

TABLE OF CONTENTS

Executive Summary

Introduction.....	ES-1
Project Description	ES-2
Potential Areas of Controversy and Issues to be Resolved	ES-6
Alternatives to the Project.....	ES-7
Summary of Impacts and Mitigation Measures.....	ES-8

Chapter One – Introduction

1.1	Procedures and Purpose	1-1
1.2	Organization of the EIR.....	1-3
1.3	Methodology	1-5

Chapter Two – Project Description

2.1	Statement of Project Intent and Objectives.....	2-1
2.2	Project Location	2-3
2.3	Project Setting	2-4
2.4	Project Description.....	2-4
2.5	Proposed Action	2-31
2.6	Uses of the EIR and Required Agency Actions and Permits.....	2-31

Chapter Three – Environmental Setting, Impacts and Mitigation Measures

3.1	Aesthetics	3.1-1
3.2	Agriculture and Forest Resources	3.2-1
3.3	Air Quality	3.3-1
3.4	Biological Resources	3.4-1
3.5	Cultural Resources	3.5-1
3.6	Geology and Soils.....	3.6-1
3.7	Hazards and Hazardous Materials.....	3.7-1
3.8	Hydrology and Water Quality	3.8-1
3.9	Land Use and Planning.....	3.9-1
3.10	Mineral Resources	3.10-1
3.11	Noise.....	3.11-1
3.12	Population and Housing.....	3.12-1
3.13	Recreation	3.13-1
3.14	Public Services	3.14-1
3.15	Transportation/Traffic.....	3.15-1
3.16	Utilities/Services	3.16-1
3.17	Greenhouse Gas Emissions (Global Climate Change).....	3.17-1

Chapter Four – Project Alternatives

4.1	Introduction	4-1
4.2	Project Objectives	4-5
4.3	Alternatives Rejected	4-5
4.4	Project Alternatives	4-6
4.5	Comparison of Alternatives and the Project.....	4-18
4.6	Conclusions	4-18

Chapter Five – Mandatory CEQA Sections

5.1	Unavoidable Significant Environmental Effects.....	5-1
5.2	Significant Irreversible Environmental Changes	5-1
5.3	Growth-Inducing Impacts	5-2
5.4	Effects Not Found to be Significant.....	5-3
5.5	Cumulative Impacts	5-4
5.6	Cumulative Setting	5-4
5.7	Cumulative Impacts Analysis	5-5

Appendices

Appendix A	Notice of Preparation (NOP) and Comments Received
Appendix B	2006 FMMP Merced County Land Use Conversion Table
Appendix C	Policy and Procedures Chapter II: Merced County LAFCo Policies
Appendix D	California Natural Diversity Database (CNDDDB) Data Query
Appendix E	USFWS List of Endangered and Threatened Species
Appendix F	California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California Data Query
Appendix G	Cultural Resources Assessment Within the Merced General Plan Update Area, Peak & Associates, Inc., December 2008
Appendix H	California Department of Toxic Substances Control Containment Site Listings
Appendix I	Environmental Noise Assessment, Merced General Plan Background Document, j.c. brennan & associates, Inc., August 13, 2007
Appendix J	Geologic, Geohazards and Environmental Health Hazards Evaluation Report, Geocon Consultants, Inc., June 2010

Appendix K Traffic Count Data and Summary of Traffic Impact Modeling, Fehr
& Peers Transportation Consultants

Appendix L List of Persons and Sources Consulted

Appendix M List of Preparers

LIST OF TABLES

Table No.	Title	Page No.
ES-1	Existing & Proposed General Plan Land Use Comparison Within the City Limits and SUDP/SOI (Acres)	ES-2
ES-2	Summary of Impacts and Mitigation Measures	ES-9
2-1	Existing & Proposed General Plan Land Use Comparison Within the City Limits and SUDP/SOI (Acres)	2-5
2-2	Merced Vision 2030 General Plan Goals and Policies	2-17
3.3-1	Ambient Air Quality in City of Merced (Number of Days Exceeding State and Federal Standards)	3.3-2
3.3-2	Merced County Attainment Designation (Federal and State)	3.3-3
3.3-3	Ozone Trends Summary: San Joaquin Valley Air Basin	3.3-4
3.3-4	Carbon Monoxide Trends Summary: San Joaquin Valley Air Basin.....	3.3-5
3.3-5	PM ₁₀ Trends Summary: San Joaquin Valley Air Basin.....	3.3-8
3.3-6	Federal and State Air Quality Standards.....	3.3-10
3.4-1	Special-Status Plant Species Reviewed for the Plan Area.....	3.4-5
3.4-2	Special-Status Wildlife Species Reviewed for the Plan Area	3.4-12
3.5-1	CCIC at California State University, Stanislaus Cultural Records Search Results.....	3.5-3
3.6-1	Regional Active Faults within Approximately 60 Miles of the SUDP/SOI ..	3.6-2
3.9-1	Existing General Plan (2015) Land Use (Acreage) within the City & SUDP.....	3.9-4
3.9-2	Standards of Population Density and Building Intensity (2015 and 2030 General Plan)	3.9-8
3.9-3	Merced Planned Land Use Summary (2015 General Plan SUDP vs. 2030 General Plan SUDP/SOI)	3.9-18

