

TABLE OF CONTENTS

VOLUME I

CHAPTER		PAGE
1.	Introduction.....	1-1
1.1	Purpose and Intended Uses of this EIR	1-1
1.2	Proposed Project.....	1-1
1.3	Project Consistency with SACOG’s 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy (i.e., Eligibility for CEQA Streamlining)	1-3
1.4	EIR Process.....	1-3
1.5	Scope of the EIR	1-4
1.6	Summary of Comments Received on the NOP	1-11
1.7	Organization of the EIR	1-12
2.	Executive Summary.....	2-1
2.1	Introduction.....	2-1
2.2	Project Location and Description.....	2-1
2.3	Mitigation Monitoring Plan	2-2
2.4	Environmental Impacts and Required Mitigation Measures	2-2
2.5	Alternatives to the Proposed Project	2-3
2.6	Environmentally Superior Alternative	2-5
2.7	Areas of Controversy and Issues to Be Resolved	2-6
3.	Project Description.....	3-1
3.1	Introduction.....	3-1
3.2	Project Location.....	3-1
3.3	Project Setting and Surrounding Uses	3-1
3.4	Project Site Background.....	3-4
3.5	Project Objectives.....	3-4
3.6	Project Components.....	3-5
3.7	Requested Entitlements	3-18
4.	Existing Environmental Setting, Impacts, and Mitigation	
<u>4.0</u>	<u>Introduction to the Analysis</u>	<u>4.0-1</u>
4.0.1	Introduction.....	4.0-1
4.0.2	Determination of Significance.....	4.0-1
4.0.3	Environmental Issues Addressed in this EIR.....	4.0-1
4.0.4	Section Format	4.0-2



CHAPTER		PAGE
<u>4.1</u>	<u>Air Quality</u>	<u>4.1-1</u>
4.1.1	Introduction.....	4.1-1
4.1.2	Existing Environmental Setting.....	4.1-1
4.1.3	Regulatory Context.....	4.1-13
4.1.4	Impacts and Mitigation Measures.....	4.1-19
<u>4.2</u>	<u>Greenhouse Gas Emissions and Energy</u>	<u>4.2-1</u>
4.2.1	Introduction.....	4.2-1
4.2.2	Existing Environmental Setting.....	4.2-1
4.2.3	Regulatory Context.....	4.2-6
4.2.4	Impacts and Mitigation Measures.....	4.2-18
<u>4.3</u>	<u>Land Use and Planning</u>	<u>4.3-1</u>
4.3.1	Introduction.....	4.3-1
4.3.2	Existing Environmental Setting.....	4.3-1
4.3.3	Regulatory Context.....	4.3-4
4.3.4	Impacts and Mitigation Measures.....	4.3-5
<u>4.4</u>	<u>Noise</u>	<u>4.4-1</u>
4.4.1	Introduction.....	4.4-1
4.4.2	Existing Environmental Setting.....	4.4-1
4.4.3	Regulatory Context.....	4.4-8
4.4.4	Impacts and Mitigation Measures.....	4.4-13
<u>4.5</u>	<u>Public Services and Utilities</u>	<u>4.5-1</u>
4.5.1	Introduction.....	4.5-1
4.5.2	Existing Environmental Setting.....	4.5-1
4.5.3	Regulatory Context.....	4.5-14
4.5.4	Impacts and Mitigation Measures.....	4.5-19
<u>4.6</u>	<u>Transportation and Circulation</u>	<u>4.6-1</u>
4.6.1	Introduction.....	4.6-1
4.6.2	Existing Environmental Setting.....	4.6-1
4.6.3	Regulatory Context.....	4.6-17
4.6.4	Impacts and Mitigation Measures.....	4.6-24
5.	Statutorily Required Sections	5-1
5.1	Introduction.....	5-1
5.2	Analysis of Growth-Inducement.....	5-1
5.3	Significant Irreversible Environmental Changes	5-1
5.4	Cumulative Impacts	5-2
5.5	Significant and Unavoidable Impacts	5-4



<u>CHAPTER</u>	<u>PAGE</u>
6. Alternatives Analysis.....	6-1
6.1 Introduction.....	6-1
6.2 Purpose of Alternatives	6-1
6.3 Alternatives Considered but Dismissed.....	6-6
6.4 Alternatives Considered in this EIR.....	6-7
6.5 Environmentally Superior Alternative	6-19
7. EIR Authors and Persons Consulted	7-1
8. References	8-1

Appendices

Appendix A	SACOG MTP/SCS Consistency Determination
Appendix B	Notice of Preparation (NOP)
Appendix C	Initial Study
Appendix D	NOP Comment Letters

