

*City of Los Angeles*

# Loyola Marymount University Master Plan Project Draft EIR

## Volume II

### Sections IV.E – IX

Prepared for:

The City of Los Angeles  
Department of City Planning  
200 North Spring Street

Los Angeles, California 90012-4801

EIR Case File No: ENV-2008-1342-EIR  
SCH 2008051103



January 2010

**Loyola Marymount University  
Master Plan Project  
Draft Environmental Impact Report**

**EIR Case File No. ENV-2008-1342-EIR  
SCH 2008051103**

**Volume II  
Sections IV.E Through IX**

**Prepared for:**

The City of Los Angeles  
Department of City Planning  
200 North Spring Street  
Los Angeles, California 90012-4801

**Prepared by:**

Impact Sciences, Inc.  
234 East Colorado Boulevard, Suite 205  
Pasadena, California 91101

**January 2010**

# TABLE OF CONTENTS

## Volume I

Section	Page
I EXECUTIVE SUMMARY .....	I-1
II PROJECT DESCRIPTION.....	II-1
III GENERAL DESCRIPTION OF ENVIRONMENTAL SETTING.....	III-1
IV ENVIRONMENTAL IMPACT ANALYSIS .....	IV-1
A Aesthetics and Visual Resources.....	IV.A-1
A.1 Aesthetics and Views .....	IV.A.1-1
A.2 Shading.....	IV.A.3-1
A.3 Light and Glare .....	IV.A.4-1
B Air Quality .....	IV.B-1
B.1 Air Quality .....	IV.B.1-1
B.2 Global Climate Change .....	IV.B.2-1
C Biological Resources .....	IV.C-1
D Cultural Resources	
D.1 Paleontological Resources .....	IV.D-1
D.2 Archaeological Resources .....	IV.D-2
D.3 Historical Resources .....	IV.D-3

## Volume II

E Geology (Geologic Hazards; Sedimentation and Erosion; Landform Alteration) .....	IV.E-1
F Hazards (Risk of Upset/Emergency Preparedness; Human Health Hazards) .....	IV.F-1
G Surface Water Hydrology and Water Quality.....	IV.G-1
H Land Use.....	IV.H-1
I Noise .....	IV.I-1
J Public Services .....	IV.J-1
J.1 Police Protection.....	IV.J.1-1
J.2 Fire Protection and Emergency Medical Services .....	IV.J.2-1
J.3 Recreation and Parks.....	IV.J.3-1
K Transportation .....	IV.K-1
L Public Utilities .....	IV.L-1
L.1 Water Supply.....	IV.L.1-1
L.2 Wastewater .....	IV.L.2-1
L.3 Solid Waste .....	IV.L.3-1
L.4 Energy (Electricity and Natural Gas).....	IV.L.4-1
V GROWTH INDUCEMENT .....	V-1
VI PROJECT ALTERNATIVES.....	VI-1
VII EFFECTS FOUND NOT TO BE SIGNIFICANT.....	VII-1
VIII SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES .....	VIII-1
IX ORGANIZATIONS AND PERSONS CONTACTED, REFERENCES.....	IX-1

## Appendices

### Volume III

- I Notice of Preparation (NOP)/Initial Study (IS); Public Comments on the Notice of Preparation/Initial Study  
Notice of Preparation (NOP)/Initial Study (IS)  
Public Comments on the Notice of Preparation (NOP)/Initial Study (IS)

### Volume IV

- II Loyola Marymount University Specific Plan (January 8, 2010)
- IV.A.3 Technical Memo Summarizing and Analyzing Illustrative Athletic Field Lighting Plan (January 2010)
- IV.B.1 Air Quality Data
- IV.B.2 Global Climate Change Technical Data
- IV.C Biological Resources  
Biological Resources Survey  
Special Status Species Potentially Occurring On Site
- IV.D.1 Paleontologic Resource Inventory and Impact Assessment Technical Report (February 2009)
- IV.D.2 Archaeological Resource Inventory and Impact Assessment Technical Report (December 2009)
- IV.D.3 Historic Resources Assessment (December 2009)
- IV.E Geotechnical Evaluation (July 2009)
- IV.F Technical Memorandum Summarizing Potential Methane Issues (December 2009)
- IV.G LMU Surface Water Hydrology and Water Quality Analysis (July 2009)
- IV.I Noise Documentation  
Campus Property Line Community Noise Monitoring  
Recycling and Waste Management Operations Relocation Study and Community Noise Impact Analysis  
Noise Calculations

