

TABLE OF CONTENTS

VOLUME I (BOUND)

<u>CHAPTER</u>		<u>PAGE</u>
1.	INTRODUCTION	1-1
1.1	Purpose and Intended Uses of this EIR.....	1-1
1.2	Proposed Project	1-1
1.3	EIR Process	1-2
1.4	Scope of the Draft EIR.....	1-4
1.5	Summary of Comments Received on the NOP.....	1-5
1.6	Organization of the Draft EIR.....	1-7
2.	EXECUTIVE SUMMARY	2-1
2.1	Introduction.....	2-1
2.2	Summary Description of the Proposed Project	2-1
2.3	Mitigation Monitoring and Reporting Program	2-2
2.4	Summary of Environmental Impacts and Required Mitigation Measures (Table 2-3)	2-3
2.5	Summary of Alternatives to the Proposed Project.....	2-3
2.6	Environmentally Superior Alternative.....	2.10
2.7	Areas of Controversy and Issues to Be Resolved	2.13
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 Background.....	3-5
3.5	Project Objectives	3-7
3.6	Required Public Approvals.....	3-11
3.7	Project Description – Mace Ranch Innovation Center Site	3-13
3.8	Project Description – Mace Triangle Site	3-51
4.	EXISTING ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION	
4.0	INTRODUCTION TO THE ANALYSIS.....	4.0-1
4.0.1	Introduction.....	4.0-1
4.0.2	Determination of Significance	4.0-1
4.0.3	Issues Addressed in this EIR.....	4.0-1
4.0.4	Section Format	4.0-2

<u>CHAPTER</u>		<u>PAGE</u>
4.1 AESTHETICS AND VISUAL RESOURCES		4.1-1
4.1.1 Introduction.....		4.1-1
4.1.2 Existing Environmental Setting		4.1-1
4.1.3 Regulatory Context		4.1-14
4.1.4 Impacts and Mitigation Measures		4.1-17
4.2 AGRICULTURE AND FORESTRY RESOURCES		4.2-1
4.2.1 Introduction.....		4.2-1
4.2.2 Existing Environmental Setting		4.2-1
4.2.3 Regulatory Context		4.2-14
4.2.4 Impacts and Mitigation Measures		4.2-26
4.3 AIR QUALITY		4.3-1
4.3.1 Introduction.....		4.3-1
4.3.2 Existing Environmental Setting		4.3-1
4.3.3 Regulatory Context		4.3-13
4.3.4 Impacts and Mitigation Measures		4.3-19
4.4 BIOLOGICAL RESOURCES		4.4-1
4.4.1 Introduction.....		4.4-1
4.4.2 Existing Environmental Setting		4.4-1
4.4.3 Regulatory Context		4.4-39
4.4.4 Impacts and Mitigation Measures		4.4-46
4.5 CULTURAL RESOURCES		4.5-1
4.5.1 Introduction.....		4.5-1
4.5.2 Existing Environmental Setting		4.5-1
4.5.3 Regulatory Context		4.5-10
4.5.4 Impacts and Mitigation Measures		4.5-14
4.6 GEOLOGY, SOILS, AND MINERAL RESOURCES.....		4.6-1
4.6.1 Introduction.....		4.6-1
4.6.2 Existing Environmental Setting		4.6-1
4.6.3 Regulatory Context		4.6-7
4.6.4 Impacts and Mitigation Measures		4.6-9
4.7 GREENHOUSE GAS EMISSIONS AND ENERGY		4.7-1
4.7.1 Introduction.....		4.7-1
4.7.2 Existing Environmental Setting		4.7-1
4.7.3 Regulatory Context		4.7-8
4.7.4 Impacts and Mitigation Measures		4.7-21

CHAPTER		PAGE
4.8	HAZARDS AND HAZARDOUS MATERIALS	4.8-1
4.8.1	Introduction.....	4.8-1
4.8.2	Existing Environmental Setting	4.8-1
4.8.3	Regulatory Context	4.8-5
4.8.4	Impacts and Mitigation Measures	4.8-8
4.9	HYDROLOGY AND WATER QUALITY	4.9-1
4.9.1	Introduction.....	4.9-1
4.9.2	Existing Environmental Setting	4.9-1
4.9.3	Regulatory Context	4.9-13
4.9.4	Impacts and Mitigation Measures	4.9-19
4.10	LAND USE AND URBAN DECAY	4.10-1
4.10.1	Introduction.....	4.10-1
4.10.2	Existing Environmental Setting	4.10-2
4.10.3	Regulatory Context	4.10-21
4.10.4	Impacts and Mitigation Measures	4.10-28
4.11	NOISE AND VIBRATION.....	4.11-1
4.11.1	Introduction.....	4.11-1
4.11.2	Existing Environmental Setting	4.11-1
4.11.3	Regulatory Context	4.11-11
4.11.4	Impacts and Mitigation Measures	4.11-14
4.12	POPULATION AND HOUSING.....	4.12-1
4.12.1	Introduction.....	4.12-1
4.12.2	Existing Environmental Setting	4.12-1
4.12.3	Regulatory Context	4.12-8
4.12.4	Impacts and Mitigation Measures	4.12-11
4.13	PUBLIC SERVICES AND RECREATION	4.13-1
4.13.1	Introduction.....	4.13-1
4.13.2	Existing Environmental Setting	4.13-1
4.13.3	Regulatory Context	4.13-5
4.13.4	Impacts and Mitigation Measures	4.13-9
4.14	TRANSPORTATION AND CIRCULATION	4.14-1
4.14.1	Introduction.....	4.14-1
4.14.2	Existing Environmental Setting	4.14-1
4.14.3	Regulatory Context	4.14-10
4.14.4	Impacts and Mitigation Measures	4.14-11

