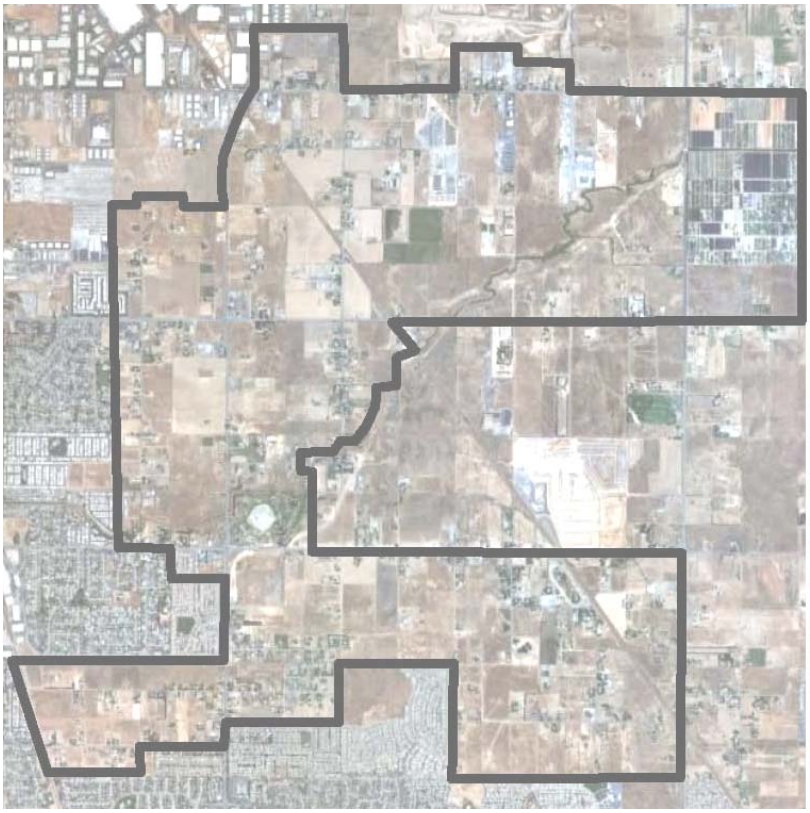
FINAL ENVIRONMENTAL IMPACT REPORT
VOLUME 1 (OF 5)

FLORIN-VINEYARD GAP COMMUNITY PLAN PROJECT



Control Number: 04-GPB-CPB-0096
State Clearinghouse Number: 2005082045
Date: October 2010

COUNTY OF SACRAMENTO
DEPARTMENT OF ENVIRONMENTAL
REVIEW AND ASSESSMENT
827 7TH STREET, ROOM 220
SACRAMENTO, CALIFORNIA 95814

Board Of Supervisors

1st District: Roger Dickinson,
2nd District: Jimmie Yee
3rd District: Susan Peters
4th District: Roberta MacGlashan
5th District: Don Nottoli

County Executive

Steve Szalay

Prepared By

Department of Environmental Review and Assessment

With Assistance By

Raney Planning & Management, Inc.

FINAL ENVIRONMENTAL IMPACT REPORT
VOLUME 1 (OF 4)

FLORIN-VINEYARD GAP COMMUNITY PLAN

Control Number: 04-GPB-CPB-0096
State Clearinghouse Number: 2005082045

This Environmental Impact Report has been prepared pursuant to the California Environmental Quality Act of 1970 (Public Resources Code Division 13). An Environmental Impact Report is an informational document which, when this Department requires its preparation shall be considered by every public agency prior to its approval or disapproval of a project. The purpose of an Environmental Impact Report is to provide public agencies with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which any adverse effects of such a project might be minimized; and to suggest alternatives to such a project.

Prepared by the
COUNTY OF SACRAMENTO
DEPARTMENT OF ENVIRONMENTAL
REVIEW AND ASSESSMENT
www.DERA.saccounty.net
827 7TH STREET, ROOM 220
SACRAMENTO, CALIFORNIA 95814

Municipal Services Agency

Department of Environmental Review and Assessment
Joyce Horizumi, Director

Steven C. Szalay, Interim County Executive
Nav Gil, Chief Operations Manager

October 15, 2010

TO: ALL INTERESTED PARTIES

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT FOR FLORIN-VINEYARD GAP COMMUNITY PLAN PROJECT (Control Number: 04-GPB-CPB-0096; State Clearinghouse Number: 2005082045)

The subject Final Environmental Impact Report (FEIR) is attached for your review. The FEIR and the subject project are scheduled to be heard before the Sacramento County Board of Supervisors on October 27, 2010 at (time) in the County Board Chambers located at 700 H Street, Sacramento, California.

The DEIR consists of five volumes:

- **Volume I** of the FEIR contains all of the program-level California Environmental Quality Act (CEQA) mandated information and analyses for the entire Florin Vineyard Gap Community Plan Project area. This volume also includes the Response to Comments on the Draft EIR.
- **Volume II** of the FEIR contains all of the project-level CEQA mandated information and analyses for the individual development projects currently proposed within the Florin Vineyard Gap Community Plan Project area.
- **Volume III** of the FEIR contains supporting technical appendices for the DEIR analysis for the overall Florin Vineyard Gap Community Plan Project Area.
- **Volume IV** of the FEIR contains supporting technical appendices for the individual development projects.
- **Volume V** of the FEIR contains Mitigation Monitoring and Reporting Programs for the individual development projects.

Volumes I, II and V are available in hard copy, with Volumes III and IV attached in CD format. All volumes will be available electronically, beginning October 15, 2010, at:
http://www.dera.saccounty.net/tabid/71/Default.aspx?ProjectID=32642

Sincerely,

Joyce Horizumi
Environmental Coordinator

P:\2004\04-0096 FV GAP\Env Docs\FEIR\Volume I - FEIR - Main\Cover Letter.doc

TABLE OF CONTENTS

CHAPTER PAGE

Preface ..... **i**

1. Executive Summary **1-1**

2. Project Description **2-1**

3. Alternatives to the Proposed Project **3-1**

4. Land Use **4-1**

5. Public Services and Utilities **5-1**

6. Sewer Service **6-1**

7. Water Supply **7-1**

8. Hydrology and Drainage **8-1**

9. Transportation and Circulation **9-1**

10. Air Quality **10-1**

11. Climate Change **11-1**

12. Biological Resources **12-1**

13. Geology and Soils **13-1**

14. Noise **14-1**

15. Cultural Resources **15-1**

16. Hazardous Materials **16-1**

17. Population and Housing **17-1**

18. Agricultural and Mineral Resources **18-1**

19. Aesthetics **19-1**

20. Summary of Impacts Disposition **20-1**

21. References **21-1**

22. Response to Comments **22-1**

Appendices

See Volume III of the Draft EIR, available at Sacramento County Department of Environmental Review and Assessment located at 827 7th Street, Sacramento, California.

LIST OF PLATES

PLATE		PAGE
PRE-1	CPAC Hybrid Land Use Plan	ii
PRE-2	Planning Department Hybrid Land Use Plan	iii
PRE-3	Planning Commission Recommended Land Use Plan	iv
PD-1	Project Location Map	2-2
PD-2	Existing General Plan Land Use Designations	2-5
PD-3	Proposed General Plan Land Use Designations	2-6
PD-4	Existing Zoning Designations	2-7
PD-5	Citizen's Advisory Committee Land Use Plan	2-8
PD-6	Planning Department Land Use Plan	2-9
PD-7	Comparison of CAC and Planning Department Plans	2-11
Alt-1	Wetland Avoidance and Smart Growth Alternative	3-5
LU-1	Existing FVGCP General Plan Land Use Designations	4-2
LU-2	City of Sacramento General Plan Designations	4-5
LU-3	Sacramento County General Plan Land Use Map	4-6
LU-4	Existing Zoning Designations	4-9
LU-5	North Vineyard Station Community Plan Designations	4-16
LU-6	Vineyard Springs Comprehensive Plan Designations	4-17
LU-7	City of Sacramento Zoning Designations	4-18
LU-8	South Sacramento Community Planning Area	4-20
LU-9	Vineyard Community Planning Area	4-21
LU-10	Proposed General Plan Designations	4-28
LU-11	CAC Land Use Plan – Proposed Designations	4-29
LU-12	PD Land Use Plan – Proposed Designations	4-30
LU-13	Land Use Options	4-36
LU-14	Blueprint Scenario for Eastern Sacramento County	4-41
PS-1	Existing Elementary School Boundaries	5-4
PS-2	Middle School and High School Boundaries	5-5

PS-2a School Plan 5-16
PS-3 Planned Parks and Parkway System 5-19
SS-1 Vicinity Map 6-2
SS-1a Area Outside Sewer District Boundaries 6-3
SS-2 2002 SFEMP Sewer Shed Boundaries 6-4
SS-3 Proposed Sanitary Sewer Shed Boundary Modifications 6-10
SS-4 Sewer System Shed Map 6-11
WS-1 Service Provider Boundaries 7-2
WS-2 South American Groundwater Subbasin 7-10
WS-3 Land Use Designations in the FVGCP 7-18
WS-4 Water Infrastructure Requirements 7-26
HY-1 Morrison Creek Streams Group 8-2
HY-2 FVGCP Watersheds 8-3
HY-3 Pre-Project Floodplain on PD Land Use Plan 8-6
HY-4 Pre-Project Floodplain on CAC Land Use Plan 8-7
HY-5 Drainage Facilities 8-19
HY-6 Northeast Drainage Facilities 8-20
HY-7 Northwest Drainage Facilities 8-21
HY-8 Southeast Drainage Facilities 8-22
HY-9 Southwest Drainage Facilities 8-23
HY-10 Post-Project Floodplain with Laguna Spill 8-26
HY-11 Post-Project Floodplain without Laguna Spill 8-27
HY-12 Areas Lacking Regional Water Quality Facilities 8-38
TC-1 Project Location 9-2
TC-2 Proposed Land Use Plans 9-3
TC-3 Existing Roadway System 9-4
TC-4 Study Roadway Segments and Intersections 9-6
TC-5 Existing Transit System 9-16
TC-6 Existing and Planned Bicycle Facilities 9-18
TC-7 Bicycle Paths 9-19
TC-7a Bicycle and Pedestrian Plan 9-20

TC-8 Traffic Analysis Zones – CAC Land Use Plan 9-23
TC-9 Traffic Analysis Zones – PD Land Use Plan 9-24
TC-10 Cumulative Roadway System 9-25
TC-11 Regional Transit – 20-Year Vision Map 9-45
TC-12 Proposed Roadway Mitigation – Existing with Project Conditions 9-55
TC-13A Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Existing Plus CAC Conditions with Mitigation 9-56
TC-13B Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Existing Plus CAC Conditions with Mitigation 9-57
TC-14A Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Existing Plus PD Conditions with Mitigation 9-58
TC-14B Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Existing Plus PD Conditions with Mitigation 9-59
TC-15 Proposed Roadway Mitigation – Cumulative with Project Conditions 9-91
TC-16A Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Cumulative Plus CAC Conditions with Mitigation 9-92
TC-16B Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Cumulative Plus CAC Conditions with Mitigation 9-93
TC-17A Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Cumulative Plus PD Conditions with Mitigation 9-94

TC-17B Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Cumulative Plus PD Conditions with Mitigation 9-95
TC-18 Proposed Roadway Mitigation – Cumulative with Project Conditions (Plus 15 Percent Housing Density Bonus) 9-132
CC-1 Impacts as a Function of Increasing Average Global Temperature Change (IPCC, 2007b)..... 11-21
CC-2 Projected California Temperature Change, December through February (DJF) and June through July (JJA), Degrees Celsius..... 11-22
CC-3 Potential Changes in Snow Accumulation, as of April 1 11-25
BR-1 Community Plan Vicinity Map 12-2
BR-2(A) FVGCP Area Wetlands 12-4
BR-2(B) FVGCP Area Wetlands 12-5
GS-1 Faults in the Environs of Sacramento County 13-3
GS-2 Earthquake Intensity Zones..... 13-4
N-1 Noise Measurement Locations..... 14-2
N-2 Mather Airport Noise Contours 14-5
N-3 UPRR Noise Contours..... 14-9
CR-1 FVGCP Cultural Survey Area..... 15-17
HM-1 Superfund Sites 16-2
AG-1 Project Area Soils..... 18-9
AG-2 Sacramento County Important Farmland 18-10
AG-3 Aggregate Resource Areas 18-11
AG-4 Sacramento County Williamson Act Lands 2007..... 18-18
RC-1 Central Valley Flood Protection Board Jurisdictional Boundaries..... 22-4
RC-2 Pedestrian and Bicycle Trail Plan 22-21
RC-3 School Plan 22-79

LIST OF TABLES

TABLE		PAGE
PRE-1	FVCP – Land Use Comparison	v
EC-1	Executive Summary of Project Impacts and Mitigation	1-3
PD-1	Existing and Proposed General Plan Land Use Designations	2-4
PD-2	Community Plan Land Use Comparison	2-10
Alt-1	Buildout Pursuant to Existing Zoning Designations	3-4
LU-1	General Plan Land Use Designation Comparison	4-34
LU-2	Community Plan Land Use Comparison	4-37
PS-1	Elk Grove Unified School District, 2008-2009	5-3
PS-2	Project Area School Enrollment, 2008-2009	5-3
PS-3	Student Generation Rates	5-14
SS-1	Equivalent Single-Family Dwelling (ESD) Values	6-8
SS-2	Trunk Shed Summary	6-9
WS-1	Cal-Am Annual Potable Water Contract	7-3
WS-2	Projected Cal-Am Annual Potable Water Purchases	7-4
WS-3	Cal-Am Historical Groundwater Usage	7-5
WS-4	Historical and Projected Water Supply for the Parkway System – Normal Year	7-6
WS-5	Supply Reliability and Sources of Supply Normal, Single Dry, And Multiple Dry Years for the Cal-Am Service Area (2025 Demand Levels)	7-6
WS-6	Surface Water Supplies – Zone 40 (Number in Acre-Feet)	7-8
WS-7	Amount of Groundwater Pumped (AF/year)	7-8
WS-8	Projected Amount of Groundwater Pumped (AF/year)	7-8
WS-9	2035 Water Supply Scenarios – Zone 40	7-9
WS-10	FVGCP Dwelling Units within Cal-Am Service Area	7-17
WS-11	Population Projections for Cal-Am Parkway Service Area	7-19
WS-12	Projected Cal-Am Connections by Customer Type	7-19
WS-13	Cal-Am Water Usage by Customer Type	7-20

WS-14 Cal-Am Projected Annual Water Use (AF) 7-20
WS-15 Cal-Am Projected Water Use and Supply 7-21
WS-16 Proposed Land Uses and Corresponding Zone 40 Classifications 7-22
WS-17 SCWA Annual Average Water Demand 7-23
HY-1 Required Elder-Gerber Detention Facilities 8-24
HY-2 Proposed Elder-Gerber Detention Basins 8-25
HY-3 Required Florin Creek Detention Facilities 8-28
HY-4 Proposed Florin Creek Detention Basins 8-28
HY-5 Required Unionhouse Creek Detention Facilities 8-29
HY-6 Proposed Unionhouse Floodwater Detention Basins 8-29
HY-7 Comparison of Flows and Stages for FVGCP Stand-Alone Conditions 8-30
HY-8 Comparison of Flows and Stages for FVGCP Post-Development Conditions 8-33
TC-1 Roadway Level of Service – Existing Conditions 9-12
TC-2 Intersection Level of Service – Existing Conditions 9-14
TC-3 Vehicle Trip Generation Summary 9-22
TC-4 Roadway Levels of Service – Existing Plus Project Conditions: CAC Land Use Plan 9-27
TC-5 Roadway Levels of Service – Existing Plus Project Conditions: PD Land Use Plan 9-29
TC-6 Intersection Levels of Service – Existing Plus Project Conditions: CAC Land Use Plan 9-32
TC-7 Intersection Levels of Service – Existing Plus Project Conditions: PD Land Use Plan 9-34
TC-8 Roadway Levels of Service – Cumulative Conditions: CAC Land Use Plan 9-36
TC-9 Roadway Levels of Service – Cumulative Conditions: PD Land Use Plan 9-38

TC-10 Intersection Levels of Service – Cumulative Conditions: CAC Land Use Plan 9-40
TC-11 Intersection Levels of Service – Cumulative Conditions: PD Land Use Plan 9-42
TC-12 Impacts to Roadway Segments 9-48
TC-13 Roadway Levels of Service – Existing Plus Project Mitigated Conditions: CAC Land Use Plan 9-60
TC-14 Roadway Levels of Service – Existing Plus Project Mitigated Conditions: PD Land Use Plan 9-63
TC-15 Impacts to Intersections 9-67
TC-16 Intersection Levels of Service – Existing Plus Project Mitigated Conditions: CAC Land Use Plan 9-78
TC-17 Intersection Levels of Service – Existing Plus Project Mitigated Conditions: PD Land Use Plan 9-80
TC-18 Cumulative Impacts to Roadway Segments 9-83
TC-19 Roadway Levels of Service – Cumulative Mitigated Conditions: CAC Land Use Plan 9-96
TC-20 Roadway Levels of Service – Cumulative Mitigated Conditions: PD Land Use Plan 9-99
TC-21 Cumulative Impacts to Intersections 9-103
TC-22 Intersection Levels of Service – Cumulative Mitigated Conditions: CAC Land Use Plan 9-119
TC-23 Intersection Levels of Service – Cumulative Mitigated Conditions: PD Land Use Plan 9-121
TC-24 Freeway Segment Traffic Share Estimates – Cumulative Conditions 9-124
TC-25 Roadway Levels of Service – Cumulative Mitigated Conditions With Density Bonus: CAC Land Use Plan 9-127
TC-26 Roadway Levels of Service – Cumulative Mitigated Conditions With Density Bonus: PD Land Use Plan 9-129
TC-27 Cumulative Impacts to Roadway Segments – Density Bonus.. 9-131

AQ-1 Federal and State Ambient Air Quality Standards 10-3
AQ-2 Days Exceeding Air Quality Standards at the Sacramento – T Street and Sacramento – Health Dept. (Stockton Blvd.) Monitoring Sites, 2005-2007 10-4
AQ-3 SMAQMD Construction Screening Levels 10-17
AQ-4 Project Carbon Monoxide Concentrations at Worst Case Intersections 10-20
AQ-5 Estimated New Regional Emissions 10-21
CC-1 Greenhouse Gas Emissions Worldwide, United States, and California 11-4
CC-2 Climate Change Impact Criteria 11-17
CC-3 Projected Annual Greenhouse Gas Emissions by Land Use Type (Unmitigated) 11-30
CC-4 Projected Annual Greenhouse Gas Emissions (Unmitigated).. 11-31
CC-5 Relative CO_2 Emissions (in CO_2 Equivalents) 11-31
CC-6 Greenhouse Gas Reduction Plan: SMAQMD Measures for the Entire Plan Area 11-33
CC-7 Greenhouse Gas Reduction Plan: Measures Identified in the Attorney General's "Project Elements Addressing CO_2 Emissions Reductions" 11-33
BR-1 Potentially Occurring Special-Status Species and Associated Habitats 12-15
BR-2 Potential Impacts to Swainson's Hawk Foraging Habitat 12-37
N-1 Ambient Noise Monitoring Results Florin-Vineyard Gap Community Plan Area – September 19-22, 2005 14-3
N-2 Existing Traffic Noise Levels and Distances to Contours on Florin-Vineyard Gap Community Plan Area Roadways 14-6
N-3 Union Pacific Railroad Noise Measurement Results Florin-Vineyard Gap Community Plan Area 14-10
N-4 Noise Level Performance Standards for Residential Uses Affected by Non-Transportation Noise 14-11

N-5 Acceptable Noise Levels in Unoccupied Rooms Affected by Transportation Noise 14-12
N-6 Sacramento County Noise Ordinance Standards Applicable at Exterior Spaces of Residential Uses 14-14
N-7 Future (Cumulative) Conditions Predicted Traffic Noise Levels and Project-Related Traffic Noise Level Increases..... 14-17
N-8 Future (Cumulative) Conditions Predicted Traffic Noise Levels and Project-Related Traffic Noise Level Increases with Density Bonus 14-21
N-9 Predicted Distances to Cumulative Plus Project (Without Density Bonus, With Mitigation) Noise Contours 14-25
N-10 Predicted Distances to Cumulative Plus Project (With Density Bonus, With Mitigation) Noise Contours 14-27
N-11 Construction Equipment Noise 14-29
CR-1 General Archaeological Patterns Documented in Sacramento County..... 15-2
PH-1 Proposed Housing Densities..... 17-6
PH-2 Multi-Family Housing 17-7
AG-1 Soil Capability Classification..... 18-2
AG-2 Storie Index Rating System 18-3
AG-3 Acres of Important Farmlands – Sacramento County (2002)..... 18-4
AG-4 FVGCP Area Soil Capability Classification 18-6
AG-5 FVGCP Area Soil Index 18-7
RC-1 City of Elk Grove Roadway Facility Analysis – Segment South of Calvine Road..... 22-14

PREFACE

In April of 2009, the Florin Vineyard Gap Community Plan (FVGCP) Project Draft EIR was released for public review and comment. The Draft EIR addressed the environmental effects of implementing the Citizens Advisory Committee (CAC) Draft Land Use Plan and the Planning Department Draft Land Use Option of the FVGCP, along with 26 associated development proposals.

Between May and June 2009, Planning Department staff conducted three joint workshops with the Vineyard and South Sacramento Community Planning Advisory Councils (CPACs) on the overall project. This was followed by numerous public meetings with the CPACs on the Land Use Plan and individual development proposals. At the CPAC meeting, held on February 24, 2010, the CPACs recommended the CPAC Hybrid Land Use Plan (Plate PRE -1), which represents a modified version of the CAC Draft Land Use Plan that was analyzed in the Draft EIR. Similarly, the Planning Department prepared a modification to the Planning Department Draft Land Use Plan based on input obtained through the CPAC meetings; that proposal is known as the Planning Department Hybrid Land Use Plan (Plate PRE -2).

On October 27, 2009, the Planning Department released the public review draft of accompanying text to the Community Plan. The text document was reviewed by the joint CPACs, and a revised draft was released on March 10, 2010, following the final CPAC meeting on the project. The Community Plan text sets forth policies and design guidelines for development within the FVGCP area, including a number of “green” measures that should help to reduce project impacts.

The Sacramento County Planning Commission considered the Draft EIR on January 21, 2010 and directed staff of the Department of Environmental Review and Assessment to respond to comments received and prepare the Final EIR. The Planning Commission subsequently held 7 public hearings on the FVGCP Land Use Plan and associated development proposals prior to their recommendation of approval of a modified land use plan, the Planning Commission Recommended Land Use Plan (Plate PRE -3), to the Board of Supervisors.

Table PRE-1 compares land use acreages and dwelling units/dwelling unit equivalents for all five land use plans. In general, the two Hybrid plans resulted in minor increases in commercial uses, with a corresponding reduction in multi-family, as compared to the two original plan proposals. Additionally, the Hybrid plans introduced a “Mixed Use Center Overlay” at key nodes, particularly at Florin and Bradshaw and at Gerber and Elk Grove-Florin; the intent of the mixed use overlay is to encourage office and employment uses at these nodes and to create projects that incorporate employment, housing and retail uses. The CPAC Hybrid also resulted in a decrease in agricultural-residential uses as compared with the CAC plan, with a corresponding increase in low density residential uses; the CPAC Hybrid also replaced a portion of the M-1 uses shown on the CAC plan with IR uses, consistent with the uses shown on the two Planning Department plans. The Planning Commission recommendation is midway

Plate PRE -1 CPAC Hybrid Land Use Plan

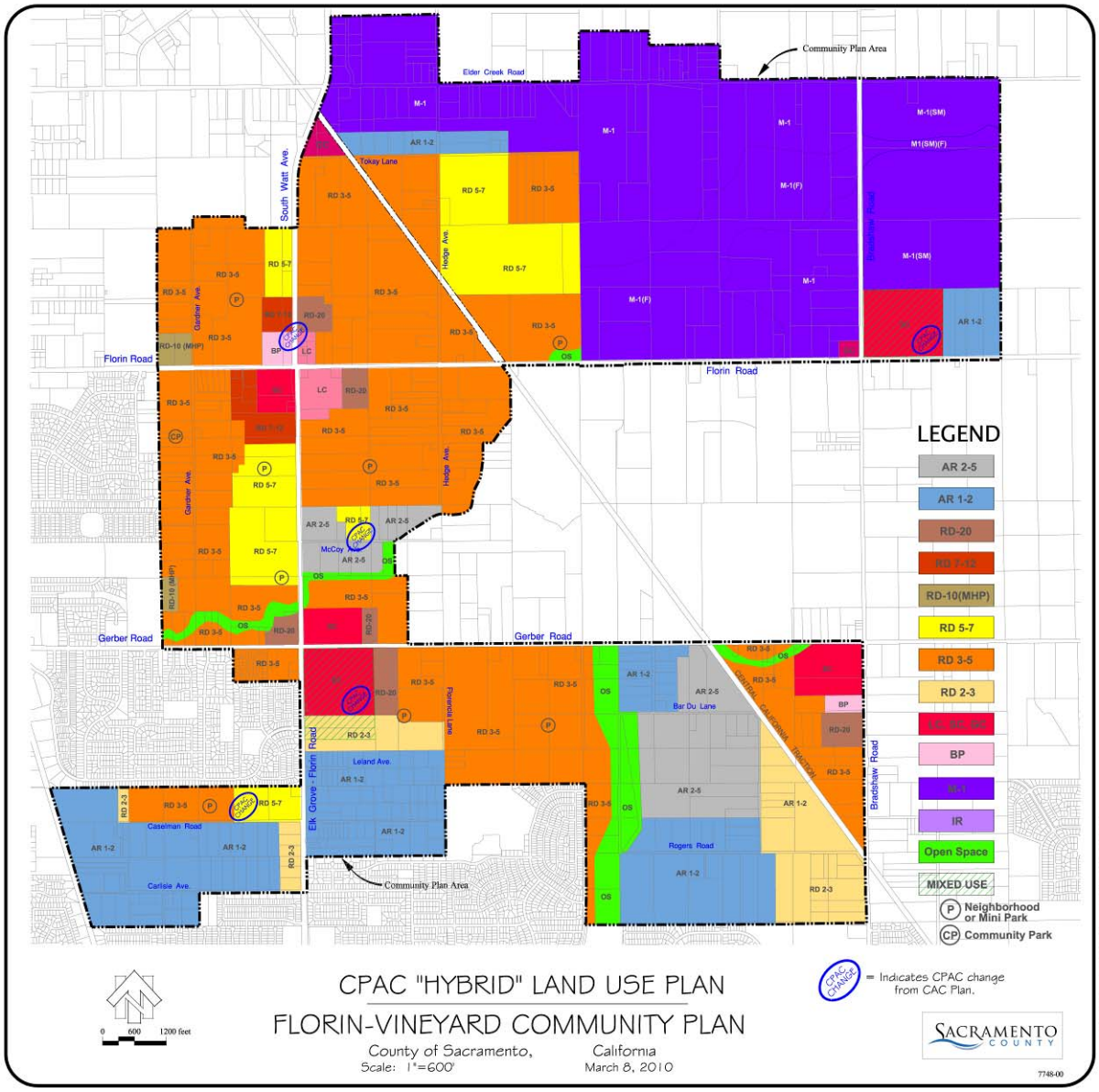


Plate PRE -2 Planning Department Hybrid Land Use Plan

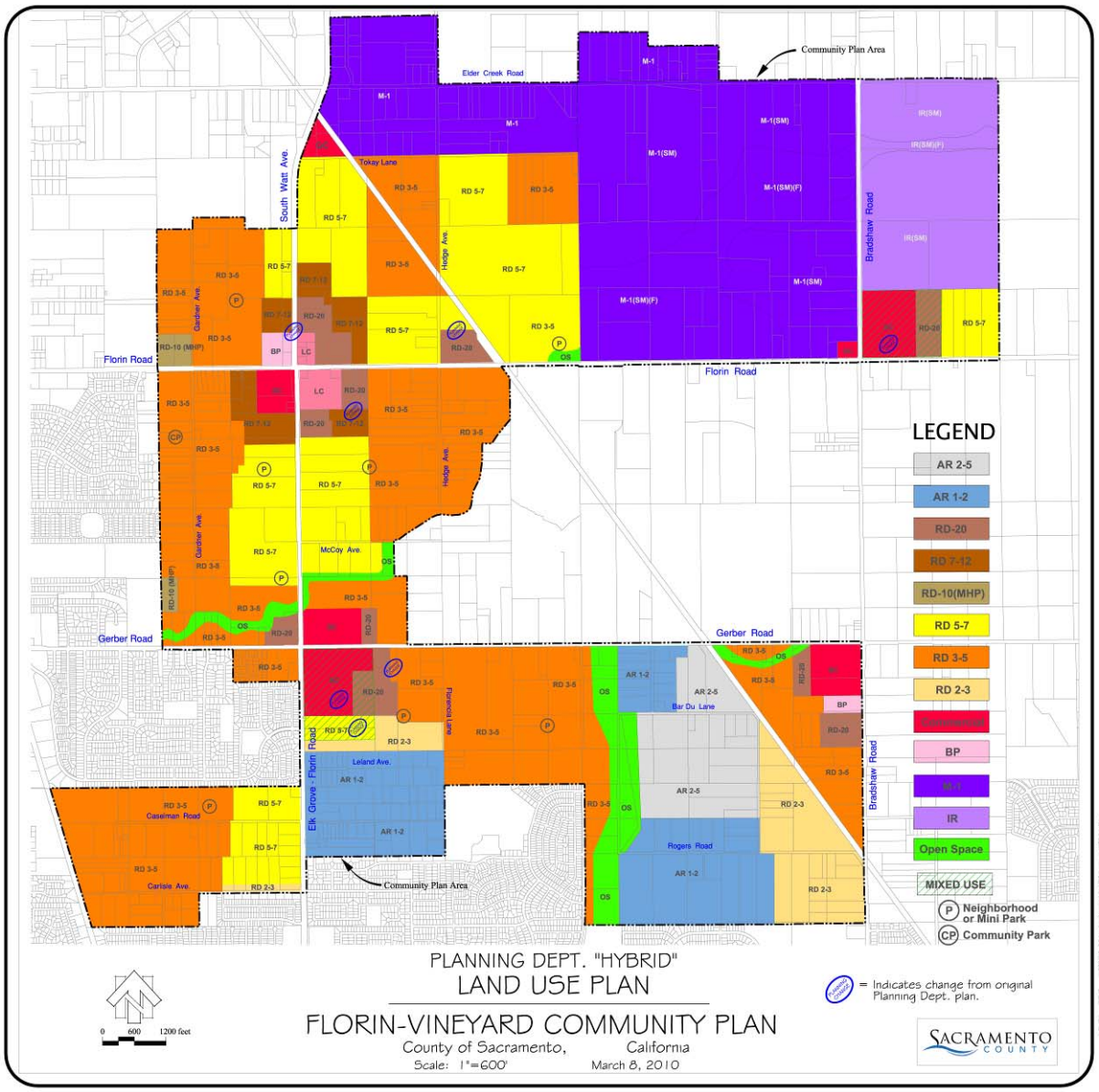


Plate PRE -3 Planning Commission Recommended Land Use Plan

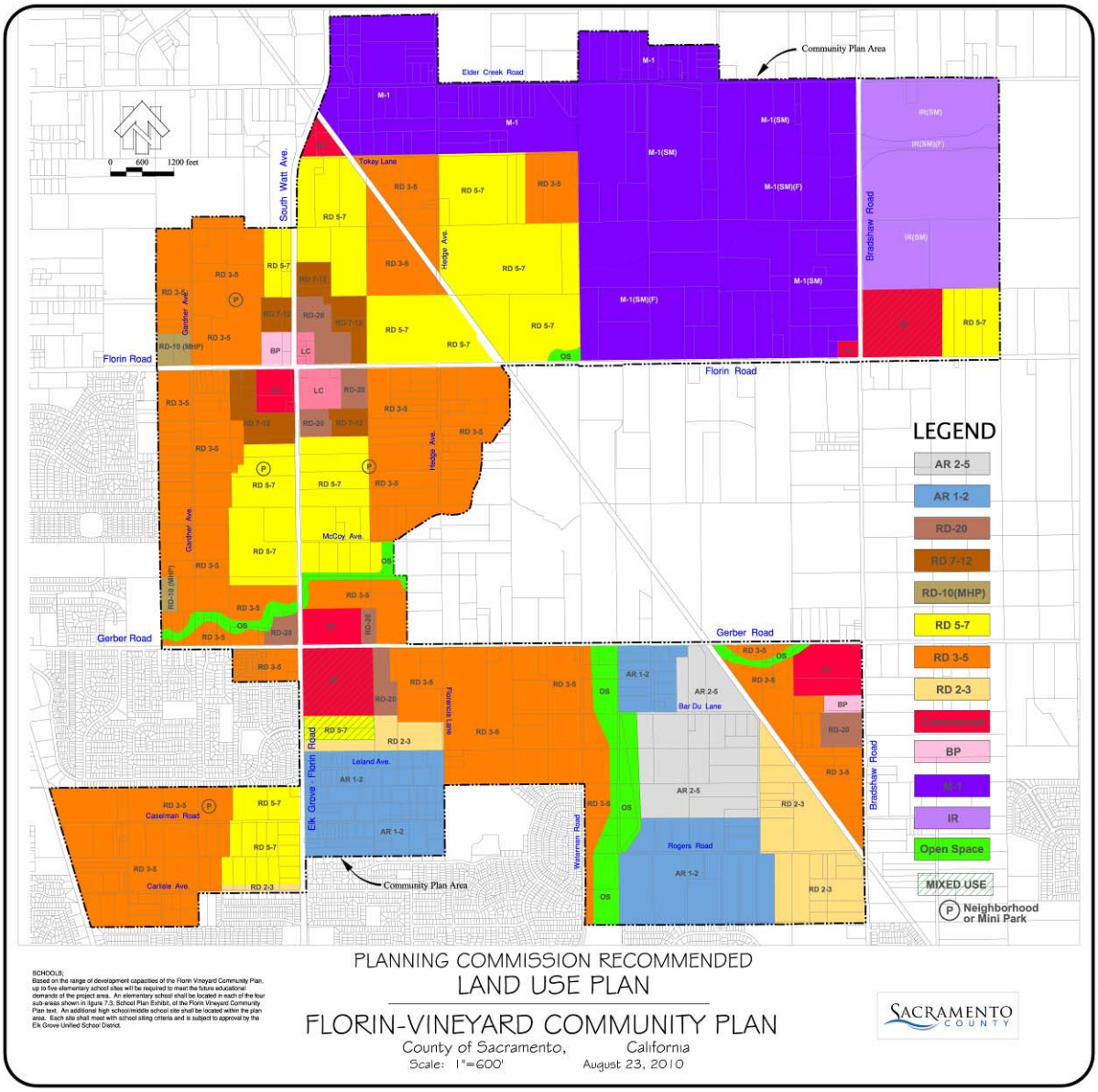


Table PRE-1

FVCP- Land Use Comparison

	Density	CAC Original (1)		CPAC Hybrid (2)		Planning Original (1)		Planning Hybrid (2)		Planning Commision	
Land Use	or DUE(3)	Land Use	Units/DUE	Land Use(3)	Units/DUE	Land Use	Units/DUE	Land Use	Units/DUE	Land Use	Units/DUE
M1	7.0	1102.0	7714.0	1092.1	7644.7	879.0	6153.0	885.3	6197.1	885.3	6197.1
IR	7.0	--		--		240.0	1680.0	237.6	1663.2	237.6	1663.2
GC	16.3	10.0	163.0	10.2	166.3	10.0	163.0	10.2	166.3	10.2	166.3
SC	13.4	137.5	1842.5	140.6	1884.0	113.5	1520.9	112.0	1500.8	140.6	1884.0
LC	16.3	21.0	342.3	20.9	340.7	18.3	298.3	18.5	301.6	18.5	301.6
BP	13.5	5.0	67.5	13.3	179.6	5.0	67.5	13.3	179.6	13.3	179.6
Subtotal- Comm/Ind:		1275.5	10129.3	1277.1	10215.2	1265.8	9882.7	1276.9	10008.5	1305.5	10391.7
	Difference:				**plus 85.9**				**plus 125.8**		
AR 2-5	0.3	207.0	68.3	180.0	59.4	129.0	42.6	132.8	43.8	132.8	43.8
AR 1-2	0.7	549.5	362.7	511.2	337.4	271.0	178.9	280.0	184.8	280.0	184.8
RD 2-3	2.5	151.5	378.8	158.8	397.0	140.5	351.3	134.0	335.0	134.1	335.3
RD 3-5	4.5	1172.3	5275.4	1191.6	5362.2	1084.5	4880.3	1086.1	4887.5	1075.3	4838.9
RD 5-7	6.0	213.0	1278.0	235.9	1415.4	572.5	3435.0	557.2	3343.2	579.1	3474.6
RD 7-12	10.0	30.5	305.0	31.9	319.0	69.0	690.0	65.2	652.0	65.2	652.0
RD-10(MHP)	10.0	13.7	137.0	13.7	137.0	13.7	137.0	13.7	137.0	13.7	137.0
RD 20	18.0	63.5	1143.0	54.5	981.0	130.5	2349.0	108.8	1958.4	68.8	1238.4
Subtotal- Residential:		2401.0	8948.1	2377.6	9008	2410.7	12063.9	2377.8	11541.7	2349.0	10904.7
	Difference:				**plus 59.9**				**less 522.2**		
OS		89.5		98.1		89.5		98.1		98.1	
Major Roads & CTRR		not included		119.2		not included		119.2		119.4	
Grand Total		3766.0	19077.4	3872.0	18016.8	3766.0	18674.9	3872.0	17632.3	3872.0	16406.7
Total Difference					**plus 145.8**				**less 426.4**		
Notes;											
1) Source of CAC Original and Planning Original- County Planning exhibits and tables, December 4, 2003.											
2) Source of CPAC Hybrid and Planning Hybrid is land use applied to GIS property base, March 4, 2010.											
3) DUE factors for commercial/industrial from Table 16, page 51 of Draft FVCP Public Facility Financing Plan.											
4) Typical rounding error requires 0.5 acre of RD3-5 added to CPAC Hybrid to match Planning Hybrid total.											
5) 3-4-10 revision subtracts 25.6 acres for CTRR from land use and adds to Major Roads.											

between the two Hybrid plans; it generally echoes the Planning Department Hybrid plan except that it includes more SC and less RD-20, consistent with the CPAC Hybrid plan.