## Appendices (continued)

### Volume V

- IV.J.1 Correspondence from Los Angeles Police Department (November 2008)
- IV.J.2 LMU Water System Analysis, Fire Flow Calculations (March 2009)
- IV.K Transportation Impact Analysis
  - Transportation Impact Analysis (December 2009)
  - Transportation Impact Analysis Appendices (December 2009)
  - Los Angeles Department of Transportation: Transportation Impact Analysis Memorandum of Understanding
  - Los Angeles Department of Transportation: Transportation Impact Analysis Clearance Letter
- IV.L.1 Los Angeles Department of Water and Power Water Supply Assessment (September 2009)
- IV.L.2 Wastewater Disposal System Analysis Technical Memorandum (July 2009)
- IV.L.4 Los Angeles Department of Water and Power and Gas Company Correspondence
  - Impact Sciences Correspondence to the Los Angeles Department of Water and Power
  - Response from the Los Angeles Department of Water and Power
  - Impact Sciences Correspondence to The Gas Company
  - Response from The Gas Company

# LIST OF FIGURES

Figure		Page
II-1	Regional Location Map.....	II-7
II-2	Vicinity Map .....	II-8
II-3	Campus Aerial Photo.....	II-11
II-4	Loyola Marymount University Campus Map.....	II-12
II-5	Proposed Campus Planning Areas .....	II-19
II-6	Proposed Pedestrian Circulation Plan.....	II-26
II-7	Proposed Vehicular Circulation Plan .....	II-27
II-8	Proposed Height Areas .....	II-28
II-9	Proposed Campus Building Setbacks.....	II-29
III-1	Related Projects.....	III-25
IV.A.1-1	Campus Entry: LMU Drive and University Hall.....	IV.A.1-11
IV.A.1-2	Leavey Campus Student Housing .....	IV.A.1-12
IV.A.1-3	Drollinger Parking Plaza .....	IV.A.1-13
IV.A.1-4	Palms Walk .....	IV.A.1-14
IV.A.1-5	Xavier Hall .....	IV.A.1-15
IV.A.1-6	St. Robert’s Hall.....	IV.A.1-16
IV.A.1-7	Sacred Heart Chapel and Chapel Tower.....	IV.A.1-17
IV.A.1-8	Sunken Garden and Alumni Mall.....	IV.A.1-18
IV.A.1-9	Photo Location Key Map.....	IV.A.1-23
IV.A.1-10	Photo Location 1: View from Jefferson Boulevard and Centinela Avenue .....	IV.A.1-24
IV.A.1-11	Photo Location 2: View from Jefferson Boulevard and McConnell Avenue.....	IV.A.1-25
IV.A.1-12	Photo Location 3: View from Jefferson Boulevard at Lincoln Boulevard, Playa Vista.....	IV.A.1-26
IV.A.1-13	Photo Location 4: Views from Culver Boulevard .....	IV.A.1-27
IV.A.1-14	Photo Location 5: Views from Bluff Creek Drive, Playa Vista.....	IV.A.1-28
IV.A.1-15	Photo Location 6: View from Dawn Creek and Discovery Creek, Playa Vista.....	IV.A.1-29
IV.A.1-16	Photo Location 7: Views of LMU Drive Campus Entrance from Lincoln Boulevard and LMU Drive .....	IV.A.1-30
IV.A.1-17	Photo Location 8: View Northeast from West Bluffs.....	IV.A.1-21
IV.A.1-18	Photo Location 9: Views West across University Hall Roof from Campion Drive Cul-de-Sac .....	IV.A.1-32
IV.A.1-19	Photo Location 10: Views West across University Hall Roof from Altavan Avenue.....	IV.A.1-33
IV.A.1-20	Photo Location 11: Views West across University Hall Roof from Altavan Avenue.....	IV.A.1-34
IV.A.1-21	Photo Location 12: View North across Leavey Field from 78th Street.....	IV.A.1-35
IV.A.1-22	Photo Location 13: View from Loyola Boulevard.....	IV.A.1-36
IV.A.1-23	Photo Location 14: View from 80th Street at Gonzaga Avenue .....	IV.A.1-37
IV.A.1-24	Photo Location 15: View from Fordham Road.....	IV.A.1-38
IV.A.1-25	Photo Location 16: View from 80th Street at Holy Cross Place .....	IV.A.1-39
IV.A.1-26	Photo Location 17: View West from McConnell Avenue .....	IV.A.1-40
IV.A.1-27	Photo Location 18: View West from McConnell Avenue .....	IV.A.1-41
IV.A.1-28	Photo Location 19: View West from McConnell Avenue .....	IV.A.1-42
IV.A.1-29	Photo Location 20: View West from McConnell Avenue .....	IV.A.1-43

