Freeways.

San Bernardino Freeway (Interstate-10) is a major east-west freeway connecting Santa Monica to the west to the Inland Empire to the east. In the eastbound direction, an off-ramp is provided at Soto Street/Wabash Avenue and an on-ramp is provided at Marengo Street. In the westbound direction, on- and off-ramps are provided at Soto Street/Charlotte Street.

Golden State Freeway (Interstate-5) is a major north-south freeway connecting Southern California with Central and Northern California. In the northbound direction, off-ramps from the freeway are provided at Cesar Chavez Avenue and Daly Street and on-ramps to the freeway are provided at Marengo Street and State Street. In the southbound direction, off-ramps from the freeway are provided at Main Street, Mission Road and Cesar Chavez Avenue (via State Street) and on-ramps to the freeway are provided at Mission Road and Cesar Chavez Avenue.

b. Local Street Network

The local streets serving the proposed Project are under the jurisdiction of the City of Los Angeles. Streets adjacent to the Project Site including Eastlake Avenue, Zonal Avenue, San Pablo Street, Norfolk Street and Alcazar Street would provide primary access. The local street network serving the Project Site is a combination of these adjacent streets, as well as other major streets in the Project vicinity. The streets comprising this street network are listed and briefly described as follows:

Eastlake Avenue/Norfolk Street is an east-west oriented roadway that provides access through the HSC. The roadway is identified as Eastlake Avenue, west of San Pablo Street, and as Norfolk Street, east of San Pablo Street. Eastlake Avenue extends from San Pablo Street to the east and Mission Road to the west. Norfolk Street extends from Playground Street and Hazard Park to the east to San Pablo Street to the west. One through travel lane is provided in both directions on Eastlake Avenue/Norfolk Street within the study area. Four-hour metered parking is allowed on both sides of the roadway.

Zonal Avenue is a northwest- to southeast-oriented Secondary Highway which provides access through the HSC and the adjacent County General Hospital site. Zonal Avenue extends between Mission Road to the west and just east of San Pablo Street. North of the Mission Road intersection, the roadway is identified as Griffin Avenue. Two through travel lanes are provided in both directions on Zonal Avenue near the Mission Road intersection, and one through travel lane is provided in each direction east of the intersection where the roadway narrows. Parking is generally prohibited on both sides of Zonal Avenue in the study area.

San Pablo Street is a north-south Secondary Highway that traverses the Project Site between Valley Boulevard to the north and Zonal Avenue to the south. One through travel lane is provided in both directions in the study area. At the Valley Boulevard "T" intersection, one left-turn lane and dual right-turn lanes are provided at the northbound approach on San Pablo Street. At the Alcazar Street and Norfolk Street intersections, one left-turn lane and one shared through/right-turn lane is provided in both directions on San Pablo Street. North of Alcazar Street, ten-hour metered parking is allowed on both sides of San Pablo Street. Between Alcazar Street and Zonal Avenue, four-hour metered parking is allowed on both sides of the roadway.

Alcazar Street is an east-west Collector Street located between Soto Street to the east and Eastlake Avenue to the west. One through travel lane is provided in both directions on Alcazar Street in the Project vicinity. Separate left-turn lanes are provided in both directions on Alcazar Street at the San Pablo Street intersection. At the Soto Street intersection, one left-turn lane, one through lane and one right-turn only lane is provided at the eastbound approach, and one combination left-turn/through/right-turn lane is provided at the westbound approach.

Immediately west of Soto Street, parking is prohibited along both sides of Alcazar Street; however, further west of the intersection ten-hour metered parking is allowed on the north side of the roadway. Parking is generally permitted on both sides of Alcazar Street east of Soto Street.

Biggy Street is a local north-south oriented roadway that extends between Eastlake Avenue to the north and Zonal Avenue to the south. One through travel lane is provided in both directions in the study area. Biggy Street forms "T" intersections with both Eastlake Avenue and Zonal Avenue. A driveway to a parking lot forms the north leg of the Biggy Street and Eastlake Avenue intersection, and the County General Hospital loading dock driveway (excluding the adjacent County General Hospital driveways) forms the south leg of the Biggy Street and Zonal Avenue intersection. Four-hour metered parking is allowed on both sides of Biggy Street in the Project vicinity.

Soto Street is a north-south Major Highway (Class II) located east of the Project Site. Two through travel lanes are provided in each direction in the Project vicinity and separate left-turn lanes are provided in both directions at major intersections. At the Marengo Street intersection, one left-turn lane, one combination left-turn/through lane, one through lane, and one combination through/right-turn lane are provided in both directions on Soto Street. Parking is prohibited along both sides of Soto Street in the study area.

Valley Boulevard is an east-west Major Highway (Class II) that borders the HSC to the north. Three through travel lanes are provided in both directions in the Project vicinity. At the San Pablo Street intersection, an exclusive left-turn lane is provided at the westbound approach on Valley Boulevard. Parking is generally allowed on both sides of the roadway except during the morning or afternoon peak commuter periods. Parking is prohibited on the north side of the roadway (westbound) during the morning peak commuter period and on the south side of the roadway (eastbound) during the afternoon peak commuter period. The Soto Street and Valley Boulevard intersection is grade separated.

Marengo Street, located south of the Project Site, is a northwest- to southeast-oriented Major Highway (Class II), between Daly Street and Soto Street, and as a Secondary Highway east of Soto Street. Two through travel lanes are provided in each direction on Marengo Street in the study area. Separate left-turn lanes are provided at both approaches on Marengo Street at major intersections. Additionally, right-turn only lanes are provided in both directions on the roadway at the Mission Street intersection and in the eastbound direction at the Soto Street intersection. Ten-hour parking is allowed along both sides of Marengo Street.

Mission Road, located west of the Project Site, is a northeast- to southwest-oriented Major Highway (Class II). Two through travel lanes are provided in each direction in the Project vicinity. Separate left-turn lanes are provided at both approaches on Mission Road at major

intersections. At the Zonal Avenue intersection, one right-turn only lane is also provided at the southbound approach on Mission Road. North of Zonal Avenue, parking is prohibited on both sides of Mission Road with posted Tow Away No Stopping Anytime signs, and four-hour metered parking is allowed on both sides of the roadway from 8:00 A.M. to 6:00 P.M. south of Zonal Avenue.

Wabash Avenue is a northwest- to southeast-oriented Secondary Highway, located southeast of the HSC. Wabash Avenue extends easterly from the Soto Street and I-10 Freeway WB Off-Ramp intersection. Two through travel lanes are provided in each direction on Wabash Avenue in the study area. At the westbound approach to the Soto Street intersection, Wabash Avenue provides one left-turn lane and one right-turn-only lane. Parking is generally allowed along both sides of Wabash Avenue in the study area.

Daly Street is a north-south Secondary Highway located west of the Project Site. Two through travel lanes are provided in both directions in the study area, separate left-turn lanes are provided at major intersections, and parking is generally allowed on both sides of the roadway in the Project vicinity.

Main Street is a north-south Secondary Highway located west of the Project Site. Two through travel lanes are provided in both directions in the Project vicinity. Separate left-turn lanes are provided in both directions on Main Street at major intersections. Parking is generally allowed on both sides of the roadway within the Project area.

Henry Street is designated as a Local Street that is located entirely within Development Site C. While shown on the Northeast Los Angeles Community Plan Generalized Circulation Map Henry Street has been paved and out of circulation for at least twenty years. Henry Street connects to Zonal Avenue and provides no other connection to the street network.

c. Public Transportation

Several public transportation services exist in the Project area. These include the Metropolitan Transit Authority (MTA) Metro Bus Transit Service which provides bus transit service along the following major roadways within the Project vicinity: (1) Marengo Street; (2) Mission Road; (3) Soto Street; (4) Wabash Avenue; (5) Main Street; (6) Valley Boulevard; (7) Griffin Avenue; and (8) State Street, as well as (9) the I-10 Freeway (see MTA Route 484). MTA Routes 254 and 255 operate to and from the HSC and Los Angeles County General Hospital. Most of the MTA local bus transit routes provide headways of 3 to 12 buses per hour during the morning and afternoon peak commuter hours.

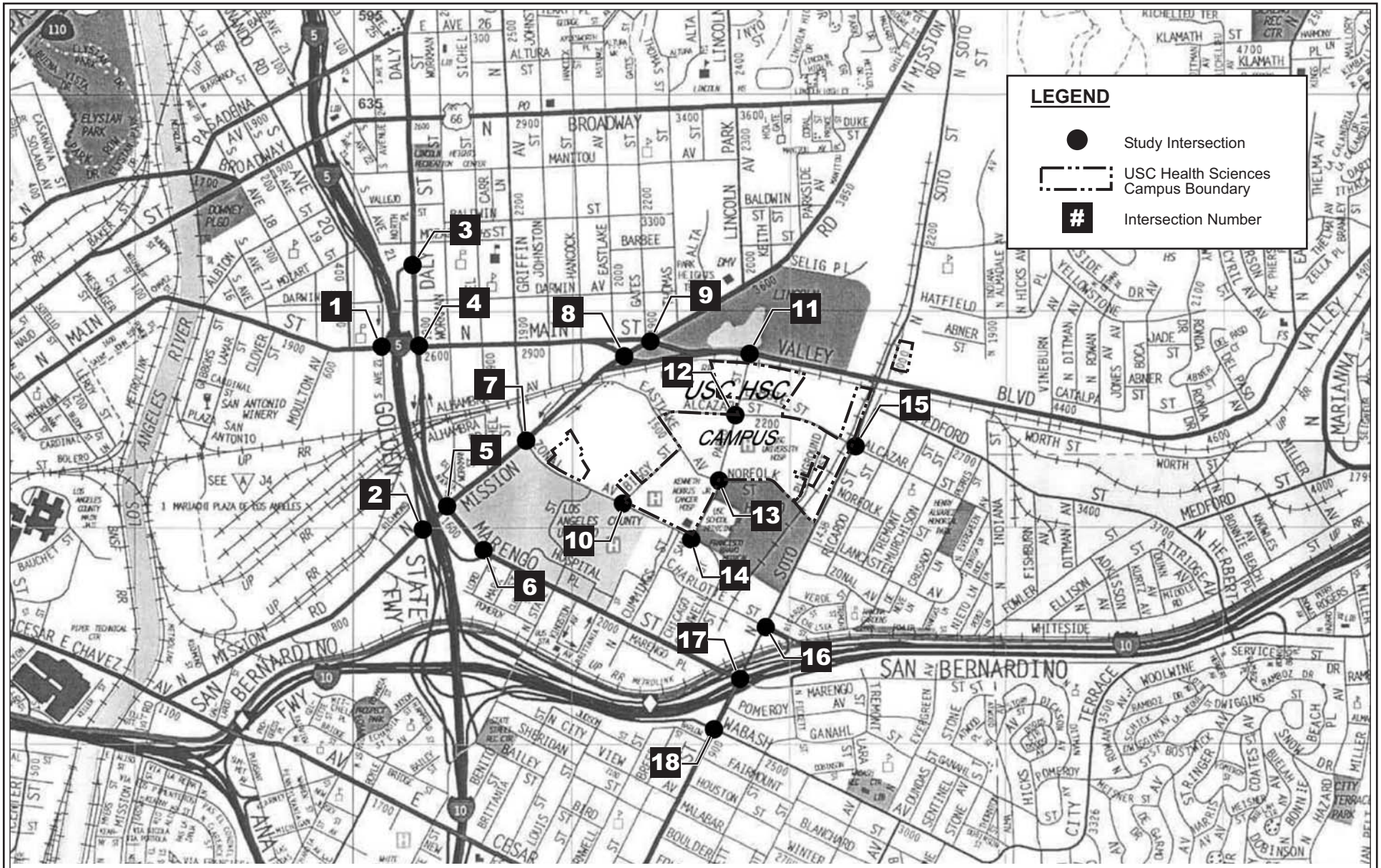
Foothill Transit provides service between Downtown Los Angeles and east San Gabriel Valley/Inland Empire communities, with service to/from the Los Angeles County/USC Busway station. Foothill Transit local bus transit service operates along the San Bernardino Freeway (I-10) in the study area. MTA is constructing an extension of the Metro Rail Gold Line Light Rail Transit system to East Los Angeles, with an estimated completion in year 2009. The proposed extension would provide service from Union Station in Downtown Los Angeles to the East Los Angeles community of the County of Los Angeles.

The Applicant currently provides a tram/shuttle service on the HSC, as well as a service between the University Park Campus and HSC. This circuit tram provides headways of three trams/shuttles per hour. The Applicant also provides car and vanpool services.

d. Existing Intersection Level of Service

To determine baseline traffic volumes and intersection Levels of Service (LOS), traffic counts were conducted at the following 18 study intersections in the Project vicinity, as shown in Figure 20 on page 150. In order to identify streets and intersections most likely to be impacted by Project traffic, these intersections were identified in consultation with the LADOT.

1. I-5 Freeway Southbound (SB) Off-Ramp and Avenue 21-Main Street
2. I-5 Freeway SB Ramps and Mission Road
3. I-5 Freeway Northbound (NB) Off-Ramp and Daly Street-Main Street
4. Daly Street and Main Street
5. Mission Road and Daly Street-Marengo Street
6. I-5 Freeway NB On-Ramp and Marengo Street
7. Mission Road and Griffin Avenue-Zonal Avenue
8. Mission Road and Valley Boulevard
9. Mission Road and Main Street
10. Biggy Street and Zonal Avenue
11. San Pablo Street and Valley Boulevard
12. San Pablo Street and Alcazar Street



NOTE: The numbers correspond to the intersections identified in Table 4 in Section IV.C.

PCR

0 0.5 Miles

Figure 20
Location of Study Intersections

Source: Linscott Law & Greenspan, Engineers; Base: Thomas Guide.

13. San Pablo Street and Eastlake Avenue-Norfolk Street

14. San Pablo Street and Zonal Avenue

15. Soto Street and Alcazar Street

16. Soto Street and I-10 Freeway Westbound (WB) Ramps-Charlotte Street

17. Soto Street and Marengo Street

18. Soto Street and I-10 Freeway Eastbound (EB) Off-Ramp-Wabash Avenue

A total of 11 of the 18 study intersections are currently controlled by traffic signals. The remaining seven study intersections (numbers 1, 3, 6, 10, 12, 13 and 14) are presently two or all-way stop sign controlled. Peak traffic periods at these intersections coincide with the peak commuter traffic periods of between 7:00 and 10:00 A.M. and 3:00 and 6:00 P.M. Manual counts of vehicle turning movements were performed at each of the 18 study intersections for the weekday morning (A.M.) and afternoon (P.M.) commuter periods.

The 18 study intersections were evaluated using the Critical Movement Analysis (CMA) method of analysis, which determines Volume-to-Capacity (V/C) ratios on a critical lane basis. The overall V/C ratio is subsequently assigned a Level of Service (LOS) value to describe intersection operations. Through the use of the CMA methodology, a determination of the LOS at an intersection where traffic volumes are known or have been projected can be obtained through a summation of the critical movement volumes at that intersection. "Capacity" represents the maximum total hourly movement of vehicles in the critical lanes, which has a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. In general terms, LOS describes the quality of traffic flow.

The procedures used to analyze the LOS for unsignalized intersections are conducted according to the *Highway Capacity Manual* published by the Transportation Research Board. For signalized and unsignalized intersections, the LOS is a qualitative measure relating to the delay experienced at an intersection as a result of the prevailing traffic volumes and the effect of such factors as speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience. There are six LOS grades for unsignalized intersections, A through F, which correspond to traffic operating conditions ranging from best to worst, respectively. In general, LOS A represents free-flow conditions with no congestion. On the other hand, LOS F corresponds to severe congestion with stop-and-go conditions. Descriptions of LOS levels and their operating characteristics are provided in Table 3 on page 152.

Table 3

LEVEL OF SERVICE AS A FUNCTION OF CMA VALUES
CITY OF LOS ANGELES

LOS	Description of Operating Characteristics	Range of CMA Values
A	Uncongested operations; all vehicles clear in a single cycle.	0.00 to 0.60
B	Same as above.	> 0.60 to 0.70
C	Light congestion; occasional backups on critical approaches.	> 0.70 to 0.80
D	Congestion on critical approaches, but intersection functional. Vehicles required to wait through more than one cycle during short peaks. No long-standing lines formed.	> 0.80 to 0.90
E	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.	> 0.90 to 1.00
F	Forced flow with stoppages of long duration.	> 1.00

Source: Linscott, Law & Greenspan, Engineers, May 2005.

Measured Level of Service (LOS) values for existing (2004) A.M. and P.M. peak-hour conditions are summarized in Table 4 on page 153. Sixteen of the 18 study intersections are presently operating at LOS D or better during the A.M. and P.M. peak commuter hours under existing conditions. As shown in Table 4, intersection congestion currently exists in the Project vicinity at two study intersections operating at LOS E during the peak hours. Currently congested intersections include the I-5 Freeway Southbound Off-Ramp and Mission Road intersection (LOS E during the A.M. peak hour only) and the Soto Street and I-10 Freeway Westbound Ramp–Charlotte Street intersection (LOS E during the A.M. peak hour only).

e. Existing Parking Supply and Demand

The existing parking supply at the HSC was documented through an inventory of the spaces in each HSC parking structure and lot. A total of 3,798 parking spaces are provided on the existing campus and available for HSC patrons. The existing baseline required parking for the HSC under the LAMC is 3,638 spaces. The existing actual parking demand was determined by conducting parking accumulation surveys of the HSC off-street parking facilities (i.e., surface parking lots and parking structures) and adjacent on-street spaces provided within the campus. The existing parking demand also accounts for USC spaces allocated in the University Hospital parking structure and spaces USC was leasing from the County of Los Angeles in its Marengo Street Parking Structure. At the time of the parking surveys, a total of 3,942 spaces were available for the HSC, including surface lots, structures and leased spaces. The parking accumulation surveys were conducted on an hourly basis in December 2003 and April 2004.

Table 4

2004 EXISTING VOLUME-TO-CAPACITY RATIOS AND LEVELS OF SERVICE
A.M. AND P.M. PEAK HOURS

No.	Intersection	Peak Hour	V/C	LOS
1	I-5 Freeway SB Off-Ramp/Avenue 21-Main Street	A.M.	0.764	C
		P.M.	0.542	A
2	I-5 Freeway SB Ramps/Mission Road	A.M.	0.980	E
		P.M.	0.689	B
3	I-5 Freeway NB Off-Ramp/Daly Street-Main Street	A.M.	0.585	A
		P.M.	0.465	A
4	Daly Street/Main Street	A.M.	0.705	C
		P.M.	0.593	A
5	Mission Road/Daly Street-Marengo Street	A.M.	0.754	C
		P.M.	0.849	D
6	I-5 Freeway NB On-Ramp/Marengo Street	A.M.	0.624	B
		P.M.	0.730	C
7	Mission Road/Griffin Avenue-Zonal Avenue	A.M.	0.601	B
		P.M.	0.507	A
8	Mission Road/Valley Boulevard	A.M.	0.588	A
		P.M.	0.639	B
9	Mission Road/Main Street	A.M.	0.692	B
		P.M.	0.543	A
10	Biggy Street/Zonal Avenue	A.M.	0.717	C
		P.M.	0.698	B
11	San Pablo Street/Valley Boulevard	A.M.	0.241	A
		P.M.	0.198	A
12	San Pablo Street/Alcazar Street	A.M.	0.478	A
		P.M.	0.511	A
13	San Pablo Street/Eastlake Avenue-Norfolk Street	A.M.	0.470	A
		P.M.	0.379	A
14	San Pablo Street/Zonal Avenue	A.M.	0.782	C
		P.M.	0.643	B
15	Soto Street/Alcazar Street	A.M.	0.788	C
		P.M.	0.576	A
16	Soto Street/I-10 Freeway WB Ramps-Charlotte Street	A.M.	0.971	E
		P.M.	0.855	D
17	Soto Street/Marengo Street	A.M.	0.727	C
		P.M.	0.751	C
18	Soto Street/I-10 Freeway EB Off-Ramp-Wabash Avenue	A.M.	0.624	B
		P.M.	0.588	A

Source: Linscott, Law & Greenspan, Engineers, May 2005.

On a campus-wide basis, the peak demand for parking on the HSC occurred at 11:00 A.M. when 2,707 parking spaces of the 3,942 total available spaces were occupied (i.e., approximately 69 percent of the spaces were occupied). This total includes the 253 spaces allocated to USC in the University Hospital parking structure and the 200 spaces that were being leased from the County of Los Angeles in its Marengo Street parking structure. Thus, roughly 1,235 parking spaces were available during the peak hour of the observations. In addition, peak use of 566 on-street parking spaces within the HSC occurred at 11:00 A.M. (i.e., 100 percent utilization), with similarly high levels of use throughout other periods of the day.

In order to calculate a conservative analysis of actual parking demand, it was assumed that 75 percent of the on-street parking demand within the HSC area is associated with the HSC. Thus, a peak existing parking demand of 3,132 spaces is calculated for the HSC, as shown below:

- (566 SP x 0.75 = 425 SP) + 2,707 SP = 3,132 Spaces

The actual existing parking demand was measured to determine the adequacy of the existing parking supply to accommodate the peak parking demand generated by the existing facilities at the HSC. Additionally, the parking demand surveys were used as a basis to forecast future parking demand at the HSC following build-out and occupancy of the proposed new facilities, irrespective of the City Code parking requirements.

A generalized parking demand model was prepared based on the current ratio of parking demand to building facilities at the HSC. The factors considered in development of the HSC parking demand model include the total existing HSC parking demand of 3,132 spaces as described above, and the total existing HSC building facilities of 1,286,620 square feet at the time of the parking surveys. The parking demand model for the HSC is calculated at 2.79 parking spaces for every 1,000 square feet of building floor area as shown below:

- 3,132 parking spaces ÷ 1,286.62 square feet = 2.43 spaces/1,000 square feet
- 2.43 × 1.15 (15% for circulation) = 2.79 spaces/1,000 square feet

This parking rate can be considered conservative in that it is based on the following: (1) 75 percent of area on-street parking is assumed to be related to the HSC; (2) all of the USC allocated spaces in the University Hospital parking structure are assumed to be fully utilized; (3) all of the spaces previously leased from the County were accounted for in the parking demand; and (4) demand at the dialysis center (TRC Lot) is included in the existing demand. In addition, this parking rate considers the interaction of parking demand generated by the teaching, outpatient, and research facilities provided at the HSC.

3. PROJECT IMPACTS

a. Methodology

(1) Traffic and Circulation

The methodology by which traffic impacts are evaluated involves several steps including the identification of existing traffic conditions, the calculation of Project traffic, the assumed distribution of Project traffic, and a comparison of Project traffic with future traffic conditions. Due to the synergy between the HSC land uses and the proposed Project, an internal capture adjustment was applied to the Project's trip-generation forecast. Internal capture trips are those trips made internal to the HSC between buildings within the campus. The internal capture adjustment was applied only to the Project's Research and Development land use component in order to provide a conservative forecast. Based on consultation with LADOT staff, a 15 percent internal capture trip reduction has been applied to the Project's Research and Development land use component in the A.M. and P.M. peak-hour traffic volume forecasts, as well as to the daily traffic volume forecast.

(a) Trip Generation

As previously discussed, the Applicant is proposing to develop between approximately 585,000 and 765,000 gross square feet of additional academic and medical-related (e.g., research, clinic, etc.) facilities within its existing HSC. A maximum of 765,000 square feet of development may occur, consisting of a maximum of 720,000 gross square feet of academic and medical research facilities, with the remaining 45,000 square feet dedicated to medical clinic facilities. Should additional medical clinic facilities be developed in lieu of academic and medical research facilities, a maximum of 120,000 gross square feet of medical clinic floor area would be developed. Should this occur, the amount of academic and medical research facilities would be reduced to 465,000 gross square feet, for an overall total of 585,000 gross square feet of development. Through the application of a trip-generation equivalency program, the environmental analysis conducted for the Project addresses the development of the full range of floor area (i.e., 585,000 to 765,000 gross square feet) and uses (i.e., academic, medical research and medical clinic) as the above scenarios are equivalent from a peak-hour trip-generation perspective.

Traffic volumes expected to be generated by the proposed Project were estimated for the weekday commuter A.M. and P.M. peak hours, as well as over a 24-hour daily period, using trip-generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 7th Edition*, 2003. Projected traffic volumes for the Project's Research and Development land use component and the Medical Office component were forecasted based on

rates per thousand square feet (gross) of building floor area. ITE trip-generation equation rates for Research and Development centers were used to forecast the daily traffic volumes for the research and development land use component.[22] In addition, the A.M. and P.M. peak hour of generator trip rates were utilized for the peak-hour trip-generation forecasts. Trip-generation equation rates were used to forecast the daily and P.M. peak-hour traffic volumes for the Project's Medical Office land use component.[23] Average trip-generation rates were used to forecast the A.M. peak-hour traffic volumes as no equation rate is provided in the ITE *Trip Generation Manual* for the A.M. peak hour.

The proposed Project's trip-generation forecast is summarized in Table 5 on page 157. The Project trip-generation forecast was submitted for review and approval by LADOT staff. As presented in Table 5, the proposed Project is expected to generate 753 vehicle trips (613 inbound trips and 140 outbound trips) during the A.M. peak hour. During the P.M. peak hour, the proposed Project is expected to generate 774 vehicle trips (161 inbound trips and 613 outbound trips). Over a 24-hour period, the proposed Project is forecast to generate 7,715 daily trips during a typical weekday (approximately 3,858 inbound trips and 3,858 outbound trips).

(b) Trip Equivalency Program

The Equivalency Program defines a framework within which certain land uses can be exchanged for other land uses without increasing transportation impacts. The Project ultimately may be developed with a range of building sizes (i.e., there may be increases in the square footage of one land use in exchange for corresponding decreases in the square footage of the other land use). The equivalency program ensures that, although the final land uses and sizes may be different from the assumptions upon which the analysis is based, the maximum transportation impacts that are addressed and mitigated by this analysis are not exceeded.

In order to implement the equivalency program, a set of equivalency factors have been developed. The equivalency factor for each land use is derived based on the total P.M. peak-hour trip generation, as it is higher than the A.M. peak hour. Equivalency factors have been established for both the research and development land use and the medical office land use areas, as the educational/academic space is not anticipated to be enrollment enhancing.

[22] ITE *trip generation Land Use Code 760 (Research and Development Center).*

[23] ITE *trip generation Land Use Code 720 (Medical-Dental Office Building).*

Table 5

PROJECT TRIP GENERATION
USC HEALTH SCIENCES CAMPUS PROJECT

Land Use	Size	Daily Trip Ends [a] Volume	A.M. Peak-Hour Volumes [a] In	Out	Total	P.M. Peak-Hour Volumes [a] In	Out	Total
Research & Development [b]	465,000 GSF	3,556	445	91	536	71	401	472
Less 15% Internal Capture Reduction [c]		(533)	(67)	(14)	(81)	(11)	(60)	(71)
Medical Office Building [d]	120,000 GSF	4,692	235	63	298	101	272	373
Total		**7,715**	**613**	**140**	**753**	**161**	**613**	**774**

GSF = gross square feet

[a] *Trips are one-way traffic movements, entering or leaving.*
[b] *ITE Land Use Code 760 (Research and Development Center) trip-generation equation rates. Please note that the A.M. and P.M. peak hour of generator trip rates were utilized in the peak-hour forecasts as no trip rates are provided for peak hour of adjacent street traffic.*
[c] *An internal capture reduction of 15 percent was applied only to the Research and Development component of the Project in order to account for the synergy between the uses on the Health Sciences Campus.*
[d] *ITE Land Use Code 720 (Medical-Dental Office Building) trip-generation equation rates were utilized to forecast the daily and P.M. peak-hour traffic volumes. ITE Land Use Code 720 trip-generation average rates were used to forecast the A.M. peak-hour traffic volumes as no equation rate is provided for the A.M. peak hour.*

Source: ITE "Trip Generation," 7th Edition, 2003.

Equivalency factors have been established on a number of trips per 1,000 square feet of floor area and are based on a review of ITE trip rates. For example, 100,000 square feet of research and development use is equivalent to 27,900 square feet of medical office space in terms of trip generation. Therefore, 0.279 square foot of medical office use has the same trip generation as 1.0 square foot of research and development use. Thus, the research and development equivalency factor is 0.279. Additionally, 100,000 square feet of medical office use is equivalent to 358,400 square feet of research and development space in terms of trip generation. Therefore, 3.584 square feet of research and development use has the same trip generation of 1.0 square foot of medical office use. Thus, the medical office equivalency factor is 3.584. Application of the equivalency program would occur within the 585,000 to 765,000 square foot range. The equivalency factors for the proposed land uses are summarized in Table 6 on page 158.

(c) Project Trip Distribution

In order to determine the volume of Project traffic at specific intersections, the calculated trips generated by the proposed Project are assigned to the local roadway system based on a traffic distribution pattern developed in consultation with LADOT staff. The traffic distribution

Table 6

EQUIVALENCY MATRIX –
LAND USE SQUARE FOOTAGE CONVERSION FACTORS

To this land use⇒ / From this land use⇓	Medical Research/Laboratory/ Academic Support	Medical Office
Medical Research/ Laboratory/ Academic Support	N/A	0.279
Medical Office	3.584	N/A

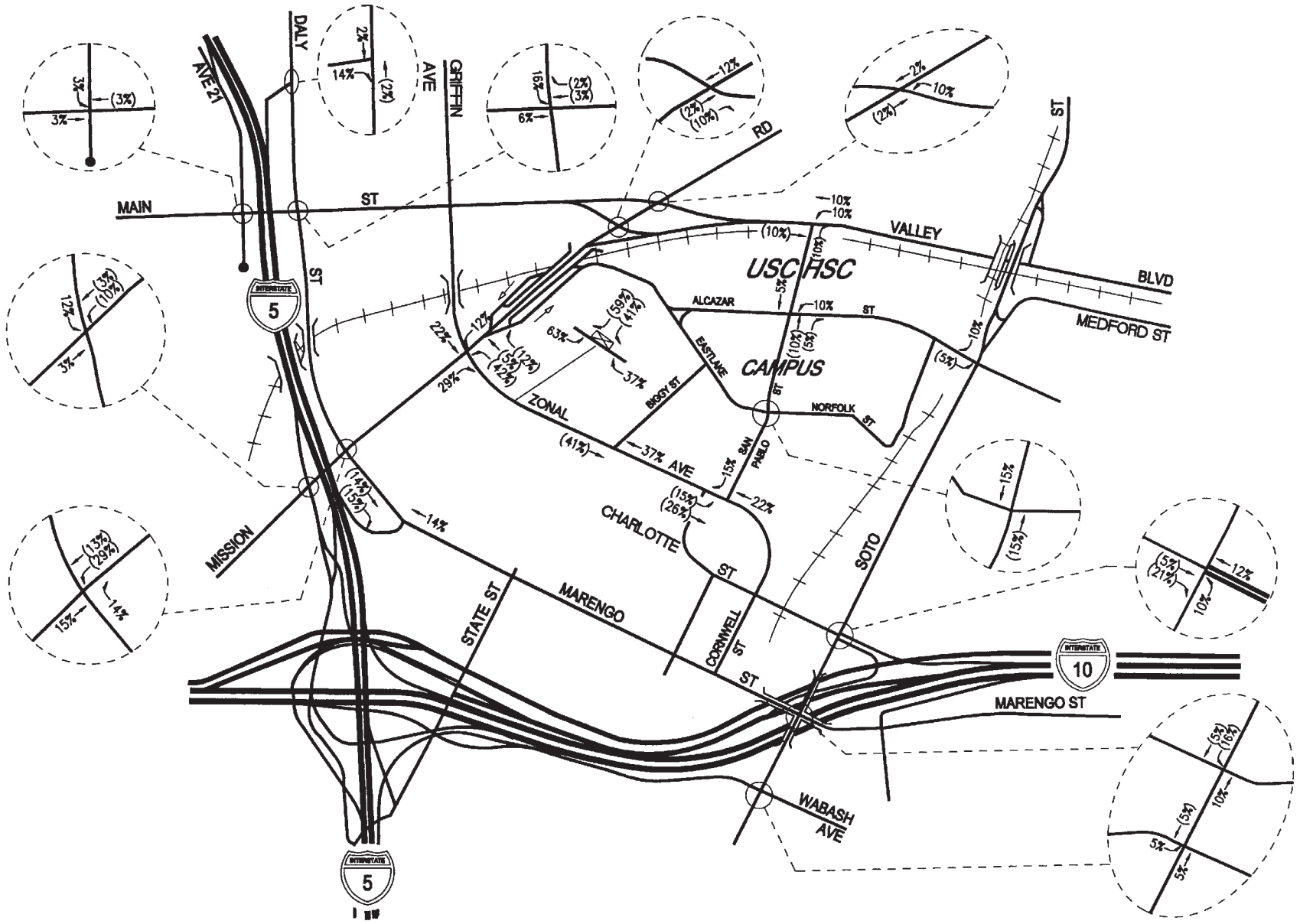
Source: Linscott, Law & Greenspan, Engineers Inc., May 2005

pattern reflects the existing and proposed Project land use, existing site access patterns, existing traffic movements, characteristics of the surrounding roadway system, and location of nearby residential areas.

The principal ingress routes for the HSC were determined based on the accessibility via the nearby freeway ramp system and appropriate arterial routes. Principal freeway routes in the vicinity of the Project Site include the I-10 (San Bernardino) Freeway and the I-5 (Golden State) Freeway. Key arterials providing access include: Daly Street, Mission Road, San Pablo Street, Soto Street, Valley Boulevard, Main Street, Alcazar Street, and Marengo Street, as well as others.

Access to the Project site would be based on the location of parking structures. Two parking scenarios, including: (1) the location of all parking at the west end of campus on Development Site C; and (2) the location of all parking on the northeast side of the campus on Development Site E (or a combination of Development Sites E and F), have been evaluated in order to provide a conservative analysis of the Project's potential transportation impacts. These two scenarios reflect the greatest concentration of Project-related traffic on the local roadway system. As such, should parking be proposed for any other combination of sites (i.e., including sites from the east end or west end of the campus), off-site impacts would be within the range identified under the two parking scenarios.

Parking Scenario No. 1 assumes that access to the parking structure in Development Site C would be provided via Zonal Avenue. Traffic distribution percentages forecast for the 18 study intersections under Parking Scenario No. 1 are provided in Figure 21 on page 159. The forecast for Parking Scenario No. 1 identifies the greatest off-site traffic near the western portion of the HSC.



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Not to Scale

Source: Linscott Law & Greenspan Engineers, 2005

Figure 21
Project Trip Distribution
Parking Scenario No.1

Parking Scenario No. 2 assumes that access to the parking structure on Development Site E (or a combination of Development Sites E and F) would be via San Pablo Street and Alcazar Street. Traffic distribution percentages forecast for the 18 study intersections under Parking Scenario No. 2 are provided in Figure 22 on page 161. Under Parking Scenario No. 2, the greatest traffic would occur near the northern/eastern portion of the HSC.

(d) Critical Movement Analysis (CMA)

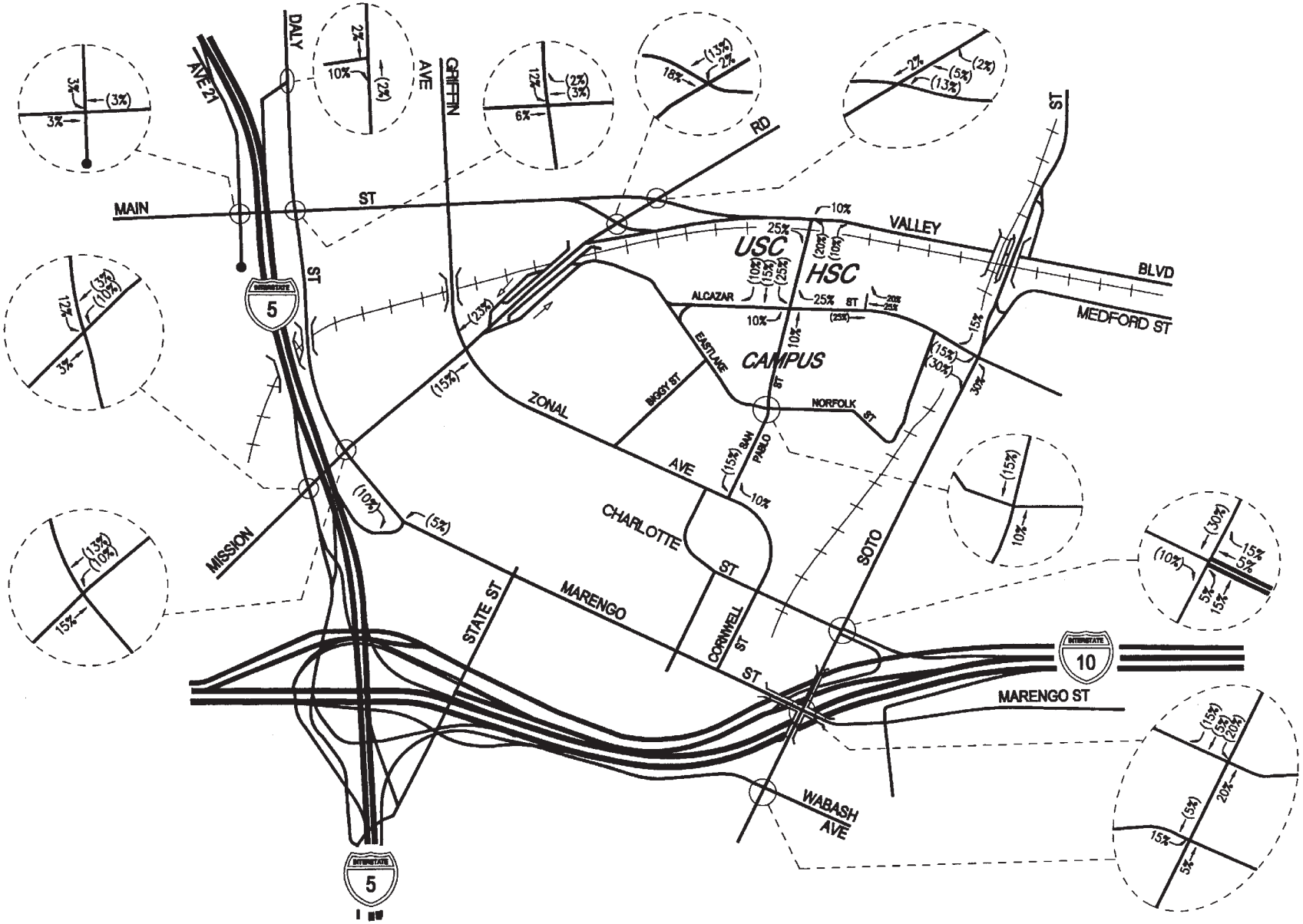
The forecasted traffic volumes in each intersection are applied to future conditions in the study area using the Critical Movement Analysis (CMA) described previously. The determination of LOS at an intersection is based on a summation of the critical movement volumes, i.e., the highest combination of conflicting movements that must be accommodated at the intersection. The CMA values for the Project area are calculated by dividing the sum of the critical movement traffic volumes by the capacity value of the intersection.

The relative impact of the added Project traffic volumes expected to be generated by the proposed Project during the A.M. and P.M. peak hours were evaluated based on analysis of future operating conditions at the 18 intersections, without and then with the proposed Project for both Parking Scenario No. 1 and Parking Scenario No. 2. The previously discussed capacity analysis procedures were utilized to evaluate the future volume-to-capacity relationships and service level characteristics at each study intersection.

An annual one percent ambient growth rate was assumed so as to account for unknown related projects in the vicinity of the proposed Project. Additionally, it was assumed that the build-out of the proposed Project would be complete and the buildings fully occupied by the end of 2015.

(2) Parking

In accordance with the City of Los Angeles *Draft CEQA Thresholds Guide*, parking impacts are analyzed according to land use, size, the Project's maximum parking requirements, and existing and proposed parking supply. Factors applied to parking demand include displacement of existing parking, average vehicle occupancy, and transportation mode (transit, bicycle, walking). Although the Guidelines are concerned with the application of code-required parking, an impact could also occur if an insufficient parking supply to serve a project results in the spillover of Project parking demands to nearby land uses not associated with the Project. Parking impacts are also evaluated according to queuing time at the proposed parking structure, since excessive queuing time could result in the underutilization of the facility.



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Not to Scale

Source: Linscott Law & Greenspan Engineers, 2005

Figure 22
Project Trip Distribution
Parking Scenario No.2

b. Thresholds of Significance

(1) Traffic and Circulation

The significance of the potential impacts of the proposed Project at each of the study intersections is identified using the traffic criteria set forth in the LADOT Traffic Study Policies and Procedures, March 2002. According to the City's published traffic study guidelines, a significant transportation impact is based on the following criteria:

LADOT Criteria for Significant Traffic Impact:

LOS	Final CMA Value	Project-Related Increase in CMA Value
C	>0.700 to 0.800	Equal or greater than 0.040
D	>0.800 to 0.900	Equal or greater than 0.020
E, F	>0.900	Equal or greater than 0.010

The criteria for determining the study area for Congestion Management Program (CMP) arterial monitoring intersections and for freeway monitoring locations are:

- 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.

- All CMP mainline freeway monitoring locations where the proposed Project would add 150 or more trips, in either direction, during either the A.M. or P.M. weekday peak hours.

Freeway segment Levels of Service are defined in accordance with the definitions included in the *2004 Congestion Management Program for Los Angeles County*, Los Angeles County Metropolitan Transportation Authority, July, 2004. The demand to capacity (D/C) ratios and Level of Service relationships are defined in the CMP document and are:

CALTRANS FREEWAY SEGMENT LEVEL OF SERVICE DESIGNATIONS

D/C	LOS	D/C	LOS
0.00 to 0.35	A	>1.00 to 1.25	F(0)
>0.35 to 0.54	B	>1.25 to 1.35	F(1)
>0.54 to 0.77	C	>1.35 to 1.45	F(2)
>0.77 to 0.93	D	>1.45	F(3)
>0.93 to 1.00	E	—	—

A significant impact on the freeway system is defined as follows:

- "For purposes of the CMP, a significant impact occurs when the proposed Project increases demand on a CMP facility 2 percent of capacity (V/C) greater than or equal to 0.02), causing LOS F (V/C > 1.00); if the facility is already LOS F, a significant impact occurs when the proposed Project increases traffic demand on a CMP facility by 2 percent of capacity (V/C greater than or equal to 0.02)."

The CMP document also states the following:

- "Calculation of LOS based on D/C ratios is a surrogate for speed based LOS used by Caltrans for traffic operational analysis. LOS F(1) through F(3) designations are assigned where severely congested (less than 25 mph) conditions prevail for more than one hour, converted to an estimate of peak hour demand in the table above. Note that calculated LOS F traffic demands may therefore be greater than observed traffic volumes."

(2) Project Construction

According to the *City of Los Angeles CEQA Thresholds Guide*, construction of the proposed Project would have significant on-street construction impacts, if:

- The Proposed Project would cause a substantial temporary inconvenience to auto travelers, bus riders, pedestrians or parkers, due to an increase in congestion, relocation of bus stops, rerouting of bus lines, restrictions of vehicular and pedestrian access and circulation and restrictions on parking during the times of construction.

- The Proposed Project would cause hazardous conditions for auto travelers, pedestrians, or bus riders.

(3) Parking

According to the *City of Los Angeles CEQA Thresholds Guide*, a project would have a significant impact on parking if the project provides less parking than is needed to meet the Project's parking demand.

(4) Project Access

According to *the City of Los Angeles Draft LA Thresholds Guide*, May 14, 1998, a project would normally have a significant project access impact if the intersection(s) nearest the primary site access is/are projected to operate at LOS E or F during the A.M. or P.M. peak hour, under cumulative plus project conditions.

(5) Public Transit

According to the *City of Los Angeles CEQA Thresholds Guide*, the proposed Project would have a significant impact on transit system capacity, if the seating capacity of the transit system serving the Project study area would be exceeded.

(6) Neighborhood Streets

According to the *City of Los Angeles CEQA Thresholds Guide*, the proposed Project would have a significant impact if:

- The proposed Project would add 120 or more trips per day to a low-volume (i.e., less than 1,000 ADT) local residential street within a local neighborhood.
- The proposed Project would add more than 12 percent, 10 percent, or 8 percent to local neighborhood streets with final ADT levels of 1000 to 1,999 trips, 2000 to 2,999 trips, or 3,000 or more trips, respectively.

c. Analysis of Project Impacts

(1) Traffic and Circulation

(a) Project Design Features

To reduce traffic in and around the HSC, the Applicant would continue operating a tram/shuttle service that runs from approximately 9:00 A.M. to 4:00 P.M., Monday through Friday, with stops at the Norris Cancer Center, University Hospital, Doheny Eye Institute, HCC I, Ambulatory Care Center, Clinical Sciences, IGM, Outpatient Clinic at LAC+USC, LAC+USC main entrance and the Women and Children Hospital on Mission Road and Zonal Avenue. This circuit tram provides headways of three trams/shuttles per hour and would provide transportation to and from the proposed parking structure(s) located at the perimeter of the HSC.

In addition, sidewalks and pedestrian walkways would connect the Project's proposed parking facilities with the proposed and existing buildings within the HSC.

Construction Design Features

The following design features would be implemented during the construction phase of the Proposed Project.

- Maintain existing access for land uses in proximity of the Project Site;
- Limit any potential lane closures to off-peak travel periods;
- Schedule receipt of construction materials to non-peak travel periods, to the extent possible;
- Coordinate deliveries to reduce the potential of trucks waiting to unload for protracted periods of time; and
- Prohibit parking by construction workers on adjacent streets and direct construction workers to available parking within the HSC.

(b) Traffic Impact Analysis Scenarios

Pursuant to LADOT's traffic study guidelines, Level of Service calculations have been prepared for the following scenarios:

- Existing Traffic Conditions;
- Existing Traffic Conditions plus one percent ambient traffic growth up through 2015;
- Existing Traffic Conditions plus one percent ambient traffic growth up through 2015 and occupancy of the related projects;
- Existing Traffic Conditions plus one percent ambient traffic growth up through 2015, occupancy of the related projects and the provision of parking per Parking Scenario No. 1 (Development Site C) through 2015;
- Existing Traffic Conditions plus one percent ambient traffic growth up through 2015, occupancy of the related projects and the provision of parking per Parking Scenario No. 2 (Development Site E or Development Sites E and F) through 2015; and

- Existing Traffic Conditions plus one percent ambient traffic growth up through year 2015, occupancy of the related projects and the provisions of parking per Parking Scenarios No. 1 and No. 2 with implementation of Project mitigation measures, where necessary.

The traffic volumes for each new condition were added to the volumes in the prior condition to determine the change in capacity utilization at the study intersections. Summaries of the V/C ratios and LOS values for the study intersections during the A.M. and P.M. peak hours are shown in Table 7 on page 167 for Parking Scenario No. 1 and Table 8 on page 169 for Parking Scenario No. 2.

2015 With Ambient Growth Conditions

Growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors are assumed to be 1.0 percent per year, through 2015. This ambient growth incrementally increases the CMA ratios at all of the study intersections. As shown in Tables 7 and 8 on pages 167 through 170, 15 of the 18 study intersections are expected to continue operating at LOS D or better during the A.M. and P.M. peak commuter hours with the addition of ambient growth traffic. The following three intersections are anticipated to operate at LOS E or F during the peak hours with the addition of ambient growth traffic:

- Intersection No. 2: I-5 Freeway. SB Ramps and Mission Road
  A.M. Peak-Hour CMA Ratio = 1.099, LOS F;

- Intersection No. 5: Mission Road and Daly Street–Marengo Street
  P.M. Peak-Hour CMA Ratio = 0.944, LOS E; and

- Intersection No. 16: Soto Street and I-10 Freeway WB Ramps–Charlotte Street
  A.M. Peak-Hour CMA Ratio = 1.089, LOS F
  P.M. Peak-Hour CMA Ratio = 0.960, LOS E.

2015 with Related Projects

As presented in Tables 7 and 8, 14 of the 18 study intersections are forecasted to operate at LOS D or better during the A.M. and P.M. peak commuter hours with the addition of ambient growth traffic and the traffic due to the related projects. The following four intersections are anticipated to operate at LOS E or F during the peak hours shown below with the addition of ambient growth traffic and traffic due to the related projects:

- Intersection No. 2: I-5 Freeway SB Ramps and Mission Road
  A.M. Peak-Hour CMA Ratio = 1.160`, LOS F;

Table 7

PARKING SCENARIO NO. 1 SUMMARY OF VOLUME-TO-CAPACITY RATIOS AND LEVELS OF SERVICE A.M. AND P.M. PEAK HOURS

			2004 Existing		2015 w/Ambient Growth		2015 w/Related Projects		2015 w/ Parking Scenario No. 1				2015 w/ Parking Scenario No. 1 and Project Mitigation			
No	**Intersection**	**Peak Hour**	**V/C**	**LOS**	**V/C**	**LOS**	**V/C**	**LOS**	**V/C**	**LOS**	**Change V/C**	**Signif Impact**	**V/C**	**LOS**	**Change V/C**	**Signif Impact**
1	I-5 Freeway SB Off-Ramp/	A.M.	0.764	C	0.848	D	0.879	D	0.893	D	0.014	No	0.893	D	0.014	—
	Avenue 21-Main Street	P.M.	0.542	A	0.602	B	0.642	B	0.648	B	0.006	No	0.648	B	0.006	—
2	I-5 Freeway SB Ramps/	A.M.	0.980	E	1.099	F	1.160	F	1.213	F	0.053	Yes	0.905	E	-0.255	No
	Mission Road	P.M.	0.689	B	0.776	C	0.831	D	0.869	D	0.038	Yes	0.735	C	-0.096	No
3	I-5 Freeway NB Off-Ramp/	A.M.	0.585	A	0.655	B	0.699	B	0.776	C	0.077	Yes	0.621	B	-0.078	No
	Daly Street-Main Street	P.M.	0.465	A	0.520	A	0.553	A	0.577	A	0.024	No	0.462	A	-0.091	—
4	Daly Street/	A.M.	0.705	C	0.794	C	0.863	D	0.865	D	0.002	No	0.865	D	0.002	—
	Main Street	P.M.	0.593	A	0.669	B	0.733	C	0.754	C	0.021	No	0.754	C	0.021	—
5	Mission Road/	A.M.	0.754	C	0.840	D	0.904	E	0.911	E	0.007	No	0.911	E	0.007	—
	Daly Street-Marengo Street	P.M.	0.849	D	0.944	E	0.986	E	1.124	F	0.138	Yes	1.124	F	0.138	Yes
6	I-5 Freeway NB On-Ramp/	A.M.	0.624	B	0.692	B	0.735	C	0.752	C	0.017	No	0.668	B	-0.067	—
	Marengo Street	P.M.	0.730	C	0.811	D	0.840	D	0.914	E	0.074	Yes	0.753	C	-0.087	No
7	Mission Road/	A.M.	0.601	B	0.678	B	0.723	C	0.807	D	0.084	Yes	0.807	D	0.084	Yes
	Griffin Avenue-Zonal Avenue	P.M.	0.507	A	0.573	A	0.583	A	0.778	C	0.195	Yes	0.778	C	0.195	Yes
8	Mission Road/	A.M.	0.588	A	0.664	B	0.706	C	0.731	C	0.025	No	0.731	C	0.025	—
	Valley Boulevard	P.M.	0.639	B	0.720	C	0.749	C	0.753	C	0.004	No	0.753	C	0.004	—
9	Mission Road/	A.M.	0.692	B	0.779	C	0.812	D	0.822	D	0.010	No	0.822	D	0.010	—
	Main Street	P.M.	0.543	A	0.614	B	0.647	B	0.653	B	0.006	No	0.653	B	0.006	—
10	Biggy Street/	A.M.	0.717	C	0.796	C	0.724	C	0.836	D	0.112	Yes	0.735	C	0.011	No
	Zonal Avenue	P.M.	0.698	B	0.775	C	0.703	C	0.753	C	0.050	Yes	0.678	B	-0.025	No
11	San Pablo Street/	A.M.	0.241	A	0.278	A	0.301	A	0.315	A	0.014	No	0.315	A	0.014	—
	Valley Boulevard	P.M.	0.198	A	0.231	A	0.301	A	0.325	A	0.024	No	0.325	A	0.024	—
12	San Pablo Street/	A.M.	0.478	A	0.531	A	0.650	B	0.727	C	0.077	Yes	0.581	A	-0.069	No
	Alcazar Street	P.M.	0.511	A	0.567	A	0.705	C	0.737	C	0.032	No	0.590	A	-0.115	—

Table 7 (Continued)

PARKING SCENARIO NO. 1 SUMMARY OF VOLUME-TO-CAPACITY RATIOS AND LEVELS OF SERVICE A.M. AND P.M. PEAK HOURS

			2004 Existing		2015 w/Ambient Growth		2015 w/Related Projects		2015 w/ Parking Scenario No. 1				2015 w/ Parking Scenario No. 1 and Project Mitigation			
No	Intersection	Peak Hour	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Change V/C	Signif Impact	V/C	LOS	Change V/C	Signif Impact
13	San Pablo Street/	A.M.	0.470	A	0.508	A	0.524	A	0.601	B	0.077	No	0.601	B	0.077	—
	Eastlake Avenue-Norfolk Street	P.M.	0.379	A	0.410	A	0.503	A	0.580	A	0.077	No	0.580	A	0.077	—
14	San Pablo Street/	A.M.	0.782	C	0.868	D	0.508	A	0.692	B	0.184	No	0.554	A	0.046	—
	Zonal Avenue	P.M.	0.643	B	0.713	C	0.648	B	0.754	C	0.106	Yes	0.603	B	-0.045	No
15	Soto Street/	A.M.	0.788	C	0.886	D	0.860	D	0.878	D	0.018	No	0.878	D	0.018	—
	Alcazar Street	P.M.	0.576	A	0.651	B	0.738	C	0.759	C	0.021	No	0.759	C	0.021	—
16	Soto Street/ I-10 Freeway WB	A.M.	0.971	E	1.089	F	1.206	F	1.262	F	0.056	Yes	1.069	F	-0.137	No
	Ramps-Charlotte Street	P.M.	0.855	D	0.960	E	1.051	F	1.149	F	0.098	Yes	1.091	F	0.040	Yes
17	Soto Street/	A.M.	0.727	C	0.818	D	0.837	D	0.860	D	0.023	Yes	0.860	D	0.023	Yes
	Marengo Street	P.M.	0.751	C	0.844	D	0.948	E	1.000	E	0.052	Yes	1.000	E	0.052	Yes
18	Soto Street/ I-10 Freeway EB	A.M.	0.624	B	0.703	C	0.780	C	0.803	D	0.023	Yes	0.716	C	-0.064	No
	Off-Ramp-Wabash Avenue	P.M.	0.588	A	0.664	B	0.716	C	0.722	C	0.006	No	0.619	B	-0.097	—

Source: Linscott, Law & Greenspan, Engineers, 2005.

Table 8

PARKING SCENARIO NO. 2 SUMMARY OF VOLUME-TO-CAPACITY RATIOS AND LEVELS OF SERVICE A.M. AND P.M. PEAK HOURS

			2004 Existing		2015 w/Ambient Growth		2015 w/Related Projects		2015 w/Parking Scenario No. 2				2015 w/ Parking Scenario No. 2 and Project Mitigation			
No	Intersection	Peak Hour	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Change V/C	Signif Impact	V/C	LOS	Change V/C	Signif Impact
1	I-5 Freeway SB Off-Ramp/	A.M.	0.764	C	0.848	D	0.879	D	0.893	D	0.014	No	0.893	D	0.014	--
	Avenue 21-Main Street	P.M.	0.542	A	0.602	B	0.642	B	0.648	B	0.006	No	0.648	B	0.006	--
2	I-5 Freeway SB Ramps/	A.M.	0.980	E	1.099	F	1.160	F	1.213	F	0.053	Yes	0.905	E	-0.255	No
	Mission Road	P.M.	0.689	B	0.776	C	0.831	D	0.869	D	0.038	Yes	0.735	C	-0.096	No
3	I-5 Freeway NB Off-Ramp/	A.M.	0.585	A	0.655	B	0.699	B	0.755	C	0.056	Yes	0.604	B	-0.095	No
	Daly Street-Main Street	P.M.	0.465	A	0.520	A	0.553	A	0.572	A	0.019	No	0.457	A	-0.096	--
4	Daly Street/	A.M.	0.705	C	0.794	C	0.863	D	0.865	D	0.002	No	0.865	D	0.002	--
	Main Street	P.M.	0.593	A	0.669	B	0.733	C	0.749	C	0.016	No	0.749	C	0.016	--
5	Mission Road/	A.M.	0.754	C	0.840	D	0.904	E	0.911	E	0.007	No	0.911	E	0.007	--
	Daly Street-Marengo Street	P.M.	0.849	D	0.944	E	0.986	E	1.039	F	0.053	Yes	1.039	F	0.053	Yes
6	I-5 Freeway NB On-Ramp/	A.M.	0.624	B	0.692	B	0.735	C	0.747	C	0.012	No	0.666	B	-0.069	--
	Marengo Street	P.M.	0.730	C	0.811	D	0.840	D	0.891	D	0.051	Yes	0.753	C	-0.087	No
7	Mission Road/	A.M.	0.601	B	0.678	B	0.723	C	0.734	C	0.011	No	0.734	C	0.011	--
	Griffin Avenue-Zonal Avenue	P.M.	0.507	A	0.573	A	0.583	A	0.605	B	0.022	No	0.605	B	0.022	--
8	Mission Road/	A.M.	0.588	A	0.664	B	0.706	B	0.749	C	0.043	Yes	0.749	C	0.043	Yes
	Valley Boulevard	P.M.	0.639	B	0.720	C	0.749	C	0.760	C	0.011	No	0.760	C	0.011	--
9	Mission Road/	A.M.	0.692	B	0.779	C	0.812	D	0.820	D	0.008	No	0.820	D	0.008	--
	Main Street	P.M.	0.543	A	0.614	B	0.647	B	0.666	B	0.019	No	0.666	B	0.019	--
10	Biggy Street/	A.M.	0.717	C	0.796	C	0.724	C	0.724	C	0.000	No	0.724	C	0.000	--
	Zonal Avenue	P.M.	0.698	B	0.775	C	0.703	C	0.703	C	0.000	No	0.703	C	0.000	--
11	San Pablo Street/	A.M.	0.241	A	0.278	A	0.301	A	0.355	A	0.054	No	0.355	A	0.054	--
	Valley Boulevard	P.M.	0.198	A	0.231	A	0.301	A	0.403	A	0.102	No	0.403	A	0.102	--
12	San Pablo Street/	A.M.	0.478	A	0.531	A	0.650	B	0.804	D	0.154	Yes	0.643	B	-0.007	No
	Alcazar Street	P.M.	0.511	A	0.567	A	0.705	C	0.832	D	0.127	Yes	0.666	B	-0.039	No

Table 8 (Continued)

PARKING SCENARIO NO. 2 SUMMARY OF VOLUME-TO-CAPACITY RATIOS AND LEVELS OF SERVICE A.M. AND P.M. PEAK HOURS

			2004 Existing		2015 w/Ambient Growth		2015 w/Related Projects		2015 w/Parking Scenario No. 2				2015 w/ Parking Scenario No. 2 and Project Mitigation			
No	Intersection	Peak Hour	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Change V/C	Signif Impact	V/C	LOS	Change V/C	Signif Impact
13	San Pablo Street/	A.M.	0.470	A	0.508	A	0.524	A	0.542	A	0.018	No	0.542	A	0.018	--
	Eastlake Avenue-Norfolk Street	P.M.	0.379	A	0.410	A	0.503	A	0.545	A	0.042	No	0.545	A	0.042	--
14	San Pablo Street/	A.M.	0.782	C	0.868	D	0.508	A	0.553	A	0.045	No	0.443	A	-0.065	--
	Zonal Avenue	P.M.	0.643	B	0.713	C	0.648	B	0.724	C	0.076	Yes	0.580	A	-0.068	No
15	Soto Street/	A.M.	0.788	C	0.886	D	0.860	D	1.017	F	0.157	Yes	0.856	D	-0.004	No
	Alcazar Street	P.M.	0.576	A	0.651	B	0.738	C	0.800	C	0.062	Yes	0.732	C	-0.006	No
16	Soto Street/ I-10 Freeway WB	A.M.	0.971	E	1.089	F	1.206	F	1.299	F	0.093	Yes	1.106	F	-0.100	No
	Ramps-Charlotte Street	P.M.	0.855	D	0.960	E	1.051	F	1.111	F	0.060	Yes	1.053	F	0.002	No
17	Soto Street/	A.M.	0.727	C	0.818	D	0.837	D	0.877	D	0.040	Yes	0.877	D	0.040	Yes
	Marengo Street	P.M.	0.751	C	0.844	D	0.948	E	1.016	F	0.068	Yes	1.016	F	0.068	Yes
18	Soto Street/ I-10 Freeway EB	A.M.	0.624	B	0.703	C	0.780	C	0.826	D	0.046	Yes	0.739	C	-0.041	No
	Off-Ramp-Wabash Avenue	P.M.	0.588	A	0.664	B	0.716	C	0.728	C	0.012	No	0.625	B	-0.091	--

Source: Linscott, Law & Greenspan, Engineers, 2005.

- Intersection No. 5: Mission Road and Daly Street–Marengo Street
  A.M. Peak-Hour CMA Ratio = 0.904, LOS E;
  P.M. Peak-Hour CMA Ratio = 0.986, LOS E;

- Intersection No. 16: Soto Street and I-10 Freeway WB Ramps–Charlotte Street
  A.M. Peak-Hour CMA Ratio = 1.206, LOS F;
  P.M. Peak-Hour CMA Ratio = 1.051, LOS F; and

- Intersection No. 17: Soto Street and Marengo Street
  P.M. Peak-Hour CMA Ratio = 0.948, LOS E.

Year 2015 with Parking Scenario No. 1

As shown in Table 7 on page 167, the application of LADOT's threshold criteria to 2015 "With Parking Scenario No. 1" conditions indicates that the proposed Project would create significant impacts at 11 of the 18 study intersections during the A.M. and/or P.M. peak commuter hours. The proposed Project is anticipated to create significant impacts at the following eleven intersections:

- Intersection No. 2: I-5 Freeway SB Ramps and Mission Road
  A.M. Peak-Hour CMA Ratio increase of 0.053 [1.160 to 1.213 (LOS F)]
  P.M. Peak-Hour CMA Ratio increase of 0.038 [0.831 to 0.869 (LOS D)];

- Intersection No. 3: I-5 Freeway NB Off-Ramp and Daly Street–Main Street
  A.M. Peak-Hour CMA Ratio increase of 0.077 [0.699 to 0.776 (LOS C)];

- Intersection No. 5: Mission Road and Daly Street–Marengo Street
  P.M. Peak-Hour CMA Ratio increase of 0.138 [0.986to 1.124 (LOS F)];

- Intersection No. 6: I-5 Freeway NB On-Ramp and Marengo Street
  P.M. Peak-Hour CMA Ratio increase of 0.074 [0.840 to 0.914 (LOS E)];

- Intersection No. 7: Mission Road and Griffin Avenue–Zonal Avenue
  A.M. Peak-Hour CMA Ratio increase of 0.084 [0.723 to 0.807 (LOS D)]
  P.M. Peak-Hour CMA Ratio increase of 0.195 [0.583 to 0.778 (LOS C)];

- Intersection No. 10: Biggy Street and Zonal Avenue
  A.M. Peak-Hour CMA Ratio increase of 0.112 [0.724 to 0.836 (LOS D)]
  P.M. Peak-Hour CMA Ratio increase of 0.050 [0.703 to 0.753 (LOS C)];

- Intersection No. 12: San Pablo Street and Alcazar Street
  A.M. Peak-Hour CMA Ratio increase of 0.077 [0.650 to 0.727 (LOS C)];

- Intersection No. 14: San Pablo Street and Zonal Avenue
  P.M. Peak-Hour CMA Ratio increase of 0.106 [0.648 to 0.754 (LOS C)];

- Intersection No. 16: Soto Street and I-10 Freeway WB Ramps–Charlotte Street
  A.M. Peak-Hour CMA Ratio increase of 0.056 [1.206 to 1.262 (LOS F)]
  P.M. Peak-Hour CMA Ratio increase of 0.098 [1.051 to 1.149 (LOS F)];

- Intersection No. 17: Soto Street and Marengo Street
  A.M. Peak-Hour CMA Ratio increase of 0.023 [0.837 to 0.860 (LOS D)]
  P.M. Peak-Hour CMA Ratio increase of 0.052 [0.948 to 1.000 (LOS E)]; and

- Intersection No. 18: Soto Street and I-10 Freeway EB Off-Ramp–Wabash Avenue
  A.M. Peak-Hour CMA Ratio increase of 0.023 [0.780 to 0.803 (LOS D)]

As shown in Table 7 on page 167, incremental but less than significant impacts are forecasted to occur at the remaining seven study intersections due to development of the proposed Project under Parking Scenario No. 1.

Year 2015 with Parking Scenario No. 2

As shown in Table 8 on page 169, the application of LADOT's threshold criteria to 2015 "With Parking Scenario No. 2" conditions indicate that the proposed Project would create significant impacts at 11 of the 18 study intersections during the A.M. and/or P.M. peak commuter hours. The proposed Project is anticipated to create significant impacts at the following eleven intersections:

- Intersection No. 2: I-5 Freeway SB Ramps and Mission Road
  A.M. Peak-Hour CMA Ratio increase of 0.053 [1.160 to 1.213 (LOS F)]
  P.M. Peak-Hour CMA Ratio increase of 0.038 [0.831 to 0.869 (LOS D)];

- Intersection No. 3: I-5 Freeway NB Off-Ramp and Daly Street–Main Street
  A.M. Peak-Hour CMA Ratio increase of 0.056 [0.699 to 0.755 (LOS C)];

- Intersection No. 5: Mission Road and Daly Street–Marengo Street
  P.M. Peak-Hour CMA Ratio increase of 0.053 [0.986 to 1.039 (LOS F)];

- Intersection No. 6: I-5 Freeway NB On-Ramp and Marengo Street
  P.M. Peak-Hour CMA Ratio increase of 0.051 [0.840 to 0.891 (LOS D)];

- Intersection No. 8: Mission Road and Valley Boulevard
  A.M. Peak-Hour CMA Ratio increase of 0.043 [0.706 to 0.749 (LOS C)];

- Intersection No. 12: San Pablo Street and Alcazar Street
  A.M. Peak-Hour CMA Ratio increase of 0.154 [0.650 to 0.804 (LOS D)]
  P.M. Peak-Hour CMA Ratio increase of 0.127 [0.705 to 0.832 (LOS D)];

- Intersection No. 14: San Pablo Street and Zonal Avenue
  P.M. Peak-Hour CMA Ratio increase of 0.076 [0.648 to 0.724 (LOS C)];

- Intersection No. 15: Soto Street and Alcazar Street
  A.M. Peak-Hour CMA Ratio increase of 0.157 [0.860 to 1.017 (LOS F)]
  P.M. Peak-Hour CMA Ratio increase of 0.062 [0.738 to 0.800 (LOS C)];

- Intersection No. 16: Soto Street and I-10 Freeway WB Ramps–Charlotte Street
  A.M. Peak-Hour CMA Ratio increase of 0.093 [1.206 to 1.299 (LOS F)]
  P.M. Peak-Hour CMA Ratio increase of 0.060 [1.051 to 1.111 (LOS F)];

- Intersection No. 17: Soto Street and Marengo Street
  A.M. Peak-Hour CMA Ratio increase of 0.040 [0.837 to 0.877 (LOS D)]
  P.M. Peak-Hour CMA Ratio increase of 0.068 [0.948 to 1.016 (LOS F)]; and

- Intersection No. 18: Soto Street and I-10 Freeway EB Off-Ramp–Wabash Avenue
  A.M. Peak-Hour CMA Ratio increase of 0.046 [0.780 to 0.826 (LOS D)].

As shown in Table 8, incremental but less than significant impacts are forecasted at the remaining seven study intersections due to development of the proposed Project under Parking Scenario No. 2.

(c) CMP Analysis

The Congestion Management Program (CMP) is a state-mandated program enacted by the State Legislature with the passage of Proposition 111 in 1990. The program is intended to address the impact of local growth on the regional transportation system. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. The MTA, the Local CMP agency, has established a countywide approach to implement the statutory requirements of the CMP. The Countywide approach includes designating a highway network that includes all state highways and principal arterials within the County and monitoring the network's LOS standards. This monitoring of the CMP network is one of the responsibilities of local jurisdictions. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to demonstrate conformance with the Countywide plan. All development projects, which are required to prepare an EIR, are subject to the Land Use Analysis program of the CMP. This requirement is to provide decision-makers with the project-specific traffic impacts created by projects on the CMP highway network.

Impacts on Freeways

As required by the 2004 Congestion Management Program for Los Angeles County, Linscott, Law and Greenspan, Engineers conducted a review of the designated monitoring locations on the CMP highway system to identify potential impacts. A significant CMP traffic impact is deemed to occur if the proposed Project increases traffic demand on a CMP facility by two percent of its capacity and/or causes or worsens a LOS F condition, as demonstrated by a Traffic Impact Analysis (TIA). A TIA must be considered if the proposed Project adds 150 or more peak-hour trips on any freeway segment, in either direction. Additionally, an analysis is required at all CMP arterial intersections where the proposed Project would add 50 or more trips during either the A.M. or P.M. peak hour. The I-10 Santa Monica Freeway at the East Los Angeles City Limit is the only CMP monitoring station located within the Project vicinity:

The proposed Project would add more than 150 trips (in either direction) during either the A.M. or P.M. weekday peak hours to the CMP freeway monitoring location. Therefore, a review of potential impacts to freeway monitoring locations which are part of the CMP highway system is required.

The impact of the proposed Project on the regional mainline freeway system has been determined based in part on the existing peak-hour traffic volumes data published in the *2003 Traffic Volumes on California State Highways*, State of California Department of Transportation (Caltrans, June 2004). The year 2003 traffic volumes were increased by Caltrans' annual average growth rate of 2.3 percent per year to reflect year 2004 existing conditions. This conservative growth rate is higher than the general traffic growth factors provided in the CMP and those approved by LADOT for the intersection analysis. The freeway impact analysis is based on a number of mainline lanes, including High Occupancy Vehicle lanes. Along some freeway segments, auxiliary lanes are provided to facilitate entering and exiting freeway traffic to and from the freeway mainline. Although some of the freeway auxiliary lanes accommodate through traffic, these have not been considered in the analysis so as to provide a conservative analysis of potential freeway impacts due to the proposed Project.