<u>CHAPTER</u>		<u>PAGE</u>
4.15 UTILITIES.....		4.15-1
4.15.1 Introduction.....		4.15-1
4.15.2 Existing Environmental Setting		4.15-1
4.15.3 Regulatory Context		4.15-26
4.15.4 Impacts and Mitigation Measures		4.15-29

VOLUME II (BOUND)

<u>CHAPTER</u>		<u>PAGE</u>
5.	CUMULATIVE IMPACTS	5-1
5.1	CEQA Requirements	5-1
5.2	Scope of the Cumulative Analysis	5-2
5.3	Cumulative Impact Analysis	5-9
6.	OTHER CEQA SECTIONS.....	6-1
6.1	Introduction	6-1
6.2	Growth-Inducing Impacts	6-1
6.3	Significant Irreversible Environmental Changes	6-4
6.4	Significant and Unavoidable Impacts	6-5
7.	ALTERNATIVES ANALYSIS.....	7-1
7.1	Introduction	7-1
7.2	Executive Summary – Alternatives Comparison	7-1
7.3	Purpose of Alternatives	7-7
7.4	Alternatives Considered But Dismissed	7-16
7.5	Alternatives Considered in Detail	7-19
	No Project (No Build) Alternative	7-21
	Reduced Site Size Alternative	7-59
	Reduced Project Alternative	7-93
	Off-Site Alternative A (Davis Innovation Center Site)	7-135
	Off-Site Alternative B (Covell Property)	7-166
7.6	Environmentally Superior Alternative	7-202
8.	MIXED-USE ALTERNATIVE	8-1
8.1	Introduction	8-1
8.2	Mixed-Use Alternative Description	8-1
8.3	Mixed-Use Alternative Analysis	8-31
9.	EIR AUTHORS AND PERSONS CONSULTED	9-1
10.	REFERENCES.....	10-1

APPENDICES

- Appendix A Notice of Preparation (NOP)
- Appendix B NOP Comment Letters

VOLUME III (BINDER)

APPENDICES CONTINUED

Appendix C Air Quality Modeling Outputs (Raney)

Appendix D Biological Resources Assessments

1. Biological Resources Evaluation for MRIC (August 2015)
2. Jurisdictional Delineation Report for MRIC (February 3, 2015)
3. Biological Survey for Stormwater Capacity for the MRIC Project (June 22, 2015)

Appendix E GHG Modeling Outputs (Raney)

Appendix F Drainage Study

1. Drainage Study for MRIC (Watermark Engineering, June 15, 2015)
2. Drainage Study for MRIC Mixed-Use Alternative (Watermark Engineering, June 30, 2015)
3. Innovation Center Flood Elevation and Inundation Area Increase Study (West Yost Associates, May 15, 2015)
4. Review of the Drainage Study for MRIC (West Yost Associates, August 10, 2015)
5. Review of the Drainage Study for MRIC Mixed-Use Alternative (West Yost Associates, July 28, 2015)

Appendix G Economic Evaluation (BAE Urban Economics, July 9, 2015)

Appendix H Urban Decay Analysis (ALH Urban & Regional Economics, March 2015)

Appendix I Noise and Vibration Technical Calculations (j.c. brennan & associates)

VOLUME IV (BINDER)

APPENDICES CONTINUED

- Appendix J Technical Traffic Calculations (Fehr & Peers, August 5, 2015)
Appendix K Water Supply Assessment (June 2015)
Appendix L Hydraulic Model Analysis of Existing System Impacts (Brown and Caldwell, March 17, 2015)
Appendix M Sewer Infrastructure Technical Memoranda
1. Impacts of Innovation Center/Nishi Property Development on Wastewater Collection System Capacity (West Yost Associates, March 25, 2015)
 2. Impacts of Innovation Center/Nishi Property Development on Wastewater Treatment Plant Capacity (Final) (West Yost Associates, April 2, 2015)
 3. Impacts of the MRIC Mixed-Use Alternative on Wastewater Treatment Plant and Sewer Capacity (West Yost Associates, July 15, 2015)

