LOS ANGELES SOUTHWEST COLLEGE MASTER PLAN

DRAFT ENVIRONMENTAL IMPACT REPORT

PREPARED FOR

LOS ANGELES COMMUNITY COLLEGE DISTRICT

PREPARED BY

TERRY A. HAYES ASSOCIATES LLC

JULY 2003

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MASTER PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT
STATE CLEARINGHOUSE NO. 2003031024

Prepared for

THE LOS ANGELES COMMUNITY COLLEGE DISTRICT
770 WILSHIRE BOULEVARD
LOS ANGELES, CA 90017

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JULY 2003

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1.0 INTRODUCTION

The Los Angeles Community College District (LACCD) has prepared a Master Plan for improvements to Los Angeles Southwest College (LASC) located in unincorporated Los Angeles County, California (**Figure 1-1**). This Environmental Impact Report (EIR) addresses the potential environmental effects of the proposed LASC Master Plan. The Master Plan includes the net addition of 273,067 gross square feet (gsf) of building space bringing the total to 689,978 gsf, as well as an increase in parking from the existing 1,306 parking spaces to 2,270 spaces.

1.1 PURPOSE OF THIS REPORT

The purpose of an Environmental Impact Report (EIR), as defined in Section 15121(a) of the State Guidelines for the implementation of the California Environmental Quality Act (CEQA) California Code of Regulations (CCR), Title 14, Division 6, Chapter 3 "Guidelines," is to "inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effect and describe reasonable alternatives to the project." This document assesses the significant environmental impacts, including unavoidable adverse impacts and cumulative impacts, related to the adoption and implementation of the proposed Los Angeles Southwest College Master Plan (hereafter referred to as the "proposed project"). Where there is potential for a significant adverse effect, this report identifies mitigation measures or alternatives that would either eliminate the impact or reduce the effect to a less-than-significant level. This report also identifies significant effects that may be unavoidable even after the implementation of feasible mitigation or feasible project alternatives, if any.

1.2 AUTHORIZATION AND FOCUS

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 and the Guidelines for the Implementation of the California Environmental Quality Act (the "State CEQA Guidelines"), as amended to date. Specifically, this document evaluates the environmental effects which may result from the implementation of the LASC Master Plan. The following environmental issues were identified as having potential to result in a significant impact:

- Aesthetics and Lighting
- Air Quality
- Geology and Seismicity
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise
- Public Services
- Transportation and Traffic
- Utilities and Service Systems

1.3 LEAD AGENCY

The LACCD is the Lead Agency in accordance with Section 15367 of the CEQA Guidelines, which defines the lead agency as "the public agency which has the principal responsibility for carrying out or approving the project." The LACCD is responsible for certifying the EIR.

Los Angeles Community College District
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Los Angeles, CA 90017
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1.4 INTENDED USES OF THE EIR

This EIR is prepared at the direction and under the supervision of the Los Angeles Community College District (LACCD). As discussed above, the LACCD is the Lead Agency. This EIR will be used by the Los Angeles Community College District, as the lead agency under CEQA, in making decisions with regard to approval of the Facilities Master Plan and implementation of projects identified in the Plan. The information in this EIR may also be used by other agencies, including but not limited to those identified below, in deciding whether to grant permits, approvals, or zone changes if necessary to construct or operate the projects discussed in the Master Plan.

- California Department of General Services - Division of the State Architect
- California Department of Toxic Substances Control
- California State Fire Marshal
- CALTRANS
- Regional Water Quality Control Board (National Pollutant Discharge Elimination System Permit)
- South Coast Air Quality Management District (Stationary Source Permits)
- County of Los Angeles
- City of Inglewood
- City of Los Angeles

1.5 PUBLIC REVIEW AND COMMENTS

A Notice of Preparation (NOP) for this EIR was issued on March 6, 2003 by the Lead Agency. The 30-day response period for the NOP ended on April 5, 2003. A copy of the NOP and any comments received are included in Appendix A of this EIR. Information, data, and observations resulting from these contacts are included in the document where relevant. This Draft EIR will be circulated for a 45-day public review period. The public is invited to comment in writing on the information contained in this document. Persons and agencies commenting are encouraged to provide information that they believe is missing from the Draft EIR, and to identify where the information can be obtained. All comment letters received will be responded to in writing, and the comment letters, together with the responses to those comments, will be included in the Final EIR.

2.0 SUMMARY

This chapter summarizes the key findings of this Environmental Impact Report, including the environmental effects, mitigation measures, unavoidable significant adverse impacts, and any areas of environmental controversy concerning the proposed project.

2.1 SUMMARY OF PROJECT DESCRIPTION

This Draft EIR examines the potential environmental impacts of developing the campus as outlined in the Los Angeles Southwest College Master Plan. Improvements contemplated in the Master Plan will add approximately 273,067 gross square feet net of enclosed building area to the LASC facilities and increase parking from 1,306 spaces to 2,270 parking spaces. Growth in enrollment has been static for many years. Implementation of the Master Plan will result in improved educational facilities for the community. The proposed improvements is anticipated to promote student enrollment.

2.2 SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS

This Environmental Impact Report (EIR) has been prepared to analyze the potential significant environmental impacts associated with the construction and long-term operation of the proposed project, and to identify mitigation measures capable of avoiding or substantially reducing the impacts. To satisfy the requirements of the California Environmental Quality Act (CEQA) and to assist the Los Angeles Community College District (LACCD) and other interested citizens and community organizations in understanding the findings of the EIR, potential impacts of the proposed project have been divided into three categories: unavoidable significant adverse impacts, significant impacts that can be mitigated to less-than-significant levels, and impacts which are less-than-significant or nonexistent when compared to the environmental impact thresholds identified in this report. The criteria for the determination of a significant impact in each environmental topic area is discussed in the body of this report.

As required by CEQA, mitigation measures are identified in this EIR to avoid or substantially reduce the level of all identified significant impacts to the extent feasible. However, certain significant environmental impacts cannot be reduced to a level below significance, even with application of the identified mitigation measures. Such impacts are identified in this Draft EIR as "unavoidable significant adverse impacts." **Table 2-1** provides a summary of impacts and mitigation measures discussed in Section 4.0 of this EIR.

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impacts	Mitigation Measures		Unavoidable Significant Adverse Impacts
GEOLOGY AND SEISMICITY			
Geologic Materials and Soils Impacts	GS1	Soils shall be evaluated on a project-by-project basis to determine the types of soil present in a proposed building location and the integrity of the soil to withstand ground shaking. Based on results of the evaluation, appropriate design and engineering features will be used in building construction. The criteria for leaving surficial soils in place should be consistent with the grading specifications approved by the Office of the State Architect.	None.
Seismic Hazards	GS2	Establish a minimal 50-foot "no-build" setback zone from the surface projection of known fault zones within the campus. No structure designed for human occupancy will be constructed within the "no build" setback zones defined within the campus boundary.	Less-than-significant
	GS3	No structures designed for human occupancy shall be constructed in areas identified as "unevaluated". Unevaluated areas shall be subject to site-specific geotechnical analysis by a state certified geologist prior to architectural design and construction as required by the Division of the State Architect.	
	GS4	All construction shall conform to the requirements of the Division of the State Architect and the Standards of the current Uniform Building Code.	
HAZARDS AND HAZARDOUS MATERIALS			
Subsidence/Methane Gas Impacts	HR1	If during construction previously unidentified abandoned oil wells are found, construction will be halted until the wells are properly abandoned according to current standards.	None.
	HR2	If during construction of the project, soil contamination is suspected, construction in the area should stop, and appropriate health and safety procedures should be implemented. Construction will be halted until a Phase Two Environmental Site Assessment is completed to characterize the nature and extent of the contamination. If contamination is found, remediation will be required in accordance with state and local laws.	
Impacts related to Hazardous Materials	HR3	For those campus facilities affected by the Master Plan, lead-based paint testing should be conducted due to the deteriorating condition of many painted surfaces. All materials identified as containing lead shall be removed by a licensed lead-based paint/materials abatement contractor.	

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impacts	Mitigation Measures		Unavoidable Significant Adverse Impacts
	N7	All residential units located within 450 feet of the construction site shall be sent a notice regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet, shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities, as well as provide a telephone number where residents can inquire about the construction process and register complaints.	
	N8	A "noise disturbance coordinator" shall be established for the construction of the proposed project. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 450 feet of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.	
Stadium Related Noise Impacts	N9	The parking structure proposed on the west side of the campus shall be constructed in an open design on the south wall to avoid reflection of noise during large events onto residential properties south of the 105 Freeway.	
	N10	The speaker configuration used for the public address system shall focus on and target the seating areas of the stadium. The speakers shall be oriented in a downward facing position into the seating areas.	
	N11	Double pane glass windows shall be required on the walls of classroom buildings (new and existing) with a direct line-of-site to the stadium.	
PUBLIC SERVICES			
Police Services Impacts	PS1	The Community College Sheriff's Bureau and LACCD in coordination with LASC shall increase the number of security personnel serving the LASC campus according to any increase in the level of criminal activity, current student enrollment, and particular requests from the LASC administration.	None.
	PS2	If the contractor does not provide construction site security, then the Community College Sheriff's Bureau shall assign additional personnel to the LASC campus station as needed to assist in construction site security.	

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impacts	Mitigation Measures	Unavoidable Significant Adverse Impacts
Parking Impacts (Interim and Event Parking)	**TT11** Upon Completion of stadium improvements, provisions shall be made for off-site parking and shuttle service as needed to handle parking overflow in the event of conflicting activities (i.e., other campus events). **TT12** To address the College's parking needs during the interim years until the completion of the Master Plan, the College's construction staging plans will evaluate parking demand and recommend appropriate changes to the parking system to accommodate proposed interim development. Changes to the parking system shall be undertaken as recommended to fully mitigate project parking impacts.	None
Cumulative Impacts	**TT13** 120th Street and I-105 E/B Off Ramp – Fund a proportionate share of the cost of the design and construction of an eastbound left-turn lane. **TT14** Imperial Highway and Crenshaw Boulevard – Fund a proportionate share of the cost of the design and construction of an eastbound right-turn lane. **TT15** Imperial Highway and Van Ness Boulevard – Fund a proportionate share of the cost of the design and construction of a southbound right-turn lane and an eastbound right-turn lane. **TT16** Vermont Avenue and I-105 W/B Off Ramp – Fund a proportionate share of the cost of the design and construction of restriping the westbound ramp to provide a left-turn lane, a shared through/right-turn lane, and an exclusive right-turn lane. **TT17** Imperial Highway and I-110 N/B Off Ramp – Fund a proportionate share of the cost of the design and construction of a westbound right-turn lane. **TT18** Imperial Highway and Western Avenue – Fund a proportionate share of the cost of the design and construction of reconfiguring the northbound approach to provide a left-turn lane, two through lanes, and a right-turn lane on the northbound approach; and provide a left-turn lane, two through lanes, and a shared through/left-turn lane on the southbound approach.	Less-Than-Significant.

Based on the analysis contained in this Draft EIR, the proposed project would create the following unavoidable significant adverse impacts after the application of mitigation measures:

- Air Quality (operational and cumulative NO_x)
- Traffic (cumulative impact on local freeway systems)
- Utilities (cumulative impact to water resources)

Significant Impacts That Can Be Mitigated To A Less-Than-Significant Level

Based on the analysis contained in this Draft EIR, the proposed project would result in the following significant impacts that can be mitigated to less-than-significant levels:

- Aesthetics and Lighting (shadows cast onto residences north of Imperial Highway)
- Geology and Seismicity (geologic materials and soils, surface rupture and ground shaking)
- Hazards and Hazardous Materials (asbestos, lead-based paint, and PCBs)
- Land Use and Planning (zoning inconsistency)
- Noise (construction related noise activities, stadium [crowd noise and public address system])
- Public Services (campus security)
- Transportation and Traffic (nine intersections for operational impacts, six for cumulative impacts, special event parking)

Less-Than-Significant Or No Impact

Based on the analysis contained in this Master Plan Draft EIR, the following were found to result in a less-than-significant impact or no impact.

- Aesthetics and Lighting (scenic highways, campus open space, landscaping, lighting)
- Air Quality (construction emissions, CO Hot Spots, consistency with the AQMP)
- Geology and Seismicity (liquefaction hazards, landslide hazards, tsunamis, inundation, and seiches)
- Hazards and Hazardous Materials (subsidence or methane gas, soil and/or groundwater contamination, release of hazardous materials)
- Land Use and Planning (consistency with SCAG Regional Policies, General and Community Plan land use designations)
- Noise (traffic related operational noise)
- Public Services (fire Services, community policing)
- Transportation and Traffic (six intersections, operational parking)
- Utilities and Services (water supply, wastewater, solid waste generation, stormwater runoff, electricity, and natural gas)

2.3 AREAS OF CONTROVERSY

Section 15123(b) of the CEQA Guidelines requires that an EIR identify areas of controversy known to the lead agency, including issues raised by the agencies and the public. Areas of controversy identified during the preparation of the EIR and the scoping included the existence of active faults traversing the campus, and the availability of sufficient parking during special events. These topics are discussed in detail in Sections 4.3 Geology and Seismicity, and 4.8 Transportation and Traffic, respectively.

3.0 PROJECT DESCRIPTION

3.1 BACKGROUND

Los Angeles Southwest College (LASC) is one of nine colleges within the Los Angeles Community College District (LACCD). The college was founded in 1965 and began operating as a junior college in 1967. LASC serves a diverse community within the West Athens/Westmont Community Plan area. LASC provides a Liberal Arts transfer curriculum. The student body at LASC is currently 5,200 full time equivalent (FTE)[1] students, made up of approximately 72 percent African-American, 25 percent Hispanic, and 3 percent other.[2] The median age of LASC's student body is 28, with a higher percentage of females than males. The campus is also home to Middle College High School (MCHS), a Los Angeles Unified School District school. MCHS allows high school students to take college level courses at LASC. The LASC campus is comprised of approximately 77 percent permanent and 23 percent temporary buildings. Currently, site facilities include approximately 417,000 gross square feet (gsf) of floor space and 1,306 parking spaces.

A $1.245 billion General Obligation Bond was proposed by LACCD to implement a capital improvement program for the colleges within the LACCD. A Colleges Facilities Project List was developed to identify projects to be undertaken at the nine community colleges. The bond, entitled the Proposition A Bond Initiative, was passed on April 10, 2001. On May 20, 2003 Proposition AA, a $980 million bond measure won voter approval. The purpose of Proposition AA is to ensure the completion of all projects outlined in each of the nine LACCD community college's master plans. Of the Proposition A funds, $111,000,000 was allocated to LASC. Approximately $65,000,000 has been allocated to LASC from Proposition AA funds. To undertake key development projects identified for LASC, a Master Plan was developed and short-term and long-term goals for facility improvements were evaluated. Full build-out and implementation of the Master Plan is projected for 2016 for purposes of this EIR.

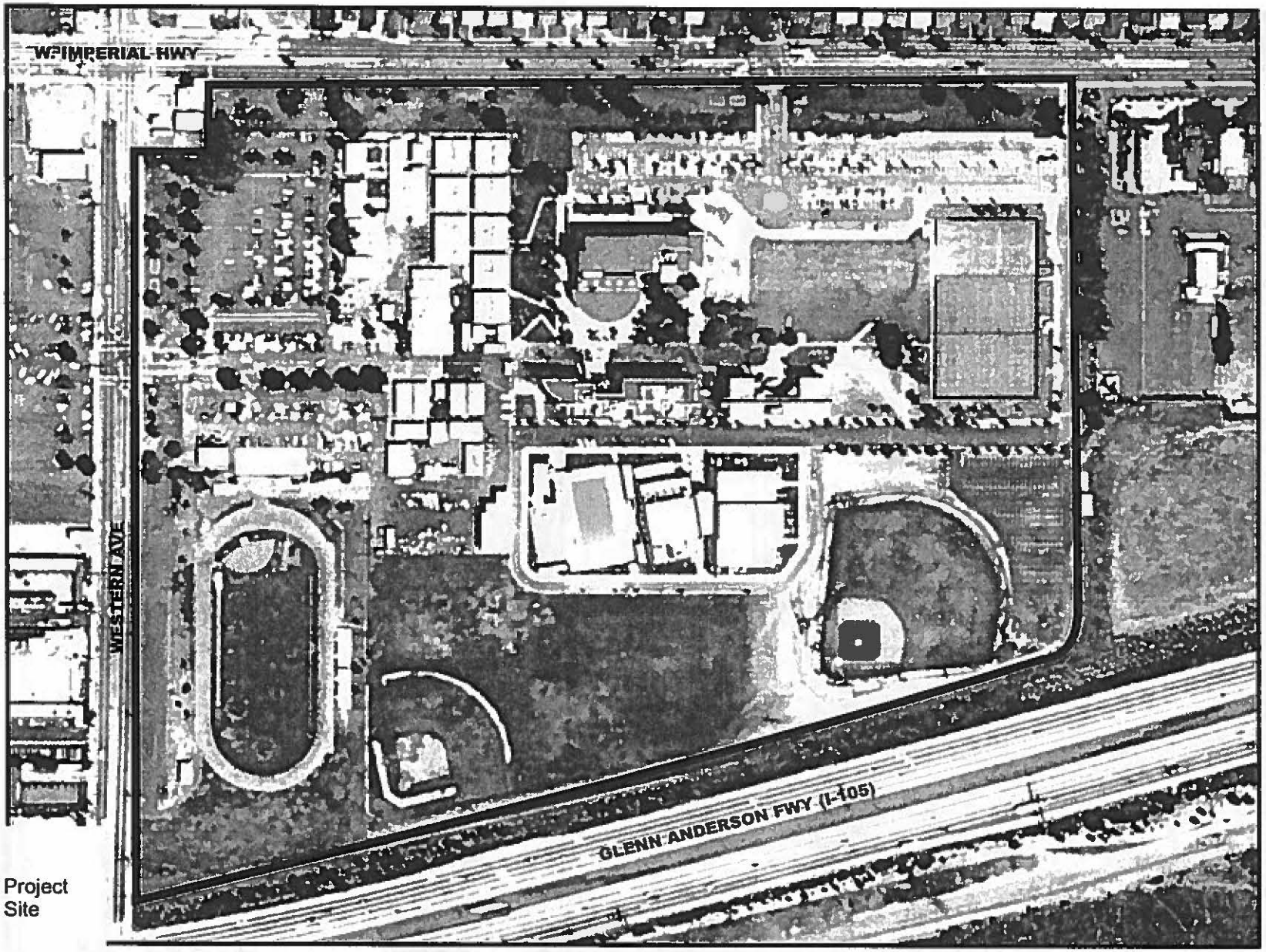
3.2 PROJECT OBJECTIVE

This EIR has been prepared to analyze the environmental impacts associated with the implementation of the LASC Master Plan. The objectives of the Los Angeles Southwest College Master Plan are to increase educational resources, increase LASC's presence as a community resource, and create a positive campus image. To meet these ends the following goals were established as part of the Master Plan. They are:

- **Establish a welcoming image for the Los Angeles Southwest College Campus.** This will be accomplished through the careful design, location, and organization of campus facilities and open space. Proposed circulation elements, signage, entrances and building placement will provide the college with an increased sense of permanence.
- **Provide a Collegial Campus Environment.** Buildings shall be sited and programmed to enhance their functionality. Currently, a large percentage of usable space on campus is in temporary buildings. These buildings are typically wooden, bungalow style structures, capable of being moved.
- **Cultivate the College's Relationship with the Community.** Provide programs and facilities that foster education, community development, and opportunities for employment. As part of the Master Plan, LASC will build eight new buildings to replace temporary structures. The Master Plan will

[1] The Full Time Equivalent (FTE) is obtained by dividing the total hours of class attendance over an academic year by 525, a number representing 15 hours per week of class attendance by one student over two standard semesters.

[2] Los Angeles Southwest College Facilities Master Plan.