The freeway lane capacity has been assumed at 2,000 vehicles per lane per hour, although it is stated in the *Highway Capacity Manual*, published by the Transportation Research Board, 2000, that recent research indicates a capacity of 2,200 vehicles per hour for four lane freeways and 2,300 vehicles per lane per hour for six or more lane freeways. The analysis can therefore be considered conservative in that the lower capacity has been assumed.

In reviewing the following analysis, the following important factors must be considered:

- Freeway conditions would be largely controlled by the operation of the off-ramp intersections and the adjacent arterial streets. Based on a review of the capacity

calculations during the A.M. or P.M. peak hours, arterial roadway capacity exists at several locations. Operationally, the street system surrounding the HSC is already equipped with the City's Automated Traffic Surveillance and Control (ATSAC) system. The ATSAC system optimizes traffic operations on a system-wide basis at the area's signalized intersections.

- Mainline freeway improvements (e.g., physical improvements to add additional mainline freeway travel lanes) are difficult in that limited freeway right-of-way is currently available and in many cases has been maximized. Tremendous costs would be incurred to acquire additional right-of-way, which in most locations is not feasible.

The Caltrans traffic volume data referenced above is presented in several ways. First, the total daily peak-hour traffic volumes for various freeway segments statewide are noted (i.e., non-directional). In addition, factors are included in the Caltrans document which indicate the direction and magnitude of the peak-hour traffic volumes. These factors are then utilized to convert the Annual Average Daily Traffic (AADT) volumes to directional peak-hour traffic volumes for each freeway segment in the vicinity of the Project site.

The results of the freeway impact analysis during the A.M. and P.M. peak hours associated with the Project are summarized in Table 9 on page 176. As presented in Table 9, these increases in overall mainline freeway traffic volumes correspond to a D/C ratio increase ranging from 0.002 to 0.010, or equal to or less than one percent of the total capacity of the segments included in the analysis. This conclusion applies to both the 765,000 square foot and 585,000 square foot development scenarios, as well as any development that falls within this range of development. Thus, based on the CMP threshold criteria, no significant project-related mainline freeway impacts are anticipated along the I-10 Freeway.

Impacts at Intersections

The CMP TIA guidelines require that intersection monitoring locations must be examined if the proposed Project would add 50 or more trips during either the A.M. or P.M. weekday peak period. The proposed Project is not forecasted to add 50 or more trips during either the A.M. or P.M. peak hours at any CMP intersection monitoring locations which is the threshold for preparing a traffic impact assessment. Therefore, no further review of potential impacts to intersection monitoring locations which are part of the CMP highway system is required. The Project's impacts on CMP intersection monitoring locations are therefore considered less than significant.

Table 9

CMP FREEWAY IMPACT ANALYSIS A.M. AND P.M. PEAK HOURS
USC HEALTH SCIENCES CAMPUS PROJECT

No.	Freeway Segment	Peak Hour	Dir.	Peak-Hour Capacity	Year 2004 Existing Conditions			Year 2015 Future Pre-Project Conditions			Project Trip Ends [e]	Year 2015 Future w/ Proposed Project Conditions			D/C Increase With Project [g]	Significant Project Impact [h]
					Demand [a]	D/C [b]	LOS [c]	Demand [d]	D/C [b]	LOS [c]		Demand [f]	D/C [b]	LOS [c]		
1	I-10 Freeway at East Los	A.M.	EB	12,000	6,440	0.54	B	7,150	0.60	C	28	7,178	0.60	C	0.002	No
	Angeles City Limit (R19.67)	Peak	WB	12,000 [i]	10,430	0.87	D	11,580	0.97	E	123	11,703	0.98	E	0.010	No
		P.M.	EB	12,000	10,420	0.87	D	11,570	0.96	E	123	11,693	0.97	E	0.010	No
		Peak	WB	12,000 [i]	7,850	0.65	C	8,710	0.73	C	32	8,742	0.73	C	0.003	No

[a] *Source: "2003 Traffic Volumes on California State Highways," Caltrans, June 2004. The year 2003 volumes were increased by Caltrans' annual average growth rate of 2.3% per year to reflect year 2004 existing conditions.*
[b] *Demand-to-Capacity ratio (D/C) calculated based on a capacity of 2,000 vehicles per lane per hour applied to the through freeway lanes, including HOV lanes. Auxiliary lanes are excluded.*
[c] *Freeway mainline Levels of Service were based on the following D/C scale:*

D/C Ratio	LOS	D/C Ratio	LOS
0.000 to 0.350	A	1.001 to 1.250	F(0)
0.351 to 0.540	B	1.251 to 1.350	F(1)
0.541 to 0.770	C	1.351 to 1.450	F(2)
0.771 to 0.930	D	>1.450	F(3)
0.931 to 1.000	E		

[d] *An ambient growth rate of one percent (1%) per year was utilized to calculate the 2015 future pre-Project traffic volumes based on general traffic growth factors provide in the CMP.*
[e] *Based on the Project trip generation and trip distribution for the proposed USC Health Sciences Campus Project.*
[f] *The 2015 Future With Project traffic volumes were derived by adding the Future Pre-Project traffic volumes with the Proposed Project volumes.*
[g] *Derived by subtracting the D/C ratio of the future Pre-Project conditions from the Future With Project conditions.*
[h] *Per the "2004 Congestion Management Program for Los Angeles County," July, 2004, a significant impact occurs when the proposed project increases traffic demand on the freeway system by 2% of capacity (D/C > 0.02).*
[i] *Source: Appendix A of the "2004 Congestion Management Program for Los Angeles County," July, 2004.*

Source: Linscott, Law & Greenspan, Engineers, May 2005.

(2) Construction Traffic-Related Impacts

Traffic impacts from construction activities would be expected to occur as a result of the following three types of activities:

- Increases in truck traffic associated with the removal or import of fill materials and delivery of construction materials;
- Increases in automobile traffic associated with construction workers traveling to and from the site; and
- Reductions in existing street capacity from temporary lane closures necessary for the construction of roadway improvements, utility relocation and drainage facilities.

Temporary lane closures are anticipated during Project construction only on those streets located within the HSC. As such, it is anticipated that temporary lane closures may occur on San Pablo Street, Alacazar Street, Eastlake Avenue and Zonal Avenue. Construction for this type of street work is normally limited to between 9:00 A.M. and 3:00 P.M. Detours around the construction site(s) as a result of lane closures would not be required. Flag men, however would be used to control traffic movement during ingress or egress of trucks and heavy equipment from the construction site(s).

Depending upon the specific nature of the construction activity (e.g., demolition, excavation, or concrete pouring), it is forecasted that the majority of truck traffic would be distributed evenly across the workday. Approvals required by the City of Los Angeles for implementation of the proposed Project include a Truck Haul Route program approved by LADOT. Based on preliminary review, haul trucks and delivery trucks would generally travel along the I-5 Freeway, I-10 Freeway, Mission Road, Soto Street, Valley Boulevard, and Marengo Street to access and depart the Project Site.

The estimated number of trucks needed for hauling and delivery are generalized according to the following three construction phases: (1) demolition, (2) site grading, and (3) building construction. The numbers of off-site trucks (i.e., haul trucks, concrete trucks and delivery trucks) are assumed for a peak construction day. It is forecasted that the maximum number of construction trips would be 448 trips per day. In general, it is anticipated that construction workers would arrive and depart the Project site during off-peak hours and that construction-related traffic would be largely freeway oriented. Construction workers would arrive and depart via nearby on- off-ramps serving the I-5 Freeway and the I-10 Freeway. The most commonly used freeway would be nearest the Project site, including the northbound and southbound on/off-ramps at Mission Road and Avenue 21, and the eastbound and westbound on/off ramps at Soto Street. The construction work force would likely be from all parts of the

Los Angeles region and are, thereby assumed to arrive from all directions. The majority of construction workers are expected to arrive and depart the Project site during off-peak hours (i.e. arrive prior to 7:00 A.M. and depart between 3:00 and 4:00 P.M.), thereby avoiding generating trips during the 7:00 to 9:00 A.M. and 4:00 to 6:00 P.M. peak periods. Consequently, their impact on peak-hour traffic in the vicinity of the Project site would be limited. Given the off-peak nature of construction worker traffic, a less than significant impact is anticipated with regard to the local roadway network as well as the freeway mainline.

With the required haul route approval and other construction management practices described above, construction activities would not create any substantial temporary inconvenience to auto travelers, bus riders, and pedestrians during construction. Therefore, Project impacts with regard to construction traffic would be less than significant. Impacts would be further reduced with the implementation of the following design features:

- Maintain existing access for land uses in proximity of the Project site;
- Limit any potential lane closures to off-peak travel periods;
- Schedule receipt of construction materials to non-peak travel periods, to the extent possible;
- Coordinate deliveries to reduce the potential of trucks waiting to unload for protracted periods of time; and
- Prohibit parking by construction workers on adjacent streets and direct construction workers to available parking within the Health Sciences Campus.

(3) Union Pacific Railroad Crossing

An at-grade Union Pacific Railroad (UPRR) crossing currently exists on San Pablo Street, immediately south of Valley Boulevard. This rail crossing is equipped with advance warning signals and control gates situated north and south of the tracks. The rail line that is protected by these controls extends from Downtown Los Angeles easterly to the Inland Empire and points east. Trains currently slow or stop at this crossing, causing vehicle queuing and occasionally rerouting of local traffic, for periods as long as 18 minutes based on field observations.

Based on the trip distribution and assignment of Project-related trips for both Parking Scenario No.1 and Parking Scenario No. 2, it is anticipated that additional vehicle queuing and the rerouting of Project traffic may occur due to UPRR trains periodically blocking north-south traffic at this location.

The redistribution of traffic under existing conditions as well as future without Project conditions is anticipated to result temporarily in increased traffic volumes at other intersections. The proposed Project is anticipated to contribute additional incremental traffic volumes at these other intersections during these temporary periods. As such, it is conservatively concluded that a Project-related potentially significant impact could occur during the periods of time when traffic is diverted due to train(s) blocking San Pablo Street. This potential impact is very temporary in nature (i.e., occurring approximately 12 times per day and lasting in duration between less than one and three minutes about half the time and occasionally lasting up to 18 minutes) and would be alleviated once San Pablo Street is available as a through traffic route. Based on recent observations, the railroad crossing gates are engaged approximately 12 times per day for train crossing and track service activities. San Pablo Street is typically blocked for a duration ranging from a few minutes to as long as approximately twenty minutes.

Public Utilities Commission (PUC) ordinance limits the duration that trains can block at-grade crossings. PUC General Order No. 135[24] states the following:

> 1. TRAIN MOVEMENTS—Except as provided in Paragraph 5, a public grade crossing which is blocked by a stopped train, other than a passenger train, must be opened within 10 minutes, unless no vehicle or pedestrian is waiting at the crossing. Such a cleared crossing must be left open until it is known that the train is ready to depart. When recoupling such a train at the crossing, movement must be made promptly, consistent with safety."

It is recommended that enforcement of the ordinance be actively pursued and that efforts be made to relocate the location of train stoppages to a point east or west of San Pablo Street. The UPRR crossings immediately west of San Pablo Street are grade separated; however, crossings to the east (i.e., east of Soto Street) are at-grade. Additionally, it is acknowledged that enforcement of this ordinance is outside the authority of decision-makers associated with the proposed Project. Thus, absent either enforcement of the PUC ordinance or a relocation of the train stoppage point, the Project would potentially contribute to an existing significant impact.

In addition, the subject crossing is included in the Alameda Corridor East (ACE) project.[25] The ACE project is located in the San Gabriel Valley between East Los Angeles and the City of Pomona. The ACE project is intended to improve mobility, enhance safety and mitigate the effects of increased freight rail traffic from the Ports of Long Beach and Los Angeles. The ACE project is being implemented in two phases and consists of improvements at

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[24] *Public Utilities Commission of the State of California, Regulations Governing the Occupancy of Public Grade Crossings by Railroads, Adopted September 11, 1974. Effective November 1, 1974. Decision No. 83446 in Case No. 8949.*

[25] *Source: www.theaceproject.org.*

55 crossings. The first phase includes safety upgrades, traffic signal control measures, roadway widening at the railroad crossings and ten grade separation projects to physically separate rail and vehicular traffic. The San Pablo Street crossing was identified for potential safety and/or traffic signal control measure improvements. The second phase of the ACE project includes ten additional grade separation projects. Both phases of the ACE project are planned to be completed in 2008.

(4) Parking Impacts

(a) Design Features

Project parking could be satisfied by parking facilities within Development Sites B, C, D, E, and F, as well as within existing HSC parking facilities. Although parking may be provided in any combination on Development Sites B, C, D, E and F, in order to provide a conservative analysis of the project's potential transportation impacts, two parking scenarios (Parking Scenario No. 1 and Parking Scenario No. 2) have been analyzed that reflect the greatest concentration of Project-related traffic on the local roadway system. As such, should parking be proposed for any other combination of sites (i.e., including sites from the east end or west end of the campus), off-site impacts would be within the range identified under the two Parking Scenarios.

The City of Los Angeles generally determines parking requirements for an environment such as the HSC on a campus-wide basis, rather than on a building-by-building or lot-by-lot basis. For example, a parking space on one block at the HSC may be considered to satisfy the LAMC parking requirement for a building located across the street.

(b) Future Parking Demand

The parking supply on the HSC would be modified based on the mix of Research and Development and Medical Office uses. Parking demand for two examples is forecast by multiplying the building floor area by the calculated parking demand rate of 2.79 spaces per 1,000 square feet of floor area. In order to describe the range of potential future parking demand, the development descriptions as previously described were utilized and are summarized below:

765,000 Square Foot Development Scenario Example

Research & Development

- [(720,000 SF × 0.93[26] = 669,600 SF) ÷ 1,000 SF] = 669.6 × 2.79 SP = 1,868 Spaces

Medical Office

- [(45,000 SF × 0.93 = 41,850) ÷ 1,000 SF] = 41.85 × 2.79 SP = 117 Spaces

Future parking demand for this example: 1,985 Spaces

585,000 Square Foot Development Scenario Example

Research & Development

- [(465,000 SF × 0.93 = 432,450 SF) ÷ 1,000 SF] = 432.45 × 2.79 SP = 1,207 Spaces

Medical Office

- [(120,000 SF × 0.93 = 111,600 SF) ÷ 1,000 SF] = 111.6 × 2.79 SP = 311 Spaces

Future parking demand for this example: 1,518 Spaces

Based on a peak existing demand of 3,132 spaces and a future peak demand of up to approximately 1,985 spaces, a total future peak parking demand of 5,117 spaces (3,132 + 1,985 = 5,117 spaces) is calculated. This peak parking demand can be considered conservative in that the existing demand includes 75 percent of area on-street parking as part of the rate, as well as all of the USC allocated spaces in the University Hospital parking structure, the leased spaces from the County and demand at the dialysis center (TRC Lot). The Project's forecasted demand also exceeds the LAMC parking requirement which results in a maximum requirement of 1,548 spaces for the proposed Project.[27] As it is anticipated that the Project would provide an increase

[26] *LAMC (Section 12.21) parking requirements are based on "gross" floor areas excluding elevator shafts, mechanical rooms, stairwells, storage. On the basis of the review of previous HSC building plans by the Department of Building and Safety, the Project's floor area is multiplied by 0.93 to reflect excluded areas.*

[27] *Under the LAMC, 720,000 square feet Research and Development = 1,339 spaces and 45,000 square feet of Medical Office = 209 spaces (total = 1,548 spaces); 465,000 square feet of Research and Development = 865 spaces; and 120,000 square feet of Medical Office = 558 spaces (total =1,423 spaces).*

of at least 2,072 spaces, the Project would exceed both the parking requirements set forth in the LAMC as well as future parking demand and as such, a less than significant impact would occur.

Project parking demand could be satisfied by parking facilities within Development Sites B, C, D, E, and F, as well as within existing HSC parking facilities. For example, some existing parking on the Eastlake Lot may be removed to accommodate future development on Development Site A while the spaces in the San Pablo Lot may be removed to accommodate future development on Development Site B.

Under Project Scenario No. 1, parking may be provided on the site of Development Site C (access via Zonal). Development Site C could accommodate a parking structure containing 2,800 spaces. Under Project Scenario No. 2, parking may be provided on Development Site E (access via San Pablo Street and Alcazar Street) and Development Site F (access via San Pablo Street). It is anticipated that Development Site E and/or Development Site F could accommodate parking facilities that would provide a parking supply similar to the net increase anticipated should a parking structure be developed on Development Site C (i.e., 2,800 future spaces less 548 existing spaces equals 2,252). Thus, a net increase of 2,252 spaces is calculated for future parking facilities under both parking scenarios for the provision of parking for the proposed Project. In addition, it is assumed that this net increase in Project parking may be provided in parking facilities within a combination of Development Sites B, C, D, E, and F, as well as within existing HSC parking facilities. As the distances between the proposed Development Sites and the parking facilities may be greater than 750 feet, a variance with regard to Section 12.21.A.4(g) of the Los Angeles Municipal Code may be required.

With the forecasted increase in parking of 2,072 spaces, the future parking supply for the USC Health Sciences Campus would increase to approximately 5,870 spaces (i.e., 3,798 existing + 2,072 net future = 5,870 spaces). Thus, the future parking supply of 5,870 spaces is anticipated to satisfy and, in fact, substantially exceed the peak future parking demand of 5,117 spaces at the HSC.

Therefore, the impact of the Project relative to parking demand would be less than significant.

(5) Project Access

The following four key intersections provide primary Project Site access to the HSC under either of the two parking scenarios

- Int. No. 7: Mission Road/Griffin Avenue–Zonal Avenue;

- Int. No. 11: San Pablo Street/Valley Boulevard;
- Int. No.14: San Pablo Street/Zonal Avenue; and
- Int. No.15: Soto Street/Alcazar Street.

All of these intersections are projected to operate at LOS D or better under the future cumulative analysis conditions (i.e., future with Project and Project mitigation conditions). Thus, Project development would result in a less than significant Project access impact. In addition, the Applicant may propose the vacation of Henry Street, which is shown on the Northeast Los Angeles Community Plan Generalized Circulation Map, but has been paved and out of circulation for at least twenty years. The deletion of this street would not impact intersection operations, as Henry Street does not exist. Furthermore, if Henry Street were available, it would not change Project impacts at any of the studied intersections. In addition, LADOT did not require the analysis of Henry Street as it does not currently connect to Zonal Avenue, nor is it proposed as part of the potential development of Development Site C. As the vacation of Henry Street would have no impact on the Project area or the existing street network, a less than significant transportation impact would result from the vacation of Henry Street.

(6) Public Transit

As required by the 2004 Congestion Management Program for Los Angeles County, an analysis of potential Project impacts on existing transit service has been conducted. Impacts on public transit would occur if the seating capacity of the transit system serving the Project study area were exceeded.

The Project's trip-generation forecast was adjusted by values set forth in the CMP (i.e., person trips equal 1.4 times vehicle trips and transit trips equals 3.5 percent of the total person trips) to estimate number of transit trips generated by the Proposed Project. Pursuant to the CMP guidelines, the proposed Project is forecast to generate a demand for 37 transit trips (30 inbound trips and 7 outbound trips) during the weekday A.M. peak hour. Similarly, during the weekday P.M. peak hour, the proposed Project is anticipated to generate a demand for 38 transit trips (8 inbound trips and 30 outbound trips). Over a 24-hour period the proposed Project is forecast to generate a demand for 378 daily transit trips. The calculations are as follows:

- A.M. Peak-Hour Trips = 753 x 1.4 x 0.035 = 37 Transit trips
- P.M. Peak-Hour trips = 774 x 1.4 x 0.035 = 38 Transit Trips
- Daily Trips = 7,715 x 1.4 x 0.035 = 378 Transit Trips

It is anticipated that the existing transit service in the Project area would be able to adequately accommodate the transit trips generated by the Project. Thus, given the relatively

few number of transit trips generated, less than significant impacts on existing and future transit service in the Project area are expected to occur as a result of the proposed Project.

(7) Neighborhood Streets

As Project traffic is anticipated to utilize the major and secondary highways adjacent to the HSC as well as internal streets within the campus, a formal neighborhood street segment analysis was not deemed necessary by LADOT. As such, Project development would result in a less than significant impact with regard to Project traffic traveling on neighborhood streets.

(8) Additional Development Scenarios

The analysis of Parking Scenario Nos. 1 and 2, as described above, identify the range of intersection and freeway impacts that could result at buildout of the proposed Project. As such, all development scenarios that could be developed under the Project would fall within the range established by Parking Scenario Nos. 1 and 2. As such, the implementation of development scenarios other than Parking Scenario Nos. 1 and 2 could result in a significant impacts at the intersections identified as such in Tables 7 and 8 on pages 167 through 170. The CMP analysis presented above is reflective of conditions under either Parking Scenario No.1 or 2. As these Parking Scenarios define the range of Project impacts, implementation of any development scenario would result in impacts that are equal to, or less than, those identified above. As such, implementation of all potential development scenarios would have a less than significant impact with regard to the CMP.

Peak construction levels would be the same regardless of the mix of land uses that is developed. As such, the construction impacts identified above would be applicable to any development scenario that may be developed under the proposed Project. Therefore, construction impacts attributable to any permitted development scenario would result in less than significant impacts.

As intersection impacts under the additional development scenarios would be within the range established by Parking Scenario Nos. 1 and 2, impacts of the additional development scenarios relative to the Union Pacific Railroad Crossing would be similarly significant. As the availability of parking under the additional development scenarios would be comparable to that available under the proposed Project, potential parking impacts with regard to LAMC requirements and parking demand, as is the case with the proposed Project, would be less than significant.

Overall tripmaking by any permitted development scenario would be comparable, although not exceeding, that of the Project as analyzed above. As such, impacts of any permitted development scenario on Project access, as is concluded above, would be less than significant.

Transit trip generation is based on total vehicle trips. Thus, transit impacts resulting from the development of any permitted development scenario would be less than significant since the impacts of the Project, as concluded above, would be less than significant and the number of vehicle trips generated by any additional permitted development scenario would not exceed those of the Project as analyzed above.

4. CUMULATIVE IMPACTS

a. Traffic and Circulation

All of the identified related projects have been considered for the purpose of assessing cumulative traffic impacts. Cumulative construction traffic impacts would only occur during periods when construction of one or more of the related projects is occurring at the same time that Project construction is anticipated to occur and then only to the extent that construction traffic is traveling on the same streets at the same time. Since this type of concurrent activity is anticipated to be limited in its occurrence, cumulative construction impacts are concluded to be less than significant.

Cumulative effects on intersection operations attributable to traffic from ambient growth and related projects have been incorporated into the above analysis of the future baseline condition. A comparison of 2015 with related project conditions (see Table 7 on page 167 and Table 8 on page 169) indicates that cumulative development would result in four intersections operating at LOS E or F. Based on the stated significance thresholds, cumulative development would result in impacts to 13 of the 18 study intersections. Since no guarantee exists that mitigation measures would be implemented with those projects, it is conservatively concluded that cumulative development would yield a significant cumulative traffic impact on intersection operations.

Cumulative growth in the Project area would result in increases in traffic on street and freeway segments in the Project vicinity. However, it is anticipated that related projects contributing to cumulative growth would be required on an individual basis to mitigate any significant traffic impacts to the extent possible to less than significant levels.

b. Parking

The Project in combination with the related projects would not result in any adverse impacts to parking. The related projects, as identified in Section III.B. of this Draft EIR, 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. No significant cumulative impacts to parking are anticipated.

5. MITIGATION MEASURES

a. Intersections

Mitigation measures are identified below which would reduce the Project's significant traffic impacts at buildout to the extent feasible. Implementation of the mitigation measures would be phased commensurate with the development of an individual building or buildings. The process for implementing the Project's mitigation measures would be determined by LADOT as individual building plans are submitted to the City of Los Angeles. At that time, LADOT would be consulted to determine the appropriate mitigation measures to be implemented based on the square footage proposed for development and the location of the parking that would support the development. The phasing program for the mitigation measures identified below for both Parking Scenarios is presented in Appendix F of the Traffic Impact Analysis (see Appendix B of this Draft EIR).

In summary, eleven of the 18 study intersections would be significantly impacted by the development of the proposed Project under Project Scenario No. 1 and Project Scenario No. 2. To reduce the proposed Project's significant transportation impacts to the extent feasible the following mitigation measures are proposed.

(1) Parking Scenario No. 1 Mitigation

Mitigation Measure C-1: Intersection No. 2: I-5 Freeway Southbound and Mission Road—Widen the southbound off-ramp to provide an additional lane. The off-ramp would provide one left-turn only lane, one combination left-turn/through lane and one right-turn only lane. Modify the existing traffic signal to facilitate traffic flow.

Mitigation Measure C-2: Intersection No. 3: I-5 Freeway Northbound Off-Ramp and Daly Street–Main Street—Install a traffic signal at this location to facilitate traffic flow during the A.M. peak commuter hour.

Mitigation Measure C-3: Intersection No. 6: I-5 Freeway Northbound On-Ramp and Marengo Street—Lengthen the red curb along the south side of Marengo Street, west of the on-ramp, and install an eastbound right-turn-only lane.

Mitigation Measure C-4: Intersection No. 10: Biggy Street and Zonal Avenue—Restripe the southbound approach to provide one left turn/through lane and one right-turn-only lane. Re-stripe the eastbound approach to provide one left-turn lane and one optional through/right-turn-only lane.

Mitigation Measure C-5: Intersection No. 12: San Pablo Street and Alcazar Street—Install a traffic signal at this location.

Mitigation Measure C-6 Intersection No. 14: San Pablo Street and Zonal Avenue—Install a traffic signal at this location.

Mitigation Measure C-7: Intersection No. 16: Soto Street and I-10 Freeway Westbound Ramps–Charlotte Street—Implement the LADOT-approved mitigation measure associated with the HNRT project, including widening of the I-10 Freeway Westbound Off-ramp to provide an additional right-turn only lane.

Mitigation Measure C-8: Intersection No. 17: Soto Street and Marengo Street—Remove the raised median islands on Soto Street, north and south of Marengo Street. Re-stripe the northbound and southbound approaches to provide dual left-turn lanes, two through lanes and one combination through/right-turn lane. Provide traffic signal modification at this intersection. This measure has only received conceptual approval at this time.

Mitigation Measure C-9: Intersection No. 18: Soto Street and I-10 Freeway Eastbound Off-Ramp–Wabash Avenue—Restripe Soto Street, south of Wabash Avenue, within the existing roadway pavement width, to provide an additional northbound through lane.

(2) Parking Scenario No. 2 Mitigation

Mitigation Measure C-10: Intersection No. 2: I-5 Freeway SB and Mission Road—Widen the southbound off-ramp to provide an additional lane. The off-ramp would provide one left-turn only lane, one combination left-turn/through lane and one right-turn only lane. Modify the existing traffic signal to facilitate traffic flow.

Mitigation Measure C-11: No. 3: I-5 Freeway NB Off-Ramp and Daly Street–Main Street—Install a traffic signal at this location.

Mitigation Measure C-12: Intersection No. 6: I-5 Freeway NB On-Ramp and Marengo Street—Lengthen the red curb along the south side of Marengo Street, west of the on-ramp, and install an eastbound right-turn-only lane.

Mitigation Measure C-13: Intersection No. 12: San Pablo Street and Alcazar Street—Install a traffic signal at this location.

Mitigation Measure C-14: Intersection No. 14: San Pablo Street and Zonal Avenue—Install a traffic signal at this location.

Mitigation Measure C-15: Intersection No. 15: Soto Street and Alcazar Street—Install a second northbound left-turn lane and widen along the south side of Alcazar Street, west of Soto Street, to provide a fourth eastbound approach lane (i.e., the eastbound approach would provide one left-turn lane, one combination left-through lane and two right-turn only lanes). Modify the traffic signal.

Mitigation Measure C-16: Intersection No. 16: Soto Street and I-10 Freeway WB Ramps–Charlotte Street—Implement the LADOT-approved mitigation measure associated with the HNRT project, including widening of the I-10 Freeway Westbound Off-ramp to provide an additional right-turn only lane.

Mitigation Measure C-17: Intersection No. 17: Soto Street and Marengo Street—Remove the raised median islands on Soto Street, north and south of Marengo Street. Re-stripe the northbound and southbound approaches to provide dual left-turn lanes, two through lanes and one combination through/right-turn lane. Provide traffic signal modification at this intersection. This measure has only received conceptual approval at this time.

Mitigation Measure C-18: Intersection No. 18: Soto Street and I-10 Freeway EB Off-Ramp–Wabash Avenue—Re-stripe Soto Street, south of Wabash Avenue, within the existing roadway pavement width to provide an additional northbound through lane.

6. SIGNIFICANCE AFTER MITIGATION

After implementation of the recommended mitigation measures, the impact of the proposed Project under Project Scenario No. 1 on study intersections during the A.M. and P.M. peak commuter hour would be reduced to less than significant levels for all but four locations (see Table 7 on page 167). Under Project Scenario No. 1, no feasible mitigation measures are available to reduce the traffic impact to a less than significant level at the Soto Street and I-10 Freeway Westbound Ramps/Charlotte Street intersection during the P.M. peak commuter hour; at the Mission Road and Griffin Avenue-Zonal Avenue intersection during the A.M. and P.M. peak commuter hours, and at the Mission Road/Daly Street-Marengo Street intersection during the

P.M. peak hour. The fourth location where a significant impact has been identified is the Soto Street and Marengo Street intersection. Project impacts at this intersection would be significant during the A.M. and P.M. peak commuter hours. The mitigation for the Soto Street and Marengo Street intersection, which is elevated above the I-10 Freeway and is entirely on a bridge structure, consists of the removal of the raised median islands on Soto Street, north and south of Marengo Street, restriping the northbound and southbound approaches to provide dual left-turn lanes, two through lanes and one combination through/right-turn lane, as well as a traffic signal modification. While these improvements would reduce the Project's significant impact at the Soto Street/Marengo Street intersection to a less than significant level, these improvements have only been conceptually approved by LADOT. As formal approval of the improvements has not occurred as of the publication of the Draft EIR, it is conservatively concluded that Project development would result in a significant traffic impact at the Soto Street/Marengo Street intersection. In the event the proposed improvements are approved by LADOT, the Project's significant impact at the Soto Street/Marengo Street intersection would be reduced to less than significant levels during both the A.M. and P.M. peak commuter hours. While the proposed Soto Street/Marengo Street intersection improvements would reduce the Project's traffic impacts to less than significant levels, the implementation of these measures may result in secondary construction impacts that are of note.

The intersection, including the traffic signals, is elevated above the I-10 Freeway and is entirely on a bridge structure. As a result, the implementation of the traffic signal modifications would require a special foundation. The installation of the special foundation may require a structural modification to the bridge structure itself. In the event that structural modifications to the bridge are not required, implementation of the proposed intersection improvements would consist of removing the raised medians on Soto Street and lane restriping in addition to the improvements to the traffic signal itself. It is anticipated that removal of the raised median islands on Soto Street would require the temporary closure of the nearest southbound and northbound travel lanes. Construction of all proposed intersection improvements would only occur during weekday, non-peak hours (between 9:00 A.M. and 3:00 P.M.). As these mid-day lane closures would not occur during either the A.M. or P.M. peak commuter travel periods and would be short-term in nature (i.e., one to two weeks), potential impacts are concluded to be less than significant. If it is determined through the design process that a special foundation for the traffic signal poles requires a structural modification to the bridge, the construction of measure would involve median removal, roadway restriping, traffic signal modification and potentially the closure of some I-10 Freeway mainline travel lanes during the off-peak periods. As the bridge reconstruction would likely take several months to complete, the potential closure of some mainline freeway travel lanes for this period of time is concluded to constitute a significant secondary impact.

Mitigation measures would reduce impacts to less than significant levels at all but three of the study intersections with implementation of Parking Scenario No. 2 (see Table 8 on page

169). No feasible mitigation measures are available to reduce the traffic impacts to a less than significant level at the Mission Road and Valley Boulevard intersection during the A.M. peak commuter hour, and at the Mission Road/Daly Street-Marengo Street intersection during the P.M. peak hour. The third location where a significant impact has been identified is the Soto Street and Marengo Street intersection. As is the case with Parking Scenario No. 1, Project impacts at this intersection would be significant during the A.M. and P.M. peak commuter hours. The mitigation, as well as the secondary impacts attributable to the implementation of the mitigation, would be the same as those identified above. As a result, implementation of the proposed mitigation may result in a significant secondary impact as a result of the potential need to close mainline freeway lanes during off-peak hours for a period of time that could last as long as several months.

Trains currently slow or stop at the existing at-grade Union Pacific Railroad crossing of San Pablo Street, immediately south of Valley Boulevard, causing vehicle queuing and occasionally rerouting of local traffic. An existing Public Utilities Commission ordinance limits the duration that trains can block at-grade crossings. However, it is acknowledged that enforcement of this ordinance is outside the authority of decision-makers associated with the proposed USC HSC project. Thus, absent either enforcement of the PUC ordinance or a relocation of the train stoppage point, the Project would potentially contribute to an existing significant impact. Project impacts on the balance of the traffic issues analyzed in this Section of the Draft EIR would be less than significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS
D. AIR QUALITY

1. INTRODUCTION

This section addresses the air emissions generated by the construction and operation (post-construction) of the proposed Project. The analysis also addresses the consistency of the proposed Project with the air quality policies set forth within the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan and the City of Los Angeles General Plan. The analysis of Project-generated air emissions focuses on whether the proposed Project would cause an exceedance of an ambient air quality standard or SCAQMD significance threshold.

2. ENVIRONMENTAL SETTING

a. Regulatory Setting

A number of statutes, regulations, plans and policies have been adopted that address air quality issues. The proposed Project Site and vicinity are subject to air quality regulations developed and implemented at the federal, State, and local levels. At the federal level, the United States Environmental Protection Agency (USEPA) is responsible for implementation of the Federal Clean Air Act (CAA). Some portions of the CAA (e.g., certain mobile source and other requirements) are implemented directly by the USEPA. Other portions of the CAA (e.g., stationary source requirements) are implemented by State and local agencies.

(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 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 the state submit and implement the

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 within the South Coast Air Basin (Basin), and as such is in an area designated a non-attainment area for certain pollutants that are regulated under the CAA.

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 which would most substantially affect the development of the proposed Project include Title I (Nonattainment 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 (O_3); (2) nitrogen dioxide (NO_2); (3) sulfur dioxide (SO_2); (4) Particulate Matter (PM_{10}); (5) carbon monoxide (CO); and (6) lead (Pb). Table 10 on pages 193 and 194 shows the NAAQS currently in effect for each criteria pollutant. The NAAQS were amended in July 1997 to include an 8-hour standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. The Basin fails to meet national standards for O_3 (for both the 1-hour and 8-hour standard), PM_{10}, and $PM_{2.5}$ and therefore is considered a Federal "non-attainment" area for these pollutants. The CAA sets certain deadlines for meeting the NAAQS within the Basin including: (1) 1-hour O_3 by the year 2010; (2) 8-hour O_3 by the year 2021; PM_{10} by the year 2006; and (3) $PM_{2.5}$ by the year 2015. Nonattainment designations are categorized into seven levels of severity: (1) basic, (2) marginal, (3) moderate, (4) serious, (5) severe-15, (6) severe-17,[28] and (7) extreme. Table 11 on page 195 lists the criteria pollutants and their relative attainment status.

(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 have set standards for other pollutants recognized by the State. In general, the California standards are more health protective than the corresponding NAAQS. California has also set standards for $PM_{2.5}$, sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The Basin is in compliance with the California standards for sulfates, hydrogen sulfide, and vinyl chloride, but does not meet the California standard for visibility. Table 10 details the current NAAQS and CAAQS, while Table 11 on page 195 provides the Basin's attainment status with respect to federal and State standards.

[28] *The "-15" and "-17" designations reflect the number of years within which attainment must be achieved.*

Table 10

AMBIENT AIR QUALITY STANDARDS[a]

Pollutant	Averaging Time	California Standard[b]	Federal Primary Standard[b]	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone (O_3)[c]	1 hour	0.09 ppm	0.12 ppm	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Motor vehicles.
	8 hours	—	0.08 ppm		
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Classified as a chemical asphyxiant, CO 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 hours	9.0 ppm	9 ppm		
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	—	0.05 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.25 ppm			
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	—	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.
	1 hour	0.25 ppm			
	24 hours	0.04 ppm	0.14 ppm		
Particulate Matter (PM_{10})	Annual Geometric Mean	20 $\mu g/m^3$	—	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 (e.g., wind-raised dust and ocean sprays).
	24 Hours	50 $\mu g/m^3$	150 $\mu g/m^3$		
	Annual Arithmetic Mean	—	50 $\mu g/m^3$		
Particulate Matter ($PM_{2.5}$)[d]	Annual Geometric Mean	12 $\mu g/m^3$	15 $\mu g/m^3$	Increases respiratory disease, lung damage, cancer, premature death; reduced visibility; surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_X, SO_X, organics).
	24 Hours	—	65 $\mu g/m^3$		

Table 10 (Continued)

AMBIENT AIR QUALITY STANDARDS[a]

Pollutant	Averaging Time	California Standard[b]	Federal Primary Standard[b]	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Lead	Monthly	1.5 ug/m^3	—	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurologic dysfunction (in severe cases).	Lead smelters, battery manufacturing & recycling facilities.
	Quarterly	—	1.5 ug/m^3		
Sulfates (SO_4)	24 hours	25 ug/m^3	—	Decrease in ventilatory functions; aggravation of asthmatic symptoms; aggravation of cardio-pulmonary disease; vegetation damage; degradation of visibility; property damage.	Coal or oil burning power plants and industries, refineries, diesel engines.

[a] *Ambient air quality standards are set at levels which provide a reasonable margin of safety and protect the health of the most sensitive individual in the population.*

[b] *ppm = parts per million and µg/m^3 = micrograms per cubic meter.*

[c] *Ozone is formed when NO_X and ROC react in the presence of sunlight. There are no air quality standards for ROC. However, ROC is recognized as a pollutant of concern as it is a precursor to the formation of ozone.*

[d] *A Federal air quality standard for $PM_{2.5}$ was adopted in 1997. Presently, no methodologies for determining impacts relating to $PM_{2.5}$ have been developed. In addition, no strategies or mitigation programs for this pollutant have been developed or adopted by federal, state, or regional agencies.*

Source: California Air Resources Board, Ambient Air Quality Standards*, 2004 and the USEPA, 2004.*

(c) South Coast Air Quality Management District (SCAQMD)

The SCAQMD has jurisdiction over an area of approximately 10,743 square miles. This area includes all of Orange County, all of Los Angeles County except for the Antelope Valley, the nondesert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The Basin is a subregion of the SCAQMD jurisdiction. While air quality in this area has improved, 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 CAAQS and NAAQS. These plans require, among other emissions-reducing activities, 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

Table 11

SOUTH COAST AIR BASIN ATTAINMENT STATUS

Pollutant	National Standards	California Standards
Ozone (O_3) (1-hour standard)	Extreme	Non-attainment
Ozone (O_3) (8-hour standard)	Severe-17	N/A
Carbon Monoxide (CO)	Serious [a]	Non-attainment
Sulfur Dioxide (SO_2)	Attainment [b]	Attainment [b]
Nitrogen Dioxide (NO_2) [b]	Attainment [b]	Attainment
PM_{10}	Serious	Non-attainment
$PM_{2.5}$	Serious	Non-attainment
Lead (Pb)	Attainment [b]	Attainment [b]

N/A = not applicable

[a] *The Basin has technically met the CO standards for attainment since 2002, but the official status has not been reclassified by the USEPA.*

[b] *An air basin is designated as being in attainment for a pollutant if the standard for that pollutant was not violated at any site in that air basin during a three year period.*

Source: USEPA Region 9 and California Air Resources Board, 2004.

modified (i.e., previously permitted) emission sources; transportation control measures; sufficient control strategies to achieve a 5 percent or more annual reduction in emissions (or 15 percent or more in a 3-year period) for Reactive Organic Compounds (ROC), NO_X, CO, and PM_{10}; and demonstration of compliance with the California Air Resources Board's established reporting periods for compliance with air quality goals.

The SCAQMD adopted a comprehensive AQMP update, the 2003 Air Quality Management Plan for the South Coast Air Basin, on August 1, 2003.[29] The 2003 AQMP outlines the air pollution control measures needed to meet Federal health-based standards for O_3 (1-hour standard) by 2010 and PM_{10} by 2006. It also demonstrates how the Federal standard for CO, achieved for the first time at the end of 2002, will be maintained.[30] This revision to the AQMP also addresses several State and Federal planning requirements and incorporates substantial new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological data and new air quality modeling tools. The 2003 AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the Ozone SIP for the South Coast Air Basin. Lastly, the plan takes a preliminary look at what will be needed to achieve new and more stringent health standards for ozone and $PM_{2.5}$.

[29] *South Coast Air Quality Management District, AQMD Website, www.aqmd.gov/news1/aqmp_adopt.htm.*

[30] *The Basin has technically met the CO standards since 2002, but the official attainment status has not been reclassified by the USEPA.*

In adopting the AQMP, the SCAQMD: (1) committed to analyzing 12 additional long-term control measures, such as requiring the electrification of all cranes at ports; (2) set a target for distributing needed long-term emission reductions between the SCAQMD, the California Air Resources Board (CARB), and the USEPA; (3) assigned emission reductions to the USEPA; and (4) forwarded to CARB and USEPA a list of more than 30 specific measures for consideration to further reduce emissions from on- and off-road mobile sources and consumer products. The AQMP identifies 26 air pollution control measures to be adopted by the SCAQMD to further reduce emissions from businesses, industry and paints. It also identifies 22 measures to be adopted by CARB and the USEPA to further reduce pollution from cars, trucks, construction equipment, aircraft, ships and consumer products.

The SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to construction or operation of the Project. For example, SCAQMD Rule 403 requires the implementation of best available fugitive dust control measures during active operations capable of generating fugitive dust emissions from onsite earth-moving activities, construction/ demolition activities, and construction equipment travel on paved and unpaved roads. SCAQMD Rule 403 is included in Appendix C of this Draft EIR.

The SCAQMD has published a handbook (*CEQA Air Quality Handbook*, November 1993) that is intended to provide local governments 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 and was used extensively in the preparation of this analysis. In addition, the SCAQMD has published a guidance document (*Localized Significance Threshold Methodology for CEQA Evaluations*, June 2003) that is intended to provide guidance in evaluating localized effects from mass emissions during construction. This document was also used in the preparation of this analysis.

(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 addresses 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 components 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 Conditions

(1) Regional Context

The Project Site is located within the South Coast Air Basin (Basin), an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. Its terrain and geographical location determine this distinctive climate of the Basin, as the Basin is a coastal plain with connecting broad valleys and low hills.

The southern California region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of pollutants throughout the Basin making it an area of high pollution potential.

The greatest air pollution impacts throughout the Basin occur from June through September. This condition is generally attributed to the large amount of pollutant emissions, 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 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 SCAQMD has published a Basin-wide air toxics study (MATES II, *Multiple Air Toxics Exposure Study*, March 2000). The MATES II study represents one of the most comprehensive air toxics studies ever conducted in an urban environment. The study was aimed at determining the cancer risk from toxic air emissions throughout the Basin by conducting a comprehensive monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to fully characterize health risks for those living in the Basin. The study concluded the average carcinogenic risk in the Basin is approximately 1,400 in one million. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors. Approximately 70 percent of all risk is attributed to diesel particulate emissions, approximately 20 percent to other toxics associated with mobile sources (including benzene, butadiene, and

formaldehyde), and approximately 10 percent of all carcinogenic risk is attributed to stationary sources (which include industries and other certain businesses, such as dry cleaners and chrome plating operations). The SCAQMD is in the process of updating the MATES II Study with a MATES III Study.

(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 South Coast Air Basin and has divided the Basin into air monitoring areas. The Project Site is located in the Central Los Angeles County Monitoring Area. The monitoring station for this area is the North Main Street Monitoring Station, which is located at 1630 North Main Street in the City of Los Angeles, a few miles northwest of the Project Site. Criteria pollutants monitored at this station include PM_{10}, $PM_{2.5}$, O_3, CO, SO_2, and NO_2. The most recent data available from this monitoring station encompasses the years 1999 to 2003. The data, shown in Table 12 on pages 199 and 200, show the following pollutant trends:

Ozone—The maximum one-hour ozone concentration recorded during the reporting period was 0.15 ppm (2003). During the 1999 to 2003 reporting period, the California standard of 0.09 ppm was exceeded between eight and thirteen times annually. The National standard of 0.12 ppm was exceeded either zero or one time annually during the five-year reporting period, with the maximum number of exceedances occurring in 1999, 2000 and 2003. The maximum eight-hour ozone concentration recorded during the reporting period was 0.11 ppm in 1999. During the 1999 to 2003 reporting period, the National standard of 0.08 ppm was exceeded between zero and four times with the maximum number of exceedances occurring in 2000.

Particulate Matter (PM_{10})—The highest recorded concentration during the reporting period was 97 micrograms per cubic meter ($\mu g/m^3$) of air particulates (2001). During this reporting period, the California PM_{10} standard was calculated to be exceeded between 24 and 119 times annually, with the highest number of exceedances in 2001. No exceedances of the National standard occurred between 1999 and 2003. The highest annual arithmetic mean recorded was 44 $\mu g/m^3$ in 1999 and 2001. The highest annual geometric mean recorded was 42 $\mu g/m^3$ in 1999.

Particulate Matter ($PM_{2.5}$)—The highest recorded concentration during the reporting period was 88 $\mu g/m^3$ in 2000. During this reporting period the National standard was exceeded between 1 and 11 times annually. The highest annual arithmetic mean recorded was 23 in 1999 and 2001.

Table 12

POLLUTANT STANDARDS AND AMBIENT AIR QUALITY DATA FROM THE LOS ANGELES-NORTH MAIN STREET MONITORING STATION

Pollutant/Standard	1999	2000	2001	2002	2003
Ozone (O_3)					
O_3 (1-hour)					
Maximum Concentration (ppm)	0.13	0.14	0.12	0.12	0.15
Days > CAAQS (0.09 ppm)	13	8	8	8	11
Days > NAAQS (0.12 ppm)	1	1	0	0	1
O_3 (8-hour)					
Maximum Concentration (ppm)	0.11	0.10	0.10	0.08	0.09
Days > NAAQS (0.08 ppm)	2	4	1	0	2
Particulate Matter (PM_{10})					
PM_{10} (24-hour)					
Maximum Concentration ($\mu g/m^3$)	88	80	97	57	81
Days > CAAQS (50 $\mu g/m^3$)	114	90	119	48	24
Days > NAAQS (150 $\mu g/m^3$)	0	0	0	0	0
PM_{10} (Annual Average)					
Annual Arithmetic Mean (50 $\mu g/m^3$)	44	40	44	36	N/A
Annual Geometric Mean (20 $\mu g/m^3$)	42	37	40	37	N/A
Particulate Matter ($PM_{2.5}$)					
$PM_{2.5}$ (24-hour)					
Maximum Concentration ($\mu g/m^3$)	69	88	73	66	70
Days > NAAQS (65 $\mu g/m^3$)	2	11	4	1	2
$PM_{2.5}$ (Annual Average)					
Annual Geometric Mean (12 $\mu g/m^3$)	23	22	23	20	N/A
Carbon Monoxide (CO)					
CO (1-hour)					
Maximum Concentration (ppm)	7	7	6	N/A	N/A
Days > CAAQS (20 ppm)	0	0	0	N/A	N/A
Days > NAAQS (35 ppm)	0	0	0	N/A	N/A
CO (8-hour)					
Maximum Concentration (ppm)	6.3	6.0	4.6	3.8	4.5
Days > CAAQS (9.0 ppm)	0	0	0	0	0
Days > NAAQS (9 ppm)	0	0	0	0	0

Table 12 (Continued)

POLLUTANT STANDARDS AND AMBIENT AIR QUALITY DATA FROM THE LOS ANGELES-NORTH MAIN STREET MONITORING STATION

Pollutant/Standard	1999	2000	2001	2002	2003
Nitrogen Dioxide (NO_2)					
NO_2 (1-hour – State Standard)					
Maximum Concentration (ppm)	0.21	0.16	0.14	0.14	0.16
Days > CAAQS (0.25 ppm)	0	0	0	0	0
NO_2 (Annual Average – National Standard))					
Annual Arithmetic Mean (0.05 ppm)	0.04	0.04	0.04	0.03	0.03
Days > NAAQS (0.05 ppm)	0	0	0	0	0
Sulfur Dioxide (SO_2)					
SO_2 (1-hour)					
Maximum Concentration (ppm)	0.05	0.08	0.08	N/A	N/A
Days > CAAQS (0.25 ppm)	0	0	0	N/A	N/A
SO_2 (24-hour)					
Maximum Concentration (ppm)	0.01	0.01	0.01	0.01	0.01
Days > CAAQS (0.04 ppm)	0	0	0	0	0
Days > NAAQS (0.14 ppm)	0	0	0	0	0
SO_2 (Annual Average)					
Annual Arithmetic Mean	0.002	0.001	0.001	0.002	0.002
Days > NAAQS (0.03 ppm)	0	0	0	0	0

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.

ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; N/A = not available

Source: South Coast Air Quality Management District, Air Quality Data 1999-2003 and California Air Resources Board, Air Quality Data 2004.

Carbon Monoxide—The highest recorded 1-hour CO and 8-hour CO concentrations were 7 ppm (1999 and 2000) and 6.3 ppm (1999), respectively. Neither the California nor National CO standards were exceeded during the reporting period.

Nitrogen Dioxide—The highest recorded one-hour concentration of NO_2 during the reporting period was 0.21 ppm (1999) and the highest recorded annual arithmetic mean during the reporting period was 0.04 (1999–2001). Neither the California nor National NO_2 standards were exceeded during the reporting period.

Sulfur Dioxide—The highest recorded one-hour and 24-hour SO_2 concentrations were 0.08 ppm (2000–2001) and 0.01 ppm (1999–2003), respectively. In addition, the highest annual average recorded was 0.002 in 1999, 2002, and 2003. No violations of the California or National SO_2 standards were recorded during this reporting period.

Lead—The Basin is currently in compliance with California and National standards for Pb and, therefore, no ambient data for airborne Pb is available for the applicable monitoring station.

(b) Existing Health Risk in the Surrounding Area

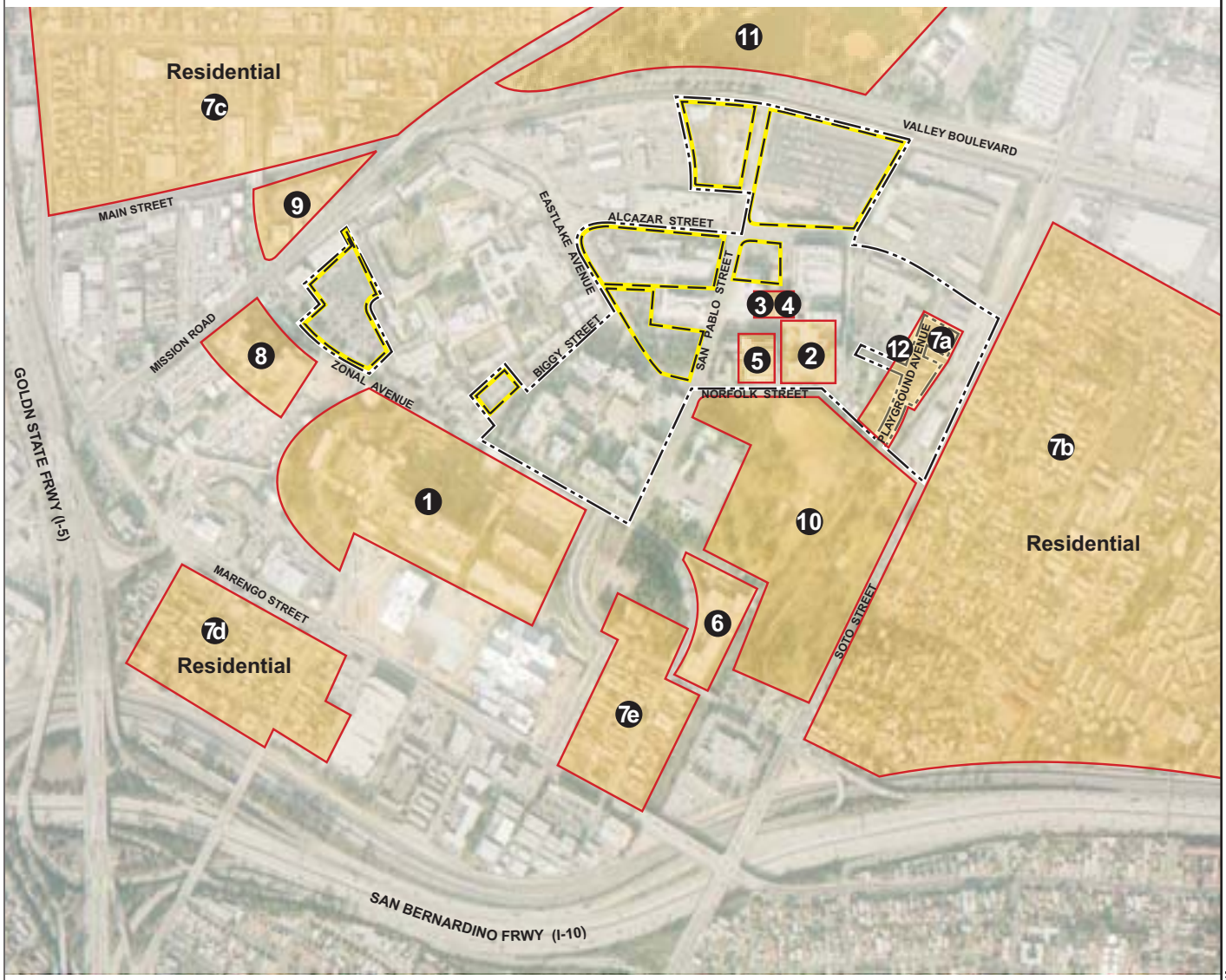
According to the SCAQMD's MATES II study, the Project area is within a cancer risk zone of approximately 1,500 in one million, which is largely due to diesel particulates generated from the convergence of freeways surrounding the downtown Los Angeles area. In comparison, the average cancer risk in the Basin is 1,400 per million.

(c) Sensitive Receptors and Locations

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 uses in the Project vicinity are shown in Figure 23 on page 202, and include the following:

- LA County–USC Hospital. This hospital/trauma center is located approximately 500 feet southeast of Development Site C, on the south side of Zonal Avenue at Biggy Street. All other Development Sites are located approximately 600 feet (Development Site D) to 2,525 feet (Development Site E) from the LA County–USC Hospital.

- USC University Hospital. The USC University Hospital is located south and/or east of the seven proposed Development Sites. Development Site B is located approximately 500 feet northwest of the hospital. All other Development Sites are



LEGEND

Sensitive Receptors

1. LA County/USC Hospital
2. USC University Hospital
3. USC Healthcare Consultation Center
4. USC Healthcare Consultation Center II
5. Doheny Eye Institute
6. Francisco Bravo Institute M.D. Magnet Senior High School
7a. Residential Neighborhoods
7b. Residential Neighborhoods
7c. Residential Neighborhoods
7d. Residential Neighborhoods
7e. Residential Neighborhoods
8. Woman and Children's Hospital
9. Nurse College
10. Hazard Park
11. Lincoln Park
12. Children's Daycare Center

Development Sites

Project Boundary

Figure 23
Sensitive Receptor Locations

PCR

Source: Aerial: Landiscore; PCR Services Corporation, 2004

located approximately 825 feet (Development Site E) to 2,600 feet (Development Site C) from the USC University Hospital.

- USC Healthcare Consultation Center (HCC). The USC HCC is located south and/or east of the seven proposed Development Sites. Development Site B is located approximately 175 feet north-northwest of the HCC. All other Development Sites are located approximately 525 feet (Development Site G) to 2,250 feet (Development Site C) from the USC HCC.

- USC Healthcare Consultation Center II. The USC HCCII is located south and/or east of the seven proposed Development Sites. Development Site B is located approximately 375 feet north of the HCCII. All other Development Sites are approximately 600 feet (Development Site E) to 2,500 feet (Development Site C) from the USC HCCII.

- Doheny Eye Institute. The Doheny Eye Institute is located south and/or east of the seven proposed Development Sites. Development Site B is located approximately 325 feet north of the Doheny Eye Institute. All other Development Sites are located approximately 500 feet (Development Site A) to 2,150 feet (Development Site C) from the Doheny Eye Institute.

- Francisco Bravo M.D. Magnet Senior High School. The Francisco Bravo M.D. Magnet Senior High School is located to the southeast of the Health Sciences Campus on the east side of Cornwell Street. Development Site A is located approximately 875 feet north of this high school. All other Development Sites are located approximately 1,150 feet (Development Site D) to 2,125 feet (Development Site C) from this High School campus location.

- Residential Neighborhood (A). Residential uses are situated on the eastern portion of the HSC, along Playground Avenue. Development Site B is located approximately 750 feet northwest of this residential area. All other Development Sites are located approximately 800 feet (Development Site E) to 3,075 feet (Development Site C) away from this residential area.

- Residential Neighborhood (B). A residential neighborhood is located east of Soto Street. Development Site E is located approximately 1,300 feet northwest of this residential area. All other Development Sites are located approximately 1,325 feet (Development Site B) to 3,250 feet (Development Site C) from this residential area.

- Residential Neighborhood (C). A residential neighborhood is located north of Main Street. Development Site C is located approximately 875 feet south of this residential

area. All other Development Sites are located approximately 1,375 feet (Development Site G) to 2,000 feet (Development Site E) from this residential area.

- Residential Neighborhood (D). A residential neighborhood is located south of Marengo Street. Development Site C is located approximately 1,500 feet north of this residential area. All other Development Sites are located approximately 1,700 feet (Development Site D) to 3,550 feet (Development Site E) from this residential area.

- Residential Neighborhood (E). A residential neighborhood is located north of Marengo Street. Development Site D is located approximately 1,150 feet northwest of this residential area. All other Development Sites are located approximately 1,700 feet (Development Site A) to 2,600 feet (Development Site F) from this residential area.

- Women and Children's Hospital. The Women and Children's Hospital is located south of Zonal Avenue. Development Site C is located approximately 375 feet northeast of this hospital use. All other Development Sites are located approximately 1,225 feet (Development Site A) to 3,025 feet (Development Site F) away from this hospital use.

- Nursing College. The Nursing College is located north of Mission Road. Development Site C is located approximately 475 feet southeast of this land use. All other Development Sites are located approximately 1,425 feet (Development Site D) to 2,750 feet (Development Site E) away from this land use.

- Hazard Park. Hazard Park is located south and/or east of the seven proposed Development Sites and is located south of Norfolk Street and east of San Pablo Street. Development Site A is located approximately 475 feet northwest of Hazard Park. All other Development Sites are located approximately 825 feet (Development Site B) to 2,025 feet (Development Site C) from Hazard Park.

- Lincoln Park. Lincoln Park is located north of Valley Boulevard and is separated from the HSC by Valley Boulevard and the railroad tracks that run parallel to, and south of, Valley Boulevard. Lincoln Park offers a wide variety of youth and adult recreational programs including fishing in the lake within the park. Development Sites E and F are the nearest Project components to this sensitive land use, and are located approximately 475 and 550 feet south of Lincoln Park, respectively. All other Development Sites are located approximately 600 feet (Development Site B) to 1,650 feet (Development Site D) from Lincoln Park.

- Child Daycare Center. The Children's Daycare Center is located along Playground Avenue, south of Alcazar Street. Development Site B is located approximately 900 feet east-northeast of this land use. All other Development Sites are located approximately 1,125 feet (Development Site E) to 3,025 feet (Development Site C) away from this land use.

3. ENVIRONMENTAL IMPACTS

a. Significance Thresholds

Construction Emissions

Based on criteria set forth in the City of Los Angeles' CEQA Thresholds Guide, the proposed Project would have a significant impact with regard to construction emissions if any of the following occurred:

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 75 pounds a day for ROC; (2) 100 pounds per day for NO_X; (3) 550 pounds per day for CO; and (4) 150 pounds per day for PM_{10} or SO_X.[31]

- Project-related fugitive dust and construction equipment combustion emissions cause an incremental increase in localized PM_{10} concentrations of 10.4 $\mu g/m^3$ or cause a violation of NO_2 or CO ambient air quality standards.[32]

- The proposed Project creates objectionable odors.

Operational Emissions

Based on criteria set forth in the City of Los Angeles' CEQA Thresholds Guide, the proposed Project would have a significant impact with regard to operational emissions if any of the following occurred:

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[31] *South Coast Air Quality Management District, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a Project), 1993.*

[32] *While the SCAQMD CEQA Air Quality Handbook (CEQA Handbook, 1993), does not provide any localized thresholds, the SCAQMD currently recommends localized significance thresholds (LST) for PM_{10}, NO_2, and CO in its draft document titled "SCAQMD Localized Significance Threshold Methodology for CEQA Evaluations (SCAQMD LST Guidelines)," June 19, 2003.*

- Operational emissions exceed any of the daily thresholds presented below:[33]

Pollutant	Significance Threshold (lbs./day)
ROC	55
NO_X	55
CO	550
PM_{10}	150
SO_X	150

- The proposed Project causes an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 parts per million (ppm), respectively, at an intersection or roadway within one-quarter mile of a sensitive receptor.

- Project-related stationary source combustion equipment emissions cause an incremental increase in localized PM_{10} concentrations of 2.5 $\mu g/m^3$.[34]

- The proposed Project creates objectionable odors.

- The proposed Project would not be compatible with SCAQMD and SCAG air quality polices if it:

  – Causes an increase in the frequency or severity of existing air quality violations;

  – Causes or contributes to new air quality violations;

  – Delays timely attainment of air quality standards or the interim emission reductions specified in the AQMP; or

  – Exceeds the assumptions utilized in the SCAQMD's AQMP.

- The proposed Project would not be compatible with City of Los Angeles air quality policies if it does not substantially comply with the air quality goals and policies set forth within the City's General Plan.

[33] *South Coast Air Quality Management District, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a Project), 1993.*

[34] *While the SCAQMD* CEQA Air Quality Handbook *(*CEQA Handbook*, 1993), does not provide any localized thresholds, the SCAQMD currently recommends localized significance thresholds (LST) for PM_{10}, NO_2, and CO in its document titled "SCAQMD Localized Significance Threshold Methodology for CEQA Evaluations (SCAQMD LST Guidelines)," June 19, 2003.*

Toxic Air Contaminants

Based on criteria set forth in the City of Los Angeles CEQA Thresholds Guide, the proposed Project would have a significant impact with regard to toxic air contaminants if:

- On-site stationary sources emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of ten in one million or an acute or chronic hazard index of 1.0.[35]

- Hazardous materials associated with on-site stationary sources result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.

- The project would be occupied primarily by sensitive individuals within a quarter mile of any existing facility that emits air toxic contaminants which could result in a health risk for pollutants identified in District Rule 1401.[36]

b. Project Features

The following design features that result in a reduction in air quality emissions are proposed as part of the proposed Project.

- The proposed Project would intensify development within the existing USC Health Science Campus by adding academic (medical-related), medical research, and medical office space, which would serve to reduce vehicle miles traveled between medical support facilities and hospitals/research institutes (e.g., LA County–USC Hospital, USC University Hospital, Doheny Eye Institute, etc.).

- All stationary-source emissions sources (e.g., emergency generator, boiler, and chiller) would utilize Best Available Control Technology (BACT) to meet SCAQMD requirements.

c. Methodology

An evaluation of potential impacts to local and regional air quality that may result from the construction and long-term operations of the proposed Project was conducted as follows:

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[35] *SCAQMD Risk Assessment Procedures for Rules 1401 and 212, November 1998.*

[36] *SCAQMD, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a Project).*

Construction-Period Impacts

Daily regional emissions during construction were forecast by developing a conservative estimate of construction (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile-source and fugitive dust emissions factors derived from URBEMIS 2002.[37] For each of the seven proposed Development Sites, the construction process was separated into two or three phases: demolition (if necessary), site preparation/excavation, and building construction/finishing. The estimate of mass daily emissions derived from this analysis is based on the conservative assumption that 765,000 square feet of floor area and a 2,800-space parking structure would be constructed within three years.

The localized effects from the on-site portion of daily emissions were evaluated at each sensitive receptor location under three analysis scenarios (to ascertain maximum potential pollutant concentrations at each sensitive receptor location) using the Industrial Source Complex (ISC3-ST) dispersion model consistent with procedures outlined in the USEPA *1998 Guideline on Air Quality Models* and the SCAQMD *Localized Significance Threshold Methodology for CEQA Evaluations* guidance documents. Each analysis scenario assumes the buildout of 765,000 square feet of building floor area and 2,800 parking spaces. Scenario 1 maximizes development at the southwest portion of the proposed Project Site (Development Sites A, C, D, and G); Scenario 2 maximizes development at the northern portion of the proposed Project Site (Development Sites B, E, and F; and Scenario 3 maximizes development within the central portion of the proposed Project Site (Development Sites A, B, C, D, and G). These three conservative analysis scenarios would concentrate concurrent construction activity in different areas of the proposed Project Site to ascertain the maximum impact to localized air quality at each sensitive receptor location.

A complete listing of the construction equipment by phase, construction phase duration, emissions estimation model and dispersion model input assumptions used in this analysis is included within the emissions calculation worksheets that are provided in Appendix D (Air Quality) of this Draft EIR.

Operations-Period Impacts

The URBEMIS 2002 software was used to forecast the daily regional emissions estimates from mobile- and area-sources that would occur during long-term Project operations. In calculating mobile-source emissions, the URBEMIS 2002 default trip length assumptions were applied to the average daily trip (ADT) estimates provided by the Project's traffic consultant to

[37] *URBEMIS 2002 is an emissions estimation/evaluation model developed by the CARB that is based, in part, on SCAQMD* CEQA Air Quality Handbook *guidelines and methodologies.*

arrive at vehicle miles traveled (VMT). Stationary-source emissions were compiled using procedures outlined in the SCAQMD *CEQA Handbook*.

Localized CO concentrations were evaluated for Parking Scenario Nos. 1 and 2 using the CALINE4 microscale dispersion model, developed by Caltrans, in combination with EMFAC2002 emission factors. Localized PM_{10} concentrations related to operation of proposed Project stationary-source combustion equipment are evaluated by conducting a screening-level analysis followed by a more detailed analysis (i.e., dispersion modeling) if necessary. The screening-level analysis consists of reviewing the proposed Project's Site Plan and Project Description to identify any new or modified stationary-source combustion equipment sources. If it is determined that the proposed Project would introduce a new stationary-source combustion equipment source, or modify an existing stationary-source combustion equipment source, then downwind sensitive receptor locations are identified and site-specific dispersion modeling is conducted to determine proposed Project impacts. All emissions calculation worksheets and air quality modeling output files are provided in Appendix D (Air Quality) of this Draft EIR.

Odor Impacts (Construction and Operations)

Potential odor impacts are evaluated by conducting a screening-level analysis followed by a more detailed analysis (i.e., dispersion modeling) if necessary. The screening-level analysis consists of reviewing the proposed Project's Site Plan and Project Description to identify any new or modified odor sources. If it is determined that the proposed Project would introduce a new odor source, or modify an existing odor source, then downwind sensitive receptor locations are identified and site-specific dispersion modeling is conducted to determine proposed Project Impacts.

Toxic Air Contaminants (TAC) Impacts (Construction and Operations)

Potential TAC impacts are evaluated by conducting a screening-level analysis followed by a more detailed analysis (i.e., dispersion modeling) if necessary. The screening-level analysis consists of reviewing the proposed Project's Site Plan and Project Description to identify any new or modified TAC emissions sources. If it is determined that the proposed Project would introduce a new source, or modify an existing TAC emissions source, then downwind sensitive receptor locations are identified and site-specific dispersion modeling is conducted to determine proposed Project impacts.

d. Project Impacts

(1) Construction

(a) Regional Construction Impacts

Construction of the proposed Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and construction activities. Mobile source emissions, primarily NO_X, would result from the use of construction equipment such as bulldozers, wheeled loaders, and cranes. During the finishing phase, paving operations and the application of architectural coatings (i.e., paints) and other building materials would release reactive organic compounds. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

The proposed Project could result in the construction of up to 765,000 square feet of academic, medical research, and medical clinic floor area. Project development could occur on up to seven Development Sites, over a 10-year time frame. The timing and location of development would be determined based on the availability of funding sources. In order to provide a conservative analysis it is assumed that all construction would be completed within the first three years following entitlement. This assumption is conservative as it represents the minimum construction time frame for any particular building and concentrates all construction activity so it is occurring concurrently and at the earliest feasible date within the Project's overall development period. The latter two points are of particular note since construction emissions are directly related to the amount and intensity of construction activities (i.e., emissions increase as the amount of construction increases) and the emission factors for certain components of Project construction (i.e., construction worker trips and delivery vehicle trips) decrease over time in response to the introduction of greater numbers of vehicles that emit lower relative levels of pollutant emissions. The phasing and duration of construction activities (i.e., demolition, site preparation/excavation, and building construction/finishing) and the equipment that would be used under each of the three construction scenarios analyzed is presented in Appendix D of this Draft EIR.

The estimate of potential daily regional emissions during construction, using the aforementioned conservative assumptions, is presented in Table 13 on page 211. Detailed emission calculations are provided in Appendix D of this Draft EIR. As presented in Table 13, construction-related daily (short-term) emissions are expected to exceed SCAQMD significance thresholds for NO_X and ROC. Thus, emissions of these pollutants would result in significant

Table 13

CONSERVATIVE ESTIMATE OF DAILY EMISSIONS DURING CONSTRUCTION [a]

	Emission Totals (lbs/day)				
Construction Phase	**CO**	**NO_X**	**PM_{10}**	**ROC**	**SO_X**
Demolition	155	190	9	21	1
Site Grading/Excavation	260	270	107	22	1
Building Construction and Finishing	340	281	11	144	<1
Maximum Estimate for Each Pollutant	**340**	**281**	**107**	**144**	**1**
SCAQMD Daily Significance Threshold	550	100	150	75	150
Over (Under)	(210)	181	(43)	69	(149)
Significant?	No	Yes	No	Yes	No

[a] *Emissions estimates for each phase of construction was calculated for each of the three construction scenarios. The data presented in this table represents the highest emissions among the three construction scenarios. Detailed calculation data is provided in Appendix D of this EIR.*

Source: PCR Services Corporation, 2004.

short-term regional air quality impacts. Daily emissions of CO, SO_X, and PM_{10} would be considered adverse, but less than significant, since the levels of these emissions would fall below the SCAQMD significance thresholds. As mentioned earlier, these emission forecasts provided reflect a specific set of conservative assumptions where the entire maximum entitlement (i.e., 765,000 square feet of floor area and 2,800-space parking structure) would be built out over a very compressed three-year time period. Because of these conservative assumptions, actual emissions would likely be less than those forecasted. If construction is delayed (i.e., does not start in 2006), or occurs over a longer time period, emissions would be less due to: (1) a more modern and cleaner burning construction equipment fleet mix; and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions would occur over a longer time interval).