## LIST OF FIGURES (continued)

Figure		Page
IV.A.2-1	Summer Solstice (Existing Conditions), 9:00 AM - 2:00 PM.....	IV.A.2-5
IV.A.2-2	Summer Solstice (Existing Conditions), 3:00 PM - 5:00 PM.....	IV.A.2-6
IV.A.2-3	Winter Solstice (Existing Conditions), 9 AM - 12:00 PM.....	IV.A.2-7
IV.A.2-4	Winter Solstice (Existing Conditions), 1:00 PM - 3:00 PM .....	IV.A.2-8
IV.A.2-5	Summer Solstice (Proposed Conditions), 9:00 AM - 2:00 PM .....	IV.A.2-13
IV.A.2-6	Summer Solstice (Proposed Conditions), 3:00 PM - 5:00 PM .....	IV.A.2-14
IV.A.2-7	Winter Solstice (Proposed Conditions), 9 AM - 12:00 PM .....	IV.A.2-15
IV.A.2-8	Winter Solstice (Proposed Conditions), 1:00 PM - 3:00 PM.....	IV.A.2-16
IV.A.3-1	Light Spillover on Residential Property Lines Along W. 78th Street.....	IV.A.3-15
IV.A.3-2	Light Spillover on Residential Property Lines Along W. 80th Street.....	IV.A.3-16
IV.A.3-3	Light Spillover on Residential Property Lines Along McConnell Avenue .....	IV.A.3-17
IV.B.1-1	South Coast Air Basin .....	IV.B.1-13
IV.B.1-2	Wind Patterns .....	IV.B.1-14
IV.B.1-3	CARB Regional Trends in Estimated Outdoor Inhalable Cancer Risk: Southern California, 1990.....	IV.B.1-21
IV.B.1-4	CARB Regional Trends in Estimated Outdoor Inhalable Cancer Risk: Southern California, 2001.....	IV.B.1-22
IV.B.1-5	CARB Regional Trends in Estimated Outdoor Inhalable Cancer Risk: Southern California, 2010.....	IV.B.1-23
IV.B.1-6	CARB Regional Trends in Estimated Outdoor Inhalable Cancer Risk: Southern California, 2010 with 75 percent reduction in diesel risk.....	IV.B.1-24
IV.B.1-7	MATES III Grid for the Loyola Marymount University Campus .....	IV.B.1-59
IV.E-1	Regional Geologic Map .....	IV.E-7
IV.E-2	Local Geologic Map .....	IV.E-8
IV.E-3	Regional Faults and Seismicity.....	IV.E-13
IV.F-1	Map of Methane Zone and Methane Buffer Zone .....	IV.F-13
IV.G-1	Existing Storm Drains.....	IV.G-11
IV.H-1	Loyola Marymount University General Plan Land Use Designations .....	IV.H-7
IV.H-2	Loyola Marymount University Zoning Designations.....	IV.H-12
IV.I-1	Noise Attenuation by Barriers and Elevation Differences.....	IV.I-3
IV.I-2	Typical Levels of Ground-Bourne Vibration .....	IV.I-6
IV.I-3	Land Use Compatibility Guidelines .....	IV.I-7
IV.I-4	Noise Monitoring Locations .....	IV.I-14
IV.I-5	Noise Levels of Typical Construction Equipment.....	IV.I-25
IV.I-6	Recycling and Waste Management Operations within Drollinger Parking Plaza .....	IV.I-36
IV.J.2-1	Fire Station Locations and Combined First-In District Boundaries .....	IV.J.2-7