VOLUME 11

Appendices Continued

Appendix E	Health Risk Assessment Modeling Outputs
Appendix F	Air Quality/Greenhouse Gas Modeling Outputs
Appendix G	Environmental Noise Assessment
Appendix H	Evaluation of University Mall Development Water Demands
Appendix I	Evaluation of University Mall Development Sewer Flows and Resulting Infrastructure Needs
Appendix J	Transportation Impact Study



LIST OF FIGURES

FIGURE		PAGE
3. Project Description		
3-1	Regional Vicinity Map	3-2
3-2	Project Location Map	3-3
3-3	University Commons Illustrative Site Plan	3-6
3-4	Ground-Level Retail Plan	3-7
3-5	Site Amenities Cross-Section	3-9
3-6	Proposed Building Levels	3-10
3-7	University Commons North Elevation – Site Features	3-14
3-8	University Commons North Elevation	3-15
4.1 Air Quality		
4.1-1	Distance Between Nearest Residential Area and Existing GDF	4.1-34
4.2 Greenhouse Gas Emissions and Energy		
4.2-1	2017 California Energy Consumption	4.2-5
4.4 Noise		
4.4-1	Loudness Comparison Chart	4.4-3
4.4-2	Noise Measurement Locations	4.4-5
4.5 Public Services and Utilities		
4.5-1	City of Davis Water Distribution Area	4.5-4
4.5-2	Preliminary Utility Plan	4.5-26
4.5-3	Potable Water Availability	4.5-29
4.6 Transportation and Circulation		
4.6-1	Study Intersection Locations	4.6-3
4.6-2	Intersection LOS – Existing Conditions	4.6-7
4.6-3	Bicycle and Pedestrian Facilities – Existing Conditions	4.6-10
4.6-4	Peak Hour Bicycle and Pedestrian Volumes – Existing Conditions	4.6-12
4.6-5	Bicycle LTS – Existing Conditions	4.6-14
4.6-6	Pedestrian StreetScore+ – Existing Conditions	4.6-15
4.6-7	Transit Service and Facilities – Existing Conditions	4.6-18
4.6-8	Project Trip Distribution – Residential Component (Inbound)	4.6-36
4.6-9	Project Trip Distribution – Commercial Component (Inbound)	4.6-37
4.6-10	Project Trip Distribution – Residential Component (Outbound)	4.6-38
4.6-11	Project Trip Distribution – Commercial Component (Outbound)	4.6-39



FIGURE		PAGE
4.6-12	Intersection LOS – Existing Plus Project Conditions.....	4.6-41
4.6-13	Primary Project Site Bicycle Access Patterns.....	4.6-44
4.6-14	Peak Hour Bicycle and Pedestrian Volumes – Existing Plus Project Conditions	4.6-45
4.6-15	Bicycle and Pedestrian Impact Summary	4.6-47
4.6-16	Vehicle Queuing – Existing Plus Project Conditions	4.6-62
4.6-17	Intersection LOS – Cumulative Plus Project Conditions	4.6-65



LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
2. Executive Summary	
2-1 Summary of Impacts and Mitigation Measures	2-7
3. Project Description	
3-1 University Commons Square Footage	3-5
3-2 Retail Square Footage Summary	3-8
4.1 Air Quality	
4.1-1 Ambient Air Quality Standards	4.1-3
4.1-2 Summary of Criteria Air Pollutants	4.1-4
4.1-3 Attainment Status	4.1-11
4.1-4 Air Quality Monitoring Data Summary for Project Area	4.1-12
4.1-5 Existing University Mall Emissions (tons/yr).....	4.1-12
4.1-6 YSAQMD Thresholds of Significance	4.1-20
4.1-7 Maximum Unmitigated Project Construction-Related Emissions	4.1-26
4.1-8 Maximum Unmitigated Net New Operational Emissions.....	4.1-29
4.1-9 Maximum Predicted CO Concentrations (parts per million)	4.1-30
4.1-10 Maximum Cancer Risk and Hazard Index Associated With Unmitigated Project Construction DPM	4.1-32
4.1-11 Maximum Mitigated Cancer Risk Associated with Project Construction DPM.....	4.1-35
4.1-12 Cumulative Cancer Risk	4.1-39
4.2 Greenhouse Gas Emissions and Energy	
4.2-1 Global Warming Potentials and Atmospheric Lifetimes of Select GHGs	4.2-3
4.2-2 Existing University Mall Emissions (MTCO ₂ e/yr)	4.2-4
4.2-3 Estimated University Mall Electricity and Natural Gas Consumption	4.2-6
4.2-4 City of Davis and State GHG Reduction Targets	4.2-17
4.2-5 Estimated Electricity and Natural Gas Consumption	4.2-28
4.2-6 Unmitigated Construction-Related GHG Emissions (MTCO ₂ e/yr)	4.2-33
4.2-7 Mitigated Construction-Related GHG Emissions (MTCO ₂ e/yr).....	4.2-33
4.2-8 Unmitigated Operational GHG Emissions Year 2024 ¹ (MTCO ₂ e/yr).....	4.2-35
4.3 Land Use and Planning	
4.3-1 Summary of Adjacent Land Use and Zoning Designations	4.3-2
4.3-2 City of Davis General Plan Consistency Discussion	4.3-9