(b) Localized Construction Impacts

An analysis of localized construction impacts was conducted based on the SCAQMD's recommended Localized Significance Thresholds (LSTs) for PM_{10}, NO_2 and CO using the ISC3-ST microscale dispersion model as specified in the USEPA *1998 Guideline on Air Quality Models*. The maximum estimates of mass daily emissions discussed above were used as inputs into the ISC3-ST model to ascertain potential air pollutant concentrations at nearby sensitive receptor locations. The dispersion analysis evaluated three development scenarios in order to estimate the maximum potential pollutant concentration for PM_{10}, CO and NO_X at each sensitive receptor location. Scenario 1 evaluated the concurrent buildout of Development Sites A, C, D, and G; Scenario 2 evaluated the concurrent buildout of Development Sites B, E, and F; and Scenario 3 evaluated the concurrent buildout of Development Sites A, B, C, D, and G. These three conservative analysis scenarios would concentrate concurrent construction activity in

different areas of the proposed Project Site to ascertain the maximum impact to localized air quality at each sensitive receptor location. The ISC3-ST model was run using meteorological data from the SCAQMD Los Angeles-North Main Monitoring Station, which is available from the SCAQMD web site (www.aqmd.gov).

Under all analysis scenarios, the potential maximum CO (1-hour and 8-hour) and NO_2 concentrations, when added to background ambient concentrations, would not violate their respective AAQS at any of the 16 sensitive receptor locations. As such, localized impacts with respect to these localized pollutant concentrations during construction would be less than significant.

With respect to localized PM_{10} impacts during construction, the PM_{10} concentration contribution could potentially exceed the 10.4 $\mu g/m^3$ SCAQMD significance threshold at all but three sensitive receptor locations. A summary of potential maximum impacts at each of the 16 sensitive receptor locations that are shown in Figure 23 on page 202 is provided below:

- LA County–USC Hospital. A potential maximum PM_{10} concentration level attributable to the proposed Project of 37.58 $\mu g/m^3$ could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites A, B, C, D, and G. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 $\mu g/m^3$.

- USC University Hospital. A potential maximum PM_{10} concentration level attributable to the proposed Project of 31.83 $\mu g/m^3$ could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites B, E, and F. Under all other development scenarios, the potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 $\mu g/m^3$.

- USC Healthcare Consultation Center (HCC). A potential maximum PM_{10} concentration level attributable to the proposed Project of 92.73 $\mu g/m^3$ could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites B, E, and F. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less, but could still exceed the SCAQMD significance threshold of 10.4 $\mu g/m^3$.

- USC Healthcare Consultation Center II (HCCII). A potential maximum PM_{10} concentration level attributable to the proposed Project of 49.03 $\mu g/m^3$ could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites B, E, and F. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 $\mu g/m^3$.

- Doheny Eye Institute. A potential maximum PM_{10} concentration level attributable to the proposed Project of 49.41 $\mu g/m^3$ could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites B, E, and F. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 $\mu g/m^3$.

- Francisco Bravo M.D. Magnet Senior High School. A potential maximum PM_{10} concentration level attributable to the proposed Project of 13.06 $\mu g/m^3$ could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites B, E, and F. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 $\mu g/m^3$.

- Residential Uses (A). A potential maximum PM_{10} concentration level attributable to the proposed Project of 16.96 $\mu g/m^3$ could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites B, E, and F. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 $\mu g/m^3$.

- Residential Uses (B). A potential maximum PM_{10} concentration level attributable to the proposed Project of 10.34 $\mu g/m^3$ could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites B, E, and F. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios. As such, the potential maximum concentration level attributable to the proposed Project would not exceed the SCAQMD significance threshold of

10.4 µg/m^3 under any development scenario, and localized PM_{10} impacts at this sensitive receptor location during construction would be less than significant.

- Residential Uses (C). A potential maximum PM_{10} concentration level attributable to the proposed Project of 20.82 µg/m^3 could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites A, B, C, D, and G. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 µg/m^3.

- Residential Uses (D). A potential maximum PM_{10} concentration level attributable to the proposed Project of 7.88 µg/m^3 could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites A, B, C, D, and G. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios. As such, the potential maximum concentration level attributable to the proposed Project would not exceed the SCAQMD significance threshold of 10.4 µg/m^3 under any development scenario and localized PM_{10} impacts at this sensitive receptor location during construction would be less than significant.

- Residential Uses (E). A potential maximum PM_{10} concentration level attributable to the proposed Project of 11.62 µg/m^3 could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites A, B, C, D, and G. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 µg/m^3.

- Women and Children's Hospital. A potential maximum PM_{10} concentration level attributable to the proposed Project of 69.59 µg/m^3 could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites A, B, C, D, and G. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 µg/m^3.

- Nursing College. A potential maximum PM_{10} concentration level attributable to the proposed Project of 27.80 µg/m^3 could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites A, B, C, D, and G.

The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 µg/m^3.

- Hazard Park. A potential maximum PM_{10} concentration level attributable to the proposed Project of 25.65 µg/m^3 could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites B, E, and F. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 µg/m^3.

- Lincoln Park. A potential maximum PM_{10} concentration level attributable to the proposed Project of 71.83 µg/m^3 could occur at this sensitive receptor location during the concurrent site preparation activities at Development Sites B, E, and F. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios, but could still exceed the SCAQMD significance threshold of 10.4 µg/m^3.

- Child Daycare Center. A potential maximum PM_{10} concentration level attributable to the proposed Project of 10.02 µg/m^3 could occur at this sensitive receptor location during concurrent site preparation activities at Development Sites B, E, and F. The potential maximum PM_{10} concentration level attributable to the proposed Project would be less during all other phases of construction at these development sites as well as all construction activities occurring under the other two construction scenarios. As such, the potential maximum concentration level attributable to the proposed Project would not exceed the SCAQMD significance threshold of 10.4 µg/m^3 under any development scenario, and localized PM_{10} impacts at this sensitive receptor location during construction would be less than significant.

Modeling input parameters are detailed in the ISC-ST3 printout sheets, which are provided in Appendix D of this Draft EIR.

(c) Toxic Air Contaminants

The greatest potential for toxic air contaminant (TAC) emissions would be related to diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the

likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given that grading and excavation activities would occur for only three to six months per Development Site, the proposed Project would not result in a long-term (i.e., 70 years) substantial source of TAC emissions with no residual emissions after construction and corresponding individual cancer risk. As such, Project-related toxic emission impacts during construction would not be significant.

(d) Odors

Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the amount of volatile organic compounds from architectural coatings and solvents. Via mandatory compliance with SCAQMD Rules, no construction activities or materials are proposed which would create objectionable odors. Therefore, no impact would occur and no mitigation measures would be required.

(2) Operations

(a) Regional Operations Impacts

Regional air pollutant emissions associated with proposed Project operations would be generated by the consumption of electricity and natural gas, by the operation of on-road vehicles, and by emergency generators. Pollutant emissions associated with energy demand (i.e., electricity generation and natural gas 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 conservatively considered to occur within the Basin and are regional in nature. Criteria pollutant emissions associated with the production and consumption of energy were calculated using emission factors from the SCAQMD's *CEQA Air Quality Handbook* (Appendix to Chapter 9).

On-site stationary sources would include chillers, boilers, and emergency generators. Any boilers (used for water and space heating) would be natural gas-fired. Criteria pollutant emissions associated with natural gas combustion were calculated using emission factors from the SCAQMD's *CEQA Air Quality Handbook* (Appendix to Chapter 9). These stationary sources (i.e., boilers) 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 Best Available Control Technology (BACT) be utilized to reduce pollutants and that any increases of criteria air pollutants be offset by achieving equivalent emission reductions at a facility within the Basin.

The proposed Project would also include the installation and operation of diesel-fired generators for emergency power generation. Unless a blackout occurs, these generators would be operated for a maximum of one hour per month for routine testing and maintenance purposes. The Applicant would be required to obtain permits to construct and operate these emergency generators under SCAQMD Rules 201, 202 and 203. Under SCAQMD Regulation XIII (New Source Review [NSR]), all generators would be required to meet Best Available Control Technology (BACT) requirements to minimize emissions of CO, VOC, NO_X, and PM_{10}. BACT standards for diesel-fired emergency generators specify a maximum allowable emissions rate of 8.5 grams of carbon monoxide per horsepower-hour (hp-hr), 1.0 gram of VOC per hp-hr, 6.9 grams of NO_X per hp-hr, and 0.38 gram of PM_{10} per hp-hr.[38] Sulfur dioxide emissions would be minor since the sulfur content of the diesel fuel would be limited to 0.05 percent by weight under SCAQMD Rule 431.2 (Sulfur Content of Liquid Fuels). Emergency equipment, however, is exempt from modeling and offset requirements (Rule 1304) and does not require a health risk assessment (Rule 1401).[39]

Emissions for miscellaneous sources were estimated to account for minor sources of criteria pollutants. Miscellaneous sources include, but are not limited to, consumer/commercial solvents, landscaping equipment, and delivery unloading equipment. These sources may not individually emit large quantities of criteria pollutants but when combined emit quantitative amounts of criteria pollutants. Miscellaneous sources were calculated to be 2 percent of the Project's combined mobile- and stationary-source daily emissions.

Mobile-source emissions were calculated using the URBEMIS 2002 emissions inventory model, which multiplies an estimate of daily vehicle miles traveled (VMT) by applicable Emfac2002 emissions factors. The URBEMIS 2002 model output and worksheets for calculating regional operational daily emissions are provided in Appendix D of this Draft EIR. As shown in Table 14 on page 218, regional emissions resulting from the proposed Project would not exceed regional SCAQMD thresholds for ROC, SO_X, CO, or PM_{10}. However, the proposed Project would exceed regional SCAQMD threshold for NO_X, and impacts associated with this pollutant would be significant.

[38] *Volatile organic compounds (VOCs) are compounds that have a high vapor pressure, such that they evaporate readily at ambient temperatures and, unlike reactive organic compounds (ROCs), include compounds which do not take part in photochemical smog reactions. For purposes of this analysis, VOCs are conservatively assumed to approximate ROC emissions that are addressed in the daily limits threshold.*

[39] *Offsets are not required under SCAQMD Rule 1304 (Exemptions) for equipment used exclusively as emergency standby equipment for non utility electrical power generation, provided that the equipment does not operate more than 200 hours per year.*

Table 14

MAXIMUM PROJECT-RELATED OPERATIONAL EMISSIONS
(Pounds per Day)

Emission Source	CO	NO_X	PM_{10}	ROC	SO_X
On Road Mobile Sources [a]	479	59	64	44	<1
Stationary Sources [b]	7	42	1	1	3
Miscellaneous Sources	10	2	1	1	<1
Total (Proposed Project)	496	103	66	46	3
SCAQMD Daily Significance Threshold	550	55	150	55	150
Over (Under)	**(54)**	**48**	**(84)**	**(9)**	**(147)**
Significant?	**No**	**Yes**	**No**	**No**	**No**

[a] *Mobile emissions calculated using the URBEMIS 2002 emissions model. Model output sheets are provided in Appendix D.*

[b] *Emissions due to Project-related electricity generation and natural gas consumption, calculated based on guidance provided in the SCAQMD CEQA Air Quality Handbook. Worksheets are provided in Appendix D.*

Sources: PCR Services Corporation, 2004.

(b) Local Impacts

Within an urban setting, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations are generally found within close proximity to congested intersection locations. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (i.e., congested intersection) increase. For purposes of providing a conservative impact analysis, CO concentrations are typically analyzed at congested intersection locations, because if impacts are less than significant in close proximity of the congested intersections, impacts will also be less than significant at more distant sensitive receptor locations.

Project traffic during the proposed Project's operational phase would have the potential to create local area CO impacts. The SCAQMD recommends a hot-spot evaluation of potential localized CO impacts when volume-to-capacity (V/C) ratios are increased by 2 percent at intersections with a level of service (LOS) of D or worse. The SCAQMD also recommends a CO hot-spot evaluation when an intersection decreases in LOS by one level beginning when LOS changes from an LOS of C to D. Intersections were selected for analysis based on information provided in the Traffic Impact Study prepared by Linscott, Law, and Greenspan Engineers (See Appendix C of the Draft EIR for the complete traffic study).

In order to conservatively analyze Project impacts, two potential Parking Scenarios were developed, each of which would have a different effect on local circulation patterns in the areas within and immediately surrounding the USC Health Sciences Campus. Parking Scenario No. 1

assumes that parking for the Project will be provided at the west end of the campus, entirely within Development Site C. Access to the parking structure located within Development Site C would be provided via Zonal Avenue. Parking Scenario No. 2 assumes that parking for the Project will be provided entirely on the northeastern side of the campus, within Development Site E or in combination with Development Site F. Access to the parking structure located within Development Site E would be provided via San Pablo Street and Alcazar Street, while access to parking within Development Site F would be provided only via San Pablo Street.

Local area CO concentrations were projected for both Parking Scenarios access alternatives using the CALINE-4 traffic pollutant dispersion model. The analysis of CO impacts followed the protocol recommended by the California Department of Transportation and published in the document titled Transportation Project-Level Carbon Monoxide Protocol, December 1997. The analysis is also consistent with procedures identified through the SCAQMD's CO modeling protocol, with all four corners of each intersection analyzed to determine whether proposed Project development would result in a CO concentration that exceeds federal or state CO standards. As stated in the Protocol, receptor locations for the one-hour analysis were located 3 meters from each intersection corner and receptor locations for the eight-hour analysis were located 7 meters from each intersection corner.

The proposed Project's CO concentrations for 1- and 8-hour CO levels are presented in Table 15 on page 220 and Table 16 on page 221 for Parking Scenarios 1 and 2, respectively. As shown, the proposed Project would not have a significant impact upon 1-hour or 8-hour local CO concentrations due to mobile source emissions. Since significant impacts would not occur at the intersections with the highest traffic volumes that are located adjacent to sensitive receptors, no significant impacts are anticipated to occur at any other locations in the study area as the conditions yielding CO hotspots would not be worse than those occurring at the analyzed intersections. Consequently, the sensitive receptors that are included in this analysis would not be significantly affected by CO emissions generated by the net increase in traffic that would occur under the proposed Project. As the proposed Project does not cause an exceedance of an ambient air quality standard, the proposed Project's localized operational air quality impacts would therefore be less than significant.

Consideration of potential localized impacts as a result of the proposed 2,800-space parking structure was also provided as part of this analysis. The analysis approach was consistent the guidelines outlined in the SCAQMD-recommended document titled "*A User's Guide for the Parking Garage Analysis Models*," Robert Scully (1993). All modeling assumptions and worksheets are provided in Appendix D. Based on this approach, the maximum off-site CO contribution at any sensitive receptor location would be 0.6 parts per million (1-hour) and 0.46 parts per million (8-hour). When added to the highest recently recorded background concentrations of 7 parts per million (1-hour) and 6.3 parts per million (8-hour), localized CO concentrations would remain below 20 parts per million (1-hour standard) and 9.0 parts per

Table 15

PROJECT PARKING SCENARIO NO. 1 LOCAL AREA CARBON MONOXIDE DISPERSION ANALYSIS

Intersection	Peak Period[a]	Maximum 1-Hour 2015 Base Concentration [b] (ppm)	Maximum 1-Hour 2015 w/ Project Concentration [c] (ppm)	Significant 1-Hour Impact [d]	Maximum 8-Hour 2015 Base Concentration [e] (ppm)	Maximum 8-Hour 2015 w/ Project Concentration [f] (ppm)	Significant 8-Hour Impact [d]
I-5 NB and Marengo	A.M.	5.9	6.0	No	5.0	5.0	No
St.	P.M.	6.1	6.2	No	5.1	5.2	No
I-5 SB and Mission	A.M.	6.7	6.7	No	5.5	5.5	No
Rd. Off ramp	P.M.	6.2	6.3	No	5.2	5.2	No
Daly St. and Mission	A.M.	6.9	7.0	No	5.5	5.5	No
Rd.	P.M.	7.9	7.1	No	5.6	5.6	No
Soto St. and 10 WB	A.M.	6.7	6.8	No	5.5	5.6	No
Ramps	P.M.	6.5	6.6	No	5.4	5.4	No
Griffin Ave. and	A.M.	6.3	6.5	No	5.2	5.3	No
Mission Road	P.M.	6.6	6.7	No	5.4	5.5	No
Soto St. and Marengo	A.M.	6.9	6.9	No	5.5	5.5	No
St.	P.M.	6.8	6.8	No	5.4	5.4	No
Mission Road and	A.M.	6.6	6.6	No	5.3	5.3	No
Valley Boulevard	P.M.	6.6	6.7	No	5.4	5.4	No
Biggy Street and	A.M.	5.9	6.1	No	5.0	5.0	No
Zonal Avenue	P.M.	6.0	6.0	No	5.0	5.0	No
San Pablo Street and	A.M.	5.9	6.0	No	5.0	5.0	No
Alcazar Avenue	P.M.	6.0	6.1	No	5.0	5.1	No
Soto Street and I-10	A.M.	6.5	6.5	No	5.3	5.3	No
Eastbound Off-ramps	P.M.	6.3	6.3	No	5.2	5.2	No

ppm = parts per million

[a] *Peak hour traffic volumes are based on the Traffic Impact Study prepared for the Project by Linscott, Law and Greenspan, January 2005.*
[b] *SCAQMD 2015 1-hour ambient background concentration (5.1 ppm) + 2015 Base traffic CO 1-hour contribution.*
[c] *SCAQMD 2015 1-hour ambient background concentration (5.1 ppm) + 2015 w/ Project traffic CO 1-hour contribution.*
[d] *The most restrictive standard for 1-hour CO concentrations is 20 ppm and for 8-hour concentrations is 9.0 ppm.*
[e] *SCAQMD 2015 8-hour ambient background concentration (4.6 ppm) + 2015 Base traffic CO 8-hour contribution.*
[f] *SCAQMD 2015 8-hour ambient background concentration (4.6 ppm) + 2015 w/ Project traffic CO 8-hour contribution.*

Source: PCR Services Corporation, 2004.

million (8-hour standard) at all off-site receptor locations. In addition, the parking structure would be built in accordance with Los Angeles Municipal Code requirements, and as such, the facades would be 50 percent open, which would allow for adequate ventilation and dispersion of potential emissions to acceptable CO ambient concentrations. Therefore, the operation of the proposed Project's parking structure would not cause or localize air quality impacts related to mobile sources and emissions would therefore be less than significant.

The proposed Project will likely include installation and operation of diesel-fired generators for emergency power generation. Unless a blackout occurs, these generators would

Table 16

PROJECT PARKING SCENARIO NO. 2 LOCAL AREA CARBON MONOXIDE DISPERSION ANALYSIS

Intersection	Peak Period[a]	Maximum 1-Hour 2015 Base Concentration [b] (ppm)	Maximum 1-Hour 2015 w/ Project Concentration [c] (ppm)	Significant 1-Hour Impact [d]	Maximum 8-Hour 2015 Base Concentration [e] (ppm)	Maximum 8-Hour 2015 w/ Project Concentration [f] (ppm)	Significant 8-Hour Impact [d]
I-5 NB and Marengo St.	A.M.	5.9	6.0	No	5.0	5.0	No
	P.M.	6.1	6.2	No	5.1	5.2	No
I-5 SB and Mission Rd. Off ramp	A.M.	6.7	6.7	No	5.5	5.5	No
	P.M.	6.2	6.3	No	5.2	5.2	No
Daly St. and Mission Rd.	A.M.	6.9	7.0	No	5.5	5.5	No
	P.M.	6.9	7.0	No	5.6	5.6	No
Soto St. and 10 WB Ramps	A.M.	6.7	7.1	No	5.5	5.6	No
	P.M.	6.5	6.6	No	5.4	5.4	No
Soto St. and Alcazar St.	A.M.	6.8	7.1	No	5.4	5.6	No
	P.M.	6.4	6.6	No	5.3	5.4	No
Soto St. and Marengo St.	A.M.	6.9	6.9	No	5.5	5.5	No
	P.M.	6.8	6.9	No	5.4	5.4	No
Mission Road and Valley Boulevard	A.M.	6.6	6.6	No	5.3	5.3	No
	P.M.	6.6	6.6	No	5.4	5.4	No
San Pablo Street and Alcazar Street	A.M.	5.9	6.1	No	5.0	5.1	No
	P.M.	6.0	6.2	No	5.0	5.2	No
Soto Street and I-10 Eastbound Off-ramp	A.M.	6.5	6.5	No	5.3	5.4	No
	P.M.	6.3	6.3	No	5.2	5.2	No

ppm = parts per million

[a] *Peak hour traffic volumes are based on the Traffic Impact Study prepared for the Project by Linscott, Law and Greenspan, January 2005.*

[b] *SCAQMD 2015 1-hour ambient background concentration (5.1 ppm) + 2015 Base traffic CO 1-hour contribution.*

[c] *SCAQMD 2015 1-hour ambient background concentration (5.1 ppm) + 2015 w/ Project traffic CO 1-hour contribution.*

[d] *The most restrictive standard for 1-hour CO concentrations is 20 ppm and for 8-hour concentrations is 9.0 ppm.*

[e] *SCAQMD 2015 8-hour ambient background concentration (4.6 ppm) + 2015 Base traffic CO 8-hour contribution.*

[f] *SCAQMD 2015 8-hour ambient background concentration (4.6 ppm) + 2015 w/ Project traffic CO 8-hour contribution.*

Source: PCR Services Corporation, 2004.

be operated for only a few hours per month for routine testing and maintenance purposes. The project Applicant would be required to obtain a permit to construct and a permit to operate any standby generators under SCAQMD Rules 201, 202 and 203. Under SCAQMD Regulation XIII (New Source Review [NSR]), all generators must meet Best Available Control Technology (BACT) requirements to minimize emissions of PM_{10} (as well as CO, VOC, and NO_X emissions). Compliance with SCAQMD Rules and Regulations regarding stationary-source combustion equipment would ensure that contributions to localized PM_{10} concentrations remain below the 2.5 $\mu g/m^3$ significance threshold. As such, any potential impacts would be less than significant.

(c) Regional Concurrent Construction and Operation Impacts

The potential exists that the later stages of proposed Project construction could occur concurrently with the occupancy of the earlier stages of development. Therefore, emissions associated with concurrent construction and operation activities were evaluated. Concurrent emissions would be their greatest in the latter stages of proposed Project construction, wherein the proposed Project would be nearly built-out (i.e., development on all but one site completed), but some construction activities would still be occurring (for purposes of this assumption, Development Site F). As summarized in Table 17 on page 223, concurrent construction and operational emissions would exceed regional SCAQMD daily thresholds for NO_X, and ROC, but would not exceed the regional SCAQMD daily threshold for SO_X, CO or PM_{10}. Thus, a significant regional air quality impact would occur.

(d) Toxic Air Contaminants

The primary source of potential air toxics associated with proposed Project operations include diesel particulates from delivery trucks (e.g., truck traffic on local streets, on-site truck idling and movement and operation of transportation refrigeration units), equipment used to off-load deliveries, boilers (used for water and space heating), and emergency backup generators. These potential sources would be dispersed among the Development Sites (i.e., at multiple loading dock, boiler and emergency backup generator locations). The SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulates (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[40]

Typical sources of acutely and chronically hazardous toxic air contaminants include industrial manufacturing processes, automotive repair facilities, and dry cleaning facilities. The proposed Project would not include any of these potential sources, although minimal emissions may result from the use of consumer products. As such, the proposed Project would not release substantial amounts of toxic contaminants, and a less than significant impact on human health would occur. Based on the limited activity of the toxic air contaminant sources, the proposed Project does not warrant the need for a health risk assessment, and potential air toxic impacts would be less than significant.

In addition, as discussed above any facility that warrants such an analysis will be required to comply with SCAQMD Rule XIV (New Source Review of Air Toxics).

[40] *SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.*

Table 17

CONCURRENT OPERATION AND CONSTRUCTION EMISSIONS
(Pounds per day)

Emission Source	CO	NO_X	PM_{10}	ROC	SO_X
Operation Emissions [a]	413	86	55	38	3
Construction Emissions [b]	117	77	28	165	<1
Total	530	163	83	203	3
SCAQMD Construction Significance Threshold	550	100	150	75	150
Over (Under)	(20)	63	(67)	128	(147)
Significant?	No	Yes	No	Yes	No
SCAQMD Operation Significance Threshold	550	55	150	55	150
Over (Under)	(20)	108	(67)	148	(147)
Significant?	No	Yes	No	Yes	No

[a] *For purposes of this analysis, assumes buildout of entire Project except Development Site F.*
[b] *For purposes of this assumption, assumes maximum emissions attributable to construction activity on Development Site F.*

Source: PCR Services Corporation, 2004.

(e) Odors

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed Project does not include any uses identified by the SCAQMD as being associated with odors. The proposed Project may include a new vivarium; however, the University would employ the same odor control measures used to avoid odor complaints at existing vivaruims.[41] Compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines would limit potential objectionable odor impacts to a level that is less than significant.

(f) SCAQMD Handbook Policy Analysis

In accordance with the procedures established in the SCAQMD *CEQA Air Quality Handbook*, the following criteria are required to be addressed in order to determine the proposed

[41] *A vivarium is an enclosure for keeping or raising and observing animals, typically for laboratory research purposes.*

Project's consistency with SCAQMD and Southern California Association of Governments (SCAG)[42] 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 for projects such as the USC Health Sciences Campus include forecasts of Project emissions in a regional context during construction and project occupancy. These forecasts are provided earlier in this section. Since the consistency criteria identified under the first criterion pertain to pollutant concentrations, rather than to total regional emissions, an analysis of the proposed Project's pollutant emissions on localized pollutant concentrations is used as the basis for evaluating Project consistency.[43] As discussed in the preceding sections, localized concentrations for PM_{10}, CO, and NO_2 have been analyzed for the proposed Project. SO_2 emissions would be negligible during construction and long-term operations, and therefore would not have potential to cause or affect a violation of the SO_2 ambient air quality standard. There is no localized threshold for ROC emissions, only a regional emissions threshold.

PM_{10} is the primary pollutant of concern during construction activities, and therefore, the proposed Project's PM_{10} emissions during construction were analyzed: (1) to ascertain potential effects on localized concentrations; and (2) to determine if there is a potential for such emissions to cause or affect a violation of the ambient air quality standard for PM_{10}. Results of the PM_{10} dispersion modeling indicate that the increase in the ambient PM_{10} concentration during construction would exceed the SCAQMD-recommended 10.4 $\mu g/m^3$ PM_{10} significance threshold at multiple sensitive receptor locations. However, the potential for this impact would be short-term and would not have a long-term impact on the region's ability to meet State and Federal air quality standards. In addition, the Project would be required to comply with SCAQMD Rule 403

[42] *SCAG is the federally designated Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. As the designated MPO, SCAG is mandated by the federal government to develop and implement regional plans that address transportation, growth management, hazardous waste management, and air quality issues.*

[43] *South Coast Air Quality Management District, CEQA Air Quality Handbook, p. 12-3, 1993.*

and would implement all feasible mitigation measures for control of PM_{10}. Nevertheless, the proposed Project will have a significant temporary impact on localized PM_{10} concentrations.

In addition, the proposed Project's maximum potential NO_X and CO daily emissions during construction were analyzed to ascertain potential effects on localized concentrations and to determine if there is a potential for such emissions to cause or affect a violation of an applicable ambient air quality standard. The analysis concluded that CO and NO_2 concentrations would not exceed their respective AAQS, and potential impacts would therefore be less than significant.

During long-term Project operations, CO is the preferred pollutant for assessing local area air quality impacts from post-construction motor vehicle operations. Based on methodologies set forth by the SCAQMD, one measure of local area air quality impacts that can indicate whether the proposed Project would cause or affect a violation of an air quality standard would be based on the estimated CO concentrations at selected receptor locations located in close proximity to the Project Site. As indicated earlier, CO emissions were analyzed using the CALINE-4 model. No violations of the state and federal carbon monoxide standards are projected to occur. Overall, the proposed Project would result in less-than-significant impacts with regard to CO, NO_2 and SO_2 concentrations during Project construction and operations. While PM_{10} concentrations during construction would exceed the SCAQMD 10.4 $\mu g/m^3$ significance threshold, the potential for this impact would be short-term and would not have a long-term impact on the region's ability to meet State and federal air quality standards. As such, the proposed Project would meet the first AQMP consistency criterion.

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it must be recognized that 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 SCAQMD's second criterion for determining 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 the population, housing and employment growth projections; (2) project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an 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 if it is consistent with the population, housing and employment assumptions which were used in the development of the AQMP. The 2003 AQMP, the most recent AQMP adopted by the SCAQMD, incorporates, in part, SCAG's 2001 Regional Transportation Plan (RTP) socioeconomic forecast projections of regional population and employment growth.

SCAG locates the Project Site within the City of Los Angeles Subregion. The 2004 RTP projects that employment in this subregion will grow by about 262,181 jobs between 2005 and 2015. The proposed Project is projected to result in a net increase of approximately 487 jobs on the Project Site, or approximately 0.19 percent of the total job growth projected for the subregion. Such levels of employment growth are consistent with the employment forecasts for the subregion as 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?

Implementation of all feasible mitigation measures is recommended to reduce air quality impacts to the extent feasible. The Proposed Project would incorporate a number of key air pollution control measures identified by the SCAQMD, as described in Section IV.D.5, Mitigation Measures, below. As such, the proposed Project meets this AQMP consistency criterion since all feasible mitigation measures would be implemented.

- 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 of the City of Los Angeles and SCAG. Locating the proposed medical office and research facilities within the existing USC Health Sciences Campus would provide improved opportunities to consolidate and/or eliminate vehicle trips that would otherwise occur if such improvements were built outside of the USC Health Sciences Campus area. This serves to fulfill the AQMD objective of reducing vehicle miles traveled and their related vehicular air emissions. Consequently, the proposed Project would be consistent with AQMP land use policy.

Overall, the proposed Project is found to be consistent with the AQMP, as the proposed Project does not cause or worsen an exceedance of an ambient air quality standard, does not delay the attainment of an air quality standard, is consistent with the AQMP's growth projections, implements all feasible air quality mitigation measures, and is consistent with the AQMP's land use policies.

City of Los Angeles Policies

The City of Los Angeles General Plan was prepared in response to California state law requiring that each city and county adopt a long-term comprehensive general plan. This plan must be integrated, internally consistent, and present goals, objectives, policies and implementation guidelines for decision makers to use. The City has included an Air Quality Element as part of its General Plan. The planning area for the City's Air Quality Element covers the entire City of Los Angeles, which encompasses an area of about 465 square miles.

The 1992 revision of the City's General Plan Air Quality Element serves to aid the greater Los Angeles region in attaining the state and federal ambient air quality standards at the earliest feasible date, while still maintaining economic growth and improving the quality of life. The City's Air Quality Element and the accompanying Clean Air Program acknowledges the inter-relationships between transportation and land use planning in meeting the City's mobility and clean air goals. With the City's adoption of the Air Quality Element and the accompanying Clean Air Program, the City is seeking to achieve consistency with regional Air Quality, Growth Management, Mobility and Congestion Management Plans.

To achieve these goals, performance based standards have been adopted to provide flexibility in implementation of the policies and objectives of the City's Air Quality Element. The following City Air Quality Element Goals, Objectives and Policies are relevant to the Proposed Project:

Goal 2—Less reliance on single occupant vehicles with fewer commute and non-work trips.

Objective 2.1—It is the objective of the City of Los Angeles to reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.

Policies 2.1.1—Utilize compressed work week schedules and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in an effort to reduce vehicle trips and/or vehicle miles traveled as an employer and encourage the private sector to do the same to reduce vehicle trips and traffic congestion.

As discussed previously, the proposed Project would locate medical office and research facilities within the existing USC Health Sciences Campus, which would provide improved opportunities to consolidate and/or eliminate vehicle trips that would otherwise occur if such improvements were built outside of the HSC area. USC currently provides a tram/shuttle service on the HSC as well as a service that runs between the University Park Campus and the HSC; and

provides carpool and vanpool services and information through its Transportation Services office. In addition, the current HSC location has convenient access to MTA and Foothill Transit bus services, and is located within close proximity to the future MTA Metro Gold Line Light Rail Transit line that is anticipated to be completed by 2009. The proposed Project is therefore considered consistent with this City policy.

> *Objective 2.2—It is the objective of the City of Los Angeles to increase vehicle occupancy for non-work trips by creating disincentives for single passenger vehicles, and incentives for high occupancy vehicles.*
>
> > *Policy 2.2.1—Discourage single-occupant vehicle use through a variety of measures such as market incentives, mode-shift incentives, trip reduction plans, and rideshare incentives.*
> >
> > *Policy 2.2.2—Encourage multi-occupant vehicle travel and discourage single occupant vehicle travel by instituting parking management practices.*
> >
> > *Policy 2.2.3—Minimize the use of single occupant vehicles associated with special events, or in areas and times of high levels of pedestrian activities.*

The USC Health Science Campus improvements would be located within walking distance of MTA and Foothill Transit bus lines as well as being in proximity to the proposed Metro Gold Line Extension that is scheduled to be completed by 2009. In addition, USC offers a carpool and vanpool program as well as a $25 per month public transportation subsidy to eligible employees that can be applied toward the purchase of a monthly pass for MTA (bus or light rail), LADOT, and Metrolink transit services. Due to these features, a higher percentage of Project-related trips would be "transit trips" than would be the case if the proposed Project were to be located farther away from convenient public transit access.

> *Goal 4—Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation and air quality.*
>
> > *Objective 4.1—It is the objective of the City of Los Angeles to include regional attainment of ambient air quality standards as a primary consideration in land use planning.*
> >
> > > *Policy 4.1.1—Coordinate with all appropriate regional agencies in the implementation of strategies for the integration of land use, transportation and air quality policies.*

As described above as part of the analysis relative to Goal 2, the proposed Project has incorporated a wide array of features into its land use plan specifically targeted towards the reduction of vehicle trips and vehicle miles traveled. In addition, development of the proposed Project at the proposed site offers the opportunity to utilize existing infrastructure to support growth in the Project area. It is well served by transit and has the opportunity to encourage pedestrian activities in this area.

Based upon this evaluation, it is concluded that the proposed Project would be consistent with City of Los Angeles air quality policies as it implements in a number of ways the air quality goals and policies set forth within the City's General Plan.

Overall, no significant impacts would occur as a result of Project development with respect to compatibility with applicable air quality policies.

(3) Additional Development Scenarios

The preceding air quality analysis addresses potential impacts during Project construction and operations. The construction air quality analysis includes forecasts of the following: (1) regional emissions of criteria pollutants attributable to construction equipment operating within each of the seven proposed Development Sites, construction worker travel to and from the Development Sites, and the delivery of construction materials; (2) localized concentrations of PM_{10}, NO_2, and CO during construction at 16 receptor locations in proximity of the Project site; (3) toxic air contaminants; and (4) odors. The operational air quality analysis includes the following: (1) forecasts of regional emissions of criteria pollutants attributable to motor vehicle travel, energy consumption, and miscellaneous minor sources; (2) forecast of localized concentrations of CO at selected intersections and analysis of localized concentrations of PM_{10}, VOC, and NO_X; (3) forecast of regional emissions of criteria pollutants during construction and operations; (4) analysis of toxic air contaminants; (5) analysis of odor impacts; and (6) Project consistency with the SCAQMD's Air Quality Management Plan (AQMP) and the City's General Plan Air Quality Element.

The Project, as proposed, provides flexibility with regard to the types and quantities of the various uses that could be developed as part of the Project. The preceding air quality analysis is based on the development of 765,000 square feet of academic and/or medical-related uses (i.e., 720,000 square feet of academic and support facilities and 45,000 square feet of medical clinic uses). Under the proposed Project, the amount of academic and/or medical research facilities could be reduced by as much as 255,000 square feet, while the amount of medical clinic facilities could be increased by as much as 75,000 square feet. Under this scenario, a total of 585,000 square feet of academic and medical research facilities would be developed. These variations would allow flexibility in the Project's land use mix in order to respond to the future

needs and demands of the HSC, the southern California economy, and changes in Project requirements.

While the exchange of uses would result in varying amounts of development (i.e., between 585,000 and 765,000 square feet), the range of permitted uses would be the same. As such the types of potential air quality impacts would be the same regardless of the amount of development that is actually constructed. The construction air quality analysis presented above provides a conservative forecast of potential construction air quality levels since it analyzes air quality impacts at each receptor location based on concurrent construction at geographically related Development Sites. This conservative assumption could occur if Project development consisted of 585,000 square feet, 765,000 square feet or any amount in between. As the construction air quality analysis is based on the amount of construction equipment operating at each site, the air quality impacts attributable to 765,000 square feet of development would not be exceeded if less than 765,000 square feet of development occurs. However, if less than 765,000 square feet of development occurs, less construction would occur over a shorter period. As the analysis is based on daily air quality levels, the construction air quality impacts under peak conditions would be the same regardless of the duration of construction and/or the total amount of development that occurs. Therefore, the conclusions presented above with regard to construction air quality impacts based on the development of 765,000 square feet of development would also apply to all of the potential additional development scenarios that could occur under the proposed Project. As such, regional emissions of NO_X and ROC during construction would result in a significant regional air quality impact. Whereas, localized concentrations of CO and NO_2 during construction would be less than significant, localized concentrations of PM_{10} would exceed the established significance threshold. In addition, emissions of toxic air contaminants and odors during construction would also be less than significant.

While the sources and quantities of emissions during Project operations would be different than during Project construction, the same conclusion applies with regard to the impacts of less than 765,000 square feet of development (i.e., impacts would be equal to or less than those forecasted to occur with 765,000 square feet of development). This results because the number of vehicle trips attributable to the Project would not be greater than those that would occur should 765,000 square feet of development occur. Impacts of on-site stationary sources would be less than or equal to those occurring with 765,000 square feet of development since the characteristics that determine the air quality levels from the individual stationary sources are not anticipated to increase with a reduction in the amount of development. Based on these conclusions, implementation of any additional development scenario would result in the following: (1) regional emissions of NO_X during operations would result in a significant regional air quality impact; (2) localized concentrations of CO, VOC, PM_{10}, and NO_2 during operations would be less than significant; (3) emissions of toxic air contaminants and odors during operations would also be less than significant; (4) regional emissions of NO_X and ROC during concurrent construction and operations impacts would result in a significant regional air

quality impact; and (5) the Project is consistent with the AQMP and the City's applicable air quality policies.

4. CUMULATIVE IMPACTS

a. Construction

Of the 14 related projects that have been identified within the proposed Project study area, there are 9 related projects that have not already been built or are currently under construction. With the exception of the USC HNRT building that is currently under construction, the Applicant has no control over the timing or sequencing of the related projects, and as such, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. For this reason, the SCAQMD's methodology to assess a project's cumulative impact differs from the cumulative impacts methodology employed elsewhere in this EIR, in which foreseeable future development within a given service boundary or geographical area is predicted and associated impacts measured.

With respect to the Project's construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to Federal Clean Air Act mandates. As such, the proposed Project would comply with SCAQMD Rule 403 requirements, and implement all feasible mitigation measures. In addition, the proposed Project would comply with adopted AQMP emissions control measures. Per SCAQMD rules and mandates as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects Basin-wide, which would include each of the related projects mentioned above. Nevertheless, construction-period NO_X and ROC mass regional emissions, and localized PM_{10} emissions associated with the proposed Project are already projected to result in a significant impact to air quality. In addition, there is a high probability that construction-period CO and PM_{10} mass regional emissions from related projects, when combined with proposed Project emissions, would exceed their respective SCAQMD daily significance thresholds. As such, cumulative impacts to air quality during proposed Project construction would be significant and unavoidable.

Similar to the proposed Project, the greatest potential for TAC emissions at each related project would be related to diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer

risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given that grading and excavation activities would occur for only three to six months per construction site, the proposed Project and the related projects that have not already been built would not result in a long-term (i.e., 70 years) substantial source of TAC emissions with no residual emissions after construction and corresponding individual cancer risk. Furthermore, any related project that has the potential to emit notable quantities of TACs would be regulated by the SCAQMD such that TAC emissions would be negligible. Thus, TAC emissions from the related projects are anticipated to be less than significant unto themselves, as well as cumulatively in conjunction with the proposed Project.

Also similar to the proposed Project, potential sources that may emit odors during construction activities at each related project would include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the amount of volatile organic compounds from architectural coatings and solvents. Via mandatory compliance with SCAQMD Rules, it is anticipated that construction activities or materials used in the construction of the related projects would not create objectionable odors. Thus, odor impacts from the related projects are anticipated to be less than significant unto themselves, as well as cumulatively in conjunction with the proposed Project.

b. Operation

The SCAQMD has set forth both a methodological framework as well as significance thresholds for the assessment of a project's cumulative operational air quality impacts. The SCAQMD's methodology differs from the cumulative impacts methodology employed elsewhere in this Draft EIR, in which 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 SCAQMD's AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the Federal and State Clean Air Acts. This forecast also takes into account SCAG's forecasted future regional growth. As such, the analysis of cumulative impacts focuses on determining whether the proposed Project is consistent with 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.

Based on the SCAQMD's methodology (presented in Chapter 9 of the *CEQA Air Quality Handbook*), a project would have a significant cumulative air quality impact if the ratio of daily Project-related employee vehicle miles traveled (VMT) to daily countywide vehicle miles traveled exceeds the ratio of daily Project employees to daily countywide employees. As shown in Table 18 on page 233, the daily Project to countywide VMT ratio is not greater than the

Table 18

PROJECT CUMULATIVE AIR QUALITY IMPACTS

Daily Vehicle Miles Traveled for Project Employment [a]	12,321
Daily Vehicle Miles Traveled Countywide [b]	225,794,000
Daily Vehicle Miles Traveled Ratio	0.00005
Project Employment [a]	487
Countywide Employment [c]	5,198,739
Employment Ratio	0.00009
Significance Test—Daily Vehicle Miles Traveled Ratio Greater Than Employment Ratio	No

[a] *Increase of vehicle miles traveled as a result of the Project, Traffic Analysis, Section IV.K. Data obtained from URBEMIS 2002.*
[b] *Data obtained from EMFAC2002.*
[c] *Data obtained from SCAG's Regional Transportation Plan, Socioeconomic Projections, April 2004*

Source: PCR Services Corporation, 2004.

Project to countywide employee ratio. Based on these criteria, development of the proposed Project would have a less-than-significant air quality impact. In addition, as shown in Table 15 on page 220, a localized CO impact analysis was conducted for cumulative traffic (i.e., related projects and ambient growth through 2015) in which no local CO violations would occur at any of the studied intersections. Despite these conclusions, the proposed Project is more conservatively concluded to contribute to a significant cumulative regional air quality impact as the Basin is non-attainment for ozone and PM_{10}, and the proposed Project would exceed the SCAQMD daily significance thresholds for ROC and NO_X emissions (i.e., ozone precursors).[44]

With respect to TAC emissions, neither the proposed Project nor any of the related projects (which are largely residential, restaurant, retail/commercial, and medical/research developments) would represent a substantial source of TAC emissions, which are typically associated with large-scale industrial, manufacturing and transportation hub facilities. However, the proposed Project and each of the related projects would likely generate minimal TAC emissions related to the use of consumer products, landscape maintenance activities, etc. Pursuant to California Assembly Bill 1807, which directs the California Air Resources Board (ARB) to identify substances as TAC and adopt airborne toxic control measures (ATCMs) to control such substances, the SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial Basin-wide TAC emissions reductions. As such, cumulative TAC emissions during long-term operations would be less than significant.

[44] *This approach is more conservative than the approach provided in the SCAQMD CEQA Air Quality Handbook.*

With respect to potential odor impacts, neither the proposed Project land use nor any of the related projects (which are primarily hospital/medical office, general office, residential, retail, and restaurant uses) land uses have a high potential to generate odor impacts.[45] Furthermore, any related project that may have a potential to generate objectionable odors would be required by SCAQMD Rule 402 (Nuisance) to implement Best Available Control Technology to limit potential objectionable odor impacts to a less than significant level. Thus, potential odor impacts from related projects are anticipated to be less than significant unto themselves, as well as cumulatively, in conjunction with the proposed Project.

5. MITIGATION MEASURES

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

a. Construction

Mitigation Measure D-1: General contractors shall implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403.[46]

Mitigation Measure D-2: Disturbed areas shall be watered three times daily, which is above and beyond the SCAQMD Rule 403 requirement to water disturbed areas two times daily.

Mitigation Measure D-3: All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.

Mitigation Measure D-4: General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not in use, to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.

[45] *According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding.*

[46] *SCAQMD Rule 403 requirements are detailed in Appendix D.*

Mitigation Measure D-5: Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used to the extent feasible.

Mitigation Measure D-6: All construction vehicles shall be prohibited from idling in excess of ten minutes, both on- and off-site.

Mitigation Measure D-7: Project heavy-duty construction equipment shall use alternative clean fuels, such as low sulfur diesel or compressed natural gas with oxidation catalysts or particulate traps, to the extent feasible.

Mitigation Measure D-8: The Applicant shall utilize coatings and solvents that are consistent with applicable SCAQMD rules and regulations**.**

b. Operation

During the operational phase, the proposed Project would result in regional emissions that exceed regional SCAQMD significance thresholds for NO_X and ROC. Long-term mobile source emissions associated with the proposed Project shall be reduced through the following transportation systems management and demand management measures:

Mitigation Measure D-9: The Applicant shall provide public education to USC Health Science Campus visitors and employees regarding the importance of reducing vehicle miles traveled and utilizing transit, and the related air quality benefits through the use of brochures and other informational tools.

Mitigation Measure D-10: The Applicant shall, to the extent feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods.

Mitigation Measure D-11: The Applicant shall coordinate with the MTA and the City of Los Angeles Department of Transportation to provide information with regard to local bus and rail services.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

a. Construction

Project construction would not result in regional emissions that exceed SCAQMD regional significance thresholds for CO, PM_{10}, and SO_X, and as such, impacts with respect to these pollutants during construction would be less than significant. With respect to NO_X and

ROC emissions during construction, mitigation measures would reduce these emissions from heavy-duty construction equipment by 5 percent based on the calculations presented in Appendix C of this Draft EIR. However, the proposed Project would still result in regional construction emissions that exceed SCAQMD thresholds of significance for NO_X and ROC. Therefore, construction of the proposed Project would result in a significant and unavoidable impact on regional air quality with respect to NO_X and ROC emissions, and certification of this EIR by the City of Los Angeles would require the adoption of a Statement of Overriding Considerations.

Local air quality impacts (i.e., pollutant concentrations) during construction with respect to CO, SO_2 and NO_2 would be less than significant. With respect to localized PM_{10} concentrations during construction, prescribed mitigation measures would reduce the projected maximum concentrations by 8 percent to 38 percent as shown in Table 19 on page 237. Nevertheless, the proposed Project would still result in localized PM_{10} concentrations during construction emissions that exceed the SCAQMD 10.4 $\mu g/m^3$ significance threshold at 12 of the 16 sensitive receptor locations. Therefore, construction of the proposed Project would result in a significant and unavoidable impact on localized air quality with respect to PM_{10} concentrations, and certification of this EIR by the City of Los Angeles would require the adoption of a Statement of Overriding Considerations.

No notable impacts related to TAC emissions during construction are anticipated to occur for the proposed Project. As such, potential impacts would be less than significant.

The proposed Project is not anticipated to generate a substantial amount of objectionable odor emissions during construction. Via mandatory compliance with SCAQMD Rules, no construction activities or materials are proposed which would create objectionable odors. As such, potential impacts would be less than significant.

b. Operation

During the operational phase, the proposed Project would result in regional emissions that exceed the SCAQMD significance threshold for NO_X. Mitigation measures identified above would reduce the potential air quality impacts of the Project to the degree technically feasible, but NO_X mass daily emissions would remain above the SCAQMD significance threshold of 55 pounds per day. Therefore, operation of the proposed Project following construction would have a significant and unavoidable impact on regional air quality with respect to NO_X mass daily emissions.

Operational emissions would not exceed the SCAQMD significance threshold for CO, ROC, PM_{10}, and SO_2, and, thus, impacts are concluded to be less than significant for these pollutants.

Table 19

POTENTIAL MAXIMUM LOCALIZED PM_{10} CONCENTRATIONS WITH MITIGATION

Sensitive Receptor Location	PM_{10} Concentration in $\mu g/m^3$ (24-hour average) No Mitigation	With Mitigation	Percent Reduction
1. LA County–USC Hospital	37.58	29.84	21%
2. USC University Hospital	31.83	26.45	17%
3. USC Healthcare Consultation Center (HCC)	92.73	72.92	21%
4. USC Healthcare Consultation Center II (HCCII)	49.03	39.04	20%
5. Doheny Eye Institute	49.41	39.42	20%
6. Francisco Bravo M.D. Magnet Senior High School	13.06	11.95	8%
7a. Residential Use A	16.96	13.44	21%
7b. Residential Use B	10.34	8.31	20%
7c. Residential Use C	20.82	16.64	20%
7d. Residential Use D	7.88	6.33	20%
7e. Residential Use E	11.62	7.42	36%
8. Women and Children's Hospital	69.59	55.57	20%
9. Nursing College	27.80	17.29	38%
10. Hazard Park	25.65	20.55	20%
11. Lincoln Park	71.83	57.43	20%
12. Children's Daycare Center	10.02	8.06	20%

Source: PCR Services Corporation.

No significant impacts related to local CO concentrations are forecast to occur for the proposed Project. Project development would be consistent with the SCAQMD's AQMP, and the City's General Plan Air Quality Element resulting in an impact that is less than significant.

The proposed Project is not anticipated to include any notable TAC emissions sources. However, as previously discussed, any potentially significant TAC emission sources would be required to comply with SCAQMD Rule XIV (New Source Review of Air Toxics). As such, potential impacts from proposed Project TAC emissions would be less than significant.

Via compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines, potential impacts that could result due to a vivarium or other potential odor source would be less than significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS
E. NOISE

The following analysis describes the existing noise environment within the Project area and estimates future noise levels at surrounding land uses due to potential changes brought about by Project construction and operation.

1. ENVIRONMENTAL SETTING

a. Noise and Vibration Basics

(1) Noise

Noise is 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 in subjective terms such as "noisiness" or "loudness." Sound pressure is measured and quantified using a logarithmic ratio, 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-weighted system is used to adjust measured sound levels. The A-weighted sound level is expressed as "dBA." This scale de-emphasizes low frequencies to which human hearing is less sensitive and focuses on mid- to high-range frequencies. Due to the physical characteristics of noise transmission and reception, an increase of 10 dBA is normally required to achieve a doubling of the "loudness," as perceived by the human ear. In addition, a 3-dBA increase is recognizable to most people in the context of the community noise environment. A change in noise level will usually not be detectable unless the new noise source is at least as loud as the ambient conditions. Typical A-weighted sound levels measured for various sources, as well as people's responses to these levels, are provided in Figure 24 on page 239.

Objects that obstruct the line-of-sight between a noise source and a receiver reduce the noise level if the receiver is located within the "shadow" of the obstruction, such as behind a sound wall. This type of sound attenuation is known as "barrier insertion loss." If a receiver is located behind the wall but still has a view of the source (i.e., line-of-sight not fully blocked), some barrier insertion loss would still occur, however to a lesser extent. Additionally, a receiver located on the same side of the wall as a noise source may actually experience an increase in the

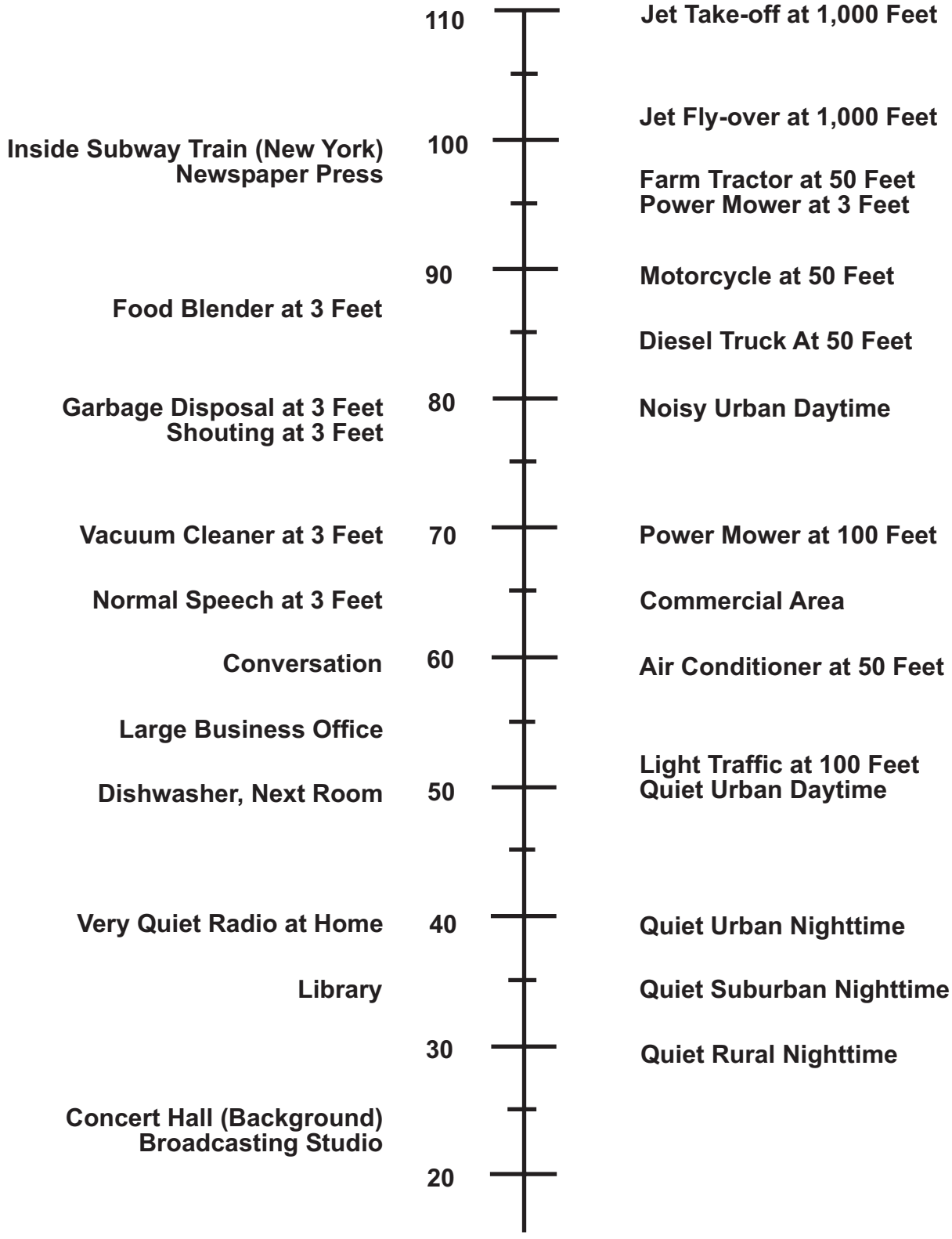

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Figure 24
A-Weighted Sound Levels

Source: Compiled by Hodges & Shutt from Various Sources (December 1993)

perceived noise level as the wall reflects noise back to the receiver, thereby compounding the noise.

Time variation in noise exposure is typically expressed in terms of the average energy over time (L_{eq}), or alternatively, as a statistical description of the sound level that is exceeded over some fraction of a given period of time. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_8 and L_{25} represent the noise levels that are exceeded 8 and 25 percent of the time, respectively, or for 5 and 15 minutes during a 1-hour period, respectively.

Other values typically noted during a noise survey are the L_{min} and L_{max}. These values represent the minimum and maximum noise levels observed during a measurement period. Maximum and minimum noise levels, as compared to the L_{eq}, are a function of the characteristics of the noise source. For example, sources such as compressors, generators, and transformers have maximum and minimum noise levels that are similar to their L_{eq} levels since noise levels for steady-state noise sources do not substantially fluctuate. However, as another example, vehicular noise levels along local roadways result in substantially different minimum and maximum noise levels when compared to the L_{eq} since noise levels fluctuate during pass by events.

Although the A-weighted scale accounts for the range of people's 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:

- Ambient (background) sound level;
- Magnitude of sound event with respect to the background noise level;
- 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 human response. A commonly used noise metric for this type of study is the Community Noise Equivalent Level (CNEL). The CNEL, originally developed for use in the California Airport Noise Regulation, adds a 5 dBA penalty to noise occurring during evening hours from 7:00 P.M. to 10:00 P.M., and

a 10 dBA penalty to sounds occurring between the hours of 10:00 P.M. to 7:00 A.M. to account for the increased sensitivity to noise events that occur during the quiet late evening and nighttime periods. 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.

b. Regulatory Framework

Many government agencies have established noise standards and guidelines to protect citizens from potential hearing damage and various other adverse physiological and social effects associated with noise and ground-borne vibration. The City of Los Angeles has adopted a number of policies, which are based in part on federal and State regulations that are directed at controlling or mitigating environmental noise effects. City policies that are relevant to Project development and operation are discussed below.

(1) City of Los Angeles Standards and Guidelines

The Los Angeles Municipal Code (LAMC) (Section 41.40 and Chapter XI, Articles 1 through 6) establishes regulations regarding allowable increases in noise levels in terms of established noise criteria. Supplementing these LAMC regulations, the City has also established CNEL guidelines that are used for land use planning purposes.

(a) City of Los Angeles Noise Regulation

The City of Los Angeles Noise Regulation establishes acceptable ambient sound levels to regulate intrusive noises (e.g., stationary mechanical equipment and vehicles other than those traveling on public streets) within specific land use zones. In accordance with the Noise Regulation limits for residential zones, a noise level increase of 5 dBA over the existing average ambient noise level at an adjacent property line is considered a noise violation. For purposes of determining whether or not a violation of the Noise Regulation is occurring, the sound level measurements of an offending noise that has a duration of five minutes or less during a one hour period is reduced by 5 dBA to account for people's increased tolerance for short-duration noise events. In cases where the actual measured ambient noise level is not known, the presumed daytime (7:00 A.M. to 10:00 P.M.) minimum ambient noise level for properties zoned residential is 50 dBA, while the nighttime (10:00 P.M. to 7:00 A.M.) presumed minimum ambient noise level is 40 dBA.[47] The presumed daytime minimum ambient noise level for properties zoned commercial is 60 dBA, while the nighttime presumed minimum ambient noise level is 55 dBA.

[47] *Los Angeles Municipal Code, Chapter XI, Article I, Section 111.03.*

The City of Los Angeles Noise Regulation 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.[48] The Noise Regulation prohibits construction noise between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday and 6:00 P.M. and 8:00 A.M. on Saturday, and does not allow construction noise on Sunday.[49]

(b) City of Los Angeles CNEL Guidelines

The City of Los Angeles has adopted local guidelines based, in part, on the community noise compatibility guidelines established by the State Department of Health Services for use in assessing the compatibility of various land use types with a range of noise levels. These guidelines are set forth in the *City of Los Angeles CEQA Thresholds Guide* (Thresholds Guide) in terms of the CNEL. CNEL guidelines for specific land uses are classified into four categories: (1) "normally acceptable"; (2) "conditionally acceptable"; (3) "normally unacceptable"; and (4) "clearly unacceptable." As shown in Table 20 on page 243, a CNEL value of 70 dBA is the upper limit of what is considered a "normally acceptable" noise environment for business and professional commercial uses, although a CNEL as high as 77 dBA is considered "conditionally acceptable." For more sensitive uses such as single-family residential, the upper limit of what is considered "normally acceptable" is set at 60 dBA CNEL.[50]

c. Existing Local Noise Conditions

The predominant noise source within the Project vicinity is roadway noise from the San Bernardino Freeway (I-10), the Golden State Freeway (I-5), and local thoroughfares such as Mission Road, Valley Boulevard, and Zonal Avenue. The Union Pacific railroad tracks that run adjacent to, and on the south side of, Valley Boulevard are another notable Project vicinity noise source. Other community noise sources include incidental noise from the existing commercial and medical uses, ambulance sirens, distant aircraft over-flights, and landscaping maintenance activities at nearby residential and commercial uses.

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[48] *In accordance with the City of Los Angeles Noise Regulations (Los Angeles Municipal Code, Section 112.05), 'technically infeasible' means that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction devices or techniques during the operation of the equipment.*

[49] *Los Angeles Municipal Code, Section 41.40.*

[50] *L.A. CEQA Thresholds Guide, Section I.2, 1998.*

Table 20

CITY OF LOS ANGELES LAND USE COMPATIBILITY FOR COMMUNITY NOISE

	Community Noise Exposure CNEL, dBA			
Land Use	**Normally Acceptable**	**Conditionally Acceptable**	**Normally Unacceptable**	**Clearly Unacceptable**
Single-Family, Duplex, Mobile Homes	50 to 60	55 to 70	70 to 75	Above 70
Multi-Family Homes	50 to 65	60 to 70	70 to 75	Above 70
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 to 70	60 to 70	70 to 80	Above 80
Transient Lodging—Motels, Hotels	50 to 65	60 to 70	70 to 80	Above 80
Auditoriums, Concert Halls, Amphitheaters	—	50 to 70	—	Above 65
Sports Arena, Outdoor Spectator Sports	—	50 to 75	—	Above 70
Playgrounds, Neighborhood Parks	50 to 70	—	67 to 75	Above 72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 to 75	—	70 to 80	Above 80
Office Buildings, Business and Professional Commercial	50 to 70	67 to 77	Above 75	—
Industrial, Manufacturing, Utilities, Agriculture	50 to 75	70 to 80	Above 75	—

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: L.A. CEQA Thresholds Guide, 1998.

(1) Noise-Sensitive Receptors

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure and the types of activities typically involved at the receiver location. The Thresholds Guide states that residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks are generally more sensitive to noise than

commercial and industrial land uses. Noise-sensitive land uses (sensitive receiver locations) in the Project vicinity are shown in Figure 25 on page 245, and include the following:

- LA County–USC Hospital. This hospital/trauma center is located approximately 500 feet southeast of Development Site C, on the south side of Zonal Avenue at Biggy Street. All other Development Sites are located approximately 600 feet (Development Site D) to 2,525 feet (Development Site E) from the LA County–USC Hospital.

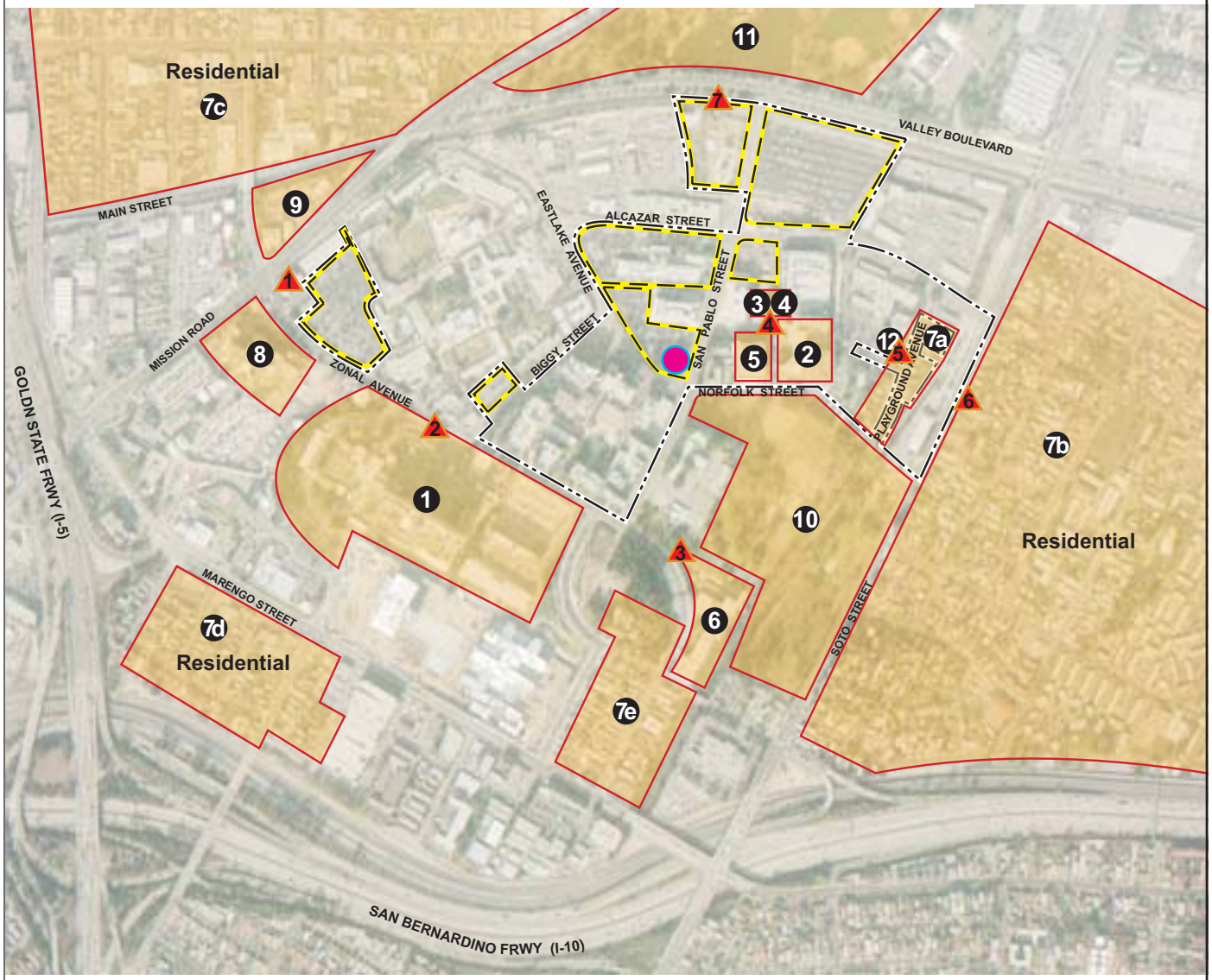
- USC University Hospital. The USC University Hospital is located south and/or east of the seven proposed Development Sites. Development Site B is located approximately 500 feet northwest of the hospital. All other Development Sites are located approximately 825 feet (Development Site E) to 2,600 feet (Development Site C) from the USC University Hospital.

- USC Healthcare Consultation Center (HCC). The USC HCC is located south and/or east of the seven proposed Development Sites. Development Site B is located approximately 175 feet north-northwest of the HCC. All other Development Sites are located approximately 525 feet (Development Site G) to 2,250 feet (Development Site C) from the USC HCC.

- USC Healthcare Consultation Center II. The USC HCCII is located south and/or east of the seven proposed Development Sites. Development Site B is located approximately 375 feet north of the HCCII. All other Development Sites are approximately 600 feet (Development Site E) to 2,500 feet (Development Site C) from the USC HCCII.

- Doheny Eye Institute. The Doheny Eye Institute is located south and/or east of the seven proposed Development Sites. Development Site B is located approximately 325 feet north of the Doheny Eye Institute. All other Development Sites are located approximately 500 feet (Development Site A) to 2,150 feet (Development Site C) from the Doheny Eye Institute.

- Francisco Bravo M.D. Magnet Senior High School. The Francisco Bravo M.D. Magnet Senior High School is located to the southeast of the Health Sciences Campus on the east side of Cornwell Street. Development Site A is located approximately 875 feet north of this high school. All other Development Sites are located approximately 1,500 feet (Development Site D) to 2,125 feet (Development Site C) from this High School campus location.



LEGEND

- 24- Hour Noise Measurement Location
- 15-Minute Noise Measurement Location

Sensitive Receptors

1. LA County/USC Hospital
2. USC University Hospital
3. USC Healthcare Consultation Center
4. USC Healthcare Consultation Center II
5. Doheny Eye Institute
6. Francisco Bravo Institute M.D. Magnet Senior High School

- 7a Residential Neighborhoods
- 7b Residential Neighborhoods
- 7c Residential Neighborhoods
- 7d Residential Neighborhoods
- 7e Residential Neighborhoods

8. Woman and Children's Hospital
9. Nurse College
10. Hazard Park
11. Lincoln Park
12. Children's Daycare Center

- Development Sites
- Project Boundary

Figure 25
Sensitive Receptor and Sound Measurement Locations

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Source: Aerial: Landiscore; PCR Services Corporation, 2004

- Residential Neighborhood (A). Residential uses are situated on the eastern portion of the HSC, along Playground Avenue. Development Site B is located approximately 750 feet northwest of this residential area. All other Development Sites are located approximately 800 feet (Development Site E) to 3,075 feet (Development Site C) away from this residential area.

- Residential Neighborhood (B). A residential neighborhood is located east of Soto Street. Development Site E is located approximately 1,300 feet northwest of this residential area. All other Development Sites are located approximately 1,325 feet (Development Site B) to 3,250 feet (Development Site C) from this residential area.

- Residential Neighborhood (C). A residential neighborhood is located north of Main Street. Development Site C is located approximately 875 feet south of this residential area. All other Development Sites are located approximately 1,375 feet (Development Site G) to 2,000 feet (Development Site E) from this residential area.

- Residential Neighborhood (D). A residential neighborhood is located south of Marengo Street. Development Site C is located approximately 1,500 feet north of this residential area. All other Development Sites are located approximately 1,700 feet (Development Site D) to 3,550 feet (Development Site E) from this residential area.

- Residential Neighborhood (E). A residential neighborhood is located north of Marengo Street. Development Site D is located approximately 1,150 feet northwest of this residential area. All other Development Sites are located approximately 1,700 feet (Development Site A) to 2,600 feet (Development Site F) from this residential area.