LIST OF FIGURES

<u>FIGURE</u>	<u>PAGE</u>
3 PROJECT DESCRIPTION	
3-1 Regional Vicinity Map	3-2
3-2 Project Vicinity Map	3-3
3-3 Existing Yolo County General Plan Designation for MRIC Site.....	3-15
3-4 Proposed City of Davis General Plan Designation for MRIC Site	3-16
3-5 Existing Yolo County Zoning Designation for MRIC Site	3-17
3-6 Proposed City of Davis Zoning Designations for MRIC Site	3-19
3-7 Anticipated Building Layout by Use Type.....	3-23
3-8 MRIC Conceptual Site Plan	3-24
3-9 Anticipated Building Use Zones	3-25
3-10 MRIC Building Height Zones	3-26
3-11 MRIC – Proposed Building Heights	3-27
3-12 MRIC Green Space Areas	3-30
3-13 Conceptual Cross-Section for MRIC Agricultural Buffer	3-33
3-14 MRIC Circulation.....	3-34
3-15 MRIC – Alternative Transportation Connectivity.....	3-36
3-16 MRIC – Conceptual Domestic Water System.....	3-40
3-17 MRIC – Conceptual Irrigation Water System.....	3-41
3-18 MRIC – Conceptual Sewer System.....	3-42
3-19 MRIC – Conceptual Drainage System	3-44
3-20 MRIC Phase 1 Exhibit.....	3-45
3-21 MRIC – Anticipated Phasing	3-47
3-22 City of Davis Sphere of Influence (Existing and Proposed)	3-50
3-23 Mace Triangle Site	3-52
4.1 AESTHETICS AND VISUAL RESOURCES	
4.1-1 Photo Locations and View Directions.....	4.1-8
4.1-2 Existing View from Key Viewpoint #1 – Looking East at the Project Site from Alhambra Drive and Mace Boulevard.....	4.1-9
4.1-3 Existing View from Key Viewpoint #2 – Looking South at the Project Site from Mace Boulevard	4.1-10
4.1-4 Existing View from Key Viewpoint #3 – Looking North at the Project Site from Mace Boulevard	4.1-11
4.1-5 Existing View from Key Viewpoint #4 – Looking Northwest at the Project Site from Westbound Interstate 80.....	4.1-12
4.1-6 Conceptual Project Phasing.....	4.1-22
4.1-7 Proposed Building Height Zones	4.1-23
4.1-8 Proposed View from Key Viewpoint #1 – Looking East at the Project Site from Alhambra Drive and Mace Boulevard.....	4.1-25

<u>FIGURE</u>	<u>PAGE</u>
4.1-9 Proposed View from Key Viewpoint #2 – Looking South at the Project Site from Mace Boulevard	4.1-27
4.1-10 Proposed View from Key Viewpoint #3 – Looking North at the Project Site from Mace Boulevard	4.1-29
4.1-11 Proposed View from Key Viewpoint #4 – Looking Northwest at the Project Site from Westbound Interstate 80.....	4.1-31
 4.2 AGRICULTURE AND FORESTRY RESOURCES	
4.2-1 Context Map.....	4.2-7
4.2-2 On-Site Soil Map.....	4.2-10
4.2-3 FMMP Designations.....	4.2-12
4.2-4 Green Space Plan.....	4.2-44
 4.4 BIOLOGICAL RESOURCES	
4.4-1 Biological Resources Map (1 of 2).....	4.4-3
4.4-2 Biological Resources Map (2 of 2).....	4.4-4
4.4-3 Potential Off-Site Volume Storage Area.....	4.4-9
4.4-4 Wetland Delineation Map (1 of 2)	4.4-33
4.4-5 Wetland Delineation Map (2 of 2)	4.4-34
 4.5 CULTURAL RESOURCES	
4.5-1 MRIC Project Area of Potential Effects	4.5-6
 4.6 GEOLOGY, SOILS, AND MINERAL RESOURCES	
4.6-1 Project Site Soils	4.6-5
4.6-2 Soil Survey Map With Linear Depression and Boring Locations	4.6-16
 4.7 GREENHOUSE GAS EMISSIONS AND ENERGY	
4.7-1 Sun Shadow in March	4.7-40
4.7-2 Sun Shadow in June	4.7-41
4.7-3 Sun Shadow in December	4.7-42
 4.9 HYDROLOGY AND WATER QUALITY	
4.9-1 Principal Watersheds in Davis Area.....	4.9-4
4.9-2 City of Davis Stormwater Basins	4.9-5
4.9-3 Plot of Flows along MDC at Eastern Boundary of MRIC Site (preliminary).....	4.9-24
4.9-4 Conceptual Location of MRIC and Triangle Off-site Detention Area.....	4.9-30
4.9-5 Conceptual Detention Basin at Mace Triangle Site	4.9-33
4.9-6 FEMA Flood Zones MRIC Site and Mace Triangle Site	4.9-41