## LIST OF FIGURES (continued)

Figure		Page
IV.K-1	Study Intersection Location Map .....	IV.K-9
IV.K-2(a)	Existing 2008 Peak Hour Traffic Volumes .....	IV.K-10
IV.K-2(b)	Existing 2008 Peak Hour Traffic Volumes .....	IV.K-11
IV.K-3	Existing Transit Routes.....	IV.K-14
IV.K-4	Project Trip Distribution.....	IV.K-21
IV.K-5(a)	Project Only Peak Hour Traffic Volumes.....	IV.K-22
IV.K-5(b)	Project Only Peak Hour Traffic Volumes.....	IV.K-23
IV.K-6	Locations of Related Projects .....	IV.K-26
IV.K-7(a)	Future (2030) Without Project Peak Hour Traffic Volumes.....	IV.K-35
IV.K-7(b)	Future (2030) Without Project Peak Hour Traffic Volumes.....	IV.K-36
IV.K-8(a)	Future (2030) With Project Peak Hour Traffic Volumes .....	IV.K-37
IV.K-8(b)	Future (2030) With Project Peak Hour Traffic Volumes .....	IV.K-38
IV.K-9	TDM Options .....	IV.K-57
IV.K-10(a)	Future With Project With Mitigation Peak Hour Traffic Volumes.....	IV.K-58
IV.K-10(b)	Future With Project With Mitigation Peak Hour Traffic Volumes.....	IV.K-59
IV.L.2-1	Existing LMU Wastewater System .....	IV.L.2-5
IV.L.2-2	Existing Burns Campus Wastewater System.....	IV.L.2-6
IV.L.2-3	Existing Leavey Campus Wastewater System .....	IV.L.2-7
IV.L.2-4	Existing Hughes Campus Wastewater System .....	IV.L.2-8



## LIST OF TABLES

Table		Page
II-1	Summary of Existing and Proposed LMU Campus Facilities.....	II-18
II-2	Proposed Height Restrictions for Height Area 3 .....	II-25
III-1	Related Projects.....	III-26
IV.A.1-1	Proposed Height Restrictions for Height Area 3 .....	IV.A.1-48
IV.A.2-1	Proposed Height Restrictions for Height Area 3 .....	IV.A.2-10
IV.A.3-1	Light Spillover Summary .....	IV.A.3-13
IV.B.1-1	National Ambient Air Quality Standard Designations South Coast Air Basin (Los Angeles County).....	IV.B.1-3
IV.B.1-2	California Ambient Air Quality Standard Designations South Coast Air Basin (Los Angeles County) .....	IV.B.1-5
IV.B.1-3	Ambient Air Quality Standards .....	IV.B.1-17
IV.B.1-4	Ambient Pollutant Concentrations Registered in Source Receptor Area 3 (Station Nos. 094/820).....	IV.B.1-25
IV.B.1-5	SCAQMD Daily Construction Emission Thresholds .....	IV.B.1-28
IV.B.1-6	Localized Significance Thresholds for Proposed Project in Source Receptor Area 3.....	IV.B.1-29
IV.B.1-7	SCAQMD Daily Operation Emission Thresholds .....	IV.B.1-31
IV.B.1-8	Estimated Proposed Project Construction Emissions.....	IV.B.1-41
IV.B.1-9	Localized Significance Threshold Analysis – Maximum Impacts at Residential Receptors .....	IV.B.1-43
IV.B.1-10	Localized Significance Threshold Analysis – Maximum Impacts at School Receptors .....	IV.B.1-44
IV.B.1-11	Proposed Project Cancer Risks .....	IV.B.1-45
IV.B.1-12	Estimated Existing Campus Operational Emissions .....	IV.B.1-47
IV.B.1-13	Estimated Campus after Proposed Project Buildout Operational Emissions .....	IV.B.1-48
IV.B.1-14	Net Estimated Increase in Operational Emissions.....	IV.B.1-49
IV.B.1-15	Carbon Monoxide Concentrations – 2030 Cumulative Plus Project .....	IV.B.1-53
IV.B.1-16	Comparison of ADT to Population Growth at Proposed Project Buildout.....	IV.B.1-62
IV.B.2-1	AB 32 Scoping Plan Measures .....	IV.B.2-10
IV.B.2-2	Top Five GHG Producer Countries and the European Union, 2005.....	IV.B.2-21
IV.B.2-3	GHG Emissions in California .....	IV.B.2-23
IV.B.2-4	Comparison of Global Pre-Industrial and Current GHG Concentrations.....	IV.B.2-24
IV.B.2-5	Construction Subphase Assumptions .....	IV.B.2-36
IV.B.2-6	Estimated Construction Greenhouse Gas Emissions .....	IV.B.2-38
IV.B.2-7	Estimated Greenhouse Gas Emissions for the Existing Campus and Campus After Proposed Project Buildout from Operations and Construction .....	IV.B.2-41
IV.B.2-8	Comparison of Annual GHG Emissions Per Million Gross Square Feet On Existing Campus and On Campus After Proposed Project Buildout .....	IV.B.2-42
IV.B.2-9	Comparison of Annual GHG Emissions Per Full Time Equivalent Students, Faculty, and Staff Before and After Proposed Project Buildout.....	IV.B.2-42
IV.B.2-10	Comparison of GHG Emissions between the Campus after Proposed Project Buildout and California.....	IV.B.2-43