- Women and Children's Hospital. The Women and Children's Hospital is located south of Zonal Avenue. Development Site C is located approximately 375 feet northeast of this hospital use. All other Development Sites are located approximately 1,225 feet (Development Site D) to 3,025 feet (Development Site E) away from this hospital use.

- Nursing College. The Nursing College is located north of Mission Road. Development Site C is located approximately 475 feet southeast of this land use. All other Development Sites are located approximately 1,425 feet (Development Site D) to 2,750 feet (Development Site E) away from this land use.

- Hazard Park. Hazard Park is located south and/or east of the seven proposed Development Sites and is located south of Norfolk Street and east of San Pablo Street. Development Site A is located approximately 475 feet northwest of Hazard

Park. All other Development Sites are located approximately 825 feet (Development Site B) to 2,025 feet (Development Site C) from Hazard Park.

- Lincoln Park. Lincoln Park is located north of Valley Boulevard and is separated from the HSC by Valley Boulevard and the railroad tracks that run parallel to, and south of, Valley Boulevard. Lincoln Park offers a wide variety of youth and adult recreational programs including fishing in the lake within the park. Development Sites E and F are the nearest Project components to this sensitive land use, and are located approximately 475 and 550 feet south of Lincoln Park, respectively. All other Development Sites are located approximately 925 feet (Development Site B) to 1,650 feet (Development Site D) from Lincoln Park.

- Child Daycare Center. The Children's Daycare Center is located along Playground Avenue, south of Alcazar Street. Development Site B is located approximately 900 feet east-northeast of this land use. All other Development Sites are located approximately 1,125 feet (Development Site E) to 3,025 feet (Development Site C) away from this land use.

(2) Ambient Noise Levels

A two-day continuous ambient sound measurement was conducted on Wednesday, June 9, and Thursday, June 10, 2004, to characterize the existing noise environment in the Project vicinity. The sound level meter was placed at the northwest corner of San Pablo Street and Eastlake Avenue, as depicted earlier in Figure 25 on page 245. A summary of the sound measurement data collected from this location is provided in Table 21 on page 248. As shown therein, the measured CNEL was 65.9 dBA and 64.9 dBA on the two measurement days. Based on the City of Los Angeles community noise/land use compatibility criteria provided earlier in Table 20 on page 243, this noise environment is considered "normally acceptable."[51]

In addition to the two-day continuous sound measurement discussed above, short-term (15-minute) measurements were conducted at seven additional locations that are also depicted in Figure 25 on page 245. These seven locations were selected based on their proximity to noise sensitive receptor locations that are present within the area that may potentially be affected by proposed Project noise sources. In addition to the L_{eq} (15-minute) noise level that is based on actual measurement data, Table 22 on page 249 also provides a forecast of CNELs for each location that was extrapolated by comparing the 15-minute measurement data collected at each

[51] *The Project Site is zoned Commercial (C2-1), Commercial-manufacturing (CM-1) and Public Facilities (PF-1), but would be developed with school and hospital uses. As such, the Project Site may be classified as 'Office Buildings, Business and Professional Commercial' or 'Schools, Libraries, Churches, Hospitals, Nursing Homes' (see Table 20 on page 243).*

Table 21

SUMMARY OF LONG-TERM AMBIENT NOISE MEASUREMENT DATA (dBA) [a]

Measurement Day	Daytime Hourly Ambient L_{eq} [b]			Nighttime Hourly Ambient L_{eq} [b]			CNEL	L_{max}	L_{min}
	Avg.	Min.	Max.	Avg.	Min.	Max.			
Wednesday, June 9, 2004	61.2	57.2	64.2	58.8	55.1	61.9	65.9	64.2	55.1
Thursday, June 10, 2004	60.2	57.3	62.2	57.9	61.9	54.7	64.9	62.2	54.7

[a] *Based on a continuous ambient sound measurement that was conducted on Wednesday, June 9, and Thursday, June 10, 2004, using a Larson-Davis 820 Type 1 Integrating Sound Level Meter. Measurement location is depicted in Figure 25 on page 245, and noise measurement data is provided in Appendix E.*

[b] *Per LAMC regulations, daytime hours are from 7 A.M. to 10 P.M., and nighttime hours are from 10 P.M. to 7 A.M.*

Source: PCR Services Corporation, 2004.

measurement location with the two-day measurement data discussed previously, and making adjustments to account for site-specific noise conditions (i.e., nearby railroad tracks, major thoroughfares and ambulance sirens).[52]

To further characterize the area's noise environment, the CNEL generated by existing traffic on local roadways was established using roadway noise equations provided in the Caltrans Technical Noise Supplement (TeNS) document and traffic volume data provided by the Project's traffic consultant. As indicated in Table 23 on page 250, the calculated CNEL for the analyzed roadway segments as a result of existing traffic volumes ranged from 52.4 dBA to 67.3 dBA at 50 feet from the roadway right-of-way based on surface-street traffic volumes only. These noise levels are generally consistent with the measured noise levels discussed earlier and provided in Table 21. All land uses located near the Project Site, with the exception of Lincoln Park, which is located north of Valley Boulevard, are currently exposed to community noise levels from traffic (at the right-of-way) that are "normally acceptable" as categorized by the City of Los Angeles' Land Use Compatibility Matrix for Community Noise (refer to Table 20 on page 243). According to the roadway noise prediction model, a CNEL of 70.9 dBA occurs at the edge of Valley Boulevard adjacent to Lincoln Park. This CNEL is considered "normally unacceptable;" however, noise levels would be reduced at areas farther away from the edge of the park adjacent to Valley Boulevard.

[52] *Since all receptor locations are located within a relatively small geographical area and exposed to similar noise sources, namely local roadway traffic, it is possible to estimate the CNEL at each short-term monitoring location based on 48-hour data collected from the long-term monitoring location and roadway traffic volume data provided in the Traffic Impact Study prepared for the proposed Project.*

Table 22

SUMMARY OF SHORT-TERM AMBIENT NOISE MEASUREMENT DATA (dBA)

Measurement Location[a]	Start Time	Duration	L_{eq} (15-minute)	CNEL[b] (extrapolated)
1. Zonal Ave. and Mission Road	12:28 P.M.	15 minutes	65.6 dBA	68.4 dBA
2. L.A. County–USC Hospital	1:00 P.M.	15 minutes	74.3 dBA	67.5 dBA
3. Bravo High School	1:25 P.M.	15 minutes	65.3 dBA	67.1 dBA
4. Doheny Eye Institute/HCCI	2:25 P.M.	15 minutes	60.1 dBA	64.5 dBA
5. Child Day Care	3:13 P.M.	15 minutes	58.4 dBA	63.0 dBA
6. Soto St. north of Norfolk St.	3:35 P.M.	15 minutes	71.5 dBA	51.7 dBA
7. Site F adjacent to Valley Blvd. [c]	4:01 P.M.	15 minutes	79.7 dBA	79.0 dBA

[a] *Measurement locations are depicted in Figure 25 on page 245.*

[b] *Since all receptor locations are located within a relatively small geographical area and exposed to similar noise sources, namely local roadway traffic, the CNEL at each short-term monitoring location was calculated based on the 48-hour data collected from the long-term monitoring location and roadway traffic volume data provided in the Traffic Impact Study prepared for the proposed Project.*

[c] *The ambient noise environment at this location is heavily influenced by the railroad line that runs adjacent to Valley Boulevard*

Source: PCR Services Corporation, 2004.

2. ENVIRONMENTAL IMPACTS

a. Methodology

(1) On-Site Construction Noise

Construction noise impacts are evaluated by determining the noise levels generated by the different types of construction activity, calculating the construction-related noise level at nearby sensitive receptor locations, and comparing these construction-related noise levels to ambient noise levels (i.e., noise levels without construction noise). More specifically, the following steps were undertaken to calculate construction-period noise impacts:

1. Ambient noise levels at surrounding sensitive receptor locations were determined from field measurements (See Table 21 and Table 22 on pages 248 and 249, respectively.);

2. Noise levels for each construction phase were obtained from the L.A. CEQA Thresholds Guide;

Table 23

PREDICTED EXISTING VEHICULAR TRAFFIC NOISE LEVELS

Roadway Segment	Adjacent Land Use	Noise Exposure Compatibility Category	Existing CNEL (dBA) at Referenced Distances from Roadway Right-of-Way		
			Adjacent	50 Feet	100 Feet
Valley Boulevard, West of San Pablo Street	Park and Commercial	Normally Unacceptable	70.8	67.2	65.3
Valley Boulevard, East of San Pablo Street	Park and Commercial	Normally Unacceptable	70.9	67.3	65.4
Alcazar Street, West of San Pablo Street	Institutional	Normally Acceptable	61.9	57.2	55.0
Alcazar Street, East of San Pablo Street	Institutional	Normally Acceptable	64.8	60.1	57.9
Eastlake Street, West of San Pablo Street	Institutional	Normally Acceptable	61.2	56.5	54.3
Norfolk Street, East of San Pablo Street	Park and Institutional	Normally Acceptable	57.1	52.4	50.2
Zonal Avenue, between Mission Road and Biggy Street	Institutional	Normally Acceptable	69.3	64.6	62.4
Zonal Avenue, between Biggy Street and San Pablo Street	Institutional	Normally Acceptable	67.3	62.5	60.3
Zonal Avenue, East of San Pablo Street	Institutional	Normally Acceptable	67.6	62.8	60.6
San Pablo Street, between Alcazar Street and Valley Boulevard	Commercial	Normally Acceptable	60.1	55.4	53.2
San Pablo Street, between Eastlake/Norfolk Street and Alcazar St	Institutional	Normally Acceptable	63.2	58.5	56.3
San Pablo Street, between Zonal Avenue and Norfolk Street	Institutional	Normally Acceptable	63.3	58.6	56.4
Biggy Street, North of Zonal Avenue	Institutional	Normally Acceptable	62.0	57.3	55.1

Source: PCR Services Corporation, 2004.

3. Distances between construction site locations (noise source) and surrounding sensitive receptors were measured;

4. The construction noise level was then calculated for sensitive receptor locations based on the standard point source noise-distance attenuation factor of 6.0 dBA for each doubling of distance;

5. For each sensitive receptor location, the construction noise level obtained above from Step 4 was added to the ambient noise level described in Step 1 to calculate the construction noise impact in terms of an hourly L_{eq}; and

6. Noise level increases were compared to the construction noise significance thresholds identified below.

(2) Off-Site Roadway Noise (During Construction and Project Operations)

Roadway noise impacts are evaluated using Caltrans' TeNS methodology using the roadway traffic volume data provided in the Traffic Impact Study prepared for the proposed Project. This methodology allows for the definition of roadway configurations, barrier information (if any), and receiver locations. Roadway-noise attributable to Project development is calculated and compared to baseline noise levels that would occur under the "No Project" condition.

(3) Stationary Point-Source Noise (During Project Operations)

Stationary point-source noise impacts are evaluated by identifying the noise levels generated by outdoor stationary noise sources such as rooftop mechanical equipment and loading dock activities, calculating the hourly L_{eq} noise level from each noise source at surrounding sensitive receiver property line locations, and comparing such noise levels to ambient noise levels. More specifically, the following steps were undertaken to calculate outdoor stationary point-source noise impacts:

1. Ambient noise levels at surrounding sensitive receptor locations were determined from field measurements (See Table 21 and Table 22 on pages 248 and 249, respectively);

2. Mechanical equipment noise levels (hourly L_{eq}) were estimated based on LAMC Noise Ordinance requirements;

3. Distances between stationary noise sources and surrounding sensitive receptor locations were measured;

4. Stationary-source noise levels were then calculated for each sensitive receptor location based on the standard point source noise-distance attenuation factor of 6.0 dBA for each doubling of distance;

5. For each surrounding sensitive receptor location, stationary-source noise levels obtained from Step 4 were added to the ambient noise level described in Step 1 to ascertain stationary-source noise impacts in terms of a hourly L_{eq}; and

6. Noise level increases were compared to the stationary source noise significance thresholds identified below.

b. Thresholds of Significance

(1) Construction Noise

Based on criteria set forth in the City of Los Angeles CEQA Thresholds Guide (Thresholds Guide), the proposed Project would have a significant impact on noise levels from construction if:

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use;
- Construction activities lasting more than 10 days in a 3 month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or
- Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, before 8:00 A.M. or after 6 P.M. on Saturday, or at anytime on Sunday.

(2) Noise from Project Operations

Based on criteria set forth in the Thresholds Guide, the proposed Project would have a significant impact on noise levels from Project operations if:

- The Project causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (see Table 20 on page 243), or by 5 dBA in CNEL within the "normally acceptable" or "conditionally acceptable" category.
- Project-related operational (i.e., non-roadway) noise sources increase ambient noise by 5 dBA, thus causing a violation of the City Noise Ordinance.

c. Project Features

The following Project Features have a potential to influence Project-related noise characteristics, and therefore, were taken into account during the analysis of potential Project impacts.

(1) Project Construction

- The Project contractor(s) will equip all construction equipment, fixed or mobile, with properly operating and maintained noise mufflers, consistent with manufacturers' standards.
- All construction equipment would be stored on-site.
- Construction hours for exterior construction and hauling activities will occur between the hours of 7:00 A.M. and 9:00 P.M., Monday through Friday, and 8:00 A.M. and 6 P.M. on Saturday.

(2) Project Operations

- All mechanical equipment (e.g., air handling units, boiler, chiller, emergency generator, etc.) will be enclosed and designed to meet the requirements of the Los Angeles Municipal Code, Chapter XI, Section 112.02, at the property line.
- All outdoor loading dock and trash/recycling areas will be fully or partially enclosed such that the line-of-sight between these noise sources and any adjacent noise sensitive land use would be obstructed.
- All rooftop mechanical equipment would be enclosed or screened from view with parapet screening.

d. Analysis of Project Impacts

(1) Construction Noise

(a) On-Site Construction Noise

The proposed Project could result in the construction of up to 765,000 square feet of academic, medical research, and medical clinic space; and multi-story parking structures which could provide up to 2,800 parking spaces. Project development could also occur on up to seven Development Sites, over a 10-year time frame. Noise disturbances in those areas located adjacent to each of the seven Development Site locations can be expected during construction. These disturbances would occur during site preparation activities and the subsequent construction of on-site structures.

As with most construction projects, construction would require the use of a number of pieces of heavy equipment such as bulldozers, backhoes, cranes, loaders, and concrete mixers. In addition, both heavy- and light-duty trucks would be required to deliver construction materials to and export construction debris from each construction site. The maximum noise level generated by typical, individual pieces of construction equipment is provided in Table 24 on page 255. For example, as heavy-duty equipment passes near a Development Site boundary, the maximum noise level (L_{max}) at a given moment would likely exceed 90 dBA for brief durations at land uses adjacent to the Development Site. However, as the equipment travels away from the property line boundary towards the center of the Development Site, the L_{max} noise level along portions of adjacent property line boundaries would diminish considerably into dBA levels in the 60s and 70s.

Composite construction noise, the noise from multiple pieces of construction equipment working concurrently, is best characterized in a study conducted by Bolt, Beranek, and Newman for the USEPA (USEPA December 31, 1971). The study concluded that noise during the heavier initial periods of construction is generally about 86 dBA L_{eq} when measured at a reference distance of 50 feet from the construction activity. This value takes into account both the number of pieces and spacing of the heavy equipment used in the construction effort. In later phases during building construction, noise levels are typically reduced from this value and the physical structures that are constructed often break up the line-of-sight noise transmission. The composite noise level for typical construction stages is provided in Table 25 on page 256. In order to present a conservative analysis, the 86 dBA noise level, the highest composite noise level, at a reference distance of 50 feet, was used to evaluate the proposed Project's construction noise impacts related to each of the seven Development Site locations.

The timing and location of development would be determined based on the availability of funding sources. In order to provide a conservative analysis it is assumed that construction activity could occur on any of the seven Development Site locations at any time. Specifically, the maximum potential construction noise impact at each sensitive receptor location was calculated by assuming that all seven Development Sites could undergo concurrent construction activity. Table 25 on page 256 provides a summary of potential impacts that may occur at each of the 16 sensitive receptor locations. As demonstrated in Table 25, maximum L_{eq} daytime noise level increases with proposed Project construction are expected to range from 0.2 dBA to 16.6 dBA L_{eq} (1-hour). These noise level estimates are based on distance attenuation and 5-dBA of barrier attenuation where intervening structures would break the line-of-sight between a Development Site and sensitive receptor location. As shown in Table 25, construction-period noise impacts would meet or exceed the 5-dBA significance criterion at six sensitive receptor locations (i.e., USC University Hospital, USC HCCI, USC HCCII, Doheny Eye Institute, Women and Children's Hospital, and Hazard Park), and as such, impacts would be significant without the incorporation of mitigation measures.

Table 24

MAXIMUM NOISE LEVELS GENERATED BY TYPICAL CONSTRUCTION EQUIPMENT

	Sound Levels at Maximum Engine Power with Mufflers dBA at Indicated Distance			
Type of Equipment	**25 feet**	**50 feet**	**100 feet**	**200 feet**
Air Compressor	87	81	75	69
Backhoe	91	85	79	73
Backup Beep	91	85	79	73
Concrete Mixer	91	85	79	73
Crane, Mobile	89	83	77	71
Dozer	86	80	74	68
Grader	91	85	79	73
Jack Hammer	94	88	82	76
Loader	85	79	73	67
Paver	95	89	83	77
Pneumatic Tool	91	85	79	73
Pump	82	76	70	64
Roller	80	74	68	62
Saw	84	78	72	66
Scraper	94	88	82	76
Truck	97	91	85	79
Minimum Sound Level	80	74	68	62
Maximum Sound Level	97	91	85	79

Assumes a drop-off rate of 6-dB per doubling of distance, which is appropriate for use in characterizing point-source (such as construction equipment) sound attenuation over a hard surface propagation path.

Source: USEPA, Bolt, Beranek, and Newman, Noise Control for Buildings and Manufacturing Plants, 1987; and PCR Services Corporation, 2004.

(b) Off-Site Construction Noise

In addition to on-site construction noise, haul trucks, delivery trucks, and construction workers would require access to the site throughout the construction duration. While construction workers would arrive from many parts of the region, and thus different directions, haul trucks and delivery trucks would generally travel to the Project Site via Soto Street from the Interstate 10 Freeway. During soil export, haul trucks would use Alcazar Street, Soto Street and the Interstate 10 Freeway, which would avoid the Francisco Bravo Institute M.D. Magnet Senior High School during its hours of operation. Although residential uses are present on the east side of Soto Street, construction traffic would not be present during the noise-sensitive late evening and nighttime hours. As such, potential impacts would be less than significant, and no mitigation measures are necessary.

Table 25

CONSTRUCTION NOISE IMPACT SUMMARY

Receptor Location [a]	Distance and Barrier-Adjusted Construction Noise from Development Sites [b]														Combined Construction Noise	Baseline Ambient Noise [c]	Ambient During Construction	Increase Over Baseline
	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site				
1	66 dBA	C	65 dBA	D	54 dBA	A	50 dBA	G	49 dBA	B	48 dBA	F	47 dBA	E	68.7 dBA	74.3 dBA	75.4 dBA	1.1 dBA
2	66 dBA	B	57 dBA	E	55 dBA	A	55 dBA	G	54 dBA	F	50 dBA	D	47 dBA	C	67.2 dBA	60.1 dBA	67.9 dBA	7.8 dBA
3	76 dBA	B	60 dBA	G	65 dBA	A	65 dBA	E	63 dBA	F	52 dBA	D	48 dBA	C	76.6 dBA	60.1 dBA	76.7 dBA	16.6 dBA
4	68 dBA	B	59 dBA	E	63 dBA	A	56 dBA	G	60 dBA	F	50 dBA	D	47 dBA	C	70.5 dBA	60.1 dBA	70.8 dBA	10.7 dBA
5	64 dBA	B	61 dBA	A	59 dBA	G	57 dBA	E	56 dBA	F	53 dBA	D	48 dBA	C	67.7 dBA	60.1 dBA	68.4 dBA	8.3 dBA
6	56 dBA	A	54 dBA	D	53 dBA	G	52 dBA	B	50 dBA	E	50 dBA	F	48 dBA	C	61.0 dBA	67.1 dBA	68.1 dBA	1.0 dBA
7a	57 dBA	B	57 dBA	E	53 dBA	A	53 dBA	F	52 dBA	G	48 dBA	D	45 dBA	C	62.2 dBA	63.0 dBA	65.6 dBA	2.6 dBA
7b	53 dBA	E	53 dBA	B	50 dBA	A	50 dBA	F	49 dBA	G	47 dBA	D	45 dBA	C	58.6 dBA	71.5 dBA	71.7 dBA	0.2 dBA
7c	56 dBA	C	52 dBA	G	52 dBA	F	51 dBA	D	50 dBA	A	50 dBA	B	49 dBA	E	60.6 dBA	65.6 dBA	66.8 dBA	1.2 dBA
7d	51 dBA	C	50 dBA	D	46 dBA	A	46 dBA	G	45 dBA	B	44 dBA	F	44 dBA	E	56.1 dBA	60.0 dBA	61.5 dBA	1.5 dBA
7e	54 dBA	D	50 dBA	A	50 dBA	C	50 dBA	G	49 dBA	B	47 dBA	E	47 dBA	F	58.6 dBA	60.0 dBA	62.4 dBA	2.4 dBA
8	69 dBA	C	53 dBA	D	49 dBA	A	48 dBA	G	47 dBA	F	46 dBA	B	45 dBA	E	69.0 dBA	65.6 dBA	70.6 dBA	5.0 dBA
9	62 dBA	C	52 dBA	D	49 dBA	G	49 dBA	A	48 dBA	F	47 dBA	B	46 dBA	E	62.8 dBA	65.6 dBA	67.4 dBA	1.8 dBA
10	67 dBA	A	57 dBA	B	56 dBA	G	54 dBA	D	54 dBA	E	53 dBA	F	49 dBA	C	67.9 dBA	61.0 dBA	68.7 dBA	7.7 dBA
11	66 dBA	F	65 dBA	E	61 dBA	B	55 dBA	G	52 dBA	A	51 dBA	C	51 dBA	D	69.6 dBA	70.0 dBA	72.8 dBA	2.8 dBA
12	57 dBA	B	57 dBA	E	53 dBA	A	53 dBA	F	52 dBA	G	48 dBA	D	45 dBA	C	62.2 dBA	63.0 dBA	65.6 dBA	2.6 dBA

[a] *Receptor locations are depicted in Figure 25 on page 245.*
[b] *Based on 86 dBA at 50 foot reference distance, adjusted for distance attenuation and barrier insertion loss (where applicable). Detailed assumptions are provided in Appendix D.*
[c] *Based on ambient measurement data.*

Source: PCR Services Corporation, 2004.

(2) Operation Noise (Post-Construction)

This section provides a discussion of potential noise impacts related to the long-term operations of the proposed modifications to the Health Sciences Campus, following completion of construction, to neighboring noise-sensitive receiver locations. Specific noise sources considered herein include roadway noise; mechanical equipment/point sources (i.e., loading dock and trash pick-up areas); parking facilities; and rooftop helipads.

(a) Off-Site Roadway Noise

According to the Project traffic study, included as Appendix B to this EIR, the proposed Project is expected to generate a maximum of 7,715 additional daily trips. The traffic volumes associated with these Project trips would have the potential to increase roadway noise levels on local roadways in and around the HSC area. Although parking for the proposed Project's 7,715 daily trips could be accommodated for on any combination of Development Sites B, C, D, E, and F, the maximum roadway noise impact would result from consolidating trip ends (i.e., trip origins and destinations) to only one or two Development Site locations. Therefore, two parking options (Parking Scenario No. 1 and Parking Scenario No. 2) were analyzed in order to ascertain maximum potential roadway noise impacts. Under all other parking scenarios, roadway noise impacts would be less since traffic volumes would be dispersed over a larger area.

Parking Scenario No. 1 assumes that parking for the Project will be provided at the west end of campus, entirely on Development Site C. Access to the parking structure located within Development Site C would be provided via Zonal Avenue. Parking Scenario No. 2 assumes that parking for the Project would be provided at the northeastern end of campus, north of Alcazar Street within Development Sites E and/or F. Access to parking structure facilities located within Development Site E, should parking be located at this Development Site, would be provided via San Pablo Street and Alcazar Street, while access to parking within Development Site F would be provided only via San Pablo Street.

Project traffic occurring under either parking option would represent a nominal increase in traffic over the total daily traffic traveling along the major thoroughfares within the Project vicinity. This increase in roadway traffic volumes was analyzed under both Parking Scenarios to determine if any traffic-related noise impacts would result from Project development. Table 26 on page 258 and Table 27 on page 259 provides the calculated CNEL for analyzed roadway segments under Parking Scenario Nos. 1 and 2, respectively, for the following situations: existing conditions; future without development of the proposed Project; future with development of the proposed Project; the increase attributed to Project-generated traffic volumes; and the cumulative increase above existing noise levels.

Table 26

PROJECT PARKING SCENARIO NO. 1
ROADWAY TRAFFIC NOISE IMPACTS AT REPRESENTATIVE NOISE SENSITIVE LOCATIONS [a]

Roadway Segment	Existing dBA CNEL	Future (2015) No Project dBA CNEL	Future (2015) with Project dBA CNEL	Project Increment [b]	Cumulative Increment [c]
Valley Boulevard, West of San Pablo Street	67.2	68.0	68.1	0.1	0.9
Valley Boulevard, East of San Pablo Street	67.3	68.0	68.2	0.2	0.9
Alcazar Street, West of San Pablo Street	57.2	58.4	58.4	—	1.2
Alcazar Street, East of San Pablo Street	60.1	61.5	61.7	0.2	1.6
Eastlake Street, West of San Pablo Street	56.5	57.2	57.2	—	0.7
Norfolk Street, East of San Pablo Street	52.4	55.0	55.0	—	2.6
Zonal Avenue, between Mission Road and Biggy Street	62.4	62.3	62.8	0.5	0.4
Zonal Avenue, between Biggy Street and San Pablo Street	62.5	62.5	63.1	0.6	0.6
Zonal Avenue, East of San Pablo Street	62.8	62.9	63.5	0.6	0.7
San Pablo Street, between Alcazar Street and Valley Boulevard	55.4	57.6	58.0	0.4	2.6
San Pablo Street, between Eastlake/Norfolk Street and Alcazar Street	58.5	59.4	59.9	0.5	1.4
San Pablo Street, between Zonal Avenue and Norfolk Street	58.6	59.6	60.1	0.5	1.5
Biggy Street, North of Zonal Avenue	57.3	57.9	57.9	—	0.6

[a] *Exterior 24-hour CNEL noise levels.*
[b] *Increase relative to traffic noise levels comparing future (2015) Pre-Project conditions to future (2015) with development of the proposed Project.*
[c] *Increase relative to traffic noise levels comparing existing conditions to future (2015) with development of the proposed Project.*

Source: PCR Services Corporation, 2004

Table 27

PROJECT PARKING SCENARIO NO. 2
ROADWAY TRAFFIC NOISE IMPACTS AT REPRESENTATIVE NOISE SENSITIVE LOCATIONS [a]

Roadway Segment	Existing dBA CNEL	Future (2015) No Project dBA CNEL	Future (2015) with Project dBA CNEL	Project Increment [b]	Cumulative Increment [c]
Valley Boulevard, West of San Pablo Street	67.2	68.0	68.2	0.2	1.2
Valley Boulevard, East of San Pablo Street	67.3	68.0	68.1	0.1	0.8
Alcazar Street, West of San Pablo Street	57.2	58.4	58.8	0.4	1.6
Alcazar Street, East of San Pablo Street	60.1	61.5	62.1	0.6	2.0
Eastlake Street, West of San Pablo Street	56.5	57.2	57.2	0.0	0.7
Norfolk Street, East of San Pablo Street	52.4	55.0	55.0	0.0	2.6
Zonal Avenue, between Mission Road and Biggy Street	62.4	62.4	62.4	0.0	0.0
Zonal Avenue, between Biggy Street and San Pablo Street	62.5	62.5	62.5	0.0	0.0
Zonal Avenue, East of San Pablo Street	62.8	62.9	63.2	0.3	0.4
San Pablo Street, between Alcazar Street and Valley Boulevard	55.4	57.6	59.5	1.9	4.1
San Pablo Street, between Eastlake/Norfolk Street and Alcazar Street	58.5	59.4	59.8	0.4	1.3
San Pablo Street, between Zonal Avenue and Norfolk Street	58.6	59.6	60.0	0.4	1.4
Biggy Street, North of Zonal Avenue	57.3	57.9	57.9	0.0	0.6

[a] *Exterior 24-hour CNEL noise levels.*
[b] *Increase relative to traffic noise levels comparing future (2015) Pre-Project conditions to future (2015) with development of the proposed Project.*
[c] *Increase relative to traffic noise levels comparing existing conditions to future (2015) with development of the proposed Project.*

Source: PCR Services Corporation, 2004

Under Parking Scenario No. 1, the largest Project-related traffic noise impact is anticipated to occur along the segment of Zonal Avenue, between Biggy Street and San Pablo Street. Project-related traffic would add 1.0 dBA CNEL to this roadway segment. As the incremental Project-related traffic noise level increases at all other analyzed locations would be less than 1.0 dBA CNEL, and noise level increases are less than the 5-dBA CNEL significance threshold, the proposed Project's roadway noise impacts are considered less than significant under Parking Scenario No.1.

Under Parking Scenario No.2, the largest Project-related traffic noise impact is anticipated to occur along the segment of San Pablo Street, between Alcazar Street and Valley Boulevard. Project-related traffic would add 1.9 dBA CNEL to this roadway segment. As the incremental Project-related traffic noise level increases at all other analyzed locations would be less than 1.9 dBA CNEL, and noise level increases are less than the 5-dBA CNEL significance threshold, the proposed Project's roadway noise impacts are considered less than significant under Parking Scenario No. 2.

(b) Stationary Point-Source Noise

This section considers potential noise impacts to neighboring noise-sensitive properties related to specific noise sources associated with the operation of the proposed modifications to the Health Sciences Campus. Such potential noise sources include:

- Mechanical equipment rooms (e.g., boiler, chiller, and emergency generator);
- Loading dock and trash/recycling areas;
- Miscellaneous rooftop mechanical equipment;
- Parking facility; and
- Rooftop helipads.

A discussion of each of these noise sources is provided below, followed by a discussion of the potential composite noise level increase (due to multiple noise sources on each Development Site) at each sensitive receptor location.

(i) Mechanical Equipment Rooms

With the exception of Development Site C (site of an up to 2,800-space parking facility), the six remaining Development Sites would require mechanical equipment such as boilers,

chillers, pumps, and emergency generators to support proposed structures. Such mechanical equipment is capable of generating high noise levels. However, project design features, detailed above in Section IV.E.2.c (Project Features), would ensure that all equipment noise levels comply with City of Los Angeles Noise Ordinance requirements, for both daytime (65 dBA) and nighttime (60 dBA) operation at the property line. In addition, implementation of project design features would ensure that any noise level increase remains below the 5-dBA significance threshold. As such, impacts would be less than significant, and no mitigation measures are required.

(ii) Loading Dock and Refuse Collection/Recycling Areas

With the exception of Development Site C (site of an up to 2,800-space parking facility), the six remaining Development Sites would all likely require a loading dock and refuse collection/recycling area, which is capable of generating a noise level as high as 75 dBA (50-foot reference distance). Most of the neighboring land uses and buildings present in areas that may potentially be affected by noise from such loading dock and refuse collection/recycling areas are located within the existing Health Sciences Campus. As such, through innovative site planning and project design features, the Applicant can be expected to avoid potential noise impacts so as not to excessively disturb its own adjacent operations, employees and tenants. The exceptions are the neighboring land uses that surround Developments Sites E and F to the north, east and west; and the land uses that are located north, west and south of Development Site D.

Lincoln Park is located north of Development Sites E and F, and as such, could potentially be impacted by loading dock/refuse collection area noise. However, this area already experiences relatively high noise levels due to roadway traffic volumes along Valley Boulevard and railroad traffic along the Union Pacific tracks that run adjacent to Valley Boulevard. According to the noise measurement data provided earlier in Table 22 on page 249, this area currently experiences a daytime ambient noise level that periodically exceeds 75 dBA. Therefore, any noise that may emanate from loading dock/refuse collection areas would have a negligible impact on Lincoln Park because any such noise would be less than ambient noise levels. The areas located immediately east and west of Development Sites E and F consist of surface parking lot and/or outdoor storage area uses that are not noise sensitive. As such, potential impacts associated with the Project at neighboring land uses that surround Development Sites E and F would be less than significant, and no mitigation measures are necessary.

The areas located immediately north and west of Development Site D consist of Juvenile Hall uses that could potentially be impacted by nearby loading dock/refuse collection area activities since such noise levels (i.e., 75 dBA at 50-foot reference distance) would be clearly perceptible in comparison to the ambient noise level of approximately 65 dBA at this location.

As such, potential impacts to these areas may be significant without incorporation of mitigation measures.

(iii) Miscellaneous Rooftop Equipment

Individual air handling units and exhaust fans would be located on building rooftops in order to provide for ventilation and air circulation. Parapet screens would shield/enclose all such rooftop equipment. Project design features, detailed above in Section IV.E.2.c. (Project Features), would ensure that rooftop equipment noise levels at each Development Site location comply with City of Los Angeles Noise Ordinance requirements, for both daytime (65 dBA) and nighttime (60 dBA) operation at the nearest adjacent property line. In addition, implementation of the project design features identified above would ensure that any noise level increase remains below the 5-dBA significance threshold. As such, impacts would be less than significant, and no mitigation measures are required.

(iv) Parking Facility Noise Levels

Various noise events would also occur within the proposed parking structures and surface parking lots. The activation of car alarms, sounding of car horns, slamming of car doors, engine revs, and tire squeals would occur periodically. A summary of maximum noise levels related to typical parking facility noise events is provided in Table 28 on page 263. Automobile movements would comprise the most continuous noise source and would generate a noise level of approximately 65 dBA at a distance of 25 feet. Car alarm and horn noise events, which generate maximum noise levels as high as 69 dBA at a reference distance of 50 feet, would occur less frequently. The composite noise level of 60 dBA L_{eq} (1-hour) at a reference distance of 50 feet was used to represent the average parking facility-generated noise level.

With the exception of Development Sites A and G, a multi-level parking facility or surface parking lots could be constructed on any of the remaining Development Site locations. As such, potential noise impacts were evaluated at the neighboring land uses that surround Development Sites B, C, D, E and F. As shown in Table 29 on page 263, the maximum parking facility-related noise level increase at any neighboring land use would be 2.9 dBA (50-foot reference distance), which could occur in the areas immediately surrounding Development Site B. At distances greater than 50 feet, the noise level increase would be less due to sound-distance attenuation. As potential noise level increases would be less than the 5-dBA significance threshold at areas adjacent to all potential Development Site locations, impacts would be less than significant and no mitigation measures are required.

Table 28

TYPICAL MAXIMUM NOISE LEVEL FROM INDIVIDUAL PARKING STRUCTURE-RELATED NOISE EVENTS

Source	Reference Sound Level [a]	Reference Distance	Maximum Sound Level at 50 Feet [b]	Frequency of Occurrence	1-Hour L_{eq} Noise Level at 50 Feet
Automobile at 14 mph	65 dBA	25 feet	59 dBA	50 percent	56 dBA
Car Alarm	75 dBA	25 feet	69 dBA	1 percent	49 dBA
Car Horn	75 dBA	25 feet	69 dBA	0.5 percent	46 dBA
Door Slam	70 dBA	25 feet	64 dBA	5 percent	51 dBA
Tire Squeal	80 dBA	10 feet	70 dBA	10 percent	56 dBA
Composite L_{eq} (1-hour)					**60 dBA**

[a] *Reference noise levels are based on actual measurement data.*
[b] *Since parking structure-related noise is more akin to a point-source, rather than a line-source, the 6-dBA per doubling of distance attenuation factor was used to distance-adjust all reference noise levels.*

Source: PCR Services Corporation, 2004.

Table 29

POTENTIAL IMPACTS RELATED TO PARKING FACILITY NOISE AT ADJACENT LAND USES

Adjacent Development Site	Baseline Ambient Noise Level	Ambient with Adjacent Parking Facility	Potential Increase Over Baseline Noise Level
Site B	60.2 dBA	63.1 dBA	2.9 dBA
Site C	60.6 dBA	63.3 dBA	2.7 dBA
Site D	69.3 dBA	69.8 dBA	0.5 dBA
Site E	74.7 dBA	74.8 dBA	0.1 dBA
Site F	74.7 dBA	74.8 dBA	0.1 dBA

Source: PCR Services Corporation, 2004.

(v) Rooftop Helipad Noise Levels

The proposed Project may include one or more buildings that would require an emergency helipad pursuant to LAMC requirements.[53] As such, these helipads would be used for emergency purposes only. Due to infrequent and the emergency nature of such a use, adverse noise impacts related to helipad uses would be less than significant.

[53] *City of Los Angeles Municipal Code Section 57.118.12 requires that buildings over 75 feet in height be equipped with an emergency helipad.*

(vi) Composite Noise Level Impacts from Proposed Project Operations

The potential composite noise level noise impact at each sensitive receptor location was evaluated by assuming that each of the seven Development Site locations would generate a steady-state equivalent noise level of 70 dBA at a 50-foot reference distance. This 70 dBA (per Development Site) composite noise level would account for each of the individual noise sources (i.e., mechanical equipment, loading dock/refuse collection areas, parking facility, etc.) present on each Development Site.

Table 30 on page 265 provides a summary of potential impacts that may occur at each of the 16 sensitive receptor locations. As demonstrated in Table 30, maximum L_{eq} daytime noise level increases with proposed Project construction are expected to range from 60.0 dBA to 74.3 dBA L_{eq} (1-hour). These noise level estimates take into account distance attenuation and 5-dBA of barrier attenuation where intervening structures would break the line-of-sight between a Development Site and sensitive receptor location. As shown in Table 30, operations-period composite noise level impacts would not exceed the 5-dBA significance criterion at any sensitive receptor locations, and as such, impacts would be less than significant. No mitigation measures would be required.

(3) Additional Development Scenarios

The preceding noise analysis addresses potential impacts during Project construction and operations. The construction noise analysis forecasts potential impacts attributable to construction equipment operating within each of the seven proposed Development Sites, as well as potential off-site noise impacts attributable to construction worker travel to and from the Development Sites, the delivery of construction materials, and travel by haul trucks. The analysis of potential post-construction noise impacts addresses off-site roadway noise attributable to the vehicle trips that would be generated by the Project and stationary noise sources that could occur within each of the seven proposed Development Sites (e.g., mechanical equipment rooms, loading docks, refuse collection/recycling areas, miscellaneous rooftop equipment, parking facilities, and rooftop helipads).

The Project, as proposed, provides flexibility with regard to the types and quantities of the various uses that could be developed as part of the Project. The preceding noise analysis is based on the development of 765,000 square feet of academic and/or medical-related uses (i.e., 720,000 square feet of academic and support facilities and 45,000 square feet of medical clinic uses). Under the proposed Project, the amount of academic and/or medical research facilities could be reduced by as much as 255,000 square feet, while the amount of medical clinic facilities could be increased by as much as 75,000 square feet. Under this scenario, a total of 585,000 square feet of academic and medical research facilities would be developed. These

Table 30

OPERATIONS NOISE IMPACT SUMMARY

Receptor Location[a]	Distance and Barrier-adjusted Operations Period Noise from Development Sites[b]														Combined Noise	Baseline Ambient Noise[c]	With Project Noise Level	Increase Over Baseline
	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site	L_{eq} (1-hour)	Site				
1	50 dBA	C	49 dBA	D	38 dBA	A	34 dBA	G	33 dBA	B	32 dBA	F	31 dBA	E	52.7 dBA	74.3 dBA	74.3 dBA	—
2	50 dBA	B	41 dBA	E	39 dBA	A	39 dBA	G	38 dBA	F	34 dBA	D	31 dBA	C	51.2 dBA	60.1 dBA	60.6 dBA	0.5 dBA
3	60 dBA	B	44 dBA	G	49 dBA	A	49 dBA	E	47 dBA	F	36 dBA	D	32 dBA	C	60.6 dBA	60.1 dBA	63.4 dBA	3.3 dBA
4	52 dBA	B	43 dBA	E	47 dBA	A	40 dBA	G	44 dBA	F	34 dBA	D	31 dBA	C	54.5 dBA	60.1 dBA	61.1 dBA	1.0 dBA
5	48 dBA	B	45 dBA	A	43 dBA	G	41 dBA	E	40 dBA	F	37 dBA	D	32 dBA	C	51.7 dBA	60.1 dBA	60.7 dBA	0.6 dBA
6	40 dBA	A	38 dBA	D	37 dBA	G	36 dBA	B	34 dBA	E	34 dBA	F	32 dBA	C	45.0 dBA	67.1 dBA	67.1 dBA	—
7a	41 dBA	B	41 dBA	E	37 dBA	A	37 dBA	F	36 dBA	G	32 dBA	D	29 dBA	C	46.2 dBA	63.0 dBA	63.1 dBA	0.1 dBA
7b	37 dBA	E	37 dBA	B	34 dBA	A	34 dBA	F	33 dBA	G	31 dBA	D	29 dBA	C	42.6 dBA	71.5 dBA	71.5 dBA	—
7c	40 dBA	C	36 dBA	G	36 dBA	F	35 dBA	D	34 dBA	A	34 dBA	B	33 dBA	E	44.6 dBA	65.6 dBA	65.6 dBA	—
7d	35 dBA	C	34 dBA	D	30 dBA	A	30 dBA	G	29 dBA	B	28 dBA	F	28 dBA	E	40.1 dBA	60.0 dBA	60.0 dBA	—
7e	38 dBA	D	34 dBA	A	34 dBA	C	34 dBA	G	33 dBA	B	31 dBA	E	31 dBA	F	42.6 dBA	60.0 dBA	60.1 dBA	0.1 dBA
8	53 dBA	C	37 dBA	D	33 dBA	A	32 dBA	G	31 dBA	F	30 dBA	B	29 dBA	E	53.0 dBA	65.6 dBA	65.8 dBA	0.2 dBA
9	46 dBA	C	36 dBA	D	33 dBA	G	33 dBA	A	32 dBA	F	31 dBA	B	30 dBA	E	46.8 dBA	65.6 dBA	65.7 dBA	0.1 dBA
10	51 dBA	A	41 dBA	B	40 dBA	G	38 dBA	D	38 dBA	E	37 dBA	F	33 dBA	C	51.9 dBA	61.0 dBA	61.5 dBA	0.5 dBA
11	50 dBA	F	49 dBA	E	45 dBA	B	39 dBA	G	36 dBA	A	35 dBA	C	35 dBA	D	53.6 dBA	70.0 dBA	70.1 dBA	0.1 dBA
12	41 dBA	B	41 dBA	E	37 dBA	A	37 dBA	F	36 dBA	G	32 dBA	D	29 dBA	C	46.2 dBA	63.0 dBA	63.1 dBA	0.1 dBA

[a] *Receptor locations are depicted in Figure 25 on page 245.*
[b] *Based on 70 dBA at 50 foot reference distance, adjusted for distance attenuation and barrier insertion loss (where applicable). Detailed assumptions are provided in Appendix E.*
[c] *Based on ambient measurement data.*

Source: PCR Services Corporation, 2004.

variations would allow flexibility in the Project's land use mix in order to respond to the future needs and demands of the HSC, the southern California economy, and changes in Project requirements.

While the exchange of uses would result in varying amounts of development (i.e., between 585,000 and 765,000 square feet), the range of permitted uses would be the same. As such the types of potential noise impacts would be the same regardless of the amount of development that is actually constructed. The construction noise analysis presented above provides a conservative forecast of potential construction noise levels since it analyzes noise impacts at each receptor location based on concurrent construction at all seven Development Sites. This conservative assumption could occur if Project development consisted of 585,000 square feet, 765,000 square feet, or any amount in between. As the construction noise analysis is based on the amount of construction equipment operating at each site, the noise impacts attributable to 765,000 square feet of development would not be exceeded if less than 765,000 square feet of development occurs. However, if less than 765,000 square feet of development occurs, less construction would result in a shorter construction period. As the analysis is based on daily noise levels, the construction noise impacts under peak conditions would be the same regardless of the duration of construction and/or the total amount of development that occurs. Therefore the conclusions presented above with regard to construction noise impacts based on the development of 765,000 square feet of development would also apply to all of the potential additional development scenarios that could occur under the proposed Project. As such, on-site construction noise impacts under all of the additional development scenarios would meet or exceed the 5-dBA significance criterion at six sensitive receptor locations (i.e., USC University Hospital, USC HCCI, USC HCCII, Doheny Eye Institute, Women and Children's Hospital, and Hazard Park). Based on this noise level increase, on-site construction noise impacts would be significant without the incorporation of mitigation measures. While this conclusion applies to on-site construction activities, potential off-site construction impacts would be less than significant, and no mitigation measures are required.

While the noise sources during Project operations would be different than during Project construction, the same conclusion applies with regard to the impacts of less than 765,000 square feet of development (i.e., impacts would be equal to or less than those forecasted to occur with 765,000 square feet of development). This results because the number of vehicle trips attributable to the Project would not be greater than those that would occur should 765,000 square feet of development occur and the impacts of on-site stationary sources would be less than or equal to those occurring with 765,000 square feet of development since the characteristics that determine the noise levels from the individual stationary noise sources are not anticipated to increase with a reduction in the amount of development. Based on these conclusions, implementation of any additional development scenario would result in operational noise impacts that are less than significant.

3. CUMULATIVE IMPACTS

All of the identified related projects have been considered for the purposes of assessing cumulative noise impacts. The potential for noise impacts to occur are specific to the location of each related project as well as the cumulative traffic on the surrounding roadway network.

(1) Construction Noise

Of the 14 related projects that have been identified within the proposed Project study area, there are 9 related projects that have not already been built or are currently under construction. With the exception of the USC HNRT building that is currently under construction, the Applicant has no control over the timing or sequencing of the related projects, and as such, any quantitative analysis that assumes multiple, concurrent construction projects would be entirely speculative. Construction-period noise for the proposed Project and each related project (that has not already been built) would be localized. In addition, it is likely that each of the related projects would have to comply with the local noise ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible.

Three nearby related projects (i.e., the Los Angeles County Medical Center, Tenet Acute Care Tower, and USC HNRT) currently under construction are either on or immediately adjacent to the USC Health Sciences Campus. If these projects are still under construction during proposed Project construction, noise-sensitive uses on or adjacent to the HSC (e.g., LA County–USC Hospital) may experience a marginal noise level increase during construction due to concurrent construction. However, each project would be required to comply with the local noise ordinance, and mitigate impacts to the extent feasible. Nevertheless, since noise impacts due to construction of the proposed Project would be significant on its own, noise impacts due to construction of the proposed Project in combination with any of the related projects would also be significant.

(2) Long-Term Operations

Each of the 14 related projects that have been identified within the general Project vicinity would generate stationary-source and mobile-source noise due to ongoing day-to-day operations. The related projects are of a residential, retail, commercial, or institutional nature and these uses are not typically associated with excessive exterior noise; however, each project would produce traffic volumes that are capable of generating a roadway noise impact. As discussed previously, traffic volumes from the proposed Project and 14 related projects, combined with ambient growth traffic, were evaluated and presented previously in Table 26 on page 258. Cumulative traffic volumes would result in a maximum increase of 2.6 dBA CNEL along San Pablo Street, between Alcazar Street and Valley Boulevard. As this noise level

increase would be below the more conservative 3-dBA CNEL significance threshold, roadway noise impacts due to cumulative traffic volumes would be less than significant.

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

4. MITIGATION MEASURES

a. Construction

As noise associated with on-site construction activity would have the potential to result in a significant impact, the following measure is prescribed to minimize construction-related noise impacts:

Mitigation Measure E-1: Prior to the issuance of any grading, excavation, haul route, foundation, or building permits, the Applicant shall provide proof satisfactory to the Department of Building and Safety and Planning Department that all construction documents require contractors to comply with Los Angeles Municipal Code Section 41.40 which requires all construction and demolition activity located within 500 feet of a residence to occur between 7:00 A.M. and 6:00 P.M. Monday through Friday and 8:00 A.M. and 6:00 P.M. on Saturday, and that a noise management plan for compliance and verification has been prepared by a monitor retained by the Applicant. At a minimum, the plan shall include the following requirements:

1. Pile drivers used in proximity to sensitive receptors shall be equipped with noise control having a minimum quieting factor of 10 dB(A);

2. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site as determined by the Department of Building and Safety;

3. Program to maintain all sound-reducing devices and restrictions throughout the construction phases;

4. An approved haul route authorization that avoids noise-sensitive land uses to the maximum extent feasible; and

5. Identification of the noise statutes compliance/verification monitor, including his/her qualifications and telephone number(s).

b. Operations

Portions of the Los Angeles County Juvenile Hall property that abuts Development Site D to the north and west could potentially be exposed to noise level increases that exceed the 5-dBA significance threshold if a loading dock/refuse collection area is located on Development Site D. As such, the following mitigation is prescribed:

Mitigation Measure E-2: If a loading dock/refuse collection area is proposed to be located on Development Site D, the Applicant shall be required to submit evidence, prior to the issuance of building permits for Development Site D, that is satisfactory to the City of Los Angeles Department of Building and Safety that noise level increases do not cause the baseline ambient noise level to increase beyond the 5-dBA significance threshold at any adjacent property line. This mitigation measure does not apply to development that may occur on Development Sites A, B, C, E, F, and G.

5. LEVEL OF SIGNIFICANCE AFTER MITIGATION

a. Construction

Most of the land uses present in areas that may potentially be affected by noise during construction are located within the existing Health Sciences Campus. As such, the Applicant can be expected to schedule construction activities so as to minimize impacts on its own adjacent operations, employees and tenants.

The mitigation measure recommended in this section would reduce the noise levels associated with construction activities to some extent. However, these activities would continue to substantially increase the daytime noise levels at nearby noise-sensitive uses by more than the 5-dBA significance threshold. As such, noise impacts during construction would be considered significant and unavoidable, and certification of this EIR by the City of Los Angeles would require the adoption of a Statement of Overriding Considerations.

b. Operations

With implementation of Mitigation Measure E-2 described above, Project development would not result in any significant noise impacts during long-term operations.

IV. ENVIRONMENTAL IMPACT ANALYSIS
F. UTILITIES
1. WATER SUPPLY

1. INTRODUCTION

This section is based on the technical report, *USC Health Science Campus Water Infrastructure*, prepared by KPFF Consulting Engineers (April 6, 2005). The KPFF technical report is contained in Appendix F-1.1 of this Draft EIR. This section addresses the potential impacts of the Project on the water supply and water distribution infrastructure systems. This analysis estimates domestic water demands of the Project and compares this demand to existing and planned water supply sources and conveyance facilities.

2. ENVIRONMENTAL SETTING

a. Regulatory Framework

(1) State Level

Title 20 of the California Administrative Code, (CAC) Section 1604, establishes efficiency standards (i.e., maximum flow rates) for all new showerheads, lavatory faucets, and sink faucets, and prohibits the sale of fixtures that do not comply with the regulations.

Other applicable State water conservation laws include:

- Health and Safety Code Section 17921.3 requires all new buildings, as of January 1, 1983, to install water conservation water closets, as defined by American National Standards Institute (ANSI) Standard A112.19.2, and urinals and associated flushometer valves that use less than an average of 1.5 gallons per flush.

- Title 20, CAC, Section 1604(f) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory and sink faucets, as specified in ANSI A112.18.1M-1979.

- Title 20, CAC, Section 1606(b) prohibits the sale of fixtures that do not comply with regulations.

- Title 24, CAC, Section 2-5307(b) prohibits the installation of fixtures unless the manufacturer has certified compliance with the flow rate standards.

- Title 24, CAC, Section 2-5352(i) and (j) address pipe insulation requirements that can reduce water used before hot water reaches fixtures.

The California Urban Water Management Planning Act requires every municipal water supplier who serves more than 3,000 customers or provides more than 3,000 acre-feet per year (AF/yr) of water to prepare and adopt an Urban Water Management Plan (UWMP). UWMPs are required to include estimates of past, current, and projected potable and recycled water use, identify conservation and reclamation measures currently in practice, describe alternative conservation measures, and provide an urban water shortage contingency plan.

Under Senate Bill 610 (Costa), an urban water supplier (e.g., the Los Angeles Department of Water and Power [LADWP]) is responsible for the preparation and periodic updating of an UWMP that must describe the water supply projects and programs that may be undertaken to meet the total water use of the service area. If groundwater is identified as a source of water available to the supplier, Senate Bill 610 requires additional information to be included in the UWMP such as: (1) a groundwater management plan; (2) a description of the groundwater basin(s) to be used and the water use adjudication rights, if any; (3) a description and analysis of groundwater use in the past five years; and (4) a discussion of the sufficiency of the groundwater that is projected to be pumped by the supplier. Similarly, Assembly Bill 901 requires UWMPs to contain information specifically pertaining to the quality of water supply sources. In addition to requirements related to UWMPs, Senate Bill 610 recognizes the need to link water supply and land use planning as currently required by Section 10910 of the Water Code. Under certain circumstances, a city or county is required to request in conjunction with a development project a water supply assessment containing specific information from the water service provider. Under SB 610, it is the responsibility of the water service provider to prepare a water supply assessment requested by a city or county for any "project" defined by Section 10912 of the Water Code that is subject to CEQA. The bill prescribes a timeframe within which a public water system is required to submit the assessment to the city or county and authorizes the city or county to seek a writ of mandamus to compel the public water system to comply with the requirements relating to the submission of the assessment. If the provider determines that water supplies are, or will be, insufficient, plans must be submitted for acquiring additional water supplies. Additionally, the bill requires a city or county to include the water supply assessment and other pertinent information in any environmental document prepared (e.g., EIR) for the project pursuant to the act. LADWP, as a water service supplier, has incorporated the provisions of SB 610 into its water supply planning process. Under Senate Bill 610, a water supply assessment must be evaluated and approved for larger projects (i.e., residential projects with more than 500 dwelling units, shopping centers employing more than 1,000 persons or having more than 500,000 square feet of floor space, or commercial office

buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space). The approved water supply assessment, which evaluates the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and how they would be secured if needed, must be incorporated into the EIR for individual projects. Based on the quantity of development proposed, a water supply assessment for the Project was prepared and certified by the LADWP.

(2) Local Level

The LADWP is the water purveyor serving the Project area. In recent years, conservation has become an important element of managing the water supplies of Southern California. The California Urban Water Management Planning Act requires water suppliers, such as the LADWP, to develop water management plans every five years to identify short-term and long-term water demand management so as to meet growing water demands during normal, dry, and multi-dry years. The plan includes descriptions of conservation efforts and alternative sources of water, including recycling.

Details of the LADWP efforts to promote efficient use and management of its water resources are contained in its Year 2000 Urban Water Management Plan. The Fiscal Year 2003–2004 Annual Update provides an update for the fiscal year ending June 30, 2004. For the Fiscal Year ending June 30, 2004, LADWP supplied 690,450 acre-feet of water, a 4 percent increase over Fiscal Year 2003. The Annual Update for Fiscal Year 2002 indicates that even higher levels of annual water demand occurred in the late 1980s.

The Fiscal Year 2003–2004 Report, available over the internet, confirms that LADWP is providing for future growth in population in its service area and in providing for the increase in the demand for water. The plan for meeting the increasing demand for water relies on conservation measures, increased use of recycled water, as well as reliance on the three primary sources of water to the City, the Los Angeles Aqueduct, local groundwater, and water purchases from the Metropolitan Water District (MWD). According to the Fiscal Year 2003–2004 Report, "LADWP has met the immediate water needs of its customers and is well-positioned to continue to do so in the future. However, LADWP will continue to rely upon its investments in MWD to meet future needs that exceed its own water resources."

The City of Los Angeles has also pursued water conservation measures, including the following strategies:

- Protect existing water supplies from contamination and clean up groundwater supplies;

- Pursue cost-effective water conservation and recycling projects to increase supply reliability and offset increases in water demand due to growth;

- Seek outside funding to offset capital investments needed to develop alternative supplies such as conservation and recycling projects and resource management programs; and

- Maintain the structural integrity of the Los Angeles Aqueduct and in-City water distribution systems.

In order to reduce the impact of potential supply deficiencies, the Los Angeles City Council has enacted ordinances mandating measures to reduce water consumption. Ordinance Nos. 163,532 and 164,093, enacted in 1988, with subsequent amendments, require new buildings to install all low-flush toilets and urinals (1.5 gallons per flush) in order to obtain building permits. Ordinance No. 163,532 also contained provisions requiring xeriphytic (low-water consumption) landscaping. This was superseded by Ordinance No. 170,978, which was approved by the City Council in April 1996 and has been in place since July 12, 1996. Ordinance No. 170,978 is a comprehensive landscape ordinance that applies to all projects except single-family dwellings that create 2,000 sq.ft., or more, of non-permeable surface. The Ordinance replaces the blanket requirement for xeriscape with "Water Management." Although a xeriscape point system chart is still used, it has been slightly augmented by increased choices as well as strengthened so that projects have to propose and document substantive water conserving features and techniques. The measures described in the above-mentioned ordinances are considered baseline conditions.

b. Existing Conditions

(1) Water System Capacity

The water needs of the City of Los Angeles are served by Los Angeles Department of Water and Power (DWP). This public utility obtains its water supplies from three major sources: (1) the Owens Valley and the Mono basin on the east side of the Sierra Nevada Mountains via the Los Angeles Aqueduct (LAA); (2) Northern California and Colorado River imports from the Metropolitan Water District of Southern California (MWD); and (3) local groundwater basins, including the San Fernando, Sylmar, Central Coast and West Coast Basins. In addition to these sources, some wastewater within the LADWP service area is reclaimed for reuse for irrigation, industrial use, and groundwater recharge.

The LADWP water infrastructure is a combined domestic and fire water supply system that is an integrated network of pipelines located in City streets. At present, Development Sites A, B, C, D, and E are parking lots and require water for irrigation purposes only.

Development Site F is a vacant lot and is assumed to have a limited water demand. Development Site G is the location for The Center for Health Professionals (CHP) and is the only developed site in the proposed Project development area with an existing water demand, although Project development is anticipated to be in addition to, rather than replace, existing CHP uses.

City water mains in the area have been designed to meet Fire Department fire flow requirements, which are based on land use.

(2) Water Service for the Seven Development Sites

The water system maintained by the LADWP includes water mains in San Pablo Street Alcazar Street, Eastlake Avenue, Biggy Street and Zonal Avenue. Table 31 on page 275 provides an inventory of available water lines that are located adjacent to the proposed Development Sites. City water lines are designed to meet fire flow requirements established by the Fire Department according to land use, as these demands exceed the corresponding demand for potable water. As the water lines serve one or more Development Sites, the analysis presented in this section is organized by water line rather than by Development Site.

(a) Water Service in Eastlake Avenue

A 10-inch water main is located in Eastlake Avenue, located 22 feet east of Eastlake Avenue's west right-of-way. The 10-inch line then offsets to approximately 15 feet and shifting to the western side of the right-of-way as the street curves toward San Pablo Street. After the curve is completed, the line then offsets to 21 feet north of Eastlake Avenue's south right-of-way line.

(b) Water Service in San Pablo Street

Two 16-inch water mains are located in San Pablo Street. One is located 21 feet east of San Pablo Street's west right-of-way and the other is located 17 feet to the east of San Pablo Street's west right-of-way line. The main located 21 feet east of San Pablo Street serves Development Sites A and B and the main located 17 feet east of San Pablo Street serves Development Sites E and F.

(c) Water Service in Alcazar Street

Three water service lines are located in Alcazar Street, including two 8-inch lines located 15 feet north of Alcazar Street's south right-of-way, and a 6-inch diameter main, located 18 feet north of Alcazar Street's south right-of-way. The 6-inch line serves Development Site G and the

Table 31

SUMMARY OF NEARBY WATER SERVICE LINES

Street	Diameter [a] (inches)	Pipe Material	ROW Location [b]	Year Constructed	Development Sites Potentially Served
Eastlake Avenue	10	Ductile Iron	22' E/W	1910	A & G
San Pablo Street	16	Ductile Iron	21' E/W	1992	A, B, E & F
San Pablo Street	16	Ductile Iron	17' N/S	1993	A, B, E & F
Alcazar Street	6	Ductile Iron	18' N/S	1984	G
Alcazar Street	8	Ductile Iron	15' N/S	1992	B & E
Alcazar Street	8	Ductile Iron	15' N/S	1966	B & E
Biggy Street	12	Ductile Iron	20' S/N	1952	D
Zonal Avenue	12	Ductile Iron	16' S/N	1977	C

[a] *Distance of the street right-of-way (ROW) line, e.g., the 10-inch main in Eastlake Avenue is located 22 feet east of Eastlake Avenue's west right-of-way line.*

Source: KPFF Consulting Engineers, May 2005.

8-inch water service lines serve Development Sites B and E. The 8-inch line offsets to 18 feet, north of Alcazar Street's south right-of-way line, as the line approaches San Pablo Street.

(d) Water Service in Biggy Street

One 12-inch diameter water line is located in Biggy Street, 20 feet south of Biggy Street's north right-of-way line.

(e) Water Service in Zonal Avenue

One 12-inch diameter water line is located in Zonal Avenue, 16 feet south of Zonal Avenue's north right-of-way line.

(3) Fire Hydrants Serving the Seven Development Sites

(a) Fire Hydrants for Development Site A

Development Site A is served by five City of Los Angeles fire hydrants. These include one hydrant and one double hydrant on the east side of Eastlake Avenue; two double hydrants on the south side of Norfolk Avenue, and one double hydrant on the east side of San Pablo Street.

(b) Fire Hydrants for Development Site B

Four City of Los Angeles fire hydrants are located in close proximity to Development Site B. Two hydrants are located on San Pablo Street; one on the east side of San Pablo Street, approximately 205 feet south of Development Site B, and the other on the west side of San Pablo Street, approximately 200 feet northwest of Development Site B. The other two hydrants are located on Alcazar Street; one directly adjacent to the northwest corner of Development Site B, and one located approximately 50 feet to the east of Development Site B.

(c) Fire Hydrants for Development Site C

Three City of Los Angeles fire hydrants are located on Zonal Avenue in close proximity to Development Site C. Two hydrants are located directly adjacent to Development Site C on the north side of Zonal Avenue and one is directly across the street from Development Site C. Another fire hydrant is located approximately 310 feet north of Biggy Street and three more are located on the northwest, southwest, and southeast corners of Zonal Avenue and Mission Road.

(d) Fire Hydrants for Development Site D

Three City of Los Angeles fire hydrants are located in close proximity to Development Site D. Two hydrants are located on the north side of Biggy Street approximately 110 feet east and 100 feet south of Development Site D. A third hydrant is located on the west side of Zonal Avenue, approximately 150 feet southwest of Development Site D.

(e) Fire Hydrants for Development Site E

Five City of Los Angeles fire hydrants are located in close proximity to Development Site E. Three hydrants are located directly across from Development Site E on the south side of Alcazar Street and two are located directly across from Development Site E on the east side of San Pablo Street.

(f) Fire Hydrants for Development Site F

Two City of Los Angeles fire hydrants are located in close proximity to Development Site F. One is located adjacent to Development Site F on San Pablo Street and one is located approximately 40 feet south of Development Site F on the west side of San Pablo Street.

(g) Fire Hydrants for Development Site G

Five City of Los Angeles fire hydrants are located in close proximity to Development Site G. Development Site G is located adjacent to one hydrant on Alcazar Street. One hydrant is located approximately 135 feet east of Development Site G on the southeast corner of the intersection of San Pablo and Alcazar Streets. A fire hydrant is also located on the west side of San Pablo Street, approximately 200 feet north of Development Site G and another is located on the east side of San Pablo Street, approximately 240 south of Development Site G. A fifth fire hydrant is located approximately 170 feet west of Development Site G on the west side of Eastlake Avenue near the intersection with Alcazar Street.

3. PROJECT IMPACTS

a. Methodology

Water generation factors are based on LADWP factors for specific types of land uses as provided in the Project's water supply assessment. Consumption factors are generally multiplied by the proposed land use and occupancy expectations of the facilities (days of operation). The highest flow rate during the year is during the peak hour of the maximum day, normally called the peak hour demand. Water generation factors also address outdoor use, which comprises approximately 28 percent of consumption for institutional and medical clinic uses such as those included in the proposed Project.

b. Thresholds of Significance

Based on the criteria set forth in the *City of Los Angeles CEQA Thresholds Guide*, the proposed Project would have a significant impact if:

- The total estimated water demand for the Project at buildout would exceed available supplies or distribution infrastructure capabilities (i.e., water infrastructure); or
- The Project would exceed the projected employment, housing, or population growth projections of the applicable Community Plan as assumed in the planning for future water infrastructure needs.

c. Project Design Features

The Proposed Project would implement water conservation methods such as ultra low-flow toilets, low-flow showerheads, low-flow fixtures and water saving appliances, as required by existing regulations.

d. Project Impacts

(1) Construction

During construction, water would be used for dust suppression, the mixing and pouring of concrete, and other construction-related activities. The majority of water use during construction would be associated with dust suppression of excavated sites. This is generally performed by water trucks which derive non-potable water from offsite sources. As such, the impact on treated water from the DWP would be incrementally small and the impact on adjacent water conveyance systems would not occur. As such, no significant impact is anticipated to occur due to Project construction activities because the water demands associated with construction activities would not exceed available supplies or distribution infrastructure.

The Project anticipates the construction of two lateral service lines to each existing water line in the adjacent street(s). One of the two service lines would supply domestic water and one would supply the Project's fire sprinkler systems and fire suppression system. All water improvements within the public right-of-way would be constructed by the LADWP. Since water lines are located within the public right-of-way, water line construction would cause short-term disruption of the right-of-way within the affected streets. In addition, it is also anticipated that water lines and other utility infrastructure would be encountered within the boundaries of the Development Sites during site preparation activities. The relocation of these service lines would occur on an as-needed basis in accordance with standard regulations and procedures, which would preclude any significant impacts. In addition to these sewer and water lines, a steam tunnel is located beneath Development Site C that serves the Los Angeles County facilities in the vicinity of the HSC. In the event that development on Development Site C requires the abandonment of the steam tunnel, the Applicant would either relocate the steam tunnel or construct a new steam plant that would be located within Development Site C.

Impacts due to the construction of the water lines that would serve Project development as well as the potential relocation of subterranean infrastructure would include temporary traffic lane disruption during trenching, laying of pipe, backfilling, and street resurfacing. Since the construction would not be within the authority of the Project, standard practices and procedures, including traffic control, are generally implemented by LADWP during construction to minimize the impact to the community. These recourses would be sufficient to reduce potential impacts to

less than significant levels. Construction of the new steam plant, if required, would not result in construction impacts that would be greater than those analyzed in this Draft EIR for Development Site C because the construction of the steam plant would not increase the peak level of construction activity analyzed in this Draft EIR.

(2) Operation

(a) Water Use and Supply

A water supply assessment has been reviewed and approved by the LADWP, in accordance with the State regulations and the LADWP Urban Water Management Plan (UWMP). The water supply assessment evaluates the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and how they would be secured if needed. The water supply assessment is also consistent with the LADWP Urban Water Management Plan (UWMP). Domestic water would be required for restrooms, research laboratories, drinking fountains, landscaping, and incidental water use. With respect to the operation of uses proposed for the Project, an estimated total of 208,704 to 266,304 gallons per day (gpd) of potable water would be consumed at Project buildout on days when all Project development is fully occupied. The range identified reflects Project buildout at 585,000 or 765,000 square feet. The estimated water demand for the Project at buildout is in Table 32 on page 280 .

Assuming the average daily demand for water is extended over 365 days per year, the projected annual consumption of the USC Health Sciences Campus would be 97.20 million gallons annually for the largest demand scenario. This represents an increase of 0.04 percent over the annual volume of water supplied by the LADWP in fiscal year 2004.

The Project falls within Senate Bill 610 size criteria in which a water supply assessment (WSA) must be evaluated and approved by the LADWP (i.e., commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space). LADWP has reviewed the WSA application for the Project and has concluded that adequate water supplies exist to serve the maximum proposed development.

The UWMP, which responds to the requirements of state water laws, is based on the land use designations and the projected growth anticipated by the Community Plan elements of the City of Los Angeles General Plan. The UWMP details a number of measures being undertaken in the coming years to serve a growing population and an increased water demand. As such, water demand is based on the buildout of the General Plan. The proposed Project would be consistent with the Community Plan's growth parameters which designate the Project site for

Table 32

PROJECTED WATER DEMAND

Use	Size (sq.ft.)	Factor (GPD/1,000 sq.ft.) [a]	Average Daily Flow	Annual Generation [b] (million gal/year)
Development Scenario = 765,000 sq.ft.				
Academic/Medical Research	720,000	250 GPD/1,000 sq.ft.	180,000	65.70
Medical Clinic	45,000	250 GPD/1,000 sq.ft.	11,250	4.11
Parking	840,000	20 GDP/1,000 sq.ft.	16,800	6.13
Outdoor Water Use [c]			58,254	21.26
Total Proposed Project			**266,304**	**97.20**
Development Scenario = 585,000 sq.ft.				
Academic/Medical Research	465,000	250 GPD/1,000 sq.ft.	116,250	42.43
Medical Clinic	120,000	250 GPD/1,000 sq.ft.	30,000	10.95
Parking	840,000	20 GDP/1,000 sq.ft.	16,800	6.13
Outdoor Use [b]			45,654	16.66
Total Proposed Project			**208,704**	**76.17**

[a] *GPD/1,000 sq.ft. = Gallons Per Day divided by 1,000 square feet of floor area.*
[b] *Annual water consumption assumes 365 days of operation a year.*
[c] *Estimated to be 28 percent of consumption.*

Source: KPFF Consulting Engineers, May 2005.

General Commercial, Limited Industrial and Public Facility uses. The Project's proposed uses represent a less intense use than those permitted by the Community Plan, for example, a large hospital facility. Since the Project would be less intensive in relation to water demand than under the Community Plan land use designations, the Project would be within the General Plan and UWMP growth projections. Therefore, the water demand of the proposed Project would be less than significant in relation to the UWMP and with state water statutes.

