III. GENERAL DESCRIPTION OF ENVIRONMENTAL SETTING

Section 15125 of the *California Environmental Quality Act (CEQA) Guidelines* requires that an environmental impact report (EIR) include a description of the existing environment. This section is intended to give a general overview of the environmental setting for the proposed Loyola Marymount University Master Plan Project. More detailed information on existing conditions as well as the regulatory framework applicable to the Proposed Project is provided for each environmental topic studied in **Section IV, Environmental Impact Analysis**. This section also provides an overview of related projects that are considered as part of the future conditions in evaluating cumulative impacts.

1.0 OVERVIEW OF ENVIRONMENTAL SETTING

Project Site Location. The approximately 142-acre Loyola Marymount University campus (Proposed Project site) is located in the West Los Angeles community of Westchester-Playa del Rey at 1 LMU Drive. The campus is located adjacent to Lincoln Boulevard (SR-1), and approximately 1 mile from Manchester Avenue (SR-42), 2 miles from the San Diego Freeway (I-405), and 2.3 miles from the Marina Freeway (SR-90). Communities and municipalities surrounding Westchester-Playa del Rey include the unincorporated community of Marina del Rey and the City of Los Angeles communities of Del Rey and Venice to the north; Culver City and the unincorporated community of Ladera Heights to the northeast; the City of Inglewood to the east, the City of El Segundo to the south; and the Pacific Ocean to the west.

Existing Land Uses. LMU's Westchester campus was established in 1928 with the development of the 100-acre Burns Campus. The original Burns Campus expanded in the 1990s with the development of a contiguous 27.5-acre property to the west now known as Leavey Campus. Leavey Campus extends from Burns Campus to the bluff edge. LMU purchased the adjacent Hughes property, including the former Hughes corporate headquarters, in 2000. Hughes Campus provides a physical link between Burns and Leavey Campuses to the east and Lincoln Boulevard to the southwest and serves as the main LMU entrance via LMU Drive from Lincoln Boulevard. The former Hughes headquarters building houses several colleges and administrative offices and is now called University Hall.

At present, the campus is developed with approximately 1.65 million gross square feet of academic and administrative uses, approximately 942,000 gross square feet of residential facilities, and approximately 185,000 gross square feet of indoor athletic uses. The campus also contains approximately 15.2 acres of outdoor athletic facilities and more than 25 acres of landscaped open space. Parking for students, faculty, staff, and visitors is provided in on-campus parking structures and surface lots containing approximately 4,100 spaces.

Currently, LMU's enrollment cap, as approved by the City in 2000 with a conditional use permit associated with the acquisition of Hughes Campus, is 7,800 full-time equivalent (FTE) students.[1] In Fall 2008, LMU's actual enrollment was 6,868 FTE students. The Proposed Project proposes increasing the existing enrollment from 6,868 FTE students to the previously approved cap of 7,800 FTE students, but would not increase the area of the LMU campus.

As of Fall 2008, LMU employed approximately 1,484 FTE faculty and staff working on campus, some of whom also live on campus.[2]

Surrounding Land Uses. As described above, the LMU campus is located in the West Los Angeles community of Westchester. Westchester generally extends from the Pacific Ocean east to Inglewood and from Ballona Creek on the north to the City of El Segundo and Los Angeles International Airport on the south. Surrounding municipalities include the unincorporated community of Marina del Rey and the City of Los Angeles communities of Venice and Del Rey to the north, the City of El Segundo to the south, the City of Inglewood to the east, and the Pacific Ocean to the west. Other institutions of higher learning in the area include Otis College of Art and Design on Lincoln Boulevard near Los Angeles International Airport; the Graduate School of Pepperdine University in northeast Westchester; and Intercontinental College in northern Westchester.

1.1 Aesthetics and Views, Shading, and Light and Glare

1.1.1 Aesthetics and Views

The approximately 142-acre LMU campus is located in the West Los Angeles community of Westchester, which consists primarily of low-density to low-medium-density residential uses, with commercial uses concentrated along the transit corridors of Lincoln Boulevard, Sepulveda Boulevard, Manchester Avenue, and Century Boulevard. Most of the topography in Westchester is level except for the varied hillside terrain located in the northwest and western portions where there are significant coastal bluffs. The

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1 FTE is a unit of measurement used to calculate enrollment for academic and master planning purposes, as opposed to student headcount. One undergraduate FTE student is defined as one undergraduate student taking 12 course units, which represents a full course load. Students taking fewer course units are considered to constitute a fraction of an FTE student, whereas students taking more than 12 units constitute more than one FTE student. One graduate FTE student is defined as one graduate student taking 9 course units, which represents a full course load. Graduate students taking fewer course units are considered to constitute a fraction of an FTE student, whereas students taking more than 9 units constitute more than one FTE student.

2 One full-time staff member works 40 hours per week. Two part-time staff members working 20 hours per week equals one full-time-equivalent staff person. A similar calculation is made for FTE faculty, except that due to reduced hours on Campus associated with a part-time faculty member, three part-time faculty members equals one FTE faculty member.

bluffs, which rise approximately 120 feet above sea level in the vicinity of the campus, form the northern and western campus boundaries.

The LMU campus is considered suburban because of its location amidst predominantly residential neighborhoods. The campus is bordered on the north and west, at the foot of the Westchester Bluffs, by Teale Street/Bluff Creek Drive and Playa Vista, a mixed-use multi-family residential and community commercial development less than 10 feet above sea level. The campus is bordered on the south and east by low-medium density single-family residential neighborhoods.

The original 100-acre campus has historically been referred to as Burns Campus. Burns Campus, founded in 1929 and developed with buildings of varying ages and architectural styles, is situated on a relatively flat plateau above the Westchester Bluffs at a higher elevation than Hughes and Leavey Campuses. Burns Campus is characterized by a collection of academic buildings arrayed along a formal axis (Alumni Mall) and cross-axis (the Sunken Garden and pedestrian walkways) that frame views of the Los Angeles Basin to the north and the Santa Monica Bay to the west.

In 1983, LMU added Leavey Campus, a contiguous 27.5-acre property extending from Burns Campus west to the bluff edge. Leavey Campus is developed with student housing built after 1992 and surface parking, as well as a parking structure set into the hillside below Burns Campus. The student residence halls are grouped informally and linked by pedestrian walkways and landscaped open space. Leavey Campus offers panoramic views over the Los Angeles Basin to the west and north.

In 2000, LMU purchased the adjacent Hughes corporate headquarters property, now referred to as Hughes Campus. Hughes Campus provides a physical link between Burns and Leavey Campuses to the east and Lincoln Boulevard to the west and serves as the primary campus entrance. Hughes Campus sits at a lower elevation than Leavey and Burns Campuses and the adjacent residential neighborhoods to the east. It is developed with the three-story University Hall and associated subterranean parking, both set into the hillside below adjacent Leavey Campus. LMU Drive and a pedestrian bridge connect Hughes Campus with Leavey Campus to the northwest.

Burns Campus has no height limit. Some of the tallest buildings on Burns Campus include Sacred Heart Chapel, with a height of approximately 51 feet to the roof, and the Chapel Tower associated with the Sacred Heart Chapel, with a height of approximately 135 feet. Development on Leavey Campus is limited to 75 feet in height above finished grade. Development on Hughes Campus is limited to a height of 139 feet above mean sea level, to remain below the ground elevation of the residential neighborhood to the southeast.

Key visual resources in the Proposed Project area, in addition to the LMU campus itself, include the Westchester Bluffs, Marina del Rey Channel and Santa Monica Bay, the Westside and Los Angeles cityscapes, and Santa Monica Mountains. Because the campus and adjacent residential neighborhoods sit atop the Westchester Bluffs, long-range panoramic views of these resources are available from LMU's campus and off-site vantage points adjacent to the campus.

1.1.2 Shading

As a result of the latitude of Los Angeles, buildings and structures cast relatively short shadows to the west and east at the height of summer, the summer solstice (June 21), when the sun is nearly directly overhead. The longest shadows are cast to the northwest, north and northeast around the winter solstice (December 21), when the sun is at its lowest point in the sky. Shadows are intermediate in length during the spring and fall equinoxes (March 21 and September 21). Buildings and structures do not cast shadows to the south in this region.