LEGEND:

Project Site

SOURCE: Los Angeles Southwest College

Southwest College Master Plan EIR

LOS ANGELES COMMUNITY COLLEGE DISTRICT

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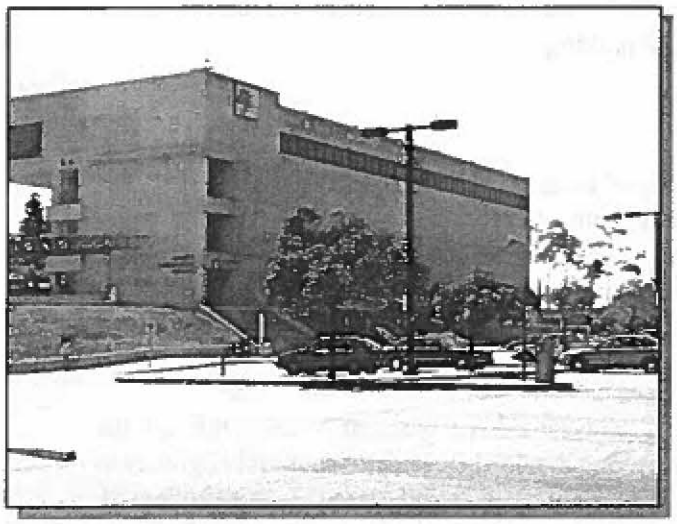
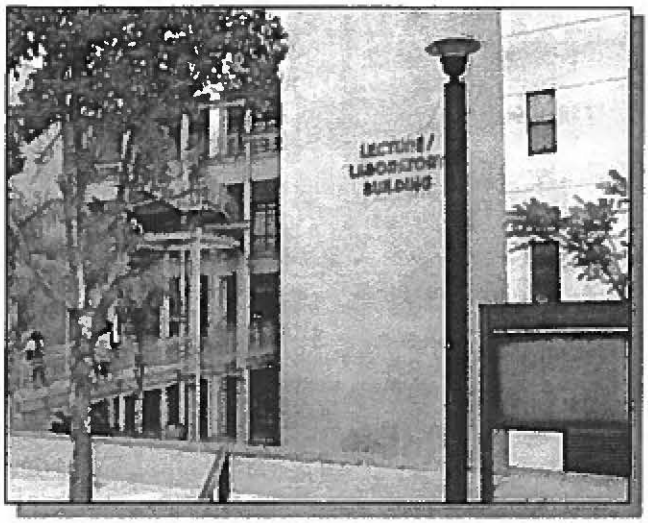
FIGURE 3-1

AERIAL PHOTOGRAPH

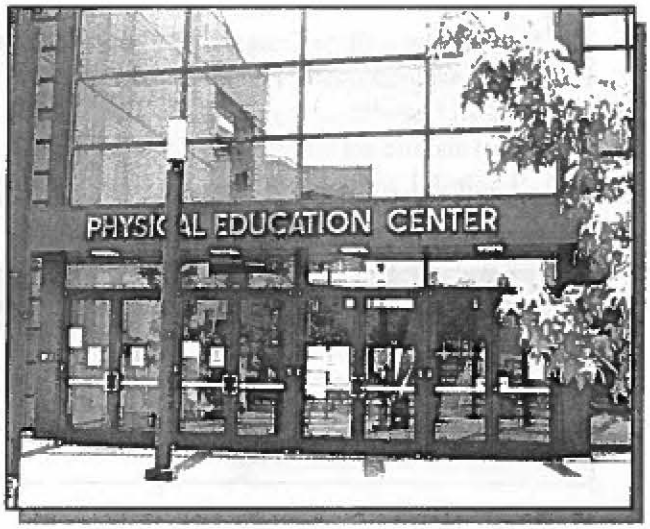


Cox Building, Parking Lot A in foreground



Lecture Laboratory Building

Technical Education Building, Parking Lot F in foreground



Thomas G. Lakin Physical Education Building

SOURCE: Terry A. Hayes Associates LLC

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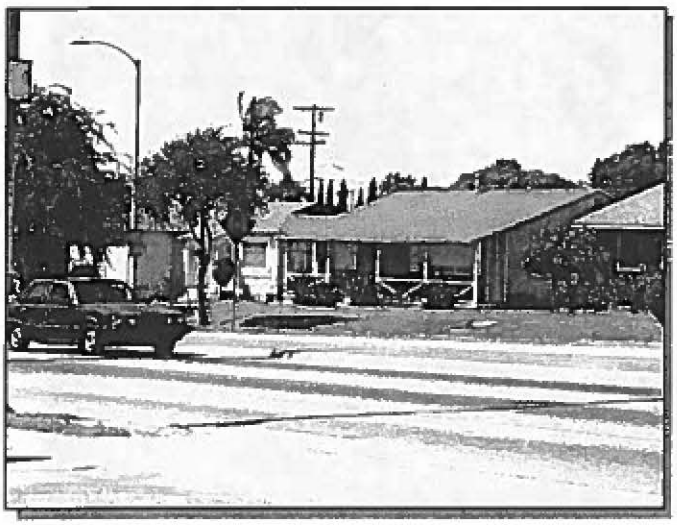
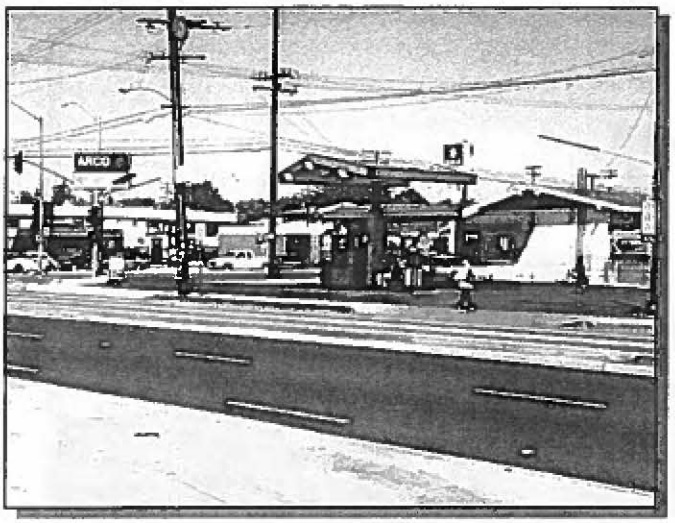
FIGURE 3-3

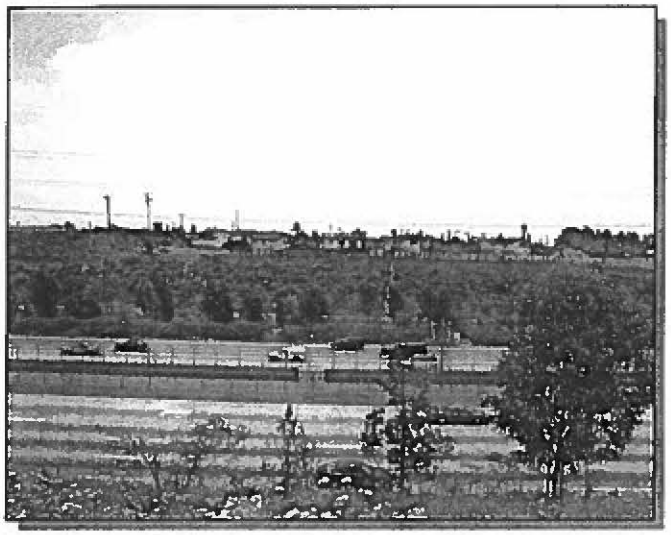
BUILDINGS TO REMAIN



Single-family homes along Imperial Avenue bordering north side of campus. Residential uses are sensitive to potential impacts, particularly air and noise.



Gas station at corner of Western Avenue and Imperial Highway



The 105 Freeway bordering the south side of campus, a contributing factor to air quality and noise impacts in the surrounding area.

SOURCE: Terry A. Hayes Associates LLC

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FIGURE 3-4

ADJACENT LAND USES

Project Phasing

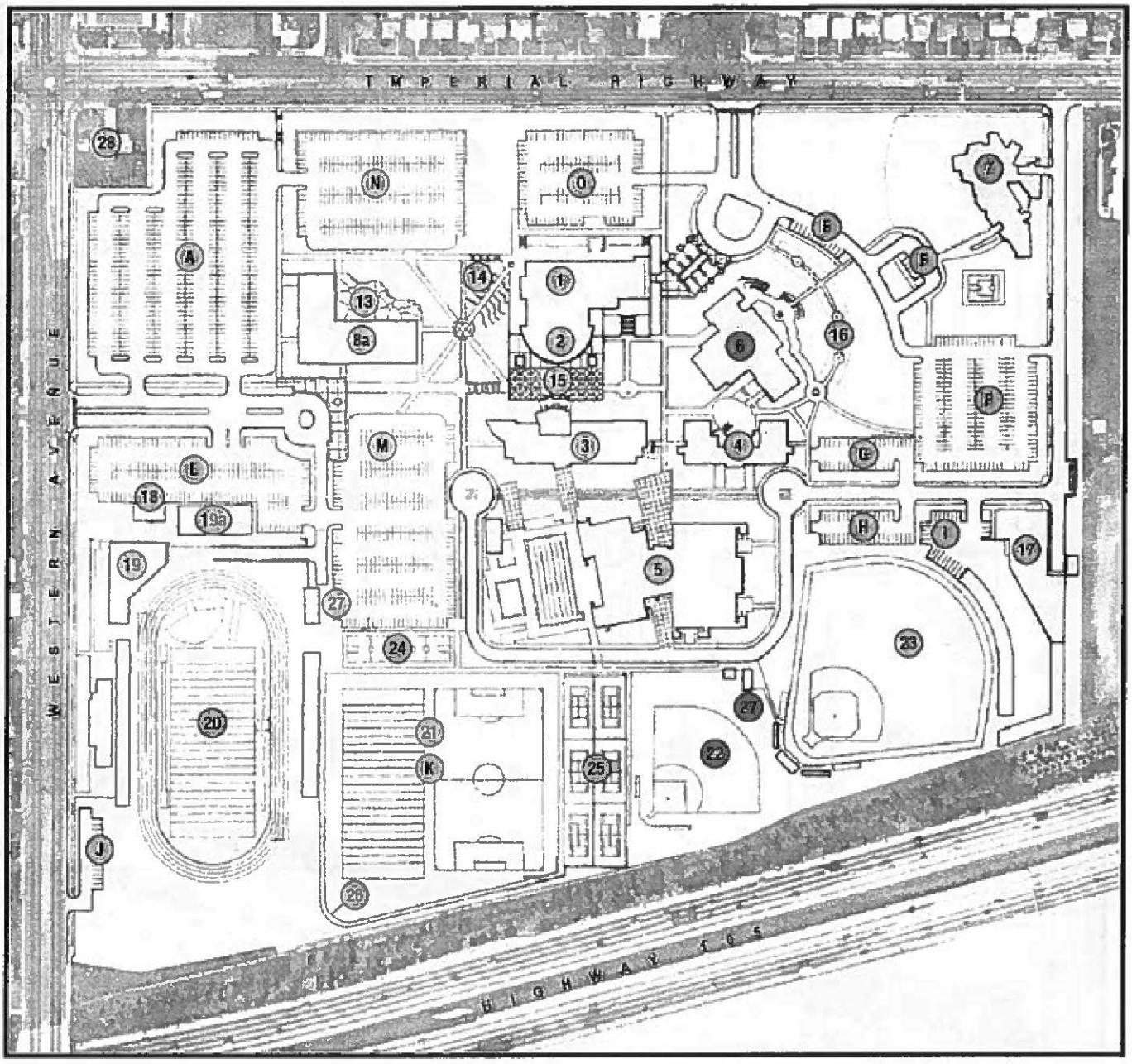
The Master Plan is forecasted for completion in two phases, as shown in **Table 3-2** along with changes in square footage for each project. **Figure 3-6** and **Figure 3-7** show the Master Plan for near-term and long-term build out, respectively. Included in the project list is the renovation of the four main buildings, expansion of the stadium, and the addition of eight new buildings. New buildings will include a Child Development Center, two new Student Services/Activity Cluster buildings,[3] a Maintenance Operations building, an Advanced Education Center, an Arts Center, a new wing on the Library, and a 4,000 seat stadium with expanded field house. Other projects include:

- Completing a survey of the water utility around the entire campus.
- Replacing the existing electricity services with new campus-owned transformers.
- Locating the gas piping on the western and southeast portions of campus.
- Upgrading the fire alarm systems so that the entire campus is on the same system.
- Completing a study of distribution piping for fire mains and pumps.
- Improving building security by installing door contacts on all exterior doors and adding motion sensors in rooms.
- Installing lighting at the upper campus tennis courts and improving lighting at the current parking Lot F.
- Achieving redundancy for the fiber-cabling network.
- Assessing the extent of a current problem area with the sewer system and finding a remedy.
- Investigating the implementation of a Standard Urban Storm Water Mitigation Plan (SUSMP) for bond projects.
- Completing the evaluation of potential surface fault rupture.

TABLE 3-2: PROPOSED LASC CAMPUS PROJECTS

Near-Term Projects	Size
New Construction	
Convert Student Services Center to Classrooms and Class Labs Building	63,000 gsf
Construct a New Child Development Center / Classroom Building	35,000 gsf
Construct a New Student Services / Activity Cluster Center Building	60,000 gsf
Construct a New Maintenance Operations Building	20,000 gsf
Maintenance Operations	
New Warehouse	
Expand Stadium for Football and Track	
Construct 4,000 Seats	22,000 gsf
Construct Spectator Support	12,200 gsf

[3] The Child Development Center and one of the Student Services buildings are currently under design. The Student Services Building is preparing for ground breaking and is anticipated to occur prior to the EIR being considered for certification. The Student Services building, is intended to move forward as a separate but related project. This is due to the fact that the construction of this building was evaluated in a previous certified EIR in 1994 and approved as part of the 1994 Los Angeles Southwest College Master Plan. The Student Services building is included in this EIR analysis for the sake of comprehensive analysis and cumulative impact purposes.



LEGEND:

1. Cox Building (Renovation)
2. Theater (Renovation)
3. Lecture Lab Building (Renovation)
4. Technical Education Building (Renovation)
5. Thomas G. Lakin Physical Education Building (Renovation)
6. Classroom & Class-Lab Building (New)
7. Child Development Center/ Classroom Building (New)

8a. Student Services/Activity Cluster (New)
13. Food Court (New)
14. Informal Outdoor Amphitheater (New)
15. Palm Court (New)
16. Thomas Gl. Larkin Rose Garden (New)
17. Maintenance/Operations-Shipping/Receiving (New)
18. Campus police (Existing)
19. Field House (New)
20. Stadium-Football,Track (Renovation)
21. Football & Soccer Practice Fields (Renovation)
22. Softball Field (New)
23. Dennis Gilbert Baseball Field (Existing)
24. Basketball Courts (New)
25. Tennis Courts (New)
26. Exercise Path (New)
27. General Use Restrooms & Concessions (New)
28. Potential Acquistion

A General Use Parking Lot - *440 spaces*
E Visitor Parking Lot - College - *12*
F Visitor Park Lot - Child Development - *5*
G General Use Parking Lot - *37*
H General Use Parking Lot - *37*
I M&O Parking Lot - *24*
J Stadium Staff Parking Lot - *15*
K Event Overflow Parking - *158*
L Interim Parking Lot - *173*
M Interim Parking Lot - *283*
N Interim Parking Lot - *239*
O Interim Parking Lot - *142*
P Interim Parking Lot - *206*

N

SOURCE: Los Angeles Southwest College Facilities Master Plan, May 2003

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FIGURE 3-6

NEAR-TERM MASTER PLAN

Anticipated Employment Opportunities

In the interest of contributing to the economic growth of the local community, the Board of Trustees for the LACCD adopted a resolution to establish a Community Economic Development Program for Proposition "A" Work. The resolution was adopted in October of 2001. As part of this resolution, the Economic Development Program includes: 1) a Community Business Enterprise Program to encourage the use of local, small, emerging and disabled veteran-owned businesses neighboring LACCD colleges; 2) a Local Hire Program which encourages the offering of both trade and non-trade job opportunities to local residents; 3) a College Internship Program for LACCD students; and 4) a Special Opportunities Program to provide training and job opportunities to the socio-economically disadvantaged.

4.0 ENVIRONMENTAL IMPACTS

This section examines the potential adverse environmental impacts that may result from the implementation of the proposed project. Discussion is focused on the identification of changes that may be considered to be environmentally significant (a substantial, or potentially substantial, adverse change in the environment).

Analysis of each environmental issues is organized within the following six subsections:

Environmental Setting - A description of existing conditions, prior to the implementation measures envisioned in the LASC Master Plan, and a discussion of the policy and technical background necessary for analysis of potential impacts.

Significance Criteria - The thresholds by which the Master Plan and subsequent implementation projects are measured to determine if a project will cause a substantial, or potentially substantial, adverse change in the existing environmental conditions.

Environmental Impact - An analysis of the beneficial and adverse effects of the Master Plan, including, where appropriate, assessments of the significance of potential adverse impacts relative to established criteria and thresholds (relative to existing conditions per CEQA).

Mitigation Measures - Wherever significant adverse impacts relative to existing conditions have been identified under the preceding Environmental Impact section, appropriate and reasonable measures are recommended to minimize impacts to the extent feasible.

Unavoidable Significant Adverse Impacts - A discussion of whether impacts would still be significant after mitigation (unavoidable significant adverse impact) or reduced to a level of less than significant or no impact after mitigation.

Cumulative Effects - In certain instances, a proposed project may have possible environmental effects which are individually limited but cumulatively considerable. In accordance with Section 15130 of the CEQA Guidelines (as amended through January 1, 2000), this EIR analyzes the cumulative impacts that could occur with the proposed project. Cumulative impacts (i.e., two or more individual effects which, when considered together, compound or increase the environmental impact of a proposed project) can result from individually minor but collectively significant projects taking place over a period of time. Where impacts are found, mitigation measures are provided to reduce impacts as much as possible.

4.1 AESTHETICS AND LIGHTING

This section evaluates the potential impacts related to campus aesthetics, lighting, and shadows as a result of physical changes to LASC under the proposed Master Plan. Aesthetics refers to visual resources and the quality of what can be seen, or overall visual perception of the environment, and may include such elements as buildings, design character, landscaping, and open areas. Lighting addresses the effects of exterior illumination and sources of glare on adjoining uses. Shading issues are concerned with effects of shadows cast by existing or proposed structures on adjacent land uses.

ENVIRONMENTAL SETTING

Scenic Highways

According to the California Department of Transportation there are no state-designated or locally-designated scenic highways within the vicinity of the project site. The nearest scenic highway is a portion of the I-110 Freeway designated a historic parkway. The historic parkway begins at the junction of the I-110 Freeway with the I-5 Freeway, approximately 12 miles north of the project site, and runs as far as Pasadena.[1]

Campus Open Space

A variety of open space areas are interspersed throughout the campus. Small areas of open space separate the main LASC buildings at the interior of campus while larger tracts of open space surround these buildings and the temporary bungalows. In the center of campus, a paved and landscaped courtyard is located between the Cox building and the Lecture Lab building. Students pass through this open space or sit at one of its four picnic tables; it is one of the more heavily used open spaces on campus. Adjacent to the courtyard on the west side is an outdoor food court with picnic tables and a space for a food catering truck.

The largest open spaces are the athletic fields located on the south side of campus. They are the baseball diamonds, the stadium and an open field. The athletic fields are limited to recreational use. The field between the two baseball diamonds and the lawn adjacent to the tennis and basketball courts receive little traffic or use. **(Figure 4.1-1)**.

Landscaping

Trees and grass cover comprise the existing landscaping at LASC. Shrubs, flowers or other common greenery are minimal. Trees on campus are either located around the Cox building or on the periphery of campus. Mature trees line the slope west of the Cox building. Trees are also planted within the courtyard between the Cox and Lecture Lab buildings and coniferous trees are along the approach to the courtyard on the east side of Cox.

Along Imperial Highway a buffer of lawn and tree canopy lines part of the northern edge of campus. The south edge of campus is a large graded drop-off to the I-105 freeway with imperceptible landscaping. The east edge is a narrow, but densely landscaped slope that leads up to the adjoining church property. The west edge is landscaped with lawn and some tree cover north of the track/stadium.

[1] www.dot.ca.gov/hq/LandArch/scenic_highways/langeles.htm

Lighting

Ambient exterior lighting at LASC consists of the illumination of some parking areas and security lighting for pedestrians among the permanent and temporary buildings as well as lighting in the stadium in the southwestern portion of the campus. The baseball fields and tennis court areas are not lit. The highest illumination on the campus is directed at the stadium where there are often nighttime training or events.

Most campus walkways are lit at night to provide secure passage between buildings. Lighting at the upper campus tennis courts and at parking Lot F, adjacent to Dennis Gilbert Field is dim along the passage between these facilities, buildings, and campus pathways. Parking lot F has lighting fixtures installed but not connected to any power source. The tennis court area, which is used after dark, has no lighting installed along the roadway or walkways surrounding the courts.