(b) Water Infrastructure

The Project would require adequate infrastructure to meet LAFD fire flow requirements and potable water demand. The adequacy of water pressure is indicated by the existing adequate pressure and service to adjoining land uses, including the multi-story USC medical and research facilities. In addition, the size of existing mains indicates the adequacy of water lines, since mains larger than 8 inches in diameter generally serve areas larger than the adjoining service area. All of the proposed Development Sites are adjacent to lines at least 10 to 16 inches in diameter and, thus, the existing water infrastructure, as the analysis provided below concludes, would be adequate to provide domestic water and fire suppression services to the proposed Project. Table 33 on page 281 forecasts the daily water consumption for each of the individual water lines that could serve the Project Site. Since existing water lines have adequate capacity to

Table 33

FORECAST OF ESTIMATED DAILY WATER USAGE

Street	Diameter (inches)	Development Site Served [a]	Maximum Floor Area	Generation Factor	Estimated Daily Consumption (GPD) [b]
Eastlake Avenue	10	A & G	565,000 sq.ft.	250 GDP/1,000 sq.ft.	141,250
San Pablo Street	16	A, B & G	765,000 sq.ft.	250 GDP/1,000 sq.ft.	191,250
San Pablo Street	16	E & F	765,000 sq.ft.	250 GDP/1,000 sq.ft.	191,250
Alcazar Street	6	B, E, & G	765,000 sq.ft.	250 GDP/1,000 sq.ft.	191,250
Alcazar Street	8	G	100,000 sq.ft.	250 GDP/1,000 sq.ft.	25,000
Alcazar Street	8	B & E	695,338 sq.ft	250 GDP/1,000 sq.ft.	173,835
Biggy Street	12	D	200,000 sq.ft.	250 GDP/1,000 sq.ft.	50,000
Zonal Avenue	12	C	840,000 sq.ft.	20 GPD/1,000 sq.ft.	16,800

[a] *Maximum potential floor area on each development site is used to present a conservative analysis for each line. The analysis is conservative in that the total Project would not exceed 765,000 square feet and that the maximum potential floor area for each Development Site would flow into only one line. However, depending on line capacity, where multiple lines serve a Development Site, water flow may be divided and maximum flow into each line would be less than shown. For instance, the daily flow from Development Site A may be divided between lines in Eastlake Avenue and San Pablo Street and, as such, would generate less flow to each line than shown above.*

[b] *GPD = Gallons Per Day (water demand daily)*

Source: KPFF Consulting Engineers, May 2005.

serve the Project, the impact of the Project relative to water conveyance lines would be less than significant. City water mains are also designed to meet the fire flow requirements established by the Los Angeles Fire Department, and thus sufficient to meet the needs of the proposed Project. Based on this analysis, it is concluded that Project impacts on water conveyance systems would be less than significant.

(c) Fire Flow

The water conveyance system at the Project site would also be required to meet LAFD fire flow standards. The LAFD Fire Marshall's office requires that water lines serving the Project site provide 6,000 to 9,000 gallons per minute (GPM) during simultaneous flow from four adjacent fire hydrants. In addition, in order to meet fire flow requirements, the residual pressure during the continuous flow from four hydrants, must not drop below 20 psi. Based on available data, the water lines that serve the proposed Project would maintain a residual pressure of at least 20 psi. As such, the existing infrastructure is capable of delivering the fire flow required to meet LAFD requirements. Furthermore, this determination would be confirmed through an analysis performed by the Water Operations Division of the LADWP at the time a development application has been filed with the City. Since the existing water pressure at the Project Site is adequate to meet this LAFD fire flow requirement, the existing conveyance system is adequate and the impact of the Project relative to fire flow would be less than significant.

In summary, the Project's total estimated water demand at buildout would not exceed available supplies or distribution infrastructure capabilities, the Project would not create a significant impact relative to the existing conveyance system, and fire flow would be adequate to meet LAFD requirements. Therefore, the Project would generate a less than significant impact with regard to water supply and water systems.

(d) Additional Development Scenarios

The preceding analysis is based on the maximum amount of proposed total development (i.e., 765,000 square feet) and the maximum amount of development at each of the seven proposed Development Sites. In addition, the water consumption factors for University-related and medical clinic uses are the same. As such, the development of any combination of permitted land uses would not exceed the impacts identified in the preceding analysis since a reduction in square footage would also result in a reduction in water consumption on an overall Project, as well as on an individual Development Site, basis. Therefore, impacts on water supply would be less than significant regardless of the development scenario that is implemented. As the conveyance systems that serve each Development Site can accommodate the maximum flow levels required to serve the Development Site, any reduction in development would also be able

to be accommodated. Thus, the implementation of any development scenario that could occur would result in a less than significant impact with regard to the conveyance of potable and fire water flows. The construction impacts identified above are independent of the amount of development occurring at any Development Site and thus, would apply to any development scenario that could be implemented. As such, construction impacts of any potential development scenario would also result in less than significant impacts.

4. CUMULATIVE IMPACTS

Related project development is situated such that the water infrastructure that would support the identified related projects would not utilize the water mains utilized by the proposed Project. As such, no cumulative impacts would occur. In addition, sufficient capacity is available in the upstream water lines to accommodate the increase in water flows generated by related project development as well as development of the proposed Project. As such, cumulative impacts on the water lines that would serve the related projects and the proposed Project are less than significant.

Since the related projects are anticipated to be constructed in accordance with State and water conservation regulations and within the build-out scenario of the controlling Community Plans and City of Los Angeles General Plan Elements, no significant impacts due to cumulative water demand are anticipated. The Project's off-site improvements would not create additional population or induce population growth directly or indirectly and, therefore, would not result in any secondary impacts on water consumption. As such, cumulative impacts associated with off-site improvements would be less than significant.

As discussed above in Subsection 1.a, Regulatory Framework, LADWP, as a public water service provider, is required to prepare and periodically update an UWMP to plan and provide for water supplies to serve existing and projected demands. The UWMP prepared by LADWP accounts for existing development within the City as well as projected growth anticipated to occur through redevelopment of existing uses and the development of new uses. In addition, water supply assessments for large-scale projects, in conformance with Senate Bill 610 (Costa), SB 221 (Kuehl) and the UWMP, evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and how they would be secured if needed. A WSA was prepared for the proposed Project by the LADWP, which concludes that adequate water supplies are available to meet the proposed Project's potable water demand.

Given that the UWMP plans and provides for water supplies to serve existing and projected needs, including those of future growth and development that may occur through

related projects, and that the requirements of Senate Bill 610 and SB 221 provide the means to ensure that the water supply needs of notable development projects have been carefully considered relative to LADWP's ability to adequately meet future needs, it is anticipated that LADWP would be able to supply the demands of the Project and related projects through the foreseeable future and no significant cumulative impacts related to water demand are anticipated.

5. MITIGATION MEASURES

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

Mitigation Measure F-1.1: Water faucet fixtures with activators shall be installed that automatically shut off the flow of water when not in use.

Mitigation Measure F.1-2: Automatic sprinkler systems shall be set to irrigate landscaping during early morning hours or during the evening 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.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

The total estimated water demand for the Project at buildout is not anticipated to exceed available supplies or distribution infrastructure capabilities (i.e., water infrastructure), or exceed the projected employment, housing, or population growth projections of the applicable General Plan Framework and Community Plan, as assumed in the planning for future water infrastructure needs. No local or regional upgrading of water conveyance systems is anticipated and, as such, no cumulative construction impacts from the development of additional off-site water lines are anticipated. Therefore, no significant unavoidable adverse impacts relative to water consumption are anticipated to occur.

IV. ENVIRONMENTAL IMPACT ANALYSIS
F. UTILITIES
2. WASTEWATER

1. INTRODUCTION

This section is based on the technical report, *USC Health Science Campus Sanitary Sewer Infrastructure*, prepared by KPFF Consulting Engineers (April 6, 2005). The wastewater technical report is contained in Appendix F-2 of this Draft EIR. The following section addresses the potential impacts of the Proposed Project on local and regional wastewater facilities and infrastructure. Wastewater treatment is under the jurisdiction of the City of Los Angeles, Department of Public Works Sanitation Bureau. The construction and maintenance of sewer lines is under the jurisdiction of the City of Los Angeles, Department of Public Works, Engineering Bureau. The analysis estimates and compares the demand for service to the capacity of the existing and proposed collection, conveyance, and treatment facilities. The Project's consistency with adopted wastewater plans and policies is also addressed.

2. ENVIRONMENTAL SETTING

a. Wastewater Regulations

The City of Los Angeles Department of Public Works (LADPW), Bureau of Sanitation, is the wastewater collection and treatment agency serving the Project Site, and regulates the acceptance of wastewater into the collection system.

In 1990, City Ordinance No. 166,060 (also known as the Sewer Allocation Ordinance) was adopted, which established regulations for projects that discharge into the Hyperion Treatment System (HTS). The ordinance established an annual sewage allotment of 5 million gallons per day (gpd), of which 34.5 percent (1,725,000 gpd) is allocated for priority projects, 8 percent (400,000 gpd) for public benefit projects, and 57.5 percent (2,875,000 gpd, with a monthly allotment of at least 239,583 gpd) for non-priority projects (of which 65 percent of this allocation is for residential and 35 percent for non-residential projects). Before the Department of Building and Safety formally accepts a set of plans and specifications for a project for plan check, LADPW must first determine if there is allotted sewer capacity available for such project. LADPW will not make such a determination until the Department of Building and Safety has determined that the Project's plans and specifications are acceptable for plan check. If LADPW determines that there is allotted sewer capacity available for the project, then the Department of

Building and Safety will accept the plans and specifications for plan check upon the payment of plan check fees. If a project is eligible to receive an allocation as a non-priority project, and the monthly allotment has been used, then the project is placed on a waiting list for the next month's allotment. At the request of the project applicant, the Department of Building and Safety will accept the project's plans and specifications as acceptable for plan check even if the project has been placed on the waiting list and a sewer permit has not yet been obtained from LADPW, with the understanding that the project will not be able to connect to the City's wastewater system until capacity is available and a sewer permit issued.

City Ordinance No. 171,036, effective June 3, 1996, changed the rate structure for new and expanded development to be based upon the strength of the wastewater flow in addition to its volume. The determination of wastewater strength for each applicable project is based upon City guidelines for average wastewater concentrations of two parameters, biological oxygen demand and suspended solids, for each type of land use.

b. Wastewater Infrastructure

(1) Existing Flow Levels and Sewer System Capacity

The existing local sanitary sewer system serving the proposed Development Sites is made up of a combination of smaller 6- and 8-inch-diameter lines for the local area and larger 12- and 15-inch lines for the regional sewer discharge (the combination of development using a particular line). Existing lines serve both the local area and other development along the streets containing the sewer lines. The local collector system conveys sewage flow to trunk lines and outfall sewers that dispose of sewage to the Hyperion Wastewater Treatment Plant (HTP) operated by the Bureau of Sanitation.

Wastewater treatment facilities at HTP have undergone recent upgrades to augment treatment capacity and to enhance water quality. These improvements are planned to meet the needs of the increasing population of the City of Los Angeles with increasing sewage generation into the future.

(2) Service to Development Sites

Wastewater services to the seven proposed Development Sites are provided from a series of existing lines in the Project vicinity. These are described below in relation to each of the Development Sites and are summarized in Table 34 on page 287. As the sewer lines serve one or more Development Sites, the analysis presented in this section is organized by sewer line rather than by Development Site.

Table 34

SUMMARY OF NEARBY SEWER SERVICE LINES

Street/Location	Diameter [a] (inches)	Pipe Material	ROW Location [b]	Year Constructed	Development Sites Potentially Served
Eastlake Avenue	6 to 8	VPC	30' E/W	1905	A & G
Eastlake Avenue	15	VPC	16' E/W	1965	A & G
San Pablo Street	8	VPC	28.5' W/E	1924	A
San Pablo Street	8	VPC	30' W/E	1905	B & G
Alcazar Street	15	VPC	20' S/N	1965	B, E, & G
Alcazar Street	8	VPC	30' N/S	1905	G
Alcazar Street [c]	8	VPC	150' N/N	1915	E
Alcazar Street [c]	10	VPC	170' N/N	1915	F
Biggy Street	8	VPC	30' S/N	1910	D
Zonal Avenue	15	VPC	23.67' W/E	1974	C

[a] *All available diameters are listed for lines increasing in size adjacent to a given site; e.g., the 6-inch-diameter line located in Eastlake Avenue increases to an 8-inch line farther downstream.*

[b] *Distance from street right-of-way (ROW) line; e.g., the 6-inch line in Eastlake Avenue is located 30 feet east of Eastlake Avenue's west right-of-way line.*

[c] *Line runs adjacent to Alcazar Street but outside of right-of-way.*

Source: KPFF Consulting Engineers, May 2005.

(a) Sewer Service in Eastlake Avenue

Two City of Los Angeles vitrified clay pipe (VCP) sanitary sewer lines are located in Eastlake Avenue. These lines, which serve Development Sites A and G, include a 15-inch line, located 16 feet east of Eastlake Avenue's west right-of-way, and a 6- to 8-inch line, located 30 feet east of Eastlake Avenue's west right-of-way. The 15-inch line originates from the direction of Biggy Street and, at the location of a manhole at the intersection of Biggy Street and Eastlake Avenue, turns to the northwest to follow along Eastlake Avenue. The 15-inch line has a slope of at least 0.40 percent. The 6-inch line begins with a slope of 2.14 percent near Development Sites A and G and increases to an eight-inch line farther downstream with a slope of at least 0.62 percent.

(b) Sewer Service in San Pablo Street

Two City of Los Angeles vitrified clay pipe (VCP) sanitary sewer lines are located in San Pablo Street. These mains, which serve Development Sites A, B, and G, are both 8-inch lines. One line is located 28.5 feet west of San Pablo Street's east right-of-way and one is located 30 feet west of San Pablo Street's east right-of-way. The 8-inch line located 28.5 feet west of San Pablo Street's east right-of-way has a slope of 1.68 percent, but eventually drains to the 8-inch line on Eastlake Avenue, with a minimum slope of 0.40 percent. The 8-inch line located

30 feet west of San Pablo Street's east right-of-way has a slope of 3.92 percent adjacent to Development Site G, and connects to an 8-inch line in Alcazar Street.

(c) Sewer Service in Alcazar Street

Two City of Los Angeles vitrified clay sanitary sewer line are located in Alcazar Street. These include a 15-inch main and an 8-inch main. The 15-inch sewer line is located 20 feet south of Alcazar Street's north right-of-way and the 8-inch sewer main is located 30 feet south of Alcazar Street's north right-of-way. The 15-inch line is adjacent to Development Sites B, E, and G and the 8-inch line serves Development Site G. The slope of this line adjacent to Development Site E is 1.88 percent, with flow running from the west toward Eastlake Avenue. This line eventually ties into the 18-inch line in Eastlake Avenue, at the point in which the slope reduces to a minimum of 0.62 percent.

Another City of Los Angeles vitrified clay sanitary sewer line is located in a subterranean alignment within Development Site E and south of Development Site F. This line has a diameter of 8 inches and a slope of 1.60 percent. Further west this line increases to 10 inches and is located 20 feet south of the Development Site F property line. Still further to the west, this line increases 12 inches however the slope is reduced to 0.24 percent.

(d) Sewer Service in Biggy Street

One 8-inch-diameter City of Los Angeles vitrified clay sanitary sewer line is located in Biggy Street. This line, located 30 feet south of Biggy Street's north right-of-way, serves Development Site D. This line, which has a minimum slope of at least 0.40 percent, flows from west to the east toward Eastlake Avenue.

(e) Sewer Service in Zonal Avenue

One 15-inch-diameter City of Los Angeles vitrified clay sanitary sewer line, serving Development Site C, is located in Zonal Avenue. This pipe is located approximately 23.67 feet west of Zonal Avenue's east right-of-way line.

3. PROJECT IMPACTS

a. Methodology

Wastewater generation estimates were developed for long-term operational use based on estimated water consumption. As noted in Subsection IV.F.1, Water Supply, of this EIR, all wastewater generation factors are identical to LADWP indoor water consumption factors. Generation factors are generally multiplied by the land use provided in the Project Description according to the occupancy expectations of the facilities (i.e., numbers of days of operation per year). Since the total floor area to be constructed on each Development Site is unknown, a conservative analysis regarding impact on the local conveyance system is performed. The analysis is conservative in that it evaluates the maximum amount of floor area that could potentially be constructed on each Development Site and, if combined, actually exceeds the total maximum floor area of the Project. In addition, the analysis is conservative because the generated flow from the maximum potential floor area for each Development Site is distributed into each of the sewer lines serving each Development Site, even though wastewater would likely be divided between lines if an individual Development Site is served by more than one line.

b. Thresholds of Significance

Based on the criteria set forth in the *City of Los Angeles CEQA Thresholds Guide* (p. K.2-3), the Project would have a significant wastewater impact if:

- The project would cause a more than limited increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained, or

- The project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its elements.

c. Project Design Features

The following Project Design features have been proposed by the Applicant:

- The Applicant shall comply with the procedural requirements of City ordinances regulating connections to the City sewer system (e.g., Ordinance No. 166,060);

- All necessary onsite infrastructure improvements shall be constructed to meet the requirements of the Department of Building and Safety;

- The Applicant shall comply with the applicable provisions of Ordinance No. 162,532, which provides for the reduction of water consumption levels, thereby restricting wastewater flows, (i.e., water saving devices to be installed shall include low flow toilets and plumbing fixtures that prevent water loss); and

- The Applicant shall apply for and comply with necessary permits, including Industrial Wastewater Discharge Permits, if required.

d. Project Impacts

(1) Construction

During construction of the Proposed Project, a negligible amount of wastewater would be generated by construction personnel. It is anticipated that portable toilets would be provided by a private company and the waste disposed of off-site. Wastewater generation from construction activities is not anticipated to cause a measurable increase in wastewater flows at a time when a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Additionally, construction is not anticipated to generate wastewater flows that would substantially or incrementally exceed the future scheduled capacity of any treatment plant by generating flows greater than those anticipated in the City Wastewater Facilities Plan. As such, construction impacts to the local wastewater conveyance and treatment system would be less than significant and no mitigation is required.

Construction at the seven proposed Development Sites would require only the construction of lateral lines from the Development Sites to the sewer lines in the public right-of-way. Those portions of the laterals constructed within the public right-of-way would have impacts relative to temporary traffic lane disruption during trenching, laying of pipe, backfilling, and street resurfacing. Standard practices and procedures, including traffic control, would be implemented to minimize the impact to the community. Mitigation measures relative to traffic control during construction are described in Traffic and Circulation, Section IV.C of this Draft EIR. The aforementioned measures would be sufficient to reduce potential impacts to less than significant levels.

(2) Operation

(a) Treatment Capacity

The regional wastewater treatment facility at HTP has been improved to provide capacity for the incremental increase in sewage generated by anticipated growth in the City of Los Angeles. Regional wastewater facilities are at least partially funded through the collection of fees. The Sewerage Facilities Charge is collected by the City of Los Angeles from owners/ developers of new land uses within the City. The Project would generate an incremental increase in the sewage flow treated by HTP. The Applicant may be subject to the payment of a Sewerage Facilities Charge for development pursuant to the proposed Project. Fees may be offset by credits should credits be available through prior uses. All projects served by the Hyperion Treatment System are subject to the Sewer Allocation program, which limits additional discharge according to a pre-established percentage rate. Before the Department of Building and Safety formally accepts a set of plans and specifications, the Los Angeles Department of Public Works must first determine if there is allotted sewer capacity available for such project. If the allotment for a particular time period (usually a month) has already been allocated, the project is placed on a waiting list until adequate treatment capacity has been determined. Under the allocation program, HTP has capacity to serve a particular rate of growth. Since the Project is located in an area designated as a public facilities site and anticipates growth, the Project's additional wastewater flows would not substantially or incrementally exceed the future scheduled capacity of the HTP by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its elements. The projected daily and annual wastewater generation for the proposed Project is summarized in Table 35 on page 292. As previously described, the Project would not be permitted prior to the determination of treatment capacity. Therefore, no significant impacts in relation to regional treatment capacity would occur.

(b) Capacity of Conveyance Systems

Project development would generate daily wastewater flows associated with restrooms and other indoor water use. Sewer availability requests have been reviewed by the City of Los Angeles Bureau of Engineering for the sewer lines which serve the seven proposed Development Sites. In response to these requests, a sewer gauging study was conducted by the City of Los Angeles Bureau of Sanitation of the local sewer lines adjacent to, and in the vicinity of, the seven proposed Development Sites. The analysis of potential impacts on these sewer lines serving the Project is based on the maximum use that could impact any single line under any development scenario. The analysis is conservative in that it evaluates the maximum amount of floor area that

Table 35

PROJECTED SEWAGE GENERATION

Use	Size (sq.ft.)	Factor [a] (GPD/1,000 sq.ft.) [b]	Average Daily Flow	Annual Generation [c] (million gal/year)
Development Scenario = 765,000 sq.ft. [d]				
Academic/Medical Research	720,000	250 GPD/1,000 sq.ft.	180,000 GPD	65.70
Medical Clinic	45,000	250 GPD/1,000 sq.ft.	11,250 GPD	4.11
Parking	840,000	20 GDP/1,000 sq.ft.	16,800 GPD	6.13
Total Proposed Project			**208,050 GPD**	**75.94**
Development Scenario = 585,000 sq.ft. [d]				
Academic/Medical Research	465,000	250 GPD/1,000 sq.ft.	116,250 GPD	42.43
Medical Clinic	120,000	250 GPD/1,000 sq.ft.	30,000 GPD	10.95
Parking	840,000	20 GDP/1,000 sq.ft.	16,800 GPD	6.13
Total Proposed Project			**163,050 GPD**	**59.51**

[a] *Factors are based on LADWP indoor water demand factors.*
[b] *GPD/1,000 sq.ft. = Gallons per Day ÷ by 1,000 sq.ft. of floor area.*
[c] *Assumes 365 days of operation a year.*
[d] *Square footage devoted to pedestrian circulation not included.*

Source: KPFF Consulting Engineers, May 2005.

could potentially be constructed on each Development Site and, if combined, actually exceeds the total maximum floor area of the Project. In addition, the analysis is conservative because the generated flow from the maximum potential floor area for each Development Site is distributed entirely into each of the sewer lines serving each Development Site, even though Project wastewater flows would likely be divided between lines if the Development Site is served by more than one line.

Forecasted daily sewage generation levels for each of the individual sewer lines that could serve the proposed Project are presented in Table 36 on page 293. An analysis of sewer line capacity for each line serving the Project Site is as follows:

(i) Sewer Service in Eastlake Avenue

Two City of Los Angeles vitrified clay pipe (VCP) sanitary sewer lines are located in Eastlake Avenue. These lines include a 15-inch line and a 6-8-inch line which serve Development Sites A and G. As shown in Table 36, adequate capacity exists in these lines to accommodate the maximum wastewater flow from the maximum development proposed for Development Sites A and G. Therefore, the impact relative to these lines would be less than significant.

Table 36

ANALYSIS OF SEWER LINES

Street/Location	Diameter (IN)	Sites served [a]	Maximum Floor Area (SF)	Sewage Generation (GDP/1,000 sf) [b]	Maximum Estimated Generation (GPD)	Existing Flow (IN) [c]	Existing Flow (CFS)	Design capacity (CFS)	Incremental increase (CFS) [d]	Future Flow (CFS)	Future Flow (IN)
Eastlake Avenue	18	A, B, E, F, G,	765,000	250	191,250	5.2	1.72	5.41	0.300	2.02	5.6
Eastlake Avenue	8	A & G	565,000	250	141,250	1.7	0.160	0.87	0.219	0.379	2.5
Biggy Street	8	D	200,000	250	50,000	0.7	0.011	0.45	0.080	0.091	1.7
Alcazar Street [e]	10	E & F	765,000	250	191,250	1.7	0.093	1.07	0.300	0.393	3.0
Alcazar Street	8	G	100,000	250	25,000	3.7	0.310	0.45	0.039	0.349	3.9
Alcazar Street	15	B, E, & G	765,000	250	191,250	3.4	0.930	5.23	0.300	1.23	3.8
Zonal Avenue	15	C	840,000	20	42,000	10.5	11.65	6.96	0.065	11.72	10.6

[a] *Maximum potential floor area on each development site is used to present a conservative analysis for each line. The analysis is conservative in that the total Project would not exceed 765,000 square feet and that the maximum potential floor area for each development site would flow into only one line. However, depending on line capacity, where multiple lines serve a Development Site, sewage flow may be divided between the lines and the maximum flow into each line would be less than shown. For instance, the daily flow from Development Site A may be divided between lines in Eastlake Avenue and San Pablo Street and, as such, would generate less flow to each line than shown above.*

[b] *GPD = Gallons Per Day (sewage generated daily)*

[c] *CFS = Cubic Feet per Second (the rate of flow in sewer mains)*

[d] *CFS generated by the Project.*

[e] *Sewer line runs adjacent to Alcazar Street approximately 150 feet to the north of the Alcazar Street right-of-way.*

Source: KPFF Consulting Engineers, May 2005.

(ii) Sewer Service for in San Pablo Street

Two City of Los Angeles 8-inch vitrified clay pipe (VCP) sanitary sewer lines are located in San Pablo Street. As shown in Table 36 on page 293, adequate capacity exists in these lines to accommodate the maximum wastewater flow from Development Sites A, B, and G, the impact relative to these lines would be less than significant.

(iii) Sewer Service in Alcazar Street

Two City of Los Angeles vitrified clay sanitary sewer line are located in Alcazar Street. These lines, which serve Development Sites B, E, and G, include a 15-inch line and an 8-inch line. As shown in Table 36, adequate capacity exists in these lines to accommodate the maximum wastewater flow generated from Development Sites B, E, and G, and the impact relative to these lines would be less than significant.

(iv) Sewer Service Within Development Site E and South of Development Site F

One City of Los Angeles vitrified clay sanitary sewer line is located in a subterranean alignment within Development Site E and south of Development Site F. Within Development Site E this line has a diameter of 8 inches. Based on the sewer availability request it is anticipated that this line has sufficient capacity available to support the additional sewer flows of 100,000 gpd anticipated to be generated by each Development Sites E and F. The gauging study conducted by the City of Los Angeles Bureau of Sanitation takes into account both Development Sites discharging a total of 200,000 GPD to the same line. As shown in Table 36, adequate capacity exists in these lines to accommodate the maximum wastewater flow from Development Sites E and F, the impact relative to these lines would be less than significant.

(v) Sewer Service in Biggy Street

One 8-inch-diameter City of Los Angeles vitrified clay sanitary sewer line is located in Biggy Street. As shown in Table 36, adequate capacity exists in this line to accommodate the maximum wastewater flow from Development Site D, and the impact relative to this line would be less than significant.

(vi) Sewer Service in Zonal Avenue

One City of Los Angeles 15-inch-diameter vitrified clay sanitary sewer line, serving Development Site C, is located in Zonal Avenue. Existing peak flows in this line exceeds 50 percent of its design capacity and as such exceeds the LADPW criteria for maximum flow

levels within an individual line. Notwithstanding, the relatively small additional flow that may be generated by Development Site C represents less than 0.6 percent of the current peak flow within this line. Furthermore, this line increases in diameter to 27 inches adjacent to the southwesterly edge of Development Site C. As such, the extent of Project impact on the 15-inch-diameter line would occur over a limited length of this sewer line. Project impacts on this particular sewer line are concluded to be less than significant as the Project would contribute only a limited increase in flows within the 15-inch-diameter line and that this increase would only occur for a short distance before the diameter of the sewer line increases to 27 inches.

Because the collection lines serving the Project are either adequately sized to serve the proposed Project, or in the case of the sewer line in Zonal Avenue, where the Project's impact would be of a very limited nature and occur for only a short distance, Project impacts on sewer line capacity are concluded to be less than significant.

(c) Additional Development Scenarios

The preceding analysis is based on the maximum amount of proposed total development (i.e., 765,000 square feet) and the maximum amount of development at each of the seven proposed Development Sites. In addition, the sewage generation factors for University-related and medical clinic uses are the same. As such, the development of any combination of permitted land uses would not exceed the impacts identified in the preceding analysis since a reduction in square footage would also result in a reduction in sewage generation on an overall Project, as well as on an individual Development Site, basis. Therefore, impacts on regional sewage capacity would be less than significant regardless of the development scenario that is implemented. As the conveyance systems that serve each Development Site can accommodate the maximum flow levels generated by the Development Site, any reduction in development would also be able to be accommodated. Thus, the implementation of any development scenario that could occur would result in a less than significant impact with regard to the conveyance of sewage flows. The construction impacts identified above are independent of the amount of development occurring at any Development Site and thus, would apply to any development scenario that could be implemented. As such, construction impacts of any potential development scenario would also result in less than significant impacts.

4. CUMULATIVE IMPACTS

The Project and related projects are not anticipated to cause a measurable increase in wastewater flows concurrent in time or at a point when a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained during peak service. Related project development is situated such that sewage flows from the identified related projects would not utilize the sewer lines analyzed in Table 34 on page 287. As such, no cumulative impacts

would occur. In addition, sufficient capacity is available in the downstream sewer lines to accommodate the increase in sewage flows generated by related project development as well as development of the proposed Project.

In relation to broad growth and demand, all related projects would be subject to the City's Sewer Allocation program for the Hyperion Treatment Plant. This program limits additional discharge according to a pre-established percentage rate. The Los Angeles Department of Public Works must first determine if there is allotted sewer capacity available for any project prior to accepting building plans for approval. If the allotment for a particular time period is filled, the project is placed on a waiting list until adequate treatment capacity has been determined. Under the allocation program, HTP has capacity to serve a particular rate of growth and prevent the occurrence of significant cumulative impacts relative to treatment capacity. Therefore, cumulative impacts to the local and regional sewer conveyance and treatment system, from the implementation of the proposed Project and related projects would be less than significant.

5. MITIGATION MEASURES

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

Mitigation Measure F-2.1: Prior to the issuance of any building permits, the Development Services Division of the Bureau of Engineering, Department of Public Works, shall make a determination of capacity in the sewer pipeline between each proposed Development Site and the trunk sewer. If service is discovered to be less than adequate, the Applicant shall be required to upgrade the connections to the lines and/or provide an alternative solution, in order to appropriately serve the Project.

Mitigation Measure F-2.2: The Applicant shall comply with the procedural requirements of City ordinances regulating connections to the City sewer system (e.g., Ordinance No. 166,060).

Mitigation Measure F-2.3: All necessary on-site infrastructure improvements shall be constructed to meet the requirements of the Department of Building and Safety.

Mitigation Measure F-2.4: The Applicant shall apply for and comply with all necessary permits, including Industrial Wastewater Discharge Permits, if required.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of the recommended mitigation measures, any local deficiencies in sewer lines would be identified and remedied and wastewater generation by the Project would be reduced. No significant impact on wastewater conveyances or the capacity of the Hyperion wastewater treatment facility would occur.

V. Alternatives to the Proposed Project

V. ALTERNATIVES TO THE PROPOSED PROJECT

A. INTRODUCTION

The State CEQA Guidelines (Section 15126.6[a]) requires an EIR to: (1) describe a range of reasonable alternatives to the proposed project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project; and (2) evaluate the comparative merits of the alternatives.[54] The State CEQA Guidelines (Section 15126.6[b]) states that the analysis of alternatives be limited to alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly.

The selection and discussion of alternatives is intended to foster meaningful public participation and informed decision-making. An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote or speculative. The State CEQA Guidelines (Section 15126.6[e]) also require the analysis of a "No Project" alternative and the identification of the "Environmentally Superior Alternative." If the environmentally superior alternative is the No Project Alternative, then the EIR is required to identify an environmentally superior alternative among the other alternatives.

In addition, the State CEQA Guidelines (Section 15126.6[c]) requires an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Accordingly, several alternatives that might avoid or substantially lessen Project impacts were considered. Of the alternatives that were considered, four were selected for analysis.

B. BASIC OBJECTIVES OF THE PROPOSED PROJECT

Section II.G of the Project Description sets forth a comprehensive list of the Project Objectives for the proposed Project. In reviewing this list, the following list identifies those objectives that would be considered the Applicant's basic objectives, pursuant to the requirements of Section 15126.6(a) of the CEQA Guidelines:

[54] *The CEQA guidelines regarding the consideration and discussion of alternatives to a proposed project, as summarized here, are found in Section 15126.6 of the State CEQA Guidelines.*

- To be a nationally respected provider of the highest quality, specialized acute inpatient and outpatient health care services and translational research.

- To assist in achieving USC's goals for the HSC to become one of the nation's very top medical schools and to attract outstanding students and provide them with a rigorous, individually tailored educational experience that trains them as internationally competitive research scientists.

- To develop new facilities which provide the quantity and quality of laboratory space required for recruiting new, world-renowned faculty, conducting breakthrough research and training future scientists.

- To provide the facilities and create an atmosphere that will stimulate and encourage USC students to excel academically, as community leaders, and as professionals.

- To provide new research, education and patient care facilities in an amount commensurate with demand for new programs and mission objectives.

- To provide centralized facilities within the HSC to attain efficiency in the meeting of the mission objectives described in Section II.G of the Draft EIR.

- To create an on-site, pedestrian-friendly campus environment that will allow pedestrian access to the entire facility with limited vehicular interfaces by providing parking at selected locations within the HSC.

C. ALTERNATIVES CONSIDERED BUT REJECTED FROM FURTHER ANALYSIS

The analysis of alternatives to the proposed Project, pursuant to Section 15126.6(c) of the CEQA Guidelines, started with an identification of alternatives to the proposed Project that had the potential to reduce or eliminate the Project's significant environmental impacts. The alternatives identified were then evaluated to determine those alternatives that would be analyzed further within the Draft EIR and those alternatives that would be rejected from further analysis. A key component of the alternatives analysis is the identification and analysis of alternative sites for the proposed Project, and in particular, whether there is an alternative location within the HSC where the proposed Project could be located. The proposed Project in and of itself proposes to develop the underutilized parcels within the HSC; therefore, there is not an existing location within the HSC, other than the seven proposed Development Sites, that could accommodate the proposed uses and the requisite parking as an integrated development without demolishing existing structures and in so doing, disrupt HSC operations in a meaningful and substantial way. Other alternatives that were identified, but subsequently rejected from further

analysis, include alternative land uses other than the proposed medical and academic-related uses that would reduce the potential significant impacts of the Project and would also meet the basic objectives of the Project. Development of any uses other than medical-related facilities (i.e., residential, industrial, retail commercial, park) would be inappropriate due to the established uses within the HSC, as they would not be compatible with existing uses. An alternative consisting of a public park was considered but rejected from further analysis as two community parks, Hazard Park and Lincoln Park, are located in proximity to the HSC. Furthermore, such uses would not meet the basic objectives of the proposed Project.

Development of other medical-related facilities, such as a hospital, were rejected from further analysis as potential alternatives as it was concluded that another hospital in the Project area is not needed, since the Los Angeles County–USC Hospital is currently being rebuilt to accommodate future needs within the area. Furthermore, a hospital use would not meet the basic objectives of the proposed Project. Thus, this alternative has been eliminated from further analysis.

D. ALTERNATIVES SELECTED FOR ANALYSIS

As required by the CEQA Guidelines, this section of the Draft EIR describes a range of reasonable alternatives to the proposed Project, and evaluates the environmental impacts associated with each alternative. This section focuses on alternatives that potentially avoid or reduce the significant adverse impacts of the proposed Project. Four alternatives to the proposed Project, including one alternative location, have been developed and analyzed. Based on comparative evaluations, estimations are made as to the environmental impacts of each alternative in contrast with those of the proposed Project and whether each alternative could attain the basic objectives of the Project. The alternatives to the proposed Project are summarized in Table 37 on page 301 and a brief description of each alternative is provided below.

Alternative 1: No Project

The No Project Alternative assumes that the Project would not be implemented and that the existing physical condition of the Project Site and existing uses at the Project Site would remain unchanged. Construction and operation of new academic and medical research facilities, as well as medical clinic facilities within the HSC would not occur. Furthermore, construction of ancillary facilities such as parking would not occur. Thus, this alternative reflects existing environmental conditions, as discussed under the Environmental Setting Section for each issue analyzed in Section IV of this EIR.

Table 37

COMPARISON OF ALTERNATIVES

Project Characteristics	Proposed Project	No Project	Reduced Project	Alternative Land Use	Alternative Site
Acreage	22	22	22	22	22
Existing Uses					Women and Children's Hospital and Surface Parking
Development Site A	Surface Parking	Surface Parking	Surface Parking	Surface Parking	
Development Site B	Surface Parking	Surface Parking	Surface Parking	Surface Parking	
Development Site C	Surface Parking	Surface Parking	Surface Parking	Surface Parking	
Development Site D	Surface Parking	Surface Parking	Surface Parking	Surface Parking	
Development Site E	Surface Parking	Surface Parking	Surface Parking	Surface Parking	
Development Site F	Vacant Land	Vacant Land	Vacant Land	Vacant Land	
Development Site G	Surface Parking	Surface Parking	Surface Parking	Surface Parking	
Proposed Uses					
Academic and Medical Research	465,000 to 720,000 GSF	0	325,500 to 504,000 GSF	265,000 to 520,000 GSF	465,000 to 720,000 GSF
Medical Clinic	45,000 to 120,000 GSF	0	31,500 to 84,000 GSF	45,000 to 107,500 GSF	45,000 to 120,000 GSF
Hotel	0	0	0	200 Room	0
Parking Spaces (Net)	2,800 (2,072)	0	1,960 (1,232)	1,996 (1,268)	2,800
Total Floor Area	585,000 to 765,000 GSF	0	409,500 to 535,500 GSF	330,000 to 527,000 GSF	585,000 to 765,000 GSF

GSF = gross square feet

Source: PCR Services Corporation, 2005.

Alternative 2: Reduced Density Project

The Reduced Density Project Alternative includes the proposed uses as set forth for the proposed Project, but reduces the scale of the development that would occur at the Project Site. On an overall basis, the amount of development is reduced by 30 percent. This reduction in Development results in a total of between 409,500 and 535,500 square feet of floor area. Should 409,500 square feet of floor area be developed, a total of 325,500 square feet of academic and/or medical research facilities would be developed, and the balance, 84,000 square feet, would be developed with medical clinic uses. In the event on-site development reaches 535,500 square feet under this alternative, a total of 504,000 square feet of academic and/or medical research facilities would be developed and the amount of medical clinic development would be decreased to 31,500 square feet. The Reduced Project Alternative would be developed at the same locations as the proposed Project and would occupy the same 22-acre area as the Project. For those Development Sites upon which new construction would occur, the existing surface parking and vacant lots would be removed.

Alternative 3: Alternative Land Use Project

The purpose of this alternative is to analyze a mix of land uses, different than the proposed Project, which would also result in reduced environmental impacts. The Alternative Land Use alternative assumes development on the same sites as the proposed Project, but includes the development of a 200-room, multi-level hotel with a total floor area of 200,000 square feet in lieu of some of the academic/medical research and/or medical clinic uses. The amount of academic/medical research and medical clinic uses that could occur under this Alternative was determined by assuming that the number of trips generated by the three land use types collectively (i.e., academic/medical research, medical clinic and hotel) would not exceed those of the proposed Project. The hotel facility associated with this alternative would house people with family members undergoing treatment at HSC facilities. This alternative is selected because it proposes development of the Project Site with academic and medical related uses and represents a level of development that continues to support the existing facilities on the HSC.

Alternative 4: Alternative Site Project

The Alternative Site proposes to locate the Project, described in Section II of the Draft EIR, at a different site as a means of understanding the environmental effects of the Project in a different geographical context. The alternate site selected for analysis is the Women and Children's Hospital site. The alternate site is located along the east side of Mission Road, generally between Zonal Avenue to the north and Marengo Street to the south in the City of Los Angeles.

E. ANALYSIS METHODOLOGY

Each of the four alternatives is evaluated in sequence below. Each alternative, pursuant to the direction set forth in the CEQA Guidelines, is evaluated in less detail than that provided in Section IV, Environmental Impact Analysis, of the Draft EIR. Whereas this is the general approach used, the analysis of alternatives is presumed in sufficient detail to determine whether overall environmental impacts after mitigation would be greater, similar, or less than the corresponding impacts of the proposed Project, as well as allowing for a determination as to whether the Project's basic objectives are substantially attained. To determine the comparative impacts, the process described below has been followed:

- An evaluation of the environmental impacts anticipated for each alternative in comparison to the proposed Project, including the ability of each alternative to avoid or substantially lessen any significant environmental impacts associated with the proposed Project. Where the impacts of the alternative and the proposed Project would be roughly equivalent, the comparative impact is said to be "similar";

- If applicable, a description of the impacts of each alternative that are not impacts of the proposed Project; and

- A statement of whether each alternative is feasible and meets the basic objectives of the proposed Project.

F. EVALUATION OF THE ALTERNATIVES

1. Alternative 1: No Project

a. Introduction

This section presents an environmental analysis of an alternative project in which the USC Health Sciences Campus Project would not be developed and the Project Site would retain its existing composition.

b. Analysis of Alternative

(1) Land Use

The No Project Alternative assumes that no project is approved; therefore, development of additional academic and medical research facilities or medical clinic facilities would not occur

on any of the seven proposed Development Sites. Accordingly, the existing surface parking facilities on Development Sites A, B, C, D, and E would remain, as well as Development Site F remaining as vacant land. Development Site G would continue to be utilized as the Center for Health Professionals without any additions or modifications.

The No Project Alternative would not implement the General Plan Framework Community Center goal of providing pedestrian-oriented, high activity multi- and mixed-use community centers, nor would it assist in further achieving the Framework's objective of reinforcing an existing community center and promoting community activity. The No Project Alternative also would not support several of the Framework policies that are supported by the proposed Project. Specifically, the Alternative does not propose any development of community-serving uses in accordance with the Project Site's permitted land use densities/ intensities; therefore, the sites would continue to be underutilized (Policy 3.9.1). In addition, the Alternative would not encourage the integration of school classrooms, libraries, and similar educational and cultural facilities within comparable existing facilities (Policy 3.9.2). Furthermore, the alternative does not provide for centralized and shared parking structures to support the HSC, it does not promote pedestrian activity through structure siting and design, and it does not provide for development of public streetscape improvements (Policies 3.9.3, 3.9.5, and 3.9.7). Lastly, the Alternative does not provide for increased activity, lighting and security in comparison to what currently exists at the Project Site; therefore, it does not support Policy 3.3.9 of the Framework.

The No Project Alternative would also not support the Northeast Los Angeles Community Plan urban design–oriented policies related to the following: site planning, building height and design, parking structure design, and light and glare. The No Project Alternative does not propose development; therefore, implementation of this Alternative would not further enhance the existing pedestrian-oriented campus environment, nor would it further facilitate pedestrian access to the entire HSC. The Alternative also would not assist in limiting pedestrian and vehicular interfaces by providing parking facilities at selected locations within the HSC that would connect with other components of the HSC via a USC-operated shuttle system.

The No Project Alternative would also not assist in achieving the principal goal of the Adelante Eastside Redevelopment Plan, which is to improve living conditions, upgrade public improvements, increase commercial choices, and revitalize the industrial base while preserving existing businesses and industry. This Alternative would not promote the preservation and enhancement of the existing HSC, which is a unique institutional resource of the community.

The No Project Alternative would also not promote the policies set forth in the Regional Comprehensive Plan and Guide (RCPG), which encourages development in and around existing activity centers, transportation corridors, underutilized infrastructure systems, and in areas needing recycling and redevelopment. The Alternative does not propose development; therefore,

implementation of this Alternative would not allow for the development of underutilized sites within the existing HSC that are currently used as surface parking lots and/or are vacant. Furthermore, the Alternative would not fully take advantage of the nearby transportation corridors and public transit systems including the I-10 and I-5 Freeways, the Metro system, DASH, Union Station, and the USC shuttle systems.

Both the No Project Alternative and the proposed Project would have land use impacts that are less than significant; however, the No Project Alternative would be less beneficial in relation to existing land use plans and policies than the land use associated with the proposed Project because it fails to further land use goals and policies. This Alternative would not result in the enhancement of the current underutilized sites and would not provide for upgraded services and infrastructure.

It has been determined that potential land use impacts of the proposed Project, relative to compatibility with nearby public, commercial, institutional, residential, and recreational land uses, would be less than significant with implementation of the proposed Project, and, therefore, mitigation is not required. Nevertheless, the No Project Alternative would not affect off-site land uses, as the Project Site would remain as it currently exists. Therefore, this alternative would avoid the Project's less than significant impact related to compatibility with existing land uses.

(2) Visual Resources

(a) Aesthetics

Construction of the proposed Project would result in the removal of existing street trees, which would temporarily detract from the visual character of the area thereby creating a potentially significant aesthetic impact. Under the No Project Alternative, no changes in the visual character of the Project Site would occur; therefore, this alternative would avoid the Project's short-term, less than significant visual impact during construction. It should be noted however, that the Project's conceptual design includes replacement of all removed trees and landscape plantings along the perimeter of each of the Development Sites, which would be an improvement over existing conditions. This overall improvement would not be realized with the No Project Alternative.

The existing vacant and surface parking lots that comprise the Project Site feature minimal landscaping and offer limited aesthetic value to the area. Under the No Project Alternative, development would not occur and visual amenities associated with the proposed Project's architectural style, which would be designed in a style reflective of the existing academic, research and medical office buildings that define the HSC's aesthetic appearance, would not be realized. Furthermore, other design and landscape features including exterior

courtyards, sidewalks, pedestrian walkways, and plantings would not be developed at the Project Site, which aid in further integrating the uses associated with the HSC. As no development would occur under this Alternative, the benefits of the Project relative to policies pertaining to aesthetics as set forth in the urban design policies applicable to the Project would not be realized. Therefore, the No Project Alternative would have a greater impact relative to aesthetics than the proposed Project.

(b) Views

In the evaluation of potential view impacts for the proposed Project, it was determined that the proposed Project would not substantially obstruct an existing view of a valued view resource from identified public or private vantage points; therefore, potential view impacts were concluded to be less than significant. Under the No Project Alternative, development would not occur; therefore, no impacts related to public or private views would occur. Since no such impacts would be associated with the No Project Alternative, the No Project Alternative would have less impact relative to views than the proposed Project.

(c) Shade/Shadow

In evaluating impacts of the proposed Project with respect to shade/shadow, it was determined that Project impacts to off- and on-site shadow sensitive uses would be less than significant. Under the No Project Alternative, no new development would be added to the Project Site that would result in potential shade/shadow effects. Therefore, although it was determined that Project-related impacts would be less than significant, these impacts would be greater than under the No Project Alternative. Since no such impacts would be associated with the No Project Alternative, the No Project Alternative would have less impact relative to shade/shadow than the proposed Project.

(3) Traffic, Circulation, and Parking

(a) Traffic and Circulation

The No Project Alternative would not result in the generation of additional vehicle trips to and from the Project Site, since no changes in existing land uses would occur. Traffic and circulation conditions under the No Project Alternative would be the same as the future baseline traffic conditions as described in Section IV.C, which reflect the conditions that would occur under the No Project Alternative. As shown therein, four (4) study intersections are anticipated to operate at LOS E or F during peak hours (A.M., P.M. or both) with the addition of growth in ambient traffic and the traffic associated with the related projects. Based on the stated significance thresholds, cumulative development would result in impacts to 13 of the 18 study

intersections. Under both Parking Scenario Nos. 1 and 2 of the proposed Project (refer to detailed description of parking scenarios in Section IV.C.4), the proposed Project before mitigation would result in significant traffic impacts at 11 of the 18 study intersections during the A.M. and/or P.M. peak commuter hours. Traffic improvements associated with the proposed Project would mitigate some of these impacts, including some of the impacts to the 13 study intersections that would occur without the development of the proposed Project, and, thus, this is a beneficial impact of the proposed Project that the No Project Alternative would not realize. However, no new vehicular trip generation is anticipated under the No Project Alternative, and the Project-related significant transportation impacts would be eliminated under the No Project Alternative. Since traffic associated with the proposed Project would generate significant impacts after mitigation under either Parking Scenario, traffic impacts under the No Project Alternative would be less than under the proposed Project. The Project's less than significant impacts with regard to Project access and transit impacts would not occur under this Alternative. Furthermore, no impacts would occur with respect to the Union Pacific Railroad crossing, as no development would occur under the No Project Alternative. In addition, although no significant Project-related mainline freeway impacts are anticipated, impacts to freeways would be less under the No Project Alternative. Construction traffic would not occur under the No Project Alternative; therefore, the proposed Project's less than significant construction traffic impacts would also be less under the proposed Project.

(b) Parking

Under the No Project Alternative, the Project Site would continue to provide surface parking for the HSC. Since no construction would occur, no surface parking would be displaced under the No Project Alternative. Although the No Project Alternative would not provide for a net increase in parking supply that would occur with the proposed Project (through the provision of parking on any combination of Development Sites B, C, D, E, and F), parking impacts under both the No Project Alternative and the proposed Project would be less than significant. Overall, the No Project Alternative would have less impact on parking than the proposed Project, since existing parking demands are currently being met and no new parking demands would be created.

(4) Air Quality

The No Project Alternative would not result in changes to the existing air quality environment, as emissions during construction and long-term operations that would occur with the proposed Project would not occur. As such, the No Project Alternative would avoid the proposed Project's significant and unavoidable construction impact as NO_X and ROC daily emissions would not exceed the SCAQMD's regional significance thresholds. Furthermore, the No Project Alternative would also avoid the proposed Project's significant unavoidable impact on localized air quality with respect to PM_{10} concentrations that would occur during

construction. The Project's less than significant construction odor impacts would not occur under this Alternative.

With regard to operations, the No Project Alternative would avoid the proposed Project's significant and unavoidable impact on regional air quality with respect to NO_X emissions at a regional level. Therefore, air quality impacts under the No Project Alternative would be less than under the proposed Project.

(5) Noise

The No Project Alternative would not result in changes to the existing local noise conditions occurring on or adjacent to the Project site, specifically noise levels associated with short-term construction and ongoing operations. As a result, the No Project Alternative would avoid the proposed Project's significant, unavoidable short-term noise impacts during construction, and the less than significant impacts associated with long-term Project operations related to roadway noise, mechanical equipment/point sources (i.e., loading dock and trash pick-up areas), and parking facilities. Therefore, the No Project Alternative would have less impact on noise than the proposed Project.

(6) Utilities

(a) Water

With no change in the existing use of the Project Site under the No Project Alternative, there would be no additional demand for water. Uses associated with the proposed Project, including laboratories, clinics, restrooms, drinking fountains, and landscaping, would generate an additional demand for domestic water. Although the proposed Project's impact on water supply would be less than significant, under the No Project Alternative, no additional water demand would occur over existing conditions. Therefore, the No Project Alternative would have less impact on water supply and conveyance systems than the proposed Project.

(b) Sanitary Sewers

Under the No Project Alternative, no development would occur within the Project Site. As such, no wastewater generation, over existing conditions, would be associated with this Alternative. The proposed Project's laboratories, clinics, restrooms, drinking fountains, and landscaping would generate additional wastewater flows and the need for greater sanitary sewer capacity. Although the impact of the proposed Project on existing sanitary sewers would be less than significant, under the No Project Alternative, no impact on sanitary sewers would occur.

Therefore, the No Project Alternative would have less impact on sanitary sewers than the proposed Project.

(7) Other Impacts of the No Project Alternative

As the seven proposed Development Sites that comprise the Project Site would remain in their current condition, the No Project Alternative is not anticipated to have significant impacts in any other areas for which the proposed Project was determined not to have significant impacts by the Initial Study.

(8) Relationship of No Project Alternative to the Project Objectives

The No Project Alternative would not meet any of the Project's basic objectives. The No Project Alternative would not accomplish the Applicant's objectives of becoming a nationally respected provider of the highest quality, specialized acute inpatient and outpatient health care services and translational research, as well as one of the nation's very top medical schools that would attract highly qualified students and provide them with exceptional training. The proposed Project's support of the basic objectives relative to the development of centralized academic, medical research, and medical clinic facilities would not occur with the No Project Alternative.

Furthermore, the No Project Alternative would not support the Applicant's overall objectives of providing the quantity and quality of laboratory space required in order to recruit new, world-renowned faculty, conducting breakthrough research and training future scientists. Because the Alternative represents no development, it would not provide for buildout of the existing HSC site required to meet the demand for new programs. The creation of an on-site, pedestrian-friendly campus environment that would allow pedestrian access to the entire facility with limited vehicular interfaces by providing parking at selected locations and assisting in the creation of a strong visible image for the HSC also would not be realized. While the No Project Alternative would avoid any significant, unavoidable air quality and construction noise impacts associated with the proposed Project and would eliminate any significant, unavoidable traffic impacts that would occur under future baseline traffic conditions, it would not meet any Project objectives.

2. Alternative 2: Reduced Density Project

a. Introduction

This section presents an environmental analysis of a Reduced Density Project Alternative that would be developed on the same seven (7) Development Sites as the Proposed Project. The

Reduced Density Project Alternative represents a 30 percent reduction in overall project square footage compared to the proposed Project. Thus, this alternative would include development of between approximately 409,500 and 535,500 gross square feet of additional academic, medical research, and medical clinic facilities within the existing HSC. In addition, the alternative would include development of parking to include up to 1,960 parking spaces, which represents a 30 percent reduction from the proposed Project's 2,800 parking spaces. The alternative would replace the existing parking lots on the Project Site similar to the proposed Project.

Table 38 on page 311 compares the elements of the Reduced Density Project Alternative with the proposed Project. In the following analyses, conclusions regarding impacts are based on impacts after mitigation. A summary of comparative adverse impacts is presented at the end of the Alternatives analysis in Table 46 and Table 47 on pages 339 and 340, respectively.

b. Analysis of Alternative

(1) Land Use

The Reduced Density Project Alternative assumes the construction of the Project with a 30 percent reduction in academic, medical research, medical clinic, and parking facilities compared to the proposed Project. The existing surface parking and vacant lots would be removed to prepare for development on those Development Sites upon which development would actually occur.

The Reduced Density Project Alternative would require the same discretionary actions as the proposed Project. Thus, Development Sites A, B, and G, zoned C2-2 (Commercial), would allow for the development that would occur under the Reduced Project Alternative as it would be consistent with the existing zoning and density permitted by the LAMC. Development Site D is zoned [Q] C2-1VL (Commercial); therefore, although the alternative represents a 30 percent reduction in square footage, similar to the proposed Project, it would require a height district change from 1VL to 2 in order for the development to comply with the LAMC. Development Sites E and F are zoned CM-1 (Commercial Manufacturing) and are located within Height District 1. Under this zoning designation, construction on Development Sites E and F under the Reduced Density Project Alternative would require a zone change from CM-1 to C2-2 to permit the Alternative. Development Site C is zoned PF-1 (Public Facilities), which permits public parking facilities, and government buildings and offices. As a parking structure could be developed on this site, under the Reduced Project Alternative, as is the case with the proposed Project, a zone change from PF to C2 is required to implement the Reduced Project Alternative, as is the case with the proposed Project. Since parking facilities under this Alternative may be more than 750 feet from the building the parking supports, this Alternative, similar to the proposed Project, may require a parking variance.

Table 38

COMPARISON OF ALTERNATIVE 2 COMPONENTS:
REDUCED PROJECT TO THE PROPOSED PROJECT

Project Component	Unit	Alternative Project	Proposed Project	Numerical Difference	Percent Change
Development Site A					
Academic/Medical Research (max) or	GSF	325,500	465,000	139,500	-30%
Medical Clinic (max)	GSF	84,000	120,000	36,000	-30%
Development Site B					
Academic/Medical Research (max) or	GSF	206,722	295,338	88,616	-30%
Medical Clinic (max)	GSF	84,000	120,000	36,000	-30%
Development Site C					
Parking	Spaces	1,960	2,800	840	-30%
Development Site D					
Academic/Medical Research (max) or	GSF	140,000	200,000	170,700	-30%
Medical Clinic (max)	GSF	41,300	59,000	60,000	-30%
Development Site E					
Academic/Medical Research (max) or	GSF	280,000	400,000	120,000	-30%
Medical Clinic (max)	GSF	82,600	118,000	35,400	-30%
Development Site F					
Academic/Medical Research (max) or	GSF	280,000	400,000	120,000	-30%
Medical Clinic (max)	GSF	82,600	118,000	35,400	-30%
Development Site G					
Academic/Medical Research (max) or	GSF	70,000	100,000	30,000	-30%
Medical Clinic (max)		26,650	29,500	2,850	-30%
Total Project					
Academic and Medical Research (max)	GSF	504,000	720,000	216,000	-30%
Medical Clinic (max)	GSF	84,000	120,000	36,000	-30%
Parking	Spaces	1,960	2,800	840	-30%
Total Floor Area	GSF	409,500 to 535,500	585,000 to 765,000	175,500 to 229,500	-30%

GSF = gross square feet

Source: PCR Services Corporation, 2005.

The Reduced Project Alternative would implement the General Plan Framework (Framework) Community Center goal of providing pedestrian-oriented, high activity multi- and mixed-use community centers and would assist in further achieving the Framework's objective of reinforcing an existing community center and promoting community activity. The Reduced Project Alternative also would support several policies of the Framework. Specifically, the Alternative provides for centralized and shared parking structures to support the HSC, promotes pedestrian activity through structure siting and design, as well as development of public streetscape improvements (Policies 3.9.3, 3.9.5, and 3.9.7), and the Alternative would also

provide for increased activity, lighting and security than what currently exists at the Project Site. As such, the Alternative supports Policy 3.3.9 of the Framework.

The Reduced Project Alternative would also support the Northeast Los Angeles Community Plan's urban design oriented policies related to site planning, building height and design, parking structure design, and light and glare. The Reduced Project Alternative would further enhance the existing pedestrian-oriented campus environment and would facilitate pedestrian access to the entire HSC. The alternative also would assist in limiting pedestrian and vehicular interfaces by providing parking facilities at selected locations within the HSC that would connect with other components of the HSC via a USC-operated shuttle system.

The Reduced Project Alternative would assist in achieving the principal goal of the Adelante Eastside Redevelopment Plan, which is to improve living conditions, upgrade public improvements, increase commercial choices, and revitalize the industrial base while preserving existing businesses and industry. However, in relation to the proposed Project, the revitalization under the Reduced Project Alternative would be incrementally less due to the reduced development that would occur. This Alternative would continue to promote preservation and enhancement of the existing HSC, which is a unique institutional resource of the community.

The Reduced Project Alternative would also promote the policies set forth in the Regional Comprehensive Plan and Guide (RCPG), which encourages development in and around existing activity centers, transportation corridors, underutilized infrastructure systems, and in areas needing recycling and redevelopment. Implementation of this alternative would allow for the development of underutilized sites within the existing HSC that are currently used as surface parking lots are vacant or are underutilized. Furthermore, the Alternative would take advantage of the nearby transportation corridors and public transit systems including the I-10 and I-5 Freeways, the Metro system, DASH, Union Station, and the USC shuttle systems.

The land use effects of the Reduced Project Alternative in relation to existing land use plans would be similar to those associated with the proposed Project and no significant land use impacts would occur. Furthermore, as the same types of land uses are proposed under this Alternative, impacts with regard to compatibility with the surrounding land uses would be the same as the proposed Project, which are concluded to be less than significant. Therefore, both the Reduced Project Alternative and the proposed Project would have a similar impact relative to land use. However, as the total amount of development would be less than the proposed Project, the Reduced Project Alternative would implement applicable Framework, Community Plan, Redevelopment Plan, and RCPG policies to a lesser extent than the proposed Project.

(2) Visual Resources

(a) Aesthetics

The Reduced Project Alternative would result in the removal of existing street trees, which would temporarily detract from the visual character of the area thereby creating a potentially significant aesthetic impact. However, it is anticipated that the Reduced Project Alternative would include the replacement of all removed trees and landscape plantings along the perimeter of each of the Development Sites, similar to the proposed Project. The Reduced Project Alternative would be constructed according to existing architectural plans for the Project in relation to detailing, style, and surface materials. Thus, the development of the Reduced Project Alternative would be designed in a style reflective of the existing academic, research and medical office buildings that define the HSC's aesthetic appearance. Furthermore, design and landscape features including exterior courtyards, sidewalks, pedestrian walkways, and plantings would be developed at the Project Site, which aid in further integrating the uses associated with the HSC. As with the proposed Project, the development of the Reduced Project Alternative would be aesthetically beneficial and no significant impacts with regard to urban design policies would occur. Therefore, both the Reduced Project Alternative and the proposed Project would have a similar impact on aesthetic quality that is less than significant.

(b) Views

In the evaluation of potential view impacts for the proposed Project, it was determined that the proposed Project would not substantially obstruct an existing view of a valued view resource from identified public or private vantage points; therefore, potential view impacts were concluded to be less than significant. Under the Reduced Project Alternative, development of uses similar to the proposed Project would occur; however, this alternative represents a 30 percent reduction in overall square footage compared to the proposed Project. As the physical form of this reduction may occur in a number of ways (i.e., lower building heights, fewer buildings, etc.), view impacts from any one vantage point may be less than what could occur under the proposed Project. Regardless, no existing view of a valued view resource would be impacted by the Reduced Project Alternative. Therefore, both the Reduced Project Alternative and the proposed Project would have a similar impact on views that is less than significant.

(c) Shade/Shadow

In evaluating impacts of the proposed Project with respect to shade/shadow, it was determined that Project impacts to off- and on-site shadow sensitive uses would be less than significant. The 30 percent reduction in overall project square footage that would occur under the Reduced Project Alternative could occur in a number of different development policies. The impacts with respect to shade/shadow may be less than the proposed Project; however, on a

site-by-site basis, the amount of the development, and the resulting shade/shadow impacts, may be the same as the proposed Project. Therefore, both the Reduced Project Alternative and the proposed Project would have similar impacts related to shade/shadow that are less than significant.

(3) Traffic, Circulation, and Parking

(a) Traffic and Circulation

Similar to the proposed Project, the Reduced Project Alternative is not anticipated to create a significant transportation impact in either direction on the I-5 or I-10 Freeway, nor would it impact existing or future transit services in the area.

Traffic volumes generated by the Reduced Project Alternative are forecast for the A.M. and P.M. peak hours, using the same trip generation and distribution assumptions as the proposed Project. The Reduced Project Alternative is anticipated to generate 541 vehicle trips (440 inbound trips and 101 outbound trips) during the A.M. peak hour. During the P.M. peak hour, the Reduced Project Alternative is anticipated to generate 566 vehicle trips (117 inbound trips and 449 outbound trips). Over a 24-hour period, the Alternative is forecasted to generate 5,476 daily trip ends during a typical weekday (2,738 inbound trips and 2,738 outbound trips). A summary of the trip generation forecast for the Reduced Project Alternative, including the total number of vehicle trips to be generated and the distribution of those trips is presented in Table 3a in the Traffic Impact Analysis in Appendix B of this Draft EIR.

The Reduced Project Alternative could be anticipated to result in impacts that are less when compared to the proposed Project, due to the 30 percent reduction in development. Under both Parking Scenario Nos. 1 and 2 (refer to detailed description of parking scenarios in Section IV.C), the proposed Project would result in significant traffic impacts at 11 of the 18 study intersections during the A.M. and/or P.M. peak commuter hours before mitigation. The Reduced Project Alternative would result in one less significant impact compared to the proposed Project before mitigation. Mitigation similar to the proposed Project would be implemented. As such, the Reduced Project Alternative would result in four significant and unavoidable impacts, based on the trip-distribution pattern of Parking Scenario No. 1. Impacts of the Reduced Project Alternative would result in two significant and unavoidable impacts, based on the trip-distribution pattern of Parking Scenario No. 2.

Since traffic associated with the proposed Project would generate significant impacts to 11 intersections, of which four intersections and three intersections could not be mitigated to a level that is less than significant under Parking Scenario No. 1 and Parking Scenario No. 2,

respectively, traffic impacts under the Reduced Project Alternative would be less than under the proposed Project.

Both the proposed Project under Parking Scenario No. 1 and the Reduced Project Alternative would generate significant, unavoidable traffic impacts at four intersections, whereas under Parking Scenario No. 2, the Reduced Project Alternative traffic would result in one less significant impact after mitigation. Therefore, traffic impacts under the Reduced Project would be the same when compared to Parking Scenario No. 1 and less when compared to the proposed Project.

Impacts to CMP monitoring locations under the Reduced Project would be less than under the proposed Project and, as is the case with the proposed Project, would be less than significant. As with the Proposed Project, temporary significant impacts may occur at the Union Pacific Railroad crossing under the Reduced Project Alternative. However, impacts with regard to Project Access and public transit would be less than significant and less than those of the proposed Project.

(b) Parking

Under the Reduced Project Alternative, a range of between 997 and 1,085 parking spaces would be required by the City parking code, depending upon the actual development that would occur within the development range. Similar to the proposed Project, surface parking would be displaced. The Reduced Project Alternative would provide for a net increase in parking supply through the provision of parking on any combination of Development Sites B, C, D, E, and F. Both the Proposed Project and Reduced Project Alternative would provide a sufficient number of parking spaces to meet LAMC requirements and parking demand. Therefore, parking impacts under both the Reduced Project Alternative and the proposed Project would be similar as well as less than significant.

(4) Air Quality

During construction, the Reduced Project Alternative would require similar amounts of site clearing and grading activities, but as a result of the approximately 30 percent reduction in building space, a corresponding reduction in construction activities during the building construction and finishing stages would be likely. However, on days of peak construction activities, the number of construction workers and heavy-duty construction equipment present on site would be similar to proposed Project conditions. As such, daily emissions during peak construction periods from under the Reduced Project Alternative would be similar to the proposed Project, as the duration (number of days), not the intensity of activities would be reduced. Consequently, worst-case daily emissions during construction would be similar to the

proposed Project. As such, the Reduced Project Alternative would result in a significant unavoidable impact with respect to regional construction emissions of ROC and NO_X and local construction emissions of PM_{10}, even after implementation of mitigation measures. As peak construction activities would be the same under this Alternative as the proposed Project, construction odor impacts would be less than significant, as is the case with the proposed Project.

With respect to long-term project operations, the Reduced Project Alternative would generate mobile source and stationary source daily emissions; however, due to the reduced scale of development, emissions are anticipated to be approximately 25 to 30 percent less than those for the proposed Project. However, this reduction would not be sufficient to avoid the significant and unavoidable impact with respect to regional emissions of NO_X that would occur with the proposed Project. Regional emissions of CO, PM_{10}, and SO_X and local emissions of CO would also be less than significant, similar to the proposed Project. Impacts of the Reduced Alternative would be less than those of the proposed Project, principally resulting from the forecasted reduction in operational emissions. Similar to the Proposed Project, impacts of this Alternative with regard to operational odors would be less than significant.

(5) Noise

During Construction, the Reduced Project Alternative would require similar amounts of site clearing and grading activities, but as a result of the approximately 30 percent reduction in building space, a corresponding reduction in construction activities during the building construction and finishing stages would be likely. However, on days of peak construction activities, the number of construction workers and heavy-duty construction equipment present on site would be similar to proposed Project conditions. Consequently, the Reduced Project Alternative would generate maximum construction-period noise levels that would be similar to proposed Project construction-period noise; however, the duration of construction-period noise would be reduced. Similar to the proposed Project, the Reduced Project Alternative would therefore generate significant and unavoidable construction noise impacts at nearby noise sensitive locations, including USC University Hospital, USC HCCI, USC HCCII, Doheny Eye Institute, Women and Children's Hospital, and Hazard Park, even with the incorporation of mitigation measures. Similar to the proposed Project, construction noise impacts associated with vehicle trips to and from Site under the Reduced Project Alternative would be less than significant.

During long-term operations, the Reduced Project Alternative would include noise sources that are similar to the noise sources associated with the proposed Project. Noise sources would include vehicular traffic, mechanical equipment/point sources (i.e., loading dock and trash pick up areas), and parking facilities. Similar to the proposed Project, noise generated by the loading dock and trash pick up areas would result in a significant impact without incorporation of mitigation measures. However, as with the proposed Project, implementation of Mitigation

Measure E-2 would diminish the impact to a level that is less than significant. Noise from other on-site sources would be less than significant due to compliance with the provisions of the City's Noise Ordinance, and no mitigation measures would be required. The reduction in traffic volumes by 2,239 daily trips (from 7,715 to 5,476) would result in a decrease in traffic-related noise levels on the surrounding roadways. Therefore, traffic-related noise impacts associated with the Reduced Project Alternative, as with the proposed Project, would be less than significant. The noise impacts of the Reduced Project Alternative, based on the preceding analysis, would be slightly reduced relative to the proposed Project due to the reduction in operational motor vehicle noise levels.

(6) Utilities and Service Systems

(a) Water

Under the Reduced Project Alternative, water would be required for clinics, laboratories, restrooms, drinking fountains, and landscaping. Under both the proposed Project and the Reduced Project Alternative, impacts on water supply would be less than significant through water conservation design features, assured through conservation-related mitigation measures. However, due to the reduced size of the Reduced Project Alternative in relation to the proposed Project, water demand would be incrementally lower than under the proposed Project. It should be noted that for purposes of comparison, the worst-case scenario for the proposed Project with respect to water consumption is utilized (i.e., 720,000 square feet of medical/research facilities and 45,000 square feet of medical clinic). As shown in Table 39 on page 318, the proposed Project would have an increased water demand of 266,304 gallons per day (gpd); whereas the Reduced Project Alternative would have an increased water demand of 186,413 gpd, or 30 percent less than the proposed Project. Since all of the proposed Development Sites are adjacent to lines at least 10 to 16 inches in diameter, the existing water infrastructure would be adequate to provide domestic water and fire suppression services for both the proposed Project and the Reduced Project Alternative. Therefore, the Reduced Project Alternative would have less impact on the water supply than the proposed Project. Although there would be less water demand and the water lines that would be installed under this Alternative may be smaller, construction impacts under the Reduced Project would be the same as the proposed Project, which are concluded to be less than significant.