<u>TABLE</u>	<u>PAGE</u>
4.4 Noise	
4.4-1 Measured Ambient Noise Levels	4.4-6
4.4-2 Existing Traffic Noise Levels and Distances to Contours.....	4.4-7
4.4-3 Effects of Vibration on People and Buildings	4.4-8
4.4-4 Exterior Noise Level Standards	4.4-10
4.4-5 Interior Noise Level Standards.....	4.4-10
4.4-6 Significance of Changes in Noise Exposure	4.4-15
4.4-7 Construction and Demolition Equipment Noise.....	4.4-18
4.4-8 Existing and Existing Plus Project Traffic Noise Levels	4.4-20
4.4-9 Vibration Levels for Various Construction Equipment.....	4.4-25
4.4-10 Cumulative and Cumulative Plus Project Traffic Noise Levels	4.4-27
4.5 Public Services and Utilities	
4.5-1 Groundwater Production	4.5-6
4.5-2 Annual Amount Under Each Water Supply Source.....	4.5-7
4.5-3 Water Supply Capacity	4.5-8
4.5-4 Projected Water Demand.....	4.5-8
4.5-5 Projected Dry Year Supply Availability (afy).....	4.5-9
4.5-6 Existing Water Demand at Project Site	4.5-10
4.5-7 Davis WWTP Influent ADWF and BOD Values, 2010-2014	4.5-12
4.5-8 Existing and Proposed Water Demand at Project Site.....	4.5-27
4.5-9 Projected Normal Year Supply Availability (mgd).....	4.5-31
4.5-10 Projected Multiple Dry Year Supply Availability (mgd)	4.5-32
4.5-11 Summary of Existing and Future WWTP Capacity	4.5-37
4.6 Transportation and Circulation	
4.6-1 Signalized Intersection LOS Criteria	4.6-4
4.6-2 Stop-Controlled Intersection LOS Criteria.....	4.6-5
4.6-3 Peak Hour Intersection Operations – Existing Conditions	4.6-6
4.6-4 Six-Year Collision History Near Project Site	4.6-9
4.6-5 Unitrans Route Summary – Project Site Vicinity	4.6-16
4.6-6 Project Travel Characteristics Methodology.....	4.6-29
4.6-7 Sycamore Lane Apartments – Peak Hour Vehicle Trip Generation	4.6-30
4.6-8 Project Residential Component – Peak Hour Vehicle Trip Generation ...	4.6-30
4.6-9 Existing University Mall – Peak Hour Vehicle Trip Generation	4.6-31
4.6-10 Existing University Mall Remaining Retail – Peak Hour Vehicle Trip Generation.....	4.6-32
4.6-11 Project Retail Component – Peak Hour Vehicle Trip Generation	4.6-33
4.6-12 Project Vehicle Trip Generation.....	4.6-34
4.6-13 Project Pass-By Trip Adjustment.....	4.6-34
4.6-14 Project Peak Hour Mode Choice	4.6-35
4.6-15 Peak Hour Intersection Operations – Existing Plus Project Conditions...	4.6-42
4.6-16 Weekday Project-Generated VMT – Existing Plus Project Conditions	4.6-57



<u>TABLE</u>	<u>PAGE</u>
4.6-17	Weekday VMT per Capita Summary – Existing Plus Project Conditions.....4.6-58
4.6-18	Maximum Queue Length Estimates – Existing Plus Project Conditions..4.6-61
4.6-19	Peak Hour Intersection Operations – Cumulative Plus Project Conditions.....4.6-66
4.6-20	Study Intersection LOS – Effect of Mitigation Measure 4.6-94.6-69
4.6-21	Weekday Project-Generated VMT – Cumulative Plus Project Conditions.....4.6-71
4.6-22	Weekday VMT per Capita Summary – Cumulative Plus Project Conditions.....4.6-72

6. Alternatives Analysis

6-1	Existing University Mall vs. Retail Project Only Alternative Natural Gas and Electricity Use 6-12
6-2	Proposed Project vs. Retail Project Only Alternative Pedestrian and Bicycle Trip Generation..... 6-13
6-3	Proposed Project vs. Retail Project Only Alternative Trip Generation 6-13
6-4	Existing University Mall vs. Existing Zoning Mixed Use Build Out Alternative Natural Gas and Electricity Use 6-15
6-5	Proposed Project vs. Existing Zoning Mixed Use Build Out Alternative Trip Generation 6-17
6-6	Proposed Project vs. Low Parking Alternative Trip Generation 6-19
6-7	Environmental Impacts of the Proposed Project and Project Alternatives 6-21