Shade and Shadow

The tallest buildings on the LASC campus, the Cox building and Technical Education building, are approximately 50 to 60 feet in height and are located near the center of campus. These buildings do not cast shadows outside of the campus boundaries. The location of buildings along the northern campus perimeter could have the potential to cast shadows onto adjacent shade sensitive uses. Examples of shade sensitive uses include useable outdoor spaces associated with residential, recreational or institutional uses, and commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor spaces. Shade sensitive uses adjacent to the campus are primarily residential.

SIGNIFICANCE CRITERIA

A significant visual and aesthetic impact would result if the proposed project would:

- Disrupt or obstruct the vista from a designated scenic highway;
- Reduce the amount of existing open space;
- Remove mature trees and landscaping;
- Cast a new shadow for more than three hours in a day onto a residential backyard;
- Generate spillover light onto adjacent residential properties, and/or noticeably increase ambient lighting levels; or
- Create a direct line of sight between pole mounted lighted fixtures and adjacent residential properties.

ENVIRONMENTAL IMPACTS

Summary of Impacts

- No significant impacts related to scenic highways.
- No significant impacts related to campus open space.
- No significant impacts related to landscaping.
- No significant impacts related to lighting.
- Potentially significant related to shade and shadow (mitigated).

Lighting

The proposed Master Plan would improve the overall lighting on the LASC campus. All parking areas and pedestrian walkways would be lit to increase the sense of security and visibility during the evening hours. Most shadowed and dark areas would be eliminated. Lighting would also be installed to provide security lighting for all buildings and facilities. Additional ornamental lighting may also be installed to accent buildings and/or the proposed landscaping plan. Lighting around the perimeter of the campus will be designed to enhance the sense of security for pedestrians. Lighting fixtures supporting this illumination program will typically be mounted on low scale poles or on the facades of buildings. It is expected that this lighting (which typically is at the level of 1 to 2 footcandles)[2] would not spillover outside the campus boundaries nor would it create glare that would adversely affect adjacent residences in any way.

To accommodate a renovated and enlarged stadium the fixture pole lighting will also be updated. Although specifications for the stadium lighting level has not be developed, the illumination of an athletic field will typically reach 50 footcandles. To achieve this level of illumination the lighting fixtures in the stadium will be updated. Because the lighting will be atop poles that are generally 80 to 100 feet in height, there is a potential for light to spillover outside of the stadium area if the light beams are not properly aimed and shielded with hoods. It is expected that directional beamed lighting and hoods will be installed as part of the upgraded stadium lighting and as a result no glare impacts are anticipated. Spillover lighting effects are not expected because light beam patterns will be directed on the field, and there are no directly adjacent residential uses that could be affected. No significant lighting impacts are anticipated.

Shade and Shadows

The surrounding area adjacent to the campus was surveyed to identify shade sensitive uses. Residential properties are located north of the campus along Imperial Boulevard. The LASC Master Plan would result in a build out of the campus that would place buildings within 50 feet of the campus perimeter along Imperial Highway. The Master Plan indicates that the new Student Services/Activity building, Advanced Education Center, and a library expansion from the Cox building would be up to three stories in height. To determine whether a shadow would be cast onto the residential properties adjacent to the north side of campus, heights of the proposed buildings, the distance of the proposed buildings from the homes, the time of day, and the time of year were taken into consideration. Worst-case shadows from these buildings would be cast in the winter at 8:00 am and at 4:00 pm. Shadows would be cast in the morning in a northwest direction from the buildings and in the evening in a northeast direction. The length of the shadows would be approximately 188 feet from the building edge for a 35-foot tall building. This shadow length would not affect residences on the north side of Imperial. (**Figure 4.1-2**) However, shadows from buildings greater than 35 feet in height would affect these residences during the winter. Implementation of mitigation measure **AE1** would ensure that no impact would result from shade or shadows.

[2]A footcandle is a standard measure of illumination typically used for light poles and signs. Generally, a foot candle is the minimum amount of light necessary to fully illuminate one square foot. A major street intersection is generally illuminated at 1to 1.5 foot candles. A baseball field is typically illuminated to a level of 30-50 footcandles.

MITIGATION MEASURES

AE1 Techniques to prevent shadows from new buildings being cast upon residential property along the north side of Imperial Highway, shall include, but are not limited to one of the following: the overall height of a building at the 50 feet setback line shall be limited to 35 feet; the buildings shall be set back farther than the recommended 50 feet; or the upper two stories of the buildings shall be stepped back to move the tallest part of the building farther away from the setback zone.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

Implementation of mitigation measure **AE1** would reduce potential shade and shadow impacts to a level of no impact.

CUMULATIVE EFFECTS

No cumulative impacts on aesthetics and lighting are anticipated because such an impact is site-specific and would not be compounded by other projects in the surrounding area.

4.2 AIR QUALITY

This section examines the degree to which the proposed project may result in changes to air quality. Both intermittent (short-term construction emissions that occurs from activities such as site grading and haul truck trips during individual projects), as well as the long-term effects related to the ongoing operation of the proposed project, are evaluated in this section. The analysis contained herein focuses on pollution in two distinct ways: 1) daily emissions (total volumes of pollutants expressed in pounds per day) from construction activity or vehicle trips attributable to the proposed project; and 2) potential "hot spots" where concentrations of pollutants could be an issue.

ENVIRONMENTAL SETTING

Climate

Regional

The climate of the project site vicinity, as with all of Southern California, is controlled largely by the strength and position of the subtropical high pressure cell over the Pacific Ocean. This high pressure cell maintains moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter wet season. Temperatures are normally mild, except during the summer months, which commonly bring substantially higher temperatures. Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime on-shore sea breezes. At night, the wind generally slows and reverses direction, traveling toward the sea.

Southern California experiences frequent temperature inversions. Temperature typically decreases with height. However, under inversion conditions, temperature increases as altitude increases, thereby preventing air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere. This interaction creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and nitrogen dioxide react under strong sunlight, creating pollution, commonly referred to as smog. Light, daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains.

During the fall and winter, air quality problems are created due to carbon monoxide (CO) and nitrogen dioxide (NO_2) emissions. CO concentrations are generally worse in the morning and late evening (around 10:00 p.m.). Morning levels are relatively high due to the large number of cars during the commute and colder temperatures. The high levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the SCAB are associated with heavy traffic. NO_2 levels are also generally higher during autumn or winter days. High levels of NO_2 in the fall and winter usually occur on days with summer-like conditions.

Local

The mountains and hills within the South Coast Air Basin (SCAB) contribute to the variation of rainfall, temperature and winds throughout the region. Within the project site and its vicinity, the average wind speed, as recorded at the Lennox Wind Monitoring Station, is approximately 4.7 miles per hour, with calm

LEGEND:

South Coast Air Basin

State of California

SOURCE: California Air Resources Board, State and Local Air Monitoring Network Plan, October 1998

APPROX. SCALE

N

0 75 150 MILES

Southwest College Master Plan EIR

LOS ANGELES COMMUNITY COLLEGE DISTRICT

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FIGURE 4.2-1

SOUTH COAST AIR BASIN

AQMP, which is prepared or subsequently revised to comply with the national ambient air standards, are submitted to CARB for incorporation in the State Implementation Plan (SIP) with plans and regulations from other air quality management and air pollution control districts in the state. When approved by CARB and the EPA, the AQMP becomes part of the SIP for the SCAB. The SIP is a collection of AQMPs for all air basins within the state.

Pollutants and Effects

Air quality studies generally focus on five pollutants which are most commonly measured and regulated: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), respirable particulate matter (PM_{10}), and sulfur dioxide (SO_2).

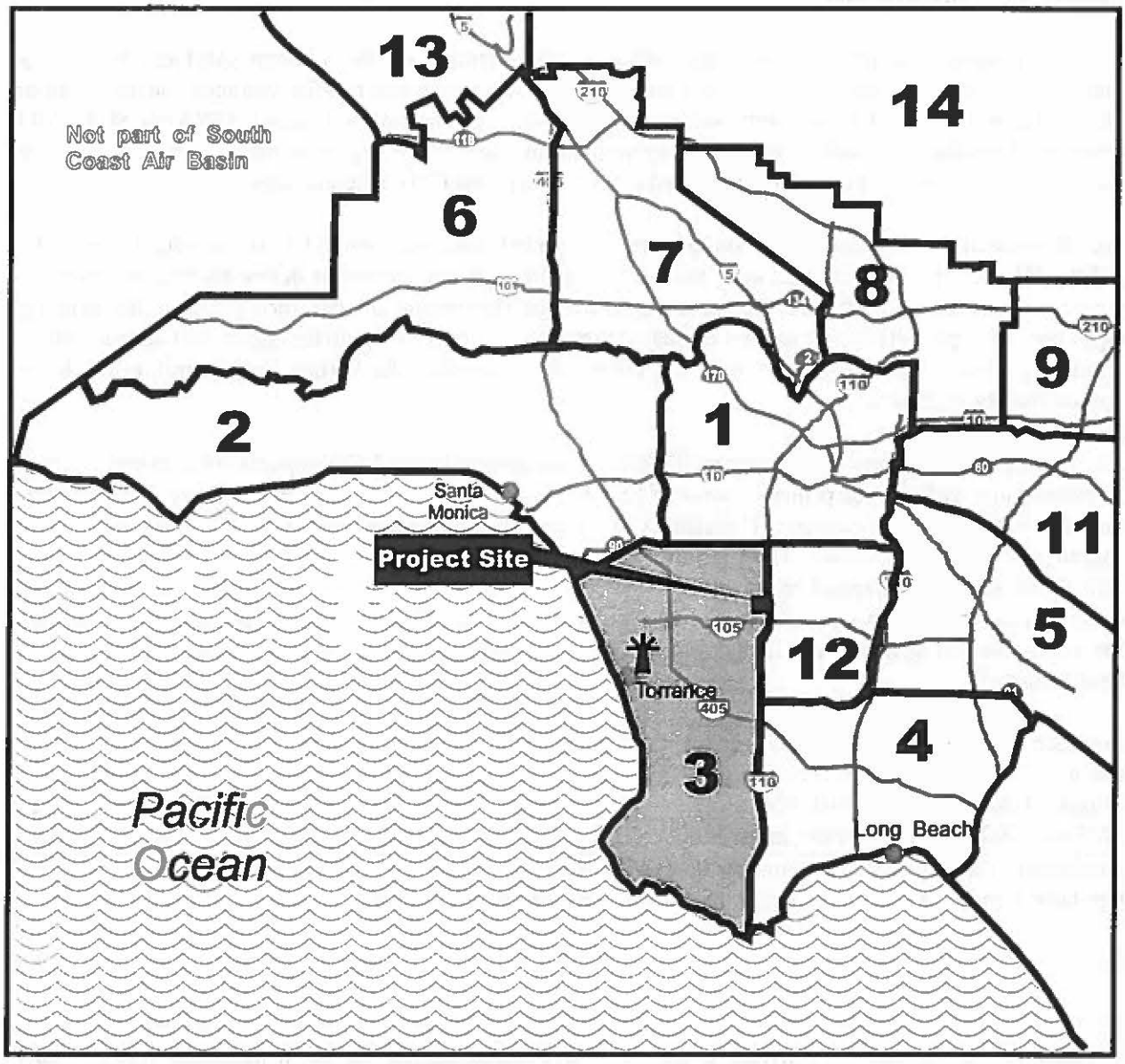
CO, a colorless gas, interferes with the transfer of oxygen to the brain. CO is emitted almost exclusively from the incomplete combustion of fossil fuels. Along with carbon dioxide (CO_2), CO is emitted by motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. Automobile exhausts release most of the CO in urban areas. CO concentrations are influenced by local meteorological conditions, primarily wind speed, topography, and atmospheric stability.

O_3, a colorless toxic gas, enters the blood stream and interferes with the transfer of oxygen, depriving sensitive tissues in the heart and brain of oxygen. O_3 also damages vegetation by inhibiting growth. Although O_3 is not directly emitted, it forms in the atmosphere through a chemical reaction between reactive organic compounds and nitrogen oxides (NO_X), which are emitted from industrial sources and from automobiles. Substantial O_3 formation generally requires a stable atmosphere with strong sunlight.

NO_2, a brownish gas, irritates the lungs. It can cause breathing difficulties at high concentrations. Like O_3, NO_2 is not directly emitted, but is formed by a reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as nitrogen oxides (NO_X) and are major contributors to ozone formation. NO_2 also contributes to the formation of PM_{10}, small liquid and solid particles that are less than ten microns in diameter (see discussion of PM_{10} below). At atmospheric concentration, NO_2 is only potentially irritating. In high concentrations, the result is a brownish-red cast to the atmosphere and reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 parts per million (ppm).

PM_{10} refers to particulate matter less than ten microns in diameter, about one-seventh the thickness of a human hair. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter also forms when gases from industry and gases emitted from motor vehicles undergo chemical reactions in the atmosphere. Major sources of PM_{10} include motor vehicles; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush or waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Suspended particulates produce haze and reduced visibility. Additionally, PM_{10} poses a greater health risk than larger-sized particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tracts. PM_{10} can also increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections.

$PM_{2.5}$ refers to particulates that are 2.5 microns or less in diameter, roughly 1/28th the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (from motor vehicles, power generation, industrial facilities), residential fireplaces and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur dioxide, nitrogen oxides, and volatile organic compounds. Like PM_{10}, $PM_{2.5}$ can penetrate the



LEGEND: Hawthorne Monitoring Station

Air Monitoring Areas in Los Angeles County:

1. Central Los Angeles
2. Northwest Coastal
3. Southwest Coastal
4. South Coastal
5. Southeast Los Angeles County
6. West San Fernando Valley
7. East San Fernando Valley
8. West San Gabriel Valley
9. East San Gabriel Valley
10. Pomona/Walnut Valley
11. South San Gabriel Valley
12. South Central Los Angeles
13. Santa Clarita Valley
14. Antelope Valley
15. San Gabriel Mountains

APPROX. SCALE

0 3.0 6.0 9.0 MILES

SOURCE: South Coast Air Quality Management District Air Monitoring Areas Map, 1989

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FIGURE 4.2-2

AIR MONITORING AREAS

- Middle College High School (on-site)
- Single-family residential uses on Imperial
- St. Francis X Cabrini School
- Stadium (on-site)
- Pool (on-site)
- Softball and Practice Fields (on-site)
- Dennis Gilbert Baseball Field (on-site)
- Chester C. Washington Golf Course
- Moore's Day Care, Inc.
- Castle in the Clouds (preschool/daycare center)
- Henry Clay Junior High School

TABLE 4.2-3: EXISTING CARBON MONOXIDE CONCENTRATIONS /a/

Intersection	CO Concentration at Nearest Sidewalk (parts per million-ppm)	
	1-Hour (State Standard = 20.0 ppm)	8-Hour (State Standard = 9.0 ppm)
Imperial Highway & Crenshaw Boulevard	11.2	7.8
Century Boulevard & Western Avenue	11.2	7.8
Century Boulevard & Normandie Avenue	11.2	7.8
Imperial Highway & Normandie Avenue	11.1	7.8
Vermont Avenue & I-105 Westbound Ramps	11.2	7.8
Imperial Highway & Western Avenue	11.1	7.8
Western Avenue & Site Entrance	11.5	8.1
Imperial Highway & Denker Avenue	10.8	7.6

/a/ All concentrations include existing one- and eight-hour ambient concentrations of 10.2 ppm and 7.1 ppm, respectively.
SOURCE: Terry A. Hayes Associates LLC, Meyers Mohaddes Associates, see Appendix G.

For purposes of providing a worst-case analysis, CO concentrations have been modeled at sidewalk locations adjacent to eight study area intersections, see discussion above. Since CO is a localized gas which disperses quickly, concentrations are highest within close proximity to intersections. Concentrations at specific sensitive receptors will be substantially lower than those concentrations immediately adjacent to intersections.

SIGNIFICANCE CRITERIA

Air quality impacts of a project can be separated into two categories: short-term impacts due to construction and long-term permanent impacts due to project operations. The proposed project would have a significant air quality impact if:

- Daily construction emissions were to exceed the SCAQMD construction emissions thresholds for CO, ROG, NO_X, SO_X, or PM_{10}. The SCAQMD significance thresholds for construction activities appear in **Table 4.2-4**;

- Project-related traffic causes CO concentrations at study intersections to violate the CAAQS for either the one- or eight-hour period. The CAAQS for the one- and eight-hour period are 20.0 ppm and 9.0 ppm, respectively. If CO concentrations currently exceed the CAAQS, then, an incremental increase of 1.0 ppm over "no project" conditions for the one-hour period would be considered a significant impact. Additionally, an incremental increase of 0.45 ppm over the "no project" conditions for the eight-hour period would be considered significant;[8] or
- The proposed project is not consistent with the SCAQMD AQMP.

TABLE 4.2-4: SCAQMD DAILY EMISSIONS THRESHOLDS

Pollutant	Construction (pounds per day)	Operations (pounds per day)
Carbon Monoxide (CO)	550	550
Reactive Organic Gas (ROG)	75	55
Nitrogen Oxides (NO_X)	100	55
Sulfur Oxides (SO_X)	150	150
Particulates (PM_{10})	150	150

SOURCE: SCAQMD, CEQA Air Quality Handbook, 1993.

ENVIRONMENTAL IMPACTS

Summary of Impacts

- No significant impacts related to construction emissions.
- Significant NO_X impact related to mobile emissions.
- No significant impacts related to CO Hot Spots.
- No significant impact related to consistency with the AQMP.
- Significant impact related to cumulative SCAQMD emissions threshold for NO_X

Discussion of Impacts

Construction Emissions

Construction of the proposed developments in the Los Angeles Southwest College Master Plan is anticipated to occur between the years 2003 and 2006. Construction for the proposed project would generate pollutant emissions from the following construction activities: (1) demolition of existing structures, (2) grading, (3) excavation, (4) construction worker travel to and from project sites, (5) delivery and hauling of construction supplies and debris to and from project sites, (6) fuel combustion by on-site construction equipment, and (7) architectural coating. These construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. However, PM_{10} is the most significant source of air pollution from construction, particularly during site preparation and grading.

Construction phases for some of the developments proposed in Master Plan would overlap, and increase emissions during certain days. Based on **Table 4.2-5**, overlapping construction is not likely to exceed

[8] Consistent with the SCAQMD Regulation XIII definition of a significant impact.

average trip length statistics, and CARB emission factors.[9] The results, shown in **Table 4.2-6**, show that incremental increases in operational emissions is anticipated to exceed the SCAQMD significance threshold for NO_X. Thus, a significant impact is anticipated.

TABLE 4.2-6: DAILY OPERATIONS EMISSIONS

Project	Pollutant (pounds per day)				
	CO	ROG	NO_x	SO_x	PM_{10}
Los Angeles Southwest College Master Plan	537	22	115	1	10
SCAQMD Threshold	**550**	**55**	**55**	**150**	**150**
Exceed Threshold?	No	No	Yes	No	No

SOURCE: Terry A. Hayes Associates LLC. See Appendix B.

Carbon-Monoxide Hot Spot Analysis

CO Concentrations from Street Intersections. Overall, CO concentrations are expected to be lower than existing conditions in the year 2015 due to stringent state and federal mandates for lowering vehicle emissions. Although traffic volumes would be higher in the future with and without implementation of the proposed project, CO emissions from vehicles are expected to be much lower due to technological advances in vehicle emissions system.

As indicated in **Table 4.2-7**, year 2015 "no project" conditions (i.e., existing plus ambient growth), one-hour CO concentrations at study intersections would range from approximately 4.4 ppm to 4.5 ppm, and eight-hour concentrations would range from 3.1 ppm to 3.2 ppm. Under "project" conditions, one-hour CO concentrations at study intersections would range from approximately 4.4 ppm to 4.6 ppm, and eight-hour concentrations would range from 3.1 ppm to 3.2 ppm. Under "project" conditions, the State one- and eight-hour standards of 20.0 ppm and 9.0 ppm, respectively, would not be exceeded at the eight study intersections. A less-than-significant impact is anticipated at the study intersections.

CO is a gas that disperses quickly. Thus, CO concentrations at sensitive receptor locations are expected to be much lower than CO concentrations at sidewalk locations adjacent to roadway intersections, which is the model in this analysis. Additionally, the sidewalk locations modeled in this analysis were selected because these locations adjoin roadway intersections that would have the worst levels of service under project conditions.[10] Thus, sensitive receptors that are located near roadway intersections with better levels of service are expected to have lower CO concentrations. As shown in **Table 4.2-7**, no impact is expected at the analyzed sidewalk locations. Thus, no significant increase in CO concentrations at sensitive receptor locations is expected, and no significant impacts would occur.