Fehr and Peers Transportation Consultants conducted an analysis of the CPAC Hybrid and Planning Department Hybrid Land Use Plans to determine whether implementation of the hybrid land use plans would result in any new impacts not identified in the Draft EIR. The complete analysis is included as Appendix P of this Final EIR. The analysis found that the CPAC Hybrid Land Use Plan would generate about 1 percent more trips (0.9 percent or about 2,500 more trips per day) than the original CAC Land Use Plan, while the Planning Department Hybrid Land Use Plan would generate about 1 percent fewer trips (-1.0 percent or about 2,900 less trips per day) than the original Planning Department Land Use Plan. Analysis of daily roadway segment traffic operation under cumulative conditions was also conducted for the CPAC Hybrid plan, since that plan would generate more trips than the original CAC plan. Based on the trip generation comparison and the cumulative roadway segment analysis, it was concluded that the traffic impacts of the hybrid land use plans would be similar to the original plans.

Overall, the modified plans would be expected to result in similar environmental impacts, for all subject areas, as compared with the original Planning Department and CAC Land Use Plans that were analyzed in the Draft EIR since the area proposed for development would not change under any of the three modified plans and none of the plans would increase the project-wide land use intensity beyond what is anticipated in the PD Land Use Plan with density bonus, As such, the determinations of impact contained within the text of this Final EIR document apply to all five Land Use Plan configurations.

1 EXECUTIVE SUMMARY

1.1 PROJECT OVERVIEW

The Executive Summary chapter provides an overview of the Florin Vineyard Gap Community Plan (FVGCP) (described in detail in Chapter 2 – Project Description), and summarizes the conclusions of the environmental analysis provided in detail in Chapters 4-19.

The Sacramento County Board of Supervisors (Board) has initiated a community planning program for the 3,766 ± acre Florin-Vineyard area, also known as the "Gap" area. The term "Gap" has been used to refer to this area because it is located between the existing urban area to the west of Elk Grove-Florin Road and a comprehensively planned urban area to the east (i.e., the North Vineyard Station Specific Plan and Vineyard Springs Comprehensive Plan areas). Because the Florin-Vineyard Gap project area is already included within the boundaries of the South Sacramento and Vineyard Community Plans, the proposed Florin-Vineyard Gap Community Plan project will involve amendments to those existing community plans (rather than adoption of a new, separate community plan).

Buildout of the FVGCP area would result in the development of 8,950 to 13,875 residential units depending on the final land use plan. Commercial, industrial, open space and public areas would also be developed. Public facilities including schools, parks, sewers, potable water, and roadways would also be developed during buildout of the Plan area. The technical chapters provide an in-depth description and analysis of the proposed facilities.

The project includes requests for the following entitlements:

- General Plan Amendment
- Community Plan Amendment
- Adoption of a Public Facilities Financing Plan

1.2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, mineral, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

Implementation of the proposed project could result in significant impacts to Hydrology and Drainage, Transportation and Circulation, Air Quality, Climate Change, Biological Resources, Noise, Cultural Resources, Hazardous Materials, and Agricultural and Mineral Resources.

This Draft EIR discusses mitigation measures that could be implemented by the County to reduce potential adverse impacts found to be significant or potentially significant to a level that is considered less-than-significant for the following chapters: Hydrology and Drainage, Biological Resources, Noise, Cultural Resources and Hazardous Materials. Such mitigation measures are noted in this Draft EIR.

If an impact is determined to be significant or potentially significant, applicable mitigation measures are identified as appropriate. The following chapters of the Draft EIR for both project and cumulative related impacts were identified as having a significant and unavoidable impact even after implementation of mitigation measures: Transportation and Circulation, Air Quality, Climate Change, Biological Resources (cumulative only), and Agricultural and Mineral Resources.

Table ES-1 provides a summary of the environmental effects of the proposed project identified in each technical section. The table contains the environmental impacts, the significance of the impacts for the proposed project, the proposed mitigation measures, and the significance of the impacts after the mitigation measures are implemented.

TABLE ES-1

EXECUTIVE SUMMARY OF PROJECT IMPACTS AND MITIGATION

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
LAND USE			
Impacts Related to Compatibility With Surrounding Land Uses: Development of the proposed community plan in conjunction with application of Zoning Code standards, would ensure that land use conflicts with existing and proposed development in the areas bordering the FVGVP would not occur.	LS	None required	LS
Impacts Related to Consistency with the General Plan: The FVGCP has been comprehensively planned to guide buildout of the project area in conformance with the guidelines of the General Plan. While the proposed project would expand the UPA and convert agricultural lands to urban uses, approval of the General Plan Amendment by the County Board of Supervisors would bring the proposed project into compliance with the General Plan.	LS	None required	LS
Impacts Related to Consistency with the Community Plans: Approval of either the CAC Land Use Plan or the PD Land Use Plan would require the amendment of the applicable community plans. However, the proposed amendments are consistent with the overall County policies related to urban development, and would not result in adverse impacts to community plans.	LS	None required	LS
Increases in the Intensity of Land Uses in the Region Due to the Proposed Project and All Other Projects in Sacramento County: The project would significantly increase the intensity of the land uses within the project area. In addition, Sacramento County and the greater Sacramento region are in the midst of significant increases in the intensity of land	LS	None required	LS

[1] PS = Potentially Significant S = Significant SU = Significant and Unavoidable LS = Less than Significant

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
use. However, the proposed project occurs primarily within areas that have previously been designated for urban development, both within the General Plan and the regional Blueprint. As a result, the project's incremental contribution to the cumulative increase in land use intensity would not be cumulatively considerable.			
PUBLIC SERVICES AND UTILITIES			
Impacts to Fire Protection Services: All projects within the FVGCP would be required to comply with the standard access and street width requirements required by the SMFD. Additionally, a fee and mechanism for implementing the necessary infrastructure and adding the required personnel has been established; payment of the required Capital Fire Facilities Fee would ensure that significant adverse impacts to fire protection services would not occur.	LS	None required	LS
Impacts to the Adequate Provision of Law Enforcement Personnel: implementation of either the CAC of PD Land Use Plans would result in the need for additional law enforcement personnel and equipment. Such personnel and equipment would be funded through a combination of tax revenue and other sources to which individual projects within the FVGCP would contribute. In addition, individual projects within the FVGCP would be required to comply with the specific SCSD requirements for crime reduction. Furthermore, adequate access for law enforcement vehicles would be provided in the project area based on SMFD and SCSD requirements.	LS	None required	LS
Impacts Related to the Increased Demand for School Resources: buildout of the FVGCP could result in the introduction of up to 8,896 students to the EGUSD service area under the PD Land Use Plan with density bonus. Based on the number of units planned in the FVGCP, the EGUSD has indicated that buildout would require four new elementary schools in the FVGCP area. Two of the four	LS	None required	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
schools would be needed to serve the populations of the 26 participating properties. Payment of required impact fees and taxes pursuant to SB 50 would ensure that adverse impacts to school services would not occur.			
Impacts to Library Services: All residential development would be required to participate in the funding of the nearby Vineyard 1 Library; therefore, adverse impacts to library services would not occur.	LS	None required	LS
Impacts Related to an Increased Demand for Solid Waste Disposal/Recycling Services: Existing and planned facilities at the Keifer Road Landfill have sufficient capacity to serve the proposed project.	LS	None required	LS
Impacts Related to the Increased Demand for Park and Recreation Services and Facilities: All of the individual projects would be required to participate in the funding of the park facilities that are required by the Southgate Recreation and Parks District in compliance with the established park standards.	LS	None required	LS
Impacts to Gas and Electric Facilities: Implementation of the proposed project would not have an adverse impact on gas and electric facilities.	LS	None required	LS
Cumulative Impacts to Public Services and Facilities Resulting from Buildout of the FVGCP in Combination with Existing and Future Developments Within the Project Area: Impact fees, annual tax assessments, and service fees have been established by the respective service providers to ensure the adequate provision of services and the long-term financial security of the providers; therefore, adverse cumulative impacts to public services would not occur.	LS	None required	LS
SEWER SERVICE			