<u>FIGURE</u>	<u>PAGE</u>
4.10 LAND USE AND URBAN DECAY	
4.10-1 Project Vicinity Map	4.10-4
4.10-2 Yolo County General Plan Land Use Map.....	4.10-6
4.10-3 City of Davis Open Space Map.....	4.10-7
4.10-4 Yolo County Zoning Map	4.10-9
4.10-5 City of Davis General Plan Land Use Map	4.10-11
4.10-6 City of Davis Zoning Map.....	4.10-13
4.10-7 City of Davis Undeveloped Land	4.10-19
4.10-4 Yolo County Zoning Map	4.10-9
4.10-5 City of Davis General Plan Land Use Map	4.10-11
4.10-6 City of Davis Zoning Map.....	4.10-12
4.11 NOISE AND VIBRATION	
4.11-1 Noise Measurement Locations	4.11-6
4.13 PUBLIC SERVICES AND RECREATION	
4.13-1 Conceptual MRIC Open Space Plan	4.13-16
4.14 TRANSPORTATION AND CIRCULATION	
4.14-1 Project Locations and Surrounding Roadway Network	4.14-53
4.14-2 Study Intersections for Project Impact Analysis	4.14-54
4.14-3 Study Roadway and Freeway Segments	4.14-55
4.14-4 Regional Freeway and Roadway Study Facilities	4.14-56
4.14-5 Existing Peak Hour Intersection LOS	4.14-57
4.14-6 Existing Bicycle Facilities.....	4.14-58
4.14-7 Existing Transit Facilities.....	4.14-59
4.14-8A Existing and Existing Plus Project AM Peak Hour LOS	4.14-60
4.14-8B Existing and Existing Plus Project PM Peak Hour LOS	4.14-61
4.15 UTILITIES	
4.15-1 City of Davis Water Distribution System.....	4.15-3
4.15-2 City of Davis Historical Annual Water Production.....	4.15-7
4.15-3 City of Davis Historical and Projected Groundwater Utilization.....	4.15-8
4.15-4 City of Davis Historical Maximum Day and Maximum Month Peaking Factors	4.15-11
4.15-5 City of Davis Historical and Projected Use of Water Supplies.....	4.15-14
4.15-6 City of Davis Historical Per Capita Water Use	4.15-17
4.15-7 Proposed MRIC On-Site Water Distribution System.....	4.15-42
4.15-8 City of Davis Water Distribution System.....	4.15-44
4.15-9 MRIC Wastewater Collection System	4.15-50

<u>FIGURE</u>	<u>PAGE</u>
5. CUMULATIVE IMPACTS	
5-1	Geographic Scope of “CEQA” Cumulative Scenario 5-3
5-2	Geographic Scope for Cumulative Traffic Analysis 5-8
5-3	Local Study Roadway Segments for Cumulative Impact Analysis 5-54
5-4	Regional Study Roadway Segments for Cumulative Impact Analysis 5-55
7. ALTERNATIVES ANALYSIS	
7-1	City of Davis Undeveloped Land 7-18
7-2	Reduced Site Size Alternative 7-61
7-3	Reduced Project Alternative 7-95
7-4	Off-Site Alternative B (Covell Property) 7-168
8. MIXED-USE ALTERNATIVE	
8-1	Mixed-Use Alternative – Site Plan 8-3
8-2	Mixed-Use Alternative – Building Use Zones 8-7
8-3	Mixed-Use Alternative – Maximum Height Zones 8-8
8-4	Mixed-Use Alternative – Green Space 8-10
8-5	Mixed-Use Alternative – Conceptual Domestic Water System 8-17
8-6	Mixed-Use Alternative – Conceptual Irrigation Water System 8-18
8-7	Mixed-Use Alternative – Conceptual Sewer System (Option 1) 8-19
8-8	Mixed-Use Alternative – Conceptual Sewer System (Option 2) 8-21
8-9	Mixed-Use Alternative – Conceptual Drainage System 8-22
8-10	Mixed-Use Alternative Conceptual Phasing 8-25
8-11	Plot of Flows along MDC at Eastern Boundary of Mixed-Use Site (preliminary) 8-95
8-12	Conceptual Location of Mixed-Use and Triangle Off-site Detention Area 8-97
8-13	Conceptual Detention Basin at Mace Triangle Site 8-100