3.11-1	Typical A-Weighted Maximum Sound Levels of Common Noise Sources	3.11-1
3.11-2	Acoustical Terminology	3.11-2
3.11-3	Existing Traffic Noise Levels	3.11-5
3.11-4	Railroad Noise Measurement Results.....	3.11-8
3.11-5	Approximate Distances to the Railroad Noise Contours without Horn Use	3.11-9
3.11-6	Existing Merced County Fair Noise Measurement Results – July 17, 2007	3.11-14
3.11-7	Existing Continuous 24-Hour Ambient Noise Monitoring Results – July 11-12, 2007.....	3.11-15
3.11-8	Existing Short-Term Community Noise Monitoring Results.....	3.11-16
3.11-9	Land Use Compatibility	3.11-19
3.11-10	Existing and Predicted General Plan Build Out Traffic Noise Levels Merced General Plan – City of Merced, California	3.11-22
3.11-11	Noise Levels of Typical Construction Equipment	3.11-30
3.11-12	Vibration Levels for Varying Construction Equipment	3.11-31
3.11-13	Effects of Vibration on People and Buildings.....	3.11-31
3.12-1	Population Growth – Merced, Merced County and California, 1980-2000	3.12-1
3.12-2	Population Estimates and Projections, 2000-2030 – City of Merced and Merced County.....	3.12-2
3.12-3	Average Household Size – Merced and Merced County, 1990-2008.....	3.12-2
3.12-4	Age Distribution, 1990-2006.....	3.12-3
3.12-5	Employment by Industry – Merced and Merced County, 2000.....	3.12-4
3.12-6	Population Growth County-Wide, 2000-2010	3.12-10
3.13-1	Merced City Park Land Inventory by Type (2010)	3.13-1

3.13-2	Merced City Park Land Inventory	3.13-3
3.14-1	Student Generation Rates in Merced City School District and Merced Union High School District (2010)	3.14-4
3.15-1	Daily Roadway Segment Level of Service Thresholds by Roadway Type	3.15-8
3.15-2	Level of Service Characteristics for Unsignalized Intersections	3.15-8
3.15-3	Level of Service Characteristics for Signalized Intersections	3.15-8
3.15-4	Merced SUDP/SOI Arterial Street System Traffic Volume & Level of Service – Existing, No Project, and 2030.....	3.15-9
3.15-5	Major Street Improvement Projects.....	3.15-22
4-1	Environmental Impacts of Alternatives Compared to Project with Mitigations.....	4-18

LIST OF FIGURES

Figure No.	Title	Following Page No.
2-1	Regional Location Map	2-4
2-2	Vicinity Map.....	2-4
2-3	2015 Land Use Map.....	2-4
2-4	2030 Land Use Map.....	2-6
3.1-1	Photograph Locations	3.1-2
3.1-2	Photoplate 1	3.1-2
3.1-3	Photoplate 2	3.1-2
3.1-4	Photoplate 3	3.1-2
3.1-5	Photoplate 4.....	3.1-2
3.1-6	Photoplate 5.....	3.1-2
3.1-7	Photoplate 6	3.1-2
3.1-8	Scenic Corridors.....	3.1-6
3.2-1	Important Farmland Map.....	3.2-2
3.2-2	Williamson Act Lands.....	3.2-2
3.3-1	California Regional Air Basins.....	3.3-2
3.4-1	National Wetlands Inventory	3.4-2
3.4-2	CNDDDB Occurrences – Plants	3.4-8
3.4-3	CNDDDB Occurrences – Wildlife.....	3.4-8
3.4-4	San Joaquin Valley Orcutt Grass Critical Habitat Map	3.4-14
3.4-5	Hairy Orcutt Grass Critical Habitat Map	3.4-14
3.4-6	Green Tuctoria Critical Habitat Map	3.4-14

3.4-7	Conservancy Fairy Shrimp Critical Habitat Map.....	3.4-16
3.4-8	Vernal Pool Fairy Shrimp Critical Habitat Map	3.4-16
3.4-9	Vernal Pool Tadpole Shrimp Critical Habitat Map	3.4-18
3.4-10	California Tiger Salamander Critical Habitat Map	3.4-20
3.6-1	Soils Map	3.6-4
3.7-1	Airport Locations	3.7-2
3.7-2	Airport Compatibility Zones	3.7-2
3.8-1	FEMA Flood Zones	3.8-2
3.8-2	Inundation Zones	3.8-20
3.11-1	Noise Measurement Site Locations.....	3.11-8
3.11-2	Continuous Measured Railroad and Hourly Noise Levels – Site B.....	3.11-8
3.11-3	Continuous Measured Railroad and Hourly Noise Levels – Site C	3.11-8
3.11-4	Continuous Measured Railroad and Hourly Noise Levels – Site D	3.11-8
3.11-5	Merced Regional Airport Noise Contours.....	3.11-10
3.11-6	Castle Airport Noise Contours.....	3.11-10
3.11-7	Fairgrounds Speedway Configuration/Measurement Sites	3.11-18
3.13-1	Parks and Open Space	3.13-2
3.15-1	Circulation Map	3.15-2
3.15-2	Regional Routes.....	3.15-2
3.15-3	North Merced Street Grid	3.15-2
3.15-4a	Bus Routes.....	3.15-4
3.15-4b	Bus Routes.....	3.15-4
3.15-4c	Bus Routes.....	3.15-4

3.15-4d	Bus Routes.....	3.15-4
3.15-5	M Street Transitway	3.15-4
3.15-6	Railroads	3.15-4
3.15-7	Bicycle Routes	3.15-6
3.15-8	Expressway Cross-Section	3.15-15
3.15-9	Major Arterial/Arterial Cross-Sections	3.15-15
3.15-10	Divided Minor Arterial Cross-Sections.....	3.15-16
3.15-11	Transitway Cross-Section	3.15-17
3.15-12	Collector Street Cross-Sections	3.15-17
3.15-13	Local Street Cross-Sections.....	3.15-18
4-1	2030 Reduce Sphere of Influence Land Use Map.....	4-10
4-2	Concentrated Growth Alternative Land Use Map	4-14