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
Impacts to Wastewater Treatment Facilities: The existing WWTP has enough capacity to accommodate the proposed project. In addition, based on population expansion projections the SRWTP 2020 Master Plan anticipates an average dry weather flow of 218 MGD, which would accommodate the proposed project in concert with other development served by the WWTP. Furthermore, project applicants would be required to pay sewer connection fees and fair share fees as outlined in the Public Facilities Financing Plan to pay for both the extension of sewerage and the WWTP capacity required to serve the FVGCP.	LS	None required	LS
Impacts to Wastewater Conveyance: With the exception of the Central Interceptor and the Bradshaw 6A Interceptor, wastewater conveyance infrastructure has not been extended into the FVGCP Area. However, the design for the establishment of wastewater conveyance infrastructure and the payment of financing plan fees ensure that the FVGCP would be adequately served.	LS	None required	LS
Long Term Impacts to Sewer Service in Sacramento County Resulting From the Development of the Project in Conjunction With Other Development: Implementation of the proposed project would result in increased demand for sewer service within Sacramento County. However, the proposed project area is largely within the Urban Service Boundary and has already been anticipated for development within planning documents for both the County of Sacramento and the SCRSD. Both the proposed project and future development would be adequately served by the Sacramento Regional County Sanitation District.	LS	None required	LS
WATER SUPPLY			
Impacts Related to Adequate Water Supply: The California American Water Company and the Sacramento County Water Agency have identified sufficient water supplies to	LS	None required	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
provide potable water to their respective potential customers within the FVGCP area.			
Impacts to Water Supply Infrastructure: Water supply infrastructure design and funding plans have been established to serve the FVGCP.	LS	None required	LS
Impacts to the Groundwater Aquifer: Groundwater extraction to serve the FVGCP would not exceed the long-term sustainable yield identified by the Water Forum.	LS	None required	LS
Long-Term Impacts to Public Services and Facilities From the Proposed Project in Combination With Existing and Future Development: Regional water supply agreements have been established which address development within the project area through 2035, and the proposed project would not conflict with those agreements.	LS	None required	LS
HYDROLOGY AND DRAINAGE			
Impacts Related to Flooding: Completion of all facilities included in the Drainage Master Plan would provide detention of floodwaters. However, should development occur within a drainage basin prior to the completion of the drainage infrastructure flood risks within the FVGCP would have the potential to adversely impact the proposed project.	PS	HY-1**a** Florin Vineyard Community Plan (FVGCP) development shall implement the proposed FVGCP Drainage Master Plan (DMP) [FVGCP Drainage Study, Civil Engineering Solutions, Inc. (October 12, 2007) as amended and accepted by the County Department of Water Resources (DWR) on May 19, 2008], or any subsequent amendments to the DMP that are reviewed and approved by the DWR. Detailed plans for the design and construction of all proposed drainage, flood control and water quality improvements, consistent with the FVGCP DMP, shall be submitted to the DWR for review and approval. **b Comply with one of the following measures, as applicable:**	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		Projects within the Elder and Gerber Creek Watersheds Construction of the FVGCP DMP improvements may be phased, subject to the approval of the DWR, so long as hydrologic/hydraulic analyses are provided that demonstrate the phased improvements will provide adequate (100-year) flood protection to proposed development areas and will not increase flood risks in downstream **and upstream** areas**, and that such phased improvements are consistent with the County's 404 permit and the proposed phasing is submitted for approval to the Corps of Engineers as required by the conditions set forth in the County's 404 permit.** Such analyses shall verify that the phased improvements will ~~reduce~~ **mitigate** post-development peak flows and water surface elevations ~~to at least pre-development levels~~ **in accordance with County standards**, and will provide water quality treatment of post-development runoff in compliance with County stormwater quality requirements. ***Projects within the Unionhouse and Florin Creek Watersheds*** *Construction of the FVGCP DMP improvements may be phased, subject to the approval of the DWR, so long as hydrologic/hydraulic analyses are provided that demonstrate the phased improvements will provide adequate (100-year) flood protection to proposed development areas and will not increase flood risks in downstream areas**, and that such improvements are consistent with requirements of state and federal environmental regulators**. Such analyses shall verify that the phased improvements will reduce post-development peak flows and water surface elevations to at least pre-development levels, and will provide water quality treatment of post-development runoff in compliance*	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		with County stormwater quality requirements. HY-2 Prior to the approval of improvement plans for individual development projects within the FVGCP area, the project proponent shall demonstrate to the satisfaction of DWR that all FVGCP DMP improvements necessary to provide adequate flood protection to the project, and necessary to provide adequate mitigation for the project's downstream drainage/flooding and water quality impacts, have been implemented. ~~HY-3 Prior to the issuance of grading permits, project applicants shall pay the drainage fee identified in the Florin Vineyard Community Plan Public Facilities Financing Plan for the implementation of drainage improvements within the FVGCP.~~ **HY-3** ***Comply with one of the following measures, as applicable:*** ***Residential Projects within the Elder and Gerber Creek Watersheds*** **No residential final maps shall be recorded, no residential improvement plans shall be approved, and no residential building permits shall be issued until supplemental drainage fees are paid pursuant to an approved "Implementation Plan" that implements the financing mechanisms recommended in the approved Florin Vineyard Gap Community Plan Public Facilities Financing Plan (FVGCP Financing Plan). In addition to those financing mechanisms, the "Implementation Plan" shall specifically include the blending of the FVGCP Financing Plan and the North Vineyard Station Specific Plan Finance Plan (NVSSP). This blended plan shall include fair share funding and construction obligations by the FVGCP for**	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		those NVSSP Finance Plan drainage improvements and rights-of-way which are of shared benefit to developments in the Elder and Gerber Creek watersheds of the FVCGP. ***Commercial Projects within the Elder and Gerber Creek Watersheds*** **For commercial development, all drainage fees required by the FVGCP PFFP and a fair share contribution, for NVSSP drainage improvements and rights-of-way which are of shared benefit to developments in the Elder and Gerber Creek watersheds of the FVGCP, shall be paid prior to approval of any commercial improvement plans for projects in the Elder and Gerber Creek watersheds of the FVGCP. Payment of fees pursuant to an interim fee agreement, that is adopted by the Board of Supervisors and which includes fair share contributions for the FVGCP and NVSSP drainage improvements and right of way acquisitions, shall satisfy the intent of this condition.** ***Projects within the Unionhouse and Florin Creek Watersheds*** **Prior to the issuance of grading permits, project applicants shall pay the drainage fee identified in the Florin Vineyard Community Plan Public Facilities Financing Plan for the implementation of drainage improvements within the FVGCP.**	
Impacts to Water Quality: The majority of the FVGCP would be served by regional water quality and stormwater detention basins that would allow sediment and pollutants to settle out of stormwater runoff. Areas that could not be	LS	None required	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
served by the regional facilities would be required to construct onsite water quality detention facilities. All development projects would be required to provide source and treatment control BMPs (Best Management Practices) to reduce pollutants in urban runoff to the maximum extent practicable, consistent with the County's Stormwater Management Program and to comply with the State Construction Activities Storm Water General Permit, which would ensure that the buildout of the FVGCP would not substantially degrade surface water quality.			
Long-Term Impacts to Drainage and Water Quality in Combination With Existing and Future Development: Both projects within the FVGCP and cumulative development would be required to implement measures to ensure that adverse impacts to hydrology and water quality would not occur.	LS	None required	LS
TRANSPORTATION AND CIRCULATION			
Impacts to Roadway Segments Under Existing Plus Project Conditions: Overall, implementation of either the CAC Land Use Plan or the PD Land Use Plan would result in 32 and 36 potentially significant primary and secondary impacts, respectively, to the study roadway segments. Implementation of the required mitigation measures would reduce impacts to many of the adversely impacted roadway segments. However, four of the roadway improvements proposed as mitigation for impacts under the CAC Land Use Plan would not reduce the impact to a less-than-significant level, and five (consisting of four CAC improvements and one additional roadway improvement) of the roadway improvements proposed as mitigation under the PD Land Use Plan would not reduce impacts to a less-than-significant level. In addition, several of the proposed improvements are not located within the jurisdiction of Sacramento County, and mitigation of impacts outside of County jurisdictions may not be feasible. Therefore, impacts to roadway segments under	PS	TC-1 All development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. Pursuant to the Program the following improvements shall be implemented subject to the approval of the controlling jurisdiction. **CAC Land Use Plan/PD Land Use Plan** TC-1(a) Widen the section of SR 16 between Folsom Boulevard and South Watt Avenue from one to two lanes in each direction. TC-1(b) Widen the section of SR 16 between South Watt Avenue and Bradshaw Road from one to two lanes in each direction. TC-1(c) Widen the section of Fruitridge Road between Florin-Perkins Road and South Watt Avenue from one to	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
both the CAC Land Use Plan and the PD Land Use Plan would remain significant and unavoidable.		two lanes in each direction. TC-1(d) Widen the section of South Watt Avenue between Elder Creek Road and SR 16 from one to three lanes in each direction. TC-1(e) Widen the section of Elder Creek Road between Power Inn Road and Florin-Perkins Road from one to two lanes in each direction. TC-1(f) Widen the section of Elder Creek Road between Florin-Perkins Road and South Watt Avenue from one to two lanes in each direction. TC-1(g) Widen the section of Florin Road between Stockton Boulevard and Power Inn Road from two to three lanes in each direction. TC-1(h) Widen the section of Florin Road between South Watt Avenue and Hedge Avenue from one to two lanes in each direction. TC-1(i) Widen the section of Gerber Road between Elk Grove-Florin Road and Bradshaw Road from one to two lanes in each direction. TC-1(j) Widen the four-lane section of Calvine Road between Power Inn Road and Elk Grove-Florin Road from two to three lanes in each direction. TC-1(k) Widen the section of Florin-Perkins Road between SR 16 and Fruitridge Road from two to three lanes in each direction. TC-1(l) Widen the section of French Road between Florin Road and Gerber Road from one to two lanes in each direction. TC-1(m) Widen the section of South Watt Avenue between Kiefer Boulevard and SR 16 from one lane to three lanes in each direction. TC-1(n) Widen the section of South Watt Avenue between SR 16 and Fruitridge Road from one to three lanes in	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		each direction. TC-1(o) Widen the section of South Watt Avenue between Fruitridge Road and Elder Creek Road from one to three lanes in each direction. TC-1(p) Widen the section of South Watt Avenue between Elder Creek Road and Florin Road from one to three lanes in each direction. TC-1(q) Widen the section of Elk Grove-Florin Road between Florin Road and Gerber Road from one to three lanes in each direction. TC-1(r) Widen the section of Elk Grove-Florin Road between Gerber Road and Carlisle Avenue from two to three lanes in each direction. TC-1(s) Widen the four-lane section of Elk Grove-Florin Road between Vintage Park Drive and Calvine Road from two to three lanes in each direction and construct Waterman Road as a two-lane roadway between Gerber Road and its current terminus. TC-1(t) Widen the section of South Watt Avenue between Elder Creek Road and SR 16 from one to three lanes in each direction. TC-1(u) Widen the section of Bradshaw Road between Kiefer Boulevard and SR 16 from two to three lanes in each direction. TC-1(v) Widen the section of Bradshaw Road between Florin Road and Gerber Road from one to two lanes in each direction. TC-1(w) Widen the section of Elder Creek Road between South Watt Avenue and Hedge Avenue from one to two lanes in each direction. TC-1(x) Widen the section of Bradshaw Road between SR 16 and Elder Creek Road from two to three lanes in each direction.	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		TC-1(y) Widen the section of Bradshaw Road between Gerber Road and Vintage Park Drive from one to two lanes in each direction. TC-1(z) Widen the section of Bradshaw Road between Vintage Park Drive and Calvine Road from one to two lanes in each direction. TC-1(aa) Widen the section of Florin Road between Florin-Perkins Road to Gardner Avenue from two to three lanes in each direction. TC-1(bb) Widen the section of Florin Road between Gardner Avenue and South Watt Avenue from two to three lanes in each direction. **PD Land Use Plan** TC-1(cc) Widen the section of French Road between Florin Road and Gerber Road from one to two lanes in each direction. TC-1(dd) Widen the section of SR 16 between Folsom Boulevard and South Watt Avenue from one to two lanes in each direction. TC-1(ee) Widen the section of Elder Creek Road between Hedge Avenue and Bradshaw Road from one to two lanes in each direction.	
<u>Impacts to Intersections Under Existing Plus Project Conditions</u>: the CAC Land Use Plan would result in 33 potentially significant impacts to intersections and the PD Land Use Plan would result in 35 potentially significant impacts to intersections. The proposed mitigation would reduce the impacts to 28 of the 33 intersections adversely affected by implementation of the CAC Land Use Plan and 29 of the 35 intersections adversely affected by the PD Land Use Plan to a less-than-significant level. However, the required improvements for five intersections under the CAC Land Use Plan and six of the intersections under the PD Land Use Plan would not reduce impacts to a less-than-	PS	TC-2 All development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. Pursuant to the Program the following improvements shall be implemented subject to the approval of the controlling jurisdiction. **CAC Land Use Plan/PD Land Use Plan** TC-2(a) Modify the traffic signal timings at the Folsom Boulevard/SR 16 intersection to accommodate the projected PM peak hour traffic volumes, which would require reallocating traffic signal green time to critical	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
significant level and/or are infeasible. Therefore, impacts to intersections would remain significant and unavoidable.		turning movements. TC-2(b) Widen the northbound and southbound approaches to the Folsom Boulevard/South Watt Avenue intersection to provide the following lane configurations: • Two left-turn lanes, three through lanes, and one right-turn lane on the northbound approach. • Two left-turn lanes, three through lanes, and one right-turn lane on the southbound approach (with overlap phasing). TC-2(c) Widen the northbound and southbound approaches to the Kiefer Boulevard/Bradshaw Road intersection to provide the following lane configurations: • One left-turn lane, three through lanes, and one right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and one right-turn lane on the southbound approach. TC-2(d) Widen the northbound, southbound, and eastbound approaches to the SR 16/Florin-Perkins Road intersection to provide the following lane configurations: • One left-turn lane, three through lanes, and one right-turn lane on the northbound approach. • One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach. • One left-turn lane, two through lanes, and a right-turn lane on the eastbound approach with overlap phasing. TC-2(e) Widen the northbound, southbound, eastbound, and westbound approaches to the SR 16/South Watt Avenue intersection to provide the following lane	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		configurations: • One left-turn lanes, three through lanes, and a right-turn lane on the northbound approach. • One left-turn lanes, three through lanes, and a right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • On left-turn lane, two through lanes, and one right-turn lane on the westbound approach. TC-2(f) Widen the northbound, southbound, eastbound, and westbound approaches to the SR 16/Bradshaw Road intersection to provide the following lane configurations: • One left-turn lane, three through lanes, and a right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and a right-turn lane on the southbound approach. • One left-turn lane, two through lanes, and a right-turn lane on the eastbound approach. • One left-turn lane, two through lanes, and a right-turn lane on the westbound approach. TC-2(g) Widen the northbound, southbound, and westbound approaches to the Fruitridge Road/Florin-Perkins Road intersection to provide the following lane configurations: • Two left-turn lane, three through lanes, and right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and right-turn lane on the southbound approach. • Two left-turn lane, two through lanes, and right-	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		turn lane on the westbound approach. TC-2(h) Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/South Watt Avenue intersection to provide the following lane configurations: • One left-turn lane, three through lanes, and a right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and a right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-2(i) Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/Hedge Avenue intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane and a shared through/right-turn lane on the eastbound approach. • One left-turn lane and a shared through/right-turn lane on the westbound approach. TC-2(j) Widen South Watt Avenue between Florin Road and Fruitridge Road from two to three lanes in each direction. TC-2(k) Install a traffic signal and widen the northbound,	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		southbound, eastbound, and westbound approaches to the Elder Creek Road/Hedge Avenue intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-2(l) Widen the westbound approach to the Florin Road/Power Inn Road intersection to provide one left-turn lane, two through lanes, and a shared through/right-turn lane. TC-2(m) Install a traffic signal and widen the northbound and southbound approaches and modify the eastbound, and westbound approaches to the Florin Road/Gardner Avenue intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane, two through lanes, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, two through lanes, and a shared through/right-turn lane on the westbound approach.	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		TC-2(n) Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/Hedge Avenue intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-2(o) Implement the system-wide study area roadway improvements identified in Mitigation Measure TC-1. (Note: mitigation is for the Florin Road/Bradshaw Road intersection impact.) TC-2(p) Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/Excelsior Road intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane and a shared through/right-turn lane on the eastbound approach. • One left-turn lane and a shared through/right-turn lane on the westbound approach. TC-2(q) Implement the system-wide study area roadway improvements identified in Mitigation Measure TC-1.	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		(Note: mitigation measure is for the Gerber Road/Power Inn Road intersection impact.) TC-2(r) Install a traffic signal and widen the eastbound approach to the Gerber Road/Waterman Road intersection to provide one through lane and a shared through/ right-turn lane, widen the westbound approach to one left-turn lane and two through lanes, and widen the northbound approach to provide one left-turn lane and one right-turn lane. TC-2(s) Install a traffic signal and widen the intersection approaches to the Gerber Road/Bar Du Lane intersection to include the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-2(t) Widen the northbound, southbound, eastbound, and westbound approaches to the Gerber Road/Bradshaw Road intersection to provide the following lane configurations: • One left-turn lane, one through lane, and a shared through/right-turn lane on the northbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the southbound approach.	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		• Two left-turn lanes, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-2(u) Install a traffic signal at the Gerber Road/Vineyard Road intersection. TC-2(v) Widen the southbound approach to the Gerber Road/Excelsior Road intersection to provide a shared through/left-turn lane and a right-turn lane. TC-2(w) Widen the northbound approach to the Tiogawoods Drive/Elk Grove-Florin Road intersection to provide a one left-turn lane, two through lanes, and a shared through/right-turn lane. TC-2(x) Install a traffic signal, provide full access, and widen the northbound, southbound, eastbound, and westbound approaches to the Caselman Road/Elk Grove-Florin Road intersection to provide the following lane configurations: • One left-turn lane, two through lanes, and a shared through/right-turn lane on the northbound approach. • One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach. • One left-turn lane and a shared through/right-turn lane on the eastbound approach. • One left-turn lane and a shared through/right-turn lane on the westbound approach. TC-2(y) Widen the northbound and southbound approaches to the Calvine Road/Elk Grove-Florin Road intersection to provide the following lane	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		configurations: • Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane (with overlap phasing) on the southbound approach. TC-2(z) Widen the eastbound and westbound approaches to the Calvine Road/Waterman Road intersection to provide the following lane configurations: • One left-turn lane, three through lanes, and a right-turn lane on the eastbound approach. • One left-turn lane, two through lanes, and a shared through/right-turn lane on the westbound approach. • Provide right-turn overlap phasing for the westbound right-turn lane at the Vintage Park Drive/Elk Grove-Florin Road intersection, which would require prohibiting southbound u-turn movements. **PD Land Use Plan** TC-2(bb) Widen the northbound and southbound approach to the Kiefer Boulevard/South Watt Avenue intersection to provide two left-turn lanes, two through lanes, and a shared through/right-turn lane. TC-2(cc) Widen the northbound and southbound approaches to the Elder Creek Road/Bradshaw Road intersection to provide one left-turn lane, two through lanes, and shared through/right-turn lane. TC-2(dd) Widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/South Watt Avenue intersection to provide the following lane configurations:	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		• One left-turn lane, three through lanes, and a right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and a right-turn lane on the southbound approach. • One left-turn lane, two through lanes, and right-turn lane on the eastbound approach. • One left-turn lane, two through lanes, and right-turn lane on the westbound approach. **CAC Land Use Plan/PD Land Use Plan** TC-2(ee) Widen the westbound approach to the Florin Road/Florin-Perkins Road intersection to provide the following lane configuration: • One left-turn lane, two through lanes, and a right-turn lane (with overlap phasing) on the westbound approach. TC-2(ff) Widen the eastbound approach to the Gerber Road/French Road intersection to provide the following lane configurations: • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the eastbound approach. TC-2(gg) Widen the northbound and southbound approaches to the Gerber Road/Elk Grove-Florin Road intersection to provide the following lane configurations in addition to right-turn overlap phasing for the eastbound right-turn lane: • Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach.	
Impacts to Transit System Operations: The FVGCP would	LS	None required	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
be designed to accommodate transit, and the proposed project would not result in adverse impacts to the transit system.			
Impacts to Bicycle and Pedestrian System Operations: Bicycle and pedestrian facilities would be included in the FVGCP, and the proposed project would not result in adverse impacts to the bicycle and pedestrian system.	LS	None required	LS
Impacts to Roadway Segments Under Cumulative Conditions: implementation of the CAC Land Use Plan would result in potential impacts to 34 study roadway segments. In addition, the PD Land Use Plan would result in potential impacts to 35 roadway segments. The proposed mitigation measures would reduce the significance of 26 of the 34 project impacts under the CAC Land Use Plan and 27 of the 35 project impacts under the PD Land Use Plan to a less-than-significant level. However, the required improvements for seven of the roadway segments would not reduce the impacts to a less-than-significant level, and one improvement would exacerbate conditions at another intersection; therefore, cumulative impacts to roadway segments would remain significant and unavoidable.	PS	TC-3 All development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. Pursuant to the Program the following improvements shall be implemented subject to the approval of the controlling jurisdiction. **CAC Land Use Plan/PD Land Use Plan** TC-3(b) Widen the two-lane section of SR 16 between Folsom Boulevard and South Watt Avenue from one to two lanes in each direction. TC-3(c) Widen the section of SR 16 between South Watt Avenue and Bradshaw Road from one to three lanes in each direction. TC-3(d) Widen the section of SR 16 between Bradshaw Road and Sunrise Boulevard from one to two lanes in each direction. TC-3(g) Widen the section of Elder Creek Road between Hedge Avenue and Bradshaw Road from one to two lanes in each direction. TC-3(h) Widen the section of Florin Road between Stockton Boulevard and Power Inn Road from two to three lanes in each direction. TC-3(j) Widen the section of Florin Road between Florin-	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		Perkins Road and Gardner Avenue from two to three lanes in each direction. TC-3(k) Widen the section of Florin Road between Gardner Avenue and South Watt Avenue from two to three lanes in each direction. TC-3(l) Widen the section of Florin Road between South Watt Avenue and Hedge Avenue from one to two lanes in each direction. TC-3(o) Widen the four-lane section of Calvine Road between Power Inn Road and Elk Grove-Florin Road from two to three lanes in each direction. TC-3(p) Widen the four-lane section of Calvine Road between Elk Grove-Florin Road and Grand Cru Drive from two to three lanes in each direction. TC-3(s) Widen the section of South Watt Avenue between SR 16 and Fruitridge Road from two to three lanes in each direction. TC-3(v) Widen the section of French Road between Florin Road and Gerber Road from one to two lanes in each direction. TC-3(w) Widen the section of South Watt Avenue between Kiefer Boulevard and SR 16 from three lanes (northbound) and two lanes (southbound) to three lanes (northbound) and three lanes (southbound). TC-3(x) Widen the section of South Watt Avenue between SR 16 and Fruitridge Road from two to three lanes in each direction. TC-3(y) Widen the section of South Watt Avenue between Fruitridge Road and Elder Creek Road from two to three lanes in each direction. TC-3(z) Widen the section of South Watt Avenue between Elder Creek Road and Florin Road from two to three lanes in each direction.	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		TC-3(aa) Widen the section of Elk Grove-Florin Road between Florin Road and Gerber Road from two to three lanes in each direction. TC-3(bb) Widen the section of Elk Grove-Florin Road between Gerber Road and Carlisle Avenue from two to three lanes in each direction. TC-3(cc) Widen the four-lane section of Elk Grove-Florin Road between Vintage Park Drive and Calvine Road from two to three lanes in each direction. TC-3(dd) Widen the section of South Watt Avenue between Elder Creek Road and SR 16 from two to three lanes in each direction. TC-3(ff) Widen the section of Bradshaw Road between Kiefer Boulevard and SR 16 from two to three lanes in each direction. TC-3(hh) Widen the section of Waterman Road between Vintage Park Drive and Gerber Road from one to two lanes in each direction. TC-3(ii) Widen the section of Elder Creek Road between South Watt Avenue and Hedge Avenue from one to two lanes in each direction. TC-3(jj) Widen the section of Florin Road between Bradshaw Road and Excelsior Road from one to two lanes in each direction. TC-3(kk) Widen the section of Bradshaw Road between Florin Road and Gerber Road from two to three lanes in each direction. **PD Land Use Plan** TC-3(ff) Widen the section of Bradshaw Road between SR 16 and Elder Creek Road from two to three lanes in each direction. TC-3(gg) Widen the section of Bradshaw Road between Elder Creek Road and Florin Road from two to three lanes	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		in each direction. **CAC Land Use Plan** TC-3(r) Widen the section of French Road between Florin Road and Gerber Road from one to two lanes in each direction. TC-3(u) Widen the section of South Watt Avenue between Elder Creek Road and Florin Road from two to three lanes in each direction. **CAC Land Use Plan/PD Land Use Plan** TC-3(i) Construct Alta Florin Road north of Florin Road between Power Inn Road and Florin-Perkins Road.	
Impacts to Study Intersections Under Cumulative Conditions: implementation of the cumulative plus CAC Land Use Plan would result in adverse impacts to 34 intersections, and the PD Land Use Plan would result in adverse impacts to 35 intersections. The proposed mitigation would reduce the impacts to the majority of the adversely affected intersections; however, the mitigation for four intersections would not reduce impacts to a less-than-significant level under either Land Use Plan. In addition, right-of-way constraints render the mitigation proposed for two intersections infeasible for both the CAC and PD Land Use Plans. As a result, impacts to intersections under the cumulative scenario would remain significant and unavoidable.	PS	TC-4 All development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. Pursuant to the Program the following improvements shall be implemented subject to the approval of the controlling jurisdiction. **CAC LAND USE PLAN/PD LAND USE PLAN** TC-4(c) Widen the northbound and southbound approaches to the Folsom Boulevard/South Watt Avenue intersection to provide the following lane configurations: • Two left-turn lanes, three through lanes, and one right-turn lane on the northbound approach. • Two left-turn lanes, three through lanes, and one right-turn lane on the southbound approach (with overlap phasing). TC-4(d) Widen the Kiefer Boulevard/South Watt Avenue intersection northbound approach to provide two left-turn lanes, three through lanes, and a right-turn lane. TC-4(e) Widen the northbound, southbound, eastbound, and westbound approaches to the Kiefer	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		Boulevard/Bradshaw Road intersection to provide the following lane configurations: • One left-turn lane, three through lanes, and one right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and one right-turn lane on the southbound approach. • Two left-turn lanes, two through lanes, and one right-turn lane (with overlap phasing) on the eastbound approach. • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the westbound approach. TC-4(f) Widen the southbound and westbound approaches to the SR 16 /Florin Perkins Road Intersection and modify the lane configurations on the eastbound approach to provide the following lane configurations: • Two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach. • One left-turn lane, two through lanes, and one right-turn lane (with overlap phasing) on the eastbound approach. • Two left-turn lanes, two through lanes, and one right-turn lane (with overlap phasing) on the westbound approach. TC-4(g) Widen the northbound, southbound, eastbound, and westbound approaches to the SR 16/South Watt Avenue intersection to provide the following lane configurations: • One left-turn lane, three through lanes, and a right-turn lane on the northbound approach. • Two left-turn lanes, three through lanes, and a	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		right-turn lane on the southbound approach. • One left-turn lane, three through lanes, and a right-turn lane on the eastbound approach. • One left-turn lane, three through lanes, and a right-turn lane (with overlap phasing) on the westbound approach. TC-4(h) Widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/South Watt Avenue intersection to provide the following lane configurations: • Two left-turn lanes, two through lanes, and a shared through/right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and one right-turn lane (with overlap phasing) on the southbound approach. • One left-turn lane, two through lanes, and one right-turn lane (with overlap phasing) on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-4(l) Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/Hedge Avenue intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a right-turn lane on the eastbound approach.	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		• One left-turn lane and a shared through/right-turn lane on the westbound approach. TC-4(n) Widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/South Watt Avenue intersection to provide the following lane configurations: • Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach. • Two left-turn lanes, three through lane, and a right-turn lane on the southbound approach. • One left-turn lane, two through lanes, and a right-turn lane (with overlap phasing) on the eastbound approach. • One left-turn lane, two through lanes, and a right-turn lane on the westbound approach. TC-4(o) EITHER: A. Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/Hedge Avenue intersection to provide the following lane configurations: • One left-turn lane, one through lane, and a shared through/right-turn lane on the northbound approach (This improvement would require a lane transition north of Elder Creek Road). • One left-turn lane, one through lane, and a shared through/right-turn lane on the southbound approach (This improvement would require a lane transition south of Elder Creek Road). • One left-turn lane, one through lane, and a shared through/right-turn lane on the	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. OR B. Construct a four-lane extension of Waterman Road between Florin Road and Elder Creek Road in the plan area; -and- Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/Hedge Avenue intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. -and- Install a traffic signal and provide the following lane configurations at the Elder Creek Road/Waterman Road intersection: • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		northbound approach. • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-4(q) Install a traffic signal and widen the northbound and eastbound approaches to the Elder Creek Road/Excelsior Road intersection to provide the following lane configurations: • One left-turn lane and one through lane on the northbound approach. • One left-turn lane and one right-turn lane on the eastbound approach. TC-4(s) Widen the westbound approach to the Florin Road/Florin-Perkins Road intersection to provide the following lane configurations: • One left-turn lane, two through lanes, and right-turn lane (with overlap phasing) on the westbound approach. TC-4(t) Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/Gardner Avenue intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach.	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		• One left-turn lane, two through lanes, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, two through lanes, and a shared through/right-turn lane on the westbound approach. TC-4(u) Widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/South Watt Avenue intersection to provide the following lane configurations: • Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach. • Two left-turn lanes, three through lanes, and right-turn (with overlap phasing) on the southbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane (with overlap phasing) on the eastbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane on the westbound approach. TC-4(v) EITHER: A. Widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/Hedge Avenue intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • Two left-turn lanes and a shared through/right-turn lane on the southbound approach. • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		eastbound approach (this improvement will require a northbound transition lane north of Florin Road). • One left-turn lane, two through lanes, and a right-turn lane on the westbound approach. OR B. Construct a four-lane extension of Waterman Road between Florin Road and Elder Creek Road in the plan area -and- Widen the Florin Road/Hedge Avenue intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, two through lanes, and a right-turn lane on the westbound approach. -and- Construct the north leg and widen the northbound, eastbound, and westbound approaches of the Florin Road/Waterman Road intersection to provide the following lane configurations: • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		northbound approach. • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. -and- Install a traffic signal at the Elder Creek Road/Waterman Road intersection and provide the following lane configurations: • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the northbound approach. • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the southbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-4(x) Install a traffic signal at the Florin Road/Vineyard Road intersection and widen the eastbound and westbound approaches to the intersection to provide the following lane configurations: • One left-turn lane, one through lane, and a shared through/right-turn lane on the	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-4(z) Widen the eastbound and westbound approaches to the Gerber Road/French Road intersection to provide the following lane configurations: • Two left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • One left-turn lane, two through lanes, and a right-turn lane (with overlap phasing) on the westbound approach. TC-4(aa) Widen the northbound, southbound, eastbound, and westbound approaches to the Gerber Road/Elk Grove-Florin Road intersection to provide the following lane configurations: • Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach. • Two left-turn lanes, two through lanes, and a right-turn lane (with overlap phasing) on the eastbound approach. • Two left-turn lanes, two through lanes, and a right-turn lane (with overlap phasing) on the westbound approach. TC-4(cc) Install a traffic signal and at the Gerber Road/Bar Du Lane intersection. TC-4(dd) Widen the northbound, southbound, eastbound, and westbound approaches to the Gerber Road/Bradshaw Road intersection to provide the	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		following lane configurations: • One left-turn lane, three through lanes, and a right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and a right-turn lane on the southbound approach. • Two left-turn lanes, two through lanes, and a right-turn lane on the eastbound approach. • Two left-turn lanes, two through lanes, and a right-turn lane on the westbound approach. TC-4(ee) Install a traffic signal and widen the northbound approach to the Gerber Road/Vineyard Road intersection to provide two left-turn lanes, one through lane, and a shared through/right-turn lane. TC-4(ff) Widen the southbound approach to the Gerber Road/Excelsior Road intersection to provide one left-turn lane, one through lane and right-turn lane. TC-4(gg) Improve the northbound, southbound, eastbound, and westbound approaches to the Calvine Road/Elk Grove-Florin Road intersection to provide the following lane configurations: • Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane (with overlap phasing) on the southbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane on the eastbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane on the westbound approach. **CAC LAND USE PLAN** TC-4(h) Widen the northbound, eastbound, and westbound approaches to the SR 16/Bradshaw Road	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		intersection to provide the following lane configurations: • Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach. • Two left-turn lanes, three through lanes, and a right-turn lane on the eastbound approach. • One left-turn lane, three through lanes, and a right-turn lane (with overlap phasing) on the westbound approach. TC-4(i) Widen the northbound, southbound, and eastbound, and westbound approaches to the SR 16/Excelsior Road intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane and a shared through/right-turn lane on the southbound approach. • One left-turn lane, two through lanes, and a right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-4(p) Widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/Bradshaw Road intersection to provide the following lane configurations: • One left-turn lane, three through lanes, and a right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and a right-turn lane on the southbound approach.	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		• Two left-turn lanes, two through lanes, and a right-turn lane on the eastbound approach (this will require a lane transition east of Bradshaw Road). • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the westbound approach. TC-4(dd) Widen the westbound approach to the Florin Road/Bradshaw Road intersection to provide the following lane configurations in addition to through lane improvements associated with roadway mitigation: • Two left-turn lanes and two through lanes and a right-turn lane (with overlap phasing) on the westbound approach. TC-4(gg) Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Caselman Road/Elk Grove-Florin Road intersection to provide the following lane configurations: • One left-turn lane, two through lanes, and a shared through/right-turn lane on the northbound approach. • One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach. • One left-turn lane and a shared through/right-turn lane on the eastbound approach. • One left-turn lane and a shared through/right-turn lane on the westbound approach. TC-4(kk) Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approach to the Calvine Road/Excelsior Road intersection to	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on all approaches. **PD LAND USE PLAN** TC-4(i) Widen the northbound, southbound, eastbound, and westbound approaches to the SR 16/Excelsior Road intersection to provide the following lane configurations: • One left-turn lane and a shared through/right-turn lane on the northbound approach. • One left-turn lane, one through lane, and a right-turn lane on the southbound approach. • One left-turn lane, two through lanes, and a right-turn lane on the eastbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach. TC-4(p) Widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/Bradshaw Road intersection to provide the following lane configurations: • One left-turn lane, three through lanes, and a right-turn lane on the northbound approach. • One left-turn lane, three through lanes, and a right-turn lane on the southbound approach. • Two left-turn lanes, two through lanes, and a right-turn lane on the eastbound approach (this will require a lane transition east of Bradshaw Road). • Two left-turn lanes, two through lanes, and a right-turn lane on the westbound approach. TC-4(y) Widen the northbound, eastbound, and westbound	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		approaches to the Florin Road/Excelsior Road intersection to provide the following lane configurations: • One left-turn lane, one through lane, and a right-turn lane on the northbound approach. • One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach. • Two left-turn lanes, one through lane, and a shared through/right-turn lane on the westbound approach. TC-4(gg) Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Caselman Road/Elk Grove-Florin Road intersection to provide the following lane configurations: • One left-turn lane, two through lanes, and a shared through/right-turn lane on the northbound approach. • One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach. • Two left-turn lanes and a shared through/right-turn lane on the eastbound approach. • One left-turn lane and a shared through/right-turn lane on the westbound approach. TC-4(hh) Modify the traffic signal to include right-turn overlap phasing on the westbound approach to the Vintage Park Drive/Elk Grove-Florin Road intersection. TC-4(jj) Widen the northbound, southbound, eastbound, and westbound approaches to the Calvine Road/Waterman Road intersection to provide the following lane configurations:	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		• One left-turn lane, one through lane, and a shared through/right-turn lane on the northbound approach. • Two left-turn lanes, two through lanes, and a right-turn lane on the southbound approach. • One left-turn lane, three through lanes, and a right-turn lane on the eastbound approach. • One left-turn lane, three through lanes, and a right-turn lane on the westbound approach. **CAC Land Use Plan/PD Land Use Plan** TC-4(b) Widen the westbound approach to the Folsom Boulevard/Florin-Perkins Road intersection to provide two left-turn lanes, one through lane, and one shared through/right-turn lane TC-4(j) Widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/Florin-Perkins Road intersection to provide the following lane configurations: • Two left-turn lanes, two through lanes, and right-turn lane on the northbound approach. • Two left-turn lanes, two through lanes, and right-turn lane on the southbound approach. • Two left-turn lanes, two through lanes, and right-turn lane on the eastbound approach. • Two left-turn lanes, two through lanes, and right-turn lane (with overlap phasing) on the westbound approach. TC-4(m) Widen the northbound, southbound, and eastbound approaches to the Elder Creek Road/Florin-Perkins Road intersection to provide the following lane configurations: • Two left-turn lanes, two through lanes, and one	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		right-turn lane on the northbound approach. • One left-turn lane, two through lanes, and one right-turn lane (with overlap phasing) on the southbound approach. • Two left-turn lanes, two through lanes, and one right-turn lane (with overlap phasing) on the eastbound approach. TC-4(r) Widen the southbound approach to the Florin Road/Power Inn Road intersection to provide the following lane configurations: • One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach.	
Impacts to Transit System Operations Under Cumulative Conditions: The FVGCP and future cumulative development would be required to accommodate transit operations; therefore, adverse cumulative impacts would not occur.	LS	None required	LS
Impacts to Bicycle and Pedestrian System Operations Under Cumulative Conditions: The FVGCP and future cumulative development would be required to include bicycle and pedestrian systems; therefore, adverse cumulative impacts would not occur.	LS	None required	LS
Impacts to State Route 99 and U.S. 50 Under Cumulative Conditions: Buildout of the FVGCP would increase demand for travel on SR 99 and U.S. 50, which would exacerbate LOS F conditions, which is considered a significant impact. Implementation of the proposed mitigation would contribute to improvements to both SR 99 and U.S. 50; however, both routes would continue to operate at LOS F conditions during peak hours. Therefore, the impact would remain significant and unavoidable.	S	TC-5 All projects within the FVGCP shall pay a fair share contribution towards SR 99 and U.S. 50 corridor improvements. Improvements could include the following: SR 99 • Installation of ramp metering at interchange on-ramps on southbound SR 99 • ~~Completion of ITS communication infrastructure (like fiber optic lines)~~	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		• ~~Upgrade of the Florin Road, 47th Street, and Fruitridge Road interchanges from full cloverleaf to partial cloverleaf configurations~~ • ~~Construction of auxiliary lanes~~ • ~~Traffic signal coordination at freeway interchanges to minimize impact of vehicle queue spillback onto SR 99~~ U.S. 50 • ~~Upgrade of the Watt Avenue interchange from a full cloverleaf to partial cloverleaf configuration~~ • ~~Traffic signal coordination at freeway interchanges to minimize impact of vehicle queue spillback onto U.S. 50~~ • The extension of HOV lanes from ~~Sunrise Boulevard~~ **Watt Avenue** to Downtown Sacramento ~~(or an interim project to Watt Avenue)~~ • ~~HOV enhancements to existing interchanges such as bypass lanes at existing metered onramps~~ • ~~Completion of ITS improvements on U.S. 50 like the installation of a changeable message sign east of the Mayhew Road overcrossing~~	
Impacts to Roadway Segments Under Cumulative Plus Project With Density Bonus Conditions: The addition of traffic resulting from the density bonus would result in an additional impact under the PD Land Use Plan (with density bonus). Mitigation of the impact would be infeasible. Therefore, implementation of the PD Land Use Plan (with density bonus) would result in an additional significant and	S	No feasible mitigation available.	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
unavoidable impact to intersections.			
AIR QUALITY			
Impacts to Air Quality Resulting from Fugitive Dust During Construction Activities: Construction activities would temporarily affect local air quality, causing a temporary increase in particulate matter and dust emissions. **Dust abatement practices are required pursuant to SMAQMD Rule 403 and California Code of Regulations, Title 13, sections 2449(d)(3) and 2485; the SMAQMD Guide lays out the basic practices needed to comply.** Application of the ~~required mitigation measures~~ **SMAQMD-recommended** dust **control measures** would reduce emissions; however, dust emissions are projected to exceed district standards resulting in a significant and unavoidable impact.	S	**No further feasible mitigation available.** ~~AQ-1 All development within the Florin Vineyard Gap Community Plan area shall employ the following measures, to reduce grading/construction particulate emissions.~~ ~~• Keep soil moist at all times;~~ ~~• Maintain two feet of freeboard space(or cover loads) on haul trucks; and~~ ~~• Use emulsified diesel or diesel catalysts on applicable heavy duty diesel construction equipment.~~	SU
Impacts to Air Quality Resulting from Ozone Precursor Emissions and Diesel Particulate Caused by Construction Activities: Although the future amount of construction activity on any given day is unknown, it is reasonable to assume that construction activities for one or more developments could result in construction emissions above the SMAQMD construction threshold of significance for ozone precursors (85 pounds per day of NO_x). Therefore, construction-related emissions of ozone precursors resulting from implementation of the proposed project would likely result in an adverse impact to air quality. Application of the required mitigation measures would ensure that construction related emissions of diesel particulate and ozone precursors would be reduced to a less-than-significant level.	PS	AQ-2 Development proposals that exceed the SMAQMD NO_X screening levels shown in Table AQ-3, or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance ~~of~~ **(currently** 85 pounds per day of NO_X**)**, ~~or the applicable standard in place at the time of application,~~ the following measure shall be implemented **(or the current SMAQMD-recommended mitigation in effect at the time of project application)**: The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which construction activity does not occur. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance; and, The contractor shall provide a plan for approval by SMAQMD demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_X reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction; and the project sponsor shall submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. ***If at the time of construction, the District has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with the District prior to construction will be necessary to make this determination.*** If, after the 20 percent NO_X reduction afforded by implementation of the above, the SMAQMD thresholds of significance are still exceeded, then that development shall pay SMAQMD off-site air quality mitigation fees to reduce the project's net construction NO_X emissions below the significance threshold. The off-site mitigation fees shall be paid to SMAQMD prior to the approval of improvement plans or the issuance of grading permits. Developers should contact the SMAQMD for assistance in assessing the fee, based on the current rate of $16,000/ton of NO_X or the prevailing rate in effect at the time of construction.	
Impacts Resulting from the Elevated Carbon Monoxide Levels Along Roads and Near Intersections Resulting from Operational Vehicle Emissions: Carbon monoxide levels are not projected to exceed the applicable air quality standards at any intersections within the FVGCP.	LS	None required	LS
Impacts Resulting from Increases in Emissions of Ozone Precursors from Operational Sources: Operational emissions	S	AQ-3 All development projects within the FVGCP shall comply with the SMAQMD **endorsed** ~~approved~~ Florin	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
of ozone precursors would exceed significance thresholds. Projected emissions of approximately 1,315 pounds per day of ROG and 571 pounds per day of NOx are anticipated under the CAC Land Use Plan, while emissions of approximately 1649 pounds per day of ROG and 682 pounds per day of NOx are anticipated under the PD Land Use Plan as compared with the SMAQMD significance thresholds of 65 pounds per day for each pollutant. Compliance with the Sacramento Metropolitan Air Quality Management District **endorsed** ~~approved~~ Air Quality Mitigation Program (AQ-15 Plan) would reduce emissions, but feasible mitigation is not available to reduce emissions to less-than-significant levels.		Vineyard Gap Community Plan Air Quality Mitigation Program (March 26, **2007** ~~2008~~), which requires implementation of a combination of Plan-wide and project-specific emission reduction measures that will achieve a minimum of 15 percent reduction in operational and area source emissions, consistent with General Plan Policy AQ-15.	
Impacts to Sensitive Receptors from New Sources of Toxic Air Contaminants: Implementation of the proposed project would not result in the substantial exposure of sensitive receptors to new toxic air contaminants.	LS	None required	LS
Impacts to Regional Air Quality Resulting from the Proposed Project in Combination with Other Reasonably Foreseeable Projects in the Sacramento Air Basin: Operational emissions of the project would contribute to the significant cumulative impact to air quality; as mitigation is not available to reduce operational emissions to a less-than-significant level, cumulative impacts would also be significant and unavoidable.	S	AQ-4 Implement Mitigation Measure AQ-3.	SU
CLIMATE CHANGE			
Impacts to the Project from Climate Change: Changes resulting from climate change could have an adverse impact on the proposed project.	PS	No further feasible mitigation available.	PS
Construction Activities Associated with Buildout of the FVGCP Would Generate a Substantial Increase in GHG Emissions When Compared with Existing Conditions: Construction of the project would result in short-term CO_2	S	Implement Mitigation Measure CC-1.	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
emissions throughout buildout of the FVGCP. The project applicants would be required to comply with the greenhouse gas reduction plan prepared for the FVGCP; however, construction impacts to climate change would remain significant and unavoidable because construction-related CO_2 emissions would still be substantial compared with existing conditions.			
Operational Emissions Resulting from Development of the FVGCP Would Generate a Substantial Increase in GHG Emissions when Compared With Existing Conditions: implementation of the proposed project would result in the emission of substantial amounts of greenhouse gases. It is estimated that the project would produce approximately 303,307 and 355,432 metric tons per year of greenhouse gases under the CAC and PD Land Use Plans, respectively. The required mitigation would offset approximately 52 percent of the project emissions. However, this project's cumulative climate change impacts are considered significant and unavoidable.	S	CC-1 All development projects within the FVGCP shall comply with the requirements of the **SMAQMD-endorsed** FVGCP Climate Change Plan, dated ~~11-6-08~~ **January 28, 2010**. Individual development projects shall provide the County of Sacramento Department of Environmental Review and Assessment with written documentation demonstrating compliance with the FVGCP-wide greenhouse gas reduction measures and incorporation of ~~the~~ project-specific measures that achieve a minimum of ten points **selected in consultation with SMAQMD** from the list of approved greenhouse gas reduction measures. **Written evidence of SMAQMD consultation shall be required at the time of plan submittal for individual development projects.**	SU
BIOLOGICAL RESOURCES			
Impacts Related to Jurisdictional Waters of the U.S. and Waters of the State: Approximately 106.1 acres of water features occur within the FVGCP, consisting of approximately 8.0 acres of channel/drainage/ditch, 1.5 acres of emergent marsh, 8.3 acres of pond, 43.7 acres of seasonal wetland, and 44.6 acres of vernal pools Grading and construction activities in the plan area would have a significant adverse effect on channels, seasonal wetlands, vernal pools, and ponds.	PS	BR-1 Development projects within the Florin-Vineyard Gap Community Plan that have the potential to impact wetland habitat shall provide a wetland delineation of the proposed development area verified by the U.S. Army Corps of Engineers, and shall provide a detailed plan that describes the specific methods that will be implemented to mitigate any project impacts upon wetlands such that no net loss in wetland habitat acreage and values is achieved. BR-2 Development projects within the Florin-Vineyard Gap Community Plan shall obtain all necessary U.S. Army Corps of Engineers permits pursuant to Section 404	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures		Level of Significance after Mitigation
			of the Clean Water Act, and all necessary Streambed Alteration Agreements from the California Department of Fish and Game, pursuant to the Fish and Game Code.	
Native or Landmark Trees: Depending on the design of the individual development projects, implementation of either the CAC or PR Land Use Plan could require the removal of a substantial number of native and landmark trees.	PS	BR-3	In conjunction with the submittal of tentative maps or development applications for project sites containing landmark trees or native trees, the applicant shall submit an arborist report that identifies the size, location, and condition of all on-site trees. If protected trees are not located on the project site, further mitigation is not required. If protected trees are located on the project site, building structure and yard design, along with construction activities, shall be required to retain existing protected trees (native oaks or native black walnuts six inches or greater dbh (or measuring 10 inches or greater in aggregate dbh for multi-trunked trees)), any native California sycamore trees 19 inches dbh or greater, or landmark trees (to be determined on a case-by-case basis) on the project area to the maximum extent practicable. Any trees that must be removed or are damaged during construction shall be compensated for with an in-kind species on an inch-for-inch basis.	LS
Impacts to Special-Status Species: Buildout of the FVGCP under either the CAC Land Use Plan or PD Land Use Plan would result in the displacement of protected species potentially including vernal pool fairy shrimp, midvalley fairy shrimp, vernal pool tadpole shrimp, California linderiella, valley elderberry longhorn beetle, giant garter snake, northwest pond turtle, western spadefoot toad, Swainson's hawk, burrowing owl, California tiger salamander, dwarf downingia, Bogg's Lake hedge-hyssop, northern California black walnut, Ahart's dwarf rush, legenere, slender orcutt grass, Sacramento orcutt grass, and Sanford's arrowhead through the elimination of existing habitat and foraging areas.	PS	BR-4	Buildout of the FVGCP could result in the loss of up to 1,214.5 acres of Swainson's hawk foraging habitat. Mitigation of the loss will be the responsibility of the developers of lands identified as Swainson's hawk foraging habitat (properties currently zoned AR-10 or greater), and shall occur at the time the property is rezoned. For properties currently zoned AG-40 or larger, habitat loss is determined to be 100% of the acreage rezoned. For properties currently zoned AG-20, IR, or UR, habitat loss is determined to be 75% of the acreage rezoned. For properties zoned A-10 or AR-10, habitat loss is determined to be 25% of the acreage rezoned.	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		Prior to the approval of improvement plans, building permits, or recordation of the final map, whichever occurs first, or, if only a rezone is requested, prior to final adoption of the zoning agreement, the project applicant shall implement one of the following options to mitigate for the loss of Swainson's hawk foraging habitat on the project site: • The project proponent shall utilize one or more of the mitigation options (land dedication and/or fee payment) established in Sacramento County's Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code); or • The project proponent shall, to the satisfaction of the California Department of Fish and Game, prepare and implement a Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat. • Should the County Board of Supervisors adopt a Swainson's hawk mitigation policy/program (which may include a mitigation fee payable prior to issuance of building permits) prior to the implementation of one of the measures above, the project proponent may be subject to that program instead. BR-5 Development projects within the FVGCP that have the potential to impact special status species (including, but not limited to: vernal pool fairy shrimp, midvalley fairy shrimp, vernal pool tadpole shrimp, California linderiella, valley elderberry longhorn beetle, giant garter snake, northwest pond turtle, western spadefoot toad, Swainson's hawk, burrowing owl, and California tiger salamander, dwarf downingia, Bogg's Lake hedge-hyssop, northern California black walnut, Ahart's dwarf rush, legenere, slender orcutt grass, Sacramento orcutt grass, and	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures		Level of Significance after Mitigation
			Sanford's arrowhead) shall conduct (or update) determinate surveys for potentially occurring special status species using protocol acceptable to the regulatory agencies with authority over the species. For any special status species identified by the determinate surveys, provide a detailed plan developed in consultation with the regulatory resource agencies (U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and California Department of Fish and Game) that describes the measures that will be implemented to avoid or reduce project impacts on any identified special status species. The detailed plan shall emphasize a multi-species approach to the maximum extent possible. Where project impacts include taking of a federally-listed species, a Section 10 Incidental Take Permit or a Biological Opinion resulting from Section 7 Consultation with another federal agency shall be obtained from the U.S. Fish and Wildlife Service and permit conditions implemented, pursuant to the federal Endangered Species Act. Where project impacts include taking of a State-listed species, an Incidental Take Permit shall be obtained from the California Department of Fish and Game and permit conditions implemented, pursuant to the California Endangered Species Act. Should the County Board of Supervisors adopt a special status species mitigation policy/program (which may include a mitigation fee payable prior to issuance of building permits) prior to the implementation of the measures above, the project proponent may be subject to that program instead.	
Impacts Related to the Cumulative Loss of Biological Resources in Sacramento County and the Effects of Ongoing Urbanization in the Region: Impacts likely to result from the implementation of the proposed project include	S	BR-6	Implement Mitigation Measures BR-1 through BR-5.	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
disturbance of Jurisdictional Waters of the U.S., riparian habitat, habitat for listed invertebrate species, special-status plant species, aquatic amphibians, special-status reptiles, and listed bird species. Development projects within the FVGCP would be required to mitigate impacts to natural resources. However, while individual impacts to species would be mitigated to a less-than-significant level, the project's incremental contribution to the cumulative biological impacts would be cumulatively considerable.			
GEOLOGY AND SOILS			
Impacts Due to Damage to Foundations, Pavement, and Other Structures From Expansive Soils: The project is not located in an area prone to seismic instability; therefore, compliance with the California Building Code would ensure that impacts to future structures are not significant.	LS	None required	LS
Impacts Related to the Loss of Structural Support Due to Liquefaction: The near surface project area soils are mostly comprised of interbedded silts, sands, and clays underlain by a cemented hardpan. This soil composition type is non-conducive to liquefaction. Further, the site is not located in an area mapped as having a likelihood of liquefaction in an earthquake. Compliance with the California Building Code would ensure that impacts to future structures are not significant.	LS	None required	LS
Impacts Related to Seismic Activity: The FVGCP area is not located in close proximity to an active fault system. In addition, the project site is not within a current Alquist-Priolo Special Study Zone and is located within a low severity earthquake zone. Compliance with the California Building Code would ensure that impacts to future structures are not significant.	LS	None required	LS
Impacts Related to Construction Increases in Soil Erosion: Construction activities would result in disturbance of site	LS	None required	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
soils, in turn leading to increased soil erosion due to loss of soil cohesiveness. Compliance with the State's Construction General Permit, and the County's Ordinances and NPDES requirements would ensure that project impacts are not significant.			
Long-term Geologic and Seismic Impacts From the Proposed Community Plan in Combination With Existing and Future Developments in the Sacramento County Area: Potentially adverse environmental effects associated with seismic hazards, as well as those associated with geologic or soils constraints, topographic alteration are usually site-specific and generally would not combine with similar effects that could occur with other projects in the Sacramento County region. However, the incremental erosion that occurs on projects throughout the County does act in combination to result in adverse impacts to air and water quality. As such, the environmental impacts are addressed cumulatively through the Countywide implementation of the programs and permits, such as the NPDES, which are designed to reduce erosion.	LS	None required	LS
NOISE			
Impacts Associated With Construction Noise: Construction noise is temporary and compliance with the Noise Ordinance would ensure that project impacts would not be significant.	LS	None required	LS
Impacts Associated With an Increase in Traffic Noise Levels at Existing Noise Sensitive Land Uses in the Plan Area: The project-related changes in traffic noise levels are predicted to range from 0 dB to an increase of 2 dB relative to future conditions without the project. A perceptible ambient noise level increase is commonly considered to be 3-5 dB. Project-related traffic noise level increases due to the project would not exceed 3 dB.	LS	None required	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
Impacts Associated With Aircraft Noise on Future Land Uses Within the FVGCP: The Mather Airport 60 dB CNEL noise contour does not extend into the FVGCP. As a result, adverse noise impacts are not identified for development within the FVGCP area relative to the Sacramento County General Plan Noise Standards. However, because a portion of the FVGCP area is located within the Mather Airport Planning Area, aircraft over-flights could result in negative public reaction. Compliance with applicable MAPA policies would ensure that new residents are aware of the potential for overflights, and adverse impacts would not occur.	LS	None required	LS
Impacts Associated With Traffic and Railroad Noise Levels at Future Noise-Sensitive Uses Proposed Within the FVGCP: The predicted 65 dB L_{dn} noise contours for 63 of the 73 roadway segments extend 100 feet or more from the street centerline. Similarly, the 65 dB L_{dn} noise contour would extend 423 feet from the UPRR tracks. Any residential or noise sensitive development along these corridors would have exterior noise levels that exceed County standards. Interior noise level impacts would be most likely along SR 16, Calvine Road, Watt Avenue/South Watt Avenue, Elk Grove-Florin Road, and Bradshaw Road where the 70 dB L_{dn} noise contour exceeds 100 feet; however, adverse impacts along smaller roads could occur depending on the placement and orientation of buildings. Construction of residential uses within 100 feet of the UPRR tracks could also result in the exceedance of County interior standards.	PS	N-1 All residential development projects within the identified 65 dB L_{dn} noise contour (as identified in Tables N-3 and N-10 of this EIR) shall be designed and constructed to reduce noise levels to within General Plan Noise Element standards for exterior activity areas. Potential options for achieving compliance with noise standards include, but are not limited to, noise barriers, increased setbacks, and/or strategic placement of structures. Rubberized asphalt may be considered as mitigation for traffic noise where appropriate, subject to coordination with and approval by the County Department of Transportation. An acoustical analysis substantiating the required noise level reduction, prepared by a qualified acoustical consultant shall be submitted to and verified by the Department of Environmental Review and Assessment prior to the issuance of any building permits for the site. N-2 All residential development projects within the identified 70 dB L_{dn} noise contour (as identified in Tables N-3 and N-10 of this EIR) shall be designed and constructed to achieve an interior noise level of 45 dB Ldn or less. An acoustical analysis substantiating the required noise level reduction, prepared by a qualified acoustical consultant, shall be	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures		Level of Significance after Mitigation
			submitted to and verified by the Department of Environmental Review and Assessment prior to the issuance of any building permits for the site.	
Impacts Associated With the Development of Noise-Producing Uses Within the FVGCP: Noise producing aspects of certain land uses which would be developed within the FVGCP such as industry, commercial loading docks, aggregate mining etc. could generate noise at levels that exceed County standards in the vicinity of existing or proposed noise-sensitive land uses	PS	N-3	All industrial or commercial development projects located adjacent to residentially designated properties shall be designed and constructed to ensure that noise levels generated by the uses do not result in General Plan Noise Element standards being exceeded on adjacent properties. An acoustical analysis substantiating the required noise level reduction, prepared by a qualified acoustical consultant shall be submitted to and verified by the Department of Environmental Review and Assessment prior to the issuance of any building permits for the site. The acoustical analysis shall include, but not be limited to, consideration of potential noise conflicts due to operation of the following items: • Mechanical building equipment, including HVAC systems; • Loading docks and associated truck routes; • Refuse pick up locations; and • Refuse or recycling compactor units. Specific designs for proposed facilities will be submitted to Sacramento County for approval prior to issuance of building permits to ensure compliance with noise standards.	LS
Impacts Associated with Increases in Traffic Noise Levels at Existing Sensitive Land Uses Due to Cumulative Development: implementation of the proposed project would not result in a cumulative increase in traffic noise levels that exceeds 3 dB.	LS	None required		LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
CULTURAL RESOURCES			
Impacts to Important Historical Resources: Archival research and field survey of the participating properties did not identify any significant resources under the criteria of the National Register of Historic Places or under the criteria of the California Register of Historical Resources. However, not all structures and properties within the FVGCP were surveyed. While the surveyed properties are representative of the resources that are located in the area, the potential exists that other properties within the FVGCP could contain properties that meet the criteria for listing in the California Register of Historical Resources. Development of properties containing eligible resources would result in adverse impacts to historic resources.	PS	Implement Mitigation Measures CR-1 through CR-3.	LS
Impacts to Important Archaeological Resources: The project area has a history of Native American habitation. Native peoples would have hunted and gathered in the project area, and may have established temporary camps along project drainages. Although surveys of the participating properties did not find any significant resources, construction activities associated with the proposed project may uncover previously unknown significant resources or human remains.	PS	CR-1 Cultural resources surveys will be required in areas not previously subject to intensive investigation (see Plate CR-1). If ground disturbing activities are planned within or adjacent to the boundaries of any identified archeological site, the following shall be required: 1. The site area will be inspected by a qualified, professional archaeologist to assess the condition of the property and determine the current status of the deposit. 2. Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine if the property meets criteria to be listed on the California Register of Historic Resources or the National Register of Historical Places. The course of the testing program should be clearly delineated in a research design which outlines prehistory of the area; research domains, questions, and data requirements; research methods inclusive of field and laboratory	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		studies; report preparation; and significance criteria. 3. Following field investigations, a technical report describing the evaluation program should be prepared. At a minimum this report shall include the elements discussed in the research design, as well as a description of the recovered site assemblage and a significance evaluation. If, based on the results of the testing program, a site is not determined to be an important archaeological resource, than effects to it would have been reduced to less than significant. 4. If, based on the results of the field investigations, resources were identified as being significant the following mitigation would apply: a. Total Avoidance: Redesign the proposed project as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels. OR, if a redesign is determined infeasible by the Department of Environmental Review and Assessment, then, b. Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of the Department of Environmental Review and Assessment. CR-2 An historic architectural study shall be performed by a qualified, professional architectural historian if historic structures or buildings are present on the	

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		project site subject to development. The resulting report should include results of a background literature search and field survey, an historic context statement, and analysis of the potential significance of the noted resource, ad recommendations for their preservation and/or mitigation. CR-3 Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914. At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.	
Cumulative Impacts to Cultural Resources Related to the Buildout of the Florin Vineyard Gap Community Plan: Impacts associated with cultural resources are site-specific and generally do not affect or are not affected by cumulative development.	LS	None required	LS
HAZARDOUS MATERIALS			