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
2.0 EXECUTIVE SUMMARY		
2-1	Comparison of Alternatives Features	2-4
2-2	Mixed-Use Alternative in Comparison to the Proposed Project	
	Environmental Benefits vs. Increased Impacts	2-12
2-3	Summary of Impacts and Mitigation Measures	2-14
3.0 PROJECT DESCRIPTION		
3-1	Mace Ranch Innovation Center Project Existing and Proposed Land Use and Zoning Designations.....	3-12
3-2	MRIC – Summary of Uses by Type.....	3-20
3-3	Proposed Parks and Green Spaces.....	3-31
3-4	MRIC Infrastructure Ownership and Maintenance	3-37
3-5	Mace Triangle Site Existing Conditions	3-51
3-6	Mace Triangle Site – Summary of Uses by Type	3-53
4.1 AESTHETICS AND VISUAL RESOURCES		
4.1-1	Viewer Exposure and Response	4.1-6
4.1-2	Existing Visual Quality at Key Viewpoints	4.1-7
4.1-3	Existing vs. Proposed Visual Quality Key Viewpoints.....	4.1-32
4.1-4	Mace Triangle Site – Summary of Uses by Type	4.1-33
4.1-5	Policy and Regulation Discussion	4.1-38
4.2 AGRICULTURE AND FORESTRY RESOURCES		
4.2-1	Land Capability Classification	4.2-3
4.2-2	Storie Index Rating System.....	4.2-3
4.2-3	On-Site Land Capability Classification and Storie Index Rating.....	4.2-9
4.2-4	City of Davis Policy and Regulation Discussion	4.2-38
4.3 AIR QUALITY		
4.3-1	Ambient Air Quality Standards	4.3-3
4.3-2	Summary of Criteria Air Pollutants.....	4.3-5
4.3-3	Attainment Status	4.3-10
4.3-4	Air Quality Monitoring Data Summary for Project Area.....	4.3-11
4.3-5	YSAQMD Thresholds of Significance.....	4.3-20
4.3-6	Maximum Unmitigated Project Construction-Related Emissions	4.3-24
4.3-7	Unmitigated Project Operational Emissions	4.3-26
4.3-8	Mitigated Project Operational Emissions.....	4.3-27

<u>TABLE</u>		<u>PAGE</u>
4.3-9	Maximum Predicted CO Concentrations	4.3-32
4.3-10	Maximum Construction-Related DPM Concentration at Nearest Sensitive Receptor.....	4.3-34
4.4	BIOLOGICAL RESOURCES	
4.4-1	Biological Communities and Other Features within Study Area	4.4-2
4.4-2	Special-Status Plants with Potential to Occur within the Study Area.....	4.4-10
4.4-3	Special-Status Wildlife with Potential to Occur within the Study Area	4.4-19
4.4-4	Trees Observed On-Site	4.4-31
4.4-5	Biological Resources Policy Discussion	4.4-76
4.5	CULTURAL RESOURCES	
4.5-1	Applicable Cultural Resources Plan, Policy, or Regulation Consistency Discussion	4.5-24
4.6	GEOLOGY, SOILS, AND MINERAL RESOURCES	
4.6-1	Modified Mercalli Scale of Earthquake Intensity	4.6-3
4.6-2	Geology and Soils Policy Discussion.....	4.6-19
4.7	GREENHOUSE GAS EMISSIONS AND ENERGY	
4.7-1	GWP _s and Atmospheric Lifetimes of Select GHGs	4.7-3
4.7-2	City of Davis GHG Reduction Targets	4.7-20
4.7-3	Unmitigated Proposed Project GHG Emissions at Buildout (2035)	4.7-26
4.7-4	Proposed Project Mitigated GHG Emissions at Buildout (2035).....	4.7-26
4.7-5	Proposed Project GHG Emissions at 1990 Levels	4.7-28
4.7-6	Consistency of Proposed Project (Mitigated) GHG Emissions with State and Local Targets (2020 and 2030).....	4.7-31
4.7-7	City of Davis Policy Discussion.....	4.7-46
4.8	HAZARDS AND HAZARDOUS MATERIALS	
4.8-1	City of Davis Policy Discussion.....	4.8-22
4.9	HYDROLOGY AND WATER QUALITY	
4.9-1	Summary of Design Flows along Mace Drainage Channel	4.9-23
4.9-2	Increases in Runoff Volumes Resulting from MRIC Site.....	4.9-26
4.9-3	Increases in Flood WSE and Inundation Areas West of the Yolo Bypass Due to Development of the Mace Ranch Innovation Center.....	4.9-27
4.9-4	Hydrology and Water Quality Policy Discussion	4.9-43
4.10	LAND USE AND URBAN DECAY	
4.10-1	MRIC Site – Summary of Uses by Type.....	4.10-14
4.10-2	City of Davis Existing Office and Industrial Inventory	4.10-15
4.10-3	Illustrative Existing Innovation Type Space Vacancy in 2035	4.10-34