(b) Sanitary Sewers

The Reduced Project Alternative would generate wastewater discharge from clinics and laboratories, restrooms, and drinking fountains that currently does not occur under existing conditions. Under both the proposed Project and the Reduced Project Alternative, wastewater impacts would be potentially significant, but reduced to levels that are less than significant with mitigation. However, due to the reduced size of the Reduced Project Alternative, wastewater

Table 39

ESTIMATED DOMESTIC WATER CONSUMPTION FOR THE PROJECT AND THE REDUCED PROJECT ALTERNATIVE

Use	Size	Factor (gpd/unit)	Average Daily Flow (gpd)	Annual Consumption (mil gal/yr) [a]
Project				
Academic/Medical Research	720,000 sq.ft.	250 gpd/1,000sq.ft.	180,000	65.70
Medical Clinic	45,000 sq.ft.	250 gpd/1,000sq.ft.	11,250	4.11
Parking	840,000 sq.ft.	20 gpd/1,000sq.ft.	16,800	6.13
Outdoor Water Use [b]			58,254	21.26
Total Proposed Project			266,304	97.20
Reduced Project Alternative [c]				
Academic/Medical Research	504,000 sq.ft.	250 gpd/1,000sq.ft.	126,000	45.99
Medical Clinic	31,500 sq.ft.	250 gpd/1,000sq.ft.	7,875	2.87
Parking	588,000 sq.ft.	20 gpd/1,000sq.ft.	11,760	4.29
Outdoor Water Use [b]			40,778	14.88
Total Alternative			186,413	68.04
Net Increase (Decrease) in Water Consumption			**(79,891)**	**(29.16)**

[a] *Assumes 365-day operation year.*
[b] *Estimated to be 28 percent.*
[c] *Assumes 30 percent reduction in floor area.*

Source: PCR Services Corporation, January 2005.

generation would be incrementally lower than under the proposed Project. As shown in Table 40 on page 319, the proposed Project would generate an increase of approximately 187,245 gallons per day (gpd) of sewage, whereas the Reduced Project Alternative would generate an increase of 131,072 gpd, or 30 percent less than the proposed Project. Therefore, the Reduced Project Alternative would have less impact on sanitary sewers and wastewater treatment than the proposed Project. Although there would be less wastewater discharge and the sewage lines that would be installed under this Alternative may be smaller, construction impacts under the Reduced Project would be the same as the proposed Project, which are concluded to be less than significant.

(7) Other Impacts of the Reduced Project Alternative

Since the Project Site would be developed with a 30 percent less development, the Reduced Project Alternative would not be anticipated to have significant impacts in areas for which the proposed Project was determined not to have significant impacts by the Initial Study.

Table 40

ESTIMATED WASTEWATER GENERATION FOR THE PROJECT AND THE REDUCED PROJECT ALTERNATIVE

Use	Size	Factor (gpd/unit)	Average Daily Flow (gpd)	Annual Consumption (mil gal/yr) [a]
Project				
Academic/Medical Research	720,000 sq.ft.	225 gpd/1,000sq.ft.	162,000	59.1
Medical Clinic	45,000 sq.ft.	225 gpd/1,000sq.ft.	10,125	3.7
Parking	840,000 sq.ft.	18 gpd/1,000sq.ft.	15,120	5.5
Total Proposed Project			**187,245**	**68.3**
Reduced Project Alternative [b]				
Academic/Medical Research	504,000 sq.ft.	225 gpd/1,000sq.ft.	113,400	41.4
Medical Clinic	31,500 sq.ft.	225 gpd/1,000sq.ft.	7,088	2.6
Parking	588,000 sq.ft.	18 gpd/1,000 sq.ft.	10,584	3.9
Total Alternative			**131,072**	**47.8**
Net Increase (Decrease) in Wastewater Generation			**(55,173)**	**(20.5)**

[a] *Assumes 365-day operation year.*
[b] *Assumes 30 percent reduction in floor area.*

Source: PCR Services Corporation, January 2005.

(8) Relationship of the Reduced Project Alternative to the Project Objectives

The Reduced Project Alternative would only partially achieve the basic objectives of the Project. The alternative would support the Applicant's mission to strive to become a nationally respected provider of the highest quality, specialized acute inpatient and outpatient health care services and translational research, as well as one of the nation's very top medical schools that would attract highly qualified students and provide them with exceptional training. The alternative also would support the Project's basic objectives through the development of centralized academic, medical research, and medical clinic facilities, and the creation of an on-site, pedestrian-friendly campus environment that would allow pedestrian access to the entire facility with limited vehicular interfaces by providing parking at selected locations and assist in creating a strong visible image for the HSC.

However, since the Reduced Project Alternative represents 30 percent less development, it would support overall objectives to a notably lesser extent than what would occur under the proposed Project. As such, the Alternative would not provide the quantity and quality of laboratory space that may be required in order to recruit new, world-renowned faculty, conducting breakthrough research and training future scientists. Furthermore, it would not

provide for buildout of the existing HSC site that is required to meet the demand for new programs. The Reduced Project Alternative would reduce, but not eliminate, potentially significant and unavoidable traffic, air quality, and construction noise impacts associated with the proposed Project**.**

3. Alternative 3: Alternative Land Use Alternative

a. Introduction

This section presents an environmental analysis of an Alternative Land Use alternative that would be constructed on the 22 acres that comprise the Project Site. As such, the development of this Alternative would require the demolition of existing parking and vacant lots on the Project Site. The Alternative Land Use assumes the development of the Project Site with academic, medical research and medical clinic uses similar to the proposed Project. However, this Alternative proposes development of a 200-room multi-level hotel facility with a total floor area of 200,000 square feet in lieu of some academic/medical research and/or medical clinic uses (i.e. reduction of 160,000 square feet of academic related research uses and a reduction of 40,000 square feet of medical clinic uses). Under this Alternative, similar to the proposed Project, a range of development scenarios could occur. The hotel facility associated with this Alternative would house people with family members undergoing treatment at HSC facilities. Under this Alternative a total of 1,996 parking spaces would be constructed, which represents a 29 percent reduction from the proposed Project's 2,800 parking spaces. Table 41 on page 321 compares the elements of the Alternative Land Use Alternative with the proposed Project. A summary of comparative adverse impacts is presented at the end of the Alternatives analysis in Table 46 and Table 47 on pages 339 and 340, respectively.

b. Analysis of Alternative

(1) Land Use

The Alternative Land Use Alternative, as with the proposed Project, would result in the removal of existing surface parking and vacant lots. This Alternative is similar to the proposed Project with the exception of developing a hotel to support the existing and proposed medical-related uses at the HSC in lieu of some additional academic and medical research facilities. As the hotel could be developed on any of the Development Sites proposed for development, and would occur in accordance with the development standards established for the proposed Project, implementation of this Alternative would require the same discretionary actions as the proposed Project. Thus, Development Sites A, B, and G, zoned C2-2 (Commercial), would allow for the development that would occur under this Alternative as it would be consistent with the existing zoning. Development Sites E and F are zoned CM-1 (Commercial Manufacturing) and are

Table 41

COMPARISON OF ALTERNATIVE 3 COMPONENTS:
ALTERNATIVE LAND USE ALTERNATIVE TO THE PROPOSED PROJECT

Project Component	Unit	Alternative Project	Proposed Project	Numerical Difference	Percent Change
Academic and Medical Research	GSF	265,000 to 520,000	465,000 to 720,000	-200,000	-28 to -43%
Medical Clinic	GSF	45,000 to 107,500	45,000 to 120,000	0 to -12,500	0 to -10%
Hotel	(GSF/Rooms)	200,000 (200)	0/0	+200,000 (200)	N/A
Total Floor Area	GSF	310,000 to 527,000	585,000 to 765,000	-238,000 to -275,000	-31 to -47%
Parking	Spaces	1,996	2,800	-804	-29%
Project Site Area	Acres	22	22	0	0%

GSF = gross square feet

Source: PCR Services Corporation, 2005.

located within Height District 1. Development Sites E and F under the Alternative Land Use Alternative would require a zone change from CM-1 to C2-2 to permit the Alternative. Under this zoning designation, construction of this Alternative would require a height district change, as is the case with the proposed Project, from height district 1 to 2 to comply with the LAMC.

Development Site C is zoned PF-1 (Public Facilities), which permits public parking facilities, and government buildings and offices. As the Project and the Alternative propose a private parking facility on Development Site C, a zone change from PF to C2 is required. The proposed zone change to C2 for Development Site C would be compatible with the zoning designations assigned to the surrounding HSC parcels and would be consistent with the intent and policies of the Community Plan and density permitted by the LAMC. Development Site D is zoned [Q] C2-1VL and as such, development of this Alternative would require a height district change, as is the case with the proposed Project, from height district 1VL to 2 to comply with the LAMC.

The Alternative Land Use Alternative would implement the General Plan Framework (Framework) Community Center goal of providing pedestrian-oriented, high activity multi- and mixed-use community centers and would assist in further achieving the Framework's objective of reinforcing an existing community center and promoting community activity. The Alternative Land Use Alternative also would support several policies of the Framework as it provides for centralized and shared parking structures to support the HSC, promotes pedestrian activity through structure siting and design, as well as the development of public streetscape improvements (Policies 3.9.3, 3.9.5, and 3.9.7). Lastly, the Alternative would also provide for

increased activity, lighting and security than what currently exists at the Project Site; and, as such, supports Policy 3.3.9 of the Framework.

The Alternative Land Use Alternative would also support the Northeast Los Angeles Community Plan's urban design oriented policies related to site planning, building height and design, parking structure design, and light and glare. The Alternative Land Use Alternative would further enhance the existing pedestrian-oriented campus environment and would facilitate pedestrian access to the entire HSC. The alternative would also assist in limiting pedestrian and vehicular interfaces by providing parking facilities at selected locations within the HSC that would connect with other components of the HSC via a USC-operated shuttle system.

The Alternative Land Use Alternative would assist in achieving the principal goal of the Adelante Eastside Redevelopment Plan, which is to improve living conditions, upgrade public improvements, increase commercial choices, and revitalize the industrial base while preserving existing businesses and industry. However, in relation to the proposed Project, the revitalization under this Alternative would be different relative to the referenced policies. This Alternative, as is the case with the proposed Project, would continue to promote preservation and enhancement of the existing HSC, which is a unique institutional resource of the community.

The Alternative Land Use Alternative would also promote the policies set forth in the Regional Comprehensive Plan and Guide (RCPG), which encourages development in and around existing activity centers, transportation corridors, underutilized infrastructure systems, and in areas needing recycling and redevelopment. Implementation of this alternative would allow for the development of underutilized sites within the existing HSC that are currently used as surface parking lots, are vacant, or are underutilized. Furthermore, the Alternative would take advantage of the nearby transportation corridors and public transit systems including the I-10 and I-5 Freeways, the Metro system, DASH, Union Station, and the USC shuttle systems.

The land use effects of the Alternative Land Use Alternative in relation to existing land use plans would be similar to those associated with the proposed Project, as the trade-off of academic and research facilities for a hotel that supports the HSC would be comparable relative to the land use policies under discussion. Furthermore, while the change in use from academic/research use to hotel use is different, impacts with regard to compatibility with the surrounding land uses would be less than significant. Therefore, both the Alternative Land Use Alternative and the proposed Project would have similar, and less than significant, impacts relative to land use.

(2) Visual Resources

(a) Aesthetics

The Alternative Land Use Alternative would result in the removal of existing street trees, which would temporarily detract from the visual character of the area thereby creating a potentially significant aesthetic impact. However, it is anticipated that this Alternative would include the replacement of all removed trees and landscape plantings along the perimeter of each of the Development Sites, similar to the proposed Project. The hotel, under this Alternative, would be developed in accordance with all of the development standards established for the proposed Project. It is also assumed that the architectural styling of the hotel would be consistent with the materials and detailing typical of modern HSC campus structures. The proposed parking facilities would be unchanged from those of the proposed Project, although the potential exists that the parking needs of the hotel would be provided within its own Development Site. Notwithstanding, the design of the parking facilities under this Alternative would maintain the same architectural style.

Furthermore, design and landscape features including exterior courtyards, sidewalks, pedestrian walkways, and plantings would be developed at the Project Site, which aid in further integrating the uses associated with the HSC. As with the proposed Project, the development of the Alternative Land Use Alternative would be aesthetically beneficial and no significant impacts with regard to urban design policies would occur. Therefore, both the Alternative Land Use Alternative and the proposed Project would have a similar and less than significant impact on aesthetic quality.

(b) Views

In the evaluation of potential view impacts for the proposed Project, it was determined that the proposed Project would not substantially obstruct an existing view of a valued view resource from identified public or private vantage points; therefore, potential view impacts were concluded to be less than significant. Under the Alternative Land Use Alternative, development of uses similar to the proposed Project would occur, and the hotel development would be developed in accordance with all of the development standards established for the proposed Project with respect to architectural design and building heights. Thus, no existing view of a valued view resource would be impacted by the Alternative Land Use Alternative. Therefore, both the Alternative Land Use Alternative and the proposed Project would have a similar and less than significant impact on views.

(c) Shade/Shadow

In evaluating the impacts of the proposed Project with respect to shade/shadow, it was determined that Project impacts to off- and on-site shadow sensitive uses would be less than significant. As development under this Alternative would occur in accordance with all of the development standards established for the proposed Project, the shade/shadow impacts of this Alternative would be the same as those of the proposed Project. Therefore, both the Alternative Land Use Alternative and the proposed Project would have similar, less than significant impacts related to shade/shadow.

(3) Traffic, Circulation, and Parking

(a) Traffic and Circulation

The Alternative Land Use Alternative replaces 200,000 square feet of academic-related research and medical clinic square footage with a 200-room hotel (i.e., reduction of 160,000 square feet of academic and research uses and a reduction of 40,000 square feet of medical clinic uses). As such under this alternative a total of 305,000 square feet of academic uses and 80,000 square feet of medical clinic uses would be developed in addition to the 200-room hotel. Similar to the proposed Project, this Alternative is not anticipated to create a significant transportation impact in either direction on the I-5 or I-10 Freeway, nor would it impact existing or future transit services in the area.

Traffic volumes generated by the Alternative Land Use Alternative are forecast for the A.M. and P.M. peak hours, using the same trip generation and distribution assumptions as the proposed Project as well as standard trip generation factors for hotels. The Alternative Land Use Alternative is anticipated to generate 647 vehicle trips (495 inbound trips and 152 outbound trips) during the A.M. peak hour. During the P.M. peak hour, the Alternative Land Use Alternative is anticipated to generate 679 vehicle trips (180 inbound trips and 499 outbound trips). Over a 24-hour period, the Alternative is forecasted to generate 6,979 daily trip ends during a typical weekday (approximately 3,490 inbound trips and 3,490 outbound trips). A summary of the trip generation forecast for the Alternative Land Use Alternative, including the total number of vehicle trips to be generated and the distribution of those trips is presented in Table 3b in the Traffic Impact Analysis in Appendix C of this Draft EIR.

Based on a review of the forecasted trip generation, this Alternative is anticipated to result in fewer significant impacts than the proposed Project based on the slightly lower peak-hour trip-generation forecast. Under both Parking Scenario Nos. 1 and 2 of the proposed Project (refer to detailed description of parking scenarios in Section IV.C.), significant traffic impacts would occur at 10 of the 18 study intersections, as compared to 11 with the proposed Project, during the A.M. and/or P.M. peak commuter hours before mitigation. In addition, the Alternative

Land Use Alternative would result in one less significant impact compared to the proposed Project before mitigation based on the trip distribution patterns of Parking Scenario Nos. 1 and 2. As there would be a decrease in traffic under the Alternative Land Use Alternative compared to the Proposed Project, impacts to CMP monitoring locations under the Alternative Land Use Alternative would be less than under the proposed Project and, as is the case with the proposed Project, would be less than significant. As with the Proposed Project, temporary significant impacts may occur at the Union Pacific Railroad crossing under the Alternative Land Use Alternative. However, impacts with regard to Project Access and public transit would be less than significant and less than those of the proposed Project.

Mitigation similar to the proposed Project would be implemented; and, as such, impacts under the Alternative Land Use Alternative would remain significant and unavoidable at four locations, based on the trip distribution patterns of Parking Scenario No. 1. All but two locations are anticipated to be fully mitigated, based on the trip distribution patterns of Parking Scenario No. 2 under the Alternative Land Use Alternative. Since traffic associated with the proposed Project would generate significant impacts to 11 intersections, of which four intersections could not be mitigated to a level that is less than significant under Parking Scenario No. 1 and three intersections could not be mitigated to levels that are less than significant under Parking Scenario No. 2, traffic impacts under the Alternative Land Use Alternative would be less than under the proposed Project.

(b) Parking

Under this Alternative, approximately 1,085 to 1,268 parking spaces would be required by the LAMC, depending upon the actual development that would occur within the development range. Similar to the proposed Project, existing surface parking lots would be displaced. As a result up to 1,996 parking spaces would be developed under this Alternative. The Alternative Land Use Alternative would provide for a net increase in parking supply through the provision of parking on any combination of Development Sites B, C, D, E, and F, and, therefore, parking impacts under both the Alternative Land Use Alternative and the proposed Project would be similar and less than significant.

(4) Air Quality

During Construction, the Alternative Land Use Alternative would require similar amounts of site clearing and grading activity. On days of peak construction activities, the number of construction workers and heavy-duty construction equipment present on site would likely be similar to proposed Project conditions. Thus, daily emissions during peak construction activities under the Alternative Land Use Alternative would be similar to the proposed Project. Consequently, daily emissions during peak construction would be similar to the Project and would result in a significant unavoidable impact with respect to regional emissions of NO_X and ROC and local emissions of PM_{10}, even after implementation of mitigation measures. No

significant impacts associated with CO, SO_X, and NO_2 concentrations would occur during construction. Impacts with regard to construction odors would be the same as the proposed Project and, as such, construction odor impacts under this Alternative would be less than significant.

With respect to long-term operations, the Alternative Land Use Alternative would result in a reduction in mobile source and stationary source daily emissions. Due to the reduced scale of development (i.e., reduction of 160,000 square feet of academic related research uses and a reduction of 40,000 square feet of medical clinic uses), emissions are anticipated to be approximately nine percent less than those for the proposed Project, due primarily to the mobile source emissions related to 736 fewer daily trips (from 7,715 to 6,979). However, this reduction would not be sufficient to avoid the significant and unavoidable impact with respect to regional emissions of NO_X that would occur with the proposed Project. Daily emissions for ROC, CO, PM_{10}, and SO_X and local emissions of CO would also decrease under the Alternative Land Use Alternative and, as with the Project, would remain less than significant. Impacts of the Alternative Land Use Alternative would be less than those of the proposed Project, principally resulting from the forecasted reduction in operational vehicle-related emissions. Similar to the Proposed Project, impacts with regard to operational odors would be less than significant.

(5) Noise

During construction, the Alternate Land Use Alternative would require similar amounts of site clearing and grading activity. The days of peak construction activities, the number of construction workers and heavy-duty construction equipment present on site would likely be similar to Project conditions. Consequently, the Alternative Land Use Alternative would generate maximum construction-period noise levels that would be of a duration similar to Project construction-period noise. Similar to the Project, the Alternative Land Use Alternative would generate noise during construction that is well above the ambient noise levels in areas of sensitive receptor locations, including USC University Hospital, USC HCCI, USC HCCII, Doheny Eye Institute, Women and Children's Hospital, and Hazard Park. As with the Project, significant and unavoidable construction noise impacts would occur under the Alternative Land Use Alternative to the above sensitive receptors, even with the incorporation of mitigation measures. Similar to the proposed Project, off-site construction noise impacts associated with vehicle trips to and from the site under this Alternative would be less than significant.

During long-term operations, the Alternative Land Use Alternative would generate noise levels that are similar to Project-generated noise levels. Noise sources would include vehicular traffic, mechanical equipment/point sources (i.e., loading dock and trash pick up areas), and parking facilities. Similar to the proposed Project, noise generated by the loading dock and trash pick up areas would result in a significant impact without incorporation of mitigation measures. However, as with the proposed Project, implementation of Mitigation Measure E-2 would

diminish the impact to a level that is less than significant. Noise from other on-site sources would be less than significant due to compliance with provisions of the City's Noise Ordinance, and no mitigation measures would be required. The reduction in traffic volumes by 736 daily trips (from 7,715 to 6,979) would result in a marginal reduction in traffic-related noise levels on the surrounding roadways, and roadway noise impacts would remain less than significant, similar to the Project. The noise impacts of the Reduced Project Alternative, based on the preceding analysis, would be slightly reduced relative to the proposed Project due to the reduction in operational motor vehicle noise levels.

(6) Utilities and Service Systems

(a) Water

The academic/medical research and medical clinic buildings, as well as the hotel use under the Alternative Land Use Alternative would generate an increase in water demand. Water would be used for laboratories, clinics, restrooms, drinking fountains, and landscaping. As the hotel would consume water at the same rate as the academic and research facilities that it is displacing, under both the Project and the Alternative Land Use Alternative, potentially significant impacts on water supply would be less than significant based on LADWP's Water Supply Assessment and through water conservation design features, assured through the implementation of conservation-related mitigation measures. As shown in Table 42 on page 328, the Alternative Land Use Alternative is estimated to have a water demand of 208,704 gpd, which is the same as the Project's demand for water. It is conservatively assumed that, as is the case with the proposed Project, the Alternative Land Use Alternative would operate approximately 365 days a year. As the water demand would be the same as the proposed Project, impacts related to the construction of the water lines would be less than significant and the same as the proposed Project. Therefore, the Alternative Land Use Alternative would have the same impact on water supply as the proposed Project.

(b) Sanitary Sewers

The Alternative Land Use Alternative would generate wastewater in association with laboratories, clinics, restrooms, and drinking fountains. Under both the Project and the Alternative Land Use Alternative, wastewater impacts would be potentially significant, but reduced to levels that are less than significant with mitigation. As shown in Table 43 on page 329 the Alternative Land Use Alternative would generate a demand of 146,745 gpd, which is the same as the Project's daily sewage generation. As the wastewater discharge would be the same as the proposed Project, impacts related to construction of the sewage lines would also be less than significant and the same as the proposed Project. Thus, the potential impact for this alternative would be the same as under the Project. Therefore, the Alternative Land Use Alternative would have the same impact on wastewater generation as the Project.

Table 42

ESTIMATED DOMESTIC WATER CONSUMPTION FOR THE PROJECT AND THE ALTERNATIVE LAND USE ALTERNATIVE

Use	Size	Factor (gpd/unit) [a]	Average Daily Flow (gpd)	Annual Consumption [b] (mil gal/yr)
Project				
Academic/Medical Research	720,000 sq.ft.	250 gpd/1,000sq.ft.	180,000	65.70
Medical Clinic	45,000 sq.ft.	250 gpd/1,000sq.ft.	11,250	4.11
Parking	840,000 sq.ft.	20 gpd/1,000sq.ft.	16,800	6.13
Outdoor Water Use [a]			58,254	21.26
Total Proposed Project			266,304	97.20
Alternative Land Use Alternative				
Academic/Medical Research	305,000 sq.ft.	250 gpd/1,000sq.ft.	76,250	27.83
Medical Clinic	80,000 sq.ft.	250 gpd/1,000sq.ft.	20,000	7.30
Parking	840,000 sq.ft.	18 gpd/1,000 sq.ft.	16,800	6.13
Hotel	200,000 sq.ft.	250 gpd/1,000sq.ft.	50,000	18.25
Outdoor Water Use [a]			45,654	16.66
Total Alternative			**208,704**	**76.17**
Net Increase (Decrease) in Water Consumption			**-57,600**	**-21.03**

[a] *Estimated to be 28 percent.*
[b] *Assumes 365-day operation year.*

Source: PCR Services Corporation, April 2005.

(7) Other Impacts of the Alternative Land Use Alternative

The Alternative Land Use Alternative would not be anticipated to have significant impacts in areas for which the Project was determined not to have significant impacts, as this Alternative would have the same square footage as the proposed Project and would be constructed in accordance with the same development standards.

(8) Relationship of the Alternative Land Use Alternative to the Project Objectives

The Alternative Land Use Alternative would only partially achieve the basic Project objectives. The Alternative would support the Applicant's objectives to become a nationally respected provider of the highest quality, specialized acute inpatient and outpatient health care services and translational research, as well as one of the nation's very top medical schools that would attract highly qualified students and provide them with exceptional training. The Alternative would also support the objectives through the development of centralized academic,

Table 43

ESTIMATED WASTEWATER GENERATION FOR THE PROJECT AND THE ALTERNATIVE LAND USE ALTERNATIVE

Use	Size	Factor (gpd/unit) [a]	Average Daily Flow (gpd)	Annual Consumption [a] (mil gal/yr)
Project				
Academic/Medical Research	720,000 sq.ft.	225 gpd/1,000sq.ft.	162,000	59.1
Medical Clinic	45,000 sq.ft.	225 gpd/1,000sq.ft.	10,125	3.7
Parking	840,000 sq.ft.	18 gpd/1,000sq.ft.	15,120	5.5
Total Proposed Project			**187,245**	**68.3**
Alternative Land Use Alternative				
Academic/Medical Research	305,000 sq.ft.	225 gpd/1,000sq.ft.	68,625	25.0
Medical Clinic	80,000 sq.ft.	225 gpd/1,000sq.ft.	18,000	6.6
Parking	840,000 sq.ft.	18 gpd/1,000sq.ft.	15,120	5.5
Hotel	200,000 sq.ft.	225 gpd/1,000 sq.ft.	45,000	16.4
Total Alternative			**146,745**	**53.5**
Net Increase (Decrease) in Wastewater Generation			**-40,500**	**14.8**

[a] *Assumes 365-day operation year.*

Source: PCR Services Corporation, April 2005

medical research, and medical clinic facilities. Furthermore, the Alternative would create an on-site, pedestrian-friendly campus environment that would be developed which would allow pedestrian access to the entire facility with limited vehicular interfaces by providing parking at selected assist in creating a strong visible image of the HSC.

However, since the Alternative Land Use Alternative proposes development of a 200-room multi-level hotel facility in lieu of 200,000 square feet of academic and research uses proposed by the Project, it would support the basic objectives of the Project to a lesser extent than what would occur under the proposed Project. As such, the Alternative would not provide the quantity and quality of laboratory space that may be required in order to recruit new, world-renowned faculty, conducting breakthrough research and training future scientists. It would not be able to provide for the maximum amount of undergraduate, graduate and postgraduate academic programs of instruction for highly qualified students. Lastly, reduction of proposed facilities within the HSC would not work to further the objective of attaining efficiency in meeting the other objectives described above.

4. The Alternative Site Alternative: Alternative Site

a. Introduction

This section presents an environmental analysis of developing the proposed Project at an alternative location. The alternative location selected for the Project is the Women and Children's Hospital site, located along the east side of Mission Road, generally between Zonal Avenue to the north and Marengo Street to the south in the City of Los Angeles. A summary of comparative adverse impacts is presented at the end of the Alternatives analysis in Table 46 and Table 47 on pages 339 and 340, respectively.

b. Analysis of Alternative

(1) Land Use

The Alternative Site, as with the Proposed Project site, is located in the Northeast Community Plan area of the City of Los Angeles on the site of the Women and Children's Hospital located to the south of the HSC across Zonal Avenue adjacent to the Los Angeles County–USC Medical Center. The Alternative Site is designated as Public Facilities and is located within Height District 1. Thus, development of the Project at the Alternative Site would require a zone change to C2 to reflect the range of uses proposed for development and to be compatible with the zoning designations assigned to the surrounding HSC parcels. A height district change from Height District 1 (allowable FAR of 1.5:1) to 2 (allowable FAR of 6:1) would also be necessary to allow the proposed development.

The Alternative Site Alternative would implement the General Plan Framework policies, but would do so at a location that does not contribute to the synergy that the Project adds to at the HSC. The Alternative Site Alternative would not enhance the existing pedestrian-oriented campus environment and nor would it facilitate pedestrian access to the entire HSC.

The Alternative Land Use Alternative would assist in achieving the principal goal of the Adelante Eastside Redevelopment Plan, which is to improve living conditions, upgrade public improvements, increase commercial choices, and revitalize the industrial base while preserving existing businesses and industry. However, this Alternative would not promote preservation and enhancement of the existing HSC to the same extent as the proposed Project.

The Alternative Site Alternative would promote the policies set forth in the Regional Comprehensive Plan and Guide (RCPG), which encourages development in and around existing activity centers, transportation corridors, underutilized infrastructure systems, and in areas needing recycling and redevelopment. The Alternative would also take advantage of the nearby

transportation corridors and public transit systems including the I-10 and I-5 Freeways, the Metro system, DASH, Union Station, and the USC shuttle systems. However, implementation of this Alternative would not allow for the development of underutilized sites within the existing HSC that are currently used as surface parking lots.

The land use effects of the Alternative Site Alternative in relation to existing land use plans would be similar to those associated with the proposed Project and no significant land use impacts would occur. However, development of the Project at the Alternative Site would not realized an enhancement of the HSC which, as an existing center of activity, is a policy direction included in many of the land use plans referenced above. Furthermore, the land uses surrounding the Alternative Site are similar to those that are located around the Project Site. Therefore, impacts with regard to land use compatibility with the surrounding land uses would be less than significant, and similar to those of the proposed Project.

(2) Visual Resources

(a) Aesthetics

The Alternative Site Alternative, similar to the proposed Project, would result in the removal of existing street trees, which would temporarily detract from the visual character of the area, thereby creating a potentially significant aesthetic impact. However, it is anticipated that development at the Alternative Site would include the replacement of all removed trees and landscape plantings along the perimeter of the Women's and Children's Hospital Site, similar to the proposed Project. Under the Alternative Site Alternative architectural styling would be consistent with the materials and detailing typical of modern HSC campus structures and would be consistent with the City's urban design policies. Under the Alternative Site Alternative, development would not occur on the HSC and visual amenities associated with the proposed Project's architectural style, which would be designed in a style reflective of the existing academic, research and medical office buildings that define the HSC's aesthetic appearance, would not be realized. Furthermore, other design and landscape features including exterior courtyards, sidewalks, pedestrian walkways, and plantings would not be developed at the HSC, which aid in further integrating proposed and existing uses within the HSC. Therefore, the Alternative Site would have greater impact relative to aesthetics than the proposed Project.

(b) Views

In the evaluation of potential view impacts for the proposed Project, it was determined that the proposed Project would not substantially obstruct an existing view of a valued view resource from identified public or private vantage points; therefore, potential view impacts were concluded to be less than significant. Under the Alternative Site Alternative, development of uses similar in height to those of the proposed Project would occur. As the view resources

available at the Alternative Site are the same as those available at the Project Site, and building heights would be comparable, no existing view of a valued view resource would be impacted by the Alternative Site Alternative. Therefore, both the Alternative Site Alternative and the proposed Project would have a similar and less than significant impact on views.

(c) Shade/Shadow

Land use in proximity to the Alternative Site is primarily institutional and commercial in nature. However, a residential area that would be considered shade/shadow sensitive is located north of Mission Road and west of Sichel Street. Should development to the maximum height permitted by the Project occur at the northern edges of the Alternative Site, these residential uses would be shaded for less than two hours during the winter solstice. Shading during other seasons of the year would not extend onto this residential area. As the duration of the shading is somewhat limited, impacts of development at the Alternative Site would be less than significant. This conclusion is the same as that attributable to the proposed Project.

(3) Traffic, Circulation, and Parking

(a) Traffic and Circulation

Development at the Alternative Site would generate the same number of trips forecasted for the Proposed Project. As such, development at the Alternative Site is forecasted to generate 753 vehicle trips (613 inbound trips and 140 outbound trips) during the A.M. peak hour. During the P.M. peak hour, this Alternative is forecasted to generate 774 vehicle trips (161 inbound trips and 613 outbound trips). Over a 24-hour period, the Alternative Site is forecasted to generate 7,715 daily trip ends during a typical weekday (approximately 3,858 inbound trips and 3,857 outbound trips).

Development at the Alternative Site is anticipated to result in approximately the same number of significant impacts when compared to the proposed Project (based on the same vehicle trip generation estimates). However, while the relative number of significant impacts is estimated to be the same as the proposed Project, the locations could vary in that the Alternative Site is situated southwest of the HSC. It is anticipated that with the implementation of the Project's recommended traffic mitigation measures, the same number of unmitigated locations as is forecasted to occur under Parking Scenario No. 1 (i.e., up to four locations) would occur with development at the Alternative Site. Therefore, traffic impacts under this Alternative, as is the case with the proposed Project, would be significant, after mitigation. Similar to the proposed Project, Project-related access and transit impacts would be less than significant under the Alternative Site Alternative. However, as there would be less traffic on San Pablo Street under the Alternative Site Alternative, the magnitude of temporary significant impacts at the Union Pacific Railroad crossing may be reduced in relation to the proposed Project

(b) Parking

Development under this Alternative site would have the same Code parking requirements as described for the proposed Project. For purposes of this analysis, it is assumed that parking under this Alternative could be satisfied by parking facilities within the Alternative Site, as well as within existing HSC parking facilities. Further, it is assumed that the future parking supply for the HSC under the Alternative Site would increase to a minimum of approximately 5,186 spaces. Thus, a future parking supply of 5,186 spaces is anticipated to satisfy the future Code parking requirements, as well as the parking demand of the Project and this Alternative. Therefore, parking impacts under both this Alternative and the proposed Project would be similar and less than significant.

(4) Air Quality

During construction, the Alternative Site Alternative would result in incrementally reduced amounts of site clearing and grading activities, as a result of the reduction in site area compared to the proposed Project. However, on days of peak construction activities, the number of construction workers and heavy-duty construction equipment present on site would be similar to proposed Project conditions. As such, peak daily emissions from construction activities under the Alternative Site Alternative would be similar to the proposed Project, as neither the duration (number of days), nor the intensity of activities would change. Consequently, peak daily emissions during construction would be similar to the proposed Project. As such, the Alternative Site Alternative would result in a significant unavoidable impact with respect to regional emissions of ROC and NO_X. In addition, the Alternate Site is located near the proposed Project site and the same sensitive receptors would apply to the Alternate Site as applied to the Project site. As development under this Alternative would be located to the west of the proposed Project, sensitive receptors to the west of the proposed Project site would experience increased impacts, while the sensitive receptors located to the east of the proposed Project would experience a lessening of impacts as they would be located further from construction activity than under the proposed Project. Regardless, and as with the proposed Project, the Alternative Site Alternative would result in a significant unavoidable impact with respect to local PM_{10}, even after the implementation of mitigation measures. As no significant construction odor impacts would occur under this Alternative, impacts with regard to construction odors would be the same as the proposed Project.

With respect to long-term operations, the Alternative Site Alternative would generate mobile source and stationary source daily emissions that are comparable to those for the proposed Project, as development intensity and trip generation characteristics would be similar. As such, the Alternative Site Alternative would result in a significant unavoidable impact with respect to regional emissions of NO_X, as would occur with the proposed Project. Regional emissions of CO, PM_{10}, and SO_X would be less than significant, similar to the proposed Project.

Regarding local CO, the Alternative Site Alternative would likely distribute traffic on local roadways in a different pattern than the proposed Project. Local CO concentration may increase at some intersections in the vicinity of the Alternate Site. However, CO concentrations at roadway intersections analyzed for the proposed Project were well under the SCAQMD significance threshold and would likely remain under the thresholds with the Alternative Site Alternative. Therefore, local emissions of CO would be less than significant, similar to the proposed Project. Likewise impacts with regard to operational odors would also be less than significant, similar to the proposed Project. Based on the preceding analysis, impacts of the Alternative Site Alternative would be less than those of the proposed Project.

(5) Noise

During construction, the Alternative Site Alternative would result in incrementally reduced amounts of site-clearing and grading activities as a result of the reduction in site area compared to the proposed Project. However, on days of peak construction activities, the number of construction workers and heavy-duty construction equipment present on site would be similar to proposed Project conditions. Consequently, the Alternative Site Alternative would generate maximum construction-period noise levels that would be similar to proposed Project construction-period noise, as the Alternate Site is located near the proposed Project site and the same sensitive receptors would apply to the Alternate Site as applied to the Project site. However, sensitive receptors to the west (e.g., Nurse College and Los Angeles County–USC Hospital) would experience an increase in noise levels and these levels would likely be significant. Therefore, the Alternative Site Alternative would generate significant and unavoidable construction noise impacts at nearby noise sensitive locations, even with the incorporation of mitigation measures. Similar to the proposed Project, construction noise impacts associated with vehicle trips to and from the Alternative Site would be less than significant.

During long-term operations, the Alternative Site Alternative would generate noise levels that are similar to noise levels generated by the proposed Project. Noise sources would include vehicular traffic, mechanical equipment/point sources (i.e., loading dock and trash pick up areas), and parking facilities. In general, operational noise levels would decrease at sensitive receptors located on the eastern side of the HSC and increase at sensitive receptors located on the western side of the HSC. However, noise from on-site sources would be less than significant due to compliance with provisions of the City's Noise Ordinance and the potential addition of mitigation measures. Traffic volumes under the Alternative Site Alternative are expected to be similar to the levels forecasted for the proposed Project but the Alternative Site Alternative would likely distribute traffic on local roadways in a different pattern than the proposed Project. However, noise levels at roadway segments analyzed for the proposed Project were well under the significance threshold and would likely remain under the thresholds with development at the Alternative Site. Therefore, traffic-related noise levels on surrounding roadways would be

comparable and likely remain less than significant, as is the case with the Project. As such, traffic-related noise impacts associated with the Alternative Site Alternative, as with the proposed Project, would be less than significant. The noise impacts of the Alternative Site Alternative, based on the preceding analysis, would be similar to the proposed Project.

(6) Utilities and Service Systems

(a) Water

Under the Alternative Site Alternative water would be required for clinics, laboratories, restrooms, drinking fountains, and landscaping. As shown in Table 44 on page 336, the Alternative Site Alternative is estimated to have a water demand of 266,304 gpd, which is the same as the proposed Project's demand for water. Under both the proposed Project and the Alternative Site Alternative, impacts on water supply would be the same and less than significant, based on LADWP's Water Supply Assessment for the proposed Project and through water conservation design features, assured through the implementation of conservation-related mitigation measures. Although the locations for the improvements to the local water lines would be different, impacts related to the construction of these lines would be less than significant, similar to the proposed Project.

(b) Sanitary Sewers

The Alternative Site Alternative would generate wastewater in association with clinics, laboratories, restrooms, and drinking fountains. As shown in Table 45 on page 337 the Alternative Site Alternative would generate a demand of 187,245 gpd, which is the same as the Project's daily sewage generation. Therefore, the Alternative Site Alternative would have the same impact on wastewater generation as the Project. Under both the Project and the Alternative Site Alternative, wastewater impacts would be potentially significant, but reduced to levels that are less than significant with mitigation. Although the locations for the improvements to the local sewer lines would be different, impacts related to the construction of these lines would be less than significant, similar to the proposed Project.

(7) Other Impacts of the Alternative Site Alternative

The Alternative Site Alternative would not be anticipated to have significant impacts in areas for which the Project was determined not to have significant impacts, as this Alternative would have the same square footage as the proposed Project and would be constructed in accordance with the same development standards.

Table 44

ESTIMATED DOMESTIC WATER CONSUMPTION FOR THE PROJECT AND THE ALTERNATIVE SITE ALTERNATIVE

Use	Size	Factor (gpd/unit) [a]	Average Daily Flow (gpd)	Annual Consumption [b] (mil gal/yr)
Project				
Academic/Medical Research	720,000 sq.ft.	250 gpd/1,000sq.ft.	180,000	65.70
Medical Clinic	45,000 sq.ft.	250 gpd/1,000sq.ft.	11,250	4.11
Parking	840,000 sq.ft.	20 gpd/1,000sq.ft.	16,800	6.13
Outdoor Water Use [a]			58,254	21.26
Total Proposed Project			266,304	97.20
Alternative Land Use Alternative				
Academic/Medical Research	720,000 sq.ft.	250 gpd/1,000sq.ft.	180,000	65.45
Medical Clinic	45,000 sq.ft.	250 gpd/1,000sq.ft.	11,250	4.11
Parking	840,000 sq.ft.	20 gpd/1,000 sq.ft.	16,800	6.13
Outdoor Water Use [a]			58,254	21.26
Total Alternative			266,304	97.20
Net Increase (Decrease) in Water Consumption			**0**	**0**

[a] *Estimated to be 28 percent.*
[b] *Assumes 365-day operation year.*

Source: PCR Services Corporation, January 2005.

(8) Relationship of the Alternative Site Alternative to the Project Objectives

The Alternative Site Alternative would only partially achieve the basic Project objectives. The Alternative would support the Applicant's objectives to become a nationally respected provider of the highest quality, specialized acute inpatient and outpatient health care services and translational research, as well as one of the nation's very top medical schools that would attract highly qualified students and provide them with exceptional training. However, the Alternative would not support the objective to provide for the development of centralized academic, medical research, and medical clinic facilities, nor would the Alternative create an on-site, pedestrian-friendly campus environment that would allow pedestrian access to the entire facility with limited vehicular interfaces by providing parking at selected locations and assist in creating a strong visible image of the HSC. Furthermore, implementation of this Alternative would not allow for the development of underutilized sites within the existing HSC. Environmental impacts overall would be similar to the Project and no reduction in potentially significant and unavoidable impacts would be achieved.

Table 45

ESTIMATED WASTEWATER GENERATION FOR THE PROJECT AND THE ALTERNATIVE SITE ALTERNATIVE

Use	Size	Factor (gpd/unit) [a]	Average Daily Flow (gpd)	Annual Consumption [a] (mil gal/yr)
Project				
Academic/Medical Research	720,000 sq.ft.	225 gpd/1,000sq.ft.	162,000	59.1
Medical Clinic	45,000 sq.ft.	225 gpd/1,000sq.ft.	10,125	3.7
Parking	840,000 sq.ft.	18 gpd/1,000sq.ft.	15,120	5.5
Total Proposed Project			**187,245**	**68.3**
Alternative Land Use Alternative				
Academic/Medical Research	720,000 sq.ft.	225 gpd/1,000sq.ft.	162,000	59.1
Medical Clinic	45,000 sq.ft.	225 gpd/1,000sq.ft.	10,125	3.7
Parking	840,000 sq.ft.	18 gpd/1,000sq.ft.	15,120	5.5
Total Alternative			**187,245**	**68.3**
Net Increase (Decrease) in Wastewater Generation			**0**	**0**

[a] *Assumes 365-day operation year.*

Source: PCR Services Corporation, January 2005

G. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

State CEQA Guidelines require the identification of an environmentally superior alternative to the proposed Project and, if the environmentally superior alternative is the "No Project Alternative," the identification of an environmentally superior alternative from among the remaining alternatives.[55] An environmentally superior alternative is an alternative to the proposed Project that would reduce and/or eliminate the significant, unavoidable environmental impacts associated with the Project without creating other significant impacts and without substantially reducing and/or eliminating the environmental benefits attributable to the Project.

Selection of an environmentally superior alternative is based on an evaluation of the extent to which the alternatives reduce or eliminate the significant impacts associated with the Project, and on a comparison of the remaining environmental impacts of each alternative. The relative environmental characteristics are comparatively summarized in Table 46 on page 339. This table presents the analytic conclusions from each of the selected alternatives. The table

[55] *CEQA Guidelines, Section 15126.6(e)(2).*

indicates whether each alternative's environmental impacts would be "similar," "greater," or "less" than those of the Project for each environmental category analyzed in the Draft EIR.

In order to compare those impacts that can be quantified, a second summary table, Table 47 on page 340, is also provided. Where quantitative information is not available (i.e., Land Use and Aesthetics), no comparison is made in Table 47. Furthermore, care must be used with regard to the information presented in Table 46 and Table 47 with regard to making conclusions of relative significance because some categories are relatively more or less important, and cannot be simply summed.

The environmentally superior alternative (excluding the No Project Alternative), is determined through a review of the Comparison of Impacts table, and reviewing the number of impact areas in which an alternative is determined to have "less" relative impact in relation to the Project. As shown on Table 46, the No Project Alternative (Alternative 1) would be the environmentally superior alternative, as this alternative would have less impact relative to the Project than the other evaluated alternatives. CEQA requires that when the No Project Alternative is the environmentally superior alternative, another alternative needs to be selected as environmentally superior.

In accordance with this procedure, the Reduced Project Alternative (Alternative 2) would be the environmentally superior alternative. Whereas several impacts are reduced under this Alternative, relative to the proposed Project, the Reduced Project Alternative would partially achieve some of the Project's objectives, as the amount of new facilities that would be developed would be lessened, which could potentially inhibit achievement of the Project's broader goals. It should also be noted, that other than the No Project Alternative, no alternatives would reduce the significant, unavoidable impacts, related to Traffic, Air Quality, and Construction Noise to levels that are less than significant.

Table 46

COMPARISON OF IMPACTS
PROPOSED PROJECT AND PROJECT ALTERNATIVES

	Project	Alternative 1: No Project	Alternative 2: Reduced Project	Alternative 3: Alternative Land Use	Alternative 4: Alternative Site
Description	Academic/Medical Research—465,000 to 720,000 GSF Medical Clinic—45,000 to 120,000 GSF Parking—2,800 Spaces	No development in any location	Proposed Project Reduced by 30 percent: Academic/Medical Research—325,500 to 504,500 GSF Medical Clinic—45,000 to 120,000 GSF Parking—1,085 Spaces	Academic/Medical Research reduced by 200,000 sq.ft. Addition of 200-room Hotel.	Same as Project
Land Use	Less than Significant	Less (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)
Visual Resources					
Aesthetics	Less than Significant with Mitigation	Greater (Less than Significant)	Similar (Less than Significant with Mitigation)	Similar (Less than Significant with Mitigation)	Greater (Less than Significant)
Views	Less than Significant	Less (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)
Shade/Shadow	Less than Significant	Less (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)
Transportation & Circulation					
Traffic	Significant & Unavoidable	Less (Less than Significant)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)	Similar (Significant and Unavoidable)
Parking	Less than Significant	Less (Less than Significant)	Less (Less than Significant)	Less (Less than Significant)	Similar (Less than Significant)
Air Quality	Significant & Unavoidable	Less (Less than Significant)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Noise	Significant & Unavoidable	Less (Less than Significant)	Less (Significant & Unavoidable)	Less (Significant and Unavoidable)	Similar (Significant and Unavoidable)
Water	Less than Significant	Less (Less than Significant)	Less (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)
Sanitary Sewers	Less than Significant	Less (Less than Significant)	Less (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)

Table 47

QUANTITATIVE COMPARISON OF PROPOSED PROJECT AND PROJECT ALTERNATIVES

	Project	No Project	Alternative 2: Reduced Project	Alternative 3: Alternative Land Use	Alternative 4: Alternative Site
Description	Academic/Medical Research—465,000 to 720,000 GSF Medical Clinic—45,000 to 120,000 GSF Parking—2,800 Spaces	No development in any location	Proposed Project Reduced by 30 percent: Academic/Medical Research—325,500 to 504,500 GSF Medical Clinic—45,000 to 120,000 GSF Parking—1,085 Spaces	Academic/Medical Research reduced by 200,000 sq.ft. Addition of 200,000-sq.ft. Hotel. Parking—1,268 Spaces	Same as Project
Land Use	22 Acres	0	22 acres	22 acres	Approx. 17 acres
Daily Trip Ends	7,715	0	5,476	6,979	7,715
Impacted Intersections, Freeway Segments	Significant impacts after mitigation at two locations under Parking Scenario No. 1 and one location under Parking Scenario No. 2; No CMP impacts	0	Significant impacts after mitigation at four locations under Parking Scenario No. 1 and two locations under Parking Scenario No. 2; No CMP impacts	Significant impacts after mitigation at four locations under Parking Scenario No. 1 and two significant impacts under Parking Scenario No. 2; No CMP impacts	Significant impacts after mitigation at two locations; No CMP impacts
Code-Required Parking	1,423 to 1,548 spaces	0	997 to 1,085 spaces	1,085 to 1,268 spaces	1,423 to 1,548 spaces
Air Quality	Significant levels of NO_X and ROC emissions during construction	0	Same as Project	Same as Project	Same as Project
Noise	Significant construction noise levels		Same as Project	Same as Project	Same as Project
Water Supply	266,304 gallons daily; 97.20 mil gal/yr		186,413 gallons daily; 68.04 mil gal/yr	Same as Project	Same as Project
Sanitary Sewers	187,245gallons daily; 68.3mil gal/yr	0	42,928 gallons daily; 47.3 mil gal/yr	Same as Project	Same as Project

VI. Other Environmental Considerations

VI. OTHER ENVIRONMENTAL CONSIDERATIONS

A. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the CEQA Guidelines requires that an EIR evaluate the significant irreversible environmental changes that would be caused by implementation of a proposed project to ensure that such changes are justified. Irreversible changes include the use of nonrenewable resources during the construction and operation of a project to such a degree that the use of the resource thereafter becomes unlikely. A significant environmental change can result from a primary and/or secondary impact that generally commits future generations to similar uses. Irreversible environmental change can also result from environmental accidents associated with the project.

Construction of the proposed Project would require the use of nonrenewable resources, such as wood, the raw materials in steel, metals such as copper and lead, aggregate materials used in concrete and asphalt such as sand and stone, water, petrochemical construction materials such as plastic, and petroleum based construction materials. In addition, fossil fuels used to power construction vehicles would also be consumed.

Operation of the proposed Project would involve the ongoing consumption of nonrenewable resources, such as electricity, petroleum-based fuels, fossil fuels, and water, which are commonly consumed in the existing surrounding urban environment. Energy resources would be used for heating and cooling of buildings, lighting, and transporting of patrons to and from the Project Site. Operation of the proposed Project would occur in accordance with Title 24, Part 6 of the California Code of Regulations, which sets forth conservation practices that would limit the amount of energy consumed by the proposed Project. Nonetheless, the use of such resources would continue to represent a long-term commitment of essentially nonrenewable resources. Operation of the proposed Project would also result in an increased commitment of public maintenance services such as waste disposal and treatment, as well as increased commitment of the infrastructure that serves the Project Site.

The limited use of potentially hazardous materials contained in typical cleaning agents and pesticides for landscaping would occur on the site. Such materials would be used, handled, stored, and disposed of in accordance with applicable government regulations and standards, which would serve to protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

The commitment of the nonrenewable resources required for the construction and operation of the proposed Project would limit the availability of these resources and the Project's building site for future generations or for other uses during the life of the proposed Project. However, use of such resources would be of a relatively small scale in relation to the Project's fulfillment of regional and local urban design and development goals for the area. As such, the use of such resources would not be considered significant.

B. GROWTH-INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires that an EIR analyze the growth-inducing impacts of a project. Growth-inducing impacts are characteristics of a project that could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the area surrounding a project site. Impacts associated with the removal of obstacles to growth as well as the development of facilities that encourage and facilitate growth are considered to be growth-inducing. However, as stated in the CEQA Guidelines, it is not to be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Currently, the City and County of Los Angeles and the Community Redevelopment Agency are putting forward a collaborative effort to facilitate mixed use and retail development and new job growth opportunities in the burgeoning fields of biomedical research and health care. The proposal is aimed at an 883-area "BioMedTech Area" that lies within a 1,207-acre area located east of the Golden State Freeway (I-5), north of the San Bernardino Freeway (I-10), west of the Long Beach Freeway (I-710), and south of Valley Boulevard. The proposed Project Site is located within this potential Joint Los Angeles County and City Redevelopment Proposal for BioMedTech Area.

At this time, the overall vision for the BioMedTech Area has not been determined, however the goal for the BioMedTech Area is to create substantial economic development and job creation in the biomedical field aimed at maximizing development near the Los Angeles County General Hospital and the HSC. Once the new Los Angeles County hospital is completed, the existing 20-story, 1,000,000 square feet hospital, located directly south of the Project Site would become available for reuse, which presents a unique opportunity to create a self sustaining "urban village" where people may live and work. Therefore, as the proposed Project is located within the proposed BioMedTech Area, it is anticipated the proposed Project would create growth-inducing impacts. Given the anticipated magnitude of development within the BioMedTech Area, significant environmental impacts may result from the implementation of this development proposal.

Although the proposed Project would constitute infill development within the existing HSC, which by its very nature has a lesser growth-inducing impact than development of undeveloped areas, the impacts of Project implementation would include effects on or from land use, visual resources, traffic and parking, air quality, and noise. The purpose of the proposed Project is to provide more opportunities for USC faculty and students to work at the forefront of their respective specialty while continuing to provide outstanding patient care. This intent is consistent with the land use goals of the City to revitalize this community and, as such, the Project Site has been designated under the City's General Plan Framework as a Commercial Center. While the proposed Project would not involve the construction of housing or generate a significant population increase resulting from new employees associated with the proposed Project, the proposed land uses, related facilities and the respective populations that directly utilize them represent an increment of direct on-site growth.

In order to accommodate proposed traffic-generated by the proposed Project on the local street system, transportation system improvements would be necessary to increase capacity. Such improvements could be growth-inducing if they contribute to a substantial reduction in traffic congestion and improved vehicular access in the greater locale. The proposed Project Project's mitigation measures have been designed to mitigate Project impacts to a level beyond that required to meet the needs of the Project's additional traffic, thus enhancing traffic capacity at some locations. This is also considered to be a growth inducing impact.

VII. References, Preparers, and Persons Consulted

VII. REFERENCES, PREPARERS, AND PERSONS CONSULTED

A. REFERENCES

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City of Los Angeles, *Los Angeles CEQA Thresholds Guide*, May 14, 1998 .

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Southern California Association of Governments, Regional Comprehensive Plan and Guide, March 1996 with 2002 updates.

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California Department of Transportation, Traffic Noise Analysis Protocol, October 1998.

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South Coast Air Quality Management District, Multiple Air Toxics Exposure Study in the South Coast Air Basin, March 2000.

South Coast Air Quality Management District Rule 403, December 1998.

South Coast Air Quality Management District Rule 2202, January 2002.

B. LIST OF PREPARERS

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Appendix A
Initial Study, Notice of Preparation (NOP), and NOP Comment Letters

A-1 Initial Study

TABLE OF CONTENTS

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LIST OF FIGURES

CITY OF LOS ANGELES
DEPARTMENT OF CITY PLANNING

ENVIRONMENTAL ASSESSMENT FORM

EAF Case No.: _____ ZA Case No.: _____ CPC Case No.: _____
Council District No.: 14 Community Plan Area: Northeast Los Angeles
PROJECT ADDRESS: USC Health Sciences Campus
Major Cross Streets: Zonal Avenue, Biggy Street, San Pablo Street, Eastlake Avenue, Alcazar Street
Name of Applicant: University of Southern California
Address. Town & Gown, 200, Los Angeles CA 90089-0631
Telephone No.: 213-740-3175 Fax No.: 213-740-7523 E-mail: _____

OWNER
Name: University of Southern California
Address: Town & Gown, 200
Los Angeles CA 90089-0631
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Signature: _____

APPLICANT'S REPRESENTATIVE (Other than Owner)
Name: William Delvac, Esq.
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Address: Latham & Watkins
633 W 5th Street, Suite 4000
Los Angeles, CA 90071
Telephone No: 213-485-1234
Signature: _____
(Applicant's Representative)

The following Exhibits are required (3 copies of each exhibit and 3 Environmental Assessment Forms for projects in Coastal & S.M. Mtn. Zones): All Exhibits should reflect the entire project, not just the area in need of zone change, variance, or other entitlement.

NOTE: The exhibits are IN ADDITION TO those required for any case for which the Environmental Assessment Form is being filed.

A. **2 Vicinity Maps:** (8½" x 11") showing nearby street system, public facilities and other significant physical features (similar to road maps, Thomas Brothers Maps, etc.) with project area highlighted.
B. **2 Radius/Land Use Maps:** (1" = 100') showing land use and zoning to 500 feet (100 feet of additional land use beyond the radius for alcoholic beverage cases); 100' radius line (excluding streets) okay for Coastal building permits 300' for site plan review applications.
C. 2 Plot Plans: showing the location and layout of proposed development including dimensions; include topographic lines where grade is over 10%; tentative tract or parcel maps where division of land is involved to satisfy this requirement, and the location and diameter of all trees existing on the project site.
D. Application: a duplicate copy of application for zone change, (including Exhibit "C" justification) batch screening form, periodic comprehensive general plan review and zone change map, variance, conditional use, subdivider's statement, etc.
E. Pictures: two or more pictures of the project site showing walls, trees and existing structures.
F. Notice of Intent Fee: a check in the amount of $25 made out to the **County of Los Angeles** for the purpose of filing a Notice of Intent to Adopt a Negative Declaration as required by § 15072 of the State CEQA Guidelines.

ENVIRONMENTAL ASSESSMENT
APPROVED BY: _____ DATE: _____
APPLICATION ACCEPTED
BY: _____ DATE: _____
RECEIPT NO.: _____

I. Project Description:

Briefly describe the project and permits necessary (i.e., Tentative Tract, Conditional Use, Zone Change, etc.) including an identification of phases and plans for future expansion:

Please see Attachments A and B for detailed description of the Project.

Will the project require certification, authorization, clearance or issuance of a permit by any federal, state, county, or environmental control agency, such as Environmental Protection Agency, Air Quality Management District, Water Resources Board, Environmental Affairs, etc.? If so, please specify:

The Project is part of a medical campus and as such, operation of the proposed facilities may require certification, authorization, clearance or issuance of a permit by federal, state, county, or environmental control agencies. The exact certification, authorization, clearance or permitting required to implement the Project will be determined.

II. Existing Conditions:

A. Project Site Area Surface parking within existing USC Health Sciences Campus
Net and 7.7 acres (approximate) Gross Acres 56 acres (approximate)

B. Existing Zoning C2-2 and PF-1

C. Existing Use of Land Surface parking
Existing General Plan Designation General Commercial and Public Facilities

D. Requested General Plan Designation N/A

E. Number N/A type N/A and age ± N/A of structures to be removed as a result of the project. If residential dwellings (apts., single-family, condos) are being removed indicate the: number of units: N/A and average rent: N/A
Is there any similar housing at this price range available in the area? If yes, where?
N/A

F. Number of existing trees To be determined Trunk Diameter To be determined and type To be determined

G. Number To be determined Trunk Diameter To be determined and type To be determined of trees being removed (identify on plot plan.)

H. Slope: State percent of property which is:
100% Less than 10% slope 0% 10–15% slope 0% over 15% slope
If slopes over 10% exist, a topographic map will be required. Over 50 acres, 1" = 200' scale is okay.

I. Check the applicable boxes and indicate the condition on the Plot Plan. There are ☐ natural or man-made drainage channels, ☐ rights of way and/or ☐ hazardous pipelines crossing or immediately adjacent to the property, or ☑ none of the above.

J. Grading: (specify the total amount of dirt being moved)
0-500 cubic yards.
Exact quantity to be determined if over 500 cubic yards. indicate amount of cubic yards.

K. Import/Export: Indicate the amount of dirt being imported or exported. To be determined.

Projects involving import/export of 1000 cubic yards or more are required to complete a Haul Route Form and Haul Route Map.

If the project involves more than one phase or substantial expansion or changes of existing uses, please document each portion separately, with the total or project details written below. Describe entire project, not just area in need of zone change, variance, or other entitlement.

III. Residential project (if not residential, do not answer)

A. Number of Dwelling Units-
Single Family _____ Apartment _____ or Condominium _____
B. Number of Dwelling Units with:
One bedroom _____ Two bedrooms _____
Three bedrooms _____ Four or more bedrooms _____
C. Total number of parking spaces provided _____
D. List recreational facilities of project _____
E. Approximate price range of units $ _____ to $ _____
F. Number of stories, _____ height _____ feet.
G. Type of appliances and heating (gas, electric, gas/electric, solar) _____
Gas heated swimming pool? _____
H. Describe night lighting of the project _____
(include plan for shielding light from adjacent uses, if available)
I. Percent of total project proposed for: Building _____
Paving _____
Landscaping _____
J. Total Number of square feet of floor area _____

IV. Commercial, Industrial or Other Project (if project is only residential do not answer this section). Describe entire project, not just area in need of zone change, variance, or other entitlement.

A. Type of use Educational, medical research and office; parking
B. Total number of square feet of floor area Maximum of 585,000 sq.ft. of floor area
C. Number of units if hotel/motel N/A
D. Number of stories. To be determined Height 150 feet maximum
E. Total number of parking spaces provided: Approximately 2,800
F. Hours of operation 24 hours Days of operation Monday-Sunday
G. If fixed seats or beds involved, number N/A
H. Describe night lighting of the project Lighting will be similar to adjacent surrounding uses within the USC Health Sciences Campus
(Include plan for shielding light from adjacent uses, if available)
I. Number of employees per shift To be determined
J. Number of students/patients/patrons To be determined
K. Describe security provisions for project Security provided by USC Department of Public Safety
L. Percent of total project proposed for: Building To be determined.
Paving To be determined.
Landscaping To be determined.

Historic/Architecturally Significant Project

Does the project involve any structures, buildings, street lighting systems, spaces, sites or components thereof which may be designated or eligible for designation in any of the following:
(please check)

☐ National Register of Historic Places _____
☐ California Register of Historic Resources _____
☐ City of Los Angeles Cultural Historic Monument. _____
☐ Within a City of Los Angeles Historic Preservation Overlay Zone (HPOZ) _____

V. Hazardous Materials and Substance Discharge

Does the project involve the use of any hazardous materials or have hazardous substance discharge? If so, please specify.

The Project is part of a medical campus and as such would involve the use of hazardous materials. Prior to occupancy of the Project, appropriate regulatory permits and licensing shall be obtained and appropriate hazardous materials handling and disposal procedures established.

A Regulatory Identification Number (if known) _____

B. Licensing Agency _____

C. Quantity of daily discharge _____

VI. Stationary Noise Clearance: A clearance may be necessary certifying the project's equipment (e.g., air conditioning) complies with City Noise Regulations.

Some projects may require a Noise Study. The EIR staff will inform those affected by this requirement.

VII. Selected Information:

A. Circulation: Identify by name all major and secondary highways and freeways within 1,000 feet of the proposed project; give the approximate distance(s):
Secondary highways adjacent to the Project site: San Pablo Street, Zonal Avenue.
Major highways within 1,000 feet of the Project site: Mission Road, Soto Street, Valley Boulevard

B. Air: All projects that are required to obtain AQMD permits (see AQMD Rules and Regulations) are required to submit written clearance from the AQMD indicating no significant impact will be created by the proposed project.*

C. Noise: Projects located within 600 feet of railroad tracks indicate the number of trains per day:**
Day 7 AM–10 PM _____
Night 10 PM–7 AM _____

VIII. Mitigating Measures:

Feasible alternatives or mitigation measures which would substantially lessen any significant adverse impact which the development may have on the environment.

To be determined via the Project's environmental review process.

* Contact the South Coast Air Quality Management District at 572-6418 for further information.

** For information, contact:

Southern Pacific Train Dispatcher 629-6569
Union Pacific Engineering 725-2313
Santa Fe Train Master 267-5546

APPLICANT/CONSULTANT'S AFFIDAVIT

OWNER MUST SIGN AND BE NOTARIZED;

IF THERE IS AN AGENT, THE AGENT MUST ALSO SIGN AND BE NOTARIZED

I, _____ I, _____

Owner (Owner in escrow)* (Please Print) | Consultant* (Please Print)

Signed: _____ Signed: _____

Owner | Agent

being duly sworn, state that the statements and information contained in this Environmental Assessment Form are in all respects true and correct to the best of my knowledge and belief.

State of California, County and City of Los Angeles

Signed: _____ Notary Subscribed and sworn to before me this _____ day of , _____ 20____	Signed: _____ Notary Subscribed and sworn to before me this day of , _____ 20 ____
(NOTARY or CORPORATE SEAL)	(NOTARY)

* If acting for a corporation, include capacity and company name.

CITY OF LOS ANGELES

OFFICE OF THE CITY CLERK
ROOM 615, CITY HALL
LOS ANGELES, CALIFORNIA 90012

CALIFORNIA ENVIRONMENTAL QUALITY ACT

INITIAL STUDY
AND CHECKLIST

(Article IV B City CEQA Guidelines)

LEAD CITY AGENCY	**COUNCIL DISTRICT**	**DATE**
City of Los Angeles Planning Department	14	

RESPONSIBLE AGENCIES

PROJECT TITLE/NO.	**CASE NO.**
USC Health Sciences Campus Project	

PREVIOUS ACTIONS CASE NO.	☐ **DOES have significant changes from previous actions.** ☐ **DOES NOT have significant changes from previous actions.**

PROJECT DESCRIPTION:

The University of Southern California (USC) is proposing to develop additional educational, medical research and office facilities within its existing Health Sciences Campus in northeast Los Angeles. New parking facilities to support the Project are also proposed. See Attachment A for a detailed description of the Project.

ENVIRONMENTAL SETTING:

USC's Health Sciences Campus (HSC) features state-of-the-art educational and medical research facilities devoted to medical research, with specific work in the fields of cancer, gene therapy, neurosciences, and transplantation biology and programs in occupational therapy and physical therapy. As an example, the 56-acre HSC includes the USC/Norris Comprehensive Cancer Center, USC University Hospital, the Zilkha Neurogenetics Institute, the Doheny Eye Institute, the School of Pharmacy, the Keck School of Medicine, the Center for Health Professions, and the Norris Medical Library. The Los Angeles County+University of Southern California Medical Center is adjacent to the HSC.

PROJECT LOCATION

The Project is located on the USC Health Sciences Campus. The Campus is located approximately three miles east of downtown Los Angeles, approximately one-half mile north of the San Bernardino Freeway (I-10) and approximately one-half mile east of the Golden State Freeway (I-5). The Campus is located adjacent to the Lincoln Heights and Boyle Heights neighborhoods of the City of Los Angeles (City) and is within the City's Northeast Los Angeles Community Plan Area, which encompasses that portion of the City east of the Los Angeles River and north of Boyle Heights.

PLANNING DISTRICT	**STATUS:**
Northeast Los Angeles	☐ **PRELIMINARY** ☐ **PROPOSED** _____ ☒ **ADOPTED** **June 15, 1999** **date**

EXISTING ZONING	**MAX. DENSITY ZONING**	☒ **DOES CONFORM TO PLAN**
C2-2, PF-1	FAR 6:1 (C2-2); 3:1 (PF-1)	
PLANNED LAND USE & ZONE	**MAX. DENSITY PLAN**	☐ **DOES NOT CONFORM TO PLAN**
General Commercial/Public Facilities		
SURROUNDING LAND USES	**PROJECT DENSITY**	☐ **NO DISTRICT PLAN**
Institutional, Commerical, Park, Residential, Public Facilities		

☞ **DETERMINATION (To be completed by Lead Agency)**

On the basis of this initial evaluation:

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

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

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

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

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

_____ _____

SIGNATURE **TITLE**

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

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

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of a mitigation measure has reduced an effect from "Potentially Significant Impact" to "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analysis," cross referenced).

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

   1) Earlier Analysis Used. Identify and state where they are available for review.
   2) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   3) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

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

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

9) The explanation of each issue should identify:
   1) The significance criteria or threshold, if any, used to evaluate each question; and
   2) The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

INITIAL STUDY CHECKLIST (To be completed by the Lead City Agency)

☞ **BACKGROUND**

PROPONENT NAME	**PHONE NUMBER**
University of Southern California, Planning & Design Management Services	213-821-5634
PROPONENT ADDRESS	
925 West 35th Street, POB, Los Angeles CA 90089-0631	
AGENCY REQUIRING CHECKLIST	**DATE SUBMITTED**
City Planning Department	
PROPOSAL NAME (If Applicable)	
USC Health Sciences Campus Project	

☞ **ENVIRONMENTAL IMPACTS** (Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a city-designated scenic highway?	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
II. AGRICULTURAL RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict the existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☒
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. The significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations. Would the project result in:				
a. Conflict with or obstruct implementation of the SCAQMD or Congestion Management Plan?	☒	☐	☐	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment (ozone, carbon monoxide, & PM 10) under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e. Create objectionable odors affecting a substantial number of people?	☒	☐	☐	☐
IV. BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service ?	☐	☐	☐	☒
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service ?	☐	☐	☐	☒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh vernal pool, coastal, etc.) Through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES: Would the project:				
a. Cause a substantial adverse change in significance of a historical resource as defined in State CEQA §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in significance of an	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
archaeological resource pursuant to State CEQA §15064.5?				
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS. Would the project:				
a. Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving :				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potential result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
VII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the area?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
VIII. HYDROLOGY AND WATER QUALITY. Would the proposal result in:				
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b. Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in an manner which would result in flooding on- or off site?	☐	☐	☒	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐
g. Place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h. Place within a 100-year flood plain structures which would impede or redirect flood flows?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
IX. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
X. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
XI. NOISE. Would the project:				
a. Exposure of persons to or generation of noise in level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b. Exposure of people to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING. Would the project:				
a. Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIII. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☒	☐
d. Parks?	☐	☐	☒	☐
e. Other governmental services (including roads)?	☐	☐	☒	☐
XIV. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐
XV. TRANSPORTATION/CIRCULATION. Would the project:				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to ratio capacity on roads, or congestion at intersections)?	☒	☐	☐	☐
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
e. Result in inadequate emergency access?	☐	☐	☒	☐
f. Result in inadequate parking capacity?	☒	☐	☐	☐
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☒	☐	☐	☐
XVI. UTILITIES. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☒	☐	☐	☐
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d. Have sufficient water supplies available to serve the project from existing entitlements and resource, or are new or expanded entitlements needed?	☐	☐	☒	☐
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☒	☐	☐	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐
XVII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b. Does the project have impacts which are individually limited, but cumulatively considerable?("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☒	☐	☐	☐
c. Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

☞ **DISCUSSION OF THE ENVIRONMENTAL EVALUATION (Attach additional sheets if necessary)**

PREPARED BY	TITLE	TELEPHONE #	DATE

ATTACHMENT A
PROJECT DESCRIPTION

A. INTRODUCTION

The University of Southern California (the Applicant) is proposing to develop approximately 585,000 square feet of additional educational, medical-related (e.g., medical research, medical clinic, etc.), and academic support facilities within its existing Health Sciences Campus (HSC) in northeast Los Angeles. The new facilities would be utilized by the Applicant for educational and academic support purposes, research laboratories and offices, as well as medical office space by tenants associated with the HSC. The Project also includes the development of parking facilities to support the proposed educational and medical-related uses. For the purposes of this Initial Study, the term "Project" is used to refer collectively to the proposed educational, academic support and medical-related facilities as well as the proposed parking facilities.

The HSC features state-of-the-art educational and medical research and treatment facilities devoted to medical research, with specific work in the fields of cancer, gene therapy, neurosciences, and transplantation biology as well as programs in occupational therapy and physical therapy. As an example, the HSC includes the USC/Norris Comprehensive Cancer Center, USC University Hospital, the Zilkha Neurogenetics Institute, the Doheny Eye Institute, the School of Pharmacy, the Keck School of Medicine, the Center for Health Professions, and the Norris Medical Library.

B. PROJECT LOCATION

The educational and medical-related facilities that would be developed in association with the Project would be located within the existing HSC on sites that currently contain surface parking lots or are underdeveloped as described in further detail below.