Shade-sensitive uses in proximity to the LMU campus include single-family residences bordering Burns Campus to the east, south, and southwest (along Fordham Road); single-family residences south of Leavey Campus; and LAUSD's planned Playa Vista Elementary School as well as multi-family residences and recreational uses in the Playa Vista community, northwest of the LMU campus at the base of the Westchester Bluffs.

The LMU campus varies in elevation relative to surrounding land uses, with Burns Campus at approximately the same elevation as off-site residential uses to the east and south; Leavey Campus elevated above Playa Vista because of its location atop the bluffs, and at the same elevation as residential land uses to the south; and Hughes Campus at a lower elevation than residential land uses to the southeast and slightly elevated above Playa Vista to the northwest.

At the summer solstice, shadows are cast to the west by LMU campus buildings and structures in the morning, but remain confined to the campus. No shadows are cast off site west of Burns Campus, since the southwest portion of Burns Campus is developed with surface parking, athletic fields, and one-story buildings.

At the winter solstice, shadows are cast to the west by campus buildings and structures at the western edge of Burns and Leavey Campuses, projecting across the bluffs and into portions of Playa Vista, but shadows retreat onto campus by midmorning. No single-family residences west of Burns Campus are shaded. Shadow projections are minimized by noon and confined to the campus as they begin to project eastward during the early afternoon. By midafternoon, shadows are projected to the northeast, but remain on LMU's campus.

1.1.3 Light and Glare

The highest ambient light levels in the LMU campus vicinity are along Jefferson Boulevard and within Playa Vista to the west and along Lincoln Boulevard to the south. Residential streets to the east, south, and southwest of the LMU campus exhibit relatively low ambient nighttime light levels.

Existing sources of nighttime illumination on the LMU campus include interior campus roadway lighting; parking lot lighting; lighted pedestrian walkways; exterior building security lighting and visible illumination of building interiors; and very limited lighting for outdoor athletic facilities in the southern portion of Burns Campus. With the exception of the Tennis Center and University Pool, LMU's outdoor athletic facilities are currently not lighted after dark. Nighttime light levels on the campus are comparable to those within the adjacent residential neighborhoods.

Sensitive receptors to light and glare in the vicinity of the LMU campus include the single-family homes east of Burns Campus; single-family residences south of Burns Campus across W. 80th Street; single-family residences in the neighborhood west of Burns Campus, south of Leavey Campus, and southeast of Hughes Campus (bounded by Fordham Road, W. 78th Street, and Altavan Road); single-family homes in West Bluffs south of Lincoln Boulevard; and LAUSD's planned Playa Vista Elementary School, as well as multi-family residences in the Playa Vista community, northwest of the campus at the base of the Westchester Bluffs. There are no hotels, hospitals, or other light-sensitive non-residential uses in the immediate vicinity of LMU's campus.

1.2 Air Quality and Climate Change

1.2.1 Air Quality

The Proposed Project site is located within the approximately 6,600-square-mile South Coast Air Basin. The Basin encompasses all or portions of four counties, including all of Orange County and the western, non-desert portions of Los Angeles, San Bernardino and Riverside Counties.

A semi-permanent, high-pressure cell over the northern Pacific Ocean is the primary climatological influence on the Basin, as is the ocean, which moderates the local climate by functioning as a large heat reservoir. As a result of these influences, warm summers, mild winters, infrequent rainfall and moderate humidity typify climatic conditions through most of the Basin. These meteorological conditions, in combination with regional topography, are also conducive to the formation and retention of ozone (O_3). The annual average relative humidity is 71 percent along the coast and 59 percent inland. Because the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

In the immediate Project vicinity, climatic conditions are characterized by mild summers, mild winters, infrequent rainfall, moderate afternoon breezes and generally fair weather. Average annual temperature ranges from the low- to mid-60s°F. Summer daytime temperatures often reach over 77°F, and winter daytime temperatures often drop below 48°F. Due to its proximity to the coast, temperatures in the Project vicinity are on average lower than further inland due to the moderating effect of the ocean. This microclimate is influenced by a marine layer that is characterized by fog or low stratus clouds. Average rainfall at Los Angeles International Airport, located within 1 mile of the Project site, is approximately 12.5 inches per year.

Health-based air quality standards have been established by California and the federal government for seven "criteria" air pollutants: O_3 (ozone), CO (carbon monoxide), NO_2, (nitrogen dioxide), SO_2 (sulfur dioxide), PM_{10} (respirable particulate matter), $PM_{2.5}$ (fine particulate matter), and lead. These standards were established to protect sensitive receptors from adverse health impacts due to air pollution. California standards are more stringent than the federal standards, and the state has also established standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. The Basin is currently designated as nonattainment for O_3, PM_{10}, and $PM_{2.5}$. These violations are largely due to automotive vehicle emissions in the region.

Air pollutants within the Basin are generated by stationary and mobile sources. Stationary sources include "point sources," referring to one or more emission sources at a single facility, and "area sources," which are widely distributed and produce many small emissions. Point sources are usually associated with manufacturing and industrial uses; examples of "area sources" include residential water heaters, lawn mowers, and consumer products, such as barbecue lighter fluid or hair spray. "Mobile sources" refer to operational and evaporative emissions from motor vehicles. Automotive vehicle emissions are largely responsible for the Basin's nonattainment status for the three criteria pollutants noted above.

Certain populations, including children, the elderly, and acutely and chronically ill persons, especially those with compromised respiratory abilities, are considered particularly sensitive to air pollution. The South Coast Air Quality Management District (SCAQMD) defines sensitive receptors as persons or facilities housing persons that could be exposed to pollutants for an extended duration (1 hour, 8 hours, or 24 hours, depending on the pollutant in question). Accordingly, residences, schools, and hospitals are considered sensitive receptors. Sensitive receptors in the vicinity of LMU's campus include the residential neighborhoods to the east, south, and west; LAUSD's planned Playa Vista Elementary School just west of the campus; and several other nearby schools (within approximately 0.5 mile).

1.2.2 Climate Change

Global climate change refers to any significant change in climate measurements, such as temperature, precipitation, or wind, lasting for an extended period (i.e., decades or longer). Climate change may result from natural factors, such as changes in the sun's intensity, natural processes within the climate system (e.g., changes in ocean circulation), and human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation).

The primary effect of global climate change has been a rise in the average temperature of the global troposphere (i.e., the bottom layer of the atmosphere) of 0.2° Celsius per decade. Climate change modeling shows that further warming is likely to occur, inducing further changes in the global climate system. Effects of global climate change on California could include dramatically declining Sierra snowpack levels, which account for approximately half of the surface water storage in California; increased ozone formation in Southern California and the San Joaquin Valley; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Delta and levee systems; increased pest infestation and forest fires; and increased demand for electricity due to rising temperatures.

The natural process through which heat is retained in the troposphere is called the "greenhouse effect." The greenhouse effect traps heat in the troposphere through the absorption of the Sun's light, or short-wave radiation, by Earth, in the form of heat; re-emission of this heat, or long-wave radiation, by Earth; and absorption and trapping of this heat by greenhouse gases in the upper atmosphere, which then send it back to Earth and into space. This third process, the absorption of heat by greenhouse gases, is the focus of current climate change actions.

While water vapor and CO_2 are the most abundant greenhouse gases, other trace GHGs have a greater ability to absorb and re-radiate long-wave radiation. For this reason, gases with high potential for absorption and re-emission of heat have been identified and are subject to federal and State regulation.

The United States was the number two producer of global greenhouse gas emissions as of 2005, and California ranks second in the United States for greenhouse gas emissions, behind Texas. As a result, California defines and regulates the following greenhouse gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). The primary contributors to California's greenhouse gas emissions are transportation, electric power production in-state and out-of-state, industry, agriculture and forestry, and other sources including commercial and residential activities.

1.3 Biological Resources

The LMU campus occupies approximately 142 acres atop the Westchester Bluffs. The bluffs rise approximately 120 feet above sea level in the vicinity of campus and form the northern and northwestern campus boundaries. Topography on the campus is varied, with sloped areas and level plateaus. The campus is suburban in nature and surrounded by single-family residential neighborhoods to the east, west, and south.

The campus encompasses more than 25 acres of open space, including 10 acres along the bluff face. The majority of open space on LMU's campus is landscaped with ornamental plantings installed since the campus was first established. The bluff slope is highly disturbed, crossed by a fire road along its face, and vegetated primarily with invasive, non-native ground cover, such as ice plant, shrubs, and pine and palm trees. Some remnant coastal sage scrub elements are scattered throughout the bluffs. The open space in the campus interior is more formally landscaped and includes turf and ornamental shrubs and trees.