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[9] Trip generation estimates were derived by the project traffic consultant, Meyers Mohaddes Associates. Average trip length was based on the Los Angeles Community College District's service area study for LASC. Emissions factor data were derived from the CARB EMFAC2002 model for the Los Angeles County portion of the SCAB (Appendix B).

[10] Level of service is used to indicate the quality of traffic flow on roadway segments and at intersections. Level of service ranges from LOS A (free flow, little congestion) to LOS F (forced flow, extreme congestion). The eight intersections that are analyzed in this report are anticipated to have an LOS of E or F under "project" conditions.

is a service institution and, thus, implementation of the proposed project would not directly result in the growth of population, housing, and employment. Thus, the proposed project complies with Consistency Criterion 2.

The proposed project complies with Consistency Criteria 1 and 2. Therefore, the proposed project is considered consistent with the AQMP.

MITIGATION MEASURES

Construction Emissions

AQ1 The construction area and vicinity (500-foot radius) shall be swept and watered at least twice daily. Site-wetting shall occur often enough to maintain a 10 percent surface soil moisture content throughout all earth-moving activities.

AQ2 All unpaved parking or staging areas shall be watered at least once every two hours of active operations.

AQ3 Site access points shall be swept/washed within thirty minutes of visible dirt deposition.

AQ4 On-site stockpiles of debris, dirt or rusty material shall be covered or watered at least twice per hour.

AQ5 All haul trucks shall either be covered or maintain two feet of freeboard.

AQ6 All haul trucks shall have a capacity of no less than 14 cubic yards.

AQ7 At least 80 percent of all inactive disturbed surface areas shall be watered on a daily basis when there is evidence of wind-driven fugitive dust.

AQ8 Operations on any unpaved surfaces shall be suspended when winds exceed 25 mph.

AQ9 If construction activities occur within 500 feet of the Child Development Center, the Child Development Center shall be temporarily relocated to an area that is 500 feet from any construction activities.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

AQ1 through **AQ9** is a list of feasible control measures that the SCAQMD recommends for construction emissions of PM_{10}. Implementation of these mitigation measures is estimated to reduce PM_{10} emissions to approximately 6 and 15 ppd during the demolition and grading/excavation phases, respectively. PM_{10} emissions would not exceed the SCAQMD threshold of 150 ppd. Thus, less-than-significant impacts are anticipated during construction.

No mitigation measures to reduce impacts related to NO_x are available. Unavoidable significant adverse impacts are anticipated for NO_X during operations of the proposed project.

4.3 GEOLOGY AND SEISMICITY

This section identifies the potential for geologic and seismic hazards to occur on and/or near the project site. Issues of concern include soils and their sustainability for development, geologic faults, and direct and indirect seismic hazards. A report, the *Report of Fault Rupture Hazard Evaluation: Proposed Campus Master Plan Los Angeles Southwest College*, was completed for the LASC campus by MACTEC on March 28, 2003. This report summarizes research done on the LASC campus that included excavating several trenches on campus in order to properly characterize and evaluate the seismic potential at LASC. This report expanded upon a similar report previously done by MACTEC for LASC that evaluated the campus for fault rupture zones. The current report analyzes new areas beyond those examined in the original report. Areas of LASC's campus that were evaluated in the recent March 28, 2003 report for surface fault rupture include:

- The stadium and track area;
- the northern portion of the softball/practice fields;
- Parking Lots C and D;
- the northern portion of the campus, between the northeast and northwest campus boundaries;
- The area extending southward from the northeast portion of the campus to Parking Lot F; and
- The area north of Dennis Gilbert Field.[1]

The recent fault rupture hazard report is contained in Appendix D of this Draft EIR.

ENVIRONMENTAL SETTING

Geologic Materials and Soils

The project site is located in the West Athens/Westmont Community Plan area within unincorporated Los Angeles County. The topography of Los Angeles County is widely varied and includes mountains, valleys, coastal plain and desert areas. The site is located in the Los Angeles Coastal Plain within the Peninsular Ranges geomorphic province. This province is characterized by elongated northwest-trending mountain ridges separated by straight-sided, sediment-floored valleys. The northwest trend is further reflected in the direction of the dominant geological structural features of the province, which are northwest to west-northwest trending folds and fault zones, including the nearby Rosecrans Hills and Newport-Inglewood fault.

During the recent geologic survey conducted at LASC during preparation of the campus Master Plan, the soils that comprise the LASC campus were evaluated. Soils observed in the survey consisted of Quaternary age colluvium, and alluvial deposits of the Pleistocene age Lakewood Formation, and artificial fill. The Quaternary age colluvium consists of sandy silt and clayey silt with variable amounts of organic material. The Lakewood Formation deposits are interbedded fine- and coarse-grained silts and sands with localized areas of sandy channel deposits and indicate a depositional environment similar to an alluvial floodplain.[2]

Before development, the LASC landscape was punctuated with small, elongated hills. As the site was developed, the peaks of the hills were graded and depressions were filled to level the site and make it more suitable for development. As a result, a combination of original sediment along with artificial fill can be found on the LASC campus.

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[1] *Report of Fault Rupture Hazard Investigation: Proposed Campus Master Plan Los Angeles Southwest College Campus*, Mactec, March 28, 2003.

[2] Ibid.

surface fault rupture. Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet). It was determined that the eastern portion of the campus is located within an established Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazard. **Figure 4.3-1** shows these faults and the Alquist-Priolo Earthquake Fault Zone in relationship to the campus.

Currently, approximately 48 percent of the campus is buildable space.[4] This excludes areas in setback zones, unevaluated campus areas for potential faults, the stadium, and athletic field area interspersed between setback and unevaluated zones. Currently, several buildings exist within the proposed set-back zones. These buildings are targeted for demolition as part of the Master Plan.

The most wide spread damaging effects of earthquakes are caused by strong ground shaking. The intensity of ground shaking at a given location depends on several factors such as the magnitude of the quake, distance from epicenter, and soil characteristics. According to the Los Angeles County Seismic Safety Element the site is subject to high ground response during an earthquake on the Newport-Inglewood fault.

Landslide

A landslide is the rapid descent of earth and rock down a slope. Some areas are at higher risk for landslides due to inherent instability. This instability is generally caused by a steep slope or unstable soil composition. Heavy rainfall, flooding, or ground movements such as earthquakes can induce landslides. According to a report by the California Department of Conservation regarding seismic hazards,[5] LASC is not located in a designated area of landslide hazard. The closest landslide area to LASC is approximately 5.5 miles to the northwest in Windsor Hills. Furthermore, there is no evidence of slope instability (**Figure 4.3-2**).

Liquefaction

Liquefaction is essentially the transformation of the soil to a liquid state. Liquefaction occurs when the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading. Liquefaction potential has been found to be the greatest where the groundwater level is shallow (50 feet or less), and loose, fine sands occur. Depth to groundwater at LASC is approximately 100 feet below ground surface.[6] Other factors that affect liquefaction include soil particle size distribution and gradation, relative density, confining pressure, intensity of shaking and duration of shaking. According to the California Geological Survey's Seismic Hazard Mapping Program (SHMP), the LASC campus is not located in a liquefaction zone. The closest liquefaction zone is located approximately two to three miles northeast of the project site, as shown in **Figure 4.3-2**.

Floods, Tsunamis, Inundation, and Seiches

The site is located within the Los Angeles Coastal Plain, however, examination of a Federal Emergency Management Agency (FEMA) Flood Hazard Map shows that the LASC campus is not located within a 100-

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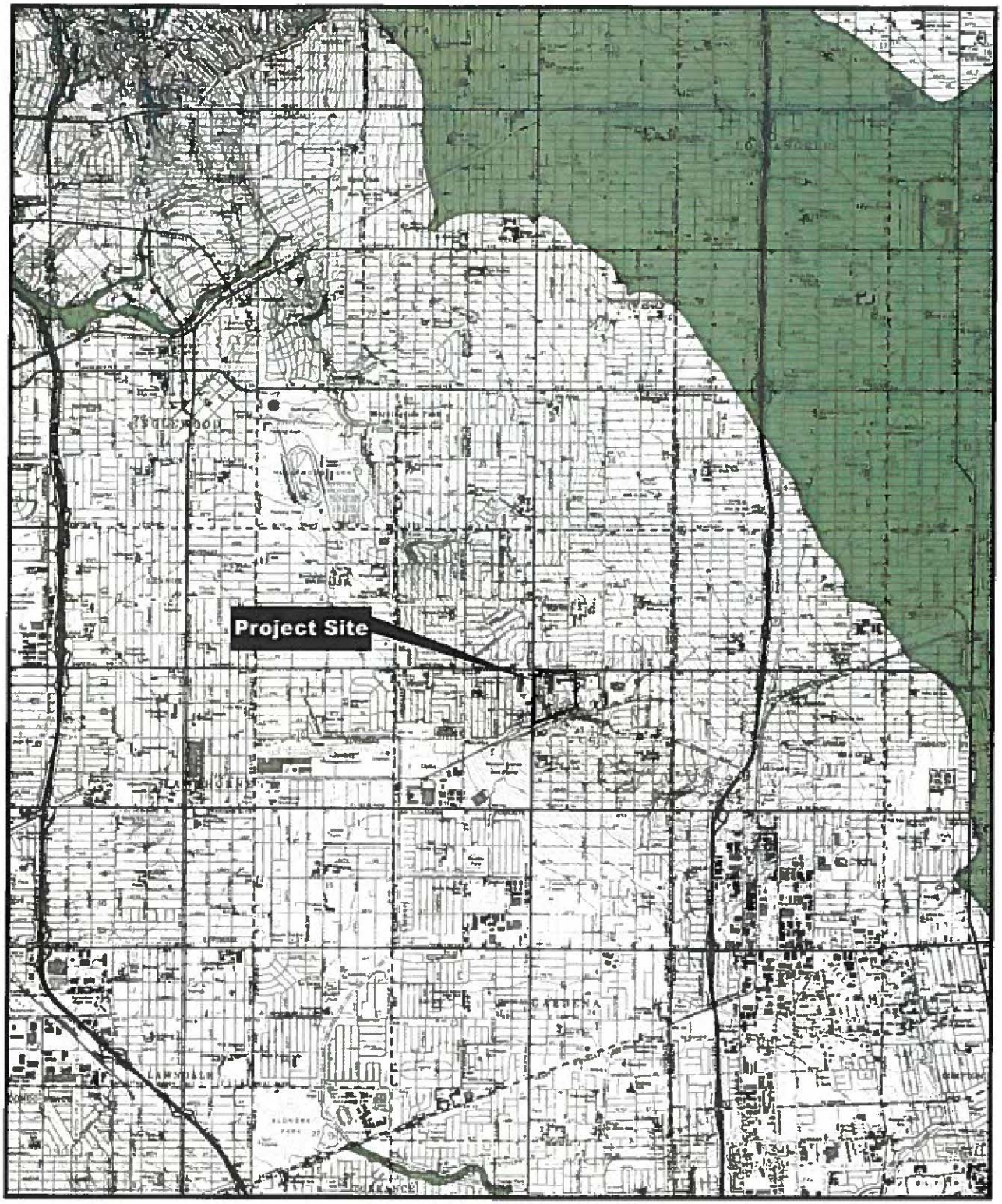
[4] Buildable space was calculated using Master Plan *Figure 2-6 Available Development Areas* plus currently developed building area.

[5] *Seismic Hazard Evaluation of the Inglewood 7.5-Minute Quadrangle, Los Angeles County, California, Plate 2.1: Landslide Inventory*, Department of Conservation, 1998.

[6] *Phase One Environmental Site Assessment*, Natec International, Inc., April 17, 2003.



LEGEND:

Liquefaction
Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Earthquake-induced Landslides
Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Project Site

SOURCE: State of California, Department of Conservation, March 25, 1999

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FIGURE 4.3-2

LIQUEFACTION AND LANDSLIDE ZONES

Discussion of Impacts

Geologic Materials and Soils

The LASC campus contains both artificial fill and original surface soils. Artificial fill can be prone to shrinking, swelling, or lurching which could affect structures built on such fill by undermining the integrity of the structure foundation. The proposed project would result in the construction of new buildings and the redevelopment of others throughout the proposed project site. This hazard would pose a significant, but mitigable impact associated with the proposed project. The site for each proposed building should be analyzed for soil characteristics prior to construction to ensure that proper design is applied.

Seismic Hazards

Seismicity. The LASC campus is dissected by two main fault zones and several associated secondary faults of the Newport-Inglewood fault zone. The site could be subject to strong ground shaking and possible surface rupture as a result of an earthquake on this fault causing risk to occupants and damage to structures.

The Alquist-Priolo Act and State seismic building codes require setbacks for buildings which will occur near an earthquake fault or within an Earthquake Fault Zone. According to the MACTEC reports, setback zones are commonly set at 50 feet unless the boundaries of the fault are poorly constrained, justifying larger setback zones. Based on data obtained regarding the location orientation, and width of faulting, it was the geologists' determination that the areal limits of the fault identified within the campus are well constrained and a setback distance of 50 feet would be sufficient.

The campus Master Plan was designed to accommodate the minimal 50 foot setback. As shown on **Figure 4.3-3**, proposed buildings will be located on the campus in areas that have been evaluated for faulting and found to be safe for structures designed for human occupancy. The Student Services Center is located within the Alquist-Priolo Study Zone. The building however, shall be set back the required minimal 50 feet from the fault. Hazards due to fault rupture is a significant but mitigable impact.

Potential ground shaking hazards can be further addressed and mitigated through compliance with State seismic building code requirements. All structures built within the project site will be required to comply with the most current seismic building code standards. Compliance with setback zones and building code standards will reduce ground shaking hazards. This hazard would pose a significant, but mitigable impact associated with the proposed project.

Liquefaction. The proposed project is not within an area of liquefaction. The closest liquefaction zone is located approximately two to three miles northeast of the project site. The depth to groundwater is approximately 100 feet below ground surface. Liquefaction does not affect the project site. Therefore, the proposed project would not result in a significant impact related to liquefaction.

Landslides. The proposed project is not within an area susceptible to landslides. Therefore, the proposed project would not result in a significant impact related to landslides.

Tsunamis, Inundation, and Seiches. The proposed project area is not in an area subject to tsunami, inundation, or seiche hazards or in an area subject to dam-related inundation caused by dam failure, conditions of excess precipitation, or seiching. Therefore, the proposed project would not result in a significant impact with regard to these hazards.

MITIGATION MEASURES

Geologic Materials and Soils

GS1 Soils shall be evaluated on a project-by-project basis to determine the types of soil present in a proposed building location and the integrity of the soil to withstand ground shaking. Based on results of the evaluation, appropriate design and engineering features will be used in building construction. The criteria for leaving surficial soils in place should be consistent with the grading specifications approved by the Office of the State Architect.

Seismic Hazards

GS2 Establish a minimal 50-foot "no-build" setback zone from the surface projection of known fault zones within the campus. No structure designed for human occupancy will be constructed within the "no build" setback zones defined within the campus boundary.

GS3 No structures designed for human occupancy shall be constructed in areas identified as "unevaluated". Unevaluated areas shall be subject to site-specific geotechnical analysis by a state certified geologist prior to architectural design and construction as required by the Division of the State Architect.

GS4 All construction shall conform to the requirements of the Division of the State Architect and the Standards of the current Uniform Building Code.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

Analyzing the soil characteristics on a building by building basis will ensure that the potential for soil swelling or shrinking will not impact new buildings. Establishing a setback zone from known faults traversing LASC's campus will ensure that impacts due to fault rupture are reduced to a level of no impact because buildings will not be constructed within the zone of possible ground rupture. The 50-foot "no-build" zone would ensure that the Student Service/Classroom proposed in an Alquist-Priolo Zone would be constructed according to specifications in the Alquist-Priolo Act. No construction shall occur in areas that have not been evaluated and all new construction shall comply with building code requirements.

Implementation of mitigation measures **GS1** and **GS4** would reduce potential impacts to less-than-significant levels.

CUMULATIVE EFFECTS

Concerns related to geology and seismicity are site specific. The proposed project site is not be expected to be affected by, or have an effect on, related projects. No potential site hazards exist on LASC's campus that could effect off-site interests. Thus no cumulative effects are expected.

HHM3 For those campus facilities affected by the Master Plan, lead-based paint testing should be conducted due to the deteriorating condition of many painted surfaces. All materials identified as containing lead shall be removed by a licensed lead-based paint/materials abatement contractor.

HHM4 For those campus facilities affected by the Master Plan, asbestos sampling should be conducted to determine if building materials used in the construction of the structures in question have an asbestos fiber content. All material identified as containing asbestos shall be removed and/or encapsulated by a licensed asbestos abatement contractor as provided by the provisions of Rule 1403 of the South Coast Air Quality Management District (SCAQMD) Rules and Regulations.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

Implementation of **HHM1** will ensure that "wildcat" oil wells, if found, are properly abandoned and managed according to current standards. Implementation of **HHM2** will ensure that proper care and caution will be taken when preparing the site for construction. The process described in mitigation measures **HHM3** and **HHM4** will ensure that proper caution is taken during demolition and that any potential impacts arising from asbestos or lead-based paints will be avoided. Implementation of mitigation measures **HHM2** through **HHM4** would reduce the potential impacts related to hazardous materials to a less-than-significant level.

CUMULATIVE EFFECTS

Concerns related to hazardous materials are site specific. All new development projects would be required to mitigate, prior to implementation, hazardous concerns (if existing). The proposed LASC project has not identified risks related to the exposure of the public to the accidental release of hazardous materials, therefore, no cumulative effects are anticipated.

4.5 LAND USE AND PLANNING

This section examines the relationship between the proposed project and local and regional long-term land use plans. The proposed project is evaluated for consistency with the West Athens/Westmont Community Plan, the Los Angeles County General Plan, and the Southern California Association of Governments (SCAG) Regional Comprehensive Plan.[1] Potential conflicts between existing land uses in the vicinity of the project area and the proposed project are also addressed in this section.

ENVIRONMENTAL SETTING

Land Use

The Los Angeles Southwest College (LASC) encompasses approximately 63.7 acres and is located in unincorporated Los Angeles County within the West Athens Community. The campus is 11 miles southwest of Downtown Los Angeles and seven miles east of Los Angeles International Airport. Cities or communities surrounding West Athens include Los Angeles to the north and to the east, Gardena to the south, and Inglewood and Hawthorne to the west. The LASC campus is bound by Imperial Highway to the north, Western Avenue to the west, the Glenn Anderson Freeway (I-105 Freeway) to the south, and Normandie Avenue to the east. LASC's campus is located in a fully developed urban environment. The surrounding neighborhood consists primarily of residential land uses with commercial/retail uses along the major roadways.

Specifically, land uses to the immediate north of LASC's campus along Imperial Highway consist mainly of single-family residential units with some commercial uses near Western Avenue that include fast food restaurants, retail stores, and gas stations. Businesses line Western Avenue to the west of campus. The shopping center and commercial uses along Western Avenue are comprised of fast food restaurants, a large grocery store, retail stores, a motel, and a community center. The area further west of Western Avenue is comprised primarily of single-family homes. To the east of the campus is property owned by St. Francis Cabrini Church where the church operates a grade school. Directly south of the campus is the I-105 Freeway with single-family residences located on the other side of the freeway.

The LASC campus is currently operating as a two-year community college. Existing structures on campus consist of four permanent, multi-level buildings (Cox Building, Lecture Laboratory Building, Technical Education Building, and Thomas G. Lakin Physical Education Building), and temporary bungalows. The Cox Building houses the campus Library, administrative offices, and the theater. The Lecture Laboratory Building and Technical Education Building provide classroom, laboratory, and lecture space. The Thomas G. Lakin Physical Education Building houses basketball gyms and various recreational facilities.

The bungalows accommodate additional classrooms and laboratories, Middle College High School, the Child Development Center, Student Health Services, and other miscellaneous uses. The bungalows are located on the western half of campus. Along the north and west borders of the campus is the majority of available surface parking, however, a parking lot is also located in the southeast corner of campus next to the baseball diamond.

[1] Consistency with the South Coast Air Quality Management District's *Air Quality Management Plan* is addressed separately in Section 4.2, "Air Quality" of this EIR.