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
<u>Impacts Due to Past Chemical Usage in the Project Area:</u> Agricultural and related businesses often stockpile pesticides, petroleum products, fertilizers, paints, and other chemicals. Additionally, the Phase 1 reports indicated the extensive presence of 55-gallon drums, petroleum tanks, abandoned vehicles, and vehicle work areas within the FVGCP area. The combination of uses that have historically occurred within the FVGCP has a substantial likelihood to have resulted in chemicals being intentionally applied or accidentally spilled on the ground.	PS	HM-1 All future development proposals on portions of the Florin-Vineyard Gap Community Plan area that are known to have supported livestock (cattle, hogs, poultry, etc.) holding areas prior to the 1970's, shall implement a soil sampling and analysis program for organochlorine pesticides. Prior to implementation, the soil sampling and analysis program shall be approved by the Sacramento County Environmental Management Department (EMD). The soil sampling results shall be submitted to EMD for determination of whether detected concentrations of the sampled substances fall within acceptable health risk guidelines and, if they do not, the remedial measures that must be implemented to ensure the protection of human health. Prior to construction activities, individual project proponents shall provide documentation demonstrating implementation of any measures required by EMD for the remediation of contaminated soils to protect human health. HM-2 Prior to future development on individual parcels within the Florin Vineyard Cap Community Plan area, any/all active and inactive storage tanks and storage drums, both below and above ground, shall be removed from the property by a licensed contractor and all contents disposed of in accordance with local, state, and federal regulations. If any stained soil related to storage tanks is identified, a soil sampling and analysis program shall be implemented to identify the substance(s) and the potential environmental effects. Prior to implementation, the soil sampling and analysis program shall be approved by the Sacramento County Environmental Management Department (EMD). The soil sampling results shall be submitted to EMD for determination of whether detected concentrations of the sampled substance(s) fall within acceptable health risk guidelines and, if they do not, the remedial measures	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures		Level of Significance after Mitigation
			that must be implemented to ensure the protection of human health. Prior to grading or construction activities, individual project proponents shall implement any measures required by EMD for the remediation of contaminated soils to protect human health.	
Impacts Due to the Presence of Petroleum Pipelines Within the FVGCP: PG&E owns and operates natural gas distribution facilities and pipelines within the FVGCP. All pipelines are located within known roadway easements; while projects within the FVGCP may need to conduct work within the easement during project development, such work would be subject to the safety requirements of PG&E.	LS	None required		LS
Impacts Associated With Water Supply Wells: improper abandonment of wells or cisterns would result in a potentially significant impact.	PS	HM-3	Prior to future development on individual parcels within the Florin Vineyard Gap Community Plan area, including preliminary grading and trenching for infrastructure, any on-site groundwater wells that are not intended for the use of the proposed development shall be abandoned in accordance with State and County regulations; this procedure requires a well abandonment permit (issued on a per-well basis) from the Sacramento County Environmental Management Department, Environmental Health Division. Any large-diameter (old hand excavated) wells and/or cisterns shall be removed and the holes backfilled in accordance with the recommendations of a geotechnical engineer.	LS
Impacts Associated With Septic Systems: Failure to remove septic systems, or improper removal of septic systems would result in a potentially significant impact to individual parcels.	PS	HM-4	Prior to future development on individual parcels within the Florin Vineyard Gap Community Plan area, any on-site septic system(s) and associated leach fields that are not intended for the use of the proposed development shall be abandoned in compliance with the standards of the Environmental Management Department.	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
Impacts Associated With Asbestos and Lead: Development within the FVGCP area would result in the demolition of existing structures, many of which were constructed prior to the ban on the use of asbestos and lead in construction materials that occurred in 1978 The Sacramento County Environmental Management Department and the Sacramento Air Quality Management District have regulations in place to ensure the abatement and proper disposal of lead paint and asbestos during demolition.	LS	None required	LS
Impacts Related to the Routine Use, Transport, or Disposal of Hazardous Materials: Any industrial or commercial tenants transporting, using, or disposing of hazardous materials would be required to comply with federal, state, or local regulations governing the use of hazardous materials.	LS	None required	LS
Long-term Hazard-related Impacts From the Proposed Project in Combination With Existing and Future Developments in Sacramento County: Impacts associated with hazardous materials are site-specific and generally do not affect or are not affected by cumulative development. Additionally, application of federal, State, and local hazardous materials management requirements would ensure that cumulative impacts related to hazards are less-than-significant.	LS	None required	LS
POPULATION AND HOUSING			
Induce Significant Growth Beyond What is Anticipated: Both the CAC Land Use Plan and the PD Land Use Plan would result in an increase in population, however, urban development of the Plan area has been anticipated in the applicable planning documents.	LS	None required	LS
Consistency With Policies Relating to Housing Balance: With the inclusion of potential housing units on SC and LC designated lands the CAC Land Use Plan would be	LS	None required	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
consistent with the low end of the Housing Element projections for multi-family units. With the inclusion of potential housing on the SC and LC designated lands the PD Land Use Plan would slightly exceed of the number of multi-family units projected in the Housing Element. Therefore, adoption of either land use plan, or a combination of the two, would achieve the number of multi-family housing units specified in the Housing Element with regard to housing balance.			
Consistency with the Affordable Housing Requirements: Pursuant to the provisions of the Sacramento County Affordable Housing Ordinance, the CAC Land Use Plan would require approximately 1,343 affordable dwelling units, based on a buildout total of 8,950 dwelling units. The PD Land Use Plan would require provisions for approximately 1,810 affordable dwelling units, based on a buildout total of 12,066 dwelling units. Individual projects would be required to comply with the code requirements through the dedication of land for affordable housing, construction of affordable housing units, payment of in-lieu fees, or a combination of the three options. Therefore, affordable housing requirements would be met within the FVGCP.	LS	None required	LS
Cumulative Population Growth Beyond What is Anticipated: Buildout of the entire FVGCP area is included in the Preferred Blueprint Scenario for Sacramento County. The proposed plans would slightly expand the Sacramento County Urban Planning Area to accommodate growth north of Florin Road and East of Bradshaw Road. However, the proposed change is included in the Preferred Blueprint Scenario, and the project's incremental contribution to the cumulative population growth in the County would not be greater than what has been anticipated in applicable planning documents.	LS	None required	LS
Cumulative Impacts to Housing Balance: Cumulative development in the County is not anticipated to result in	LS	None required	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
adverse impacts to housing balance.			
Cumulative Impacts to the Provision of Affordable Housing: Cumulative development projects would be required to comply with the County's Affordable Housing Ordinance; therefore, impacts would be less-than-significant.	LS	None required	LS
AGRICULTURAL AND MINERAL RESOURCES			
Conversion of Prime Farmland and Farmland of Statewide Importance to Non-Agricultural Use: The proposed project would convert over 50 acres of agriculturally zoned lands that are designated as Prime Farmland and Farmland of Statewide Importance to non-agricultural uses. 320 acres located north of Florin Road and east of Bradshaw Road are designated as agricultural land (AG-20 and AG-80, with approximately one-third of this area designated as either Prime Farmland or Farmland of Statewide Importance per the 2006 Sacramento County Important Farmland map. The proposed project would expand the Urban Policy Area to include these agricultural lands	PS	AG-1 The applicants for all future development proposals shall compensate for the loss of Prime Farmland and Farmland of Statewide Importance by preserving permanent agricultural land through land dedication at a 1:1 ratio. The land dedication shall be provided by an in-perpetuity conservation easement or in fee title to be provided to the County or third party conservation organization acceptable to the County. The land dedication shall be located in eastern Sacramento County, outside of the Urban Planning Area and shall include at a minimum the following provisions: • Statement of purpose, including that the land is to remain in productive agricultural and open space use; • List of prohibited uses, including but not limited to, mining, resort facilities, golf courses, public airstrips, or other structures and improvements that do not contribute to the agricultural production on the property; • Annual monitoring program; • Enforcement procedures; and • Statement of perpetual duration. The land dedication shall be accompanied with an applicant provided monetary endowment to cover the operations and maintenance of the dedicated land in-	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
		perpetuity. The endowment shall be calculated using an industry standard, attribute based system for calculating financial endowments such as the Property Analysis Record (PAR). Should the County Board of Supervisors adopt an agricultural lands mitigation policy/program (which may include a mitigation fee) prior to the implementation of the above measure, the project proponent may be subject to that program instead.	
Conflict With the Williamson Act: Williamson Act lands are not located within or directly adjacent to the FVGCP.	LS	None required	LS
Other Changes in the Existing Environment, Which Could Result in Conversion of Farmland to Non-Agricultural Use: Extension of the UPA and construction of urban uses adjacent to the UPA boundary could result in increased pressure to develop farmlands that are currently not located adjacent to the UPA. However, the General Plan contains policies and guidelines that restrict the extension of the UPA and conversion of farmland outside the UPA which serve to protect farmland from encroachment. In addition, the County right-to-farm ordinance serves to protect agricultural uses from conflicts with new urban uses.	LS	None required	LS
Loss of Availability of Known Mineral Resources: Removal of the SM designation from substantial areas of Sector I-3 under the CAC Land Use Plan would result in a significant impact to mineral resources. The PD Land Use Plan would retain the SM designation and the protections it provides to mineral resources.	S LS	**CAC Land Use Plan** No feasible mitigation available. **PD Land Use Plan** None required	SU LS
Cumulative Conversion of Prime Farmland and Farmland of Statewide Importance on a Regional Basis: The project-level conversion of farmland is considered to be a cumulatively considerable contribution to the cumulative impact to	S	AG-2 Implement Mitigation Measure AG-1.	SU

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
farmland.			
Cumulative Loss of Access to Mineral Resources: The project-level impact to mineral resources is considered to be a cumulatively considerable contribution to the cumulative impact to mineral resources.	S LS	**CAC Land Use Plan** No feasible mitigation available. **PD LAND USE PLAN** None required.	SU LS
19 Aesthetics			
Impacts Related to Light and Glare: Implementation of the proposed project would introduce additional light and glare to the FVGCP. Glare from surface building materials and exterior lighting may be considered disruptive to neighborhood character and impair vehicular safety along roadways. However, compliance with General Plan policies and County Code regulations would ensure that impacts are less-than-significant.	LS	None required	LS
Impacts Related to Scenic Vistas and Scenic Resources: The proposed project area does not contain a State Scenic Corridor, nor is the area part of a protected viewshed. Nonetheless, the largely rural project setting contains extensive open space and agricultural views which would be affected by project development. The measures recommended to mitigate adverse impacts to trees and waterways would ensure that impacts to scenic vistas and resources are less-than-significant.	LS	None required	LS
Impacts Related to the Degradation of the Existing Visual Character or Quality of the Project Area: The existing character of the area is that of a rural low-density residential community. The proposed plan includes significant amounts of planned residential communities, and large parcels of regional commercial, business, and employment development, which includes light industrial. While	LS	None required	LS

Impact	Level of Significance prior to Mitigation[1]	Mitigation Measures	Level of Significance after Mitigation
implementation of the proposed project would substantially alter the existing visual character of the FVGCP area, compliance with the General Plan goals and policies as well as the Sacramento County Zoning Code would ensure that the alteration would not be considered degradation.			
Cumulative Impacts to the Aesthetic Character of the Area: Implementation of either the CAC Land Use Plan or the PD Land Use Plan would significantly increase the intensity of development within the project area. However, development of the project area has been comprehensively planned, and application of General Plan goals and policies would ensure that cumulative development would not result in a significant impact to the aesthetic character of the FVGCP.	LS	None required	LS

Terminology Used in this EIR

This Draft EIR uses the following terminology to describe environmental effects of the project.

- **Significance Criteria.** A set of criteria used by the lead agency to determine at what level, or "threshold," an impact would be considered significant. Significance criteria used in this EIR include those that are set forth in the CEQA Guidelines, or can be discerned from the CEQA Guidelines; criteria based on factual or scientific information; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the Sacramento County General Plan.
- **Less-than-Significant Impact.** A project impact is considered less than significant when it does not reach the standard of significance and would therefore cause no substantial change in the environment. No mitigation is required for less-than-significant impacts.
- **Potentially Significant Impact.** A potentially significant impact is a substantial, or potentially substantial, adverse change in the environment. Physical conditions which exist within the area will be directly or indirectly affected by the proposed project. Impacts may also be short-term or long-term. A project impact is considered significant if it reaches the threshold of significance identified in the EIR. Mitigation measures may reduce a potentially significant impact to less than significant.
- **Significant Unavoidable Impact.** A project impact is considered significant and unavoidable if it is significant and cannot be avoided or mitigated to a less-than-significant level once the project is implemented.

- **Cumulative Significant Impact.** A cumulative impact can result when a change in the environment results from the incremental impact of a project when added to other related past, present or reasonably foreseeable future projects. Significant cumulative impacts may result from individually minor but collectively significant projects.
- **Mitigation.** Mitigation measures are revisions to the project that would minimize, avoid, or reduce a significant effect on the environment. CEQA Guidelines §15370 identifies 5 types of mitigation:

  a) Avoiding the impact altogether by not taking a certain action or parts of an action.

  b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

  c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

  d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

  e) Compensating for the impact by replacing or providing substitute resources or environments.

Mitigation Monitoring and Reporting Program

Comply with the Mitigation Monitoring and Reporting Program (MMRP) for this project as follows:

1. The applicant shall comply with the MMRP for this project, including the payment of 100% of the Department of Environmental Review and Assessment staff costs, and the costs of any technical consultant services incurred during implementation of the MMRP. The initial estimate of these costs is $_____. If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the applicant, and if the actual monitoring costs exceed the initial estimate, the applicant shall be responsible to pay the additional amount.

2. Until the MMRP has been recorded and the estimated MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved; and no encroachment, grading, building, sewer connection, water connection or occupancy permit from Sacramento County shall be approved.

2 PROJECT DESCRIPTION

INTRODUCTION

This section provides a comprehensive description of the Florin-Vineyard Gap Community Plan (FVGCP) Project for the County of Sacramento. In addition, the proposed project's background and objectives are discussed.

PROJECT LOCATION

The Florin-Vineyard Gap Community Plan project (proposed project) site consists of approximately 3,766 ± acres, located in both the South Sacramento and Vineyard community planning areas (Plate PD-1, Project Location Map), and generally described as follows: south of Elder Creek Road and the Sacramento City limits; west of Bradshaw Road, excluding the North Vineyard Station Specific Plan area; north of Vintage Park Drive, and the developed neighborhoods of Churchill Downs and Vintage Park; and east of the Union Pacific Railroad tracks, and those developed neighborhoods of Tiogawoods, Florin Town, and Sunrise Florin.

PROJECT PROPONENTS

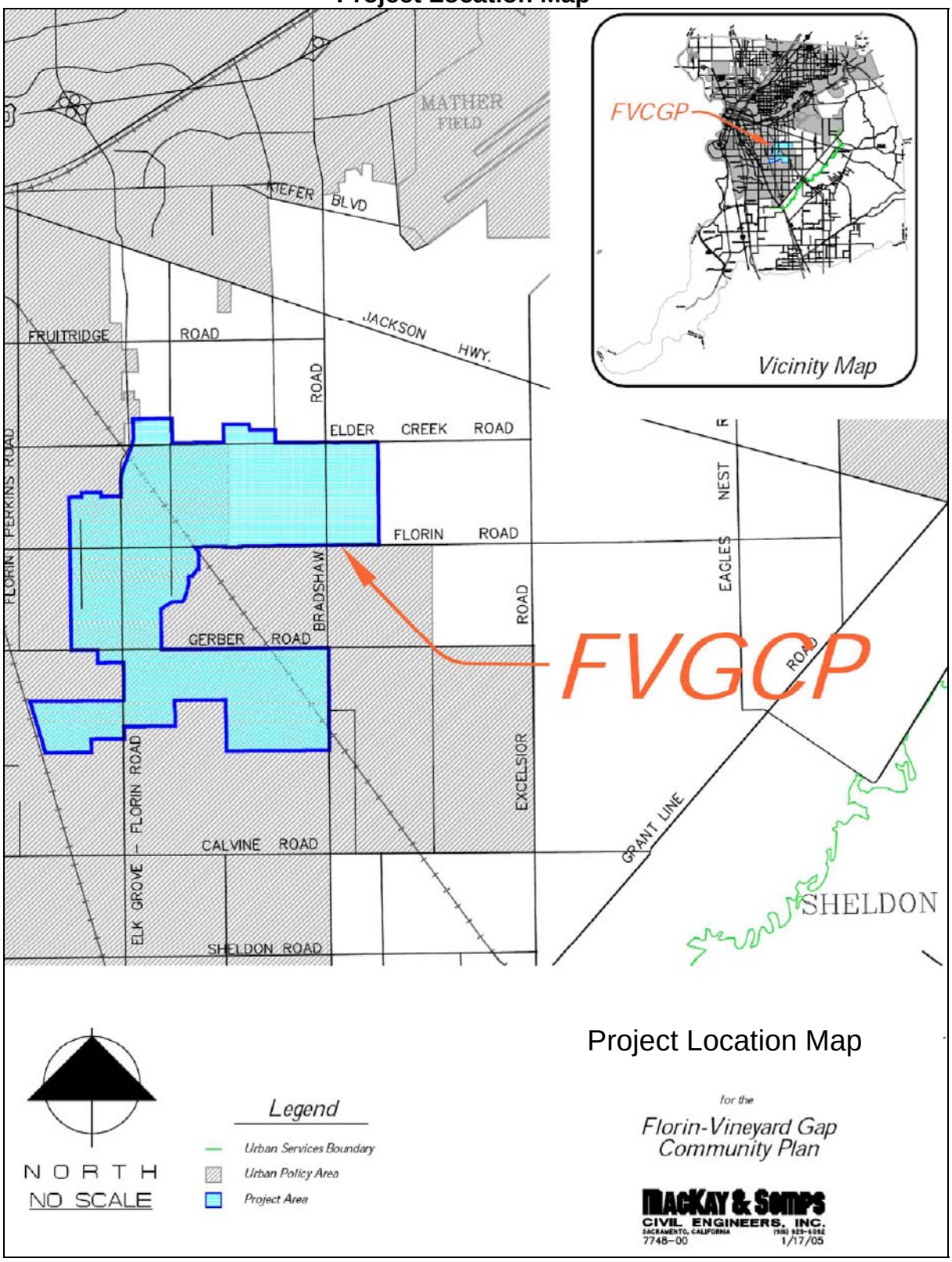
Sacramento County Board of Supervisors
c/o Planning and Community Development Department
700 H Street, Room 2450
Sacramento, CA 95814

-and-

Florin-Vineyard Property Owners Group[1]
c/o The Brewer Law Firm
980 9th Street, Suite 2050
Sacramento, CA 95814

1 The Florin-Vineyard Property Owners Group, also known as the "participating property owners," consists of owners of ± 1,072 acres of land within the 3,766 ± acre Plan area who are participating financially in the Florin-Vineyard Gap Community Plan planning process and who are currently requesting development entitlements (rezones and subdivision maps) for their properties. The participating properties encompass approximately 28 percent (1,072 ± of the 3,766 ± total acres) of the Florin-Vineyard Gap Community Plan project area and are listed on Table INTRO-1 in Volume 2 of this EIR.

Plate PD-1
Project Location Map



PROJECT HISTORY

The Sacramento County Board of Supervisors (Board) has initiated a community planning program for the 3,766 ± acre Florin-Vineyard area, also known as the "Gap" area. The term "Gap" has been used to refer to this area because it is located between the existing urban area to the west of Elk Grove-Florin Road and a comprehensively planned urban area to the east (i.e., the North Vineyard Station Specific Plan and Vineyard Springs Comprehensive Plan areas). Because the Florin-Vineyard Gap project area is already included within the boundaries of the South Sacramento and Vineyard Community Plans, the proposed Florin-Vineyard Gap Community Plan project will involve amendments to those existing community plans (rather than adoption of a new, separate community plan).

In October 2002, the Board adopted Resolution No; 2000-1312, which states that the Board: *"[supports] a comprehensive approach known as the Florin-Vineyard Gap Community Plan to address regional and community planning issues and infrastructure/service issues in the [Florin-Vineyard Gap] area, rather than reacting to issues as they may be presented on a project-by-project basis,"* and that the Board: *"supports the Florin-Vineyard Gap Community Plan as the appropriate tool to comprehensively plan the entirety of the [Florin-Vineyard Gap] study area [...] This planning process shall include the preparation of technical studies and amendments to appropriate County planning documents. This planning process shall also include an infrastructure and financing component describing the provisions and timing for the delivery of facilities and services to properties within the [Florin-Vineyard Gap] study area."*

As part of the planning process, the Board appointed a Citizen's Advisory Committee (CAC) to work with County Planning Department staff and the community to prepare a draft comprehensive land use plan for the Board's consideration. In December 2003, the Board endorsed two draft Community Plan land use maps for the ± 3,766 acre Florin-Vineyard Gap project area for further analysis and environmental review. The base map consists of the Florin-Vineyard Community Plan Citizen's Advisory Committee Preferred Land Use Plan, December 4, 2003. Supplementing that map are six optional amendments to the CAC Plan that were proposed by the Planning Department and that result in greater residential density in the FVGCP area.

PROJECT DESCRIPTION

The project consists of the adoption of the Florin-Vineyard Gap Community Plan (FVGCP), General Plan Amendment, and Community Plan Amendment that will guide the development of approximately 3,766 acres located in both the South Sacramento and Vineyard community planning areas (Plate PD-1, Project Location Map) in a comprehensive and coordinated manner.

Table PD-1, Existing and Proposed General Plan Land Use Designations, show the change in land uses proposed for the FVGCP area.

Table PD-1
Existing and Proposed General Plan Land Use Designations

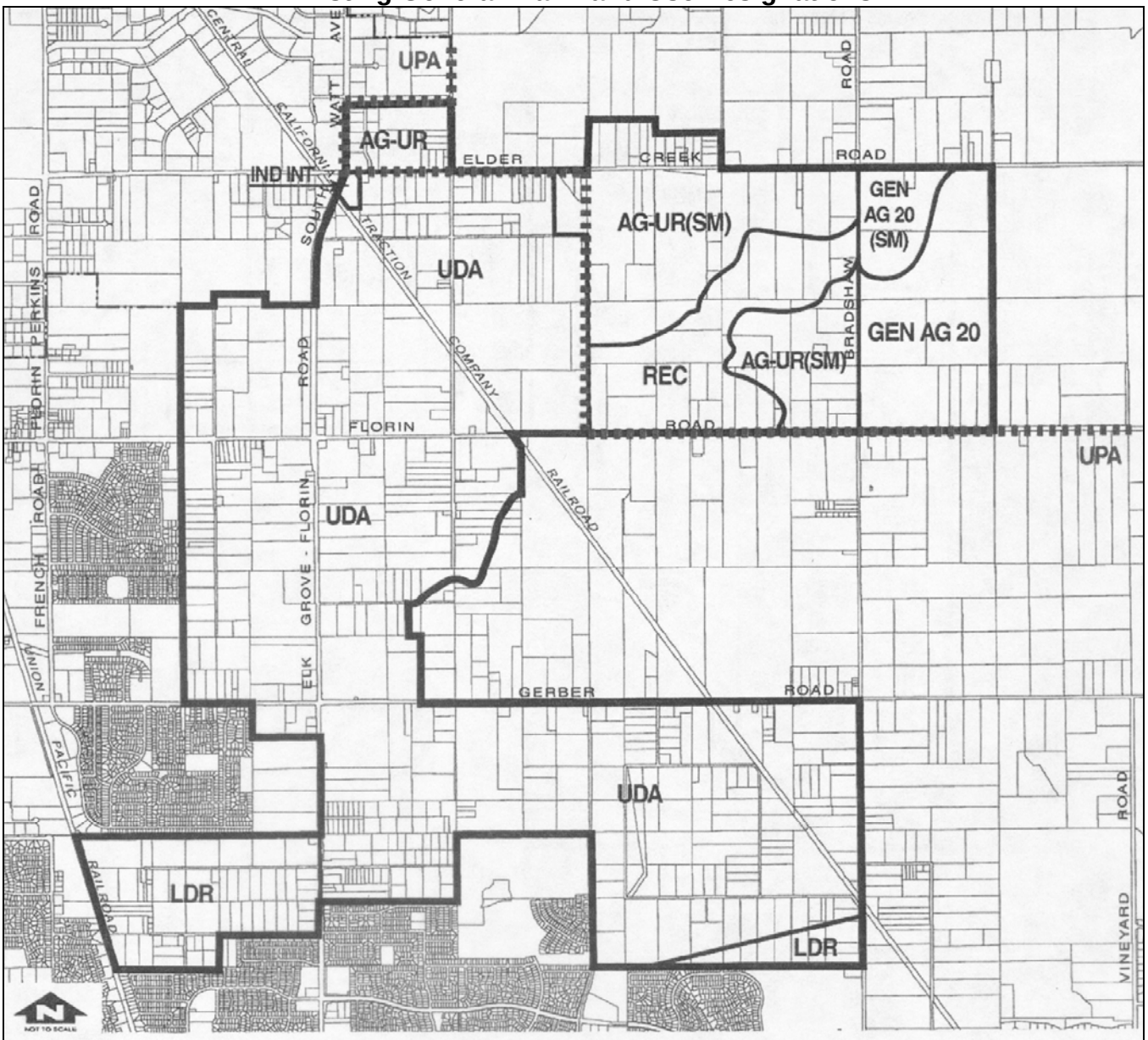
Land Use Designation	Existing General Plan Designation (Acres)	Proposed General Plan Amendment (Acres)	Change (Acres)
Agricultural – Urban Reserve	57	0	(57)
Agricultural – Urban Reserve/Aggregate Resource Area	428	0	(428)
Commercial and Office		157	157
General Agriculture (20 acres)	258	0	(258)
General Agriculture (20 acres)/Aggregate Resource Area	62	0	(62)
Intensive Industrial	5.5	250	244.5
Intensive Industrial/Aggregate Resources Area	0	874.4	874.5
Low Density Residential	272	2,409.5	2,137.5
Medium Density Residential	0	75	75
Recreation	272	0	(272)
Urban Development Area	2,411.5	0	(2,411.5)
Total	3,766	3,766	

The Florin-Vineyard Gap Community Plan EIR contains equal level analysis of both the Citizens Advisory Committee (CAC) Land Use Plan and the Sacramento County Planning Department (PD) Land Use Plan. The proposed project would change the existing agricultural development patterns to a predominately residential community with industrial and commercial areas. The project includes requests for the following entitlements:

1. **General Plan Amendment** for the FVGCP area to relocate the Urban Policy Area (UPA) boundary, and to amend the land use designations as identified by the Existing and Proposed General Plan Land Use diagrams (Plate PD-2 and PD-3), for properties within the FVGCP project area.

2. **Community Plan Amendment** to amend the land use designations for properties within the FVGCP as identified by the Existing Zoning/Community Plan Designations diagram (Plate PD-4) to either the proposed CAC Land Use Plan (Plate PD-5), or the proposed PD Land Use Plan (Plate PD-6). Table PD-2 shows the acreage changes for both the CAC Land Use Plan and the PD Land Use Plan. Note that there are two land use options – a less intense option proposed by the CAC, and a more intense option proposed by County Planning staff. The approval of either land use option would result in amendments to both the South Sacramento and Vineyard Community Plans. Plate PD-7 illustrates the CAC preferred option along with the PD preferred changes.

Plate PD-2
Existing General Plan Land Use Designations



LDR – Low Density Residential
UDA – Urban Development Area
REC – Recreation
AG-UR – Agriculture Urban Reserve
AG-UR(SM) – Agriculture Urban Reserve/ Resource Management Area
GEN AG 20 – General Agriculture 20-Acre Minimum