There are no surface streams or water bodies on LMU's campus, with the exception of a small sump south of Drollinger Parking Plaza on Leavey Campus, which operates as an element of the campus storm-drain system.

Two tree species protected under the Los Angeles Municipal Code (Sections 46.00 to 46.06, Protected Tree Regulations, Ordinance Number 177,404) are present on LMU's campus: coast live oak (*Quercus agrifolia*) and western sycamore (*Platanus racemosa*).

Several special status wildlife species have been observed and reported north of the LMU campus, at the bottom of the bluffs in the riparian corridor and freshwater marsh habitat on and near the Playa Vista site, but no habitat for most of the species in question exists on LMU's campus. The only special status wildlife species reported on the LMU campus is the monarch butterfly (*Danaus plexippus*), which appear to occur only as migratory transient individuals on the campus. Some potential nesting habitat exists for a variety of protected bird species within trees, shrubs, and ground cover within the campus, but otherwise the campus does not contain or serve as link between wildlife movement corridors.

1.4 Cultural Resources: Paleontological Resources, Archaeological Resources, and Historical Resources

1.4.1 Paleontological Resources

Paleontological resources include fossil remains, the respective fossil sites, associated specimen data and corresponding geologic and geographic site data, and the fossil-bearing strata. Paleontological resources also include rock units that underlie the ground surface and have a potential for yielding particular types of fossil remains because they have yielded similar remains at previously recorded sites in the area. A fossil specimen in good condition is considered scientifically important if it can be accurately dated, is useful in environmental reconstruction, represents a "type specimen" (i.e., a specimen sufficient to serve as an objective standard of reference for a species), is a member of a rare species or is part of a diverse assemblage, and/or is a more complete specimen of a given species than others already collected. The rock units on LMU's campus were evaluated to determine if they were of high, medium, low, or no paleontological importance, based on their potential to yield scientifically important fossils.

The LMU campus is underlain by two Quaternary rock units: undifferentiated Palos Verdes Sand and overlying non-marine terrace cover; and Holocene dune sand. (A former ravine in the northeastern corner of campus contains fill and is developed with Parking Lot H.)

The undifferentiated Palos Verdes Sand and non-marine terrace cover rock unit is considered paleontologically highly productive and scientifically important. There are small areas of undifferentiated Palos Verdes Sand and non-marine terrace cover found in the northeastern and northwestern corners of the LMU campus at varying depths below the surface. Both are exposed at varying elevations below the top of the bluffs that form the northern and western edges of the campus. There are no documented records of fossil sites in these rock units on the LMU campus, but several fossil sites are recorded in Palos Verdes Sand along the upper part of the bluff face less than 0.2 mile from the campus, and have yielded a variety of fossils.

Holocene dune sand is exposed at the surface throughout the campus and overlies undifferentiated Palos Verdes Sand and terrace cover rock units, which are, as previously stated, buried at varying depths below the surface. There are no recorded fossil sites within the dune sand rock unit on or near the campus, and it is likely too young to contain remains old enough to be considered fossilized. For these reasons, dune sand is considered to be of low paleontological productivity and, therefore, of low scientific importance.

1.4.2 Archaeological Resources

The LMU campus is located at the edge of the Westchester Bluffs above a once extensive estuary, the Ballona Wetlands, adjacent to Santa Monica Bay. The wetlands served as the mouth of the Los Angeles River throughout much of prehistory. A rich marsh existed at the base of the bluffs beginning approximately 18,000 years ago until approximately 5,000 years ago. Humans first appeared in the area approximately 8,000 years ago (during the Millingstone period) and are believed to have occupied sites in the Proposed Project area, primarily along the blufftops, on a mobile, seasonal basis. Between 3,000 and 1,000 years ago (the Intermediate period), humans are thought to have occupied more structured, developed settlements, also on the blufftops. During the Late period of prehistoric settlement of the area, beginning approximately 1,000 years ago, the population grew dramatically; there are more sites from this period along the coast than at any other time in history. It is thought that the population in the Proposed Project area was concentrated during this period in one large settlement at the base of the bluffs.

There are three recorded archaeological sites on LMU's campus. CA-LAN-61 is located primarily on Leavey Campus and may extend onto Burns Campus. CA-LAN-212 is located on Burns Campus. CA-LAN-1018 is located on Leavey Campus. CA-LAN-61 was first identified by a local resident in 1936 and was later documented in 1939; the site once contained a large number of artifacts on the surface as a result of plowing, but the artifacts were collected by locals over the years. The site underwent formal evaluation and subsequent data recovery in the 1980s in advance of planned construction by the Hughes Aircraft Company. It is thought that the primary occupation of the site occurred during the Intermediate period (3000–1000 B.P.). CA-LAN-212 was first documented in 1953 and was described as a small (presumably) prehistoric site; it is likely that this site dates to roughly the same time period as LAN-61. CA-LAN-1018 was first documented by a local resident in 1936 and formally recorded in 1979; it was described as a shell midden on a terrace containing historical-period artifacts, but may instead be a naturally occurring Pleistocene-era shell deposit.

1.4.3 Historical Resources

LMU's Westchester Campus was founded in 1928, when real estate developer Harry Culver offered Loyola College approximately 100 acres of land on a high bluff overlooking the Pacific Ocean, which became Burns Campus. Loyola College broke ground on May 20, 1928.

Original architectural plans developed by Thomas Franklin Power proposed Tudor-Gothic Revival building styles and a north-south central spine traversing the campus. A new 1928 plan by architect David Elms Graham proposed Spanish-Colonial revival building styles. Construction of the first two

buildings on campus was completed in 1929, in the northwestern corner of Burns Campus: Xavier Hall contained administrative offices and housing for the resident Jesuit community, and St. Robert's Hall contained classrooms and lecture halls. The hillside letter "L" located on the bluff face below Xavier Hall also was constructed in 1929. In 1930, Loyola College achieved university status and become known as Loyola University.

The 1929 stock market crash and subsequent Depression curtailed Loyola University's initial building program. By 1950, much of the original 1928 Campus plan had been abandoned, but a defining feature of that plan was realized when Sacred Heart Chapel was constructed in 1953 and became the terminus and focal point of the Campus's central spine first envisioned in 1928. It also provided an appropriate location to hold religious services.

In 1954, a new plan for the campus was developed by San Francisco landscape architect and planner Prentiss French. French's plan reinforced the original plan's symmetrical, cross-axial orientation of the campus and reconciled vehicle and pedestrian circulation and parking. French designed the Sunken Garden south of Sacred Heart Chapel and Regent's Terrace, a raised plaza marking the transition from the Sunken Garden to the central spine that would later become known as the Alumni Mall. In 1956, the Los Angeles architectural firm A.C. Martin and Associates was retained to assist Loyola University with building out its master plan. A.C. Martin and Associates was instrumental in establishing modern Los Angeles after World War II and designed some of the first modern high-rise buildings in downtown Los Angeles. The firm designed six buildings for Loyola University between 1958 and 1965 in locations defined in French's master plan; the buildings were designed in the modernist architectural styles characteristic of the mid-twentieth century.

In 1967, Loyola University and Marymount College, a women's college founded in Westwood in 1923, announced a cooperative agreement whereby Marymount College would relocate to Loyola University's Campus and both institutions would share faculty and facilities. In 1973, after five years of affiliation and shared resources, Loyola University and Marymount College announced a merger to form a single institution, Loyola Marymount University.

In 1983, LMU purchased 27.5-acre Leavey Campus, west of Burns Campus. The 1990s ushered in a period of significant campus expansion and construction, including the development of Leavey Campus with student housing, Drollinger Parking Plaza, and Leavey intramural field on Drollinger's roof deck. The Jesuit Community Residences and Burns Recreation Center also were constructed on Burns Campus.

In 2000, LMU acquired the adjacent Hughes Campus, which included a vacant office building originally constructed in 1985 to serve as the headquarters of the Hughes Electronics Corporation.[3] The building was converted for academic and administrative purposes and renamed University Hall by LMU. The acquisition of Hughes Campus allowed LMU to link Leavey and Burns Campuses with a new main entrance to Lincoln Boulevard.