The HSC is located approximately three miles east of downtown Los Angeles, approximately one-half mile north of the San Bernardino Freeway (I-10) and approximately one-half mile east of the Golden State Freeway (I-5), as shown in Figure A-1 on page A-2. The HSC is located adjacent to the Lincoln Heights and Boyle Heights neighborhoods of the City of Los Angeles (City) and is within the City's Northeast Los Angeles Community Plan Area, which encompasses that portion of the City east of the Los Angeles River and north of Boyle Heights.

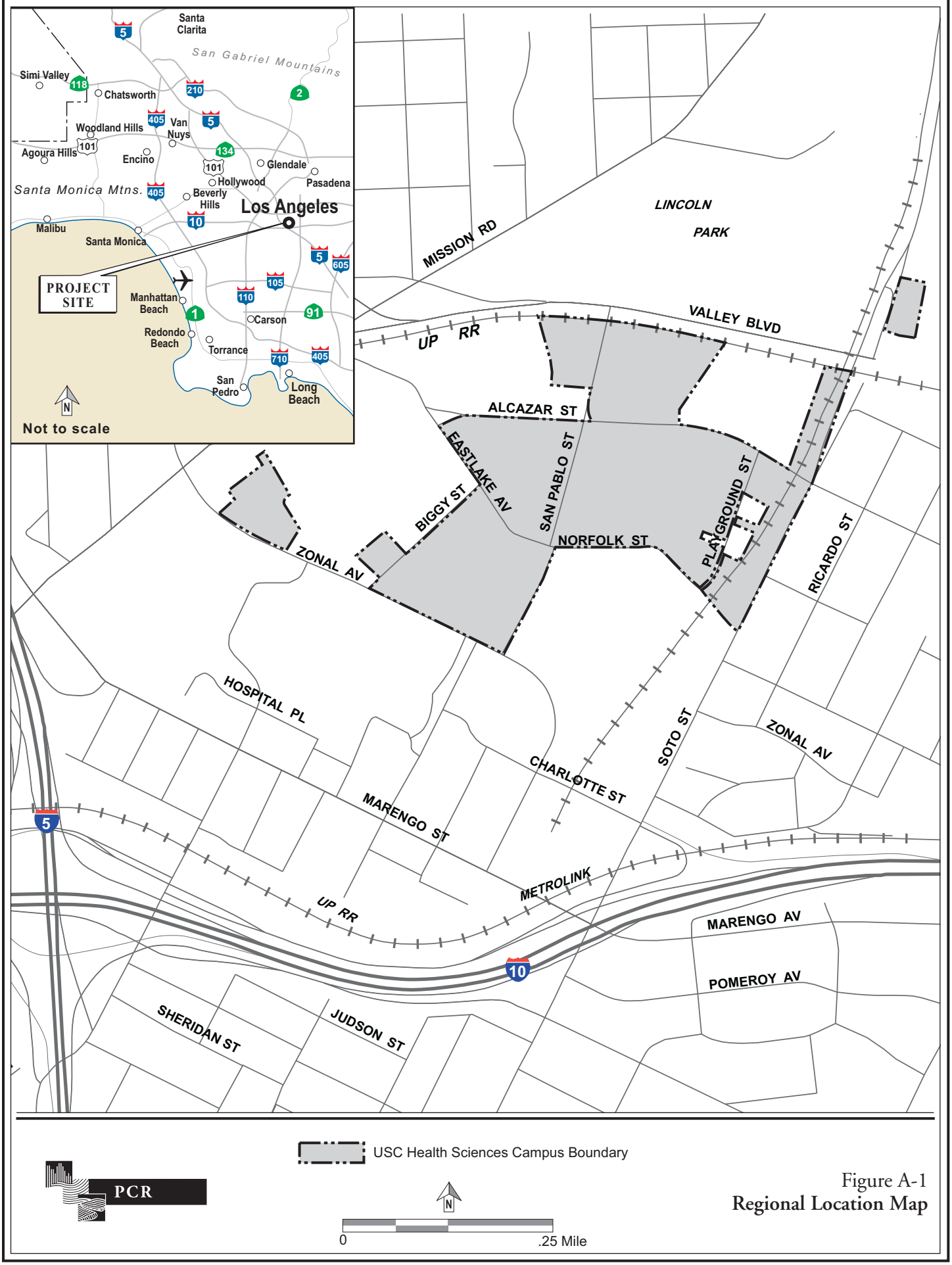


Figure A-1
Regional Location Map

The HSC is also within the Adelante Eastside Redevelopment Project area, which is administered by the Community Redevelopment Agency of the City of Los Angeles (CRA).

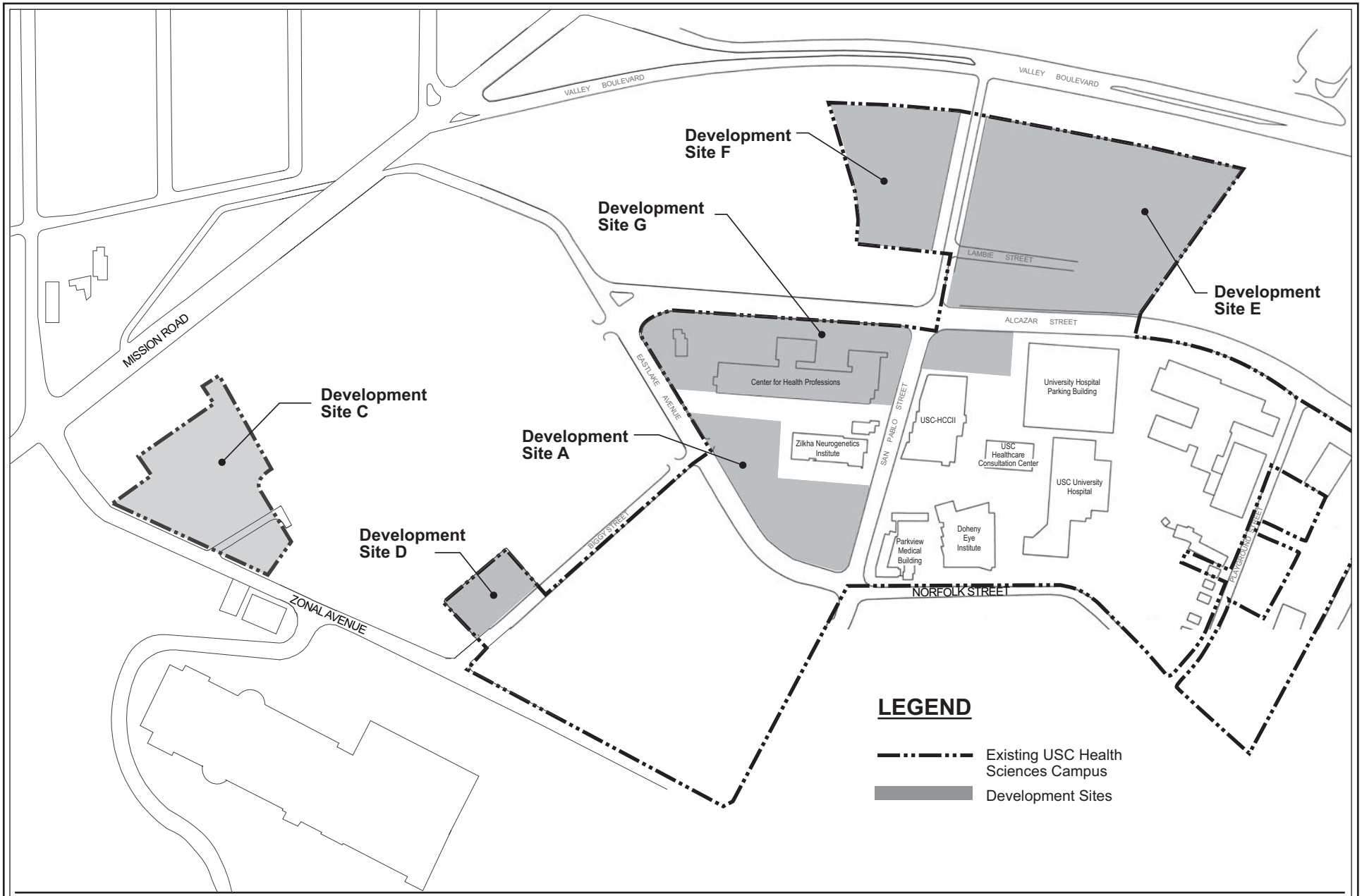
C. PROJECT COMPONENTS

The Project proposes development on up to four (4) designated Development Sites. The four Development Sites are hereafter referred to as Development Sites A, B, C and D, as shown in Figure A-2 on page A-4 and Figure A-3 on page A-5. For the purposes of this Initial Study, the term "Project Site" is defined to include all four (4) Development Sites. Development Sites A and B are considered infill sites located within the existing HSC. Development Site C is an existing HSC surface parking lot located on the west side of the HSC. Development Site D is an existing surface parking lot located along the west side of Biggy Street between Zonal and Eastlake Avenues. The following describes a conceptual development program for Development Sites A – D.

1. Development Site A

Development Site A is centrally located within the HSC. Development Site A is approximately 2.11 acres in size, though it is part of a larger 7.92-acre parcel identified as Lot 1, Tract 24390 by the Los Angeles County Assessor. The larger 7.92-acre parcel also includes the Center for Health Professions and the Zilkha Neurogentics Institute (ZNI). The maximum amount of development proposed for Development Site A is 465,000 gross square feet. Maximum building heights on this Development Site would be 150 feet.

Based on the Project's conceptual design, it is anticipated that development on Development Site A would include two buildings that would be occupied by medical research and laboratory facilities. The first building would be approximately 100 feet in height and consist of 280,000 square feet, with an average building floorplate of approximately 35,000 to 40,000 square feet. This building may feature five to seven above-grade levels, one or two basement levels, as well as a penthouse for building mechanical equipment. The basement level of this proposed building could be designed to connect to the basement of the existing adjacent ZNI building. The second building would be 150 feet in height with a maximum gross square footage of 185,000 square feet, utilizing building floorplates of approximately 20,000 square feet. This building could feature five-above grade levels as well as basement levels and a penthouse for building mechanical equipment.

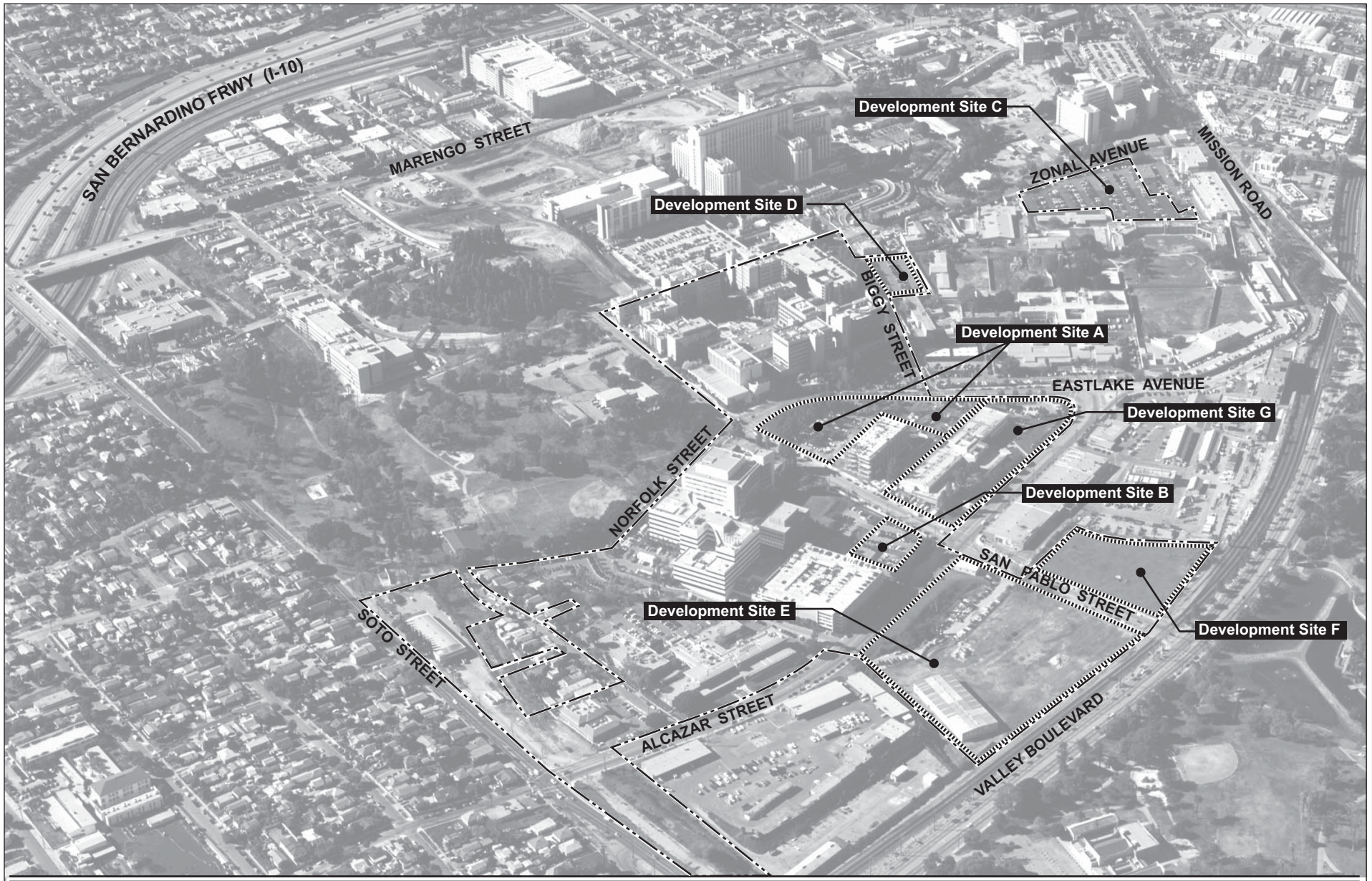


PCR

0 125 250 500 Feet

Source: University of Southern California.

Figure A-2
Proposed Development Sites



—·—·— USC Health Sciences Campus Boundary

PCR

Figure A-3
Aerial View of Campus

Source: University of Southern California

2. Development Site B

Development Site B is also centrally located within the HSC and can also be characterized as infill development within the HSC. Development Site B is approximately 1.13 acres in size and is identified as Lot 5, Tract 49380 by the Los Angeles County Assessor. This Development Site is located west of the existing USC University Hospital parking structure. The maximum amount of development proposed for Development Site B is 120,000 gross square feet of floor area. The maximum height permitted would be 100 feet including the height of the penthouse for mechanical equipment. Surface parking may also be provided within a portion of Development Site B.

Based on the Project's conceptual design, the proposed structure on this Development Site would form a courtyard configuration with the existing Healthcare Consultation Center (HCC) and HCCII buildings. Development Site B would be occupied by medical office uses in a structure that would include six above-grade levels and a penthouse for building mechanical equipment. The floorplate for this building is anticipated to be 35,000 square feet in area. Based on the conceptual design, the proposed development of this site would displace the surface parking that currently exists at this location.

3. Development Site C

Development Site C is located in the western portion of the HSC. This approximately 3.68-acre site is located on the north side of Zonal Avenue, between State Street to the east, and Mission Road to the west, as shown in Figure A-2 on page A-4 and Figure A-3 on page A-5. Development Site C is currently used as a 548-space surface parking lot. Proposed activity on Development Site C would be limited to parking. A multi-story parking structure providing up to 2,800 parking spaces is proposed to be developed at this location and, if constructed, would provide the parking required to support Project development, as well as replacement parking for the existing surface lot that currently occupies Development Site C. This proposed parking structure may be developed in two phases, with approximately 1,400 parking spaces constructed in each phase. The height of the parking structure would not exceed the City's 75-foot High Rise requirement. Due to the distance between the proposed parking structure and the buildings it serves, a parking variance is required to implement this component of the proposed Project.

4. Development Site D

Development Site D is an approximately 0.77-acre site located on the west side of Biggy Street between Zonal and Eastlake Avenues, as shown in Figure A-2 on page A-4 and Figure A-

3 on page A-5. Development Site D is currently used as a 106-space surface parking lot and is proposed to be developed with the type of University and/or medical-related uses that are described above for Development Sites A and B, or as parking facilities that support the proposed uses. In addition, new construction on Development Site D may be a combination of University/medical-related uses and parking. In the event that University and/or medical-related uses are constructed on Development Site D, a maximum of 200,000 square feet of floor area may be developed. The development of University and/or medical-related uses would occur in structure(s) with a maximum height of 140 feet, including the height of the penthouse for mechanical equipment.

While development of up to 200,000 square feet may occur on Development Site D, total Project development would not exceed a total of 585,000 square feet of University and/or medical-related uses on the identified Development Sites. As such, development on Site A and/or B would be reduced accordingly.

Parking facilities to support the Project may also occur on Development Site D. The parking facilities, should they occur, could be a mix of a multi-level structure and surface parking. The height of the parking structure would not exceed the City's 75-foot High Rise requirement. A maximum of 600 parking spaces could be constructed on Development Site D. Project parking, in addition to occurring within Development Sites C and D, could be satisfied by existing HSC parking facilities.

D. CONCEPTUAL PROJECT DESIGN

The proposed buildings would be constructed of steel structural or concrete framework clad with pre-cast concrete panels and glass and aluminum curtain wall systems. Though the design of the proposed buildings has not been fully developed at this stage, their architectural style would be similar to the same type of buildings that already exist on the HSC, such as those shown in the photographs in Figure A-4 through Figure A-7 on pages A-8 through A-11, respectively.

The Project would also include the creation of new exterior courtyards and walkways between and around the proposed buildings. These spaces would include plantings that would complement the existing landscaping program throughout the HSC. The proposed buildings would also feature signage and lighting consistent with existing HSC lighting and signage.

As described above, parking for the proposed buildings would be provided on Development Site C and/or Development Site D. Sidewalks and pedestrian walkways between

The view eastward from the corner of Biggy Street and Eastlake Avenue shows the new Zilkha Neurogenetics Institute (ZNI) with adjacent surface parking lots that comprise Development Site A.

The view westward from the east side of San Pablo Street shows the south facade of the Zilkha Neurogenetics Institute (ZNI) and the adjacent surface parking lots that comprise Development Site A.

PCR

Figure A-4
Photographs of Development Site A

Source: PCR Services Corporation, 2003

The view southward from Alcazar Street showing Development Site B with the HCCII building to the right, the USC University Hospital parking structure to the left and the HCC building and Doheny Eye Institute in the background.

The view eastward from the corner of Alcazar Street and San Pablo Street showing Development Site B.

PCR

Figure A-5
Photographs of Development Site B

Source: PCR Services Corporation, 2004

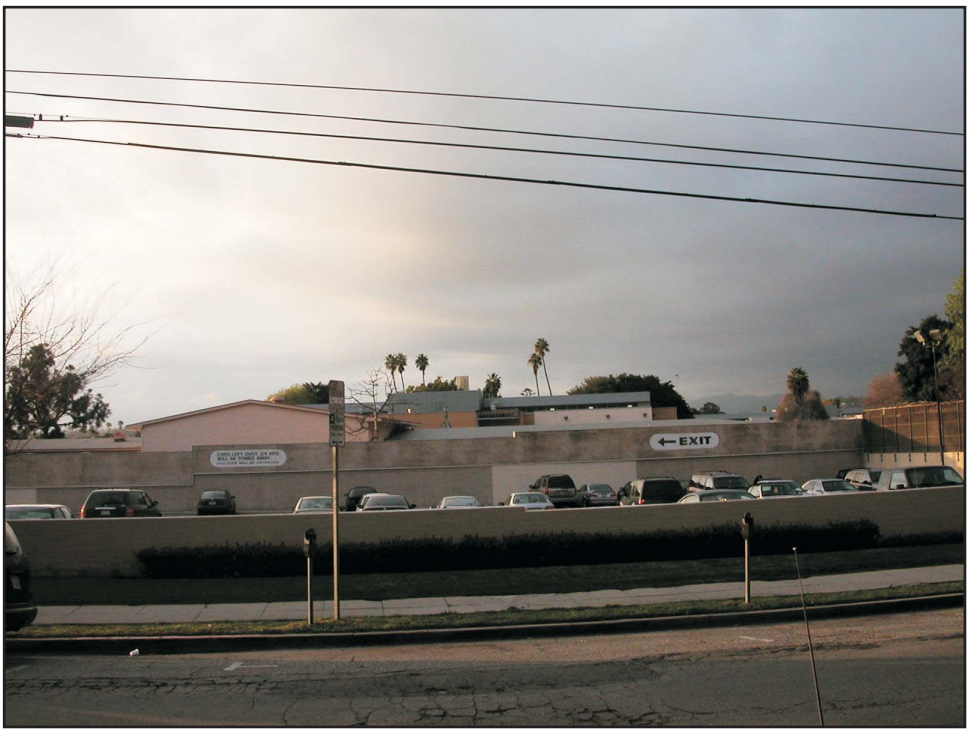
View northward of Development Site C from Zonal Avenue.

View southward from within Development Site C with County-USC Hospital visible in the background.

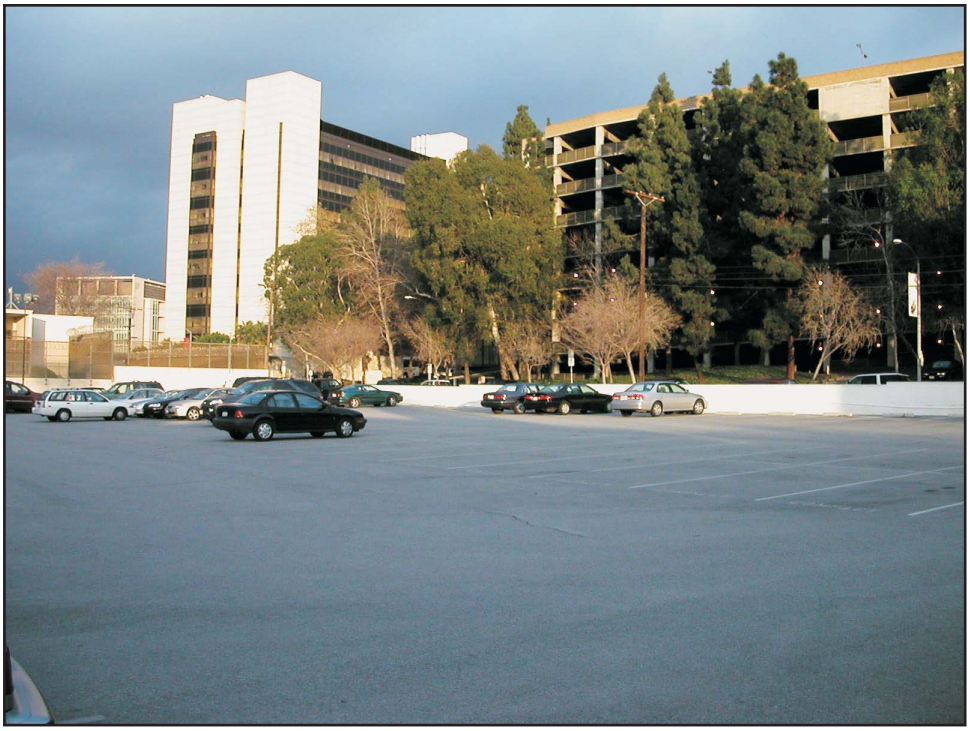
PCR

Figure A-6
Photographs of Development Site C

Source: PCR Services Corporation, 2004



View westward of Development Site D from Biggy Street.



View eastward from within Development Site D with the USC/Norris Comprehensive Cancer Center visible in the background.

PCR

Figure A-7
Photographs of Development Site D

Source: PCR Services Corporation, 2004

buildings would connect the parking with the proposed and existing buildings within the HSC. In addition, drop-off and delivery areas would be provided at each of the proposed buildings.

E. EQUIVALENCY PROGRAM

An Equivalency Program is proposed to provide flexibility for modifications to land uses and square footages within the Project in order to respond to the future needs and demands of the southern California economy and changes in Project requirements. The Equivalency Program defines a framework within which educational, academic support, research and medical office uses can be exchanged for one another.

Table A-1 on page A-13 identifies the equivalency ratios for the land use categories included within the Project. The equivalency ratios are expressed in terms of thousands of square feet of floor area. An example of an equivalency transfer would be a transfer of 10,000 square feet of medical office development to 33,900 square feet of medical research/laboratory/academic support uses (e.g., 10,000 * 3.39 = 33,900).

An analysis of the potential environmental impacts attributable to the proposed Equivalency Program is provided within each environmental analysis in Section IV, Environmental Impact Analysis, of the Draft EIR for this Project. The environmental analysis for the Equivalency Program evaluates the different equivalency scenarios to determine its impacts, including whether the impacts of any scenario are equal to or greater than the impacts of the Proposed Project. If the equivalency scenario would result in a greater or different impact than the Proposed Project, then such impact is analyzed and additional mitigation measures are proposed as appropriate. On the other hand, if the impacts in any given equivalency scenario are equal to or less than the impacts from the Proposed Project, then the analysis of the Proposed Project's impacts and any mitigation measures are also applicable to the given equivalency scenario, unless otherwise noted.

F. PROJECT DEVELOPMENT

The development timeframe for buildout of the proposed Project is approximately seven to eight years, with buildout anticipated to occur by 2012. Within this timeframe the construction of individual buildings would take place over the course of two to three years. Development of the parking facilities would occur in coordination with development of the buildings to be served by the parking. The final plans and construction documents for each component of the Project would identify protocols for demolition, site preparation, staging and other activities associated with construction.

Table A-1

EQUIVALENCY MATRIX –
LAND USE SQUARE FOOTAGE CONVERSION FACTORS

To this land use (ooo's)⇒ / From this land use (ooo's)⇓	Medical Research/Laboratory/ Academic Support		Medical Office
Medical Research/ Laboratory/ Academic Support	N/A		0.295
Medical Office	3.39		N/A

Source: PCR Services Corporation based on data provided by Linscott, Law & Greenspan, Engineers Inc..

ATTACHMENT B
EXPLANATION OF CHECKLIST DETERMINATION

I. AESTHETICS. *Would the Project:*

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

Less Than Significant Impact. No designated scenic vistas or other designated scenic resources are visible from the Project Site or would be visually obstructed by development that would occur with implementation of the proposed Project. Development of multi-story structures with a maximum height of 100 to 150 feet would occur on Development Sites A and B, respectively. A multi-story parking structure would be developed on Development Site C. Development Site D would feature either a multi-story structure containing University and/or medical-related uses similar to Sites A and B with a maximum height of 120 feet or a multi-story parking structure. The four Development Sites are located within the existing USC Health Sciences Campus and, as such, are characterized as infill development similar to the Campus' related medical uses contained in structures of similar height and mass. While development of these sites could potentially block views of the distant San Gabriel Mountains from a limited number of vantage points within the HSC, the San Gabriel Mountains would still be visible from many other vantage points on and around the HSC. Therefore, the impact of the Project on scenic vistas would be less than significant, and no mitigation measures are necessary.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a city-designated scenic highway?

No Impact. None of the roadways adjacent to and in the vicinity of the Project Site are designated as a scenic highway on the Scenic Highways Element of the City of Los Angeles General Plan. The City-designated scenic highway nearest to the site is Huntington Drive/Mission Road (Scenic Highway No. 46), which is approximately one-half mile northeast of the Project Site. As Project development would not affect any portion of the Huntington Drive/Mission Road Scenic Highway, no impact upon the scenic resources that are associated with this designated scenic highway would occur.

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

Potentially Significant Impact. The Development Sites are located within the larger approximate 56-acre USC Health Sciences Campus, which is characterized by educational, research, hospital and medical office buildings. The proposed development that would occur could be characterized as infill within the existing HSC. Though the specific design of the proposed buildings to be constructed has not been fully established at this time, it is expected that the buildings would be designed in a style reflective of the existing educational, research and medical office buildings that define the visual/aesthetic appearance of the HSC. Additionally, it is expected that the future buildings would incorporate architectural elements and design styles similar to existing nearby buildings such as the Zilkha Neurogenetics Institute and the Healthcare Consultation Center (HCC) and HCC II buildings. Nonetheless, the Project, despite occurring within the HSC, represents a substantial alteration of the visual character of the Project Site in that it proposes construction of multi-level buildings on land that is currently surface parking. Therefore, this issue shall be analyzed further in an Environmental Impact Report, with feasible mitigation measures proposed as necessary.

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

Less Than Significant Impact. Existing artificial light sources on the Development Sites includes surface parking lot and security lighting. The artificial light environment in the Project vicinity is influenced by street lights as well as lighting associated with adjacent buildings and parking facilities within the HSC. In addition, vehicles traveling on Eastlake Avenue, San Pablo Street, Alcazar Street, Biggy Street and Zonal Avenue also contribute to the existing artificial light environment within the HSC. Implementation of the proposed Project would introduce new light sources within the Project Site including streetlights, interior building lighting, exterior security lighting, and parking facility lighting; however, the proposed lighting would be typical of existing adjacent facilities within the HSC and is not expected to create unusually high levels of light. Furthermore, the Project would meet the standards set forth in the Los Angeles Municipal Code (LAMC) for the control of lighting impacts, including the following:

- Chapter 9, Article 3, Sec. 93.0117. No exterior light source may cause more than two footcandles (21.5 lx) of lighting intensity or generate direct glare onto exterior glazed windows or glass doors; elevated habitable porch, deck, or balcony; or any ground surface intended for uses such as recreation, barbecue or lawn areas or any other property containing a residential unit or units.

- Chapter 1, Article 2, Sec. 12.21 A5(k). All lights used to illuminate a parking area shall be designed, located and arranged so as to reflect the light away from any streets and any adjacent premises.

- Chapter 1, Article 7, Sec. 17.08C. Plans for street lighting system shall be submitted to and approved by the Bureau of Street Lighting.

- Division 62, Sec. 91.6205M. No sign shall be arranged and illuminated in such a manner as to produce a light intensity of greater than three footcandles above ambient lighting, as measured at the property line of the nearest residentially zoned property.

Additionally, Project-generated vehicle headlights would add to the existing lighting environment; however, the anticipated levels of lighting associated with the Project would not be considered significant in an urban setting such as the HSC. Since the Project would utilize lighting similar to that used on adjacent buildings, which would maintain the existing visual character of the HSC, and would implement the standards set forth in the Los Angeles Municipal Code (LAMC) to address potential lighting effects, the level of lighting that would occur with the proposed Project, both stationary and transient (i.e., automobile headlights), would not adversely affect day or nighttime views in the area, and no mitigation measures are necessary.

The Project would utilize an exterior window wall system which would be of low reflectivity, similar to that used on adjacent buildings. Highly-reflective, potentially glare producing exterior features and building materials would not be used. Additionally, while Project-generated vehicles would generate transient glare from the reflection of the sun, the anticipated levels would not be considered significant in an urban setting such as the HSC. Furthermore, the proposed Project buildings would blend with the existing buildings and would generate minimal glare due to the exterior materials that will be used. Therefore, the level of glare associated with the Project would not adversely affect day or nighttime views in the area, and no mitigation measures are necessary.

II. AGRICULTURAL RESOURCES. *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California agricultural land evaluation and site assessment model (1997) prepared by the California department of conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the Project:*

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

No Impact. No agricultural uses or related operations are present on the Project Site or within the surrounding area. The site is not considered prime or unique farmland of statewide or local importance as identified by the State Department of Conservation and the City of Los Angeles General Plan. Therefore, the Project would not result in the conversion of designated farmland, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses. No mitigation measures are necessary.

b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?

No Impact. The Project Site is not zoned for agricultural uses, nor is it under a Williamson Act contract. Therefore, no conflict exists with agricultural zoning or Williamson Act contracts, and no mitigation measures are necessary.

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

No Impact. As there are no agricultural uses or related operations on or near the Project Site, the Project would not involve the conversion of farmland to non-agricultural uses. Therefore, no impacts to agricultural uses would occur, and no mitigation measures are necessary.

III. AIR QUALITY. *The significance criteria established by the south coast air quality management district (SCAQMD) may be relied upon to make the following determinations. Would the project result in:*

a. Conflict with or obstruct implementation of the SCAQMD or Congestion Management Plan?

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

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment (ozone, carbon monoxide, & PM_{10}) under an applicable federal or state ambient air quality standard?

Potentially Significant Impact [a–c]. The state and federal governments have set health standards for air pollutants, specifying levels beyond which the air is deemed unhealthful. The Project Site is located in the South Coast Air Basin and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The South Coast Air Basin is currently in non-attainment for ozone (O_3), fine particulate matter (PM_{10}), and carbon monoxide (CO) based on federal, and thus state, air quality standards, as the state standards for California are more stringent than the federal standards. Together with the Southern California Association of Governments (SCAG), the SCAQMD is responsible for formulating and implementing air pollution control strategies throughout the Basin. The Regional Air Quality Management Plan (AQMP) was adopted by the SCAQMD in 1997 to establish a comprehensive air pollution control program that would lead to the attainment of state and federal air quality standards. The Project could result in increases in air emissions from construction, vehicle trips, and other sources, which could potentially: conflict with or obstruct implementation of the SCAQMD or Congestion Management Plan; violate an air quality standard or contribute substantially to an existing or projected air quality violation; or result in a cumulatively considerable net increase of ozone, carbon monoxide, or PM_{10}, for which the South Coast Air Basin, as described above, is currently in non-attainment. Potential air quality impacts resulting from the proposed Project shall be analyzed in further detail in an Environmental Impact Report with feasible mitigation measures proposed, as necessary.

d. Expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. Sensitive receptors in the immediate vicinity of the Project Site include educational and medical facilities within the HSC. Residential uses are also located approximately 700 feet east of Development Site B and approximately 900 feet west of Development Site C. Construction activity would result in increased air emissions, largely due

to dust and heavy-duty equipment exhaust emissions. In addition, operation of the Project would result in an increase in mobile source emissions associated with an increase in vehicle trips. Furthermore, the Project could result in an increase in air emissions from stationary sources associated with the new buildings. Potential impacts due to the exposure of sensitive receptors to substantial pollutant concentrations from mobile and stationary air emission sources shall be analyzed in further detail in an Environmental Impact Report with feasible mitigation measures proposed, as necessary.

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

Potentially Significant Impact. No objectionable odors are expected as a result of construction of the multi-story buildings on Development Sites A, B and possibly D or the parking structure on Development Site C and possibly D. The proposed buildings and structures would be constructed using conventional building materials. It is not anticipated that odiferous building materials would be used.

With regard to operations occurring within the proposed buildings, odors would typically be associated with industrial projects involving high volumes of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes. In addition, odors could also be associated with uses such as sewage treatment facilities and landfills. The proposed Project would not contain any element related to these types of uses. However, the educational, medical research and office buildings proposed on Development Site A could include a basement-level vivarium to connect to the existing vivarium located in the basement level of the adjacent Zilkha Neurogenetics Institute, which could potentially generate odors. This issue shall be analyzed in further detail in an Environmental Impact Report with feasible mitigation measures proposed, as necessary.

IV. BIOLOGICAL RESOURCES. *Would the project:*

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

No Impact. The Development Sites are in an urbanized location and are developed with surface parking. The Development Sites feature ornamental trees and landscaping designed as amenities to the streetscape, rather than as natural habitat. These existing surface parking lots feature negligible landscaping and do not contain any natural habitat. As such, the Project Site does not contain any natural habitat for species identified as candidate, sensitive or of special status.

The surrounding area features Hazard Park, a 25-acre recreational resource, which contains trees, lawns, baseball diamonds, tennis courts, and a vegetated gully along an abandoned railroad spur line that bisects the park. Hazard Park has the potential to contain notable biological resources; however, the Project Site is physically separated from Hazard Park such that there is no direct interface between the Project Site and the park. Development Site A (the portion of the Project site nearest to Hazard Park) is located at the northwest corner of San Pablo Street and Eastlake Avenue, whereas the park is located at the southeast corner of the intersection. While Development Site A and the park are located at opposite corners of the intersection, actual buildings proposed on Development Site A would be separated from Hazard Park not only by San Pablo Street and Eastlake Avenue/Norfolk Street, but also by the ornamental landscape buffer that exists directly north of Eastlake Avenue. Development Sites B, C, and D are located further from Hazard Park and are separated from the park by the other HSC buildings. Therefore, due to the distance and the actual physical separation that exists between the Project Site and park, the Project would not have an impact, either directly or through habitat modification, on any species that may inhabit Hazard Park. Therefore, the Project would not result in any impact, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service. As such, no impacts would occur, and no mitigation measures are necessary.

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

No Impact. The Project Site is in an urbanized location and is primarily developed with surface parking. The site does not feature any riparian habitat or other sensitive natural communities as identified in City or regional plans, policies or regulations. The site is not in or adjacent to any riparian area and is not identified in the City of Los Angeles General Plan as a natural, conservation or open space resource. Additionally, no other adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan applies to the Project Site.

The surrounding area features Hazard Park that may potentially contain sensitive natural communities that are not specifically identified by any plans, policies, or regulations. However, the Project does not propose any direct (i.e., physically alter the park) or indirect (i.e., discharge of storm water) alterations to Hazard Park. Furthermore, and as described above, the Project Site is physically separated from Hazard Park such that there is no direct interface between the Project Site and the park. Furthermore, stormdrains to support the proposed buildings would tie into existing stormdrains, and in so doing, also ensures that runoff to Hazard Park would not occur. Therefore, the Project would not have any impact on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, regulations

administered by the California Department of Fish and Game or U.S. Fish and Wildlife Service. No impacts would occur, and no mitigation measures are necessary.

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

No Impact. The Project Site is in an urbanized location and is primarily developed with surface parking. The Project Site does not contain any natural hydrologic features or federally protected wetlands as defined by Section 404 of the Clean Water Act. As stated above, the surrounding area features Hazard Park, which could potentially contain federally protected wetlands as defined by Section 404 of the Clean Water Act. However, the Project does not propose any direct or indirect alteration to Hazard Park. Therefore, the Project would not result in an adverse effect on any federally protected wetlands or potentially federally protected wetlands. No impacts would occur, and no mitigation measures are necessary.

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

No Impact. The Project Site is in an urbanized location and is primarily developed with surface parking. The Project Site does not function as a wildlife corridor and no bodies or courses of water exist on-site to provide habitat for fish. As stated above, the surrounding area features Hazard Park, which could potentially contain native resident or migratory fish or wildlife species. However, the Project does not propose any direct or indirect alteration to Hazard Park. Furthermore, as stated above the Project Site is physically separated from Hazard Park such that there is no direct interface between the Project Site and the park. Therefore, the Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, nor would it impede the use of native wildlife nursery sites. As such, no impacts would occur, and no mitigation measures are necessary.

e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

No Impact. The Project Site is in an urbanized location and is primarily developed with surface parking. The Project Site does not contain any notable natural features or protected biological resources. The surface parking lots on Development sites A, B, C and D do feature

non-native, ornamental trees as landscaping amenities and as street trees. Any street trees requiring removal as a result of the Project would occur in accordance with the City of Los Angeles Street Tree Division requirements. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands). No impacts would occur, and no mitigation measures are necessary.

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

No Impact. As previously noted, the Project Site is located within an urbanized area and does not contain any notable natural features. Additionally, no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan applies to the Project site. As such, the Project would not have any impact as it would not conflict with any habitat conservation plans, and no mitigation measures are necessary.

V. CULTURAL RESOURCES. *Would the project:*

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

No Impact. Section 15064.5(a)(3) of the CEQA Guidelines generally defines historical resources as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Since none of the Development Sites contain any extant buildings, structures, objects, sites or districts with any historical associations or significance necessary for California Register eligibility, the Project Site does not contain any historical resources as defined by the CEQA Guidelines. As such, no historical resources would be affected by implementation of the Project. No adverse impacts to significant historical resources would occur, and no mitigation measures are necessary.

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

Less Than Significant Impact. The Project Site is located within an urbanized area and has been subject to disturbance due to grading and development activities in the past; thus, any surficial archaeological resources that may have existed on the site at one time are likely to have been disturbed or removed previously. A records search conducted by the South Central Coastal Information Center of the California Historical Resources Information System[1] reported no historic or prehistoric archaeological sites on the Project Site or within the HSC. Any discovery of archeological resources during construction of the Project would be treated in accordance with federal, state and local guidelines, as appropriate. As no known archeological resources are present and the historic use of the site indicates that the likelihood of undisturbed archeological resources is low, less than significant impacts are expected, and no mitigation measures are necessary.

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

Less Than Significant Impact. The Project Site is located within an urbanized area and has been developed and subject to disturbance in the past. No unique paleontological or unique geologic resources have been identified on any of the Development Sites or in the surrounding area.[2] Site excavation could potentially uncover vertebrate fossil remains. If unique paleontological resources were uncovered, these would be treated in accordance with federal, state, and local guidelines, as appropriate. Any impacts are expected to be less than significant, and no mitigation measures are necessary.

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

No Impact. The Project Site is currently developed, and no human remains are known to be present. The Project Site is located within an urbanized area and has been developed and subject to disturbance in the past. In the event that excavation uncovers human remains, these resources would be treated in accordance with federal, state, and local guidelines, as appropriate. No impacts are expected, and no mitigation measures are necessary.

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[1] *Correspondence from Catharine M. Wood, Staff Archeologist, South Central Coastal Information Center, California Historical Resources Information System, to PCR Services Corporation, March 13, 2003.*

[2] *City of Los Angeles, Department of City Planning, Los Angeles Citywide General Plan Framework, Draft Environmental Impact Report, January 19, 1995, Figure CR-2.*

VI. GEOLOGY AND SOILS. *Would the project:*

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

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. Faults are classified as active, potentially active, or inactive. For the purposes of the Alquist-Priolo Earthquake Fault Zoning Map Act, the State of California defines active faults as those that have historically produced earthquakes or shown evidence of movement within the past 11,000 years (during the Holocene Epoch). Active faults may be designated as Earthquake Fault Zones under the Alquist-Priolo Earthquake Fault Zoning Act, which includes standards regulating development adjacent to active faults. In addition, the City of Los Angeles designates Fault Rupture Study Zones on each side of potentially active and active faults to establish hazard potential.[3] Although the Project Site is located in the seismically active region of southern California, no known active surface faults pass through any of the Development Sites, nor are any of the Development Sites within an Alquist-Priolo Earthquake Fault Zone. Therefore, no impacts associated with fault rupture on the site are expected to occur with implementation of the Project, and no mitigation measures are necessary.

ii. Strong seismic ground shaking?

Less Than Significant Impact. The Project Site is located in the seismically active Southern California region, which is characterized by major faults and fault zones. The nearest known fault is the Elysian Park Thrust Fault, which is located approximately 0.7 miles to the north. Other nearby faults include the Hollywood Fault located 4.2 miles to the northwest, the Raymond Fault located 4.2 miles to the northeast, and the Verdugo Fault, located 5.6 miles to the north. During a seismic event, the Project Site is subject to moderate to strong ground shaking typical of the general southern California area. Development associated with the Project could result in the potential exposure of people and structures to groundshaking in the event of an earthquake. Any ground shaking that may occur would be similar throughout the vicinity and no unusual or unique risk is posed by the proposed Project. With adherence to applicable seismic standards, safety requirements and construction specifications, potential impacts related to strong seismic ground shaking would be less than significant, and no mitigation measures are necessary.

[3] *Exhibit A, City of Los Angeles General Plan Safety Element, adopted November 26, 1996.*

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is a form of earthquake-induced ground failure that occurs primarily in relatively shallow, loose, granular, water-saturated soils. Excess water pressure that builds up during repeated movement from seismic activity can result in the transformation of the soil to a fluid mass. Geotechnical studies conducted for other portions of the HSC have indicated that the type and consistency of the soils and underlying bedrock as well as the extensive geologic history of the site are such that the Project would not be expected to experience liquefaction or similar seismic ground failure.[4] Additionally, adherence to applicable safety requirements and construction specifications would reduce the potential exposure of people or structures to the risk of loss, injury or death as a result of seismic events. As such, any impacts would be less than significant, and no mitigation measures are necessary.

iv. Landslides?

Less Than Significant. Development Sites A, B, C and D as well as the surrounding area are relatively level. Geotechnical studies conducted for other portions of the HSC have indicated the probability of seismically induced landslides occurring on the campus are remote.[5] Additionally, adherence to applicable safety requirements and construction specifications would reduce the potential exposure of people or structures to the risk of loss, injury or death as a result of seismic events. As such, any impacts would be less than significant, and no mitigation measures are necessary.

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

Less Than Significant Impact. The Project Site is located in a developed setting and contains either surface parking or vacant land that was previously developed. Any topsoil that may exist on the site was previously blended with other on-site soils during previous site preparation/grading activities. As such, Project development would not result in substantial loss of topsoil. Construction activities such as grading and excavation could create a potential for soil erosion. However, construction on any of the four Development Sites would occur in accordance with the Los Angeles Building Code Sections 91.7000 through 91.7016, which require necessary permits, plan checks, and inspections to reduce the effects of sedimentation and erosion. In addition to these requirements, any grading work in excess of 200 cubic yards scheduled to occur between November 1 and April 15 would require submittal of an erosion control plan to be approved by the City of Los Angeles Department of Building and Safety.

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[4] *Geotechnical Engineering Investigation, Proposed University of Southern California/USC Care Medical Group Health Care Consultation Center II, Geotechnologies, Inc., February 6, 2001*

[5] *Ibid.*

With Code compliance, the Project is not expected to cause substantial soil erosion during construction activities. Site drainage would be engineered and landscaped areas would be maintained, minimizing the potential for soil erosion during operation of the proposed facilities. Therefore, less than significant impacts are anticipated, and no mitigation measures are necessary.

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

Less Than Significant. Development Sites A, B, C and D are located in an urbanized setting on previously developed properties with relatively minimal slope. As stated previously, the probability of landslide or liquefaction are remote. With adherence to applicable safety requirements and engineering conditions determined during the construction process, potential impacts relative to the presence of unstable soils would be addressed. As such, any impacts would be less than significant, and no mitigation measures are necessary.

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

Less Than Significant. Development Sites A, B, C and D are located in an urbanized setting on previously developed properties of relatively minimal slope. Geotechnical studies conducted for other portions of the HSC have indicated the presence of moderately expansive soils.[6] Detailed geotechnical investigations that would be required in support of the City's issuance of grading and building permits would identify and remedy any adverse conditions attributable to the presence of expansive soils. With adherence to applicable safety requirements, potential impacts relative to the presence of expansive soils would be addressed. As such, any impacts would be less than significant, and no mitigation measures are necessary.

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

No Impact. The Project Site is located in an urbanized area served by existing sewer infrastructure. The Project would not involve the use of septic tanks or alternative wastewater disposal systems. No impact would occur, and no mitigation measures are necessary.

[6] *Ibid.*

VII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

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

Less Than Significant Impact. Construction activities associated with development of the proposed buildings and structures would involve the use of potentially hazardous materials, including paints, cleaning materials, vehicle fuels, oils, and transmission fluids. However, all potentially hazardous materials utilized during construction of the Project would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. As such, construction of the Project would not create a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials, and no mitigation measures are necessary.

Due to the nature of the proposed uses at Development Sites A and B, as well as potentially at Development Site D, the Project could use some medical hazardous materials and, if so, would generate some medical hazardous waste. These materials and wastes would include, but are not limited to, acids, solvents and astringents typically used in medical clinics as well as biohazardous "red bag" wastes (i.e., blood saturated items, bags and intravenous [IV] tubing containing blood products, suction canisters, hemovacs, chest drainage units, hemodialysis products) and biomedical wastes (i.e., sharps, pathology specimens and samples, medication). Additionally, the Project may include nuclear medicine, which would involve the use of very small amounts of radioactive materials or radiopharmaceuticals for diagnosis and treatment of diseases. As a result, the Project would implement several plans to address the use, storage and disposal procedures and requirements for hazardous, flammable, and radioactive materials and waste. These plans would be implemented in accordance with all applicable federal, state and local laws, regulations and standards. All hazardous waste, including biohazardous and biomedical wastes, generated on the Project site would be properly transported and disposed of off-site by a licensed subcontractor. Additionally, the proposed Project would also be required to prepare an emergency response and evacuation plan, conduct hazardous materials training (including remediation of accidental releases), and notify employees who work in the vicinity of hazardous materials, in accordance with federal OSHA and Cal OSHA requirements. The existing medical facilities that are part of the HSC already have these type of hazardous materials and emergency response plans and procedures in place.

The routine use of the proposed parking facilities at Development Site C and possibly at Development Site D may generate small quantities of hazardous materials associated with vehicle operations (e.g., leaks of engine oil, transmission fluid). However, the quantity of hazardous materials or wastes generated would not be anticipated to create a significant hazard. Furthermore, the proposed parking structures would be constructed incorporating required best

management practices (BMPs), that would address the proper handling of pollutant loads such as those described herein, in accordance with the State and local standards.

Based on the preceding, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. As such, impacts would be less than significant, and no mitigation measures are necessary.

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

Less Than Significant Impact. As stated above, all hazardous materials and wastes used or generated as part of the medical research and treatment conducted at Development Sites A and B would be handled in accordance with applicable safety standards and regulations. Furthermore, as stated above, routine use of automobiles within the parking facilities at Development Site C and possibly Development Site D would not create the potential for a significant hazard to the public from hazardous materials. As such, no upset or accident is reasonably foreseen that would involve the creation of a significant hazard through the release of hazardous materials into the environment. Any impacts would be less than significant, and no mitigation measures are necessary.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. Existing education facilities within one-quarter mile of the Project Site include the Francisco Bravo Medical Magnet High School and the educational facilities of the USC Health Sciences Campus itself. No new schools have been proposed within one-quarter mile of the Project Site. As stated above, the Project would involve the use and storage of potentially hazardous materials consisting of chemicals and solutions for medical research and clinical purposes and cleaning solvents. All such materials and waste would be handled in accordance with applicable safety standards and regulations. As such, impacts would be less than significant, and no mitigation measures are necessary.

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

Less Than Significant Impact. Phase 1 Environmental Site Assessments conducted for other portions of the HSC surrounding the Development Parcels have indicated the inclusion of locations with the Campus on lists of hazardous material sites compiled pursuant to Government

Code Section 65962.5. However, based on the findings of these Assessments it is not anticipated that the Project would create a significant hazard to the public. Furthermore, any adverse conditions that are identified during the regulatory permitting and construction process for the Project would be satisfactorily addressed and mitigated to a less than significant level via compliance with applicable standards and regulations. Therefore, impacts would be less than significant, and no mitigation measures are necessary.

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

No Impact. The Project Site is not within an airport land use plan or within two miles of a public airport or public use airport. Therefore, the Project would not result in any impact, and no mitigation measures are necessary.

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

No Impact. The Project Site is not within the vicinity of a private airstrip. Therefore, the Project would not result in any impact, and no mitigation measures are necessary.

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

Less Than Significant Impact. Implementation of the Project would not result in the closure of any street, particularly those designated as an evacuation route in an adopted emergency response or evacuation plan. To the extent feasible, construction activities and staging areas would not physically block any streets or impair access to and around the Campus or any adjacent properties. The proposed buildings would be designed to conform to the standards of the Los Angeles Fire Department for emergency egress and would be integrated into the existing HSC emergency response and evacuation plans. As such, potential impacts to adopted emergency response or evacuation plans would be less than significant, and no mitigation measures are necessary.

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

No Impact. The Project Site is not located in a mountain fire zone, fire buffer zone or Brush Fire Hazard Area.[7] The Project Site would be located within a developed urban setting that is not located adjacent to any wildland areas. The surrounding area does include Hazard Park located southeast of the Project Site, however Hazard Park is not a wildland and therefore would not be the subject of wildland fires. Therefore, the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no mitigation measures are necessary.

VIII. HYDROLOGY AND WATER QUALITY. *Would the proposal result in:*

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

Less Than Significant Impact. The Project proposes construction and operation of multi-level educational and medical office facilities and associated parking facilities on development sites currently containing surface parking. As a result, the proposed Project would be required to comply with state and local regulations governing water quality standards and waste discharge requirements associated with construction and operation of the facilities associated with the Project.

Regulatory and permitting processes have been established to control the water quality of runoff from construction sites with urban environments, such as the Project Site. In 1987, the Federal Water Pollution Control Act, also referred to as the Clean Water Act (CWA), was amended to provide that the discharge of pollutants into waters of the United States from storm water is effectively prohibited, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) Permit. The 1987 amendments to the CWA added Section 402(p), which established a framework for regulating municipal, industrial and construction stormwater discharges under the NPDES program. In California, these permits are issued through the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB). The SWRCB has adopted a statewide general construction permit that applies to most construction projects. This permit allows storm water discharge under certain conditions during the construction period but is intended to minimize the pollution of downstream receiving waters from construction activities. The Project would be served by engineered drainage systems that would connect to the existing

[7] *General Plan Framework Section, City of Los Angeles Planning Department, Brush Fire Hazard Areas Map, August 1994 and City of Los Angeles, Department of City Planning, Zoning Map Information System.*

storm drain system and would be designed to meet all applicable National Pollution Discharge Elimination Systems (NPDES) permits requirements. As such, Project construction would result in less than significant impacts to water quality, and no mitigation measures would be necessary.

Furthermore, as part of the Project, the City Standard Urban Stormwater Management Plan (SUSMP) requirements would be implemented. Under the SUSMP requirements, the Project would be designed to ensure that post-development peak storm water runoff discharge rates would not exceed the estimated pre-development rates such that there would be an increased potential for downstream runoff. The SUSMP requirements also include, but are not limited to, the following: minimizing stormwater pollutants of concern; providing storm drain system stenciling and signage; containing properly designed outdoor material storage areas; containing properly designed trash storage areas; and providing proof of ongoing BMP maintenance. The final design of these systems will be reviewed in accordance with applicable standards and the conditions of approval during the building permit process to ensure that no water quality standards or waste discharge requirements are violated. As such, the Project would result in less than significant impacts to water quality, and no mitigation measures would be necessary.

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

Less Than Significant Impact. The Project would not require the use of groundwater. Potable water for the Project would be supplied by the Los Angeles Department of Water and Power, which draws its water supplies from distant sources for which it conducts its own assessment and mitigation of potential environmental impacts. Therefore, the water needs of the Project would not substantially deplete groundwater supplies. The USC Health Sciences Campus is mostly developed and contains minimal amounts of pervious surfaces. Any increase of impervious area resulting from the Project could marginally reduce percolation, which could result in a reduction in groundwater recharge; however, the extent that local groundwater supplies would be substantially depleted would be extremely limited. As such, groundwater impacts would be less than significant and no mitigation measures are necessary.

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

Less Than Significant Impact. The Project Site and the surrounding area do not feature any stream or river; therefore, no stream or river course would be altered with implementation of the Project. The Project proposes construction and operation of multi-level educational and medical office facilities and associated parking facilities on development sites currently containing surface parking. The drainage system for the Development Sites currently connects to the City's existing stormwater drainage infrastructure, which sufficiently meets the storm drain demand generated by this site. Replacement of the existing surface parking lots with buildings would not substantially increase the amount of impervious cover that currently exists. As such, the amount of surface runoff would not substantially increase and the existing drainage pattern of the site would not be altered. Furthermore, the buildings proposed would feature newly designed drainage systems connecting to the existing storm drainage systems, and no change to the flow quantity to the City's existing storm drain facilities is anticipated. The final design of these systems will be reviewed in accordance with applicable standards and the conditions of approval during the building permit process. Since the Development Sites are currently impervious and would continue to be with the Project, and development is not expected to increase surface runoff or alter existing drainage, substantial erosion or siltation on- or off-site would not be expected to occur.

For the reasons described above, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site and therefore, would result in less than significant impacts to water quality, and no mitigation measures would be necessary.

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

Less Than Significant Impact. As noted above, the Project Site and the surroundings do not feature any stream or river; therefore, no stream or river course would be altered with implementation of the Project. Furthermore, the Project Site is located within the HSC, which features designed drainage systems connected to the City's urban stormwater drainage infrastructure. The Project would utilize this existing system and as described above, the HSC drainage systems and the City's stormwater drainage infrastructure have adequate capacity to accommodate future runoff from the Project Site. Therefore, the Project would not result in a substantial alteration to the existing drainage pattern or an increase in the rate or amount of

surface runoff that would result in on- or off-site flooding. No mitigation measures would be necessary.

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

f. Otherwise substantially degrade water quality?

Less Than Significant Impact [e. and f.]. As noted above, the Project would utilize the existing storm drainage system and would not alter the existing drainage pattern. The HSC drainage systems and the City's stormwater drainage infrastructure have adequate capacity to accommodate future runoff from the Project Site and no improvements to the existing storm drain system are known or planned. An increase in urban contaminants may be expected from the increase in parking facilities on Development Site C and possibly Development Site D. However, the Project would be required to comply with state and local regulations governing water quality standards and waste discharge requirements associated with construction and operation of the facilities associated with the Project. The Project would be served by engineered drainage systems that would connect to the existing storm drain system and would be designed to meet all applicable National Pollution Discharge Elimination Systems (NPDES) permit requirements.

Furthermore, as part of the Project, the City Standard Urban Stormwater Management Plan (SUSMP) requirements would be implemented. Under the SUSMP requirements, the Project would be designed to ensure that post-development peak storm water runoff discharge rates would not exceed the estimated pre-development rates such that there would be an increased potential for downstream runoff. The SUSMP requirements also include, but are not limited to, the following: minimizing stormwater pollutants of concern; providing storm drain system stenciling and signage; containing properly designed outdoor material storage areas; containing properly designed trash storage areas; and providing proof of ongoing BMP maintenance. The final design of these systems will be reviewed in accordance with applicable standards and the conditions of approval during the building permit process to ensure that no water quality standards or waste discharge requirements are violated. As such, the Project would result in less than significant impacts to water quality, and no mitigation measures would be necessary.

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

No Impact. The Project Site is not located within a 100-year flood plain[8] nor does the Project include any housing. As such, Project implementation would not place housing within a 100-year flood plain. Therefore, no impact would occur, and no mitigation measures are necessary.

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

No Impact. The Project Site is not located within a 100-year flood plain. Therefore, the proposed structure would not impede or redirect flood flows within a 100-year flood hazard area. No impact would occur with regard to flood flows, and no mitigation measures are necessary.

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

No Impact. The Project Site is not located within a 100-year flood plain nor within an inundation area associated with the failure of a levee or dam.[9] No impact would occur with regard to flood flows, and no mitigation measures are necessary.

j. Inundation by seiche, tsunami, or mudflow?

No Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of the sea floor associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity. The Project Site is relatively distant from the ocean, not in the vicinity of a reservoir, harbor, lake, or storage tank capable of creating a seiche and is not positioned downslope from an area of potential mudflow. Therefore, no impact would occur with regard to seiche, tsunami, or mudflow, and no mitigation measures are necessary.

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[8] *City of Los Angeles, Department of City Planning, Los Angeles Citywide General Plan Framework, Draft Environmental Impact Report, January 19, 1995, Figure FC-2.*

[9] *City of Los Angeles, Department of City Planning, Los Angeles Citywide General Plan Framework, Draft Environmental Impact Report, January 19, 1995, Figure GS-7.*

IX. LAND USE AND PLANNING. *Would the project:*

a. Physically divide an established community?

No Impact. The Project proposes construction and operation of multi-level educational and medical office facilities and associated parking facilities on Development Sites within the HSC that currently contain surface parking. Therefore, development of educational and medical-related facilities on these sites would be consistent with the existing uses found within the Campus, particularly existing adjacent buildings such as the Zilkha Neurogenetics Institute, and the HCC and HCC II buildings. As part of an established Campus of related land uses, the proposed buildings would not physically divide an established community, but rather would assist in infilling the established Campus with similar uses.

The proposed parking structure on Development Site C and possibly on Development Site D would provide parking spaces to support the Project. These sites are currently utilized as surface parking for the HSC and are surrounded by other institutional uses and other parking facilities. The development of multi-level parking facilities in place of these surface lots would not result in the physical separation of any established community as the proposed uses fit the context of the Development Sites. Therefore, no impacts would occur and no mitigation measures are necessary.

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

Potentially Significant Impact. Local and regional plans, policies, and regulations control development on and around the site. The Project Site is within the City of Los Angeles and therefore is subject to the City's land use plans, policies and regulations. This includes applicable sections of the City of Los Angeles General Plan, the Northeast Los Angeles Community Plan, and the City of Los Angeles Municipal Code. In addition, the Project Site is within the Adelante Eastside Redevelopment Project Plan area, as administered by the City of Los Angeles Community Redevelopment Agency (CRA). Furthermore, regional agencies including the Southern California Association of Governments (SCAG), the Metropolitan Transportation Authority (MTA), and the South Coast Air Quality Management District (SCAQMD), are also involved with planning and land use issues that affect the Project Site.

The Northeast Los Angeles Community Plan Map designates Development Sites A, B and D as General Commercial, while Development Site C is designated for Public Facilities. The proposed uses (i.e., educational, medical research and office buildings on Development Sites

A, B, and possibly D and a parking structure on Development Site C and possibly D) are consistent with these designations.

The City of Los Angeles Planning and Zoning Code (Chapter 1 of the Los Angeles Municipal Code--LAMC) regulates development through land use designations and development standards. Development Sites A and B are zoned C2-2 (Commercial). As detailed in Section 12.14 of the LAMC, the C2-2 commercial zone permits a wide variety of commercial uses, including medical laboratory and allows the provision of surface parking in support of commercial uses. Development Sites C and D are zoned PF-1 (Public Facilities) and [Q] C2-IVL, respectively. Thus the Project would be a permitted use under the existing zoning designations. There is no required minimum lot area or minimum front, side or rear yard for non-residential uses in the C2 zone.

Total floor area and height limitations are regulated by Section 12.21.1 of the LAMC. Development Sites A, B and D are located within Height District 2 for which the applicable height limitation is defined in terms of permitted floor area. Specifically, the total floor area in all buildings shall not exceed six times the buildable lot area. The Project proposes a maximum allowable square footage total for buildings within Development Sites A, B and D shall not exceed approximately 585,000 square feet, and heights of proposed buildings on Development Sites A, B and D shall not exceed 150, 100 and 140 feet, respectively. Development Site C is located in height district 1, which constrains the total floor area on a lot in a public facilities zone to three times the buildable area. However, parking is not considered to count towards the permitted floor area.

The LAMC also regulates the minimum number of parking spaces to be provided on a property based on land use and the number of units or floor area. Based on LAMC Section 12.21.A.4(g), this parking must be provided on the same lot as the proposed use or on a separate lot within 750 feet of the use. Development of parking facilities to support the new buildings in Development Sites A, B and possibly D as described above would be accommodated through construction of multi-level parking structure on Development Site C and possibly a second parking structure on Development Site D. As Development Site C is greater than 750 feet from Development Sites A and B, a variance from the distance requirement would be required.

The Adelante Eastside Redevelopment Plan encompasses approximately 2,200 acres of commercial and industrial properties in east Los Angeles. The principle goal of the Redevelopment Plan is to preserve the existing commercial and industrial economy of the community. To this end, the Project is generally consistent with the policies of the Adelante Eastside Redevelopment Plan as the Project preserves and enhances the HSC as a unique educational and commercial resource of the community. The Redevelopment Plan also contains specific policies regarding land use in the project area. The Project's relationship with these policies shall be evaluated in detail in the Environmental Impact Report.

Based on the preceding discussion, the Project is expected to be consistent with the applicable provisions of the LAMC. Notwithstanding, the Project's relationship with these policies, regulations and plans will be evaluated in further detail in an Environmental Impact Report. Additionally, air quality impacts and traffic impacts will also be analyzed in an EIR. These analyses will address the Project's relationship to the Congestion Management Plan and Air Quality Management Plan.

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

No Impact. The Project Site is not subject to any habitat conservation plan or natural community conservation plan. Therefore, no impact on such a plan would occur, and no mitigation measures are necessary. Habitat and natural communities are further discussed in Section IV. Biological Resources of this Initial Study.

X. MINERAL RESOURCES. *Would the project:*

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

No Impact. Development associated with the Project would occur on sites currently containing surface parking or vacant land that was previously developed. The Project Site is not located in an area containing significant mineral deposits, as designated by the City of Los Angeles.[10] Therefore, development associated with the Project would not change the availability of known or potential mineral resources. No impact would occur, and no mitigation measures are necessary.

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

No Impact. As previously noted, the Project Site is in a developed condition in an urbanized setting. The applicable local land use plans do not delineate that the site or the area contain significant mineral deposits or are designated as a locally important mineral resource site.[11] Therefore, the proposed Project would not result in the loss of availability of a locally

[10] *City of Los Angeles, Department of City Planning, Los Angeles Citywide General Plan Framework, Draft Environmental Impact Report, January 19, 1995, Figure GS-1.*

[11] *Northeast Los Angeles Community Plan, Part of the General Plan, City of Los Angeles, Department of City Planning.*

important mineral resource recovery site delineated on a land use plan. No impact would occur, and no mitigation measures are necessary.

XI. NOISE. *Would the project:*

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

Potentially Significant Impact. The Los Angeles Municipal Code (LAMC) establishes regulations regarding allowable increases in noise levels as a result of Project implementation, both in terms of Project operations and construction activities. In addition, the City, in its General Plan Noise Element, has established noise guidelines that are used for planning purposes. These guidelines are based in part on the community noise compatibility guidelines established by the State Department of Health Services and are intended for use in assessing the compatibility of various land use types with a range of noise levels. The Project would generate noise as a result of construction activity, traffic generated by the Project and on-site stationary noise sources. The relationship of Project generated noise and the established City standards shall be analyzed and discussed in an Environmental Impact Report.

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

Less Than Significant Impact. Operation of the Project would be limited to educational, medical research, treatment, office and related uses that are not sources of excessive groundborne noise or vibration. Groundborne vibrations could be generated by the operation of certain construction equipment such as pavement breakers or pile-drivers. The Project would be constructed using typical construction techniques, including the use of some equipment that causes groundborne vibration. Groundborne vibration attenuates rapidly with distance from the source such that impacts would only be experienced within short distances (i.e.: 500 feet or less) of the source. The land uses, buildings and people within short distances of where vibration causing construction equipment might be used for the Project includes the existing HSC. As such, the Applicant can be expected to manage construction of the Project so as not to excessively disturb its own adjacent operations, employees and tenants. Therefore, it is anticipated that construction would not cause excessive groundborne noise or vibration. As such, potential impacts associated with the Project would be less than significant, and no mitigation measures are necessary.

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

Potentially Significant Impact. The Project is located within the existing institutional setting of the HSC and the Los Angeles County/University of Southern California Medical Center. The existing noise environment in the Project area is characterized primarily by traffic noise from nearby roadways. The design and operation of the proposed facilities would not include significant on-site stationary noise sources. However, the Project could cause significant permanent increases in ambient noise levels due to Project-related traffic. Therefore, the impacts of Project-related traffic on ambient noise levels shall be analyzed and discussed in an Environmental Impact Report.

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

Potentially Significant Impact. The Project is located within the existing institutional setting of the HSC and the Los Angeles County/University of Southern California Medical Center. The existing noise environment in the Project area is characterized primarily by traffic noise from nearby roadways. However, the Project could cause significant temporary or periodic increases in ambient noise levels due to equipment use in the construction process. The significance of the construction noise impacts will be analyzed and discussed in the Environmental Impact Report.

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

No Impact. The Project Site is not within an airport land use plan or within two miles of a public airport or public use airport. Therefore, the Project would not result in any impact, and no mitigation measures are necessary.

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

No Impact. The Project Site is not within the vicinity of a private airstrip. Therefore, the Project would not result in any impact, and no mitigation measures are necessary.

XII. POPULATION AND HOUSING. *Would the project:*

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

Less Than Significant Impact. Development associated with the Project would occur within an urbanized area with existing infrastructure and roadways, and would not result in the extension of roads or major infrastructure. The Southern California Association of Governments (SCAG) has forecasted between years 2005 and 2010, employment and population in the City of Los Angeles will increase by over 67,000 jobs and over 155,000 people, respectively. While new employment opportunities would be created by the Project, most of the expected employees would be drawn from the existing labor force in the region and would not require the need to relocate or place a demand for housing in the area. It is possible that some of the future employees would be new residents of the area; however, it is unlikely that this growth would be substantial in the context of the growth forecasted for the City of Los Angeles between 2005 and 2010. Thus, any impacts on area population growth would be less than significant, and no mitigation measures are necessary.

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

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

No Impact [b-c]. Development associated with the Project would occur on sites that do not contain residential uses and none would be provided as part of the proposed Project. Implementation of the proposed Project would not displace existing housing, nor would it displace numbers of people, necessitating the construction of replacement housing elsewhere. No impacts would occur and no mitigation measures are required.

XIII. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

a. Fire protection?

Less Than Significant Impact. The Project Site is not located in a high fire hazard area, as designated by the City of Los Angeles. The Los Angeles Fire Department (LAFD) provides fire protection to the Project Site. The nearest LAFD stations are Station 1 at 2230 Pasadena Avenue and Station 2 at 1962 East Cesar Chavez Avenue, both approximately one mile from the Project Site. Both stations feature two engine units and one rescue unit.[12] The Los Angeles Municipal Code (LAMC) Section 57.09.07 establishes a standard for maximum response distance from a LAFD Station based on land use. The maximum response distance from a station housing an engine company for industrial and commercial uses is one mile. The distance from either Station 1 or Station 2 to the Project Site is approximately one mile and therefore the Project Site is within the LAMC response distance standard. Notwithstanding, educational, medical research and office buildings as well as the parking structure associated with the Project would be constructed to include fire safety features such as sprinklers in accordance with LAMC requirements to ensure adequate fire protection. Furthermore, plan check procedures conducted by the City of Los Angeles during the building permit process would identify additional fire safety features in accordance with applicable standards and would identify any needs for additional measures to assure the adequate provision of fire protection services to the Project. As such, the Project would result in a less than significant impact related to the provision of fire protection, and no mitigation measures are necessary.

b. Police protection?

Less Than Significant Impact. The City of Los Angeles Police Department (LAPD) provides police protection to the Project Site and surrounding area. The Project Site is within the Hollenbeck Community Policing area, which encompasses the communities of El Sereno, Lincoln Heights and Boyle Heights. The Hollenbeck Community Police Station is located at 2111 East 1st Street, approximately 1.5 miles south of the Project Site. Project buildings would be designed with security features, such as controlled access and illumination of public and semi-public spaces to minimize opportunities for criminal activity, thereby reducing the demands placed upon police services. In addition, USC maintains a Department of Public Safety to address safety and security concerns on its campuses. These existing services would be extended

[12] *http://www.lafd.org/vehicles.htm*

to include the proposed Project. Based on the above, any Project impacts on police protection services are expected to be less than significant, and no mitigation measures are necessary.

c. Schools?