Plate PD-3
Proposed General Plan Land Use Designations

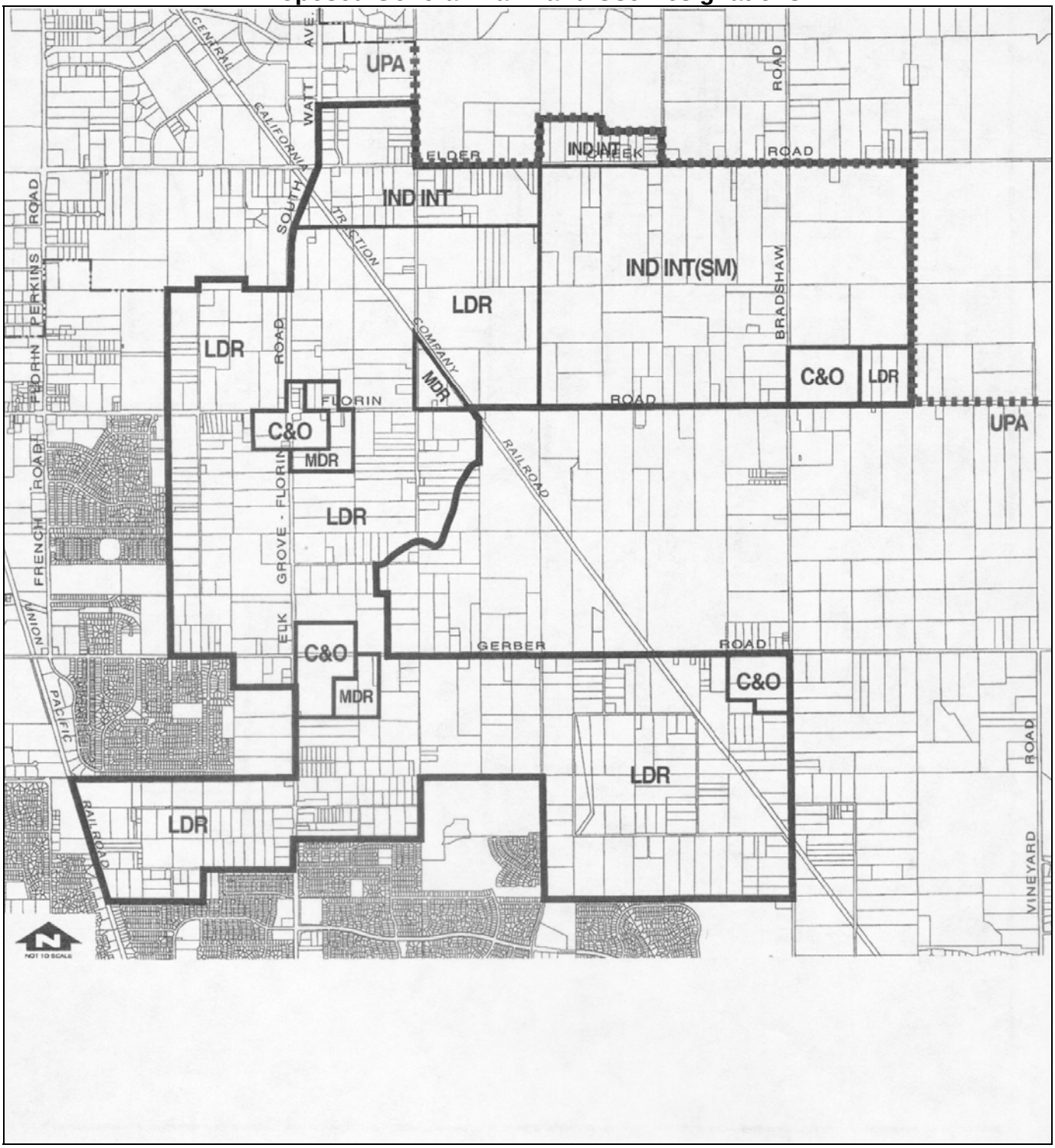


Plate PD-4
Existing Zoning Designations

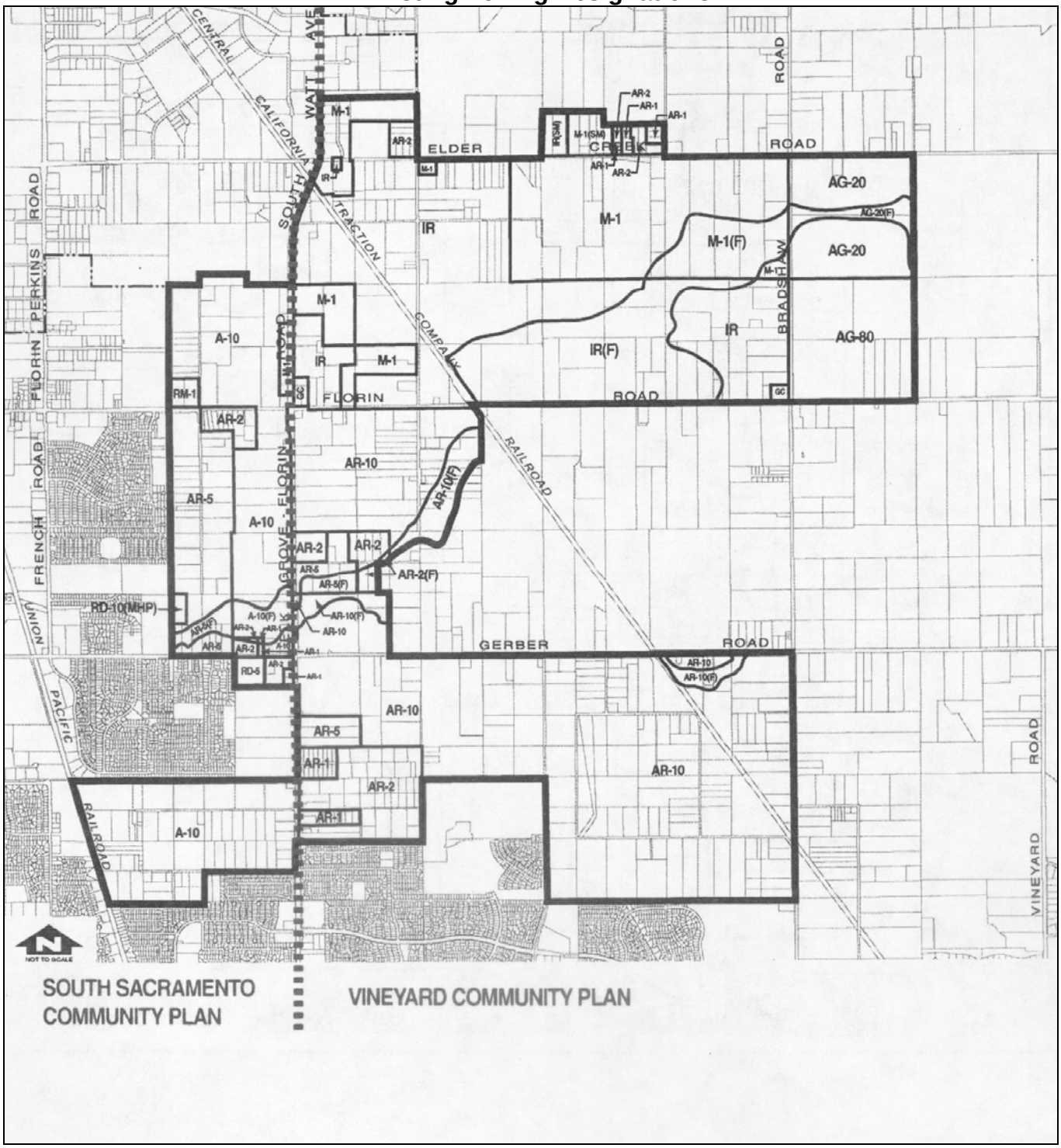


Plate PD-5
Citizen's Advisory Committee Land Use Plan

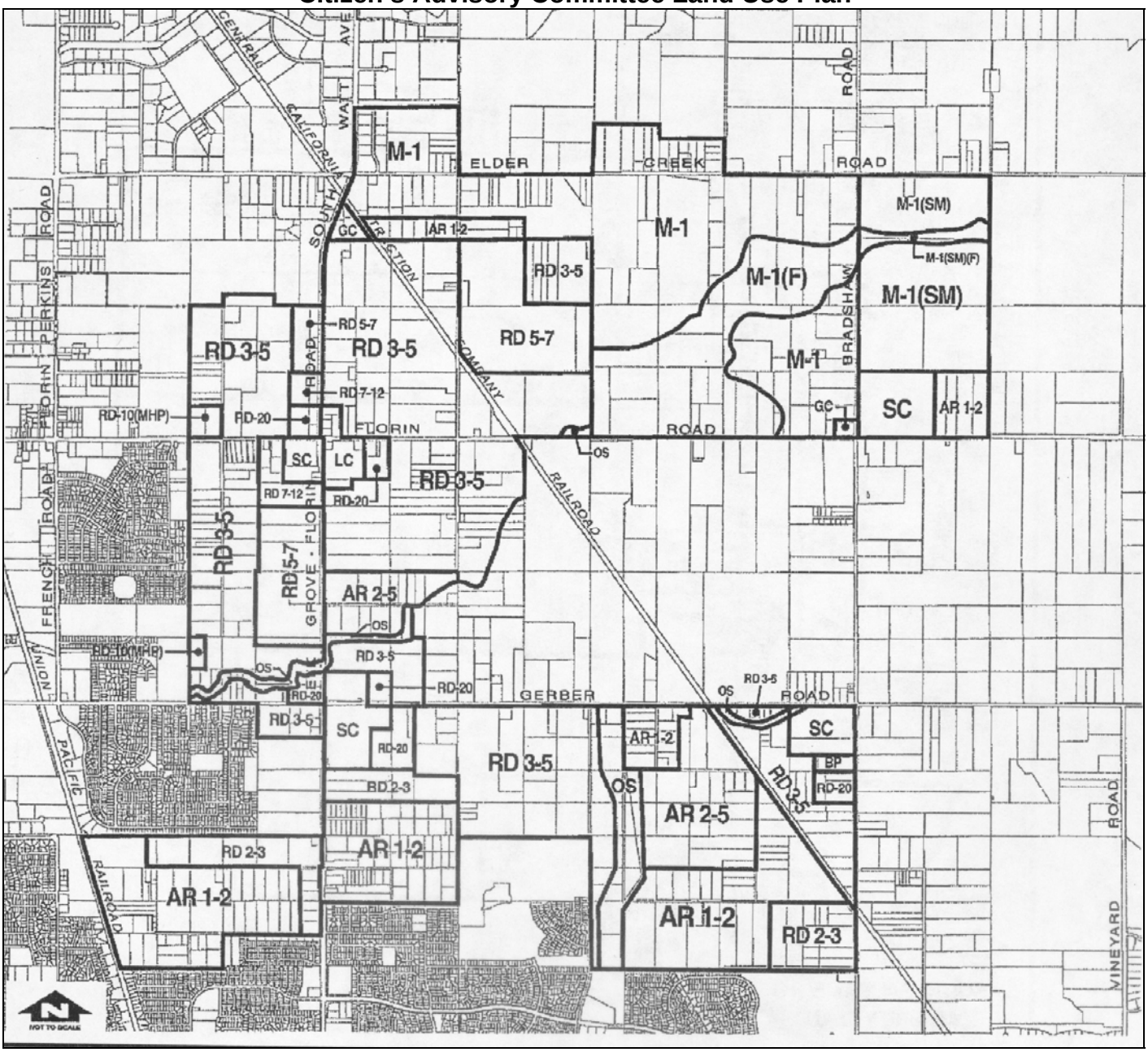


Plate PD-6
Planning Department Land Use Plan

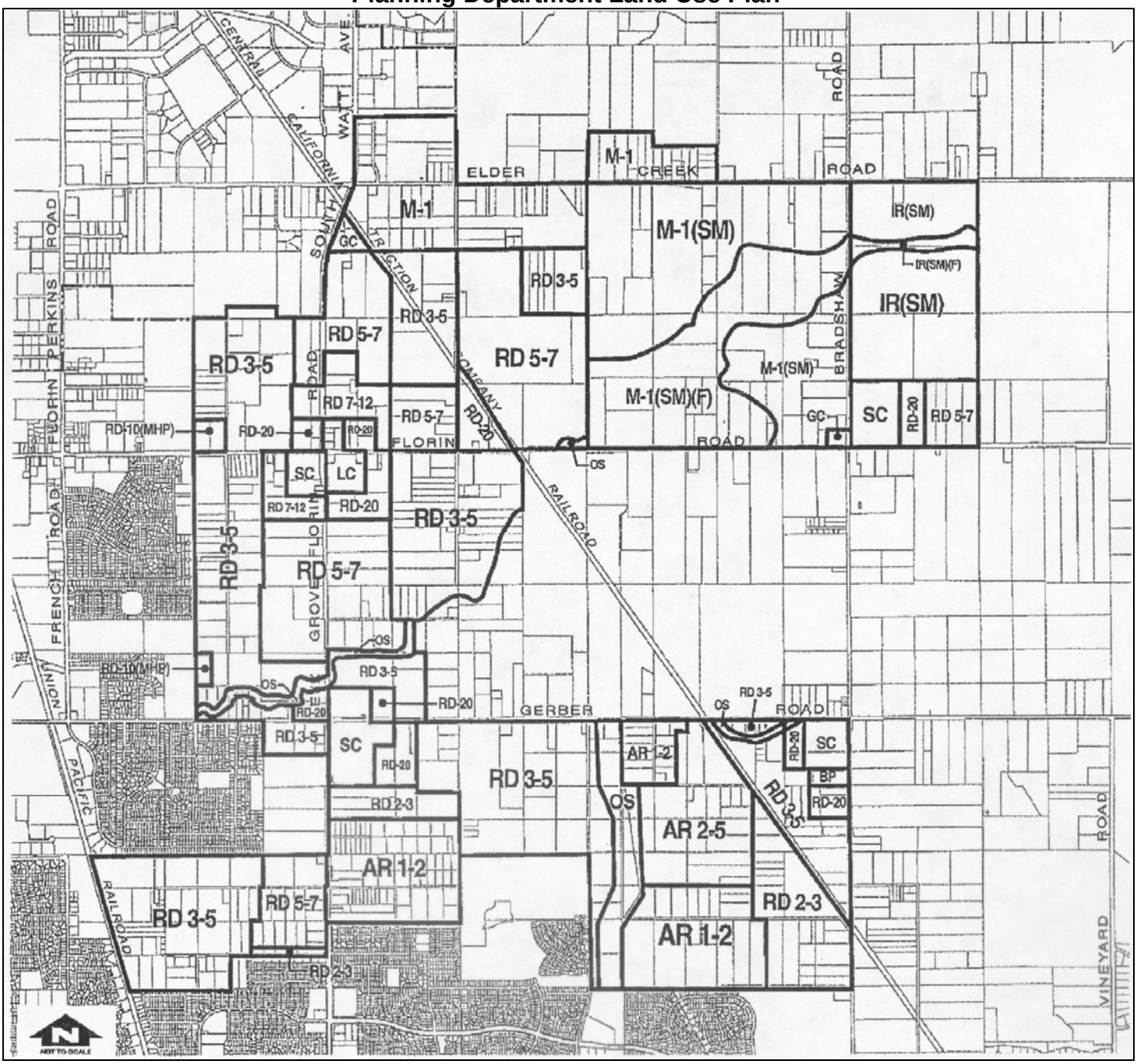
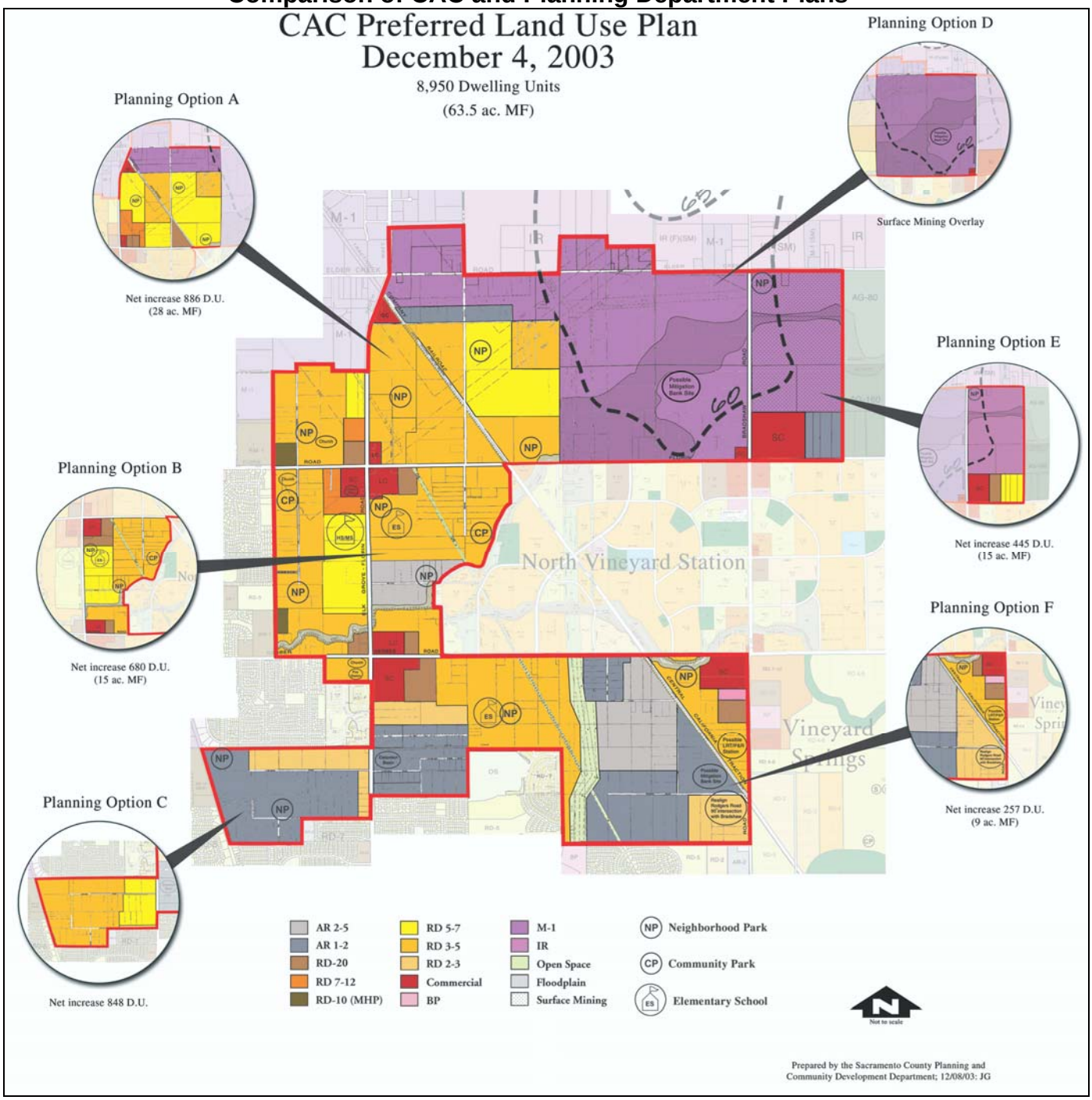


Table PD-2
Community Plan Land Use Comparison

Land Use Designations	Existing (ac.)	CAC Planning (ac.)	Planning Dept. Plan (ac.)
AG-20 / AG-20 (F)	160		
AG-80	160		
A-10 / AR-10 / AR-10 (F)	1698		
AR 1-2	392[1]	549.5	271
AR 2-5		207	129
BP		5	5
GC	7	10	10
IR (F) / IR (SM)	840		240
LC		21	18.3
M-1 / M-1 (F) / M-1 (SM)	486	1,102	879
OS		89.5	89.5
RM-1	9		
RD-10 (MHP)	5	13.7	13.7
RD 2-3		151.5	140.5
RD 3-5	9[2]	1172.3	1,084.5
RD 5-7		213	572.5
RD 7-12		30.5	69
RD-20		63.5	130.5
SC		137.5	113.5
Total	**3,766**	**3,766**	**3,766**

[1] The existing distribution of these 392 acres is: 31 acres AR-1/AR-1(F); 171 acres AR-2/AR-2(F); and 190 acres AR-5/AR-5(F).
[2] The existing land use designation of these 9 acres is RD-5.

Plate PD-7
Comparison of CAC and Planning Department Plans



3. **Adoption of a Public Facilities Financing Plan** for the Florin-Vineyard Gap Community Plan project area, which:

    a) Identifies public facilities and infrastructure improvements required to support the proposed land uses;
    b) Defines proposed methods for financing required public facilities and infrastructure; and
    c) Provides a description of infrastructure phasing.

Buildout of the FVGCP area would result in the development of from 8,950 residential dwelling units under the CAC Land Use Plan to 12,066 residential dwelling units under the Planning Department Land Use Plan. In addition, it should be noted that in December 2004, Sacramento County adopted an Affordable Housing Policy that includes a “density bonus” provision intended to offset the cost of providing affordable housing. For the proposed project, the density bonus could result in an additional 1,342 single family dwelling units under the CAC Plan (for a total of 10,292) or an additional 1,809 single family dwelling units under the PD Plan (for a total of 13,875), if the density bonus were applied.

Commercial, industrial, open space and public areas would also be developed. Public facilities including fire protection, law enforcement, solid waste disposal, gas and electricity, schools, libraries parks, wastewater, potable water, drainage, and roadways would also be developed during buildout of the Plan area. Where necessary, the project would include annexation into the active service area of various public service providers. As outlined below, the technical chapters provide in-depth description and analysis of the proposed facilities.

Fire Protection

Fire protection for the project area is provided by the Sacramento Metropolitan Fire District (SMFD). The SMFD provides prevention services and emergency response. The prevention services include fire safety inspections, fire investigation, plan review, public education, weed abatement, and permits. The emergency responses include pre-hospital emergency medical services, fire suppression, hazardous materials response, technical rescue, and public assistance. The FVGCP would be served by existing and proposed fire stations located in adjacent communities. According to the Public Facilities Financing Plan, the SMFD has determined that the stations would be sufficient to serve the FVGCP and the surrounding development. Please refer to Chapter 5, Public Services and Facilities, for additional analysis of existing and proposed fire protection services and facilities.

Law Enforcement

The Sacramento County Sheriff’s Department (SCSD) provides law enforcement services to the FVGCP area. The Community Plan area is located within the

Sacramento County Sheriff's Department Central Division. Additional equipment and personnel needed to serve the project would be funded through a combination of tax revenue and other sources to which individual projects within the FVGCP would contribute. Please refer to Chapter 5, Public Services and Facilities, for additional analysis of existing and proposed law enforcement services and facilities.

Solid Waste Disposal

The Sacramento County Department of Waste Management and Recycling provides weekly garbage collection, and biweekly collection of recyclables and green waste. The Department operates the Kiefer Road Landfill, located near Kiefer Boulevard and Grant Line Road, which is the primary municipal solid waste disposal facility in Sacramento County. Solid waste generated within the FVGCP would be transported to the Keifer Road Landfill. The ultimate permitted size of 660 acres is anticipated to be able to serve the County to the year 2035. Please refer to Chapter 5, Public Services and Facilities, for additional analysis of existing and proposed solid waste disposal facilities.

Gas and Electricity

Electric service within the FVGCP area is provided by the Sacramento Metropolitan Utility District (SMUD), and natural gas is provided by Pacific Gas & Electric (PG&E). Electric transmission lines and gas mains are located within the FVGCP. Buildout of the FVGCP would require the extension of electricity and natural gas lines throughout the project area. Please refer to Chapter 5, Public Services and Facilities, for additional analysis of existing and proposed gas and electricity facilities.

Schools

The FVGCP is located within the Elk Grove Unified School District (EGUSD). The FVGCP area is primarily served by Sierra Enterprise Elementary School, Katherine Albiani Middle School, and Pleasant Grove High School. Based on the number of units planned in the FVGCP, the EGUSD has indicated that buildout would require four new elementary schools in the FVGCP area. Two of the four schools would be needed to serve the population generated by the 26 participating properties. Please refer to Chapter 5, Public Services and Facilities, for additional analysis of school.

Libraries

The Sacramento Public Library Authority provides library services for the FVGCP area. The Library Authority maintains 27 City and County library branches and two bookmobiles. Currently, libraries are not located within the FVGCP. The FVGCP would be served by the existing nearby Library Authority facilities, which include

the Southgate Library, Valley Hi – North Laguna Library, and the Elk Grove Library. In addition, a new library (Vineyard 1 Library) is planned as part of the adjacent North Vineyard Station Specific Plan, and all residential development would be required to participate in the funding of the Vineyard 1 library. Please refer to Chapter 5, Public Services and Facilities, for additional analysis of libraries.

PARKS

~~The Southgate Recreation and Park District (SRPD) is an independent special district that manages parks and recreation facilities in the southeastern portion of Sacramento County, including the FVGCP. According to the SRPD draft Planned Parks and Parkways System plan, at buildout the FVGCP is anticipated to contain 17.9 acres of mini-parks, 54.1 acres of small neighborhood parks, 41.1 acres of large neighborhood parks, 24.6 acres of community parks, additional playground facilities, and two community centers totaling 25,000 square feet. In addition, an extensive parkway and trail network is incorporated into the design of the FVGCP. Please refer to Chapter 5, Public Services and Facilities, for additional analysis of existing and proposed parks and recreation facilities.~~

The Southgate Recreation and Park District (SRPD) is an independent special district that is responsible for the planning of parkland, open space and recreational facilities and the ownership and maintenance of existing and planned facilities within the District boundaries. Southgate's adopted park acreage standard is 5 acres of parkland for every 1,000 people.

According to the Preliminary Draft of the Park and Recreation Capital Improvement Plan for the Florin Vineyard Community Plan Public Facilities Financing Plan prepared by SRPD in May 2007, at buildout the FVGCP is estimated to include 17.9 acres of mini-parks (1-3 acres), 54.1 acres of small neighborhood parks (3-6 acres), 41.1 acres of large neighborhood parks (6-11 acres), 24.6 acres of community parks (11+ acres), and 13.6 acres of parkways. The park sites and parkways totaling approximately 151 acres will include sports fields, picnic shelters, playground facilities, two community centers and an extensive trail and parkway system along the Gerber and Elder Creek corridors, utility corridors, Gardner and Hedge Avenues.

WASTEWATER

The Sacramento Regional County Sanitation District (SRCSD) and Sacramento Area Sewer District (SASD) provide public sewer service to the urbanized portions of unincorporated Sacramento County. Local sewage collection and transport is provided by SASD facilities to the regional sewage transmission, treatment, and disposal facilities operated by SRCSD. SASD is responsible for the operation and maintenance of the local trunk and collection systems within the County that are not operated and maintained by the Cities of Sacramento or Folsom. The

SRCSD's facilities include interceptor sewage lines and the Sacramento Regional Wastewater Treatment Plant (SRWTP) in Elk Grove. The majority of the FVGCP is located within the SRCSD and the SASD; however, the area of the FVGCP located north of ~~Elder Creek Road between Bradshaw Road and~~ **Florin Road and east of** a point 1 mile west of Bradshaw Road **(1/2 mile east of Hedge Avenue)** is not currently within either district. Therefore, that portion of the FVGCP would need to be annexed to both the SRCSD and SASD prior to development. The S*anitary Sewer Master Plan for the Florin-Vineyard Gap Community Plan* has been prepared for the project which identifies key improvements that would be needed to ensure that sewerage could be provided to the entire FVGCP, including those portions currently outside of the boundaries of the SRCSD and SASD. Installation of the necessary sewerage facilities would occur concurrent with development. Please refer to Chapter 6, Sewer Service, for additional analysis of existing and proposed sewerage infrastructure.

POTABLE WATER

The Florin-Vineyard Gap Community Plan (FVGCP) is located within the services areas of three purveyors: the Sacramento County Water Agency (SCWA), California American Water Company (Cal-Am), and the Florin County Water District. The project area was included in the Master Water Study for the FVGCP. The Florin County Water District Area was included in the 2005 SCWA Zone 40 Water Supply Master Plan, which implies that the Zone 40 water system will be designated to serve this area; however, the decision as to which agency will be the retail water provider has not been made at this time. The SCWA and Cal-Am would provide potable water to the FVGCP through a combination of surface and groundwater. Cal-Am and SCWA have identified sufficient water supplies to provide potable water to their respective potential customers within the FVGCP area. Necessary potable water infrastructure would be installed concurrent with development. Please refer to Chapter 7, Water Supply, for additional analysis of existing and proposed potable water supply and infrastructure.

DRAINAGE

The FVGCP is primarily located within the watershed boundaries of Florin Creek, Elder-Gerber Creeks, and Unionhouse Creek. Buildout of the FVGCP would require extensive drainage improvements to convey stormwaters and protect water quality. Improvements would include regional detention and water quality basins, improvements to both Elder Creek and Gerber Creek to reduce the potential for flooding. Drainage improvements have been master planned in the *Florin Vineyard Gap Community Plan Preliminary Drainage Study*, and would be installed concurrent with development. Please refer to Chapter 8, Hydrology and Drainage, for analysis of existing and proposed drainage facilities. In addition, Chapter 12, Biological Resources, analyzes potential impacts resulting from drainage improvements that would occur within waterways.

ROADWAYS

The primary roadways within the project area include: Elk-Grove Florin Road/South Watt Avenue, Bradshaw Road, Florin Road, and Gerber Road. Implementation of the proposed project would require installation of new road, extensions of existing roads, and extensive improvements to both existing roadways and intersections both within and outside of the FVGCP. Improvements would include intersection expansion and road widening along State Route 16, Fruitridge Road, South Watt Avenue/Elk Grove-Florin Road, Elder Creek Road, Gerber Road, Florin-Perkins Road, Calvine Road, Bradshaw Road, as well as smaller roads within the project area. Please refer to Chapter 9, Traffic and Circulation, for analysis of the existing and proposed roadway network.

ENVIRONMENTAL SETTING

The topography of the ± 3,766 acre FVGCP area is flat to gently undulating, with elevations ranging from a high of approximately 70 feet near the northeast to a low of approximately 40 feet in the west. The area is roughly bounded by Elder Creek Road on the north, the Churchill Downs neighborhood on the south, Bradshaw Road on the east, and the Union Pacific Railroad tracks to the west. Historical drainage patterns reflective of area topography generally flow from the higher elevations in the northeast to the lower-lying areas in the southwest. The majority of the FVGCP area is tributary to three drainage sheds: Florin Creek, Elder and Gerber Creeks, and Union House Creek. A very small portion of the northern Plan area drains to Morrison Creek and a minor portion of the southern Plan area drains to Strawberry Creek. Historical land uses within the FVGCP area include grazing and low-intensity farming.

The planning area consists primarily of non-native annual grasslands, as well as agricultural lands, irrigated pastures, vernal pool/swales, seasonal wetlands, emergent marshes, ponds, channels, trees/shrubs, and urban areas.

Recent surveys show 556 residential households in the area. As noted above, domestic water supply is provided by three water purveyors (Sacramento County Water Agency, California American Water Company, and the Florin County Water District, and the majority of the project area is located within the SRCSD and the SASD.

Surrounding land uses include light manufacturing to the north of the project site. Residential development currently exists to the west and southwest of the FVGCP area. Agricultural lands exist to the northeast of the planning area. The North Vineyard Station and the Vineyard Springs development area are located east of the project area.

Elk Grove-Florin Road provides regional access to the planning area on the west from South Watt Avenue, Elder Creek Road, and Florin Road. Bradshaw Road

provides regional access to the planning area from the east; while Elk Grove-Florin Road and Gerber Road provide access from the south. The Union Pacific Railroad transects the planning area in a northwesterly direction.

PROJECT OBJECTIVE

The stated objectives of the project are:

- Establish a coordinated and comprehensive approach towards land use development.
- Provide for a mix of land uses and a variety of housing types.
- Provide a circulation system that connects uses with roadways, bicycle and pedestrian pathways, as well as linkages to public transportation.
- Ensure that infrastructure is provided in a logical and efficient manner.
- Provide for a pattern of development that will compliment existing neighborhoods, and build upon infill opportunities.
- Provide each landowner the opportunity to develop and/or redevelop their property, consistent with the objectives of the Florin-Vineyard Plan.

INTENDED USE OF THE EIR

The County of Sacramento, as Lead Agency, must consider the information in this EIR prior to its approval or denial of the Florin-Vineyard Gap Community Plan and related land use entitlements. The Florin-Vineyard Gap Community Plan EIR will also provide environmental information for other agencies that may have permitting authority or an interest in various aspects of development within the Florin-Vineyard Community Plan area. The potential Responsible Agencies may include, but are not limited to, the following:

- California Department of Fish and Game (CDFG);
- California Integrated Waste Management Board (CIWMB);
- California Water Resources Control Board (CWRCB);
- Local Agency Formation Commission (LAFCo);
- Sacramento Metropolitan Air Quality Management District (SMAQMD);
- Sacramento Regional Water Quality Control Board (SRWQCB);
- United States Army Corp of Engineers (USACE); and
- United States Fish and Wildlife Service (USFWS).

TYPE OF EIR

The CEQA Guidelines identify types of EIRs, each applicable to different project circumstances. The Florin-Vineyard Gap Community Plan Project EIR includes both program-level and project-level analyses.

PROGRAM-LEVEL EIR

According to CEQA Guidelines Section 15168, a *program-level* EIR is an EIR that may be prepared on a series of actions that can be characterized as one large project and are related either:

(1) Geographically;
(2) As logical parts in the chain of contemplated actions;
(3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or
(4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally environmental effects which can be mitigated in similar ways.

According to CEQA Guidelines Section 15168(c)(5), a program-level EIR will be most helpful in dealing with subsequent activities if the EIR deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program-level EIR, and further environmental documents would not be required.

PROJECT-LEVEL EIR

In addition to the program-level analysis, a *project-level* EIR has been conducted for the ~~26~~ **17** individual development projects submitted for concurrent analysis in the EIR. A project-level EIR examines the environmental impacts of a specific development project. According to CEQA Guidelines Section 15161, a project-level EIR is required to examine all phases of the project including planning, construction, and operation.

It should be noted that the impacts that would be associated with the overall development of the FVGCP area are discussed at program-level in Volume 1 of this EIR, while project-level analysis for individual development projects is included in Volume 2 (see Volume 2 for further detail regarding the specific project applications that will be included within the proposed project).

3 ALTERNATIVES ANALYSIS

INTRODUCTION

The primary intent of the alternatives evaluation in an EIR, as stated in Section 15126.6(a) of the CEQA Guidelines, is to "[…] describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives [...]"

The following objectives for the project were provided by the County:

- Establish a coordinated and comprehensive approach towards land use development.
- Provide for a mix of land uses and a variety of housing types.
- Provide a circulation system that connects uses with roadways, bicycle and pedestrian pathways, as well as linkages to public transportation.
- Ensure that infrastructure is provided in a logical and efficient manner.
- Provide for a pattern of development that will compliment existing neighborhoods, and build upon infill opportunities.
- Provide each landowner the opportunity to develop and/or redevelop their property, consistent with the objectives of the Florin-Vineyard Plan.

Section 15126.6 (f) states that "[…] The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice […]"

The CEQA Guidelines (§15126.6 (e)(1)) state that a 'no project' alternative should be evaluated along with its impact. Specifically, the Guidelines state:

> The specific alternative of the "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project. The no project alternative analysis is not the baseline for determining whether the Proposed Project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline.

In addition, Section 15126.6 (d) of the CEQA Guidelines states that "[…] If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the

alternative shall be discussed, but in less detail than the significant effects of the project as proposed."

Selection of Alternatives

Alternatives that are included and evaluated in this EIR must be feasible alternatives. According to the CEQA Guidelines Section 15126.6(f), "[…] the alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project […]" In addition, Section 15126.6(f)(1) states that the feasibility of an alternative may be determined based on a variety of factors including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control.

Alternatives Considered But Dismissed in this EIR

Consistent with CEQA, primary consideration was given to alternatives that could reduce significant impacts, while still meeting most of the project objectives. Those alternatives that would have impacts identical to or more severe than the proposed project, and/or that would not meet any or most of the project objectives were rejected from further consideration. One alternative was considered but dismissed for the Florin-Vineyard Gap Community Plan Project.

Off-Site Alternative

The purpose of the planning effort is to establish a comprehensive land use plan for the Florin-Vineyard Gap area. Therefore, analysis of an off-site location would fundamentally fail to address the primary objective of the project. As a result, off-site alternatives are dismissed from further consideration.

Alternatives Considered in this EIR

The Draft EIR includes an equal-level analysis of two alternatives (See Chapter 2, *Project Description*, for a more detailed discussion). The components of Citizen's Advisory Committee (CAC) Land Use Plan and Sacramento County Planning Department (PD) Land Use Plan are summarized below. Refer to each technical chapter for information regarding the potential environmental impacts of the CAC Land Use Plan and the PD Land Use Plan.

CAC Land Use Plan

The proposed CAC Land Use Plan would include a mix of uses and residential densities. Approximately 2,401 acres of the overall 3,766 acres would be designated for residential use. The remaining 1,365 acres would be designated

for a mixture of commercial, industrial, public, and open space uses. The overall land use pattern would remain low-density residential, including a number of Agricultural-Residential areas to maintain the rural setting. With the inclusion of the density bonus associated with affordable housing, the CAC Land Use Plan would accommodate a maximum of 10,292 dwelling units. Therefore, based on the US Census figure of 2.64 residents per household in Sacramento County, the plan would accommodate 27,171 persons (2.64 * 10,292 = 27,171), for an approximate average density of 11.3 persons per residential acre.

PD Land Use Plan

The proposed PD Land Use Plan options would marginally increase the amount of land devoted to residential use, and increase overall residential density of the project area. Approximately 2,411 acres of the overall 3,766 acres would be designated for residential use. The remaining 1,355 acres would be designated for a mixture of commercial, industrial, public, and open space uses. The PD Land Use Plan would also preserve lands for aggregate surface mining. Adoption of the options would increase the acreage devoted to multi-family, and incrementally increase the densities of several areas. The plan does contain some areas of Agricultural-Residential land; however, the designation would make up a smaller proportion of the total in the PD Land Use Plan. With acceptance of the PD Land Use Plan options, the Community Plan would accommodate a maximum of 13,876 dwelling units with implementation of the density bonus, with a resulting population of 36,333 (2.64 * 13,876 = 36,333), at an average of 15.1 persons per residential acre. Therefore, either project would result in a substantial increase in both population size and density over what currently occurs in the project area.

No Project – Buildout Pursuant to Existing Zoning Designations

Under the No Project – Buildout Pursuant to Existing Zoning Designations Alternative, the FVGCP area would be assumed to develop at the highest density allowed by the existing zoning designations. As shown in Table Alt-1, buildout of the FVGCP under existing designations could result in a total of 595 residential units, 5.25 acres of commercial uses, and 486 acres of light industrial uses. Currently, there are approximately 556 residential units within the FVGCP area; therefore, implementation of the alternative would result in an increase of approximately 39 residential units.

The minimal number of new residences would be built at a density that is similar to, or lower than much of the existing development. The small amount of development projected in the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would likely occur over an extended period of time as individual residents acquired the large parcels needed to build in the IR and AR zones.

WETLAND AVOIDANCE AND SMART GROWTH ALTERNATIVE

As shown in Plate Alt-1, the Wetland Avoidance and Smart Growth Alternative would expand the open space area along Elder Creek, and would designate as open space substantial areas of the industrial lands located in the Planning Option D area. Substantial wetland and vernal pool resources are located in the Planning Option D area and along Elder Creek in the Option B area. Increasing the open space areas would allow for preservation of the biological resources.

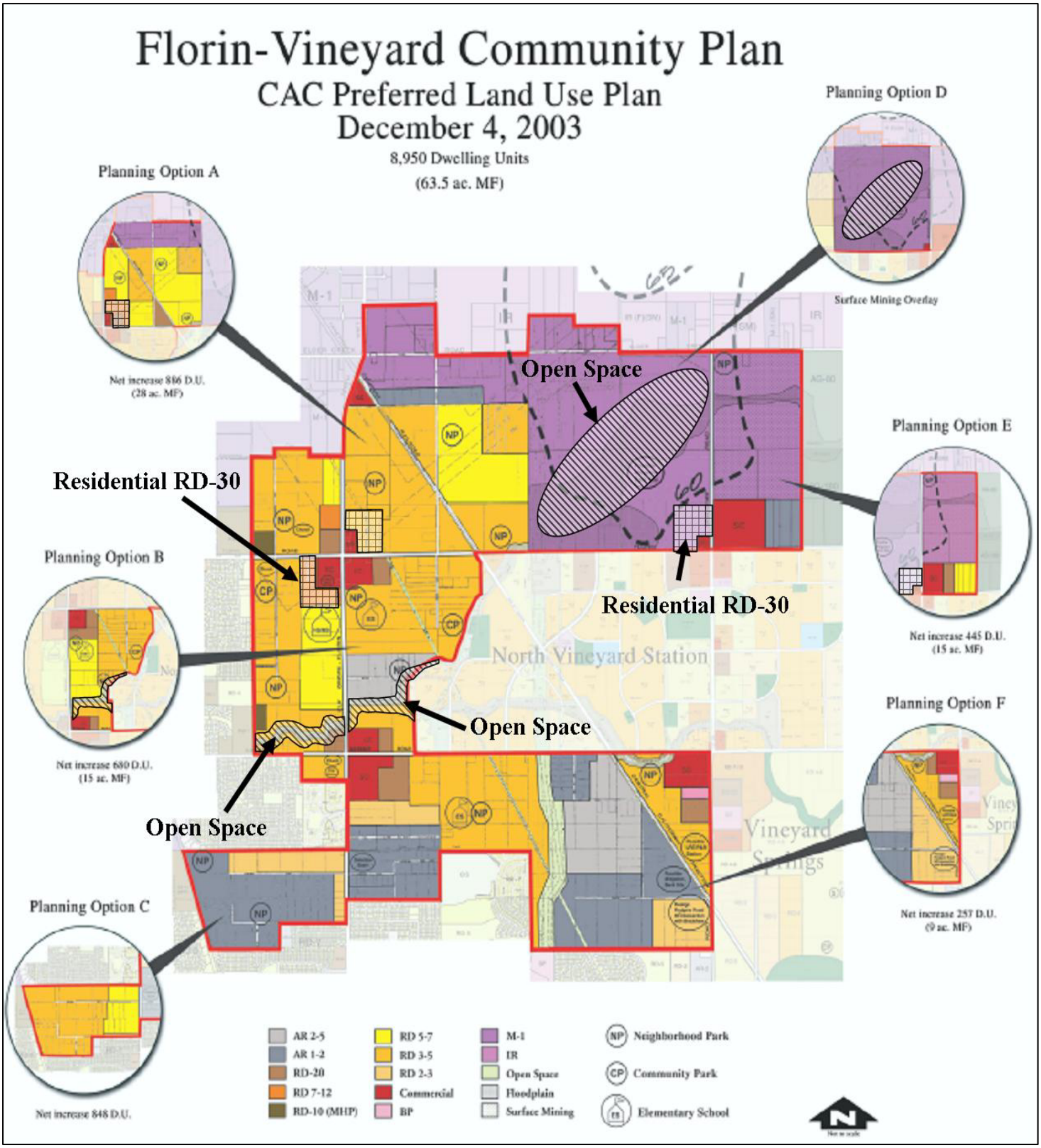
Table Alt-1: Buildout Pursuant to Existing Zoning Designations

Existing Zoning Designations[1]	New Development[2]
AG-80 (160 acres)	2 du
AG-20 (160 acres)	8 du
IR (840 acres) Industrial reserve lands can be developed with residential uses at a density of one unit per 20 acres under a Use Permit.	42 du
AR-10 (1,698 acres)	169 du
AR-5 (190 acres)	38 du
AR-2 (171 acres)	85 du
AR-1 (31 acres)	31 du
RD-5 (9 acres)	45 du
RM-1 (9 acres)	90 du
RD-10 (MPH) (5 acres)	50 du
M-1 (486 acres)	
GC (7 acres) Residential potential equals 25 percent of total acreage * 20 dwelling units per acre.	35 du
3,766 total acres	**595 dwelling units, 5.25 acres of commercial, and 486 acres of light industrial uses.**

[1] Source: Existing zoning information from Sacramento County Planning Department, 2008.
[2] Calculations made using the zoning densities provided in the County Zoning Code and total acreage per zone provided by the Sacramento County Planning Department.

The smart growth portion of the Alternative would involve the reallocation of the proposed development near Elder Creek to areas located near the intersections of Elk-Grove Florin Road and Bradshaw Road with Florin Road. The areas would be designated as multi-family sites at a minimum of 30 units per acre. The increased zoning density would be done in part to address State Housing Element law and the potential future requirements that occur if Sacramento County is considered a metropolitan jurisdiction under State law. If so, land included in the County's adequate land use inventory must be designated at a minimum of 30 units per acre, or the County must demonstrate that the sites can accommodate the required low income housing.

Plate Alt-1: Wetland Avoidance and Smart Growth Alternative



Therefore, it may be prudent for the County to begin to identify sites at the higher minimum density threshold in order to reduce the burden of proof that may be placed on the County to demonstrate that multiple family sites below 30 units per acre satisfy the State Law provisions. It should be noted that the housing units would be reallocated and not increased. Therefore, the maximum number of residential units would not exceed the 13,876 dwelling units anticipated under the PD Land Use Plan with density bonus.

Redistributing, and increasing densities for the housing units that are currently proposed in this Open Space area would support the County's efforts to pursue smart growth. As shown in Plate Alt-1, moving proposed dwelling units from biological resource areas to the intersections of Elk Grove-Florin Road/Gerber Road and Bradshaw Road/Gerber Road will create dense nodes of mixed-use development. Services will be within close proximity of residences, and public transit would be easier to access.

The ultimate purpose of smart growth is sustainable communities, and smart growth is a reaction to the recognized health and safety impacts of urban sprawl and vehicle-centric development strategies. Various studies have demonstrated that smart growth development significantly reduces impacts to air quality, water quality, open space/biological resources, and public health.

Alternatives Impact Analysis

Equal-level analysis of the CAC Land Use Plan and PD Land Use Plan was conducted throughout the DEIR. In compliance with CEQA Guidelines Section 15126.6(d) the following analysis addresses the impacts of the of the No Project – Buildout Pursuant to Existing Zoning Designations Alternative and the Wetland Avoidance and Smart Growth Alternative in less detail than the two versions of the project as proposed.

No Project – Buildout Pursuant to Existing Zoning Designations

The following discussion evaluates the impacts of the No Project – Buildout Pursuant to Existing Zoning Designations Alternative with regard to the proposed CAC and PD Land Use Plans. From the standpoint of avoiding direct physical impacts to the environment, the No Project – Buildout Pursuant to Existing Zoning alternative appears to be the Environmentally Superior Alternative. However, the No Project – Buildout Pursuant to Existing Zoning alternative does not meet the General Plan and Vineyard Community Plan objectives and strategies for efficient growth management. The majority of the FVGCP area is included within the Urban Policy Area and designated as an Urban Growth Area, signaling the intent to efficiently accommodate, at this site, a portion of the growth that is projected to occur within Sacramento County. If designated growth areas are not developed to their full potential, direct, adverse physical impacts to the environment could occur through the further loss of agricultural lands and open space/natural habitat areas. By not accommodating projected growth at this site, the growth needs are likely to be displaced elsewhere to another location that may not be as appropriately situated. The environmental implications of displacing growth may be greater than those impacts associated with the proposed project. This would be

particularly true if the displaced development were to occur outside of the Urban Policy Area or, worse yet, outside of the Urban Service Boundary where no development is envisioned during the planning horizon of the General Plan. Furthermore, the No Project – Buildout Pursuant to Existing Zoning alternative does not meet the project objective which, in essence, is intended to guide the formulation of a comprehensive land use plan for an intended growth area. For these reasons, the No Project – Buildout Pursuant to Existing Zoning Alternative is not the Environmentally Superior Alternative.