1.5 Geology

The approximately 142-acre LMU campus is located atop the Westchester Bluffs (also known as the Ballona Escarpment), overlooking the Ballona Plain. The campus is bounded by the bluffs on the north and northwest, by W. 78th and W. 80th Streets on the south, by Lincoln Boulevard on the southwest and west, and by McConnell Avenue on the east. The campus is approximately 66 feet above mean sea level at the LMU Drive entrance at Lincoln Boulevard, rising to approximately 120 feet above mean sea level along the bluff edge in the northeastern corner of campus and approximately 150 feet above mean sea level on Burns Campus. Bluff slopes forming the campus's northern and northwestern edges range from approximately 0.5:1 to 3:1 (horizontal:vertical). The bluff face has been locally modified by construction of a road and a trunk sewer line beneath the road, just off campus, but is otherwise undeveloped. There are no unique geologic features such as hilltops, ridges, hill slopes, canyons, ravines, rock outcrops, water bodies, streambeds, or wetlands within the developed areas of the campus.

The campus is underlain by late Pleistocene dune sand deposits that extend to depths of 50 to 90 feet below the surface. These materials generally consist of dense, poorly graded sand and silty sand. The dune sand deposits are underlain by the Pleistocene-age Lakewood formation deposits consisting of sand, silt, and gravel. Artificial fill of variable thickness also is locally present throughout the campus as the result of past grading activities for existing campus improvements.

Groundwater is estimated to be approximately 10 to 23 feet above mean sea level in the campus vicinity, and is therefore at least 50 feet below the ground surface of the vast majority of the campus.

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3 Historic Resources Group, LLC, *Historical Resources Assessment: Loyola-Marymount University*, (2009); "Completion Nearing on Hughes Headquarters" *Los Angeles Times*, Los Angeles County Edition, September 15, 1985; Ramos, Georg,. "School With a View: Loyola Marymount remakes the bluff-top former world headquarters of Hughes Aircraft", *Los Angeles Times*, Los Angeles County Edition, January 22, 2001.

1.6 Hazards

Hazardous materials are generally defined as chemicals capable of causing harm during an accidental release or mishap, and are characterized as being toxic, corrosive, flammable, reactive, an irritant or strong sensitizer. Exposure to a hazardous substance can occur through the natural or accidental emission of air toxics or through discharges to soil, groundwater, or surface water. Hazardous substances are defined and listed in various federal and state laws and regulations, including, but not limited to, the Resource Conservation and Recovery Act (Title 40 of the Code of Federal Regulations), which identifies hazardous substances and hazardous waste.

A number of existing uses and operations on the LMU campus regularly store, transport, use and/or dispose of hazardous materials, including chemicals handled in science laboratories, cleaning products, paints, oil, and other materials necessary to support campus operations. A comprehensive inventory of all hazardous substances in use on the campus is maintained by the LMU Environmental Health and Safety Department.

There are five 400-gallon tanks used to store heating oil on the campus. One tank is above ground and four tanks are below ground within concrete bunkers. All tanks are adequately sealed and no leaks or other safety infractions have occurred. Buildings of any age on LMU's campus have the potential to contain asbestos-containing materials, and may also include lead-based paint and polychlorinated biphenyls (PCBs) in certain types of electrical equipment.

The entire LMU campus is mapped as being within either a Methane Zone or Methane Buffer Zone, as designated by the Los Angeles Department of Building and Safety. A recent investigation did not detect elevated levels of methane gas on the LMU campus. The campus is located approximately 0.5 mile east of the Playa del Rey Oil Field, which was operational until the 1940s and is presently used as a reservoir for natural gas storage by The Gas Company.

The Department of Toxic Substances Control has indicated that an abandoned oil well is located on Lincoln Boulevard approximately 1,000 feet northwest of the campus. A second oil well is located on Denrock Avenue slightly more than 1,000 feet east of the northeastern campus boundary. Based upon review of field maps prepared by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, this oil well was determined to be approximately 1,000 feet northwest of the northwestern corner of campus.

1.7 Surface Water Hydrology and Water Quality

The LMU campus comprises three distinct watersheds or drainage areas. The first watershed generally encompasses the southeast corner of Burns Campus, including Sullivan Field, the baseball and softball fields, the tennis courts, and the area north of the tennis courts, and discharges into the McConnell Avenue Storm Drain at the southeast corner of Burns Campus. The second watershed encompasses the remainder of Burns Campus and discharges via a storm drain pipe at the campus' northeast corner into Playa Vista's Riparian Corridor, a vegetated stormwater conveyance and flood control channel at the base of the Westchester Bluffs. The third watershed encompasses all of Hughes and Leavey Campuses and also discharges into the Riparian Corridor via a storm drain pipe west of LMU Drive. Stormwater runoff is conveyed by an on-campus storm drain system consisting of roof drains, area drains, gutters, catch basins, and storm drain pipes.

Existing impervious surface area (i.e., developed or paved area) on campus totals approximately 88 acres or 62 percent of the 142-acre campus and includes roads, walkways, and residential, academic, administrative, and athletic facilities. The remaining 54 acres, or 38 percent, of the campus is considered pervious, and includes lawns, athletic fields, landscaped areas, and a small stormwater collection and flood control sump.

1.8 Land Use

The LMU campus is located within the Westchester community of the City of Los Angeles, approximately 1.25 miles east of the Pacific Ocean and 1 mile north of Los Angeles International Airport (LAX). Surrounding communities and municipalities include the unincorporated community of Marina del Rey and the City of Los Angeles communities of Venice and Del Rey to the north, the City of Culver City and the unincorporated community of Ladera Heights to the northeast, the City of Inglewood to the east, the City of El Segundo to the south, and the Pacific Ocean to the west. Other institutions of higher learning in the area include Otis College of Art and Design on Lincoln Boulevard near Los Angeles International Airport; the Graduate School of Pepperdine University in northeast Westchester; and Intercontinental College in northern Westchester. Regional access to the campus is provided by the San Diego Freeway (I-405), the Marina Freeway/Expressway (State Highway 90), and Lincoln Boulevard (State Highway 1). The San Diego Freeway/Marina Freeway interchange is approximately 2 miles northeast of the campus.

The campus is generally bordered on the east by McConnell Avenue, on the southwest by Lincoln Boulevard, and on the south by W. 78th and W. 80th Streets. The campus is suburban in nature and surrounded by low-density, single-family residential neighborhoods to the east, west, and south.

The campus is currently developed with approximately 1.65 million gross square feet of academic and administrative uses and approximately 942,000 gross square feet of residential facilities. The campus also contains approximately 185,000 gross square feet of indoor athletic uses and approximately 15.2 acres of outdoor athletic facilities. Parking for students, faculty, staff, and visitors is provided in on-campus parking structures and surface lots containing approximately 4,100 spaces.

Land uses on the campus are governed by the City of Los Angeles Zoning Ordinance and the City of Los Angeles General Plan, including the Westchester-Playa del Rey Community Plan. The LMU campus is designated "L" (Low Density Residential) in the Westchester-Playa del Rey Community Plan, as are the neighborhoods surrounding the campus to the west, south, and east. The area north and northwest of the campus, at the base of the Westchester Bluffs, is contained in the Playa Vista Area D Specific Plan and is designated for a mix of uses including Commercial (Regional Mixed Use Commercial and Community Commercial), High-Medium Density Multi-Family, and Industrial. The campus is also zoned [Q]R4-1, (Residential – Multiple Dwelling Zone, Height District 1). The R4 zoning designation, according to the Los Angeles Municipal Code, allows education institutions as well as multi-family residences, dormitories, sorority/fraternity houses, churches, hotels, and other uses; however, these uses are limited by the [Q] Qualified Conditions that apply to Burns, Leavey, and Hughes Campuses and are intended to ensure compatibility with surrounding uses. The R4 zone normally corresponds to the High-Medium Density Residential land use designation under the General Plan. However, LMU's existing land use designation is Low Density Residential, which the City has previously found to be consistent with the campus' R4 zoning due to the land use limitation of the campus' [Q] Qualified Conditions,

1.9 Noise

Noise is defined as unwanted sound and is considered undesirable when it interferes with normal activities, causes actual physical harm, or has an adverse effect on health. Noise is measured on a logarithmic scale of sound pressure known as a decibel (dB). In response to the human ear's sensitivity or lack thereof to different frequencies, the A-weighted noise level, referenced in units of dB(A), was developed to better correspond to the subjective human judgment of sound levels. Noise sources take two forms: (1) point sources, such as stationary equipment or individual motor vehicles; and (2) line sources, such as a roadway with a large number of mobile point sources (motor vehicles). Sound generated by a stationary point source typically diminishes (attenuates) at a rate of 6 dB(A) for each doubling of distance from the source to the receptor at acoustically "hard" (paved or developed with hard surfaces) sites, and at a rate of 7.5 dB(A) at acoustically "soft" sites (such as landscaped areas).