<u>TABLE</u>	<u>PAGE</u>
4.10-4 Applicable Land Use Plan, Policy, or Regulation Consistency Discussion	4.10-48
4.11 NOISE AND VIBRATION	
4.11-1 Typical Noise Levels.....	4.11-3
4.11-2 Summary of Existing Background Noise Measurement Data.....	4.11-5
4.11-3 Existing Traffic Noise Levels and Distances to Contours	4.11-8
4.11-4 Railroad Noise Measurement Results	4.11-9
4.11-5 Approximate Distances to the Railroad Noise Contours.....	4.11-9
4.11-6 Effects of Vibration on People and Buildings.....	4.11-10
4.11-7 Standards for Exterior Noise Exposure	4.11-15
4.11-8 Standards for Interior Noise Levels.....	4.11-16
4.11-9 Significance of Changes in Noise Exposure	4.11-16
4.11-10 Construction Equipment Noise	4.11-20
4.11-11 Vibration Levels for Various Construction Equipment	4.11-23
4.11-12 Existing and Existing Plus Project Traffic Noise Levels	4.11-25
4.11-13 Transportation Noise Levels at Proposed Uses	4.11-29
4.11-14 Noise Regulations and Policy Discussion	4.11-35
4.12 POPULATION AND HOUSING	
4.12-1 Sacramento Regional Growth Forecast.....	4.12-3
4.12-2 Summary of Housing Units Forecasted in MTP/SCS	4.12-5
4.12-3 Summary of Employment Forecasted in MTP/SCS.....	4.12-5
4.12-4 Summary of Employees and Housing Units in Developing Communities	4.12-6
4.12-5 City of Davis Employment Projections by Sector.....	4.12-6
4.12-6 Sacramento Regional Jobs/Housing Balance	4.12-7
4.12-7 City of Davis Jobs/Housing Balance.....	4.12-8
4.12-8 Place of Residence for Davis Area Workers	4.12-9
4.12-9 MRIC Site – Summary of Uses by Type.....	4.12-13
4.12-10 MRIC Site Estimated Buildout Job Yields.....	4.12-14
4.12-11 Office and Industrial Employment Growth Projections and Reallocation.....	4.12-15
4.12-12 MRIC Site Estimated Employee Household Generation and Housing Demand at Buildout.....	4.12-16
4.12-13 MRIC Employee Housing Unit Demand by Location	4.12-18
4.12-14 Projected Location of Housing for MRIC Site Employees Not Living in Davis.....	4.12-19
4.12-18 Applicable Population and Housing Plan, Policy, or Regulation Consistency Discussion	4.12-21

<u>TABLE</u>	<u>PAGE</u>
4.13 PUBLIC SERVICES AND RECREATION	
4.13-1 Parkland Dedication Table	4.13-8
4.13-2 Applicable Public Services and Recreation Plan, Policy, or Regulation Consistency Discussion	4.13-21
4.14 TRANSPORTATION AND CIRCULATION	
4.14-1A Study Intersections Outside of Mace Boulevard Interchange Area	4.14-3
4.14-1B Study Intersections Within the Mace Boulevard Interchange Area	4.14-3
4.14-2 Study Freeway Mainline Segments.....	4.14-4
4.14-3 Intersection LOS Criteria	4.14-5
4.14-4 Freeway Mainline LOS Criteria	4.14-6
4.14-5 Existing Peak Hour LOS Outside Mace Boulevard Interchange Area	4.14-62
4.14-6 Existing Peak Hour Intersection Operations Mace Boulevard/I-80 Interchange Area	4.14-64
4.14-7 Existing Midweek Peak Hour Freeway Operations	4.14-65
4.14-8A Proposed MRIC Trip Generation	4.14-19
4.14-8B Proposed Mace Triangle Site Project Trip Generation	4.14-21
4.14-9A Existing Plus Project Peaks Hour LOS Outside Mace Boulevard Interchange Area	4.14-66
4.14-9B Existing Plus Project Phase 1 Peak Hour Intersection Operations Outside Mace Boulevard Interchange Area	4.14-68
4.14-10A Existing Plus Project Peak Hour Intersection Operations Mace Boulevard/I-80 Interchange Area.....	4.14-69
4.14-10B Existing Plus Project Phase 1 Peak Hour Intersection Operation Mace Boulevard/I-80 Interchange Area.....	4.14-70
4.14-11 Existing Plus Project Peak Hour Roadway Operations-Regional Analysis	4.14-71
4.14-12 Existing Plus Project Peak Hour Freeway Operations (Local Study Area).....	4.14-72
4.14-13 Existing Plus Project Peak Hour Freeway Operations-Regional Analysis	4.14-74
4.14-14 Transportation/Traffic Policy Discussion	4.14-45
4.15 UTILITIES	
4.15-1 Annual Amount under Each Water Supply Source	4.15-10
4.15-2 Water Supply Capacity (mgd)	4.15-12
4.15-3 Monthly Water Supply at Maximum Capacity (mgd).....	4.15-13
4.15-4 Projected Deliveries to Meet Projected Demand in Average Climate Years (ac-ft/yr)	4.15-15
4.15-5 Projected Supply Availability by Source for Average, Single-Dry, and Multiple-Dry Years	4.15-15
4.15-6 Projected Dry Year Supply Availability (ac-ft/yr)	4.15-15