Land Use

Under the No Project – Buildout Pursuant to Existing Zoning Designations Alternative, changes to the existing General Plan, Community Plan, and Zoning designations would not occur. Therefore, impacts related to compatibility, consistency with the General Plan, and consistency with the Community Plan would be reduced as compared to the CAC and PD Land Use Plans. In addition, development that would occur under the Alternative would not increase land use intensity beyond what is already anticipated, and would not contribute to a cumulative increase in land use intensity.

Public Services and Utilities

Buildout of the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would result in a small number of new residences, and limited amounts of new industrial and commercial uses on the appropriately zoned acreage. However, such uses are not anticipated to result in substantial new demand for fire protection, law enforcement, solid waste disposal, electrical and natural gas service, schools, parks and recreation, or libraries. The existing and planned facilities located in the surrounding communities would be sufficient to serve FVGCP residents. Therefore, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce public services impacts as compared to the CAC and PD Land Use Plans.

Sewer Service

Given the minimal number of new residents and businesses anticipated under the No Project – Buildout Pursuant to Existing Zoning Designations Alternative, the extension of sewer service would not be anticipated and would be too costly for the relatively low number of new residents introduced into the project area. New residents would install septic systems for sewerage purposes. Therefore, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would not require the sewer collection system improvements that would be needed for sewer service to be extended to the CAC and PD Land Use Plans. As a result, this Alternative would not increase demands on the County’s existing sewer system, thereby not necessitating various collection system improvements.

Water Supply

Given the minimal number of new residents and businesses anticipated under the No Project – Buildout Pursuant to Existing Zoning Designations Alternative, the extension of potable water supply lines would not be feasible. The small number of new residents would install groundwater wells for potable water. The increased number of small wells would draw less water than the proposed municipal supply wells. In addition, the reduction in demand and impervious surfaces as compared to the land uses proposed for the project would result in reduced impacts to the groundwater aquifer. Therefore, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce water supply impacts as compared to the CAC and PD Land Use Plans.

Hydrology and Drainage

Substantial changes to the existing hydrology and drainage situation are not anticipated under the No Project – Buildout Pursuant to Existing Zoning Designations Alternative because only 39 additional units would be introduced into the area as a result of this Alternative. Furthermore, the dispersed development pattern assumed under the Alternative would result in the development of substantially less total area of impervious surfaces, which would reduce stormwater runoff. As a result, the alternative would likely reduce flooding potential and stormwater quality impacts, as compared to the proposed project. Overall, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would have reduced hydrology and drainage impacts, as compared to the CAC and PD Land Use Plans.

Transportation and Circulation

Implementation of the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would result in a minimal increase in traffic through the project area. As a result, project-level and cumulative impacts to roadway segments and intersections would be reduced. Furthermore, the Alternative's incremental contribution to the cumulative impact to State Route 99 and U.S. 50 would be less-than-significant. However, it should be noted that implementation of the Alternative would likely preclude the installation of bicycle, pedestrian, and public transportation networks, which would increase impacts as compared to the proposed projects. Overall, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce transportation and circulation impacts as compared to the CAC and PD Land Use Plans by substantially reducing project-related traffic levels.

Air Quality

The small amount of development projected in the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would likely occur over an extended period of time as individual residents acquired the large parcels needed to build in the IR and AR zones. Therefore, the Alternative would be unlikely to exceed the standards of significance for either construction or operational air quality impacts at either the project-

level or cumulative level. Furthermore, the reduction in total residents and the dispersed development patterns would reduce the potential for adverse impacts associated with Toxic Air Contaminants. Therefore, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce air quality impacts as compared to the CAC and PD Land Use Plans.

Climate Change

The No Project – Buildout Pursuant to Existing Zoning Designations Alternative would not result in a substantial increase in greenhouse gas emissions from construction or operational activities. Furthermore, the minimal amount of development that would occur under the Alternative would be subject to the regulations promulgated by the California Air Resources Board to reduce Statewide emissions. It is also important to note that individual developments that would be expected to occur under this Alternative would be small -- projects of < 100 peak hour or 1,000 daily trips -- as a result, per Sacramento County's standard of significance, specific carbon dioxide offset mitigation would not be required. Therefore, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce the project's incremental contribution from construction and operational GHG emissions to the significant cumulative impact as compared to the CAC and PD Land Use Plans. Whereas the proposed project would have a potentially significant impact to climate change, this Alternative would be anticipated to result in a less-than-significant impact to climate change.

Biological Resources

By reducing the footprint of allowable development, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative has the potential to reduce the impacts to jurisdictional waters, trees, special-status species, and cumulative loss of biological resources. It should be noted that even dispersed development has the potential to reduce functional habitat; however, overall, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce biological resources impacts as compared to the CAC and PD Land Use Plans.

Geology and Soils

By reducing the total number of structures and associated occupants, and the total developable area, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce the potential for adverse impacts associated with expansive soils, liquefaction, seismic activity, soil erosion, and cumulative geological impacts. Therefore, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce impacts to geology and soils as compared to the CAC and PD Land Use Plans.

Noise

By reducing the total number of structures and the total developable area, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce construction noise. In addition, the reduced population and dispersed development pattern associated with this Alternative would reduce the likelihood for impacts to future residents associated with existing noise producing uses, such as aircraft, traffic, and railroad noise levels. Furthermore, the reduced population would result in reduced traffic levels, which would subsequently produce less traffic noise. Therefore, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce project-level and cumulative noise impacts as compared to the CAC and PD Land Use Plans.

Cultural Resources

Implementation of the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce the potential for the removal of potential historic structures by not increasing the development potential of lands that currently contain structures. Impacts to unknown archaeological resources would be reduced as compared to the proposed projects by reducing the total developable area, which would also reduce the potential for grading and excavation to unearth archaeological resources. By reducing project-level impacts the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would also reduce the project's incremental contribution to cumulative impacts to cultural resources.

Hazardous Materials

By reducing the total number of structures and the total developable area, the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would reduce the potential for adverse impacts to construction workers and future residents from past chemical usage, asbestos, and lead. In addition, the reduced development would be less likely to result in impacts to petroleum pipelines, or result in the routine use, transport, or disposal of hazardous materials. However, as water and sewer service would not be extended to the FVGCP area, the total number of water supply wells and septic systems would increase. Overall, this Alternative would be expected to have slightly reduced impacts related to hazardous materials, as compared to the proposed project.

Population and Housing

Implementation of the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would substantially reduce population growth as compared to the proposed project at both the project and cumulative levels. Because population growth would be reduced under this Alternative, the need for the provision/extension of public services and associated infrastructure would also be reduced. In addition, the remaining large lot development that would occur under the Alternative would not contribute to ensuring a housing balance or the provision of affordable housing. Therefore, the reduction in

housing units as a result of this Alternative would adversely impact the ability of the County to reach goals associated with housing balance and affordable housing at both the project and cumulative levels.

Agricultural and Mineral Resources

Implementation of the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would result in the conversion of some areas of agricultural lands to non-agricultural use. However, development would be consistent with existing zoning, and would substantially reduce impacts, as compared to the proposed project, at both the project and cumulative levels given that substantially more agricultural and mineral lands would be developed under the proposed project. By dispersing residences throughout the lands designated as Industrial Reserve (IR), this Alternative would likely preclude the extraction of mineral resources in some IR areas. It should be noted that residences are not allowed in IR zones by right; therefore, residences would only be allowed in IR zones if a Use Permit can be secured, which could actually result in the maintenance of access to mineral resources in the area. This Alternative would be expected to result in fewer impacts to mineral resources, given the fact that the CAC Land Use Plan would redesignate some MRZ-2 areas in the I-3 sector as M-1 with removal of the surface mining combining (SM) zone. In addition, because Williamson Act lands are not located within the FVGCP area, this Alternative would not result in adverse impacts to Williamson Act lands.

Aesthetics

Implementation of the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would result in a marginal increase in the number of residences. Furthermore, such residences would be developed in a manner consistent with the existing rural and open character of the FVGCP. Therefore, implementation of the Alternative would reduce impacts to light and glare, scenic resources, the existing visual character, and cumulative change to the visual quality of the project area, as compared to the proposed CAC and PD Land Use Plans. Therefore, while all such impacts were found to be less-than-significant, implementation of the No Project – Buildout Pursuant to Existing Zoning Designations Alternative would further reduce impacts to aesthetic resources.

WETLAND AVOIDANCE AND SMART GROWTH ALTERNATIVE

Land Use

The Wetland Avoidance and Smart Growth Alternative would require similar changes to the existing General Plan, Community Plan, and Zoning designations for the FVGCP as compared to the PD and CAC Land Use plans. The Alternative would result in some areas of increased density near major intersections; however, the Alternative would not increase the project-wide land use intensity beyond what is anticipated in the PD Land Use Plan with density bonus. It should be noted that the Wetland Avoidance and Smart

Growth Alternative would locate dense multi-family sites near Elk Grove-Florin Road and near the intersection of Florin Road and Bradshaw Road. Therefore, this Alternative would be expected to better meet several of the policies set forth in the Sacramento County General Plan and the Vineyard Community Plan, such as Policy FU-7 in the Vineyard Community Plan, which is in regard to the clustering of housing, and Policy HE-4 in the County General Plan, which is in regard to locating new market-rate multi-family uses along transportation corridors and at transit stops and stations. The Wetland Avoidance and Smart Growth Alternative would be expected to result in reduced land use impacts, as compared to the proposed project.

Public Services and Utilities

Buildout of the Wetland Avoidance and Smart Growth Alternative would not increase population figures beyond what was identified for the PD Land Use Plan with density bonus. Therefore, the new demand for fire protection, law enforcement, solid waste disposal, electrical and natural gas service, **parks** and libraries identified in Chapter 5 for the proposed PD Land Use Plan would be similar for this Alternative. Based on the student generation numbers used by the Elk Grove Unified School District, multi-family student generation rates are lower than single-family generation rates; therefore, the increased number of multi-family residences proposed for this Alternative would introduce fewer new students to the school district, as compared to the CAC and PD Land Use Plans, which would reduce impacts to school services. Therefore, the Buildout of the Wetland Avoidance and Smart Growth Alternative would result in similar or reduced impacts to public services as compared to the PD Land Use Plan. Given the increased population under this Alternative as compared to the CAC Land Use Plan, most public service impacts would be increased under this Alternative. ~~However, the substantial increase in open space included in the Alternative would reduce parks and recreation impacts as compared to both the CAC and PD Land Use Plans.~~

Sewer Service

Buildout of the Wetland Avoidance and Smart Growth Alternative would not increase population figures beyond what was identified for the PD Land Use Plan with density bonus. Therefore, this Alternative would include a level of development sufficient to finance the extension/provision of sewer service, and would not result in a demand level higher than the PD Land Use Plan with density bonus. As a result, the Buildout of the Wetland Avoidance and Smart Growth Alternative would result in similar impacts to sewer services as compared to the PD Land Use Plan, which were determined in the EIR to be less-than-significant. It should be noted that, given the increased population of this Alternative as compared to the CAC Land Use Plan, sewer service impacts would be increased.

Water Supply

Buildout of the Wetland Avoidance and Smart Growth Alternative would not increase population figures beyond what was identified for the PD Land Use Plan with density

bonus. Therefore, the Alternative would include a level of development sufficient to finance the provision of water supply, and would not result in a demand level higher than the PD Land Use Plan with density bonus. It should be noted that the possibility exists that water demand would be reduced for this Alternative because of the higher densities and the consideration that larger lots, such as those that are more prevalent in the PD Land Use Plan, account for a substantial portion of residential water demand due to the associated maintenance of exterior landscaping. As a result, the Buildout of the Wetland Avoidance and Smart Growth Alternative would result in similar or reduced impacts to water supply as compared to the PD Land Use Plan. It should be noted that, given the increased population of this Alternative as compared to the CAC Land Use Plan, water supply impacts would be increased.

Hydrology and Drainage

The Wetland Avoidance and Smart Growth Alternative would expand the open space setbacks along Elder Creek, and establish a large open space area within the Planning Option D area. The open space areas would increase the amount of space available for addressing flooding and water quality concerns, which would also reduce cumulative impacts to drainage and water quality. In addition, this Alternative would maintain more permeable surface area, which would reduce peak flows. Therefore, the Wetland Avoidance and Smart Growth Alternative would reduce hydrology and drainage impacts, as compared to the CAC and PD Land Use Plans.

Transportation and Circulation

Smart growth principles have been shown to reduce vehicle trips by increasing the viability of mobility options such as walking, cycling, and use of public transit. Furthermore, by improving connectivity and locating different uses in proximity smart growth allows for the combination of trips. Therefore, implementation of the Wetland Avoidance and Smart Growth Alternative may be assumed to result in a reduction in vehicle trips as compared to the PD Land Use Plan, and a reduction in impacts to roadway segments and intersections under both project and cumulative conditions. However, it should be noted that without a comprehensive traffic study, determination of impacts to specific intersections or roadway segments is not feasible. The possibility exists that the larger population associated with the Alternative could result in increased impacts to roadway segments and intersections as compared to the CAC Land Use Plan. Similarly, the Alternatives' incremental contribution to the cumulative impact to State Route 99 and U.S. 50 could also be reduced as compared to the PD Land Use Plan, and could be increased as compared to the CAC Land Use Plan. However, development of the FVGCP in a manner that is more conducive to alternative forms of transportation could also reduce impacts.

Implementation of the Alternative would improve the viability and use of the bicycle, pedestrian, and public transportation networks as compared to both the CAC and PD Land Use Plan. Overall, the Wetland Avoidance and Smart Growth Alternative would

reduce transportation and circulation impacts as compared to the PD Land Use Plan, and marginally increase impacts as compared to the CAC Land Use Plan.

Air Quality

The reduction in total developed area resulting from implementation of the Wetland Avoidance and Smart Growth Alternative would reduce construction related fugitive dust, ozone, and diesel particulate emissions as compared to the PD and CAC Land Use Plans. Uncertainty exists with regard to vehicle use pattern in the Alternative. As a result, determining whether vehicle emissions, carbon monoxide levels, ozone precursor emissions, and the exposure of sensitive receptors would increase or decrease as compared to the CAC Land Use Plan is not feasible without detailed traffic evaluations. It is possible that the Alternative's emissions would be greater than the CAC Plan due to the higher density associated with the Alternative. However, emissions would all be reduced as compared to the PD Land Use Plan, given the implementation of smart growth principles as part of this Alternative's design. Similarly, cumulative impacts to air quality reduced in comparison to the PD Land Use Plan, and the cumulative impacts as compared to the CAC Land Use Plan are not known but may increase.

Climate Change

As outlined above, construction emissions would be reduced by the Wetland Avoidance and Smart Growth Alternative by reducing the total developable area. As a result, construction emissions of greenhouse gases would also be reduced by the Alternative as compared to either the CAC or PD Land Use Plans. Given the larger population, this Alternative's operational emissions of greenhouse gases would increase as compared to the CAC Land Use Plan, and be reduced as compared to the PD Land Use Plan.

Biological Resources

The Wetland Avoidance and Smart Growth Alternative would expand the open space area associated with the project, and would designate as open space substantial areas of the industrial lands located in the Planning Option D area. Substantial wetland and vernal pool resources are located in the Planning Option D area and along Elder Creek in the Option B area. By expanding the open space area associated with the project, the Wetland Avoidance and Smart Growth Alternative would reduce impacts to jurisdictional waters, trees, special-status species, and cumulative loss of biological resources, as compared to either the CAC Land Use Plan or the PD Land Use Plan.

Geology and Soils

By reducing the total developable area, the Wetland Avoidance and Smart Growth Alternative would reduce the potential for adverse impacts related to soil erosion as compared to the CAC and PD Land Use Plans. Impacts associated with expansive soils, liquefaction, seismic activity, and cumulative geological impacts would be similar

to those anticipated for the CAC and PD Land Use Plans because the total number of persons and dwelling units included in this Alternative would be the same number of units anticipated under the PD Land Use Plan with density bonus.

Noise

By reducing the total developable area, the Wetland Avoidance and Smart Growth Alternative would reduce construction noise levels. The creation of higher density centers around major intersections would result in the exposure of future residents to existing noise sources; however, design considerations would ensure that such impacts would not be adverse as the future multi-family uses would not have sensitive outdoor areas located in proximity to the surrounding streets. Rather, these multi-family uses would contain internally located common areas, which are shielded by the buildings. In addition, the anticipated reduction in vehicle trips as compared to the PD Land Use Plan would also reduce vehicle generated noise levels.

This Alternative would increase the number of residents in the Mather Airport Policy Area, which would increase the number of residents exposed to aircraft overflights; however, it is important to note that the entire FVGCP area is located outside of the 60 dB CNEL noise contour associated with the airport. Under this Alternative, dense residential areas would be concentrated within existing urban corridors, which would be consistent with the County's Smart Growth principles, and would be expected to create fewer noise impacts to sensitive receptors by potentially reducing total traffic noise as compared to the PD Land Use Plan. As noted above, although uncertainties exist with regard to the Alternative's anticipated traffic patterns, it is anticipated that the Alternative would result in increased noise levels as compared to the CAC Land Use Plan.

Cultural Resources

Implementation of the Wetland Avoidance and Smart Growth Alternative would reduce impacts to unknown archaeological resources as compared to the CAC and PD Land Use Plan by reducing the total developable area, which would also reduce the potential for grading and excavation to unearth archaeological resources. By reducing some project-level impacts, the Wetland Avoidance and Smart Growth Alternative would also reduce cumulative impacts to cultural resources. Therefore, this Alternative would be expected to result in fewer impacts to cultural resources, as compared to both the PD Land Use Plan and the CAC Land Use Plan.

Hazardous Materials

The Wetland Avoidance and Smart Growth Alternative would include increased open space areas, which would result in the development/disturbance of a smaller portion of the project area. Therefore, under this Alternative, there would be a reduced likelihood, as compared to the project, that any potentially contaminated soil in the area (via the previous use of pesticides or other chemicals) would become exposed and adversely affect construction workers or future residents. Therefore, this Alternative would result in

fewer impacts related to hazardous materials, as compared to both the CAC and PD Land Use Plans.

Population and Housing

The Wetland Avoidance and Smart Growth Alternative would result in population growth equal to or less than the PD Land Use Plan with density bonus, which the DEIR has found to be consistent with anticipated growth. In addition, the inclusion of nodes containing increased housing densities would improve the ability of the project area to achieve goals related to housing balance and affordable housing. Therefore, implementation of the Alternative would reduce impacts to population and housing, as compared to both the CAC and PD Land Use Plans.

Agricultural and Mineral Resources

Similar to the CAC and PD Land Use Plans, the Wetland Avoidance and Smart Growth Alternative would convert the majority of the FVGCP area to non-agricultural uses. Some open areas of this Alternative would be specifically dedicated to the preservation of wetland resources, such as the large open space area established in Planning Option D. However, these preservation areas would preclude resource extraction activities. Overall, this Alternative would be expected to result in a similar amount of restrictions imposed on resource extraction.

Aesthetics

The Wetland Avoidance and Smart Growth Alternative would increase residential density adjacent to two major intersections; however, the change would not result in the degradation of the visual character or substantial increases in light. In addition, the increased open space areas under this Alternative would provide scenic areas, which could improve the aesthetics of the areas in which they are located by creating viewsheds along Elder Creek and into the Planning Option D area. Therefore, the Wetland Avoidance and Smart Growth Alternative would be expected to result in fewer impacts to aesthetics, as compared to both the PD and CAC Land Use Plans.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In order to assist the Lead Agency, an EIR typically identifies the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. In addition, §15126(d)(2) of the CEQA Guidelines states that “if the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.”

For this project, the environmentally superior alternative would result in development of the FVGCP under the Wetland Avoidance and Smart Growth Alternative. As compared to the CAC Land Use Plan, the Wetland Avoidance and Smart Growth Alternative would

reduce impacts to ~~parks and recreation,~~ hydrology and drainage, alternative modes of transportation, construction emissions, biological resources, soil erosion, construction noise, archaeological resources, affordable housing and housing balance, and aesthetics. It should be noted that while the analysis shows some increases in impacts as compared to the CAC Land Use Plan due to the increase in total population. In addition, several of the impacts in the areas of traffic and circulation, air quality, and noise are identified as “unknown” as substantial uncertainty exists as to whether the traffic reducing effects of the Smart Growth design would offset the increase in population.

As compared to the PD Land Use Plan, the Wetland Avoidance and Smart Growth Alternative would reduce impacts to school facilities, water supply, ~~parks and recreation,~~ hydrology and drainage, transportation and circulation, alternative modes of transportation, air quality, climate change, biological resources, soil erosion, construction noise, archaeological resources, affordable housing and housing balance, and aesthetics. It should be noted that while the analysis shows increases in impacts in the areas of noise, the mitigation measures identified in Chapter 14, Noise, would ensure that the impact remains less-than-significant. In addition, the impact identified to mineral resources is the same impact that would occur through implementation of the CAC Land Use Plan.

The Wetland Avoidance and Smart Growth Alternative would result in a mixture of increased and decreased impact levels. Overall, the Wetland Avoidance and Smart Growth Alternative would reduce more impacts than would be increased as compared to the PD Land Use Plan, and the increased impacts identified with respect to the CAC Plan are in those areas which are most strongly affected by increasing population densities (public services, sewer service, etc.). However, increased land use densities is considered to be one of the primary ways of reducing overall environmental impacts by reducing the total area affected by urban development and creating living environments that are more conducive to alternative transportation methods. As a result, the Wetland Avoidance and Smart Growth Alternative is the Environmentally Superior Alternative.

4 LAND USE

INTRODUCTION

The purpose of the Land Use chapter is to examine the proposed project's compatibility with existing and planned land uses in the area. Consistency with applicable General Plan goals and policies is also evaluated. Documents referenced to prepare this section include the *Sacramento County General Plan, Sacramento County Zoning Code, South Sacramento Community Plan,* and the *Vineyard Community Plan.*

ENVIRONMENTAL SETTING

Section 15125 of the CEQA Guidelines states that "an EIR must include a description of the physical environmental conditions in the vicinity of the project […] and shall discuss any inconsistencies between the proposed project and applicable general plans and regional plans." The following provides the existing land uses in the Florin-Vineyard Gap Community Plan (FVGCP) area, as well as the existing plans and policies that guide the development of the FVGCP area.

PROJECT LOCATION

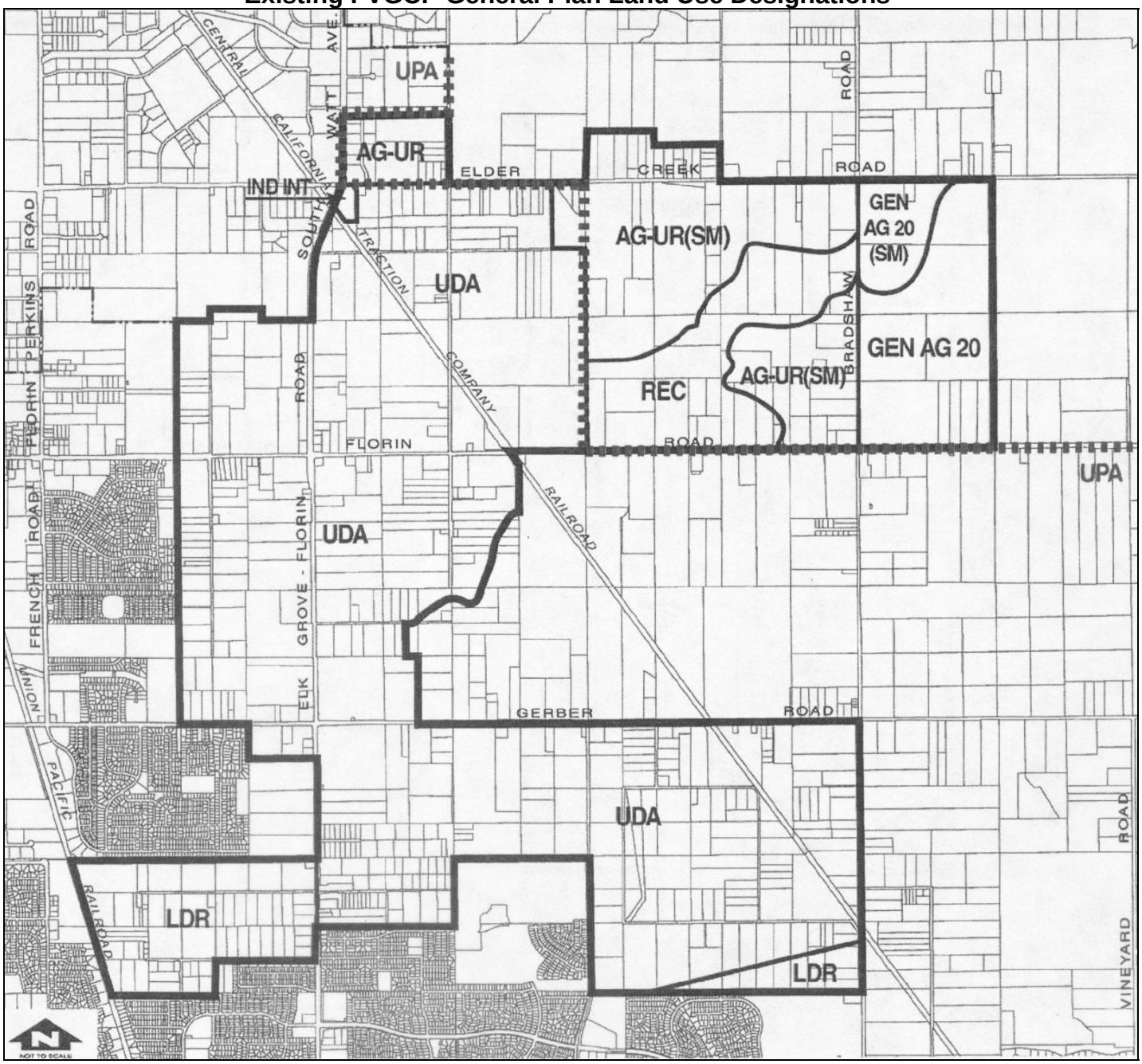
The FVGCP project site consists of approximately 3,766 ± acres, located in both the South Sacramento and Vineyard community planning areas, and generally described as follows: south of Elder Creek Road and the Sacramento City limits; west of Bradshaw Road, excluding the North Vineyard Station Specific Plan area; north of Vintage Park Drive, and the developed neighborhoods of Churchill Downs and Vintage Park; and east of the Union Pacific Railroad tracks, and those developed neighborhoods of Tiogawoods, Florin Town, and Sunrise Florin.

EXISTING GENERAL PLAN LAND USE DESIGNATIONS

The FVGCP area is within Sacramento County and is designated by the General Plan as follows (see Plate LU-1):

Urban Development Area (UDA): The Urban Development Area designation indicates where the County will conduct studies leading to the appropriate configuration of urban land uses for the area. The Urban Development Area differs from the Agricultural-Urban Reserve designation in that development in the Urban Development Area is anticipated within the 20-year planning period.

Plate LU-1
Existing FVGCP General Plan Land Use Designations



Low Density Residential (LDR): This designation provides for areas of predominantly single-family housing with some attached housing units. The designation allows urban densities between one and twelve dwelling units per acre (du/ac), resulting in population densities ranging from approximately 2.5 to 30 persons per acre. Typical low-density development includes detached single-family homes, duplexes, triplexes, four-plexes, townhouses, lower density condominiums, cluster housing, and mobile home parks.

Industrial Intensive (IND INT): This land use designation allows for manufacturing and related activities including research, processing, warehousing, and supporting commercial uses, the intensive nature of which require urban services. Industrial Intensive areas are located within the urban portion of the County and receive an urban level of public infrastructure and services. Floor Area Ratios range from 0.15 to 0.80.

Recreation (REC): The Recreation designation provides areas for active public recreational uses, including community parks, County parks, and activity areas within the American River Parkway. Some facilities types are too small or numerous to be identified on the Land Use Diagram, but they may be in the text of the Plan mapped at a more detailed scale.

The Recreation land use designation may also apply to lands within floodplains in urbanizing areas. Pursuant to adoption of a Master Drainage Plan it would be appropriate to modify the Recreation designation to reflect the more precise land use designations established in the Master Drainage Plan.

General Agriculture - 20 Acres (GEN AG 20): This designation identifies land that is generally suitable for agricultural production with the specific intent to provide an opportunity for starter farms or large hobby farms. Much of the land in this category is classified as "statewide in significance", with soils generally in the class III and IV range. Approximately 30 percent of the land in this category is primarily suitable for grazing. The General Agriculture (20 acres) designation allows single-family dwelling units at a density no greater than 20 acres per unit. Uses other than agricultural production are not permitted.

Agricultural-Urban Reserve (AG-UR): The Agricultural-Urban Reserve designation identifies areas for urban expansion after the 20-year planning period. One large area given this designation is reserved for aggregate resource mining. Areas designated Agricultural-Urban Reserve will be evaluated for their development potential when the level of growth in the planned urban areas justifies their need, mining is completed, and the area is restored. Because most of this land is intended for mining the sites will not receive additional urban services (e.g., water and sewer systems) above the level existing when the land was first designated. Further, land divisions incompatible with orderly and well-planned future urban development are not permitted.

Combining Land Use Designations

Combining Land Use designations recognize the underlying zoning as the guide to land uses which are permitted on any particular piece of property. This approach preserves selected natural resources without imposing unnecessary restrictions on the use of the land.

Aggregate Resource Area (ARA): The purpose of the Aggregate Resource Area combining designation is to identify areas with valuable mineral resources and protect those resources as open space until the area is mined. While surface mining is an industrial activity, its locational requirements are dependent upon the physical location of aggregate resources. Specific policies apply to these areas that encourage the conservation and efficient use of mineral resources, while ensuring the maximum feasible protection of the environment. This land use designation is combined with the following designations listed above: Intensive Industrial, Agricultural-Urban Reserve, and General Agriculture (20 acres). These areas may be ultimately reclaimed for residential, industrial, or other land uses. (Note: The ARA combining designation is shown as “SM” on Plates LU-1 and LU-10.)

Surrounding General Plan Land Use and Designations

The FVGCP shares a border with the City of Sacramento. In addition, a portion of the FVGCP is located within the City of Sacramento Sphere of Influence (See Figure LU-2). The City of Sacramento General Plan Land Use Map shows Heavy Industrial and Warehouse, Rural Estate, and County Mixed Residential uses adjacent to and within the FVGCP. County Mixed Residential is a descriptive designation as opposed to a designated land use.

As shown in Plate LU-3, the Sacramento County General Plan Land Use Map shows industrial and aggregate mining areas are located north of the FVGCP. Residential development currently exists to the west and southwest of the FVGCP area. Agricultural lands exist to the northeast of the planning area. The North Vineyard Station Specific Plan, Vineyard Springs Comprehensive Plan, and agricultural areas are located east of the project area.

The following land uses surrounding the Florin Vineyard Gap Community Plan area have been designated by the City of Sacramento and Sacramento County General Plans. It should be noted that each of the following land use designations include an indication as to whether the designation is from the City of Sacramento General Plan or the Sacramento County General Plan.

Plate LU-2
City of Sacramento General Plan Designations

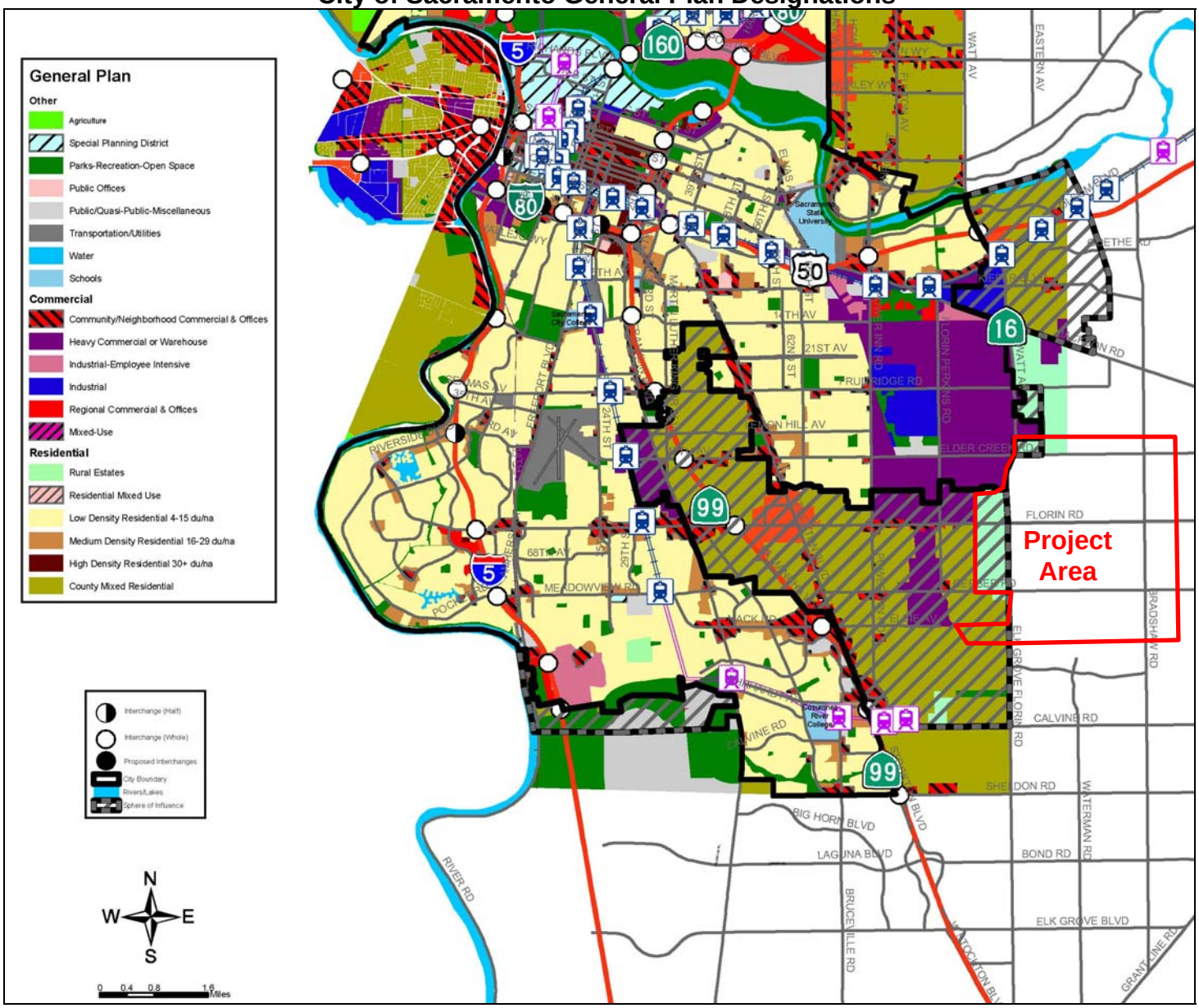
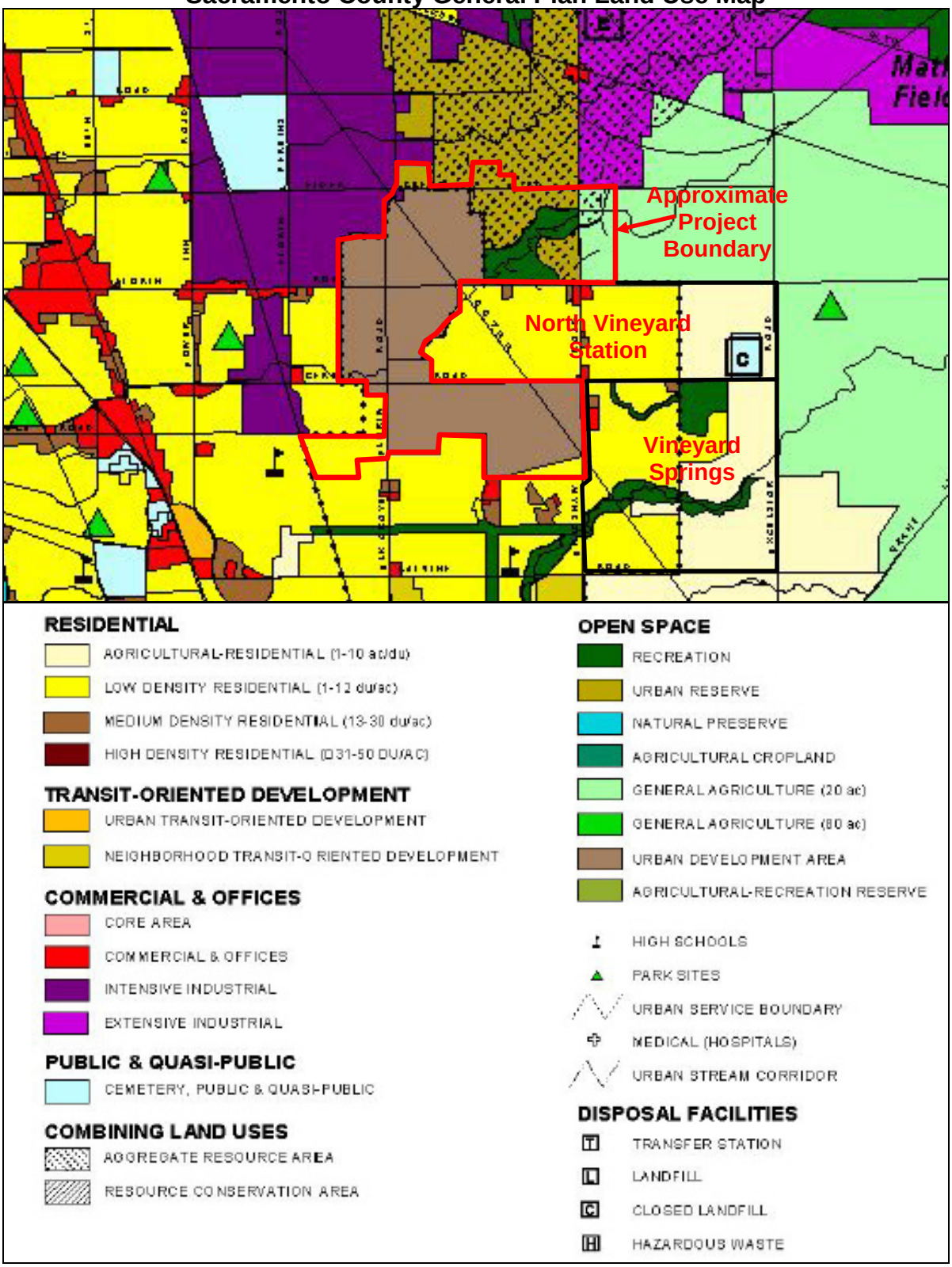


Plate LU-3
Sacramento County General Plan Land Use Map



North

Agricultural-Urban Reserve (AG-UR) (Sacramento County): The Agricultural-Urban Reserve land use designation is described above.