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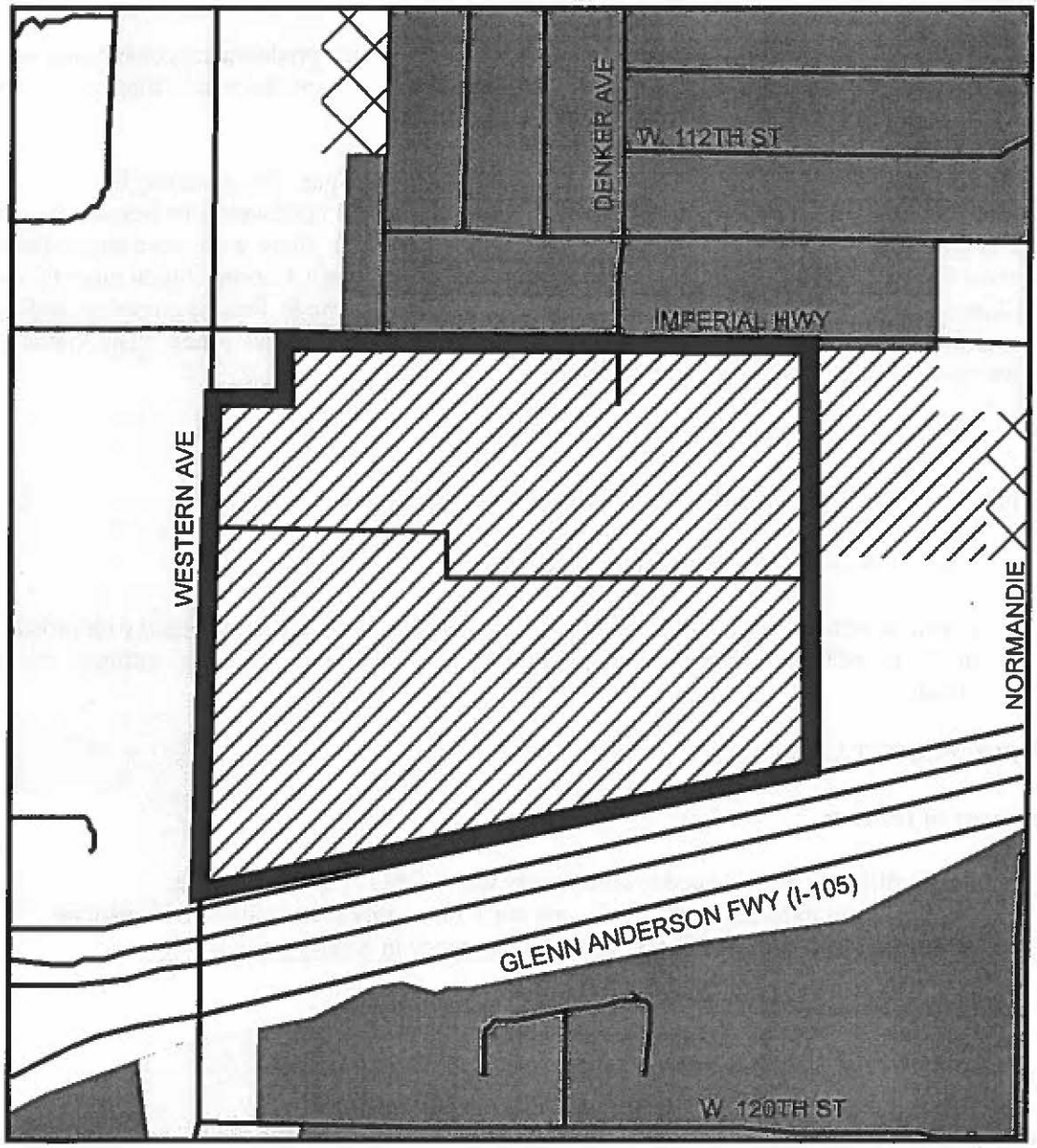


LEGEND:

Project Site

Single-Family Residences (RD 2.3)

Medium Density Bonus (RD 3.2)

Community Commercial (C2)

Public/Quasi-Public Use (P1-1)

SOURCE: West Athens/Westmont Community Plan & Terry A. Hayes Associates LLC

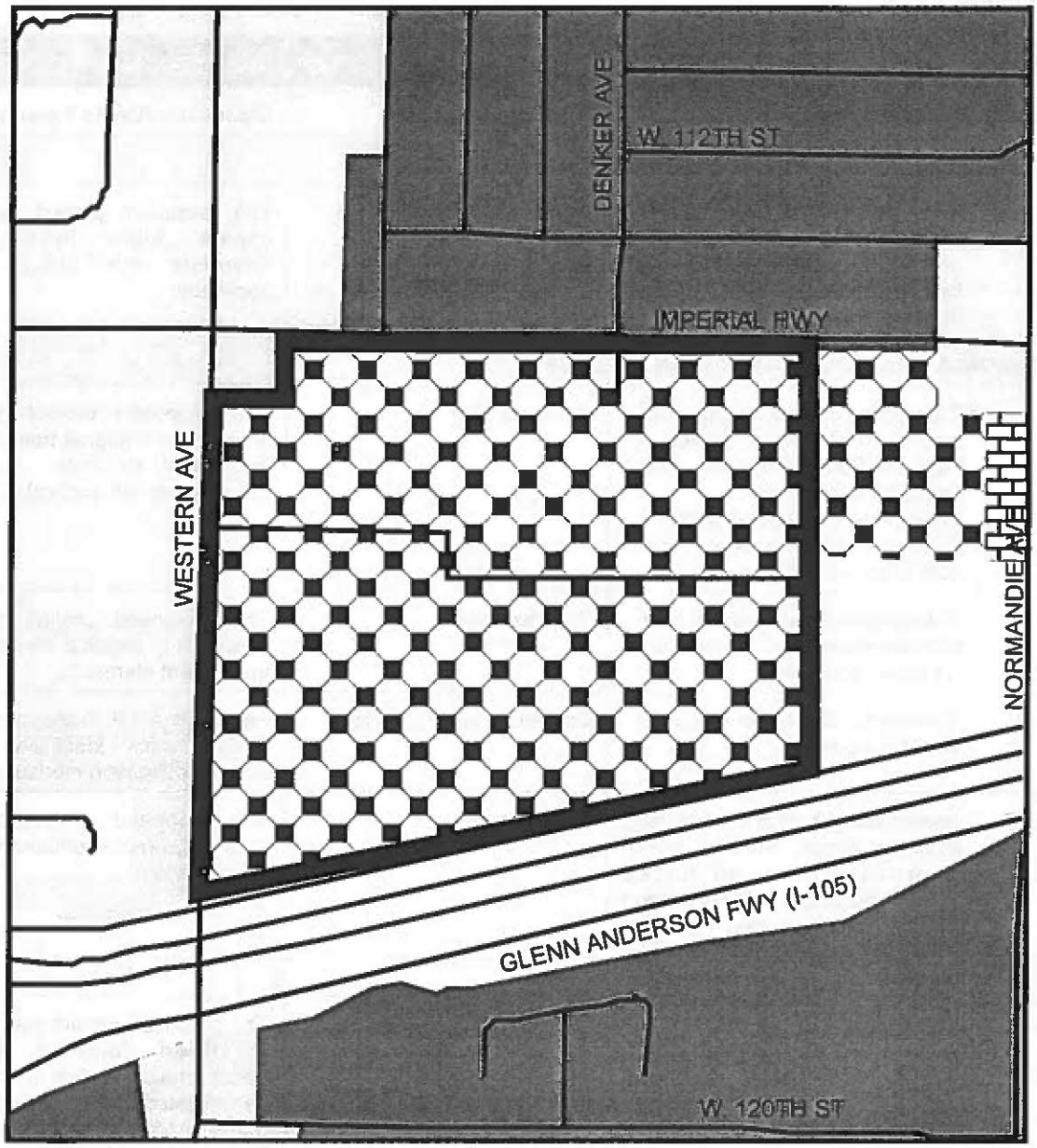
Southwest College Master Plan EIR

LOS ANGELES COMMUNITY COLLEGE DISTRICT

taha 2002-68

FIGURE 4.5-1

LAND USE



LEGEND:

Project Site

Single-Family Residential (R-1)

Medium Density Residential (R-3)

Community Commercial (C2)

Agricultural (A-1)

SOURCE: West Athens/Westmont Community Plan & Terry A. Hayes Associates LLC

Southwest College Master Plan EIR

LOS ANGELES COMMUNITY COLLEGE DISTRICT

taha 2002-68

FIGURE 4.5-2

ZONING

TABLE 4.5-1: COMPARISON OF THE PROPOSED PROJECT TO SCAG REGIONAL POLICIES

Policy Type and Goals		Finding	Discussion/Cross Reference
3.09	Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.	Consistent with this policy.	Funds for this project will come from Proposition A and AA. Money has already been allocated to the college and will be put toward making needed physical and technological improvements on campus.
3.10	Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.	Consistent with this policy.	This report is an EIR to a Master Plan. Because this report evaluates all proposed projects within the Master Plan, future permitting of the individual component in the Master Plan can be streamlined.
GROWTH MANAGEMENT CHAPTER POLICIES TO IMPROVE THE REGIONAL QUALITY OF LIFE			
3.12	Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.	Not applicable.	The proposed project consists of renovation and expansion of an existing use.
3.14	Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.	Not applicable.	The proposed project is the buildout of an existing use.
3.16	Encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.	Not Applicable.	The proposed project is the buildout of an existing use.
3.18	Encourage planned development in locations least likely to cause environmental impact.	Not applicable.	The site is a fully improved urban location.
3.21	Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	Not applicable.	A Cultural Resources Record Search was conducted and no cultural resources within the project site were identified.
3.23	Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.	Consistent with this policy.	See Summary of Mitigation Measures discussed in Chapter 2.0 Summary of this EIR.

Compatibility with Community Plan

As an educational facility, LASC complies with it's Community Plan land use designation of Public/Quasi-Public. In addition, the proposed Master Plan would serve to promote policies identified under the Public Facility Element of the West Athens/Westmont Community Plan. Those policies are to:

- Encourage enhanced public facilities and community services, educational, cultural, and recreational opportunities and other municipal services.
- Coordinate recreational planning with school district to maximize the joint use of facilities and encourage programs which provide educational and cultural enrichment for all the people of the community.
- Continue to encourage and support an adequate level of public services to meet the needs fo the existing and future planned population.

The Public Facilities Element of the Community Plan identified issues and problems within the Community Plan area. They included the lack of sufficient park land and the need for a more efficient use of existing public facilities. Implementation of the Master Plan would improve and expand existing recreational facilities and open space areas. It would also encourage effective utilization of existing facilities by providing enhanced educational opportunities at LASC. Because LASC is in compliance with the Community Plan and the physical improvements in the proposed Master Plan would further the Community Plan's stated Public Facility policies, no significant impact is anticipated.

Zoning Designations

With implementation of the LASC Master Plan LASC would continue to operate as an educational facility, and thus the zoning inconsistency would remain. This inconsistency would be considered a significant land use planning impact. The inconsistency can be corrected by any one of the following three processes. A zone change can be recommended for adoption and approval by the Los Angeles County Planning Commission and the Board of Supervisors. The County in this regard would rely on the Community Plan "public/quasi-public facilities" land use designation and the existing historical use of the site as a college in making their determination. The Los Angeles Community College District (LACCD) could also seek to obtain a conditional use permit (CUP) from the Los Angeles County Planning Commission as colleges and universities are allowable uses in a Light Agricultural zone provided a CUP is in effect. A third option would be for the LACCD to exempt the college from the Los Angeles County Zoning Map and Code under the provisions of State Government Code Section 53094 that grants such powers to State-enabled entities such as schools and college districts. Here, the Los Angeles Community College District Board would have the ability to determine that there is no significant impact as to zoning because the LASC campus would be exempt from L.A. County requirements. The proposed LASC Master Plan is consistent with the Los Angeles County General Plan, but that the underlying zoning does not reflect the historical and projected use of the site as a college, and would exempt the college from aspects of the underlying zoning regulations for an agricultural zone that would be in conflict with continued use of the site as a college. The inconsistency with zoning is considered to be a significant impact. As stated above this impact can be mitigated.

MITIGATION MEASURES

LUP1 In order to mitigate the zoning inconsistency, the LACCD Board shall undertake and accomplish one of the following: 1) Exempt LASC from the Los Angeles County Zoning Map and Code provisions for an Agricultural Zone that are inconsistent or in conflict with the continued use of the LASC campus as a college. 2) Apply for a zone change to be considered by the Los Angeles County Planning Commission to bring the zoning for the site into consistency with the West Athens/Westmont Community Plan. 3) Pursue a CUP which would put LASC into conformity with the conditions outlined in the zoning code for colleges and universities.

4.6 NOISE

SCOPE AND METHODOLOGY

This section examines the degree to which the proposed project may result in increased noise levels. Short-term changes to the noise environment resulting from construction activities, as well as effects related to the ongoing operation of the proposed project are evaluated.

The assessment of potential noise impacts from the proposed project addresses such sources as construction noise, traffic noise at sensitive receptors. Noise levels are calculated based on direct line-of-sight paths. Sound levels are adjusted to account for the distance between source and receiver. Vehicle noise is based on the Federal Highway Administration Highway Traffic Noise Prediction Model (RD77108) which uses traffic volume, speed and vehicle mix between cars and trucks as inputs. Model outputs, and noise worksheets are included in Appendix F.

ENVIRONMENTAL SETTING

Noise Definition and Terminology

Noise is defined as unwanted or excessively loud sound. The degrees to which noise can impact the human environment range from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, as well as the amount of background noise present and the nature of work or human activity that is exposed to the noise source.

Sound is technically described in terms of loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The "A-weighted scale" (dBA) reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately three to 140 dBA. The smallest perceptible sound level change is about three decibels, while a ten dBA increase is perceived by most people as a doubling of the sound level. Examples of typical A-weighted sound levels in different environments are shown in **Figure 4.6-1**.

Leq is the average noise level on an energy basis for any specific time period. The Leq for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. Leq can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

Community Noise Equivalent Level (CNEL) is an average sound level during a 24-hour day. CNEL is a noise measurement scale, which accounts for noise source, distance, single event duration, single event occurrence, frequency, and time of day. Human reaction to sound between 7:00 p.m. and 10:00 p.m. is as if the sound were actually five decibels higher than if it occurred from 7:00 a.m. to 7:00 p.m. From 10:00 p.m. to 7:00 a.m., humans perceive sound as if it were ten dBA higher due to the lower background level. Hence, the CNEL is obtained by adding an additional five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m., and 10 dBA to sound levels in the night before 7:00 a.m. and after 10:00 p.m. Because CNEL accounts for human sensitivity to sound, the CNEL 24-hour figure is always a higher number than the actual 24-hour average.

Sound Propagation and Attenuation

Generally, noise is most audible when traveling by direct line-of-sight.[1] Barriers, such as walls, berms, or buildings, that break the line-of-sight between the source and the receiver greatly reduces noise levels from the source since sound can only reach the receiver by bending over the top of the barrier (diffraction). Sound barriers can reduce sound levels by approximately 10 to 15 dBA. However, if a barrier is not high or long enough to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced. In a situation where the source or the receiver is located three meters (approximately 9.84 feet) above the ground, or whenever the line-of-sight averages more than three meters above the ground, sound levels would reduce by approximately three decibels for each doubling of distance.

Sensitive Receptors

Land uses that are considered sensitive to noise impacts are referred to as "sensitive receptors." Noise sensitive receptors include, but are not limited to, schools, residences, libraries, hospitals and other care facilities. Noise sensitive receptors that are on the proposed site or within the vicinity of the project site include, but are not limited to:

- YMCA Playtime for Tots
- Busy Bees Wonderland Pre-School
- Southwest College Day Care Center (on-site)
- Single-family residential uses on Imperial
- St. Francis X Cabrini School
- Castle in the Clouds
- Moore's Day Care, Inc.

Existing Setting

The existing noise environment of the project area is typical of an urban region and can be characterized by a background, or ambient, noise level generated by vehicular traffic on the nearest roadways and a variety of other characteristic urban noise events, such as home and car stereos and people.

The Quest Q-400 Noise Dosimeter was used to measure ambient noise levels at seven sensitive receptor locations within the vicinity of the project site. One of the seven sensitive receptors are located on the project site. Noise measurements were conducted between 11:30 a.m. and 1:30 p.m. on April 29, 2003 and between 10:00 a.m. and 11:00 a.m. on April 30, 2003. The seven noise monitoring locations, as well as the noise measurements, are listed in **Table 4.6-1** and shown in **Figure 4.6-2**. As shown in **Table 4.6-1**, ambient noise levels at each sensitive receptor range from 68 to 73 dBA.

[1] Line-of-sight is a direct line between the noise source and the noise receptor.

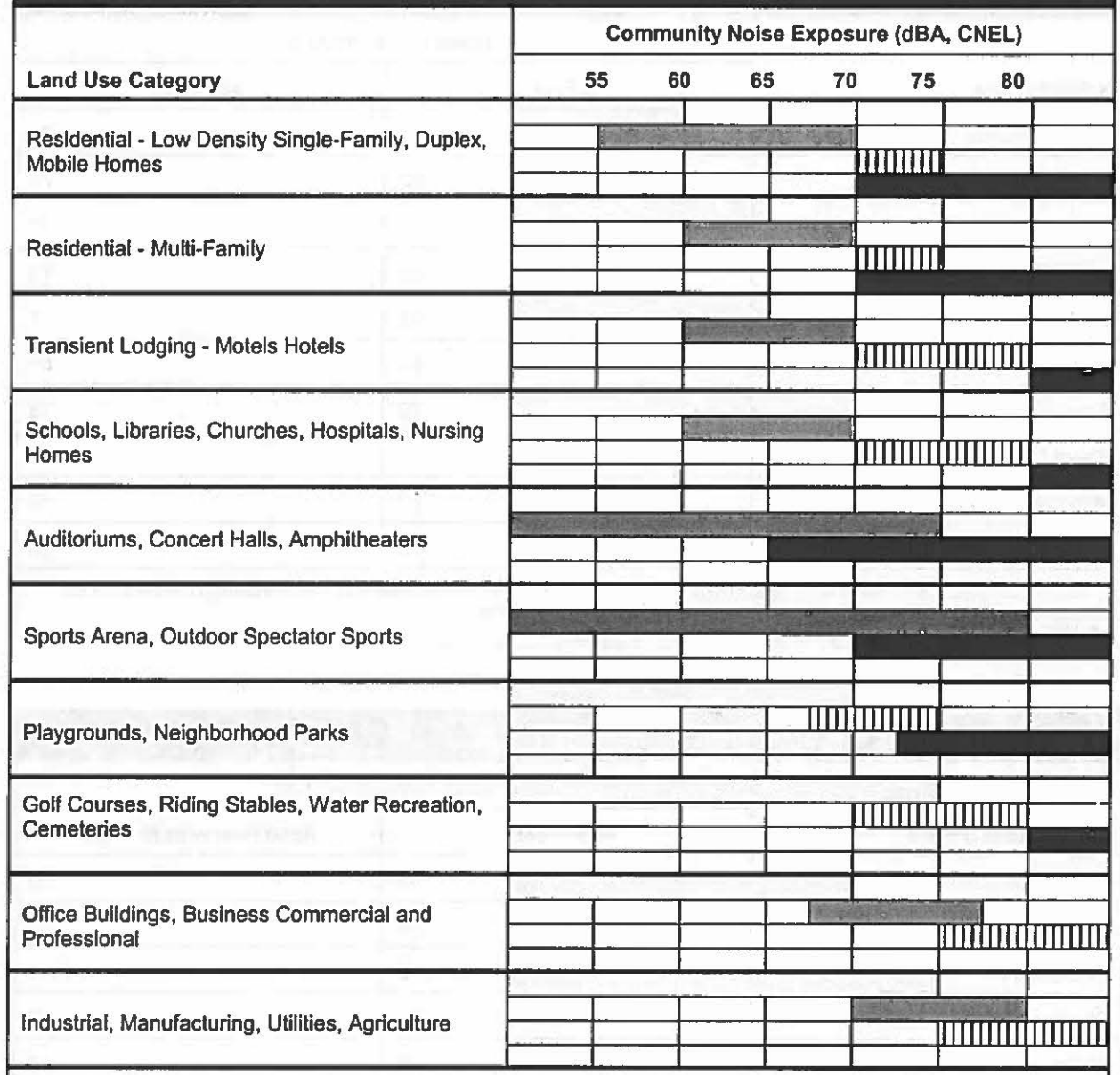
TABLE 4.6-1: EXISTING NOISE LEVELS		
No.	**Noise Monitoring Position**	**Noise Measurement (dBA, Leq)**
1	YMCA Playtime for Tots (at the northwest corner of Imperial Hwy. and St. Andrews Pl.)	69
2	Busy Bees Wonderland Pre-School (on the north side of Imperial Hwy. east of St. Andrews Pl.)	73
3	Southwest College Day Care Center (east of the existing northwest parking lot)	68
4	Single-family residential uses on the north side of Imperial Highway (across from campus)	70
5	St. Francis X Cabrini School (at the southwest corner or Imperial Hwy. and Normandie Ave.)	68
6	Castle in the Clouds (on the north side of 120th St. west of Normandie Ave.)	69
7	Moore's Day Care, Inc. (at the southwest corner of 120th St. and Harvard Blvd.)	68
SOURCE: Terry A. Hayes Associates LLC.		