<u>TABLE</u>	<u>PAGE</u>
4.15-7 City of Davis Service Area buildout Demographics	4.15-18
4.15-8 City of Davis Service Area Buildout Demographics	4.15-18
4.15-9 Buildout Water Demands by Water Use Sector- Current Service Area...	4.15-19
4.15-10 Projected Water Demands by Water Use Sector- Current Service Area .	4.15-20
4.15-11 Davis WWTP Influent ADWF and BOD Values, 2010-2014	4.15-22
4.15-12 Davis Sewer Flow Factors.....	4.15-33
4.15-13 MRIC Site Buildout Demand	4.15-36
4.15-14 Mace Triangle Site Buildout Demand.....	4.15-37
4.15-15 Summary of Buildout Demands	4.15-38
4.15-16 Projected Average Year Demand – Current Service Area and Proposed Developments (ac-ft/yr).....	4.15-38
4.15-17 Projected Water Demands by Water Use Sector – Current Service And Proposed Developments (ac-ft/yr).....	4.15-39
4.15-18 Projected Dry-Year Demand (ac-ft/yr).....	4.15-39
4.15-19 Normal-Year Buildout Demand to Supply Comparison	4.15-40
4.15-20 Average-Year Water Demand and Supply Comparison (ac-ft/yr).....	4.15-40
4.15-21 Single- and Multiple-Dry Year Water Demand and Supply Comparison (ac-ft/yr)	4.15-41
4.15-22 Estimated Wastewater Generation from General Plan Buildout Development	4.15-46
4.15-23 Projected Wastewater Generation from General Plan Buildout Development	4.15-47
4.15-24 Projected Future BOD Loads for General Plan Buildout Development ..	4.15-48
4.15-25 Summary of Existing and Future Capacity and Flow>Loading Conditions	4.15-49
4.15-26 Projected Wastewater Flows from the MRIC Site and the Mace Triangle	4.15-51
4.15-27 Estimated Wastewater Generation from Existing Development City- Wide	4.15-52
4.15-28 Utilities Policy Discussion	4.15-61

5. CUMULATIVE IMPACTS

5-1 Existing Davis Commercial Development, as of June, 2015	5-4
5-2 Projected Office/Industrial/Commercial Development of Remaining Vacant Land within the City of Davis	5-5
5-3 Davis IC Land Use Summary.....	5-6
5-4 Nishi Gateway Land Uses	5-6
5-5 Buildout Projections for “CEQA” Cumulative Scenario (without MRIC Project)	5-7
5-6 Buildout Projections for “Modified” Cumulative Scenario (without MRIC Project)	5-9

<u>TABLE</u>		<u>PAGE</u>
5-7	Increases in Flood WSE and Inundation Areas West of the Yolo Bypass due to Development of the Davis IC, MRIC, and Mace Triangle	5-31
5-8	Cumulative No Project and Cumulative Plus Project Traffic Noise Levels	5-41
5-9	Transportation Noise Levels at Proposed Uses	5-44
5-10	Roadway Segment LOS Definitions	5-56
5-11	CEQA Cumulative Plus Project Peak Hour Intersection Operations Mace Boulevard/I-80 Interchange Area	5-59
5-12	Modified Cumulative Plus Project Peak Hour Intersection Operations Mace Boulevard/I-80 Interchange Area	5-61
5-13	CEQA Cumulative Roadway Segment LOS	5-67
5-14	Modified Cumulative Roadway Segment LOS	5-75
5-15	CEQA Cumulative Peak Hour Freeway Operations	5-83
5-16	Modified Cumulative Peak Hour Freeway Operations	5-87
5-17	CEQA Cumulative Peak Hour Freeway Operations Regional Analysis.....	5-91
5-18	CEQA Cumulative Peak Hour Roadway Segment Operations Regional Analysis.....	5-94
5-19	Estimated Wastewater Generation from General Plan Buildout Development	5-96
5-20	Projected Indoor Water Use for the Proposed Davis IC Project and Other Proposed Development	5-96
5-21	Projected Wastewater Generation from General Plan Buildout Development	5-97
5-22	Projected Wastewater Generation for the Proposed Development Projects	5-98
5-23	Projected Future BOD Loads for General Plan Buildout Development	5-98
5-24	Projected Future BOD Loads for Proposed Project and Other Proposed Development.....	5-98
5-25	Estimated Wastewater Generation from Existing Development City-Wide	5-98