Industrial Intensive (IND INT) (Sacramento County): The Industrial Intensive land use designation is described above.

Industrial Extensive (IND EX) (Sacramento County): This designation allows activities that require large areas of land and do not require urban levels of services. Extensive Industrial areas are not located within the urban portion of the County and do not need urban services. An urban level of public infrastructure and service will not be extended during the planning period. Floor Area Ratios range from 0.15 to 0.40.

Aggregate Resource Area (ARA) (Sacramento County): The Aggregate Resource Area land use designation is described above.

Heavy Commercial or Warehouse (City of Sacramento): Includes lands developed with heavy commercial (printing, bakeries, laundries etc.), warehousing/distribution, and some light manufacturing activities.

Rural Estate (City of Sacramento): This designation is intended for property with environmentally sensitive conditions or where more varied housing types are need to balance residential opportunities within a community. The density ranges for this designation are from one unit per 0.5 to four net acres. Typical development on these sites consists of small ranchettes or single family homes in rural settings.

East

Low Density Residential (LDR) (Sacramento County): The Low Density Residential land use designation is described above.

Medium Density Residential (MDR) (Sacramento County): The Medium Density Residential designation provides for areas of attached units, including apartments and condominiums, along transit corridors and throughout the urban area. This designation establishes urban densities between 13 and 30 du/ac, resulting in population densities ranging from approximately 32.5 to 73.5 persons per acre. Medium density development includes apartments, condominiums, and group housing. Medium density housing uses are appropriate near commercial areas, transportation and transit corridors, and employment centers.

Commercial and Offices (C-O) (Sacramento County): The Commercial and Office designation provides for a full range of neighborhood, community and regional shopping centers and a variety of business and professional offices. Uses include locally-oriented retail, professional offices, and regional commercial operations. The location and size of commercial areas is based upon accessibility, historic development patterns, community and neighborhood needs, and minimization of land use conflicts. Ideally,

commercial areas are designed to integrate with the community, including the provision for pedestrian amenities. The standard for commercial Floor Area Ratio is between 0.25 and 2.5.

General Agriculture (20 Acres) (AG-20) (Sacramento County): The General Agriculture land use designation is described above.

South

Low Density Residential (LDR) (Sacramento County): The Low Density Residential land use designation is described above.

West

Low Density Residential (LDR) (Sacramento County): The Low Density Residential land use designation is described above.

Heavy Industrial and Warehouse (City of Sacramento): The Heavy Industrial and Warehouse land use designation is described above.

Rural Estate (City of Sacramento): The Rural Estate land use designation is described above.

County Mixed Residential (City of Sacramento): The designation is a descriptive designation, not a specified land use.

Commercial and Offices (C-O) (Sacramento County): The Commercial and Office land use designation is described above.

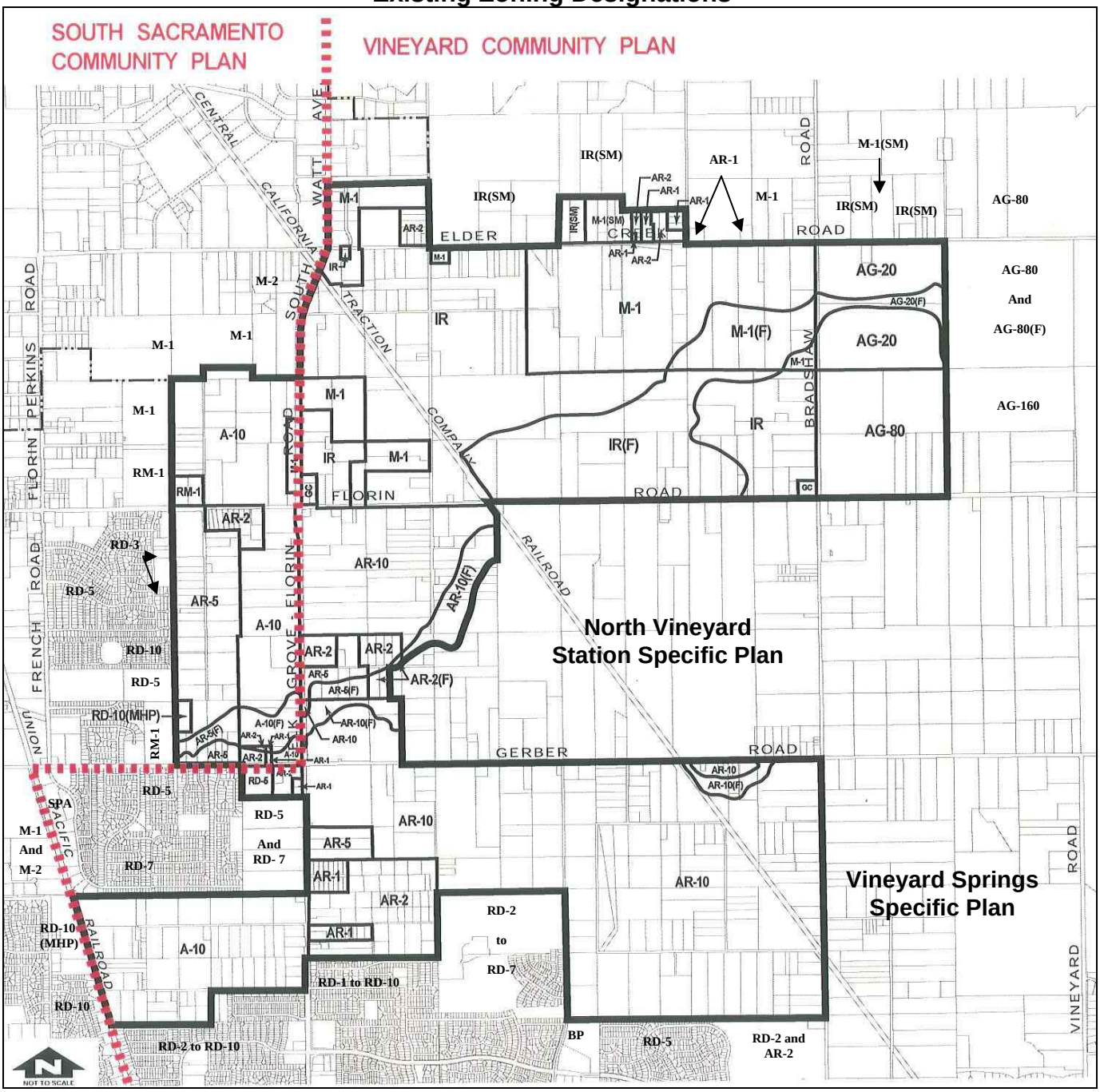
Industrial Intensive (IND INT) (Sacramento County): The Industrial Intensive land use designation is described above.

Existing Zoning Designations

Zoning for the project area consists of a variety of designations (See Plate LU-4). The complete list of current zoning for the project area is described as follows in the County Zoning Code:

Agricultural (AG): The Agricultural Land Use Zones established in this Chapter are designed to promote and protect the public health, safety and general welfare. The Board of Supervisors in establishing these zones finds that these zones with the uses and regulations provided in this Code are consistent and compatible with the objectives, policies, general land uses and programs specified in the Sacramento County General Plan, and are adopted for the following purposes:

Plate LU-4
Existing Zoning Designations



(a) To eliminate the encroachment of land uses which are incompatible with the long-term agricultural use of land.

(b) To preserve the maximum amount of the limited supply of agricultural land in order to conserve the County's economic resources which are vital for a healthy agricultural economy within the County.

(c) To discourage the premature and unnecessary conversion of agricultural land to urban uses, which will benefit the residents of urban areas and which will prevent unnecessary increases in the costs of providing community services to urban residents.

(d) To assure the preservation of agricultural lands which have a definite value as open space and for the production of agricultural products, so as to preserve an important physical, social, aesthetic and economic asset of the residents of the County.

(e) To encourage the retention of sufficiently large agricultural lots to assure maintenance of viable agricultural units.

The Agricultural Land Use Zones are subdivided into the following categories:

Agricultural (AG-20) shall have gross area requirements of twenty (20) acres.

Agricultural (AG-40) shall have gross area requirements of forty (40) acres.

Agricultural (AG-80) shall have gross area requirements of eighty (80) acres.

Agricultural Residential (AR): The Agricultural-Residential Land Use Zones established in this Chapter are designed to promote and protect the public health, safety and general welfare. The Board of Supervisors in establishing these zones finds that these zones, with the uses and regulations provided in this Code, are consistent and compatible with the objectives, policies, general land uses and programs specified in the Sacramento County General Plan; and are adopted for the following purposes:

(a) To establish living areas within the County where development is limited to low density concentrations of one-family dwellings.

(b) To limit the number of permitted nonresidential uses so as to promote and encourage a suitable environment for family life on parcels of land larger than generally is provided in residential zones.

(c) To protect estate areas against fire, explosions and other hazards, and against offensive noises, odors, glare and other objectionable influences.

(d) To provide adequate open space and access of light and air for privacy by controls over the spacing and height of buildings.

(e) To permit those religious, educational, recreational and public cultural facilities which serve the needs of the nearby residents and which generally perform their own activities more effectively in a residential environment and which do not create objectionable influences.

(f) To promote the most desirable use of land and direction of building development in accord with the General Plan, to promote stability of land development, to conserve the value of land and improvements and to protect the County's tax revenues.

(g) To regulate the development of land when not served with both public water supply and public sewerage facilities.

(h) To avoid undue concentration of population and overcrowding of land to lessen congestion in the streets.

The Agricultural Residential Land Use Zones are subdivided into the following categories:

Agricultural Residential (AR-1) shall have a minimum gross area of one (1) acre.

Agricultural Residential (AR-2) shall have a minimum gross area of two (2) acres.

Agricultural Residential (AR-5) shall have a minimum gross area of five (5) acres.

Agricultural Residential (AR-10) shall have a minimum gross area of ten (10) acres.

The Agricultural Residential Land Use Zones are combined with the following land use:

Flooding (F): The *(F)* Combining Zone as shown on the Comprehensive Zoning Plans is intended to comprise all land covered by rivers, creeks, and streams and land subject to flooding within the unincorporated area of the County. The Board of Supervisors in adopting the regulations in this Article recognizes that:

(a) The promotion of the orderly development and beneficial use of lands subject to recurrent flooding is necessary if the potential property damage, which results from improper development is to be minimized.

(b) There is a need to protect current and future occupants of land subject to flooding from the physical damage of flooding.

(c) The health, general welfare and safety of the public of the County as a whole requires that lands subject to flooding be strictly regulated as to the uses permitted on the land and the amount of open space which separate buildings and structures.

(d) Inundation frequently causes extensive property damage.

(e) Strict regulation of flood lands is necessary to protect prospective buyers of land from deception as to the utility of the land within the flood zones.

Residential (RD): The Residential Land Use Zones established in this Chapter are designed to promote and protect the public health, safety, and general welfare. The Board of Supervisors in establishing these zones finds that these zones with the uses and regulations provided in this Code are consistent and compatible with the objectives, policies, general land uses and programs specified in the Sacramento County General Plan; and are adopted for the following purposes:

(a) To provide sufficient space in appropriate locations for residential development to meet the housing needs of the County's present and expected future population with due allowance for the need for a choice of sites.

(b) To protect residential areas against fire, explosions, toxic and noxious matter, and other hazards, and against offensive noise, odorous matter, glare, and other objectionable influences.

(c) To protect residential areas, as far as possible, against heavy and through traffic.

(d) To protect residential areas against congestion, by regulating the density of population and the bulk of buildings in relation to the land around them and to one another, and by providing for off-street parking spaces; to require the provisions of open space in residential areas wherever practicable; and thereby to provide a more desirable environment for urban living in a metropolitan area.

(e) To provide for access of light and air and for privacy, by controls over the spacing and height of buildings and other structures.

(f) To provide appropriate space for those educational, religious, recreational, health, and similar facilities which serve the needs of the nearby residents, which generally perform their own activities more effectively in a residential environment, and which do not create objectionable influences.

(g) To encourage the development of more attractive and economic building forms.

(h) To promote the most desirable use of land and direction of building development in accord with the General Plan; to promote stability of residential development so as to protect the character of a district and its

peculiar suitability for particular uses; to conserve the values of land and buildings; and to protect the County's tax revenues.

(i) To provide for the parking and storage of major recreational equipment within designated open spaces.

(j) To provide for State authorized, certified or licensed family care homes, foster homes or group homes as a residential use of property.

The Residential Land Use Zones are subdivided into the following categories:

Residential (RD-5): For subdivision projects of five or more, the maximum density shall not exceed five dwelling units per gross acre of land.

The Residential Land Use Zones are combined with the following land uses:

Mobile Home Park (MHP): The *(MHP)* Combining Zone, as shown on the Comprehensive Zoning Plans, is designed to provide for the development of mobilehome parks, as defined in Section 130-126 of this Code. When combined with the underlying zone, it will provide opportunity for a variety of mobilehome park environments, which are compatible with the communities in which they are placed. In adopting these regulations, the Board of Supervisors recognizes that:

(a) There is a need to afford present and future County residents with increased options for residential living environments.

(b) Mobilehome parks are a potential means for affordable housing.

(c) Mobilehome park densities should be consistent with densities in surrounding areas.

(d) There should be opportunities for design flexibility to permit mobilehome park developments to be responsive to different site conditions, community plan considerations, potential markets, and sizes of mobilehomes.

Mobilehome (RM-1): RM-1 is an Interim Residential Zone. As noted in the County's "Summary of Zoning Classifications," the RM-1 zone permits few uses other than mobilehome parks. The zone contains park development standards including requirements for minimum driveway width, vehicle storage areas, recreational areas, and public street frontage.

Business Park (BP): The Business Park zone is intended to provide an area for business and professional office uses and compatible related uses. This zone is intended to promote a harmonious development of business and professional office areas with adjacent commercial or residential development.

General Commercial (GC): The GC General Commercial zone is intended to provide an area for the general commercial and heavier types of commercial uses, which would not be appropriate in the more restrictive commercial districts. It is intended that this district be used in appropriate locations along major streets or in commercial subdivisions where the uses permitted would not adversely affect the surrounding properties.

Industrial Reserve (IR): As noted in the County's "Summary of Zoning Classifications," the Industrial Reserve zone is essentially an agricultural zone with a minimum parcel size of 20 acres. In this zone many uses including single family residential require a use permit. Future industrial uses are foreseen as appropriate in areas where this zone is applied subject to further review and rezoning.

The Industrial Reserve Land Use Zones are combined with the following land uses:

Flooding (F): The (F) Combining Zone as shown on the Comprehensive Zoning Plans is described above.

Surface Mining (SM): The *(SM)* Combining Zone is designed to protect the mineral resources of Sacramento County from incompatible land use; to manage the mineral resources; to assure the County of an adequate supply of these resources with due consideration for the environment; and to provide for the restoration of mined lands for future use. The goals to be pursued by establishment of this zone include:

(a) That mineral resource areas be protected from preclusive and incompatible land uses.

(b) That surface mining be controlled to provide for protection of the environment.

(c) That surface mining be controlled to protect the public health, safety, welfare, and property values of residents living near surface mining operations.

(d) That provisions be made for the reclamation of mined lands.

Light Industrial (M-1): The M-1 Light Industrial zone is intended to provide for the:

(a) Development of industrial uses which include fabrication, manufacturing, assembly, or processing of materials that for the most part are already in processed form and which do not in their maintenance, assembly, manufacture, or plant operation create smoke, gas, odor, dust, sound, or other objectionable influences which might be obnoxious to persons conducting business or residing in this or any other zone; and

(b) For the development of land uses related to or compatible with the permitted industrial uses.

The Light Industrial Land Use Zones are combined with the following land uses:

Flooding (F): The (F) Combining Zone as shown on the Comprehensive Zoning Plans is described above.

Surface Mining (SM): The (SM) Surface Mining Combining Zone is described above.

Special Planning Area (SPA): The purpose of the SPA designation is to establish a procedure whereby the Board or the Commission may initiate proceedings to regulate property in areas throughout the County area that have unique environmental, historic, architectural, or other features which require special conditions not provided through the application of standard zone regulations. It is recognized that in certain circumstances it may be desirable to provide for a greater range or mixture of uses in an area than would be permitted in the standard land use zones of this Code. It is the purpose of the SPA designation to provide the method for the County to guide the development of such areas so as to preserve such unique characteristics or provide for a broader mixture of land uses when appropriate.

SURROUNDING ZONING DESIGNATIONS

The Sacramento County parcels that are adjacent to the FVGCP include residential, industrial, commercial, and agricultural zoned properties (Plates LU-4, LU-5, and LU-6). As shown in Plate LU-7, the project area is bordered by City of Sacramento parcels that are zoned for industrial uses.

NORTH

As shown in Plate LU-5, the City of Sacramento has zoned properties directly north of the FVGCP under the Light Industrial (M-1) and Heavy Industrial (M-2).

Light Industrial Zone (M-1) (City of Sacramento): This zone permits most fabricating activities, with the exception of heavy manufacturing and the processing of raw materials. In addition, regulations are provided in the M-1(S) zone to provide more attractive and uncrowded developments.

Heavy Industrial Zone (M-2) (City of Sacramento): This zone permits the manufacture or treatment of goods from raw materials. Like the M-1(S) zone, the M-2(S) zone has certain regulations designed to obtain industrial park developments that are in keeping with the modern concept of attractive, landscaped industrial plants.

As shown in Plate LU-4, properties immediately north of the project area are zoned Industrial Reserve (IR), Light Industrial (M-1), Agricultural Residential (AR-1), and Agricultural (AG-80) by Sacramento County. Many of the properties located north of the FVGCP are included in the Surface Mining (SM) combining zone.

Plate LU-5
North Vineyard Station Community Plan Designations

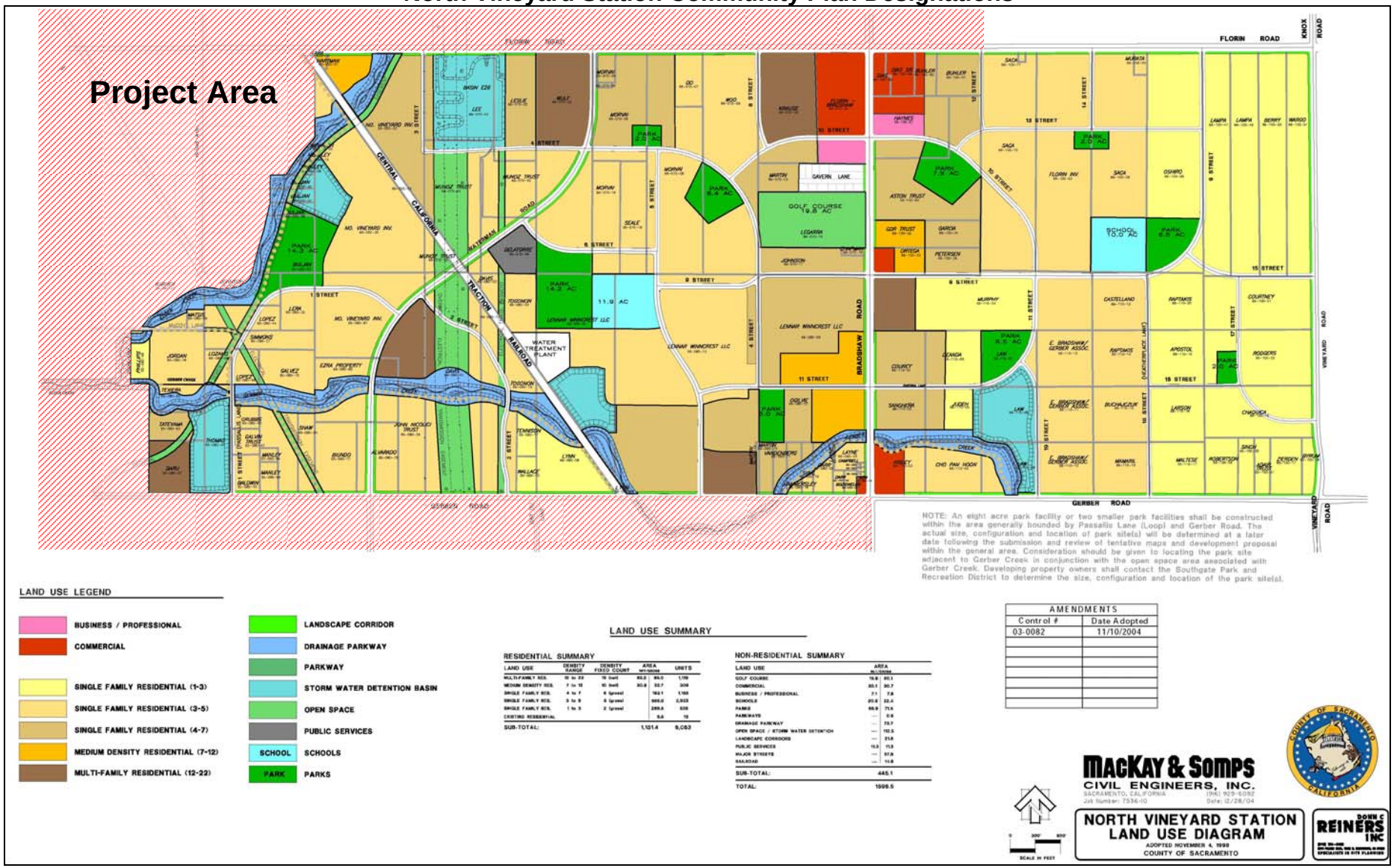


Plate LU-6
Vineyard Springs Comprehensive Plan Designations

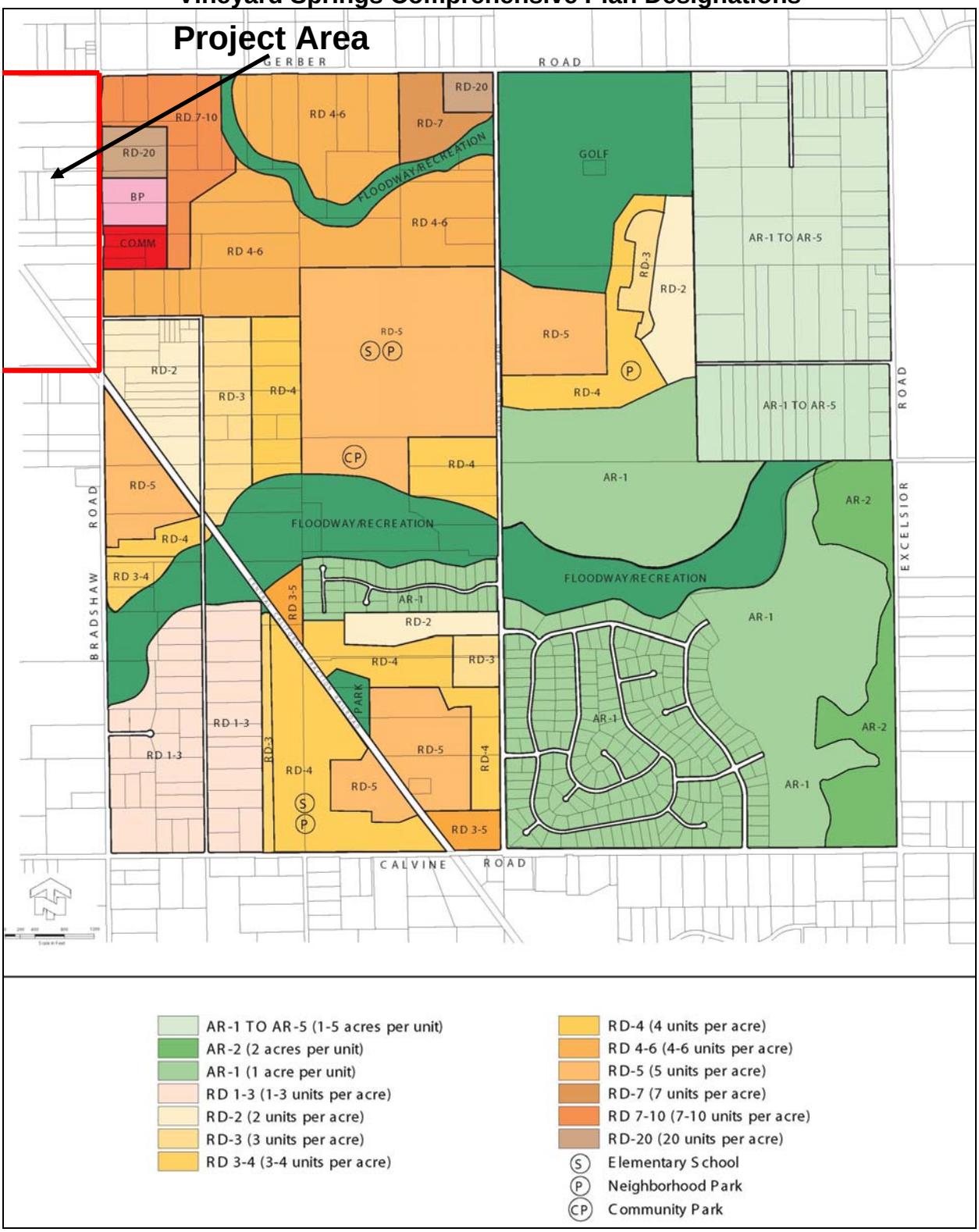
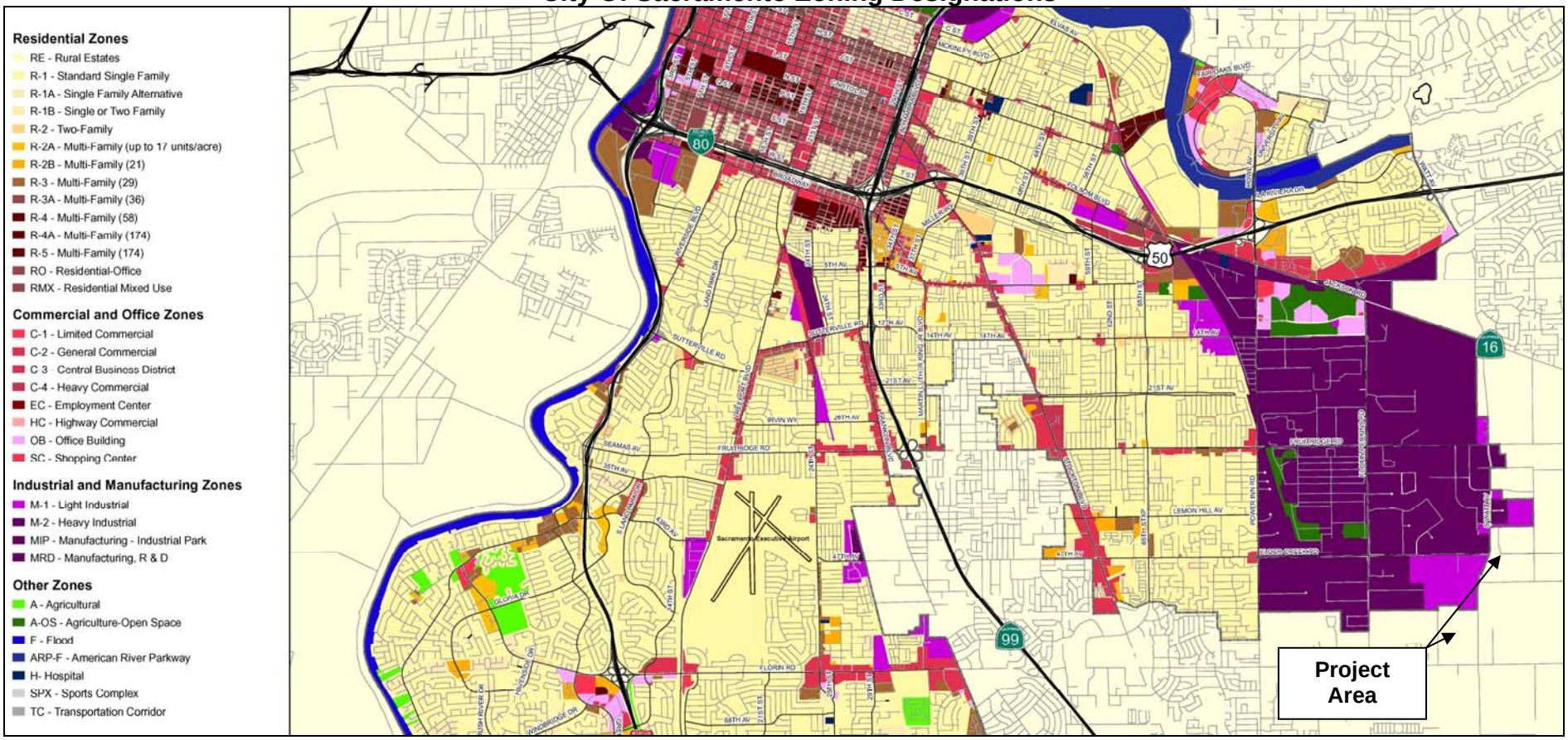


Plate LU-7
City Of Sacramento Zoning Designations



South

As shown on Plate LU-4, properties immediately south of the project area are zoned at Residential (RD) densities ranging from RD-2 to RD-10. The RD-2 parcels are primarily located along the border of the FVGCP area. In addition, parcels are designated Agricultural Residential (AR-2), and Business Park (BP) by Sacramento County.

East

As shown in Plate LU-4, properties located east of the project area are designated Agricultural (AG-80 to AG-160). In addition, the Vineyard Springs and North Vineyard Station areas have been designated under a variety of urban uses as shown in Plates LU-5 and LU-6. The North Vineyard Station Specific Plan is primarily residential with densities ranging from one to 22 units per acre. Commercial and Business Professional uses are located along Bradshaw Road adjacent to the FVGCP. The Vineyard Springs Comprehensive Plan would place Residential (RD-2 to RD-20), Business Park, and Commercial zoned uses along the eastern boundary of the FVGCP.

West

As shown in Plate LU-5, properties directly west of the FVGCP are zoned Light Industrial (M-1) and Heavy Industrial (M-2) by the City of Sacramento. Sacramento County has zoned properties to the east of the project area under various Residential (RD) densities, Industrial (M-1 and M-2), and a Special Planning Area (SPA) is located along the UPRR tracks.

Existing Community Plans

The proposed project is located within both the South Sacramento Area Community Planning Area and the Vineyard Community Planning Area (See Plates LU-8 and LU-9). The South Sacramento Area Community Planning Area was adopted in 1978, and the Vineyard Community Planning Area was adopted in 1985. Community Planning designations are substantially similar to the General Plan designations.