Vehicular Traffic. Vehicular traffic is the predominant noise source in the project vicinity. Using existing traffic volumes provided by the project traffic consultant and the Federal Highway Administration (FHWA) RD-77-108 noise calculation formulas, CNELs have been calculated at five sensitive receptor locations along roadway segments that may be affected by project related traffic increases. The CNELs are used as a baseline to measure the proposed projects' operational noise impacts. The sensitive receptors and their estimated CNELs are shown in **Table 4.6-2.**[2] The estimated noise levels represent the most conservative scenario, which assume that no shielding is provided between the traffic and the location of each sensitive receptor.

TABLE 4.6-2: EXISTING ESTIMATED COMMUNITY NOISE EQUIVALENT LEVEL		
No.	**Noise Sensitive Receptor**	**Estimated dBA, CNEL**
1	YMCA Playtime for Tots (at the northwest corner of Imperial Hwy. and St. Andrews Pl.)	75
2	Busy Bees Wonderland Pre-School (on the north side of Imperial Hwy. east of St. Andrews Pl.)	75
3	Southwest College Day Care Center (east of the existing northwest parking lot)	65
4	Single-family residential uses on the north side of Imperial Highway (across from campus)	76
5	St. Francis X Cabrini School (at the southwest corner or Imperial Hwy. and Normandie Ave.)	76
SOURCE: Terry A. Hayes Associates LLC, see Appendix F.		

[2] The assumptions used in developing vehicular noise levels are provided in Appendix F.

TABLE 4.6-3: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS



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 system or air conditionally 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: California Office of Noise Control, Department of Health Services

Sensitive land uses would be impacted the most when construction activities occur within close proximity. Thus, noise levels during the construction period for each sensitive receptor location were calculated by (1) making a distance adjustment from the sensitive receptor to the nearest construction source sound level and (2) logarithmically adding the adjusted construction noise source level to the ambient noise level. Results appear in **Table 4.6-6.**

TABLE 4.6-6: CONSTRUCTION NOISE IMPACTS

Sensitive Receptor	Distance of Receptor to Project Site (feet)	Existing Ambient at Receptor (dBA, Leq)	New Ambient at Receptor (dBA, Leq) /a/	Increase (dBA, Leq)	≥5 dBA (Leq) Increase?
1	1,360	69	70	1	No
2	800	73	74	1	No
3	100	68	76	8	Yes
4	125	70	72	2	No
5	100	68	76	8	Yes
6	1,000	69	70	1	No
7	800	68	70	2	No

/a/ New ambient sound level assumes construction noise sources would be active for approximately 40 percent of the eight-hour work day, which is consistent with the USEPA studies of construction noise. Construction sound levels are adjusted for distance.
SOURCE: Terry A. Hayes Associates LLC.

During construction, it is likely that both stationary and mobile equipment would be in operation simultaneously. The noise levels shown in **Table 4.6-6** assume that both mobile and stationary equipment would be operating simultaneously at the same time. As shown in **Table 4.6-6**, noise levels would range from 70 to 76 dBA (Leq) at sensitive receptors when construction activities are within close proximity to sensitive receptors. Construction activities would be greater than five decibels (Leq) at two sensitive receptors. Thus, a significant impact is anticipated. Implementation of mitigation measures should reduce noise impacts to the maximum extent feasible.

Operational Impacts

Traffic-Related Noise. The predominant operational noise source for the proposed project would be vehicular traffic. According to the traffic consultant, Meyers Mohaddes Associates, the proposed project would generate a total of approximately 10,472 net new daily trips.

The greatest noise impacts associated with vehicular traffic are anticipated to occur at sensitive receptor locations adjacent to roadways substantially affected by the proposed project. Using the FHWA RD77108 noise calculation formulas and the predicted traffic volumes provided by the project traffic consultant, noise impacts associated with project-related traffic were predicted. Based on traffic volumes provided by the project traffic report, the CNEL was calculated at five sensitive receptor locations along roadway segments that may be affected by project related traffic increases (**Table 4.6-7**).[5]

[5] See Appendix F.

According to the Master Plan, sensitive receptor No. 3 (Southwest College Child Development Center) would be moved to the northeast corner of the site. This places the Child Development Center approximately 1,700 feet from the stadium. At this distance, the Development Center would experience an increase of less than one decibel in ambient noise levels during stadium functions. No impact is anticipated at this location.

TABLE 4.6-8: EFFECT OF CROWD NOISE ON AMBIENT NOISE LEVELS AT VARIOUS AREAS /a/

Sensitive Receptor Areas	Existing Ambient Sound Level (dBA) /b/	4,000 People	
		New Ambient (dBA, Leq) /b/	Increase (dBA, Leq)
1	69	69	<1
2	73	73	<1
3	68	73	5
4	70	70	<1
5	68	68	<1
6	69	69	<1
7	68	68	<1

/a/ Assumes a reference crowd size of 4,000 people generating 100 dBA.
/b/ Pre-project ambient sound level at sensitive receptor location.
/c/ New sound level at sensitive receptor location.
SOURCE: Terry A. Hayes Associates, see Appendix F.

By Master Plan buildout, the closest classroom to the stadium will be the lecture lab building approximately 300 feet away from the stadium. At this distance, the new ambient sound level during a stadium event would be 78 dBA, an increase of 10 dBA from the original ambient.

The stadium is a depressed structure. The depression allows the stadium walls to act as a sound barrier. This characteristic would refract noise within the bowl and would only allow noise to reach the lecture lab by bending or diffracting over the top of the barrier. This prevents noise from traveling by line-of-sight, reducing the amount of noise that can reach the lecture lab. Additionally, a four-story parking structure would be constructed directly north of the stadium. This structure would also act as a sound barrier for stadium events. However, the potential for a significant impact remains.

Public Address System. To be clearly intelligible, a public address system must generate sound of at least ten dBA above the background noise levels. The increase in events resulting from the improvements to the stadium would potentially result in an increased usage of the public address system. There is potential for a significant impact to occur.

MITIGATION MEASURES

Construction Noise

N1 Construction contracts shall specify that all construction equipment shall be equipped with mufflers and other suitable noise attenuation devices.

N2 Construction operations shall be staged as far from noise sensitive land uses as possible.

disturb the concentration of students and children at the school and day care center. Additionally mitigation measure **AQ9** requires that if construction is to take place within 500 feet of the Child Care Center, the Child Care Center would be temporarily relocated to an area at least 500 feet away from construction. With implementation of mitigation measures, a less-than-significant impact is anticipated.

TABLE 4.6-9: MITIGATED CONSTRUCTION NOISE IMPACTS

Sensitive Receptor	Distance of Receptor to Project Site	Existing Ambient at Receptor (dBA, Leq)	New Ambient at Receptor (dBA, Leq) /a/	Increase (dBA, Leq)	≥5 dBA (Leq) Increase?
1	1,360	69	69	<1	No
2	800	73	73	<1	No
3	100	68	73	5	Yes
4	125	70	72	2	No
5	100	68	73	5	Yes
6	1,000	69	69	<1	No
7	800	68	68	<1	No

/a/ New ambient sound level assumes construction noise sources would be active for approximately 40 percent of the eight-hour work day, which is consistent with the USEPA studies of construction noise. Construction sound levels are adjusted for distance.
SOURCE: Terry A. Hayes Associates LLC.

Operational Impacts

As stated earlier, sound barriers can reduce sound levels by approximately 10 to 15 decibels. With the reduction of noise by the stadium depression and proposed parking structure, and implementation of mitigation measure **N9**, the lecture lab would experience noise increases of less than three decibels, therefore a less-than-significant impact is anticipated.

Public Address System

With implementation of mitigation measure **N10**, the directionality of the sound from the speakers at the distance to the nearest classrooms would be reduced. Additionally, there would be no direct line-of-sight from the speakers to any sensitive receptors. This also results in a reduction of noise emanating from the stadium. A less-than-significant impact is anticipated.

CUMULATIVE IMPACTS

Construction

Although several projects are within the vicinity of the project site, the timing and degree of overlapping construction is unknown at this time. Because of the long-term phasing of the build-out of the project, overlapping construction is unlikely. It is also important to note that few of the proposed projects are located close enough together that they would likely disrupt traffic flows on the same street nor combine together to increase overall construction-related noise as it would affect a single neighborhood or sensitive land use. Thus, no construction-related noise cumulative impacts are anticipated.

4.7 PUBLIC SERVICES

This section of the EIR presents an overview of the fire and emergency response service and police services serving the LASC campus and surrounding area. The potential impacts from the implementation of the proposed Master Plan would have on the provision of these services is evaluated.

ENVIRONMENTAL SETTING

Fire Protection and Emergency Services

Fire protection for Los Angeles County including the LASC campus is provided by the Los Angeles County Fire Department (LACoFD). The closest stations serving the LASC campus are Station 14 and Station 170, both part of Division 6, Battalion 20 and located less than a mile from the project site as shown in **Table 4.7-1** and **Figure 4.7-1**. Station 14, is the jurisdictional company serving LASC and would therefore respond first to an emergency call from campus. Emergency paramedic services are also provided by Station 14. Currently, there are six LACoFD employees at Station 14 and six LACoFD employees at Station 170. In 2001, Station 14 received 4,325 emergency calls. Emergency response times were reported as 3.7 minutes for emergency calls and 3.7 minutes for paramedic services. Station 162 is the next closest at two miles south of campus. There are four LACoFD employees at Station 162 and its response time is 8.7 minutes for emergency and paramedic services.[1]

TABLE 4.7-1: FIRE STATIONS SERVING THE LOS ANGELES SOUTHWEST COLLEGE CAMPUS

Fire Station	Address	Response Personnel	Equipment	Location
Station 14	1401 West 108th Street	6	-Paramedic engine (an engine company with full paramedic capabilities) -Paramedic squad	0.9 miles north of the campus
Station 162	12151 Crenshaw Boulevard	4	-Quint (a combination engine/ladder company)	2.0 miles south of campus
Station 170	10701 South Crenshaw Boulevard	6	-Light Force (an engine and ladder truck responding as a unit)	0.9 miles southwest of the campus

SOURCE: Los Angeles County Fire Department, 2003.

Police Protection

On-Campus Security

Security protection on campus is provided by the Los Angeles County Sheriff's Department through a contract with Los Angeles Community College District. The Community College Sheriff Bureau, headquarters for all of the nine community college sheriff stations, is located at Los Angeles City College.

[1] Based on an April 22, 2003 written response from Chief David Leiniger, Los Angeles County Fire Department, Forestry Division.

Two sheriff stations are located on the LASC campus. The headquarters/dispatch facility is on the ground floor of the Cox Building and a secondary facility is in a temporary building near the west campus entrance. The boundary of the Los Angeles County Sheriff's Department's jurisdiction is the perimeter of the college. Currently, the LASC Sheriff station employs three campus deputies, ten campus security officers, nine cadets assigned to campus patrol and to the office, and one secretary. One to two roving deputies and two to three field sergeants are employed by the Community College Sheriff Bureau to attend to calls at any of the campuses on an as needed basis, but they begin and end their shifts at the LASC station. The majority of the calls received by the on-campus Los Angeles County Sheriff's Department for the year 2002 were as follows: 22 calls for petty theft, 19 calls for lost property, 12 calls for vandalism, 12 calls for verbal disputes, 12 calls for burglary, 10 calls for injury, and 7 calls for grand theft auto. Other calls received were requests for service (unlocking doors, escorts, etc.) but not related to a criminal occurrence.[2]

Los Angeles County Sheriff's Department

The nearest Los Angeles County Sheriff station serving the area surrounding LASC campus is the Lennox Sheriff Station (**Figure** 4.7-1.) This station is approximately three miles west of the campus and is located at 4331 West Lennox Boulevard in the City of Inglewood. The Lennox Station currently employs 194 sworn officers for a population of approximately 115,349 people.[3]

The Lennox Station responded to approximately 5,084 urgent calls for Part I offenses (i.e., homicide, forcible rape, robbery, aggravated assault, burglary, theft). Most Part I offenses consisted primarily of aggravated assault (969 incidents), burglaries (2,213 incidents) and theft (1,477 incidents). The Lennox Station handles crimes taking place on the LASC campus that involve felonies or persons in custody. For the year 2002, Lennox personnel were summoned to assist the LASC station for 22 incidents at the college.[4]

SIGNIFICANCE CRITERIA

The proposed project would have a significant impact on emergency services if:

- It substantially diminishes the level of fire protection services;
- It creates a substantial need for additional fire department personnel or equipment;
- It fails to comply with applicable fire codes and regulations, thereby putting persons or property at substantial risk in the event of a fire;
- It increases the maximum response distances; and
- Creates a substantial need for additional police department personnel or facilities, or substantially diminishes the level of police protection services by adversely affecting police response time.

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[2]According to written response and phone consultation with Officer Jesus Guillen and Deputy Lendell Johnson, May 19, 2003.

[3]According to written response and phone consultation with Sheriff Leroy Baca and Lieutenant Kevin Goran, May 20, 2003.

[4]Ibid.

Security during Construction. Construction equipment left on campus during the building stages creates the opportunity for increased vandalism or theft. To prevent damage or theft of construction equipment, the on-campus sheriff station has stipulated that equipment left on the project site will need to be patrolled. Typically, construction site security is provided by the contractor. If the contractor does not providing security, then arrangements between LASC and the campus Sheriff Station for this extra service would be required. The need for more security staff, either for day to day operations or at construction sites would be a potentially significant impact.

Los Angeles County Sheriff's Department. The implementation of the proposed Master Plan would not result in an increase in the permanent population of West Athens or the area surrounding LASC. The Los Angeles County Sheriff's Department has indicated that an increase in staffing will not be necessary under the proposed Master Plan in order to maintain a satisfactory level of service.[6] No significant impacts to police services off-campus are anticipated.

MITIGATION MEASURES

PS1 The Community College Sheriff's Bureau and LACCD in coordination with LASC shall increase the number of security personnel serving the LASC campus according to any increase in the level of criminal activity, current student enrollment, and particular requests from the LASC administration.

PS2 If the contractor does not provide construction site security, then the Community College Sheriff's Bureau shall assign additional personnel to the LASC campus station as needed to assist in construction site security.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

Implementation of **PS1** would ensure that security services at LASC are evaluated as the school and student body grows so that necessary adjustments to staff and/or facilities can be made as needed. Mitigation measure **PS1** would reduce the potential for a significant impact to a less-than-significant level. Security for construction equipment and sites would be provided for through implementation of mitigation measure **PS2**. Mitigation measure **PS2** would reduce this impact to a less-than-significant level. Thus, there would be no unavoidable significant impacts for fire protection and emergency services or police services.

CUMULATIVE EFFECTS

No significant impacts to fire protection and emergency services or to police protection are anticipated, therefore no cumulative impacts are anticipated.

[6] Letter from Sheriff Leroy Baca, Lennox Station, May 13, 2003.

4.8 TRANSPORTATION AND TRAFFIC

This section summarizes the findings of the traffic and parking study conducted by Meyer, Mohaddes Associates, Inc.[1]

The traffic and parking study was prepared to evaluate traffic generated by the proposed Master Plan and the impacts on the surrounding street system. The traffic analysis addresses existing conditions, cumulative base conditions, and cumulative plus project conditions. Existing and potential future parking demands were analyzed in detail. Traffic and parking mitigation measures were recommended as needed.

ENVIRONMENTAL SETTING

Existing Street System

Regional access to the College is provided by the Century Freeway (I-105) with full interchanges at Vermont Avenue and Crenshaw Boulevard (via 120th Street), the Harbor Freeway (I-110) with an interchange at Imperial Highway, and by several major arterial streets, including direct site access onto Western Avenue and Imperial Highway. The Century Freeway is located directly south of the project site. The Harbor Freeway is approximately 1.25 miles east of the project site. In the vicinity of LASC, major arterials are located one mile apart on a rectilinear grid with minor arterials located every half-mile. All of the study intersections reviewed in this report are signalized.

The following provides a brief description of the major roadways within the study area.

I-105 (Glenn Anderson Freeway) – I-105 is an east-west Interstate Highway that forms the south boundary of the LASC campus and is one of the primary regional freeways in the area. I-105 generally has three through lanes in each direction plus a high-occupancy-vehicle (HOV) lane. At its interchanges with I-110 (Harbor Freeway), Vermont Avenue, and Crenshaw Boulevard, it has additional auxiliary lanes for movement to and from the ramps.

I-110 (Harbor Freeway) – I-110 is a north-south Interstate Highway that extends from its terminus at the Port of Los Angeles to the north through Downtown Los Angeles and is one of the primary regional freeways in the area. I-110 generally has four through lanes in each direction plus two high-occupancy-vehicle (HOV) lane. At its interchanges with Century Avenue, Imperial Highway, I-105, and El Segundo Boulevard, it has additional auxiliary lanes for movement to and from the ramps.

Imperial Highway – Imperial Highway is a primary arterial street that forms the northern boundary of the LASC campus and provides direct access to on-campus parking lots. It travels in an east-west direction with two and three lanes provided in each direction. Left-turn lanes and a median divide the travel lanes. The curb-to-curb width is about 80 to 95 feet depending on the area and the posted speed limit is 35 to 40 mph. Parking is not permitted from 6:30 to 8:30 a.m and 3:00 to 6:00 p.m. along the campus frontage. A mix or commercial/retail and residential development fronts the street.

Western Avenue – Western Avenue is a north-south primary arterial street that forms the western boundary of the LASC campus and provides direct access to on-campus parking lots. In the vicinity of the campus, no

[1] Meyer, Mohaddes Associates, Inc., "Los Angeles City College Master Plan - Draft Traffic and Parking Study," March 2002. See Appendix G for complete traffic report.

MTA Line 204 and 354 – Vermont Avenue – Lines 204 and 354 operate between Athens/South Central Los Angeles and Hollywood via Vermont Avenue. They offer direct transit access to LASC. Line 354 is an express service with limited stops.

MTA Line 206 – Normandie Avenue – Line 206 operates between Athens/South Central Los Angeles and Hollywood via Normandie Avenue. Near the campus it operates on Normandie Avenue and Imperial Highway and provides service at approximately 20-minute intervals.

MTA Line 207 and 357 – Western Avenue – Lines 207 and 357 operate between the Watts and Hollywood districts of the City of Los Angeles via Western Avenue. Line 357 is an express service with limited stops.

MTA Line 209 – Van Ness Avenue and Arlington Avenue – Line 209 operates between Koreatown and Hawthorne via Arlington Avenue and Van Ness Avenue. Near the campus, it connects to Line 120 at Imperial Avenue and operates on Normandie Avenue and Imperial Highway connecting to the Metro Green Line station at I-105. Line 209 operates on approximately half-hour intervals.

Metro Green Line – The Metro Green Line provides rail service between Manhattan Beach, Los Angeles International Airport, Hawthorne and Norwalk. The entire Metro rail system can be accessed from any Metro station. The Vermont Avenue and Crenshaw Boulevard stations provide rail transit access to the LASC campus via connecting MTA bus routes.

Gardena Transit

Gardena Transit Route 2 – Western Local – Route 2 runs between Imperial Highway and Pacific Coast Highway along Western Avenue, Normandie Avenue, and Vermont Avenue. In the vicinity of the College, this line stops at Western and Imperial adjacent to the campus. The line provides service on approximately 30-minute intervals.

Recent data showed that approximately 78 percent of the full-time employees of LASC commute in single-occupant vehicles, 18 percent carpool, 2 percent use public transit, and 2 percent walk or use bicycles.

The College currently maintains a Rideshare program that is limited to employees with assistance in finding rideshare partners and providing carpools/vanpools with preferentially located parking. It is possible that the pursuit of a more aggressive Rideshare program could result in a greater percentage of employees using the program.

Existing Traffic Conditions

The efficiency of traffic operations at a location is measured in terms of Level of Service (LOS). LOS is a description of traffic performance at intersections. The LOS concept is a measure of average operating conditions at intersections during an hour. It is based on a volume-to-capacity (V/C) ratio for signalized intersections. Levels range from A to F with A representing excellent (free-flow) conditions and F representing extreme congestion. The definition for each LOS is described in **Table 4.8-1** for signalized intersections and **Table 4.8-2** for unsignalized intersections.