Vibration is noise that is carried through structures and the earth (groundborne), instead of through the air. Vibration is generally felt rather than heard.

Plans and policies pertaining to noise conditions indude State of California, Department of Health Services, Environmental Health Division Guidelines for Noise and Land Use Compatibility, the City of Los Angeles General Plan, the City of Los Angeles Municipal Code (LAMC), and the City of Los Angeles Community Noise Equivalent Level (CNEL) Guidelines for specific land uses, which measure A-weighted sounds levels over a 24-hour period.

Sources of noise on LMU's campus include outdoor athletic recreational activities, which are concentrated in the southern portion of Burns Campus; outdoor ceremonies and concerts, typically held in athletic facilities as well as in the Sunken Garden in the north end of Burns Campus; surface parking lot use; the operation of equipment in Facilities Management shops along the eastern edge of Burns Campus; the operation of landscaping maintenance equipment throughout landscaped campus open space; the operation of rooftop, cooling, and ventilation (HVAC) equipment throughout the campus; and waste collection and other regular maintenance and operation of the campus.

The primary off-site sources of noise in the Proposed Project area are neighboring residential land uses and traffic along Lincoln Boulevard, southwest of the campus. Current noise levels along the campus boundary range from 56 dB(A) to 63.5 dB(A) CNEL. Because of LMU's proximity to LAX (the airport is approximately 1 mile south of the campus), planes passing overhead on approach or departure also contribute to the ambient noise environment.

Sensitive noise receptors in the immediate vicinity of the campus include single-family residences in the McConnell Avenue residential neighborhood that abuts Burns Campus to the east; single-family residences to the south and southeast of the campus in the W. 78th Street/Fordham Road residential neighborhood; and multifamily residential uses in Playa Vista community north and west of the campus. The closest Playa Vista residential uses are located approximately 300 feet northwest of LMU's campus.

1.10 Public Services: Police Protection, Fire Protection and Emergency Medical Services, and Recreation and Parks

1.10.1 Police Protection

The Los Angeles Police Department (LAPD) is divided into four geographic bureaus: (Central, West, Valley, and South) and 23 divisions. The LMU campus is located within the Pacific Division (also called the Pacific Area) of the West Bureau within Reporting District 1474. The Pacific Division covers 25.47 square miles and includes over 200,000 residents. Its boundaries are the Los Angeles/Santa Monica City boundary and the Santa Monica Freeway (I-10) to the north, the Los Angeles City boundary to the south and east, and the Pacific Ocean to the west. Reporting District 1474 extends from the former City of

Los Angeles boundary along the Westchester Bluffs to the north to Manchester Avenue on the south, and from Georgetown Avenue on the east to Lincoln Boulevard to the west.

The Pacific Community Police Station (Pacific Station), the closest station to the Project site, is located at 12312 Culver Boulevard, which is approximately 3 miles from the Project site. In the Pacific Division, there were 292 patrol officers for 239,079 residents in 2007. This translates to 1.22 patrol officers per 1,000 residents. Although the Los Angeles Police Department does not have an established goal for response times to emergency calls, the Citywide average response time in 2007 was 6.9 minutes and the Pacific Division's average response time was approximately 7.5 minutes.

The LMU Department of Public Safety provides first-response police protection services for the LMU campus. The Department of Public Safety has a full-service Campus Security Services Department operating 24 hours a day, 365 days a year, and employs a Chief, a Deputy Chief, four Captains or Managers of Public Safety, and six Lieutenants who serve as patrol watch commanders and shift supervisors. As of January 2009, the Department of Public Safety employs a number of security officers who conduct foot and vehicle patrols of the campus and assist students, faculty, and staff with residence hall and office access. The Department of Public Safety also employs LMU students who assist the staff with routine office functions and serve as after-hours campus escorts.

1.10.2 Fire Protection and Emergency Medical Services

Fire prevention, fire protection, and emergency medical services for the LMU campus are provided by the City of Los Angeles Fire Department (LAFD). The LAFD is a full-spectrum life safety agency that provides services to approximately 4 million people in the City of Los Angeles. The LAFD's 3,586 uniformed personnel protect life, property, and the environment through fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community service. A total of 1,101 uniformed firefighters (including 242 serving as firefighter/paramedics) are on duty 24 hours per day at Fire Department facilities Citywide, including 106 neighborhood fire stations located across the Fire Department's 471-square-mile jurisdiction. Approximately 353 non-uniformed support personnel provide technical and administrative expertise.

Target response times for fire protection and emergency medical services within the City of Los Angeles are 5 minutes for first response and 8 minutes for paramedic response. The LAFD operates three fire stations in the vicinity of LMU that provide initial response to incidents campus. Each fire station has a first-in district, or geographic boundaries within which it responds to incidents on a first-due basis, although fire trucks also respond to incidents in adjacent first-in districts, depending on their location at the time of an incident.

Primary fire protection services are provided by Fire Station No. 67, located at 5451 Playa Vista Drive, approximately 0.8 mile northwest of the campus. Fire Station No. 67 has a fire vehicle response time to the LMU campus of approximately 3 minutes and is equipped with one engine company and an emergency medical technician rescue team.

Secondary fire protection is provided by Fire Station No. 5, located at 8900 South Emerson Avenue, approximately 1.4 mile to the southeast. Fire Station No. 5 has a fire vehicle response time to the LMU campus of approximately 5.2 minutes and is equipped with a paramedic rescue team and task force.

Fire Station 51, located at 10435 South Sepulveda Boulevard, is the next closest fire station to the campus and is approximately 2.5 miles to the southeast with a fire vehicle response time to the campus of approximately 7.4 minutes. Fire Station No. 51 is equipped with a paramedic assessment fire engine and a paramedic rescue ambulance.

The City of Los Angeles Fire Department also includes a Hazardous Materials Division that responds to accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes. The nearest hazardous materials squad is in Fire Station 95, located at 10010 International Road, near LAX. Fire Station 95 is located approximately 3.3 miles to the south with a fire vehicle response time to campus of approximately 9.4 minutes.

The LMU Department of Public Safety provides support services on campus until Los Angeles Fire Department arrives. The Department of Public Safety maintains an Emergency Preparedness Program and has an Emergency Preparedness Manager who maintains LMU's Emergency Management Guide.

1.10.3 Recreation and Parks

LMU's campus is developed with a number of athletic and recreational facilities used for intercollegiate, or varsity sports, intramural sports, and club teams. LMU's intercollegiate athletic programs include basketball, crew, cross-country, golf, soccer, baseball, softball, tennis, track, volleyball, water polo, and swimming, and the demand for training and competition facilities is primarily met by on-campus facilities. (Crew practices and events are held off-campus at LMU's Jane Browne Bove Boathouse, located in Marina del Rey). Additionally, since LMU does not have facilities to host track and field events, LMU participates only in off-campus track and field events, and when necessary, rents track facilities for practices.

The LMU campus currently has approximately 185,000 square feet of indoor athletic facilities, 15.2 acres of outdoor athletic facilities, and more than 25 acres of landscaped open space.

The majority of the facilities devoted to recreational and athletic instructional activities are concentrated in the southeast portion of Burns Campus. Most facilities are intended to be used year-round between approximately 6:00 AM and 10:00 PM, seven days a week.

With respect to off-campus parks and recreational facilities, the City of Los Angeles Department of Recreation and Parks owns and operates public parks and recreation facilities in the City. The Department oversees over 15,710 acres of parkland Citywide, including 39 neighborhood and regional parks, 9 lakes, 176 recreation centers, 9 dog parks, 7 skate parks, 13 golf courses, 63 swimming pools, and 27 senior centers.

There are three City of Los Angeles Recreation and Parks Department parks located within 2 miles of LMU's campus. These include Westchester Recreation Center, Del Rey Lagoon, and Vista Del Mar Park. Approximately 30 acres of additional neighborhood park land is planned within Playa Vista, adjacent to the LMU campus to the north.