## LIST OF TABLES (continued)

Table		Page
IV.B.2-11	Consistency of Sustainable Strategies with Relevant AB 32 Scoping Plan Measures.....	IV.B.2-46
IV.B.2-12	Consistency with the Relevant 2006 CAT Report and 2007 Update Greenhouse Gas Emission Reduction Strategies.....	IV.B.2-50
IV.B.2-13	Consistency with Relevant Office of Planning and Research Suggested Measures .....	IV.B.2-58
IV.B.2-14	Consistency with the LA Green Plan.....	IV.B.2-64
IV.B.2-15	Consistency with Relevant Attorney General’s Recommended “Project Level” Measures.....	IV.B.2-69
IV.D.3-1	Resources Surveyed to Determine Historical Significance.....	IV.D.3-17
IV.E-1	Geologic Time Scale .....	IV.E-10
IV.E-2	Major Named Faults Considered to be Active in Southern California .....	IV.E-12
IV.E-3	Major Named Faults Considered to be Potentially Active in Southern California .....	IV.E-17
IV.E-4	Significant Southern California Earthquakes with a Magnitude of 5.5 or Greater .....	IV.E-18
IV.H-1	Proposed Height Restrictions for Height Area 3 .....	IV.H-19
IV.H-2	SCAG Regional Comprehensive Plan and Guide Policies .....	IV.H-22
IV.H-3	SCAG Regional Transportation Plan Goals and Policies.....	IV.H-25
IV.H-4	SCAG Growth Visioning Principles .....	IV.H-26
IV.H-5	Framework Element Goals, Objectives, and Policies .....	IV.H-30
IV.H-6	Westchester-Playa del Rey Community Plan Land Use Goals and Objectives .....	IV.H-34
IV.H-7	City of Los Angeles “Do Real Planning” Principles.....	IV.H-41
IV.I-1	Outside to Inside Noise Attenuation, in dB(A).....	IV.I-2
IV.I-2	Presumed Ambient Noise Levels.....	IV.I-9
IV.I-3	City of Los Angeles Land Use Compatibility Guidelines.....	IV.I-11
IV.I-4	Existing Ambient Noise Levels .....	IV.I-12
IV.I-5	Existing Weekday Modeled Roadway Noise Levels.....	IV.I-16
IV.I-6	Construction Noise Levels.....	IV.I-26
IV.I-7	Weekday Modeled Roadway Noise Levels with Project.....	IV.I-29
IV.I-8	Recycling and Waste Management Equipment Noise Levels.....	IV.I-34
IV.I-9	Weekday Modeled Roadway Noise Levels with Project.....	IV.I-41
IV.J.1-1	Los Angeles Police Department Crimes by Reporting Area for 2007 .....	IV.J.1-6
IV.J.1-2	LMU Department of Public Safety 2008 Crimes/Incidents.....	IV.J.1-9
IV.J.1-3	Residential Related Projects – LAPD Pacific Division.....	IV.J.1-17
IV.J.2-1	Los Angeles Fire Department Fire Code Standards Applicable to the LMU Campus .....	IV.J.2-2
IV.J.2-2	Number of Emergency Incidents Responded to by Local Fire Stations During Fiscal Year 2007–2008.....	IV.J.2-6
IV.J.2-3	Residential Related Projects Within Fire Station 67 First-In District.....	IV.J.2-21
IV.J.3-1	City of Los Angeles Recreation and Parks Facilities in the Project Vicinity.....	IV.J.3-9
IV.J.3-2	Summary of Existing and Proposed Athletic and Open Space Facilities .....	IV.J.3-12
IV.K-1	Level of Service Definitions for Intersections.....	IV.K-2
IV.K-2	Intersection Level of Service Existing Conditions (2008).....	IV.K-12
IV.K-3	Existing Transit Service .....	IV.K-16
IV.K-4	Proposed Project Trip Generation Rates Per FTE .....	IV.K-19