Less Than Significant Impact. The proposed educational and medical research and office buildings on Development Sites A, B and possibly D and the parking structure on Development Site C and also possibly on Development Site D are non-residential in nature and therefore, would not directly generate school-age children. Though it is expected that most of the new employees would be drawn from the existing labor force in the area, the creation of new employment opportunities might induce new residents to the area. However, any potential new employees are expected to be distributed among the region's several municipalities and school districts and are not expected to contribute a significant number of children to any one school. In addition, the Project would be subject to the development fees of the Los Angeles Unified School District. Senate Bill 50 (SB 50), enacted in 1998, states that the payment of a fee, charge or other levy pursuant to the provisions of Section 17620 of the Education Code is deemed to provide full and complete mitigation for any impact to school facilities. As such, Project development would result in a less than significant impact on schools, and no mitigation measures are necessary.

d. Parks?

Less Than Significant Impact. There are several park and public recreational facilities within the surrounding area, most notably Hazard Park and Lincoln Park, located southeast and north of the Project Site, respectively. Lincoln Park is located north of Valley Boulevard. The proposed educational, medical research and medical office buildings on Development Sites A, B and possibly D, and the parking structure on Development Site C and also possibly on Development Site D are non-residential in nature. Employees of these buildings are not expected to make significant use of the nearby parks; as the majority of the recreational needs of Project-related employees would be met by park facilities near their place of residence or by regional park facilities. The residences of potential new employees are expected to be distributed among several municipalities and are not expected to result in a significant increase in demand for parks in any specific city, community or neighborhood. Therefore, the Project's impacts on parks would be less than significant, and no mitigation measures are necessary.

e. Other governmental services (including roads)?

Less Than Significant Impact. Other public facilities that would serve the Project include libraries, roads and transit, utility systems such as water and sewer infrastructure, as well as other general public facilities. The Project is part of an educational and medical campus. The Project is non-residential in nature and most of the expected employees would be drawn from the

existing labor force in the region. As such, the Project would not directly generate any other new demand for public facilities. Based on the above, impacts to other governmental services would be less than significant, and no mitigation measures are necessary.

XIV. RECREATION.

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

Less Than Significant Impact. There are several park and public recreational facilities within the surrounding area, most notably Hazard Park and Lincoln Park. The Project is non-residential in nature. Employees of the Project are not expected to make significant use of the nearby parks, however the majority of the recreational needs of Project-related employees would be met by park facilities near their place of residence or by regional park facilities. The residences of potential new employees are expected to be distributed among several municipalities and are not expected to result in a significant increase in demand for parks in any specific city, community or neighborhood. Therefore, potential impacts to parks or other recreational facilities resulting from the Project would be less than significant, and no mitigation measures are necessary.

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

Less Than Significant Impact. The Project would include some exterior space devoted to landscaping. Otherwise, the Project does not propose construction of recreational facilities and, as noted above, the Project is not expected to result in an increased demand for recreation that would require the construction or expansion of recreational facilities. As such, the Project would result in less than significant recreation-related impacts, and no mitigation measures are necessary.

XV. TRANSPORTATION/CIRCULATION. *Would the project:*

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

Potentially Significant Impact. Construction and operation of the proposed educational and medical research and office facilities would result in an increase in traffic. Parking for the Project would primarily be provided at a proposed parking structure to be located on Development Site C and possibly a parking structure on Development Site D.. The Project would feature up to 585,000 square feet of University and/or medical-related uses. Therefore, the proposed Project could result in an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to ratio capacity on roads, or congestion at intersections). This issue shall be further evaluated in the Environmental Impact Report and feasible mitigation measures shall be proposed, as necessary.

b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Potentially Significant Impact. The Los Angeles County Metropolitan Transportation Authority (MTA) administers the Congestion Management Plan (CMP), a state-mandated program designed to address the impact urban congestion has on local communities and the region as a whole. The CMP provides an analytical basis for the transportation decisions contained in the State Transportation Improvement Project (STIP). The CMP guidelines require evaluation of all designated CMP roadway intersections where a project could add 50 or more trips during either peak hour; and all freeway segments where a project could add 150 or more trips in each direction during the peak hours. The increase in traffic resulting from the Project may result in significant impacts to the CMP network. This issue shall be evaluated in further detail in the Environmental Impact Report and mitigation measures shall be proposed where feasible.

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

No Impact. The Project does not propose any uses expected to change air traffic patterns. The Project Site is not located within an airport land use plan nor within two miles of an airport. No impact is expected, and no mitigation measures are necessary.

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

Potentially Significant Impacts. Development of educational, medical research and office buildings and a parking structure on the Project Site could result in increased hazards as a result of proposed site design of access points and the layout of the proposed structure. This issue shall be evaluated in further detail in the Environmental Impact Report and feasible mitigation measures shall be proposed, as necessary.

e. Result in inadequate emergency access?

Less Than Significant Impact. Implementation of the Project would not result in the closure of any street, particularly those designated as an evacuation route in an adopted emergency response or evacuation plan. To the extent feasible, construction activities and staging areas would not physically block any streets or impair access to and around the HSC or any adjacent properties. As such, the Project would have less than significant impacts on emergency access, and no mitigation measures are necessary.

f. Result in inadequate parking capacity?

Potentially Significant Impact. The Project proposes construction of parking facilities on Development Site C and possibly Development Site D to serve the medical research and office facilities proposed on Development Sites A, B and possibly D. The proposed parking would also include an adequate number of spaces to address displacement of the existing surface parking spaces on the Development Sites. Adequacy of the Project's proposed amount of parking shall be evaluated in further detail in the Environmental Impact Report and feasible mitigation measures shall be proposed, as necessary.

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

Potentially Significant Impact. USC operates shuttles within the HSC, to and from the University Park Campus and to and from other area destinations such as Union Station. MTA also operates bus routes that serve the HSC, including Route 254 along Biggy Street and Alcazar Street. The relationship of the Project to existing alternative transportation policies shall be evaluated in further detail in the Environmental Impact Report and feasible mitigation measures shall be proposed, as necessary.

XVI. UTILITIES. *Would the project:*

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

Potentially Significant Impact. Wastewater treatment services are provided to the HSC by the City of Los Angeles Department of Public Works. The site is within the Hyperion Treatment Plant service area, and not located within a designated Sewer Capacity Threshold Study Area.[13] The Hyperion Treatment Plant has been designed to treat 450 million gallons per day (mgd). The annual increase in wastewater flow to the Hyperion Treatment Plant is limited by City Ordinance No. 166,060 to five (5) mgd. Although the Project would not substantially contribute to the overall flow of wastewater to the HTP, it would generate an increase in the volume of wastewater to be treated. In order to assess whether this increase in wastewater flow would exceed wastewater treatment requirements, this issue shall be evaluated in further detail in the Environmental Impact Report and feasible mitigation measures shall be proposed, as necessary.

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

Potentially Significant Impact. Water service would be provided by the City of Los Angeles Department of Water & Power; wastewater treatment services would be provided by the City of Los Angeles Department of Public Works. The Project would result in an increase in water consumption and wastewater production; however, due to the size of the proposed development, the Project would not warrant the construction or expansion of existing City water or wastewater treatment facilities. Furthermore, implementation of water conservation measures such as those required by Titles 20 and 24 of the California Administrative Code would reduce wastewater flows. Therefore, impacts to City of Los Angeles water and wastewater facilities would be less than significant and no mitigation measures are necessary.

The construction of the proposed Project would require the provision of necessary on- and off-site sewer and water pipe connections to adequately link the development to the existing City water and wastewater systems. The design of these connections would be developed by a registered engineer and approved by the Los Angeles Bureau of Engineering and, where construction would require excavation in a right of way, LADOT. The ability of the local water and wastewater conveyance systems to accommodate the Project will be evaluated in further detail

[13] *Los Angeles CEQA Thresholds Guide, Exhibit K2-1 and K.2-2.*

in the Environmental Impact Report and feasible mitigation measures shall be proposed, as necessary.

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

Less Than Significant Impact. The Project would feature designed drainage systems, which would connect to the existing stormwater drainage infrastructure, to appropriately accommodate, treat and convey anticipated stormwater flows in accordance with SUSMP and LARWQCB requirements. The construction of these drainage features is not expected to cause any significant environmental effects, and no mitigation measures are necessary. Please refer to Section VIII, Hydrology and Water Quality, for further discussion of drainage issues.

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

Less Than Significant Impact. Water supply would be provided to the Project Site by the City of Los Angeles Department of Water and Power (DWP). Chapter XII of the Los Angeles Municipal Code (LAMC) comprises the City's Emergency Water Conservation Plan, as amended, and stipulates conservation measures pertaining to water closets, showers, landscaping, maintenance activities, and other uses. At the State level, Title 24 of the California Administrative Code contains the California Building Standards, including the California Plumbing Code (Part 5), which promotes water conservation. In addition, Title 20 addresses Public Utilities and Energy and includes appliance efficiency standards that promote conservation. Various sections of the Health and Safety Code also regulate water use.

New state legislation, Senate Bill (SB) 221 and SB 610, addressing water supply were signed into law on October 9, 2001 and became effective January 1, 2002. SB 221 (Kuehl), which relates land use development to water supplies, requires written verification from a water provider that sufficient water supply is available to serve a proposed residential subdivision or that the local agency make a specified finding that sufficient water supplies are or will be available prior to completion of a project. SB 610 (Costa), which also relates land use development to water supplies, requires that at the time a city determines that an EIR or negative declaration is required, a water supply assessment be prepared by the appropriate water agencies.

As the Project is non residential in nature, SB 221 does not apply. However, the Project would be subject to SB 610. Based on the adequacy of water supply described in DWP's most recent Urban Water Management Plan, impacts are not expected to be significant. Nonetheless, the adequacy of the water supply to meet the needs of the Project shall be assessed in the EIR.

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

Potentially Significant Impacts. Wastewater from the Project would be treated at the Hyperion Treatment Plant (HTP) located in Playa Del Rey. A major expansion and upgrade of the HTP has been completed which increased the capacity to 450 million gallons per day.[14] The expanded capacities of this and other treatment plants serving the Los Angeles area are expected to be sufficient to sustain wastewater treatment needs to the year 2010.[15] Although the Project would not substantially contribute to the overall flow of wastewater to the HTP, an increase in demand for treatment facilities may occur. Therefore, this issue shall be further documented and analyzed in an Environmental Impact Report.

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

Potentially Significant Impact. Solid waste management services in the City of Los Angeles are provided by various public agencies and private companies. The current practices administered by the Applicant for the HSC for solid waste disposal would be continued. The Applicant currently contracts with private firms for the collection and disposal of solid waste. Most site-generated solid waste would be disposed of at one of several Class III landfills located within Los Angeles County. Class III landfills accept all types of non-hazardous solid waste. Due to the nature of the use, some medical hazardous waste would be generated by the Project. To address the disposal of these wastes, the Project would implement plans and procedures in accordance with all applicable federal, state and local laws, regulations and standards. The existing medical facilities that are part of the HSC already have such plans and procedures in place. All hazardous waste, including biohazardous and biomedical wastes, generated on the Project site would be properly transported and disposed of off-site by a licensed subcontractor.

Los Angeles County is engaged in an ongoing evaluation of landfill needs and capacity through the Los Angeles County Solid Waste Management Plan. Ultimate landfill capacity will be determined by several factors including: (1) the expiration of various landfill permits (e.g., Land Use Permits, Waste Discharge Requirements Permits, Solid Waste Facilities Permits, and air quality permits); (2) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary; and (3) operational constraints. Several actions have occurred in recent years that have also altered projected capacity. In 1999 the City of Los Angeles approved the reopening and expansion of Sunshine Canyon Landfill. This

[14] *City of Los Angeles, Bureau of Engineering, Internet site.*

[15] *City of Los Angeles, Citywide General Plan Framework, December 1996.*

expansion is anticipated to provide disposal capacity for approximately 26 years and will increase the solid waste disposal capacity in Los Angeles County. In addition, an application is currently being processed for the extension of the Puente Hills Landfill, and construction of a Materials Recovery and Rail Loading Facility at that site is underway. Furthermore, in August 2000, the Los Angeles County Sanitation Districts purchased Eagle Mountain Landfill, located in Riverside County, and Mesquite Landfill, located in Imperial County. Both facilities are waste-by-rail landfills that are fully permitted but not yet constructed. The Eagle Mountain Landfill would accept 20,000 tons per day (tpd) of waste and have a total capacity of approximately 708 million tons, with a projected life of approximately 117 years. The Mesquite Landfill will accept 20,000 tpd of waste and have a total capacity of approximately 600 million tons, with a projected life of approximately 100 years.

Furthermore, aggressive waste reduction and diversion programs countywide have reduced disposal levels. Examples of such efforts include resource conservation per the provisions of the California Integrated Waste Management Act of 1989 (AB 939) and the diversion of waste to transformation (waste-to-energy) facilities or to intermodal facilities that transport the waste by rail to facilities outside of the County. According to the City of Los Angeles Bureau of Sanitation, through implementation of AB 939 requirements, the City achieved a waste diversion of 58.8 percent in 2000.[16] The City has adopted the goal of achieving 70 percent diversion by 2020.

Notwithstanding the preceding, questions remain regarding available capacity to accommodate the solid waste generated by the Project, as well as cumulative development, within existing landfills in Los Angeles County. Therefore, this issue shall be further documented and analyzed in an Environmental Impact Report.

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

Less Than Significant Impact. Solid waste management is guided by the California Integrated Waste Management Act of 1989 (the "Act"), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. The Act requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE). The City of Los Angeles has also prepared a Solid Waste Management Policy Plan, adopted by the City Council in 1994. The Project would operate in accordance with the City's Solid Waste Management Policy Plan and Framework Element of the General Plan, in addition to applicable Federal and State regulations associated with solid waste. Since the Project would

[16] *City of Los Angeles Bureau of Sanitation, Year 2000 AB 939 Report, available at http://www.lacity.org/SAN/srcrd/ab939y2000/ab939y2000.pdf, July 31, 2002.*

comply with Federal, State, and local statutes and regulations related to solid waste, no impact would be expected, and no mitigation measures are necessary.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE.

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

Potentially Significant Impact. Based on the analysis contained in this Initial Study, aspects of the Project have the potential for significant impacts. An Environmental Impact Report will be prepared to analyze and document these potentially significant impacts. Though these impacts are not expected to reduce or eliminate any plant or animal species, or destroy prehistoric records of the past, they do have the potential to degrade the environment. Therefore, whether the Project has the potential to degrade the quality of the environment will be addressed in the Environmental Impact Report.

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

Potentially Significant Impact. The potential for cumulative impacts occurs when the independent impacts of the Project are combined with the impacts of related projects in proximity to the Project Site such that impacts occur that are greater than the impacts of the Project alone.

In evaluating the potential for cumulative impacts, environmental issues can be grouped together, to a certain extent, based on the nature of the potential impacts as analyzed in this Initial Study. Some aspects of the Project have been identified as having the potential for significant environmental impacts and will be analyzed and documented in an EIR. Therefore, the potential for cumulative impacts related to Aesthetics, Air Quality, Land Use, Noise, Traffic, and Utilities, resulting from the Project in conjunction with related projects cannot be fully determined in this study and must also be analyzed and documented in the EIR.

The potential for significant cumulative impacts from the impacts of other environmental issues that are not to be analyzed and documented in the EIR can be assessed. Cumulative

impacts are concluded to be less than significant where it has been determined that the Project would have no impact. In addition, the Project and the related projects are expected to comply with applicable federal, state and City regulations that would preclude significant cumulative impacts with regard to many aspects of geology and soils, hazards and hazardous materials, and hydrology and water quality. Any increase in area population and employment resulting from the Project and related projects are expected to be within City and SCAG growth forecasts; therefore, less than significant cumulative impacts to population or housing are expected. Similarly, the new demands on public services such as fire protection, police protection, schools and parks resulting from the Project and the related projects would be less than significant as the service providers monitor growth and adjust their resources accordingly, subject to City Council support. Therefore, only those aspects of the Project to be analyzed and documented in the EIR are concluded to have the potential for significant cumulative impacts.

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

Potentially Significant Impact. Based on the analysis provided above, some aspects of the proposed Project have the potential to have environmental effects that cause direct or indirect substantial adverse effects on human beings. These aspects of the Project shall be analyzed in an EIR to determine and document the extent of potential impacts and the feasible mitigation of these impacts.

A-2 Notice of Preparation

DEPARTMENT OF
CITY PLANNING
200 N. SPRING STREET, ROOM 525
LOS ANGELES, CA 90012-4801

CITY PLANNING COMMISSION

MABEL CHANG
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DAVID L. BURG
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October 20, 2004

NOTICE OF PREPARATION AND PUBLIC SCOPING MEETING ENVIRONMENTAL IMPACT REPORT

EAF NO.: ENV-2004-1950-EIR
PROJECT NAME: USC Health Sciences Campus Project
PROJECT LOCATION/ADDRESS: USC Health Sciences Campus/1510-1520 San Pablo Street
COMMUNITY PLAN AREA: Northeast Los Angeles
COUNCIL DISTRICT: 14
DUE DATE FOR PUBLIC COMMENTS: November 19, 2004

PROJECT DESCRIPTION: The Project is proposed to occur on seven development sites within the USC Health Sciences Campus (HSC). The seven development sites are identified as Development Sites A through G. The Project consists of the development of between 585,000 and 765,000 square feet of academic and medical research facilities as well as medical clinic facilities. The development sites currently contain surface parking lots and/or are underdeveloped. Parking accommodations to support the proposed academic and medical-related uses are also included as part of the Project. The seven development sites comprise approximately 22 acres within the existing HSC. Actions requested by the applicant include: a General Plan Amendment from Public Facilities to General Commercial for Development Site C; a Zone Change from PF to C2 for Development Site C; a Zone Change for the Development Sites to establish [Q] conditions; a Height District Change from 2 to 3 for Development Site B; a Height District Change from 1VL to 2 for Development Site D; a Height District Change from 1 to 2 for Development Site F; a Development Agreement; a Variance from the distance requirement for parking to be provided within 750 feet of the proposed use; and possible subdivision actions.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Aesthetics, Air Quality, Land Use/Planning, Noise, Transportation/Traffic, Utilities/Service Systems, and Mandatory Findings of Significance.

PUBLIC SCOPING MEETING LOCATION, DATE AND TIME: The public scoping meeting will be held on Thursday, November 4, 2004, from 6:00 p.m. to 8:00 p.m. in the Herkoltz Seminar Room of the Zilka Neurogentic Institute within the USC Health Sciences Campus. The scoping meeting will provide information regarding the proposed Project's environmental implications and the scope of analysis to be contained in the EIR. The City Planning Department encourages all interested individuals and organizations to attend this meeting.

Date:	**Thursday, November 4, 2004**
Time:	**6:00 p.m. to 8:00 p.m.**
Location:	**USC Health Sciences Campus** **Zilka Neurogentic Institute** **Herkoltz Seminar Room** **1501 San Pablo Street** **Los Angeles, CA 90033** (See Attached Map)

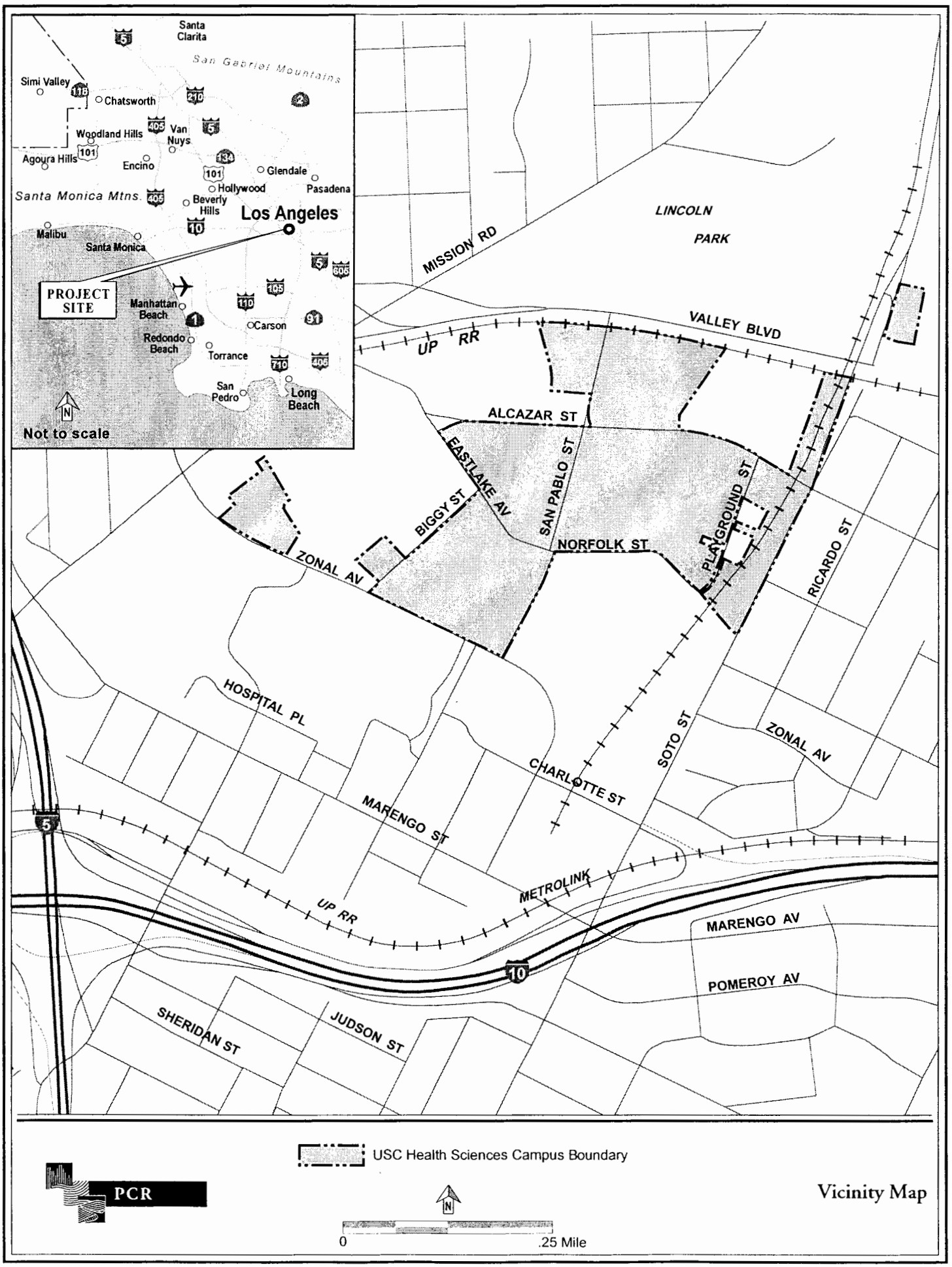
The enclosed materials reflect the scope of the proposed Project, which is located in an area of interest to you and/or the organization you represent. An Environmental Impact Report (EIR) will be prepared. The Environmental Review Section welcomes all comments regarding potential environmental impacts of the proposed Project. All comments will be considered in the preparation of the EIR. **Written comments** must be submitted to this office by **November 19, 2004**.

Please direct your comments to:

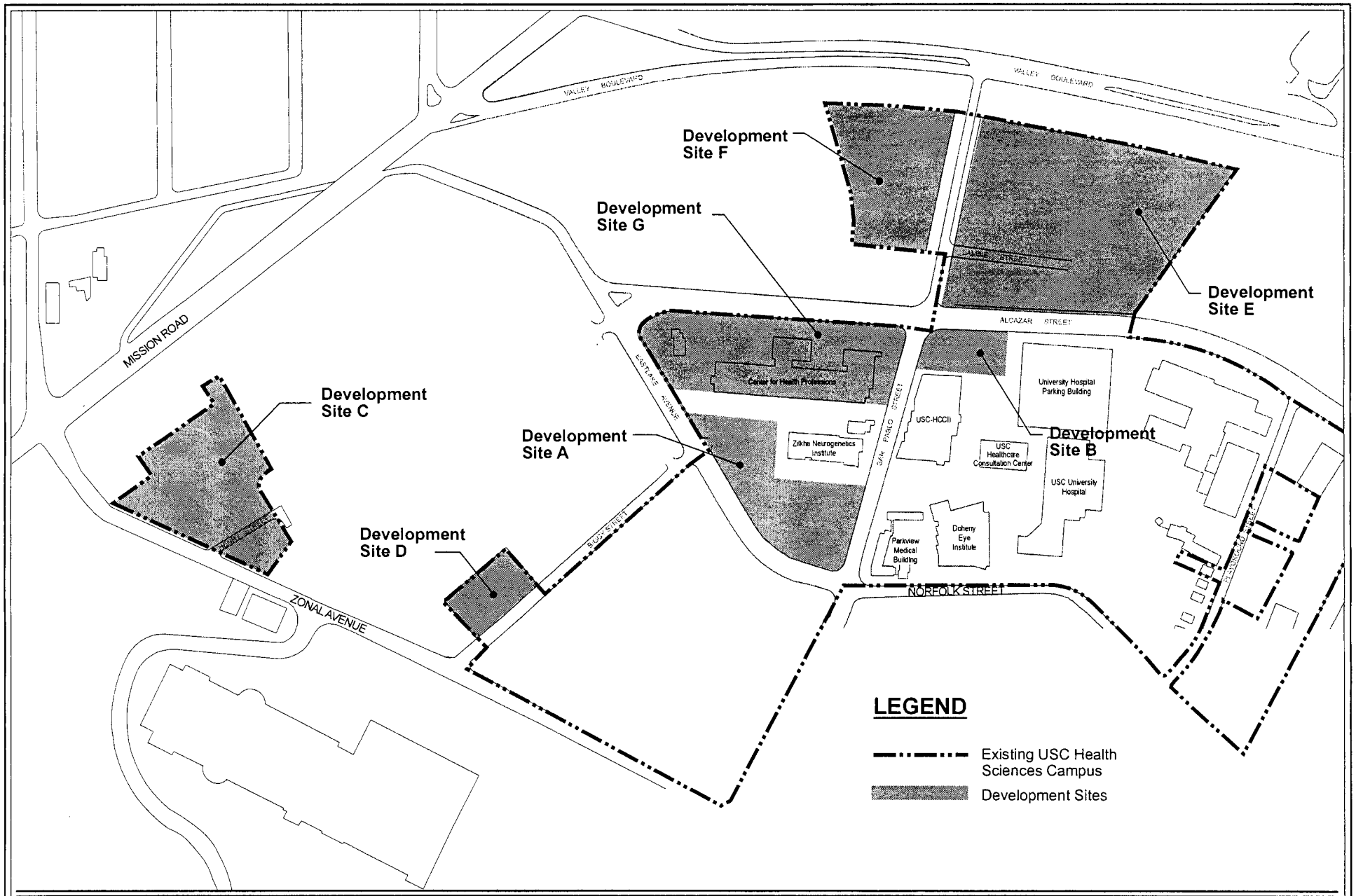
Jimmy Liao, City Planner/Project Coordinator
Environmental Review Section
Department of City Planning
200 N. Spring Street, Room 750
Los Angeles, CA 90012

Con Howe
Director of Planning

Emily Gabel-Luddy
Associate Zoning Administrator
Division Of Land/Environmental Review



Vicinity Map

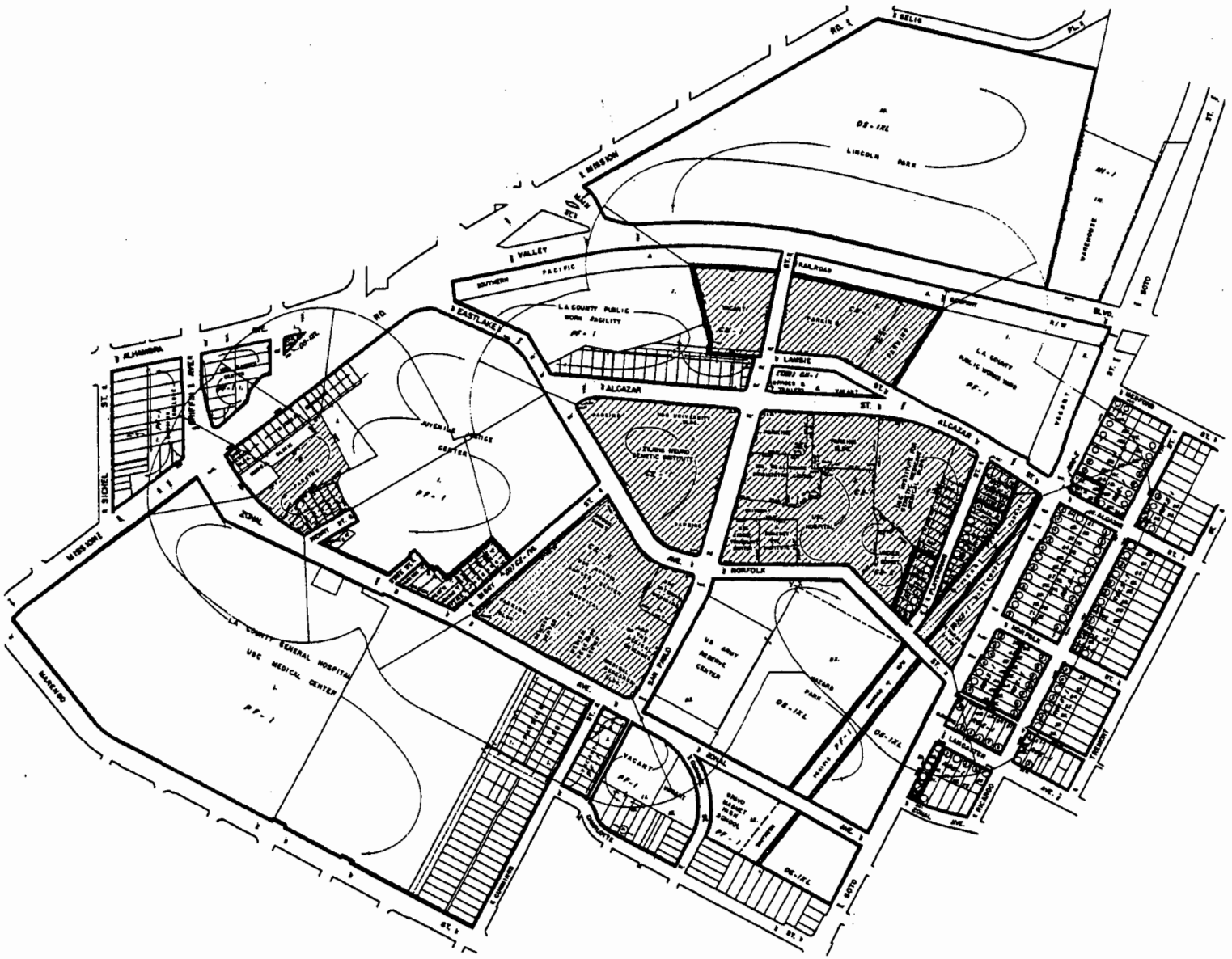


PCR

0 125 250 500 Feet

Source: University of Southern California

Proposed Development Sites



PCR

Scale Not Provided

Radius Map

Source: GC Mapping Services

A-3 NOP Comment Letters

Arnold
Schwarzenegger
Governor

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Jan Boel
Acting Director

Notice of Preparation

October 21, 2004

To: Reviewing Agencies

Re: USC Health Sciences Campus Project
SCH# 2004101084

Attached for your review and comment is the Notice of Preparation (NOP) for the USC Health Sciences Campus Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Jimmy Liao
City of Los Angeles
200 N. Spring Street, Room 750
Los Angeles, CA 90012

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2004101084
Project Title USC Health Sciences Campus Project
Lead Agency Los Angeles, City of

Type NOP Notice of Preparation

Description The project is proposed to occur on seven development sites within the USC Health Science Campus (HSC). The seven development sites are identified as Development Sites A through G. The project consists of the development of between 585,000 and 765,000 SF of academic and medical research facilities as well as medical clinic facilities. The development sites currently contain surface parking lots and/or are underdeveloped. Parking accommodations to support the proposed academic and medical-related uses are also included as part of the project.

Lead Agency Contact

Name Jimmy Liao
Agency City of Los Angeles
Phone (213) 978-1300 **Fax**
email
Address 200 N. Spring Street, Room 750
City Los Angeles **State** CA **Zip** 90012

Project Location

County Los Angeles
City Los Angeles, City of
Region
Cross Streets Soto Street / UPRR / Zonal Avenue / Norfolk Street
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-10, I-5
Airports
Railways UPRR
Waterways
Schools
Land Use

Project Issues Aesthetic/Visual; Air Quality; Landuse; Noise; Other Issues; Traffic/Circulation

Reviewing Agencies Resources Agency; Regional Water Quality Control Board, Region 4; Department of Parks and Recreation; Native American Heritage Commission; Department of Health Services; Department of Fish and Game, Region 5; Department of Water Resources; California Highway Patrol; Caltrans, District 7; Air Resources Board, Major Industrial Projects

Date Received 10/21/2004 **Start of Review** 10/21/2004 **End of Review** 11/19/2004

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

County: Los Angeles SCH# [illegible]

Resources Agency

- [x] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  Suzi Betzler
- [ ] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Gerald R. Zimmerman
- [ ] **Dept. of Conservation**
  Roseanne Taylor
- [ ] **California Energy Commission**
  Environmental Office
- [ ] **Dept. of Forestry & Fire Protection**
  Allen Robertson
- [ ] **Office of Historic Preservation**
  Hans Kreutzberg
- [x] **Dept of Parks & Recreation**
  B. Noah Tilghman
  Environmental Stewardship Section
- [ ] **Reclamation Board**
  DeeDee Jones
- [ ] **Santa Monica Mountains Conservancy**
  Paul Edelman
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- [x] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

Fish and Game

- [ ] **Dept. of Fish & Game**
  Scott Flint
  Environmental Services Division
- [ ] **Dept. of Fish & Game 1**
  Donald Koch
  Region 1
- [ ] Dept. of Fish & Game 2
- [ ] **Dept. of Fish & Game 3**
  Robert Floerke
  Region 3
- [ ] **Dept. of Fish & Game 4**
  William Laudermilk
  Region 4
- [x] **Dept. of Fish & Game 5**
  Don Chadwick
  Region 5, Habitat Conservation Program
- [ ] **Dept. of Fish & Game 6**
  Gabrina Gatchel
  Region 6, Habitat Conservation Program
- [ ] **Dept. of Fish & Game 6 VM**
  Tammy Allen
  Region 6, Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Game M**
  George Isaac
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Steve Shaffer
  Dept. of Food and Agriculture
- [ ] **Dept. of General Services**
  Robert Sleppy
  Environmental Services Section
- [x] **Dept. of Health Services**
  Wayne Hubbard
  Dept. of Health/Drinking Water

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Debby Eddy
- [ ] **Office of Emergency Services**
  John Rowden, Manager
- [ ] **Governor's Office of Planning & Research**
  State Clearinghouse

- [x] Native American Heritage Comm.

- [ ] **Public Utilities Commission**
  Ken Lewis
- [ ] **State Lands Commission**
  Jean Sarino
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Business, Trans & Housing

- [ ] **Caltrans - Division of Aeronautics**
  Sandy Hesnard
- [ ] **Caltrans - Planning**
  Terri Pencovic
- [x] **California Highway Patrol**
  John Olejnik
  Office of Special Projects
- [ ] **Housing & Community Development**
  Cathy Creswell
  Housing Policy Division

Dept. of Transportation

- [ ] **Dept. of Transportation 1**
  Mike Eagan
  District 1
- [ ] **Dept. of Transportation 2**
  Don Anderson
  District 2
- [ ] **Dept. of Transportation 3**
  Jeff Pulverman
  District 3
- [ ] **Dept. of Transportation 4**
  Tim Sable
  District 4
- [ ] **Dept. of Transportation 5**
  David Murray
  District 5
- [ ] **Dept. of Transportation 6**
  Marc Birnbaum
  District 6
- [x] **Dept. of Transportation 7**
  Cheryl J. Powell
  District 7
- [ ] **Dept. of Transportation 8**
  John Pagano
  District 8
- [ ] **Dept. of Transportation 9**
  Gayle Rosander
  District 9
- [ ] **Dept. of Transportation 10**
  Tom Dumas
  District 10
- [ ] **Dept. of Transportation 11**
  Mario Orso
  District 11
- [ ] **Dept. of Transportation 12**
  Bob Joseph
  District 12

Cal EPA

Air Resources Board

- [ ] Airport Projects
  Jim Lerner
- [ ] Transportation Projects
  Kurt Karperos
- [x] Industrial Projects
  Mike Tollstrup

- [ ] **California Integrated Waste Management Board**
  Sue O'Leary
- [ ] **State Water Resources Control Board**
  Jim Hockenberry
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resources Control Board**
  Steven Herrera
  Division of Water Rights
- [ ] **Dept. of Toxic Substances Control**
  CEQA Tracking Center

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [x] **RWQCB 4**
  Jonathan Bishop
  Los Angeles Region (4)
- [ ] **RWQCB 5S**
  Central Valley Region (5)
  - [ ] **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
  - [ ] **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** _____

Last Updated on 05/21/04

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
120 SO. SPRING ST.
LOS ANGELES, CA 90012
PHONE: (213) 897-3747
FAX: (213) 897-1337

Flex your power!
Be energy efficient!

IGR/CEQA No. 041046AL, NOP
USC Health Sciences Campus Project
Vic. City Wide, LA-05/PM 18.78, LA-10/PM 19.07
SCH # 2004101084

October 27, 2004

Mr. Jimmy Liao
City of Los Angeles
200 N. Spring Street, Room 750
Los Angeles, CA 90012

Dear Mr. Liao:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project.

To assist us in our efforts to evaluate the impacts of this project on State transportation facilities, a traffic study in advance of the DEIR should be prepared. We wish to refer the project's traffic consultant to our traffic study guideline Website:

http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf

and we list here some elements of what we generally are expecting in the traffic study:

1. Presentations of assumptions and methods used to develop trip generation, trip distribution, choice of travel mode, and assignments of trips to State Route 10 and 05.

2. Consistency of project travel modeling with other regional and local modeling forecasts and with travel data. The IGR/CEQA office may use indices to check results. Differences or inconsistencies must be thoroughly explained.

3. Analysis of ADT, AM and PM peak-hour volumes for both the existing and future conditions in the affected area. This should include freeways, interchanges, and intersections, on/off ramps, and all HOV facilities. Interchange Level of Service should be specified (HCM2000 method requested). Utilization of transit lines and vehicles, and of all facilities, should be realistically estimated. Future conditions would include build-out of all projects (see next item) and any plan-horizon years.

4. Inclusion of all appropriate traffic volumes. Analysis should include traffic from the project, cumulative traffic generated from all specific approved developments in the area, and traffic growth other than from the project and developments. That is, include: existing + project + other projects + other growth.

5. Discussion of mitigation measures appropriate to alleviate anticipated traffic impacts.

These mitigation discussions should include, but not be limited to, the following:

- Description of Transportation Infrastructure Improvements
- **Financial Costs, Funding Sources and Financing**
- Sequence and Scheduling Considerations
- Implementation Responsibilities, Controls, and Monitoring

Any mitigation involving transit, HOV, or TDM must be rigorously justified and its effects conservatively estimated. Improvements involving dedication of land or physical construction may be favorably considered.

6. Specification of developer's percent share of the cost, as well as a plan of realistic mitigation measures under the control of the developer. The following ratio should be estimated: additional traffic volume due to project implementation is divided by the total increase in the traffic volume (see Appendix "B" of the Guidelines). That ratio would be the project equitable share responsibility.

   We note for purposes of determining project share of costs; the number of trips from the project on each traveling segment or element is estimated in the context of forecasted traffic volumes which include build-out of all approved and not yet approved projects, and other sources of growth. Analytical methods such as select-zone travel forecast modeling might be used.

   The Department as commenting agency under CEQA has jurisdiction superceding that of MTA in identifying the freeway analysis needed for this project. Caltrans is responsible for obtaining measures that will off-set project vehicle trip generation that worsens Caltrans facilities and hence, it does not adhere to the CMP guide of 150 or more vehicle trips added before freeway analysis is needed. MTA's Congestion Management Program in acknowledging the Department's role, stipulates that Caltrans must be consulted to identify specific locations to be analyzed on the State Highway System. Therefore State Route(s) mentioned in item #1 and its facilities must be analyzed per the Department's Traffic Impact Study Guidelines.

We look forward to reviewing the traffic study. We expect to receive a copy from the State Clearinghouse when the DEIR is completed. However, to expedite the review process, and clarify any misunderstandings, you may send a copy in advance to the undersigned.

If you have any questions, please feel free to contact me at (213) 897-3747 or Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 041046AL.

Sincerely,

Cheryl Powell

CHERYL J. POWELL
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

Main Office
818 West Seventh Street
12th Floor
Los Angeles, California
90017-3435

t (213) 236-1800
f (213) 236-1825

www.scag.ca.gov

November 9, 2004

Mr. Jimmy Liao, City Planner/Project Coordinator
Environmental Review Section
Department of City Planning
200 N. Spring Street, Room 750
Los Angeles, CA 90012

RE: SCAG Clearinghouse No. I20040720 USC Health Sciences Campus Project

Dear Mr. Liao:

Thank you for submitting the **USC Health Sciences Campus Project** for review and comment. As areawide clearinghouse for regionally significant projects, SCAG reviews the consistency of local plans, projects and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

We have reviewed the **USC Health Sciences Campus Project**, and have determined that the proposed Project is not regionally significant per SCAG Intergovernmental Review (IGR) Criteria and California Environmental Quality Act (CEQA) Guidelines (Section 15206). Therefore, the proposed Project does not warrant comments at this time. Should there be a change in the scope of the proposed Project, we would appreciate the opportunity to review and comment at that time.

A description of the proposed Project was published in SCAG's **October 16-31, 2004** Intergovernmental Review Clearinghouse Report for public for review and comment.

The project title and SCAG Clearinghouse number should be used in all correspondence with SCAG concerning this Project. Correspondence should be sent to the attention of the Clearinghouse Coordinator. If you have any questions please contact me at (213) 236-1867. Thank you.

Sincerely,

JEFFREY M. SMITH, AICP
Senior Regional Planner
Intergovernmental Review

Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952
213.922.2000 Tel
metro.net

Metro

October 28, 2004
Jimmy Liao
City Planner/Project Coordinator
Environmental Review Section
Department of City Planning
200 N. Spring Street, Room 750
Los Angeles CA, 90012

Dear Mr. Liao,

Thank you for the opportunity to comment on the Notice of Preparation (NOP) for the USC Health Sciences Campus Project. This letter conveys recommendations from the Los Angeles County Metropolitan Transportation Authority (LACMTA) concerning issues that are germane to our agency's statutory responsibilities in relation to the proposed project.

A Traffic Impact Analysis (TIA), with both highway and freeway, and transit components, is required under the State of California Congestion Management Program (CMP) statute. The CMP TIA Guidelines are published in the "2002 Congestion Management Program for Los Angeles County", Appendix D. The geographic area examined in the TIA must include the following, at a minimum:

1. All CMP arterial monitoring intersections, including monitored freeway on/off-ramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. weekday peak hour (of adjacent street traffic); and
2. Mainline freeway-monitoring locations where the project will add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hour.

Among the required steps for the analysis of development-related impacts to transit are:

1. Evidence that the affected transit operators received the NOP for the Draft EIR;
2. A summary of the existing transit services in the area;
3. Estimated project trip generation and mode assignment for both morning and evening peak periods;

Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952
213.922.2000 Tel
metro.net

Metro

4. Documentation on the assumptions/analyses used to determine the number of percentage of trips assigned to transit;
5. Information on facilities and/or programs that will be incorporated in to the development plan that will encourage public transit usage and transportation demand management (TDM) policies and programs; and
6. An analysis of the expected project impacts on current and future transit services along with proposed project mitigation.

The MTA looks forward to reviewing the Draft EIR. If you have any questions regarding this response, please call me at 213-922-6908 or email at chapmans@metro.net. Please send the Draft EIR to the following address:

LACMTA
One Gateway Plaza
Attn: Susan Chapman
Long Range Planning, 99-23-2
Los Angeles, CA 90012-2952

Sincerely,

Susan Chapman
Program Manager, Long Range Planning

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 · www.aqmd.gov

October 28, 2004

Mr. Jimmy Liao
City Planner/Project Coordinator
Department of City Planning
200 N. Spring Street, Room 750
Los Angeles, CA 90012

Dear Mr. Liao:

Notice of Preparation of a Draft Environmental Impact Report for
USC Health Sciences Campus

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft Environmental Impact Report (EIR). Please send the SCAQMD a copy of the Draft EIR upon its completion.

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2002 Model. This model is available on the CARB Website at: www.arb.ca.gov.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips

should be included in the analysis. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (http://www.aqmd.gov).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Charles Blankson, Ph.D., Air Quality Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources

SS:CB:li

LAC041027-01LI
Control Number

City of Los Angeles

Scoping Meeting for the Environmental Impact Report
USC Health Sciences Campus Project
November 4, 2004

Written Comment Form

The purpose of the public scoping meeting is to obtain input from the public regarding the scope and the alternatives that will be analyzed in the Draft EIR for the USC Health Sciences Campus Project. The University of Southern California is proposing to develop additional academic and, medical-related (e.g., medical research, medical clinic, etc.), facilities within its existing Health Sciences Campus. The Project proposes the development of between 585,000 and 765,000 square feet of floor area. The Project also includes the development of parking facilities to support the proposed academic and medical-related uses.

Comments can be provided verbally at the scoping meeting or in written form. The deadline for submitting written comments to the City is November 19, 2004. In the space below (and on additional pages, if necessary), please provide any written comments you may have concerning the scope of the Draft EIR for the proposed project. Your comments will then be considered during preparation of the Draft EIR.

I am a resident at 1432 Playground st. I have been living at this address for 47 years, I also own 1430 Playground st. Through the years we have watched this neighborhood transform into a busy noisey street. There is no parking for myself or for any visitors we might get the noise is unbearable. Helicopters flying over our house all day and all night, we also can hear the hammering that goes on at the construction sites. Our once back yard view of Soto street is now covered by trees lining the warehouse that rests on Soto street which is also owned by USC medical Center. I could only imagine how the air quality is due to construction stucco painting and everything that contains chemicals. Being Senior citizens and putting up with all this traffic, noise we feel we should be informed of all projects that would concern our living status. Also we would like to know if we could also become patients at these facilities, we are putting up with all the inconviences of these sites we should be able to use them too! Please contact us with Answers!

Name: Ralph & Celia Virgen
Address: 1432 Playground St
Los Angeles, Ca 90033
(323) 227-5160

PS. Please TAKE these Comments into deep Consideration - thank You

Please leave this form in the box provided or deliver or mail it to Mr. Jimmy Liao, City Planner/Project Coordinator, City of Los Angeles, Environmental Review Section, Department of City Planning, 200 N. Spring Street Room 750, Los Angeles, California 90012. This form can simply be folded and placed in a mailbox. Please remember to add postage.

11/11/04

Jimmy Liao, City Planner / Project Coordinator
Environmental Review Section
Dept. of City Planning
200 N. Spring St, Room 750
Los Angeles, CA 9012

Dear Sir:

To my regret, I was unable to attend the meeting on Nov. 4. Regarding this project: USC Health Sciences Campus Project, what is the proposed time that this is to be done & completed? Since the demolition on Marengo St. to State & back-side on San Pedro Transit even been completed (yet) & now another project. I'm sure its for a good cause, however, in the '50's family had one car, now its 3-4! As a resident on Norfolk St because people who live on Soto park here, employees from hospital also. This has been going on way too long. I understand that there is parking for employees. Now on top of that an Environmental factor for young & old. Its pretty bad, when a person(s) is forced to in between park in front of driveway because the street is used more for persons who don't even live on this street.

Your answer on this would be greatly appreciated

Thank You,

Gloria Sena
2409 Norfolk St.
Los Angeles CA 90033

Gloria Sena
2409 Norfolk St.
Los Angeles, CA 90033

FORM GET 160A (Rev 1/82)

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

1510-1520 San Pablo St
DOT Case No. CEN 04-1750

Date: November 17, 2004

To: Jimmy Liao, City Planner/Project Coordinator
Department of City Planning

From: Mike Bagheri, Transportation Engineer
Department of Transportation

Subject: **NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE UNIVERSITY OF SOUTHERN CALIFORNIA (USC) HEALTH SCIENCES CAMPUS PROJECT LOCATED AT 1510-1520 SAN PABLO STREET**

The Los Angeles Department of Transportation (LADOT) has reviewed the Notice of Preparation (NOP) for the Draft Environmental Impact Report (DEIR) for the University of Southern California (USC) Health Science Campus project located at 1510-1520 San Pablo Street. The proposed project consists of seven development sites within the USC Health Sciences Campus (HSC). The development sites consists of 585,000 to 765,000 square-feet (SF) of academic and medical research facilities as well as medical clinic facilities. The development sites currently contain surface parking lots and/or are underdeveloped. Parking accommodations to support the proposed academic and medical uses are also included as part of the project. The seven development sites comprise approximately 22 acres within the existing HSC.

ASSESSMENT OF TRAFFIC IMPACT

A traffic study is being prepared to analyze the potential impacts of the project. LADOT has been working with traffic consultant Linscott, Law & Greenspan Engineers on the traffic study and scope of work required for the study.

If you have any questions, please contact Ed Chow of my staff at (213) 240-3074.

cc: Jimmy Blackman, Council District 14
Central District, LADOT
Land Development Group, BOE

Letters/USC_HealthScience_NOP.wpd

COUNTY OF LOS ANGELES

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ALHAMBRA, CALIFORNIA 91802-1460

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ENVIRONMENTAL
UNIT

November 17, 2004

IN REPLY PLEASE
REFER TO FILE: LD-0

Mr. Jimmy Liao
Environmental Review Section
Department of City Planning
City of Los Angeles
200 North Spring Street, Room 750
Los Angeles, CA 90012

Dear Mr. Liao:

RESPONSE TO NOTICE OF PREPARATION
OF DRAFT ENVIRONMENTAL IMPACT REPORT
USC HEALTH SCIENCES CAMPUS
CITY OF LOS ANGELES

Thank you for the opportunity to provide comments on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the proposed construction of academic, medical research, and medical clinic facilities in the existing Health Sciences Campus located in the vicinity of San Pablo Street and Valley Boulevard. The NOP we received did not include an Initial Study. We offer the following comments for your consideration in preparing the DEIR:

Hazards and Hazardous Materials

The existing hazardous waste management (HWM) facilities in this County are inadequate to handle the hazardous waste currently being generated. We believe the proposed project may generate hazardous waste that could adversely impact existing HWM facilities. This issue should be addressed and mitigation measures provided in the DEIR.

If the project involves the construction, installation, modification, or removal of underground storage tanks, industrial waste treatment, or disposal facilities, and/or stormwater treatment facilities, our Environmental Programs Division must be contacted for required approvals and operating permits. If any excavated soil is contaminated by or classified as hazardous waste by an appropriate agency, the soil must be appropriately managed and disposed.

Hydrology and Water Quality

The proposed project may change the absorption rates, drainage pattern, and the rate and amount of surface runoff discharged to streets and storm drains in the area. To adequately evaluate drainage and water quality impacts, a Drainage Concept/Standard Urban Stormwater Management Plan (SUSMP) report must be prepared during the DEIR stage for Public Works review and approval. The analysis should address increases in runoff, any change in drainage patterns, treatment method proposed for SUSMP regulations, and the capacity of any existing and proposed storm drain facilities. When approved, the report should be included in the DEIR.

Solid Waste

As projected in the Los Angeles County Countywide Siting Element, which was approved by a majority of the cities in Los Angeles County in late 1997 and by the County Board of Supervisors in January 1998, a shortfall in permitted daily landfill capacity may be experienced in the County within the near future. The pre-, during, and post- construction activities associated with the proposed project will increase the generation of solid waste and may have potentially significant impact to solid waste management infrastructure in the County. Therefore, the DEIR must identify what measures the City plans to implement to mitigate the impact. Mitigation measures may include, but are not limited to, implementation of waste reduction and recycling programs to divert the solid waste, including construction and demolition waste and excavated material from the landfills.

If you have any questions regarding these comments, please contact Mr. Suk Chong at (626) 458-7150.

Very truly yours,

DONALD L. WOLFE
Interim Director of Public Works

Dennis Hunter

DENNIS HUNTER
Assistant Division Engineer
Land Development Division

SPC:jmw
P:\CEQA\SUK\nop4usc health sciences campus.doc

Appendix B
Mitigation Monitoring and Reporting Program

APPENDIX B
MITIGATION MONITORING AND REPORTING PROGRAM

1. INTRODUCTION

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared in accordance with Section 21081.6 of the Public Resources Code and Section 15097 of the CEQA Guidelines, which require adoption of a Mitigation Monitoring and Reporting Program for all projects for which an Environmental Impact Report or Mitigated Negative Declaration has been prepared. Specifically, Section 21081.6 of the Public Resources Code states: "…the [lead] agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment…[and that program]…shall be designed to ensure compliance during project implementation." The City of Los Angeles, Department of City Planning is the Lead Agency for the proposed Project.

The MMRP describes the procedures for the implementation of all of the mitigation measures identified in the EIR for the proposed Project. It is the intent of the MMRP to: (1) verify satisfaction of the required mitigation measures of the EIR; (2) provide a methodology to document implementation of the required mitigation; (3) provide a record of the Monitoring Program; (4) identify monitoring responsibility; (5) establish administrative procedures for the clearance of mitigation measures; (6) establish the frequency and duration of monitoring; and (7) utilize existing review processes where feasible.

The MMRP lists mitigation measures according to the same numbering system contained in the Draft EIR sections. Each mitigation measure is categorized by topic, with an accompanying discussion of the following:

- The enforcement agency (i.e., the agency with the authority to enforce the mitigation measure);
- The monitoring agency (i.e., the agency to which mitigation reports involving feasibility, compliance, implementation, and development operation are made);
- The phase of the Project during which the mitigation measure should be monitored (i.e., prior to issuance of a building permit, construction, or occupancy);

- The monitoring frequency and duration of monitoring and reporting (i.e., once at site plan review or monthly during construction); and

- The administrative procedures for the clearance of mitigation measures (i.e., Approval of Site Plan or Monthly Statements of Compliance).

The Applicant shall be obligated to demonstrate that compliance with the required mitigation measures has been effected. All departments listed below are within the City of Los Angeles unless otherwise noted. The entity responsible for the implementation of all mitigation measures shall be the Applicant unless otherwise noted.

A. Land Use

No land use mitigation measures are required and thus none are identified in the EIR.

B. Visual Qualities

Mitigation Measure B-1: The Applicant shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials are posted on any 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.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Construction

Monitoring Frequency: Monthly during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly Statements of Compliance

Mitigation Measure B-2: Building façades facing public streets shall be designed to enhance the pedestrian experience and connectivity of the HSC campus through such features as wide and well-illuminated entry areas, landscaping, and informal gathering space.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Design and Plan Check, and Construction

Monitoring Frequency: Monthly during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly Statements of Compliance

Mitigation Measure B-3: Architectural design and exterior building materials shall be compatible with the theme and quality of building design and materials used within the HSC campus.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Design and Plan Check, and Construction

Monitoring Frequency: Monthly during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly Statements of Compliance

Mitigation Measure B-4: New utilities shall be constructed underground, to the extent feasible.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Plan Check and Construction

Monitoring Frequency: Monthly during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly Statements of Compliance

Mitigation Measure B-5: Exterior signage for the proposed buildings shall be compatible with the design of the building.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Plan Check and Construction

Monitoring Frequency: Monthly during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly Statements of Compliance

Mitigation Measure B-6: All new or replacement street trees shall be selected for consistency with the existing street trees or in accordance with a street tree master plan reviewed and approved by the Department of Public Works Street Tree Division.

Enforcement Agency: City of Los Angeles, Department of Public Works Street Tree Division, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Public Works Street Tree Division, Department of Building and Safety

Monitoring Phase: Plan Check and Construction

Monitoring Frequency: Monthly during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly Statements of Compliance

Mitigation Measure B-7: All mechanical, electrical and rooftop equipment shall be screened from view from adjacent surface streets.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Plan Check and Construction

Monitoring Frequency: Monthly during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly Statements of Compliance

Mitigation Measure B-8: Landscaping and/or vegetation features shall be incorporated into the design of each Development Site.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Plan Check and Construction

Monitoring Frequency: Monthly during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly Statements of Compliance

Mitigation Measure B-9: All exterior lighting shall be directed on-site or shielded to limit light spillover effects.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Plan Check and Construction

Monitoring Frequency: Monthly during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly Statements of Compliance

C. Traffic Circulation and Parking

Parking Scenario No.1 Mitigation Measures

Mitigation Measure C-1: Intersection No. 2: I-5 Freeway SB and Mission Road—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the A.M. and P.M. peak commuter hours. Mitigation for this intersection consists of widening the southbound off-ramp to provide an additional lane. The off-ramp would provide one left-turn only lane, one combination left-turn/through lane and one right-turn only lane. A traffic signal modification would also be required.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works in consultation with the State of California Department of Transportation (Caltrans).

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-2: Intersection No. 3: I-5 Freeway NB Off-Ramp and Daly Street-Main Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the A.M. peak commuter hour. Mitigation for this intersection consists of the installation of a traffic signal at this location.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works in consultation with the State of California Department of Transportation (Caltrans).

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-3: Intersection No. 6: I-5 Freeway NB On-Ramp and Marengo Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the P.M. peak commuter hour. Mitigation for this

intersection consists of the installation of an eastbound right-turn only lane. This measure will involve a lengthening of the red curb along the south side of Marengo Street west of the on-ramp.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-4: Intersection No. 10: Biggy Street and Zonal Avenue—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during both the A.M. and P.M. peak commuter hours. Mitigation for this intersection consists of restriping the southbound approach to provide one left-through lane and one right-turn only lane and restriping the eastbound approach to provide one left-turn lane and one optional through/right-turn only lane.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-5: Intersection No. 12: San Pablo Street and Alcazar Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the A.M. peak commuter hour. Mitigation for this intersection consists of the installation of a traffic signal at the location. Traffic signal warrant analyses have been completed for the intersection.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-6: Intersection No. 14: San Pablo Street and Zonal Avenue—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the P.M. peak commuter hour. Mitigation for this intersection consists of installation of a traffic signal at this location.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-7: Intersection No. 16: Soto Street and I-10 Freeway WB Ramps-Charlotte Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during both the A.M. and P.M. peak commuter hours. Partial mitigation for this intersection consists of the previously City reviewed and approved mitigation measure associated with the HNRT project. The previously reviewed and approved mitigation measure involves the widening of the I-10 Freeway Westbound Off-ramp to provide an additional right-turn only lane. The Preliminary Engineering Evaluation Report document is currently in preparation and will be submitted to the California Department of Transportation for review.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works in consultation with the State of California Department of Transportation (Caltrans).

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-8: Intersection No. 17: Soto Street and Marengo Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during both the A.M. and P.M. commuter peak hours. Mitigation for this intersection consists of the removal of the raised median islands on Soto Street, north and south of Marengo Street, restriping the northbound and southbound approaches to provide dual left-turn lanes, two through lanes and one combination through/right-turn lane, as well as a traffic signal modification.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-9: Intersection No. 18: Soto Street and I-10 Freeway EB Off-Ramp—Wabash Avenue—The intersection is anticipated to be significantly impacted by Parking Scenario No. 1 during the A.M. peak commuter hour. Mitigation for this intersection consists of restriping Soto Street, south of Wabash Avenue, within the existing roadway pavement width, to provide an additional northbound through lane.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Parking Scenario No.2 Mitigation Measures

Mitigation Measure C-10: Intersection No. 2: I-5 Freeway SB and Mission Road—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the A.M. and P.M. peak commuter hours. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the I-5 Freeway SB and Mission Road intersection also would be applicable to Parking Scenario No. 2.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works in consultation with the State of California Department of Transportation (Caltrans).

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-11: No. 3: I-5 Freeway NB Off-Ramp and Daly Street-Main Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the A.M. peak commuter hour. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the I-5 Freeway NB Off-Ramp and Daly Street-Main Street intersection also would be applicable to Parking Scenario No. 2.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works in consultation with the State of California Department of Transportation (Caltrans).

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-12: Intersection No. 6: I-5 Freeway NB On-Ramp and Marengo Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the P.M. peak commuter hour. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the I-5

Freeway NB On-Ramp and Marengo Street intersection also would be applicable to Parking Scenario No. 2.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-13: Intersection No. 12: San Pablo Street and Alcazar Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the A.M. and P.M. peak commuter hours. The aforementioned traffic mitigation measure recommended for the Parking Scenario No. 1 for the San Pablo Street and Alcazar Street intersection also would be applicable to Parking Scenario No. 2.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-14: Intersection No. 14: San Pablo Street and Zonal Avenue—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the P.M. peak commuter hours. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the San Pablo Street and Zonal Avenue intersection also would be applicable to Parking Scenario No. 2.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-15: Intersection No. 15: Soto Street and Alcazar Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the A.M. and P.M. peak commuter hours. Mitigation for this intersection includes the installation of a second northbound left–turn lane and widening along the south side of Alcazar Street, west of Soto Street, to provide a fourth eastbound approach lane (i.e., the eastbound approach would provide one left-turn lane, one combination left-through lane and two right-turn only lanes). A traffic signal modification would also be required.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-16: Intersection No. 16: Soto Street and I-10 Freeway WB Ramps-Charlotte Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during both the A.M. and P.M. peak commuter hours. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the Soto Street and I-10 Freeway WB Ramps-Charlotte Street intersection also would be applicable to Parking Scenario No. 2.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works in consultation with the State of California Department of Transportation (Caltrans).

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-17: Intersection No. 17: Soto Street and Marengo Street—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during both the A.M. and P.M. commuter peak hours. The aforementioned traffic mitigation measure recommended for Parking Scenario No. 1 for the Soto Street and Marengo Street intersection also would be applicable to Parking Scenario No. 2.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Mitigation Measure C-18: Intersection No. 18: Soto Street and I-10 Freeway EB Off-Ramp—Wabash Avenue—The intersection is anticipated to be significantly impacted by Parking Scenario No. 2 during the A.M. peak commuter hour. Mitigation for this intersection consists of restriping Soto Street, south of Wabash Avenue, within the existing roadway pavement width, to provide an additional northbound through lane.

Enforcement Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Agency: City of Los Angeles, Department of Transportation; City of Los Angeles, Department of Public Works.

Monitoring Phase: Plan Check and Construction.

Monitoring Frequency: Once at issuance of construction permit and once at final inspection.

Action Indicating Compliance with Mitigation Measure(s): Issuance of any building permit and a Certificate of Occupancy.

Parking

No parking mitigation measures are required and thus none are identified in the EIR.

D. Air Quality

Construction

Mitigation Measure D-1: General contractors shall implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403.[1]

Enforcement Agency: SCAQMD

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Construction

Monitoring Frequency: Ongoing during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by Project contractor

Mitigation Measure D-2: Disturbed areas shall be watered three times daily, which is above and beyond the SCAQMD Rule 403 requirement to water disturbed areas two times daily.

Enforcement Agency: SCAQMD

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Construction

Monitoring Frequency: Ongoing during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by Project contractor

Mitigation Measure D-3: All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.

Enforcement Agency: SCAQMD

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Construction

Monitoring Frequency: Ongoing during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by Project contractor

Mitigation Measure D-4: General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not

[1] *SCAQMD Rule 403 requirements are detailed in Appendix D.*

in use, to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.

Enforcement Agency: SCAQMD

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Construction

Monitoring Frequency: Ongoing during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by Project contractor

Mitigation Measure D-5: Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used to the extent feasible.

Enforcement Agency: SCAQMD

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Construction

Monitoring Frequency: Ongoing during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by Project contractor

Mitigation Measure D-6: All construction vehicles shall be prohibited from idling in excess of ten minutes, both on- and off-site.

Enforcement Agency: SCAQMD

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Construction

Monitoring Frequency: Ongoing during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by Project contractor

Mitigation Measure D-7: Project heavy-duty construction equipment shall use alternative clean fuels, such as low sulfur diesel or compressed natural gas with oxidation catalysts or particulate traps, to the extent feasible.

Enforcement Agency: SCAQMD

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Construction

Monitoring Frequency: Ongoing during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by Project contractor

Mitigation Measure D-8: The Applicant shall utilize coatings and solvents that are consistent with applicable SCAQMD rules and regulations**.**

Enforcement Agency: SCAQMD

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Construction

Monitoring Frequency: Ongoing during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by Project contractor

Operations

Mitigation Measure D-9: The Applicant shall provide public education to USC Health Science Campus visitors and employees regarding the importance of reducing vehicle miles traveled and utilizing transit, and the related air quality benefits through the use of brochures and other informational tools.

Enforcement Agency: SCAQMD

Monitoring Agency: SCAQMD

Monitoring Phase: Occupancy

Monitoring Frequency: Ongoing during occupancy

Action Indicating Compliance with Mitigation Measure(s): Annual compliance report submitted by the Applicant

Mitigation Measure D-10: The Applicant shall, to the extent feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods.

Enforcement Agency: SCAQMD

Monitoring Agency: SCAQMD

Monitoring Phase: Occupancy

Monitoring Frequency: Ongoing during occupancy

Action Indicating Compliance with Mitigation Measure(s): Annual compliance report submitted by the Applicant

Mitigation Measure D-11: The Applicant shall coordinate with the MTA and the City of Los Angeles Department of Transportation to provide information with regard to local bus and rail services.

Enforcement Agency: MTA and City of Los Angeles, Department of Transportation

Monitoring Agency: MTA and City of Los Angeles, Department of Transportation

Monitoring Phase: Occupancy

Monitoring Frequency: Ongoing during occupancy

Action Indicating Compliance with Mitigation Measure(s): Annual compliance report submitted by the Applicant

E. Noise

Construction Noise

Mitigation Measure E-1: Prior to the issuance of any grading, excavation, haul route foundation, or building permits, the Applicant shall provide proof satisfactory to the Building and Safety Department and Planning Department that all construction documents require contractors to comply with Los Angeles Municipal Code Section 41.40 which requires all construction and demolition activity located within 500 feet of a residence to occur between 7:00 A.M. and 6:00 P.M. Monday through Friday and 8:00 A.M. and 6:00 P.M. on Saturday, and that a noise management plan for compliance and verification has been prepared by a monitor retained by the Applicant. At a minimum, the plan shall include the following requirements:

1. Pile drivers used in proximity to sensitive receptors shall be equipped with noise control having a minimum quieting factor of 10 dB(A);

2. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site as determined by the Department of Building and Safety;

3. Program to maintain all sound-reducing devices and restrictions throughout the construction phases;

4. An approved haul route authorization that avoids noise-sensitive land uses to the maximum extent feasible; and

5. Identification of the noise statutes compliance/verification monitor, including his/her qualifications and telephone number(s).

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Pre-construction, construction

Monitoring Frequency: Ongoing during construction

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by the Project contractor

Operational Noise

Mitigation Measure E-2: If a loading dock/refuse collection area is proposed to be located on Development Site D, the Applicant shall be required to submit evidence, prior to the issuance of building permits for Development Site D, that is satisfactory to the City of Los Angeles Department of Building and Safety that noise level increases do not cause the baseline ambient noise level to increase beyond the 5-dBA significance threshold at any adjacent property line. This mitigation measure does not apply to development that may occur on Development Sites A, B, C, E, F, and G.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Pre-construction, construction

Monitoring Frequency: Ongoing during construction of Development Site D

Action Indicating Compliance with Mitigation Measure(s): Monthly compliance report submitted by the Project contractor

F. Utilities and Service Systems

Water

Mitigation Measure F-1.1: Water faucet fixtures with activators shall be installed that automatically shut off the flow of water when not in use.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Pre-construction, construction

Monitoring Frequency: Once at issuance of building permit and once at final inspection

Action Indicating Compliance with Mitigation Measure(s): Issuance of occupancy permit

Mitigation Measure F-1.2: Automatic sprinkler systems shall be set to irrigate landscaping during early morning hours or during the evening 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.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Pre-construction, construction

Monitoring Frequency: Once at issuance of building permit and once at final inspection

Action Indicating Compliance with Mitigation Measure(s): Issuance of occupancy permit

Wastewater

Mitigation Measure F-2.1: Prior to the issuance of any building permits, the Development Services Division of the Bureau of Engineering, Department of Public Works, shall make a determination of capacity in the sewer pipeline between each proposed Development Site and the trunk sewer. If service is discovered to be less than adequate, the Applicant shall be required to upgrade the connections to the mains and/or provide an alternative solution, in order to appropriately serve the Project.

Enforcement Agency: City of Los Angeles, Department of Public Works, Bureau of Engineering, Development Services Division; City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Public Works, Bureau of Engineering, Development Services Division; City of Los Angeles, Department of Building and Safety

Monitoring Phase: Pre-construction

Monitoring Frequency: Once at issuance of building permit

Action Indicating Compliance with Mitigation Measure(s): Issuance of building permit

Mitigation Measure F-2.2: The Applicant shall comply with procedural requirements of City ordinances regulating connections to the City sewer system (e.g., Ordinance No. 166,060).

Enforcement Agency: City of Los Angeles, Department of Public Works, Bureau of Engineering, Development Services Division; City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Public Works, Bureau of Engineering, Development Services Division; City of Los Angeles, Department of Building and Safety

Monitoring Phase: Pre-construction

Monitoring Frequency: Once at issuance of building permit

Action Indicating Compliance with Mitigation Measure(s): Issuance of building permit

Mitigation Measure F-2.3: All necessary on-site infrastructure improvements shall be constructed to meet the requirements of the Department of Building and Safety.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Pre-construction, construction

Monitoring Frequency: Once at issuance of building permit and once at final inspection

Action Indicating Compliance with Mitigation Measure(s): Issuance of occupancy permit

Mitigation Measure F-2.4: The Applicant shall apply for and comply with all necessary permits, including Industrial Wastewater Discharge Permits, if required.

Enforcement Agency: City of Los Angeles, Department of Building and Safety

Monitoring Agency: City of Los Angeles, Department of Building and Safety

Monitoring Phase: Pre-construction, construction, and occupancy

Monitoring Frequency: Ongoing through Project construction and occupancy

Action Indicating Compliance with Mitigation Measure(s): Issuance of building permit and occupancy permit