1.11 Transportation

Regional access to the LMU campus is provided by the San Diego Freeway (I-405), the Marina Freeway/Expressway (State Highway 90), and Lincoln Boulevard (State Highway 1). The San Diego Freeway/Marina Freeway interchange is approximately 2 miles northeast of the campus.

There are two points of campus ingress/egress. The primary entrance is LMU Drive, which is accessed from Lincoln Boulevard. Gates are lowered at this entrance during nighttime hours and key card use or check-in at the guard station is required to gain access to campus via LMU Drive during these hours. A secondary campus ingress/egress is provided via Loyola Boulevard at W. 80th Street along the southern edge of the campus and is gate-controlled via key card access.

The Proposed Project area is served by four local transit agencies in the form of express and local bus service. The Los Angeles County Metropolitan Transportation Authority (Metro), the City of Santa Monica's Big Blue Bus, Culver City Bus, and the City of Los Angeles Department of Transportation Commuter Express provide public transit service to the Proposed Project area. LMU also operates its own Lion Express shuttle service, which provides transportation from campus to the Loyola Village Community Commercial Center and other destinations.

A parking inventory and occupancy survey was conducted on the LMU campus in Fall 2008. According to these surveys, the campus currently has a total parking supply of 4,133 spaces contained within 18 structured and surface parking facilities located throughout campus.

1.12 Public Utilities: Water Supply, Wastewater, Solid Waste, and Energy

1.12.1 Water Supply

The Los Angeles Department of Water and Power (LADWP) is responsible for providing water within the City of Los Angeles, including LMU. LADWP's service area encompasses the City of Los Angeles, an area of 464 square miles, or approximately 295,000 acres, as well as portions of West Hollywood, Culver City and small areas adjacent to City of Los Angeles limits. LADWP water sources include local groundwater, the Los Angeles Aqueduct (which conveys water from the Owens Valley in Eastern California), and purchased water from MWD. MWD derives its supplies from Northern California through the State Water Project's California Aqueduct, operated by the California Department of Water Resources, and from the Colorado River through MWD's Colorado River Aqueduct.

The California Urban Water Management Planning Act requires every municipal water supplier that serves more than 3,000 customers or provides more than 3,000 acre-feet per year of water to prepare an Urban Water Management Plan addressing water demand and supplies for the ensuing 20-year period. In the Urban Water Management Plan, the water supplier must describe its service area, including current and projected population, and any other factors affecting water management and planning; existing and planned water supplies (including groundwater, if applicable) for the 20-year period identified, in five-year increments; and any water supply projects and programs undertaken to meet demand in the service area.

LADWP's current Urban Water Management Plan, prepared in accordance with the California Urban Water Management Planning Act, was adopted in 2005 and projects water demand through 2030. The population of LADWP's service area is expected to increase at a 0.4 percent annual growth rate between 2005 and 2030, resulting in 368,000 new residents for and a total of approximately 4.3 million residents. Annual demand is expected to total 683,000 acre-feet per year in 2010, or approximately 610 million gallons per day, and 776,000 acre-feet per year in 2030, an increase of 17 percent over 2005. In 2008, LADWP had an available water supply of 638,840 acre-feet (AF), including 22.9 percent derived from the Los Angeles Aqueduct, 13.5 percent from local ground water, and 66.5 percent from MWD; approximately 1 percent of the water supply was reclaimed water. The potable water system on LMU's campus is supplied by three LADWP water mains. These include a 12-inch water main in McConnell Avenue, an 8-inch water main in W. 80th Street, and a 12-inch water main in LMU Drive. LMU's water system combines domestic and fire water on the main campus "loop" beneath Loyola Boulevard and Ignatian Circle, and elsewhere on campus.

LMU's total existing water demand, as calculated by LADWP and including all academic and administrative uses, residential uses, athletic uses, cooling towers, and some landscaping, is approximately 563.5 acre-feet per year, or 502,140.07 gallons per day. LMU also uses reclaimed water to irrigate approximately 60 percent of the landscaped areas of campus.

1.12.2 Wastewater

The Los Angeles Department of Public Works, Bureau of Sanitation, is responsible for wastewater collection and treatment in the City of Los Angeles. The Bureau of Sanitation is also responsible for system maintenance, including channel and debris basin cleaning, catch basin overflow control, basin and sewer repair, roach/rodent abatement, sewer odor control, sewer service charge adjustment, sewer spill and stoppage repair, standing water control, and storm drain maintenance.

Sewage generated on the LMU campus is conveyed to and treated at Hyperion Treatment Plant, the largest of three treatment plants that collectively constitute the Hyperion Treatment System. The Hyperion Treatment System service area serves the central Los Angeles area, treats excess flows from the Los Angeles-Glendale Water Reclamation Plant, and processes solids generated by four of the City's other treatment/reclamation plants. As of 2008, the plant treated an average capacity of 370 million gallons per day, with a remaining capacity of 80 million gallons per day.

The wastewater system serving the LMU campus comprises four smaller systems serving different portions of the campus. Two systems serve Burns Campus, which is developed with residential, academic, research, and athletic facilities. One system serves Leavey Campus. The fourth system serves Hughes Campus. LMU's exterior wastewater system (i.e., the portion of the system outside of buildings) functions via gravity flow, such that pipes convey wastewater flow using the forces of gravity to a point of discharge to the nearest municipal system at the downstream end of the pipe, and consequently no pumps or other mechanical devices are used for LMU's exterior wastewater system. The oldest and most constrained (i.e., near capacity) portion of the on-campus sewer system is on Burns Campus, where some of the pipes date to the original construction of the campus; other portions of the campus sewer system are newer and possess ample remaining capacity.

The campus wastewater system discharges sewage at four locations along the campus boundary to the municipal system (i.e., the receiving sewer). Three discharge points along the north edge of Burns and Leavey Campuses are directly connected to the City's North Outfall Sewer line, which traverses the northern edge of LMU's campus. The fourth campus discharge point is located within the City of Los Angeles right-of-way at the intersection of LMU Drive and Lincoln Boulevard, where it joins flow from other off-campus land uses and is collected by the North Outfall Sewer and conveyed south.

For the year 2008, the most recent year for which data is available, LMU's wastewater demand was approximately 393,714 gallons per day or 441.31 acre-feet per year.

1.12.3 Solid Waste

The City of Los Angeles Bureau of Sanitation provides solid waste services to the City of Los Angeles, including the LMU campus. Non-recyclable waste is collected and delivered to one of four on-campus garbage compactors, located in or adjacent to the Facilities and Maintenance Operations Yard, Leavey Campus student housing complex, Malone Student Center, and University Hall. Waste is transported off campus by LMU's contracted hauler, Consolidated Disposal Service, LLC, a subsidiary of Republic Services, Inc. LMU also operates a recycling area in the Facilities and Maintenance Operations Yard. No waste is chemically processed in this area, but instead is baled, compacted and readied for collection by the contracted hauler.

As reported by LMU, the campus presently generates approximately 5,800 tons of solid waste per year. Through LMU's recycling program, the current annual waste diversion rate on campus is estimated to be 58.6 percent, with 100 percent of green waste recycled. Thus, approximately 3,400 tons of the 5,800 tons of solid waste generated on campus are diverted from landfills each year. The balance, 2,400 tons, is deposited into landfills; the primary landfill that presently serves the campus is the Sunshine Canyon Landfill.

1.12.4 Energy (Electricity and Natural Gas)

The Los Angeles Department of Water and Power (LADWP) provides electricity service to the LMU campus. Electricity is supplied and distributed to the City of Los Angeles by LADWP, which derives energy from conventional and alternative resources. The largest single source of power supply for LADWP is coal, which presently provides approximately 47 percent of the City's energy. Natural gas provides approximately 29 percent of the City's energy; nuclear energy accounts for approximately 9 percent; hydroelectricity, approximately 7 percent; and the remainder, approximately 8 percent, comes from renewable energy sources such as hydrogeneration plants along the Los Angeles Aqueduct system, digester and landfill gas from sewage treatment plants and landfills, and purchases from renewable sources.

LADWP owns and operates 20 receiving stations throughout the Los Angeles area that serve as collection points for power conveyed from switching stations and power generation facilities in California, Utah, Nevada and Arizona via a network of major overhead and underground transmission lines. The receiving stations lower the voltage of electricity to subtransmission levels, sending the power on to

120 distributing stations throughout the City. LADWP currently serves 1.4 million electric service connections in the greater Los Angeles area.