## LIST OF TABLES (continued)

Table		Page
IV.K-5	Proposed Project Trip Generation.....	IV.K-19
IV.K-6	City of Los Angeles Department of Transportation Significance Criteria for Signalized Intersections.....	IV.K-27
IV.K-7	City of Los Angeles Department of Transportation Criteria for Neighborhood Intrusion Impacts .....	IV.K-28
IV.K-8	Intersection Level of Service Analysis Future (2030) Traffic Conditions – Without and With Project.....	IV.K-39
IV.K-9	Unsignalized Intersection Level of Service Analysis Future with Proposed Project (2030) Traffic Condition.....	IV.K-41
IV.K-10	Unsignalized Intersection Analysis –City of Los Angeles CEQA Thresholds Guide.....	IV.K-42
IV.K-11	Neighborhood Street Segment Analysis .....	IV.K-45
IV.K-12	Campus Parking Demand Projections .....	IV.K-48
IV.K-13	Proposed Project Parking Supply Phasing .....	IV.K-49
IV.K-14	Proposed Project Trip Generation with Residential Trip Rates .....	IV.K-54
IV.K-15	Signalized Intersection LOS Analysis Future (2030) Traffic Conditions – Without and With Mitigation.....	IV.K-56
IV.L.1-1	City of Los Angeles Water Demand Through 2030.....	IV.L-14
IV.L.1-2	LADWP Annual Water Supply .....	IV.L-19
IV.L.1-3	LADWP Groundwater Basin Supply .....	IV.L-23
IV.L.1-4	Existing LMU Campus Water Demand .....	IV.L-49
IV.L.1-5	Proposed Project Water Demand .....	IV.L-55
IV.L.3-1	In-County Class III Landfills Serving the City of Los Angeles .....	IV.L.3-12
IV.L.3-2	Out-of-County Class III Landfills Available for Use by the City of Los Angeles.....	IV.L.3-13
IV.L.3-3	Proposed or Approved Class III Landfill Expansions and Future Landfills.....	IV.L.3-15
IV.L.3-4	Permitted Unclassified Landfills.....	IV.L.3-15
IV.L.3-5	Existing LMU Campus Solid Waste Generation.....	IV.L.3-16
IV.L.3-6	Construction Waste Generation for Proposed Project Construction.....	IV.L.3-21
IV.L.3-7	Proposed Project Net New Solid Waste Generation .....	IV.L.3-22
IV.L.3-8	Solid Waste Generation – Related Projects .....	IV.L.3-26
IV.L.4-1	Proposed Project Electricity Consumption.....	IV.L.4-19
IV.L.4-2	Proposed Project Natural Gas Consumption .....	IV.L.4-22
IV.L.4-3	Electrical Consumption –City of Los Angeles Related Projects.....	IV.L.4-26
IV.L.4-4	Natural Gas Consumption – Related Projects.....	IV.L.4-27
VI-1	Alternatives Analysis Comparison Summary.....	VI-19
VI-2	Alternative 3 – No New or Replacement Residential Uses Alternative Summary of Existing and Proposed LMU Campus Facilities.....	VI-53
VI-3	Alternative 4 – Build New Residential Uses Off-Campus Alternative Summary of Existing and Proposed LMU Campus Facilities .....	VI-69
VI-4	Alternative 5 – Replacement of Existing Residential Uses and 25 Percent Reduction in New and Replacement Non-Residential Square Footage Alternative Summary of Existing and Proposed LMU Campus Facilities.....	VI-88