Traffic operating conditions in the vicinity of the project were analyzed using intersection capacity-based methodology known as the Circular 212 "Critical Movement Analysis" (CMA) method for the signalized locations. For the highway segments, the Highway Capacity Manual (HCM) methodology for basic freeway segments was utilized to calculate LOS.

The following 15 intersections are analyzed in this study:

- 120th Street and I-105 Eastbound Ramps
- Imperial Highway and Crenshaw Boulevard
- Imperial Highway and Van Ness Avenue
- Century Boulevard and Western Avenue
- Century Boulevard and Normandie Avenue
- Imperial Highway and Normandie Avenue
- Imperial Highway and Vermont Avenue
- Vermont Avenue and I-105 Westbound Ramps
- Vermont Avenue and I-105 Eastbound Ramps
- 111th Place and I-110 SB Ramp
- Imperial Highway and I-110 Southbound Ramps
- Imperial Highway and I-110 Northbound Ramps
- Imperial Highway and Western Avenue
- Western Avenue and Site Entrance
- Imperial Highway and Denker Avenue (site entrance)

New morning and evening peak period turning movement traffic counts were conducted at the 15 analyzed intersections in April 2002 and May 2003. The counts were conducted during the spring school session and no significant new development occurred in the area between the days the counts were obtained. The April 2002 traffic counts were factored as necessary to match the through volumes witnessed during the May 2003 counts. The traffic impact analysis was based on the highest single hour of traffic (during the AM and PM peak period) at each location. Daily traffic volume data was collected from various sources including Caltrans, LADOT, and factoring the 2003 turning movement counts based on the ratio of the hourly-to-daily volumes observed at the locations where data was previously collected.

The morning and evening peak hour LOS analyses were conducted for the 15 study intersections based on the measured traffic volumes and the methodologies described previously (**Figure 4.8-1**). All intersection analyses are performed using the TRAFFIX (Traffic Impact Analysis) software program. The existing conditions LOS analysis results are summarized in **Table 4.8-3** for the AM and PM peak hours.

The results shown in **Table 4.8-3** indicate that only one of the 15 analyzed intersections, the Western Avenue campus driveway, is currently operating at LOS E or F during one or both of the peak hours. The remaining nineteen study intersections currently operate at LOS D or better during both peak hours.

TABLE 4.8-3: EXISTING CONDITIONS LOS SUMMARY

	Existing Conditions			
	AM Peak Hour		PM Peak Hour	
Intersection	LOS	V/C	LOS	V/C
120th Street and I-105 Eastbound Ramps	C	0.712	B	0.632
Imperial Highway and Crenshaw Boulevard	C	0.762	D	0.826
Imperial Highway and Van Ness Avenue	B	0.676	B	0.674
Century Boulevard and Western Avenue	C	0.739	D	0.868
Century Boulevard and Normandie Avenue	C	0.792	D	0.872
Imperial Highway and Normandie Avenue	C	0.786	B	0.689
Imperial Highway and Vermont Avenue	C	0.796	C	0.775
Vermont Avenue and I-105 Westbound Ramps	D	0.839	C	0.743
Vermont Avenue and I-105 Eastbound Ramps	C	0.798	A	0.586
111th Place and I-110 SB Ramp	A	0.443	A	0.348
Imperial Highway and I-110 Southbound Ramps	B	0.640	A	0.586
Imperial Highway and I-110 Northbound Ramps	B	0.692	C	0.744
Imperial Highway and Western Avenue	C	0.783	D	0.856
Western Avenue and Site Entrance	B	0.627	F	1.133
Imperial Highway and Denker Avenue (site entrance)	B	0.624	A	0.504

SOURCE: Meyer, Mohaddes Associates, Inc. June 2003.

Congestion Management Program System Analysis

The Congestion Management Program (CMP) was created statewide as a result of Proposition 111 and has been implemented locally by the Los Angeles County Metropolitan Transportation Authority (LACMTA). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potential regional significance be analyzed. A specific system of arterial roadways plus all freeways comprise the CMP system. A total of 164 intersections are identified for monitoring on the system in Los Angeles County. There are no CMP monitoring intersections within the project vicinity. The closest CMP freeway stations are the I-105 (#1042) east of Crenshaw and west of Vermont and the I-110 (#1046) at Manchester Avenue.

Existing Parking Conditions

To determine the existing parking demand ratios for the college (spaces per student and spaces per staff member), a parking occupancy survey was conducted in 2002. The study compared the number of occupied spaces to the number of staff employed (371 head count [HC]) and students enrolled (7,200 HC) at the College during that session.

An hourly parking survey was conducted in February 2002 between the hours of 8:00 a.m. and 9:00 p.m.. The results of that survey are summarized in Appendix G. After adjusting for parking demand for the Middle College High School (MCHS), total LASC demand was found to peak between 7:00 p.m. and 8:00 p.m with a secondary peak between 10:00 a.m. and 11:00 a.m.

ENVIRONMENTAL IMPACTS

Summary of Impacts

Project Related Impacts

- Significant impact at Imperial Highway and Crenshaw Boulevard (PM peak hour)(mitigated).
- Significant impact at Imperial Highway and Van Ness Boulevard (PM peak hour)(mitigated).
- Significant impact at Century Boulevard and Western Avenue (both peak hours)(mitigated).
- Significant impact at Century Avenue and Normandie Avenue (PM peak hour)(mitigated).
- Significant impact at Imperial Highway and Normandie Avenue (both peak hour)(mitigated).
- Significant impact at Imperial Highway and Vermont Avenue (both peak hour)(mitigated).
- Significant impact at Imperial Highway and Western Avenue (both peak hours) (mitigated).
- Significant impact at Western Avenue and the Campus Entrance (both peak hours) (mitigated).
- Significant impact at Imperial Highway and Denker Avenue (both peak hours) (mitigated).
- No significant impact related to the Congestion Management Program.
- No significant impact related to operational parking.
- Significant impact related to event parking (mitigated).

Cumulative Impacts

- Significant impact at 120th Street and I-105 EB Off-Ramp (both peak hours) (mitigated).
- Significant impact at Imperial Highway and Crenshaw Boulevard (PM peak hour) (mitigated).
- Significant impact at Imperial Highway and Van Ness Boulevard (PM peak hour) (mitigated).
- Significant impact at Vermont Avenue and I-105 WB Off-Ramp (both peak hours) (mitigated).
- Significant impact at Imperial Highway and I-110 NB Off-Ramp (PM peak hour) (mitigated).
- Significant impact at Imperial Highway and Western Avenue (PM peak hour) (mitigated).
- Significant and unavoidable impact related to cumulative traffic impacts on local Freeways.

Discussion of Impacts

Future No Project Conditions

Project Trip Generation. The first step in analyzing the future traffic conditions with the project is to estimate the number of new trips that the proposed expansion is expected to generate. As described previously, the proposed project would result in an increase in student enrollment from the existing 15,500 students to 19,000 students by the year 2015. Utilizing trip generation rate data contained in the ITE *Trip Generation, 6th Edition*, the estimated trips for the proposed project were calculated. The increase in student enrollment is expected to generate a total of approximately 10,472 net daily trips of which approximately 952 trips are expected to occur during the morning peak hour and approximately 1,156 trips during the evening peak hour. It should be noted that these trip estimates do not include any reductions for students who arrive to the campus by bus, which stop adjacent to the college along Imperial Highway and Western Avenue.

Project Trip Distribution and Assignment. The next step in the forecast of project traffic is the anticipated distribution of the trip estimates. The trip distribution assumptions are used to determine the origin and destination of the new vehicle trips associated with the project. The geographic distribution of a sample of the existing student population was determined based on student and faculty zip code data from the spring semester of 2003. Using this data, a trip distribution pattern for the proposed campus expansion was developed. As can be seen, the majority of the trips would come from the north and west of the site. Based

TABLE 4.8-5: RELATED PROJECTS TRIP GENERATION

		AM Peak Hour			PM Peak Hour			Daily		
Project	**Size**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
/a/DPSS Office Bldg	100,000 sf	164	22	186	33	158	191	664	664	1,328
/b/ The Exchange										
Office	406,900 sf									
Manf.	287,100 sf									
Retail	261,420 sf									
Warehse.	584,550 sf									
Industrial	264,300 sf									
The Exchange Total		1,034	380	1,414	741	1,209	1,950	10,490	10,490	20,980
Grand Total		1,198	402	1,600	774	1,367	2,141	11,154	11,154	22,308

/a/ Traffic study for the "DPSS Western Avenue Project", Linscott, Law, and Greenspan, November 2002.
/b/ Traffic study for the "Exchange Project", Kaku Associates, May 2001. Preferred Base Scenario.
SOURCE: Meyer, Mohaddes Associates, Inc.

Future Without Project Traffic Analysis. The proposed Master Plan is anticipated to be complete by 2015; therefore future conditions without the project were assessed for that year. The no-project traffic projections were developed and operating conditions were analyzed at the 15 study intersections for the morning and evening peak hours, first taking into account the addition of the background ambient growth.

To identify the base-level condition for analysis purposes, the future no-build condition needs to be identified. The no-project analysis assumes that the existing LASC campus does not experience any growth and only the background ambient traffic growth is added.

Based on the forecast parameters discussed above, the morning and evening peak hour traffic volumes were developed for the year 2015 base-level conditions. Based on the 2015 without project traffic forecast, the levels of service at the analyzed intersections were calculated for both peak hours. **Table 4.8-6** summarizes the peak hour LOS results. As shown in **Table 4.8-6**, three of the fifteen analyzed intersections would be operating at LOS E or F during one or both of the peak hours. These intersections are:

- Century Avenue and Western Avenue (PM peak hour)
- Century Avenue and Normandie Boulevard (PM peak hour)
- Western Avenue and the Campus Entrance (PM peak hour)

The remaining twelve study intersections currently operate at LOS D or better during both peak hours.

Future With Project Analysis

The intersection volume-to-capacity ratios and corresponding levels of service for future the future With-Project condition were calculated and the results summarized in **Table 4.8-6** for each of the 15 analyzed locations. The resultant change in V/C ratio comparing the "Future With-Project" to the "Future Baseline" is also presented in **Table 4.8-6**.

Based on the County of Los Angeles' thresholds of significance, the future with project forecast indicate that the proposed project would create significant traffic impacts at nine of the fifteen analyzed intersections during one or both peak hours. **Table 4.8-6** summarizes the results of the analysis. As shown on the table, the nine analyzed intersections that are forecasted to be significantly impacted include:

Congestion Management Program System Analysis

The CMP "Traffic Impact Analysis Guidelines" requires analysis of all surface street monitoring locations where the proposed project adds 50 or more peak hour trips. The CMP also requires all freeway segments to be analyzed where the proposed project adds 150 or more trips during the peak hour. Within the study area, there are no CMP monitoring locations which could potential be impacted by the proposed project. In addition, the proposed campus expansion will not add 150 or more additional trips to any freeway segment.

Parking Analysis

As described in the introduction, the proposed Los Angeles Southwest College Master Plan will provide 964 new parking spaces. The LASC campus overall would provide a total of 2,270 spaces. The majority of the on-site parking would be provided on the west side of the campus. This section provides an analysis of the parking conditions at the LASC with the proposed completion of the Master Plan.

Los Angeles County Parking Ordinance. The current Los Angeles County zoning ordinance does not have a provision for colleges and universities. In addition, the plans and requirements for Community Colleges and Universities are determined by the State Architect's Office, including the number of parking spaces required.

Therefore, parking demand estimates for the future development condition were based on the current activity at the college and the current parking demand level.

Future Parking Demand. The parking demand expected from the completion of the Master Plan was based on the existing program activities at the college and the projected increase in student population by the year 2015.

Based on information provided by the campus, the overall population growth would increase from 7,100 HC students (year 2001) to 16,400 actual students by the year 2015 and a HC staff increase from about 370 (year 2001) to a total of 610. Based on this increase in student enrollment and faculty/staff increases and the existing schedule of classes, the peak number of students projected to be on campus will occur during the 10-11 AM hour. This will result in peak park demand at a different hour than currently occurs. **Table 4.8-7** summarizes the projected future parking demand. In addition to the parking demand for the college, it should be noted that additional parking spaces would be reserved for other proposed future development proposals, such as the development an on-site day care for college employees.

Overall, as shown in **Table 4.8-7**, the additional 9,300 actual students (6,800 FTE) and 240 staff would generate a total peak daytime parking demand for approximately 2,140 parking spaces. In addition to this demand, there is expected to be a need for approximately 30 parking spaces to serve the MCHS site and 40 spaces to accommodate the proposed Child Care facility.

The College is proposing a childcare facility for 120 children with a staff of about 25 employees. Based on the Los Angeles County Planning and Zoning Code, childcare facilities must provide 1 parking space per employee and 1 space per 15 children. This will result in a requirement to provide 40 parking spaces for this facility.

These uses combined will generate a demand for approximately 2,210 parking spaces. Based on the projected supply of 2,270 spaces, the Master Plan will provide adequate on-site parking to meet this increase in demand.

MITIGATION MEASURES

Mitigation measures were developed for those locations where it was deemed feasible and their effectiveness was analyzed. The potential measures were designed to increase capacity and included operational improvements and potential physical improvements. Physical improvements involving right-of-way acquisition were not considered since the study area is a relatively built-up area with little or no easily available right-of-way for roadway improvements.

The implementation of these mitigation measures or other suitable mitigation measures will depend upon the availability of funding and the willingness of applicable agencies to implement measures in an appropriate timeframe. If these mitigation measures cannot be undertaken then the related impacts would be deemed significant and unavoidable.

Traffic

TT1 Imperial Highway and Crenshaw Boulevard – Fund a proportionate share of the cost of the design and construction of a northbound right-turn lane.

TT2 Imperial Highway and Van Ness Boulevard – Fund a proportionate share of the cost of the design and construction of northbound right-turn lane.

TT3 Century Boulevard and Western Avenue – Fund a proportionate share of the cost of the design and construction of a northbound and a southbound right-turn lane.

TT4 Century Avenue and Normandie Avenue – Fund a proportionate share of the cost of the design and construction of a westbound right-turn lane.

TT5 Imperial Highway and Normandie Avenue – Fund a proportionate share of the cost of the design and construction of a northbound right-turn lane, a southbound through-lane and a westbound right-turn lane.

TT6 Imperial Highway and Vermont Avenue – Fund a proportionate share of the cost of the design and construction of a northbound right-turn lane, a southbound right-turn lane and an eastbound right-turn lane.

TT7 Imperial Highway and Western Avenue – Fund a proportionate share of the cost of the design and construction of an eastbound right-turn lane.

TT8 Western Avenue and the Campus Entrance – Fund a proportionate share of the cost of the design and construction of a northbound through-lane, a southbound right-turn lane, and restriping the westbound approach to provide a left-turn lane, a shared through/right-turn lane, and an exclusive right-turn lane.

TT9 Imperial Highway and Denker Avenue – Fund a proportionate share of the cost of the design and construction of the northbound access drive to provide a left-turn lane, a through lane, and a right-turn lane, and develop a second westbound left-turn lane.

TT10 A campus traffic management plan should be developed that considers the impacts for each development milestone and the relative proportion of the full mitigation program that should be implemented at that stage of the Master Plan development.

The traffic impacts from the Master Plan development were identified for the full program development. Because annual project development plans will be based on both program needs and enrollment changes, identifying the specific years that certain projects would be constructed was not practical. As such, the traffic impacts for any interim years were also not identifiable. To address the traffic impacts for interim phases of the Master Plan development, **TT10** will ensure proper timing for implementation of the appropriate measure.

The requirements for on-campus parking during the short-term or interim years prior to the full program development will be determined on an on-going basis as campus enrollment and building staging and construction dictates. Since the programming of future campus development will be driven by both program and enrollment needs, the specific parking needs at any intermediate year could not be determined at this time. With the implementation of mitigation measure **TT11** potential impacts to parking will be fully mitigated.

With the implementation of mitigation measure **TT12** potential impacts to parking during special events will be fully mitigated.

Thus, no significant unavoidable adverse impacts would remain. However, as discussed above, if these mitigation measures cannot be undertaken then the related impacts would be deemed significant and unavoidable.

CUMULATIVE IMPACTS

The traffic volumes from the two identified related projects previously discussed were added to the above "With-Project" future traffic volumes. The intersection volume-to-capacity ratios and corresponding levels of service for future With-Related-Projects condition were calculated and the results summarized in **Table 4.8-8** for each of the 15 analyzed locations. The resultant change in V/C ratio comparing the "Future With-Related-Projects" to the "Future Baseline" is also presented in the table.

Based on the County of Los Angeles' thresholds of significance, the future with project forecast indicate that the proposed project would create significant traffic impacts at six of the fifteen analyzed intersections during one or both peak hours. **Table 4.8-8** summarizes the results of the analysis. As shown on the table, the six analyzed intersections that are forecasted to be significantly impacted include:

- 120th Street and I-105 E/B Off Ramp (both peak hours)
- Imperial Highway and Crenshaw Boulevard (PM peak hour)
- Imperial Highway and Van Ness Boulevard (PM peak hour)
- Vermont Avenue and I-105 W/B Off-Ramp (both peak hours)
- Imperial Highway and I-110 N/B Off-Ramp (PM peak hour)
- Imperial Highway and Western Avenue (PM peak hour)

The remaining nine analyzed intersections are not expected to be significantly impacted by traffic from the identified related projects during the morning and evening peak hours.

In addition to the project impacts identified above, however, the project also has the potential to contribute to significant cumulative impacts at locations that are operating poorly under cumulative conditions even though the project's addition of trips does not exceed LACDPW or CMP threshold criteria. The LASC campus is located adjacent to the Athens portion of the City of Los Angeles and the cities of Inglewood and Hawthorne. Traffic congestion is experienced on many freeways and surface streets throughout the greater Los Angeles area in general and this region in particular during peak periods.

since the study area is a relatively built-up area with little or no easily available right-of-way for roadway improvements. The results of the capacity analyses including the proposed mitigation measures are presented in **Table 4.8-9.**

The implementation of these mitigation measures or other suitable mitigation measures will depend upon the availability of funding and the willingness of applicable agencies to implement measures in an appropriate timeframe. If these mitigation measures cannot be undertaken then the related impacts would be deemed significant and unavoidable.

TT13 120th Street and I-105 E/B Off-Ramp – Fund a proportionate share of the cost of the design and construction of an eastbound left-turn lane.

TT14 Imperial Highway and Crenshaw Boulevard – Fund a proportionate share of the cost of the design and construction of an eastbound right-turn lane.

TT15 Imperial Highway and Van Ness Boulevard – Fund a proportionate share of the cost of the design and construction of a southbound right-turn lane and an eastbound right-turn lane.

TT16 Vermont Avenue and I-105 W/B Off-Ramp – Fund a proportionate share of the cost of the design and construction of restriping the westbound ramp to provide a left-turn lane, a shared through/right-turn lane, and an exclusive right-turn lane.

TT17 Imperial Highway and I-110 N/B Off-Ramp – Fund a proportionate share of the cost of the design and construction of a westbound right-turn lane.

TT18 Imperial Highway and Western Avenue – Fund a proportionate share of the cost of the design and construction of reconfiguring the northbound approach to provide a left-turn lane, two through-lanes, and a right-turn lane on the northbound approach; and provide a left-turn lane, two through lanes, and a shared through/left-turn lane on the southbound approach.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS (CUMULATIVE)

With the implementation of mitigation measure **TT13**, the operating conditions at 120th Street and the I-105 E/B Off-Ramp would be mitigated to a less-than-significant level during both peak hours (V/C ratio 0.726 in the AM and 0.683 in the PM).

With the implementation of mitigation measure **TT14**, the operating conditions at Imperial Highway and Crenshaw Boulevard would be mitigated to a less-than-significant level during both peak hours (V/C ratio 0.814 in the AM and 0.855 in the PM).

With the implementation of mitigation measure **TT15**, the operating conditions at Imperial Highway and Van Ness Boulevard would be mitigated to a less-than-significant level during both peak hours (V/C ratio 0.691 in the AM and 0.724 in the PM).

With the implementation of mitigation measure **TT16**, the operating conditions at Vermont Avenue and I-105 W/B Off-Ramp would be mitigated to a less-than-significant level during both peak hours (V/C ratio 0.864 in the AM and 0.751 in the PM).