For the year 2008, LMU's electricity consumption was approximately 83,383 kWh per day or 30,435 MWh annually. As of Spring 2008, Loyola Marymount University used sustainable energy sources to supply a total of 9 percent of its electricity consumption. By 2009, LMU began using 12 percent sustainable energy sources, including a total of 6 percent supplied by three photovoltaic systems located on the rooftops of University Hall, Gersten Pavilion, and Von der Ahe Library.

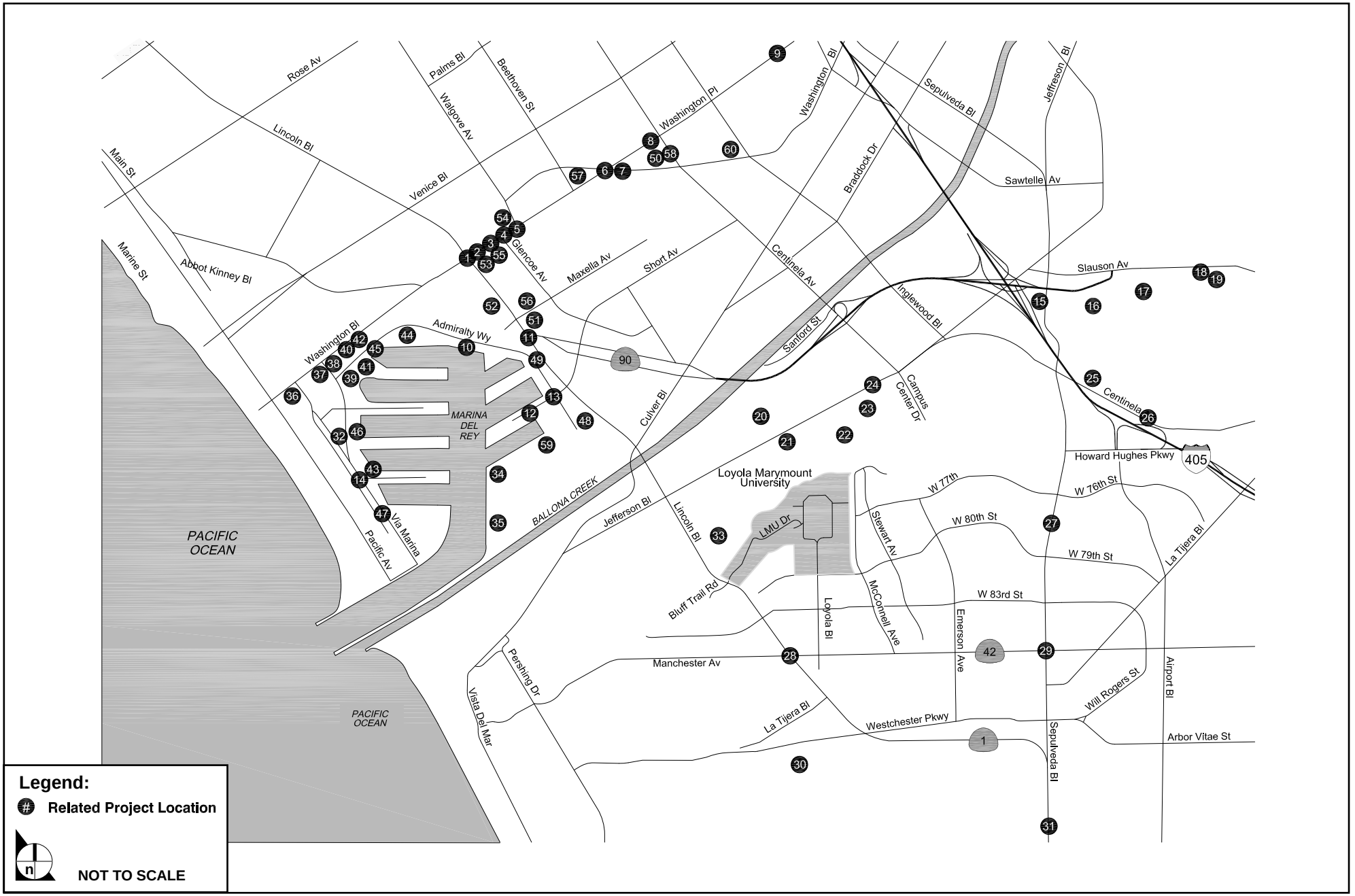
Natural gas is supplied and distributed to the City of Los Angeles, including the City of Los Angeles, by the Southern California Gas Company. Natural gas is extracted from on- and off-shore sites in California, the San Juan Basin in northwestern New Mexico and southwestern Colorado (the largest single source), west Texas, the Rocky Mountains, southwestern Colorado, and western Canada. It is then transported via high-pressure transmission lines to one of four storage fields maintained by the Gas Company in Southern California, and redistributed through a network of transmission, supply, distribution, and local service lines. With each transition, pressure is regulated down to the most efficient level of pressure for the end user. The natural gas supply for the LMU campus and vicinity originates from the Playa del Rey underground storage field and is supplied to the campus through a 4-inch main underneath Fordham Road, a 2-inch main underneath W. 77th Street, and a 2-inch main underneath McConnell Avenue.

For the year 2008, LMU's natural gas consumption was approximately 5,070 Mcf per month or 60,836 Mcf annually.

2.0 RELATED PROJECTS

The analysis contained in **Section IV** of this EIR examines both Project-specific impacts and the potential environmental effects associated with cumulative development. CEQA requires that an EIR evaluate cumulative impacts. *CEQA Guidelines*, Section 15355, defines "cumulative impacts" in part as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Section 15130(b)(1) states that cumulative impact analysis should be based on either a list of past, present, and probable future projects or a summary of projections contained in an adopted General Plan or related document. The selection of methodology is dependent on the appropriateness and availability of the data. When assessing cumulative impacts upon broad regional issues, such as air quality, the analysis takes into consideration projections of cumulative growth that are contained in adopted planning documents of the City, SCAG, or the SCAQMD. Conversely, the analysis of the cumulative effects of localized impacts focuses on a list of related projects in the project vicinity.

A list of potential projects in the Proposed Project vicinity that might be developed within the study time frame was compiled based on information currently available from the City of Los Angeles Department of Transportation (LADOT), the County of Los Angeles, and the City of Culver City. Recent traffic studies conducted in the area were also used to obtain related project data. The list is presented as **Table III-1, Related Projects**. This list of projects accurately reflects the related project proposals at the time of preparation of this document and is limited in detail to the information that was made available by the reporting agencies. The locations of the projects relative to the LMU campus are shown in **Figure III-1, Related Projects**.



SOURCE: Fehr & Peers Transportation Consultants – April 2009

FIGURE **III-1**

Related Projects

877-001•10/09

Table III-1
Related Projects

Map No.	Project Name	Location (Address)	City	Size	Description
1	Lincoln Boulevard Mixed-Use Project	4004 South Lincoln Boulevard	Los Angeles	98 du 6,020 sf	Condominium Retail
2	Encore Mixed-use	13424 Washington Boulevard	Culver City	36,000 sf 71 du	Retail Apartment
3	Glencoe/Washington mixed-use development	13365 Washington Boulevard	Culver City	5,000 sf 19 du	Retail Apartment
4	Live/work units	13340 Washington Boulevard	Culver City	41 du	Condominium
5	Commercial & retail development	13322 Washington Boulevard	Culver City	4,257 sf	Commercial
6	West-Culver Lofts	12801 Washington Boulevard	Culver City	24 du 4,024 sf	Apartment Retail
7	Four-unit condominium	4025 Wade Street	Culver City	4 du	Condominium
8	The Olson Co. Mixed-use	12337 Washington Boulevard	Culver City	12,070 sf 78 du	Retail Apartment
9	Mixed-use	11501 Washington Boulevard	Culver City	2,359 sf 950 sf 2,000 du	Retail Office Apartment
10	Retirement Facility	4445 Admiralty Way	Marina Del Rey[1]	114 du	Retirement Home
11	Villa Marina Mixed Use Development	4350 Lincoln Boulevard	Los Angeles	230 du	Condominium
12	Demolition of restaurant/build retail	13525 Mindanao Way	Marina Del Rey		Demolition of restaurant/build retail
13	Demolition of gas station/build park	4676 Admiralty Way	Marina Del Rey		Demolition of gas station/build park