7. ALTERNATIVE ANALYSIS

7-1A	Comparison of Alternatives Features	7-2
7-1B	Comparison of Alternatives Features	7-3
7-2	Unmitigated Reduced Project Alternative Operational Emissions	7-100
7-3	Unmitigated Reduced Project Alternative Operational GHG Emissions at Buildout.....	7-108
7-4	Existing and Existing Plus Reduced Project Alternative Traffic Noise Levels	7-115
7-5	Estimated Buildout Job Yields Reduced Project Alternative Compared to Proposed Project	7-119
7-6	Reduced Project Alternative Trip Generation	7-122

<u>TABLE</u>	<u>PAGE</u>
7-7	Mixed-Use Alternative in Comparison to the Proposed Project Environmental Benefits vs. Increased Impacts 7-205
7-8	Alternative Environmental Impacts Comparison 7-206
8.	MIXED-USE ALTERNATIVE
8-1	Mixed-Use Alternative – Summary Uses by Type 8-4
8-2	Mixed-Use Alternative – Proposed Parks, Gathering Areas, and Green Spaces 8-11
8-3	MRIC Infrastructure Ownership and Maintenance 8-14
8-4	Maximum Unmitigated Mixed-Use Alternative Construction-Related Emissions 8-40
8-5	Maximum Unmitigated Mixed-Use Alternative Operational Emissions 8-41
8-6	Mitigated Mixed-Use Alternative Operational Emissions 8-42
8-7	Maximum Construction-Related DPM Concentration at On-site Sensitive Receptor 8-44
8-8	Unmitigated Mixed-Use Alternative GHG Emissions at Buildout (2035) 8-74
8-9	Mitigated Mixed-Use Alternative GHG Emissions at Buildout (2035) 8-75
8-10	Mixed-Use Alternative GHG Emissions at 1990 Levels 8-76
8-11	Summary of Design Flows along Mace Drainage Channel 8-94
8-12	Increases in Runoff Volumes Resulting from Mixed-Use Site 8-96
8-13	Applicable Land Use Plan, Policy, or Regulation Consistency Discussion 8-109
8-14	Construction Equipment Noise 8-111
8-15	Vibration Levels for Various Construction Equipment 8-115
8-16	Existing and Existing Plus Mixed-Use Project Alternative Traffic Noise Levels 8-117
8-17	Transportation Noise Levels at Proposed Uses 8-120
8-18	Applicable Land Use Plan, Policy, or Regulation Consistency Discussion 8-126
8-19	Mixed-Use Alternative Student Enrollment 8-132
8-20	Mixed-Use Alternative Trip Generation 8-138
8-21	External Mixed-Use Alternative Trips by Travel Mode 8-138
8-22	Mixed-Use Alternative Trip Generation 8-139
8-23	Existing Plus Mixed-Use Alternative Peak Hour Intersection Operations Outside Mace Boulevard Interchange Area 8-153
8-24	Existing Plus Mixed-Use Alternative Peak Hour Intersection Mace Boulevard/I-80 Interchange Area 8-155
8-25	Existing Plus Mixed-Use Alternative Peak Hour Freeway Operations (Local Study Area) 8-155
8-26	Summary of Normal-Year Buildout Demands and Supplies 8-158
8-27	Average-Year Water Demand and Supply Comparison (ac-ft/yr) 8-158

8-28	Single- and Multiple-Dry Year Water Demand and Supply Comparison (ac-ft/yr)	8-159
8-29	Cumulative No Project and Cumulative Plus Mixed-Use Project Alternative Traffic Noise Levels.....	8-182
8-30	Transportation Noise Levels at Proposed Uses	8-186
8-31	CEQA Cumulative Plus Mixed-Use Alternative Peak Hour Intersection Operations Mace Boulevard/I-80 Interchange Area.....	8-191
8-32	Modified Cumulative Plus Mixed-Use Alternative Peak Hour Intersection Operations Mace Boulevard/I-80 Interchange Area.....	8-193
8-33	CEQA Cumulative Plus Mixed-Use Alternative Roadway Segment LOS	8-195
8-34	Modified Cumulative with Mixed-Use Alternative Roadway Segment Levels of Service	8-201
8-35	CEQA Cumulative Plus Mixed-Use Alternative Peak Hour Freeway Operations (Local Study Area).....	8-208
8-36	Modified Cumulative Plus Mixed-Use Alternative Peak Hour Freeway Operations (Local Study Area).....	8-211
8-37	Estimated Wastewater Generation from General Plan Buildout Development	8-214
8-38	Projected Wastewater Generation from General Plan Buildout Development	8-215
8-39	Projected Wastewater Generation for the Proposed Development Projects	8-215
8-40	Projected Future BOD Loads for General Plan Buildout Development	8-216
8-41	Estimated Wastewater Generation from Existing Development City-Wide	8-217