TABLE 4.8-9 YEAR 2015 WITH RELATED PROJECTS AND VOLUME-CAPACITY RATIOS

Intersection	Future 2015 Base Conditions				Future 2015 With Related Project				Future 2015 w/ Related Projects Mitigated			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
120th Street and I-105 Eastbound Ramps	C	0.742	B	0.659	D	0.837*	C	0.757*	C	0.726	B	0.683
Imperial Highway and Crenshaw Boulevard	C	0.796	D	0.862	D	0.814	D	0.883*	D	0.814	D	0.855
Imperial Highway and Van Ness Avenue	C	0.706	C	0.704	C	0.724	C	0.768*	B	0.691	C	0.724
Century Boulevard and Western Avenue	C	0.771	E	0.907	C	0.793	E	0.901	C	0.793	E	0.901
Century Boulevard and Normandie Avenue	D	0.827	E	0.910	D	0.812	E	0.902	D	0.812	E	0.902
Imperial Highway and Normandie Avenue	D	0.820	C	0.718	D	0.834	C	0.752	D	0.834	C	0.752
Imperial Highway and Vermont Avenue	D	0.832	D	0.809	D	0.836	C	0.795	D	0.836	C	0.795
Vermont Avenue and I-105 Westbound Ramps	D	0.876	C	0.776	E	0.909*	D	0.814*	D	0.864	C	0.751
Vermont Avenue and I-105 Eastbound Ramps	D	0.833	B	0.610	D	0.843	B	0.638	D	0.843	B	0.638
111th Place and I-110 Southbound Ramp	A	0.461	A	0.361	A	0.470	A	0.370	A	0.470	A	0.370
Imperial Highway and I-110 Southbound Ramps	B	0.666	B	0.611	B	0.675	B	0.640	B	0.675	B	0.640
Imperial Highway and I-110 Northbound Ramps	C	0.722	C	0.776	C	0.749	D	0.815*	C	0.727	C	0.776
Imperial Highway and Western Avenue	D	0.818	D	0.893	D	0.814	E	0.916*	C	0.774	D	0.863
Western Avenue and Site Entrance	B	0.653	F	1.185	B	0.627	E	0.960	B	0.627	E	0.960
Imperial Highway and Denker Avenue (site entrance)	B	0.650	A	0.525	C	0.705	B	0.668	C	0.705	B	0.668

*Note: * - Denotes intersections where there is a significant impact.*
SOURCE: Meyer, Mohoddes Associates, Inc.

4.9 UTILITIES AND SERVICE SYSTEMS

The proposed project site is within a highly urbanized environment, with infrastructure already in place to support the provision of water, sewer, solid waste, electrical, and natural gas services to the site. This section addresses the incremental demand placed on service providers, whether this demand can be met without the need for additional infrastructure, and whether the proposed project would be in compliance with regulations governing the provision of these utilities.

Sustainable Development

In 1994, the US Green Building Council formed the Leadership in Energy and Environmental Design (LEED) Rating System. The mission of LEED is to encourage and accelerate "the global adoption of sustainable green building practices through the development and implementation of universally understood and accepted standards, tools, and performance criteria." Green building practices emphasize building site choice, energy efficiency, water conservation, and indoor air quality. These practices are based on scientific principles and technological solutions.

In an effort to encourage sustainable development, the Los Angeles Community College District (LACCD) has mandated a LEED Rating System for all new buildings that will be a part of the $1.4 billion Proposition A and AA bond programs. Sustainable building principles applicable to this section of the EIR include conservation of natural resources, maximizing the use of renewable resources and maximizing energy efficiency and utilization. These principles will be applied as mitigation measures where appropriate.

ENVIRONMENTAL SETTING

Water Supply

Water is supplied to LASC by the Southern California Water Company (SCWC). SCWC is a subsidiary of American States Water and is a public utility company engaged principally in the purchase, production, distribution, and sale of water to 1 out of every 30 people in California. LASC is located within SCWC's Southwest District.[1]

The Southwest District obtains its water supply from groundwater sources located within the system service area and treated surface water purchased from the Metropolitan Water District of Southern California (MWD) and distributed through 12 active and standby connections. Last year, about 60 percent of the SCWC Southwest District's approximately 42 million gallons per day (mgd) water supply was purchased from the MWD. The remaining 40 percent of the water was obtained from 15 local groundwater wells.[2]

In October 2002, LASC signed a letter of agreement with West Basin Municipal Water District (WBMWD) to purchase recycled water from SCWC for non-potable needs, such as irrigation, once the proper infrastructure is installed and adequate flows are available. It is estimated that LASC would use

[1] E-mail from Sabine Arweiler, Water Quality Engineer, Southern California Water Company, April 23, 2003.

[2] Ibid.

2013 (CUP No. 92-250(4)). Paper products for recycling are taken to either Angeles Western Paper Fibers or Quality Paper Corporation.[10]

California Integrated Waste Management Act, AB 939

As many of the landfills in the state were approaching capacity and siting of new landfills became increasingly difficult, the California IWMA of 1989 AB 939 was designed to focus on source reduction, recycling and composting, and environmentally safe landfilling and transformation activities. The Act required cities and counties to divert 25 percent of all solid waste from landfills and transformation facilities by 1995, and 50 percent by the year 2000.

Los Angeles Southwest College Efforts

In July of 2001, the LACCD Board of Trustees adopted Waste Reduction Policy 71100.[11] By adopting this policy, the district mandates that the various colleges within the district engage in responsible business practices intended to help protect the environment by meeting California's goals for diverting solid waste from landfills. Waste diversion goals shall be accomplished through such strategies as source reduction, purchasing and utilizing durable and reusable products, supporting new markets for recycled content products, providing a recycling coordinator to manage activities and provide educational/outreach programs.

Based on a review of the 2002 State Agency Waste Management Annual Report for Los Angeles Southwest College, LASC generated 337.31 tons of solid waste. Materials generated included beverage containers, cardboard, paper, plastics, scrap metal, xeriscaping and grass waste, wood waste and generic commercial pickup of waste. As part of the LACCD Integrated Waste Management Plan, LASC is currently diverting 50.65 percent of all wastes generated. This level is in compliance with the California Integrated Waste Management Act (IWMA) AB 939 mandate. Thus, 170.86 tons are diverted while 163.576 tons goes to area landfills. Recyclable materials from LASC are collected by Inner Vision Youth, a youth organization in Los Angeles. A small amount of waste, 2.875 tons (or 0.85 percent of LASC's total waste), is hazardous material and is sent to a special handling facility. LASC achieved this level of diversion by recycling and utilizing electronic documents (as opposed to paper) when possible.

Stormwater Runoff

The proposed project area is within the Los Angeles River Basin, which includes the coastal areas of Los Angeles County, south of the divide of the San Gabriel Mountains and Santa Susana Mountains, and includes a small part of the coastal portion of Ventura County south of the divide of the Santa Monica Mountains. Three major rivers drain the basin: the Los Angeles River, the Rio Hondo, and the San Gabriel River. The Los Angeles River and the Rio Hondo join and empty into the Pacific Ocean at the Port of Long Beach. The San Gabriel River, empties into the ocean near Seal Beach.

At present, approximately one-half of the site consists of impervious surface area. An increase in impervious surface area would result in an increase of sheet-flow runoff and transportation of pollutants into the storm drain system. Areas which are not paved or developed are landscaped with trees and grass, or used as athletic fields. A stormwater drainage system is currently in place to accommodate existing runoff.

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[10] Conversation with Barbara Zwart, Recycling Coordinator, Browning-Ferris Industries, April 15, 2003.

[11] Chapter VII Article XI Environmental Protection 71100.

- The proposed project would place a substantial burden on local infrastructure or regional treatment facilities, such that the increased demand could not be met by available facilities or feasible local improvements, or would warrant an unforeseen or unanticipated expansion of regional treatment facilities;

- The proposed project would generate substantial amounts of solid waste; or

- A significant impact would occur if stormwater runoff under the proposed project would be increased above the level presently in existence to the extent that the existing drainage infrastructure would be insufficient.

ENVIRONMENTAL IMPACTS

Summary of Impacts

- No significant impact related to water supply.
- No significant impact related to wastewater.
- No significant impact related to solid waste generation.
- No significant impact related to stormwater runoff.
- No significant impacts related to electricity and natural gas.
- Significant unavoidable cumulative impact related to water resources.

Discussion of Impacts

Water Supply

LASC currently uses approximately 92,040 gpd of potable water. The proposed project is anticipated to increase enrollment from 5,200 FTE students to 12,000 FTE students by build out of the long-term Master Plan. Based on the current 17.7 gpd usage of water per student, future usage is expected to increase by 120,360 gpd, for a total usage rate of 212,400 gpd, an increase of 130%. However, LASC intends to introduce the use of recycled water for irrigation as soon as a system is in place to provide such service. This new system is expected to be installed within the near-term. It is estimated that LASC will use approximately 56,239 gpd (27,443 ccf) of recycled water, or approximately 26.5 percent of its projected water use.[17] With the use of reclaimed water, water usage at LASC under the proposed Master Plan's improvements would increase by 64,121 gpd, a 70% increase over current usage.

It should be noted that the provision of water to California has been an ongoing issue. Mitigation measures are recommended in the following section to ensure that LASC will conserve water resources to the greatest extent possible. The Project's impact on water supply is a significant but mitigable impact.

Wastewater

Currently, LASC averages a total of 104,000 gpd of sewage. Implementation of the proposed project is anticipated to increase enrollment by an additional 6,800 FTE students over the long-term. As determined by the County Sanitation Districts of Los Angeles County, the expected increase in average wastewater flow from the additional 6,800 students will be 136,000 gpd (0.14 mgd). As JWPCP has a capacity of 400 mgd and currently uses 330 mgd, an increase of 0.14 mgd (0.0004 percent of the daily average flow) of

[17] Letter from Darryl G. Miller, General Manager, West Basin Municipal Water District to Douglas Campbell, Facilities Manager, Los Angeles Southwest College, October 10, 2002.

three million kWh per year, totaling a usage of approximately 7.7 million kWh per year. The County of Los Angeles consumed 63,919 million kWh during the year 2000. An increase of three million kWh (0.00005 percent of Los Angeles County usage) would not significantly impact the ability for SCE to provide energy.

The increase in square footage would increase the amount of natural gas consumed by 114,688 therms per year, totaling a usage of approximately 289,791 therms per year. This amount is approximately 0.0003 percent of the 967 million therms supplied by SCG in 2000. This increase in natural gas demand would not significantly impact the ability for SCG, to provide service to LASC.

The infrastructure needed to provide electrical and natural gas service to the proposed project area is in place and is not anticipated to require expansion or rehabilitation beyond that planned by SCE or SCG. Therefore, the proposed project would not result in a significant impact to the electrical and natural gas infrastructure system.

Although the anticipated increased need for electricity and gas does not constitute a significant impact, the LACCD is striving for greater sustainability through the employment of LEED building practices. Implementation of LEED strategies will aid in offsetting the increased demand for energy. Because LASC is seeking a LEED certification, applicable LEED building practices have been incorporated into this report as mitigation to assist in reaching that goal.

MITIGATION MEASURES

Water Supply

USS1 Water efficient landscaping and native and drought tolerant plants shall be used wherever possible.

USS2 Landscaping design shall incorporate the use of high efficiency irrigation systems.

USS3 Proposed projects shall be equipped with wastewater conservation fixtures including low flow toilets.

USS4 The projects shall exceed local building codes in water reduction.

USS5 LASC shall facilitate the construction of a water reclamation system to supplement its water supply.

Electricity and Natural Gas

USS6 Exceed the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) 1999 energy performance requirements by 15 percent for new construction and 10 percent for major renovation projects.

USS7 Select buildings' orientation optimize the use of natural light.

USS8 Optimize buildings' energy performance by using features such as cool roofs (light colored roofs to reflect heat), high thermal insulation to help maintain constant indoor temperatures, and operable windows.

USS9 Utilize solar power to supplement energy needs with renewable sources.

5.0 PROJECT ALTERNATIVES

5.1 DESCRIPTION OF PROJECT ALTERNATIVES

Alternatives to the proposed project must be evaluated under Section 15126.6 of the California Environmental Quality Act (CEQA). Because an Environmental Impact Report must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives focuses on changes to the project or the project's location which are capable of achieving the objectives of the proposed project while avoiding or substantially lessening any significant effects associated with the project.

In the scope of alternatives to be examined in an EIR, the public agency must be guided by the doctrine of "feasibility." In the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof (Public Resources Code Section 21002).

The Legislature has defined "feasible" for purposes of CEQA review as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors." (Public Resources Code Section 21061.1; Guidelines Section 15364). In addition, among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (Guidelines Section 15126.6). A project alternative which cannot be feasiblely accomplished need not be extensively considered.

5.2 ANALYSIS OF ALTERNATIVES

Alternative 1-No Project Alternative

The "No Project" alternative is required by Section 15126(e) of the CEQA Guidelines and assumes that the proposed project would not be implemented. The "No Project" Alternative does not mean that development within the project area will be prohibited. The "No Project" alternative allows decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. With respect to the proposed project, analysis of the "No Project" alternative includes existing environmental impacts on-site, as well as those environmental effects which would be reasonably expected to occur in the foreseeable future if the project were not approved.

Summary of Impacts

The "No Project" Alternative would mean that Proposition "A" bond funds would not be used and the Master Plan would not be implemented. The Los Angeles Southwest College (LASC) campus and facilities would remain as is except for improvements and changes made possible through scheduled maintenance funding. No additional on-campus parking would be constructed. No significant physical changes to existing buildings would be made to improve efficiency. Correction of fire-life-safety deficiencies in buildings would be addressed on a case-by-case basis. Better internal circulation and other elements of a "green" campus would not be implemented.

Without improvements, it is anticipated that the LASC campus would continue to grow, but at a much slower rate than if Master Plan improvements were implemented. It is expected that reduced growth would stem from the college reaching capacity in terms of classroom and laboratory space and scheduling, parking

limitations, and the loss of enrollment market share from LASC to other community colleges or private technical colleges due to more modernized facilities and amenities at these other locations.

The environmental effects of the "No Project" Alternative would include the following:

- **Aesthetics and Lighting.** No or little improvement to campus perimeter landscaping and screening would occur. There may be some improvement to the facades of individual buildings through re-painting.

- **Air Quality.** No impact.

- **Geology and Seismicity.** The "No Project" Alternative would not entail major construction projects and there would be no impact on the geology or the hydrology of the LASC site. There would be no change to the amount impervious surface that would affect drainage patterns or the rate of runoff. However, portions of the Middle College High School, the book store, and the plant facilities are currently within seismic setback zones and could pose a potential hazard if left in their current respective locations. This would be a significant and unavoidable impact.

- **Hazards and Hazardous Materials.** As there would be no demolition or excavation of the project site, there would be no impacts from ground contamination, asbestos, lead-based paint, or PCBs.

- **Land Use and Planning.** No impact.

- **Noise.** Since there would be no major new construction, there would be no new noise effects.

- **Public Services.**

  - Police. The demand for Sheriff services would be incremental on the LASC campus.
  - Fire. The demand for Fire services would be incremental on the LASC campus. Greater potential for demand from facilities that may have fire/life safety deficiencies.

- **Transportation and Traffic.** No Impact

- **Utilities and Service Systems.** It is not expected that a significant increased demand for utilities and infrastructure would occur. However, failure to implement the Master Plan would mean that resources to design sustainable and energy efficient buildings consistent with the policy direction established by the Los Angeles Community College District (LACCD) would not be available and goals for such efficiency would not be met.

Alternative 2 - Off-Site Alternative

Unavoidable significant impacts identified in this report with implementation of the Master Plan are related to air quality (NO_x operational emissions and cumulative NO_x emissions). The source of No_x emissions is automobile exhaust. The longer the trip length per vehicle the greater the increase in emissions. These effects suggests that if growth were channeled to another location(s) these impacts would be eliminated. This would result in shorter trip lengths within the service area by providing facilities in a decentralized manner. The formation of one or more satellite locations within the eight mile service radius of the LASC campus would serve to meet special student population needs for those at a distance from the main campus. The Master Plan could result in an increase of the student population by 6,800 FTE. This alternative would result in 1,500 FTE of the new student enrollment accommodated at satellite locations. Anticipated satellite

locations for LASC would most likely be located in leased space in existing buildings. Most importantly, satellite locations would be selected to maximize convenient community access via transit, walk or biking.

Despite best efforts at providing a location that would maximize access to non-vehicular forms of transportation and public transportation there is still the potential for traffic and parking impacts to result within the vicinity of the satellite location. Air quality impacts in the vicinity of the campus would be completely mitigated, however, the potential to contribute to regional air quality impacts is still an issue.

Finally, it is important to note that this type of decentralized alternative would be inconsistent with the goals of the Master Plan which are focused on enhancing the image and improved functionality of the main campus by concentrating resources. The provision of off-campus locations would decrease the amount of Proposition A and AA funding available to improve the main campus. Other potential environmental effects such as aesthetics, noise, utilities, etc...would typically not be evaluated because normally, these types of facilities would be considered Categorically Exempt under Section 15300.4 of the CEQA Guidelines governing such topics as use of existing facilities, replacement and reconstruction of structures and facilities, conversion of small structures and minor alterations of land.

5.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6 (e)(2) of the State CEQA Guidelines requires that an environmentally superior alternative be identified among the selected alternatives (excluding the "No Project" alternative).

The proposed Los Angeles Southwest College Master Plan has been developed to provide for needed college facilities and functions over approximately the next 13 years. The physical arrangement of the Master Plan, including the spatial distribution of re-use functions and activities, is intended to achieve the College's basic mission. One of the key elements of the proposed Master Plan is the creation of additional space for the development of a new Education Center Building, Community Arts Center, and an Advanced Technology Center in a newly defined main campus area.

The Off-Site Alternative would not meet the objectives of the master plan as it would require the dispersion of the Proposition A and AA funding resources reducing the potential for improvement to the main campus and this option would shift other impacts such as parking and traffic circulation to other densely developed areas where there could also be significant adverse effects.

The "No Project" alternative would not meet any of the objectives of the Master Plan. More importantly, failure to implement the Master Plan would mean that hazards related to seismicity would remain. Improvements to the existing buildings would likely be limited to scheduled maintenance and would not meaningfully extend the economic or useful life of these structures. Upon consideration of the "No Project" Alternative and Off-Site Alternative, the proposed Master Plan is the environmentally superior alternative.

6.0 EFFECTS DETERMINED NOT TO BE SIGNIFICANT

This section discusses expected effects of the proposed project and why these effects are not considered significant or why various effects would not be expected to occur.

Agricultural Resources

The project site is zoned for Light Agriculture, however, LASC has occupied the site since 1965 and does not utilize the site as farmland, or as any other agricultural use. In addition, the project is located in an urbanized and developed area in which no farmland exists.

Biological Resources

The project site is located within an area that has been urbanized for many years. According to the West Athens/Westmont Community Plan, no rare or endangered plant or animal species are known or suspected to exist within the Community Plan boundaries. There are no year-round bodies of surface water to provide corridors for native resident or migratory fish or wildlife species.[1]

Cultural Resources

A cultural resources records check was conducted for LASC by W.H. Bonner Associates on April 7, 2003 (Appendix C). The records check concluded that there are no archaeological sites located on or within a one-mile radius of the project site. The California State Historic Resources Inventory (CHRIS) lists three properties within a one-mile radius of LASC; however, the records check found that all of these sites have been evaluated and none are eligible for National Register listing. The potential of finding paleontological resources is very low. Due to the age of the campus no historical resources are anticipated on campus. No impact on historic resources would occur.

Hydrology and Water Quality

There are no surface water bodies on or adjacent to the campus. Thus, the proposed project would not cause changes in currents or the course or direction of water movement or effect water quality.

Mineral Resources

One oil well was in use on the site previous to the construction of the college campus. This well was appropriately abandoned several years ago.[2] No other mineral resources have been identified in the project site. Since 1967, LASC has operated it's campus, and the renovation of existing buildings and construction of new structures will not result in the loss of opportunity to utilize a known mineral resources.

Population and Housing

The proposed project is not anticipated to stimulate population growth in the area since no residential units would be included in the project. New employment may be generated from the new development, possibly drawing employees from the local area and general region.

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[1] West Athens/Westmont Community Plan, March 1990.

[2] Phase One Environmental Site Assessment, April 2003.

7.0 ORGANIZATIONS AND PERSONS CONSULTED

PUBLIC AND PRIVATE AGENCIES CONSULTED

- Southern California Association of Governments
- South Coast Air Quality Management District
- State of California, The Resources Agency Department of Conversation, Division of Mines and Geology
- California Energy Commission
- Southern California Water Company
- Sanitation Districts of Los Angeles County
- Browning-Ferris Industries
- South Central Coastal Information Center, California Historic Resources Information System
- Los Angeles County Fire Department
- Los Angeles County Sheriff, Lennox Station
- Los Angeles County Sheriff, Community College Bureau

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