Map No.	Project Name	Location (Address)	City	Size	Description
14	Neptune Apartments	13800 Tahiti Way	Marina Del Rey	526 du	Apartment
15	Bankfield Warehouse	5722 Bankfield Avenue	Culver City	40,000 sf	Warehouse
16	Westfield Fox Hills Mall expansion	200 Fox Hills Mall	Culver City	293,786 sf	Shopping Center
17	Fire Station	6030 Bristol Parkway	Culver City	12,156 sf	Fire Station
18	Office & retail building	700 Corporate Pointe	Culver City	240,612 sf 4,242 sf	Office Retail
19	Symantec Office multiphase development	800 Corporate Pointe	Culver City	550,000 sf	Office
20	Westchester Neighborhood School expansion	5401 Beethoven Street	Los Angeles	420 students	School
21	Playa Vista Phase I	Jefferson Boulevard	Los Angeles	3,246 du 25,000 sf 1,570,000 sf 65,000 sf	Residential Retail Office/Studio Community Serving
22	Playa Vista Plant Site (Spruce Goose)	Bluff Creek Drive	Los Angeles	332,500 sf 797,400 sf 572,050 sf	Stages Production/Stage Support Office
23	Playa Vista Phase II (The Village)	Jefferson Boulevard	Los Angeles	175,000 sf 2,600 du 150,000 sf 40,000 sf	Office Residential Retail (Neighborhood) Community Serving
24	215 unit condominium	5550 Grosvenor Boulevard	Los Angeles	215 du	Condominium
25	Radisson Office tower	6161 Centinela Boulevard	Culver City	300,000 sf	Office
26	Marina Honda Car Sales	5850 Centinela Avenue	Los Angeles	42,391 sf	New Car Sales
27	Westchester Lutheran School expansion	7831 Sepulveda Boulevard	Los Angeles	600 students	School

Map No.	Project Name	Location (Address)	City	Size	Description
28	Decron Mixed-Use Development	8601 Lincoln Boulevard	Los Angeles	31,000 sf 539 du	Retail/Restaurant Apartment
29	Western Federal Credit Union	8632 South Sepulveda Boulevard	Los Angeles	3,621 sf	Bank
30	Los Angeles International Airport expansion (Alt D)		Los Angeles	N/A	Airport Expansion
31	Century Pacific Hotel	6225 West Century Boulevard	Los Angeles	180 du	Hotel
32	Demo. 202 units; construct 544 units	4160 Admiralty Way (Parcels 100, 101)	Marina Del Rey	342 du	Apartment
33	Central Region Elementary School No. 22	Playa Vista Drive & Bluff Creek Drive	Los Angeles	650 seats	School
34	Fisherman's Village Project	W/o Fiji Way near terminus Fisherman's Village (Parcels 55,56,W)	Marina Del Rey	132 rooms 1,230 seats 24,000 sf 5,000 sf 26 slips (12,964) sf (16,149) sf (17) slips	Hotel Restaurant Retail Office Boat Slip Retail (to be removed) Restaurant (to be removed) Boat Slip (to be removed)
35	Villa Venetia Project	Southern terminus of Fiji Way (Parcel 64)	Marina Del Rey	478 du 500 sf 34 slips (224) du	Multi-Family Residential Restaurant Boat Slip Apartment (to be removed)
36	123 unit apartment	300 West Washington Boulevard	Marina Del Rey	123 du	Apartment

Map No.	Project Name	Location (Address)	City	Size	Description
37	Mixed-use	S/s Washington Boulevard btw. Via Marina/Via Dolce (Parcel 95)	Marina Del Rey	72 du 368 seats 16,352 sf 7,888 sf (9,180) sf (165) seats	Apartment Restaurant Retail Office Office (to be removed) Restaurant (to be removed)
38	Specialty Retail	514-586 Washington Boulevard btw. Via Marina/ Palawan Way	Marina Del Rey	6,236 sf (5,750) sf	Specialty Retail Specialty Retail (to be removed)
39	147 room hotel	S/s Admiralty Way, E/s Via Marina (Parcel IR)	Marina Del Rey	147 rooms	Hotel
40	179 unit apartment	NWC Admiralty Way/Palawan Way (Parcel 140)	Marina Del Rey	179 du (64) du	Apartment Apartment (to be removed)
41	111 room hotel	SWC Admiralty Way & Palawan Way (Parcel 27)	Marina Del Rey	111 rooms (64) rooms	Hotel Hotel (to be removed)
42	Mixed–use	E/o Palawan Way btw Washington Boulevard/ Admiralty Way (Parcel OT); N/s Panay Way, E/o Via Marina (Parcel 21)	Marina Del Rey	114 du 5,000 sf 6,000 sf 6,000 sf	Retirement Facility Retail Marine Commercial Office Health Club (to be removed)
43	Mixed-use	E/o Via Marina & S/o Panay Way (Parcels 10R, FF, 9U)	Marina Del Rey	526 du 288 rooms 174 slips 1.46 acre (136) du (184) slips	Apartment Hotel Boat Slip Public Park Apartment (to be removed) Boat Slip (to be removed)

Map No.	Project Name	Location (Address)	City	Size	Description
44	600 unit condominium	4333 Admiralty Way	Marina Del Rey	600 du	Condominium
45	Mixed–use	S/s Admiralty Way, E/s Palawan Way (Parcel 33/NR)	Marina Del Rey	351 du 24,300 sf 266 seats (1,067) seats	Apartment Retail Restaurant Restaurant (to be removed)
46	Mixed-use	E/s Via Marina btw Panay Way/Marquesas Way (Parcels 12, 15)	Marina Del Rey	940 du 82 du 4,000 sf 6,000 sf 439 slips	Apartment Senior Apartment Specialty Retail Commercial Boat Slip
47	Apartment expansion	4500 Via Marina	Marina Del Rey	120 du	Apartment (expansion)
48	Retail	W/o Lincoln Boulevard N/o Fiji Way (Parcels 50, 83)	Marina Del Rey	4,700 sf	Specialty Retail
49	Mixed-use	4363 Lincoln Blvd	Marina Del Rey	158 du 3,178 sf	Condominium Specialty Retail
50	Mixed-use	12402 Washington Place	Marina Del Rey	30,400 sf 9,300 sf	Office Specialty Retail
51	Mixed-use	E/o Lincoln Boulevard btw SR-90 & Maxella Avenue	Marina Del Rey	244 du 8,000 sf (21,038) sf	Condominium Shopping Center Shopping Center (to be removed)
52	Mixed-use	NWC Princeton Drive/Carter Avenue	Marina Del Rey	298 du (24,000) sf (21,600) sf (40,000) sf	Apartment Manufacturing (to be removed) Office (to be removed) Auto Service (to be removed)
53	Bank	13400 West Washington Boulevard	Marina Del Rey	4,300 sf	Walk-in Bank
54	Mixed-use	13365 Washington Boulevard	Marina Del Rey	5,000 sf 19 du	Specialty Retail Condominium
55	140 unit condominium	4055, 4063, 4071 South Redwood Avenue	Marina Del Rey	140 du	Condominium

Map No.	Project Name	Location (Address)	City	Size	Description
56	118 unit condominium	4155 Redwood Avenue	Marina Del Rey	118 du	Condominium
57	Apartment & Live/Work	12801-23 Washington Boulevard	Marina Del Rey	12 du 12 du	Live/Work Apartment
58	Mixed-use	12337-12449 Washington Boulevard	Marina Del Rey	70 du 11,600 sf	Condominium Specialty Retail
59	Mixed-use	N/s Fiji Way, W/o Admiralty Way (Parcel 52/GG)	Marina Del Rey	345 vessels 30 vessels 1,500 sf	Dry Stack Storage Facility Mast Up Storage Facility Sheriff Boatwright Facility
60	Elementary School	12099 Washington Boulevard	Marina Del Rey	30,000 sf (13,800) sf	Elementary School Medical Office (to be removed)

Notes:
N/A – Not Available
sf – square feet; du – dwelling units
Sources:
Projects 1, 11, 22, 26, 28-31: City of Los Angeles Department of Transportation, 2007.
Projects 10, 12-16, 34: Los Angeles County, August 2008.
Projects 2-9, 17, 19-21, 27: City of Culver City, April 2007, Verified August 2008.
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1 Projects within Marina del Rey are under the jurisdiction of the County of Los Angeles.