Plate LU-8
South Sacramento Community Planning Area

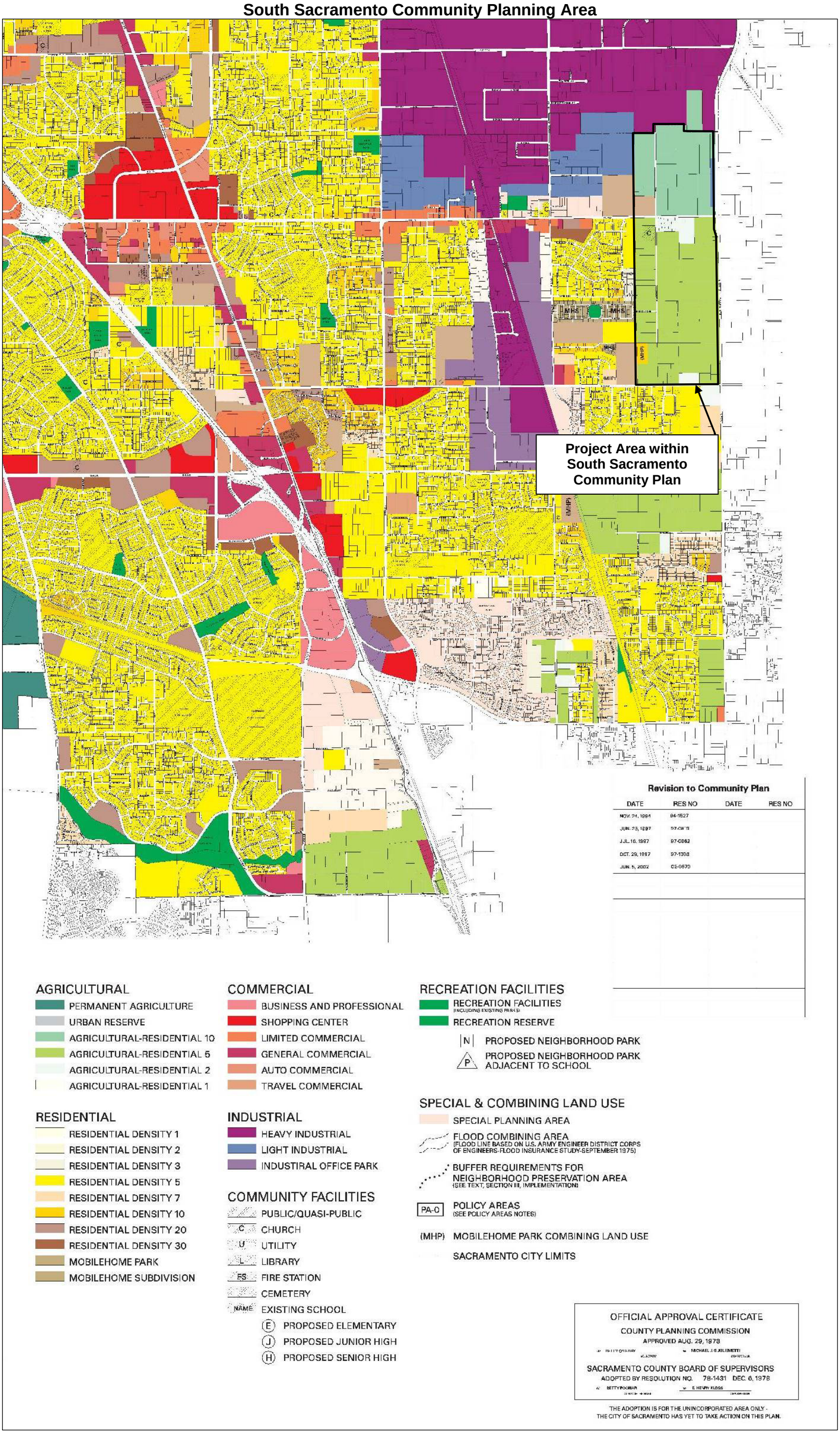
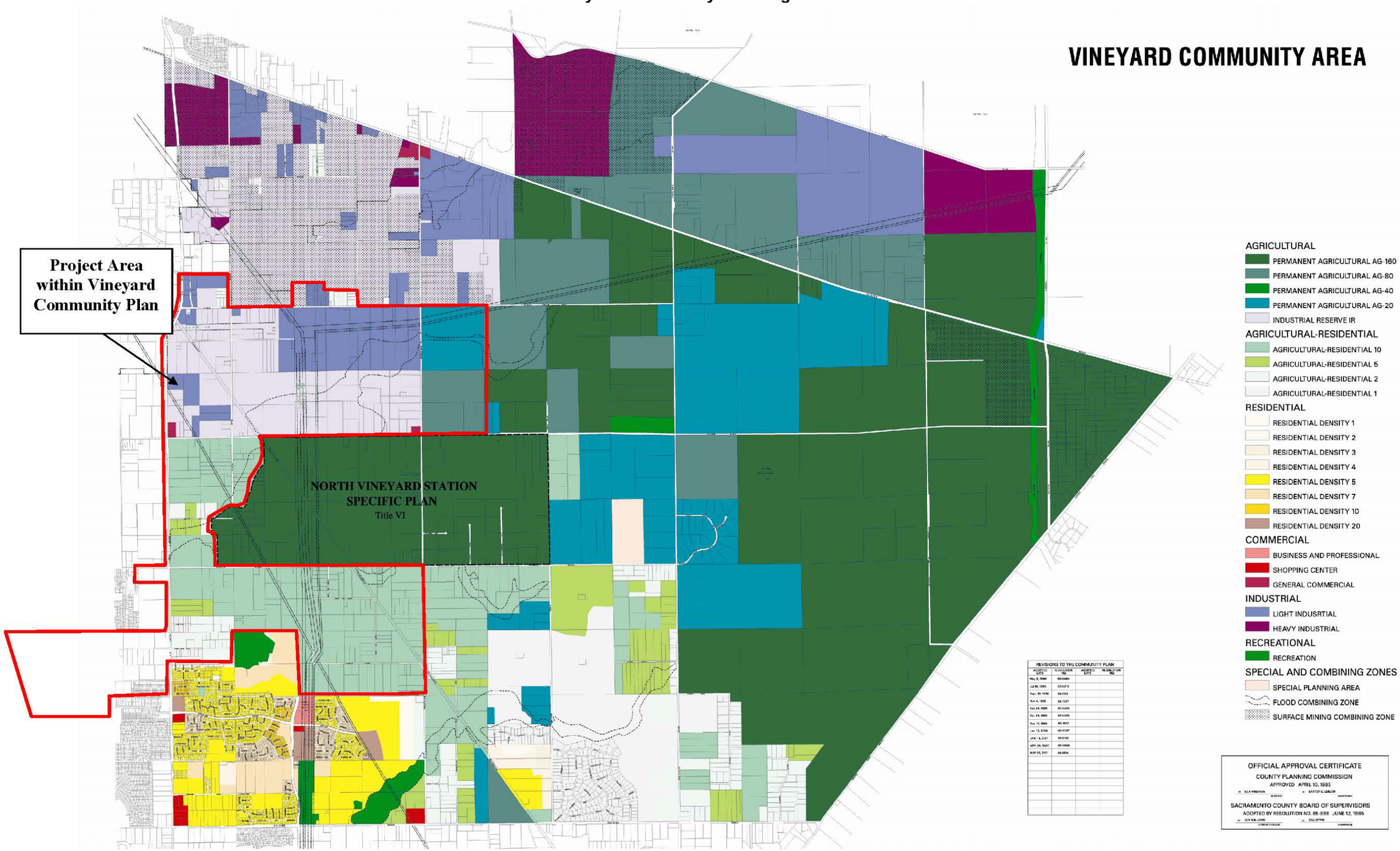


Plate LU-9
Vineyard Community Planning Area



REGULATORY CONTEXT

SACRAMENTO COUNTY GENERAL PLAN

The following are applicable General Plan goals and policies related to land use and planning:

LAND USE ELEMENT

STRATEGIES TO ACCOMMODATE GROWTH

Goal — Accommodate projected population and employment growth in areas where the appropriate level of public infrastructure and services are or will be available during the planning period.

LU-1 — The County shall create redevelopment districts in those areas where deteriorated conditions and blight warrant planned redevelopment.

LU-2 — The County shall give priority to residential development on vacant or underutilized sites within existing urban areas, which have infrastructure capacity available.

LU-3 — Each community planning area containing an existing urban use shall provide within the urbanized portion (excluding urban growth areas) additional residential holding capacity sufficient to meet that community's fair share of a County-wide target of 4,500 units increased holding capacity.

LU-4 — All residential projects involving ten or more units, excluding remainder lots and Lot A's, shall not have densities less than 75% of zoned maximums, unless physical or environmental constraints make achieving the minimum densities impossible, or unless existing zoning is inconsistent with LU-17.

LU-5 — Provide for the development of vacant or underutilized portions of industrial-office parks with medium or high-density residential uses or mixed-use development provided they are located near existing trunk or feeder line networks and are designed so as to be compatible with adjacent uses.

LU-6 — Provide for additional mixed-use development in commercial parking areas near the trunk or feeder line networks where such uses would be compatible with surrounding uses and where parking demand can be appropriately accommodated or structured parking can be constructed.

LU-7 The County shall not approve land use projects which are for noncontiguous development (i.e., leapfrog).

LU-8 Infrastructure financing plans which specify the extent, timing and estimated cost of all necessary infrastructure shall be approved by the Board of Supervisors together with the approval of zoning for any urban uses in urban growth areas. The resulting financing mechanisms shall be implemented prior to the approval of all entitlements in urban growth areas.

LU-9 Specific plans may be prepared for subareas of an urban growth area for the purpose of prioritizing development opportunities. In such cases, the Plan shall have defensible boundaries and address development of all lands within them.

URBAN GROWTH MANAGEMENT STRATEGY

Goal Land use patterns that minimize the impacts of new and existing development while maintaining the quality, character, and identity of neighborhood and community areas.

LU-10 Promote a better balance of employment, neighborhood services, and different housing types by reviewing development projects and the surrounding community and designing new projects wherever feasible so that they maintain or improve the mix of uses in the community.

LU-11 Specific Plans and Community Plans for areas within the Urban Service Boundary should provide a balance of employment, neighborhood services, and different housing types wherever feasible.

LU-12 Depending on its emphasis, a mixed use development should include the following proportions of different uses, shown as percentages of the site area:

USE			
	Retail	50-70%	10-30%	10-30%
	Office	0-20%	50-70%	0-30%
	Residential	20-40%	0-30%	50-80%
	Public	10-30%	10-30%	10-30%

LU-13 Community Plans, Specific Plans, and development projects shall be designed to promote pedestrian movement through direct, safe, and pleasant routes that connect destinations inside and outside the plan or project area.

LU-18 Design new development to be compatible with surrounding development.

LU-19 Incompatible urban land uses should be buffered from one another by methods that retain community character, and do not consume large land areas or create pedestrian barriers.

LU-20 Neighborhood identity should be maintained in existing and developing areas.

LU-21 Support the efforts of individual neighborhoods to maintain their identities through strategies such as Neighborhood Preservation Areas (NPAs) or neighborhood associations. Nothing in this plan is intended to supersede the objectives of these efforts.

LU-42 Future Agricultural-Residential development shall be limited to existing developed and infill Agricultural-Residential lands designated on the Land Use Diagram and such additional areas adjacent to existing developed lands to act as a buffer to new urban areas or as a buffer at the Urban Service Boundary as are consistent with LU-43.

LU-43 Community and Specific Plans prepared for urbanizing areas may provide for additional Agricultural-Residential areas provided they are functionally integrated with other urban uses in the context of the Plan.

LU-44 Approval of all future Agricultural-Residential entitlements shall encompass fair share as a concept to equitably apportion all infrastructure costs consistent with General Plan goals.

LU-45 The County supports development proposals that divide vacant and developed AR/A-1 and AR/A-2 zoned parcels inside the USB to their maximum zoning density.

LU-46 The County supports rezoning of lands within existing Agricultural-Residential areas inside the USB to create additional AR/A-1 and AR/A-2 zoned land uses when it is consistent with plans to provide for urban uses, appropriate infrastructure is available or planned, is in line with historic demand levels, and consolidates rural communities.

LU-47 Community and Specific Plans for Agricultural-Residential areas shall provide for the extension of public sewer and water systems to one and two acre lots.

LU-48 All new AR/A-1 and AR/A-2 lots created within the USB shall either connect to or provide for ultimate connection to the public sewer and water systems.

LU-49 Prohibit septic system replacement when sewers become available.

RURAL GROWTH MANAGEMENT STRATEGY

LU-59 Expansion of urban uses in rural areas shall be limited to the established Delta communities of Freeport, Hood, Courtland, Locke, and Walnut Grove and to specific small expansions which support the agriculturally and recreationally based economies of the Delta.

LU-60 Sewer and water treatment and delivery systems shall not provide for greater capacity than that authorized by the General Plan.

LU-61 The County will not support the development of new towns in rural areas extending beyond the Urban Services Boundary.

SOUTH SACRAMENTO COMMUNITY PLAN GOALS AND POLICIES

The following are applicable South Sacramento Community Plan goals and policies related to land use and planning:

1. A major concept of this plan is to place a great emphasis on in-filling (development of vacant urban areas within areas partially urbanized).

2. Special effort must be made to encourage the contiguous growth from existing urban development outward. The principal reason for this is to eliminate “Leap Frog” development which increases costs of development because of the need to extend public services and other services beyond vacant lands. The question of, “Is a proposal contiguous or not,” must be answered at the time a proposal for development is being considered.

3. Areas in the Urban Reserve category are planned for agricultural use for the life of the plan (5 to 10 years) and are proposed for future urban use when a real need has been established. Conversion to urban use should not occur until a full plan restudy has been completed. Under some circumstances, such as only 20 or 30 acres proposed for urban use, an intermediate plan update may be sufficient.

VINEYARD COMMUNITY PLAN POLICIES

The following are applicable Vineyard Community Plan goals and policies related to land use and planning:

AGRICULTURAL-RESIDENTIAL POLICIES AND PROGRAMS

AR 1. Buffer, through incremental zoning, agricultural-residential development from industrial and agricultural land use areas.

AR 2. Parcels splits in agricultural/residential areas that result in lots of less than 5 gross acres are not consistent with the Vineyard Community Plan, except in the following areas:

a. in areas adjacent to urban growth areas, 2-acre parcels may be appropriate.

b. in areas where existing parcelization is 2 acres or less, creation of new 2-acre parcels may be appropriate.

Commercial/Industrial Policies and Programs

CI 1. Industrial land use proposals should be carefully reviewed to ensure compliance with AICUZ and APZ compatibility standards.

CI 2. Industrial proposals should include efficient site plans which reflect the rural character of Vineyard, include measures to ensure efficient public service facility provision, and avoid potential compatibility conflicts.

CI 4. Commercial/industrial development must be adequately buffered from adjacent residential or agricultural uses with screening, open space, or less dense development, or other means.

Future Urbanization Policies and Programs

FU 1. Buffer, through incremental zoning, residential development from industrial and agricultural land use areas.

FU 2. Urban residential development will only be considered in those areas contiguous to approved urban uses and designated for future urban growth, and only when negative impacts upon the Vineyard community are mitigated to the greatest extent possible.

FU 7. Urban land use proposals should minimize encroachment upon open space areas and maximize infrastructure effectiveness through measures such as clustered design and contiguous development.

Impacts and Mitigation Measures

Standards of Significance

For the purposes of this Draft EIR, impacts are considered significant if implementation of the proposed project would:

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, Community Plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Create physical conflicts with existing or planned land uses in neighboring areas caused by factors such as noise or dust.

METHOD OF ANALYSIS

The land use impact evaluation qualitatively compares the uses proposed for the project to the existing and other proposed uses in the vicinity of the project area in order to determine if proposed land uses are compatible with existing or proposed uses. The determination of compatibility is based on the anticipated environmental effects of proposed uses and the sensitivity of adjacent uses to those effects. The evaluation also assesses the consistency of the proposed project with the goals and policies of the Sacramento County General Plan, the South Sacramento Community Plan, Vineyard Community Plan, and the Sacramento County Zoning Code.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

IMPACTS RELATED TO COMPATIBILITY WITH SURROUNDING LAND USES.

CAC LAND USE PLAN/PD LAND USE PLAN

The determination of compatibility of land uses typically relies on a general discussion of the types of adjacent uses to a proposed project and whether any sensitive receptors exist either on the adjacent properties or are associated with the proposed project. Incompatibilities typically exist when uses such as residences, parks, churches, and schools are located adjacent to more disruptive uses, such as heavy industrial, major transportation corridors, and regional commercial centers, where noise and traffic levels may be high. The identification of incompatible uses occurs if one land use is anticipated to be disruptive of the existing or planned use of an adjacent property. Plates LU-10 to LU-12 show the proposed General Plan designations, Citizen's Advisory Committee (CAC) Land Use Plan, and Planning Department (PD) Land Use Plan. The CAC Land Use Plan and PD Land Use Plan have been designed to ensure that the proposed uses would be compatible with each other. Furthermore, development standards placed on new development would ensure that uses would not result in adverse impacts to adjacent uses within the FVGCP.

Therefore, the following discussion will focus on existing and planned uses along the north, south, east, and west borders of the FVGCP. It should be noted that the compatibility discussions for both the North Vineyard Station Specific Plan and Vineyard Springs Comprehensive Plan are included in the discussion of land uses to the east.

Plate LU-10
Proposed General Plan Designations

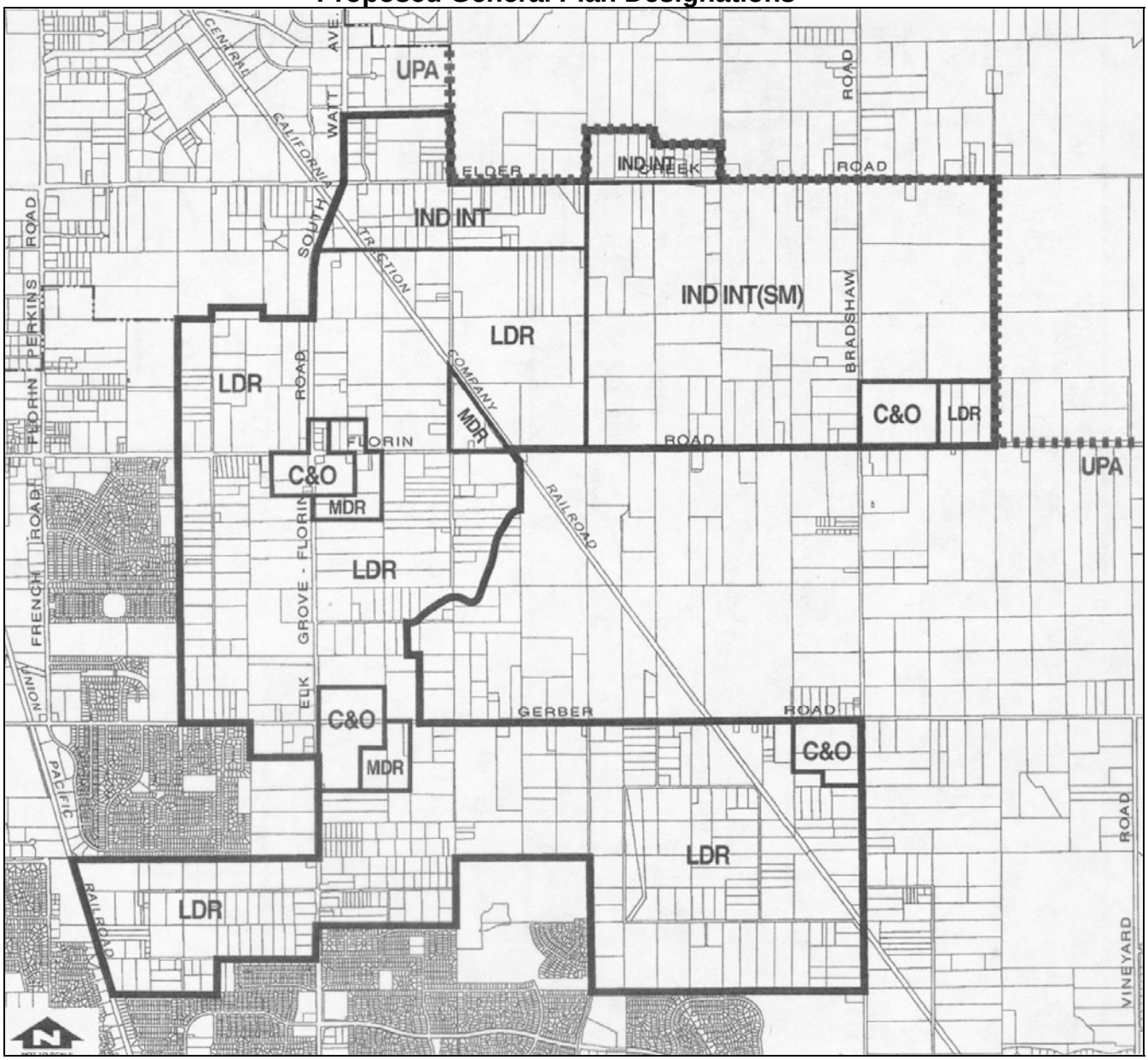


Plate LU-11
CAC Land Use Plan - Proposed Designations

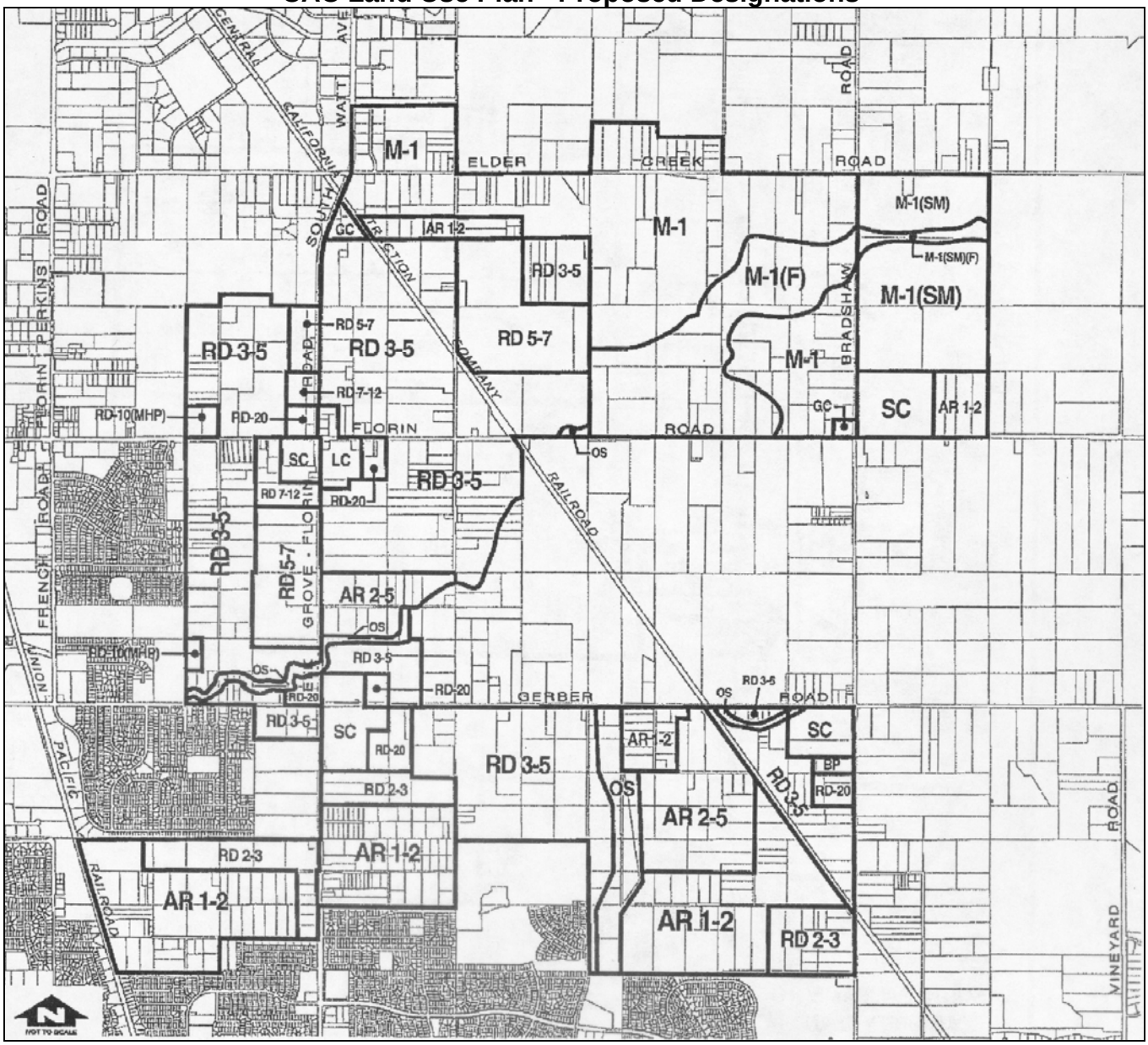
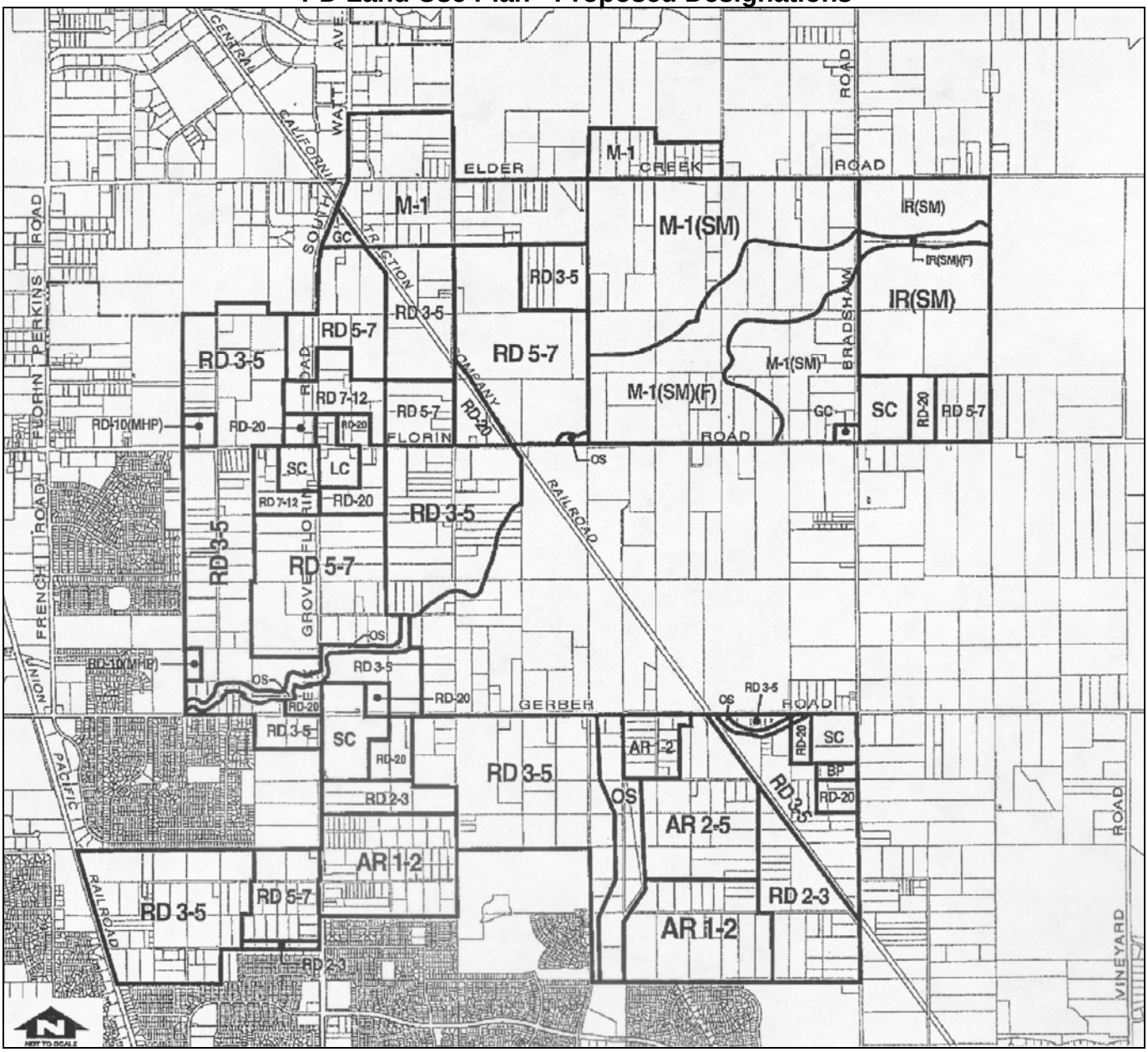


Plate LU-12
PD Land Use Plan - Proposed Designations



North: Development in accordance with both the CAC and PD land use plans would potentially result in a conflict between the proposed residential uses in the northwestern area of the FVGCP and the industrial uses located to the north and west in the City of Sacramento. However, the Zoning Code includes setback and noise requirements that would serve to minimize adverse impacts as a result of the implementation of either plan. Conflicts between the industrial uses proposed for the FVGCP and the industrial and agricultural uses located north of the FVGCP are not anticipated.

East: Buildout of both the CAC and PD land use plans would extend the Urban Services Boundary (USB) to the east and would place residential and industrial uses adjacent to agriculturally designated areas along the northeastern boundary of the FVGCP. Under the SM combining zoning designation, the industrial uses would primarily involve aggregate mining. Aggregate mining would not adversely affect the existing agricultural uses (primarily cattle grazing) adjacent to the FVGCP.

The CAC Land Use Plan includes AR 1-2 parcels along the eastern border of the FVGCP, east of Bradshaw Road and north of Florin Road. The use of AR parcels adjacent to the USB north of Florin Road and east of Bradshaw Road as depicted in the CAC Land Use Plan would serve as a buffer between the Shopping Center area and the General Agriculture lands to the east in substantial compliance with the intent of LU-42. Under the PD Land Use Plan, the AR 1-2 parcels would be replaced within an area designated RD 5-7. Low intensity grazing, a typical use in the project area, does not usually require extensive chemical sprays or plowing, and the relatively low number of animals per acre would reduce the potential for odors. However, agricultural uses can vary substantially between properties, and existing uses could change to more intensive operations in the future. Therefore, the potential exists for conflicts between the urban/suburban uses that would occur under the RD 5-7 designation and the adjacent agricultural uses.

Agricultural activities are protected from nuisance complaints pursuant to Chapter 14.05, Agricultural Activities, of the Sacramento Zoning Code. In addition the County has adopted a right-to-farm ordinance, which is intended to provide legal assurance that established agricultural operations are allowed to continue, and to inform residents of areas zoned or designated for agriculture that they may be subject to inconvenience or discomfort resulting from accepted agricultural operations. As a result, new residents adjacent to agricultural lands under either the AR 1-2 designation (CAC Land Use Plan) or the RD 5-7 designation (PD Land Use Plan) would be aware of the adjacent uses, and substantial land use conflicts are not anticipated.

The North Vineyard Station Specific Plan places residential uses at various densities along the border of the FVGCP (See Plate LU-5). The residential densities are complimentary to the proposed residential densities for both the CAC Land Use Plan and PD Land Use Plan. In addition, commercial uses are located south of Florin Road and north of Gerber Road at the interface of the North Vineyard Station Specific Plan and the FVGCP along Bradshaw Road. Both the CAC Land Use Plan and PD Land Use Plan place corresponding commercial areas north of Florin Road and south of Gerber Road. Similarly, both FVGCP land use plans would place Shopping Center, Business

Park and RD-20 uses across Bradshaw Road from the RD-20, RD-7 to 10, Business Park, and commercial uses proposed for the Vineyard Springs Comprehensive Plan (See Plate LU-6). Therefore, both the CAC Land Use Plan and PD Land Use Plan would be compatible with existing and proposed uses to the east of the FVGCP.

South: As shown in Plate LU-4, lands to the south are primarily designated for residential uses at a variety of zoning densities. Many of the lots directly bordering the FVGCP are large lots under the RD-2 designation. Both the CAC Land Use Plan and PD Land Use Plan would implement low density zoning along the southern boundary of the FVGCP. Both plans make extensive use of AR zoning south of the CTCR and east of the open space parcel. However, the PD Land Use Plan includes additional areas of RD 2-3 in place of AR zoning which would conform to the County GP land use guidelines' intent of increasing density within the USB.

West: The General Plan designates the area adjacent to the western boundary of the Florin Vineyard Gap Community Plan project area as Low-Density Residential (1-12 du/ac). Implementation of the residential uses proposed in either the CAC Land Use Plan or the PD Land Use Plan would not result in incompatible uses with adjacent residential uses, therefore, the impacts associated with this development would not be considered adverse. Within Planning Option C area, the CAC Land Use Plan includes a substantial AR zoned area. The area would be surrounded on all sides by residential areas developed at substantially higher densities. However, land uses conflicts would not be expected to result from the varying densities as the proposed uses are primarily residential. As discussed above, parcels located along the northwestern boundary of the FVGCP are designated for industrial uses. Both of the proposed land use plans would place low to medium density residential uses adjacent to the industrially designated lands. However, implementation of the mitigation measures included in the Noise chapter of this Draft EIR, as well as adherence to setback requirements during development of the subject parcels, would serve to ensure that land use conflicts would not occur.

Conclusion

Development of the proposed community plan in conjunction with application of the Zoning Code, would ensure that land use conflicts with existing and proposed development in the areas bordering the FVGVP would not occur. Because proposed uses within the FVGCP area are compatible with adjacent uses, a ***less-than-significant*** impact is expected.

Mitigation Measure(s)

None required.

IMPACTS RELATED TO CONSISTENCY WITH THE GENERAL PLAN.

CAC LAND USE PLAN/PD LAND USE PLAN

The project consists of the adoption of the FVGCP General Plan Amendment that will guide the development of ± 3,766 acres located in both the South Sacramento and Vineyard community planning areas in a comprehensive and coordinated manner. The existing General Plan is a mixture of uses and currently includes the following: 57 acres of Agricultural-Urban Reserve; 428 acres of Agricultural-Urban Reserve/Aggregate Resource Area; 258 acres of General Agriculture; 62 acres of General Agriculture/Aggregate Resource Area; 5.5 acres of Intensive Industrial; 272 acres of Low Density Residential, 272 acres of Recreation; and 2,411.5 acres of Urban Development Area. The proposed project includes the following: 157 acres of Commercial and Office; 250 acres of Intensive Industrial; 874.5 acres of Intensive Industrial/Aggregate Resource area; 2,409.5 acres of Low Density Residential; and 75 acres of Medium Density Residential.

The proposed project includes a General Plan Amendment to relocate the Urban Policy Area (UPA) boundary, and to amend the land use designations as identified in Table AG-1, for properties within the FVGCP area.

The General Plan's Urban Growth Management Strategy directs Sacramento County towards an urban character by focusing policy upon a specific area where growth will occur. Within the UPA, the General Plan distinguishes between areas with urban land use designations, and areas without designations that will eventually be assigned uses after completing additional studies. These areas are shown on the Land Use Diagram as Urban Development Areas. Within the UPA, the General Plan directs how growth will occur through redevelopment, buildout of vacant urban areas, developing new urban growth areas.

Within developing areas, the General Plan supports how growth will occur using design strategies which:

- Create greater mixes of uses within communities;
- Create communities that promote pedestrian circulation;
- Foster land use and transit relationships;
- Shape community and neighborhood;
- Orient development towards transit;
- Improve housing affordability, provide for inclusionary and creating a diversity of lifestyles;
- Provide for new commercial and industrial land uses within the same transit-oriented design framework; and
- Provide for Agricultural-Residential uses within urbanizing areas.

Table LU-1: General Plan Land Use Designation Comparison

Land Use Designations	Existing GP (ac.)	Proposed GP Amendment (ac.)
Agricultural-Urban Reserve	57	
Agricultural-Urban Reserve/ Aggregate Resource Area	428	
Commercial & Office		157
General Agriculture (20 ac.)	258	
General Agriculture (20 ac.)/ Aggregate Resource Area	62	
Intensive Industrial	5.5	250
Intensive Industrial /Aggregate Resource Area		874.5
Low Density Residential	272	2409.5
Medium Density Residential		75
Recreation	272	
Urban Development Area	2411.5	

The FVGCP has been comprehensively planned to guide buildout of the project area in conformance with the guidelines of the General Plan. All projects would be required to connect to the regional sewer system, and Mitigation Measure HY-1 (See Chapter 8, Hydrology and Drainage) requires the completion of drainage improvements prior to the construction of individual project. Furthermore, the project area is largely bounded by the City of Sacramento, City of Elk Grove, Community of South Sacramento, the North Vineyard Station Specific Plan, and the Vineyard Station Comprehensive Plan. Therefore, leapfrog development would not occur. However, the FVGCP requires a General Plan Amendment to relocate the UPA boundary in the northeast corner of the project. As a result, the project would expand the extent of the area where growth can occur beyond what was anticipated in the General Plan. While, the proposed project's design strategies are consistent with the General Plan, the proposed project would extend the UPA and convert agricultural lands to urban uses. Approval of the General Plan Amendment by the County Board of Supervisors would bring the proposed project into compliance with the General Plan. Should the expansion of the UPA not be approved, the project would omit the agricultural lands located west of Bradshaw Road, and the project would be compatible with the General Plan. Therefore, implementation of the proposed project would result in a ***less-than-significant*** impact on the General Plan.

MITIGATION MEASURE(S)
None required.

IMPACTS RELATED TO CONSISTENCY WITH THE COMMUNITY PLANS.

CAC LAND USE PLAN/PD LAND USE PLAN

The proposed project includes a Community Plan Amendment to amend the land use designations as identified by the South Sacramento Community Plan and the Vineyard Community Plan, for both the proposed CAC Land Use Plan and the PD Land Use

Plan. The approval of either land use option would result in amendments to both the South Sacramento and Vineyard Community Plans.

As part of the planning process, the Citizen's Advisory Committee worked with the County Planning Department staff and the community to prepare a draft comprehensive land use plan for the Board's consideration. In December 2003, the Board endorsed two draft Community Plan land use maps for the 3,766 ± acre FVGCP area for further analysis and environmental review. The base map consists of the Florin-Vineyard CAC Land Use Plan, December 4, 2003 (See Plate LU-11). Supplementing that map are six optional amendments to the CAC Land Use Plan that were proposed by the Planning Department (Planning Options A through F) (See Plates LU-12 and LU-13). Adoption of the Planning Department amendments would result in greater residential density in the Plan area. The proposed land use acreages are contained in Table LU-2.

CAC Land Use Plan

Implementation of the CAC Land Use Plan would substantially change the existing land use designations under the Vineyard Community Planning Area. As shown in Plate LU-9, the northern third of the FVGCP is currently designated primarily as Light Industrial, Industrial Reserve, Permanent Agricultural AG-20 and AG-80, with two small areas designated for commercial uses. The primary use of the area would remain industrial; however, substantial areas would be designated for residential uses at densities ranging from AR 1-2 to RD-20. In addition, the commercial areas would be expanded.

The central portion, between Florin Road and Gerber Road, is designated for Agricultural Residential development in the Vineyard Community Planning Area. Implementation of the CAC Land Use Plan would substantially increase the residential density with the majority being designated RD 3-5. Densities would increase along Elk Grove-Florin Road and at major intersections to as high as RD-20. In addition, commercial areas would be added at the intersections of Florin Road and Gerber Road with Elk Grove-Florin Road.

The southern portion, south of Gerber Road, is predominately designated AR-10 in the Vineyard Community Planning Area. The CAC Land Use Plan would include substantial areas designated as AR 1-2 and 2-5, with smaller areas designated RD 2-3 and 3-5. Commercial, Business Park, and RD-20 areas would be located near the intersections of Elk-Grove Florin Road and Bradshaw Road with Gerber Road.

Areas located within the South Sacramento Community Planning Area are primarily designated AR-5 and AR-10. Small areas are also designated Light Industrial, RD-20, RD-10, RD-10 (MHP) and AR-2. Under the CAC Land Use Plan, the majority of the area north of Gerber Road would be designated RD 3-5, with higher densities located along Elk-Grove Florin Road. While the CAC Land Use Plan would include some AR 1-2 designated lands south of Gerber Road, overall the density of the residential land uses would be substantially increased.

Plate LU-13
Land Use Options

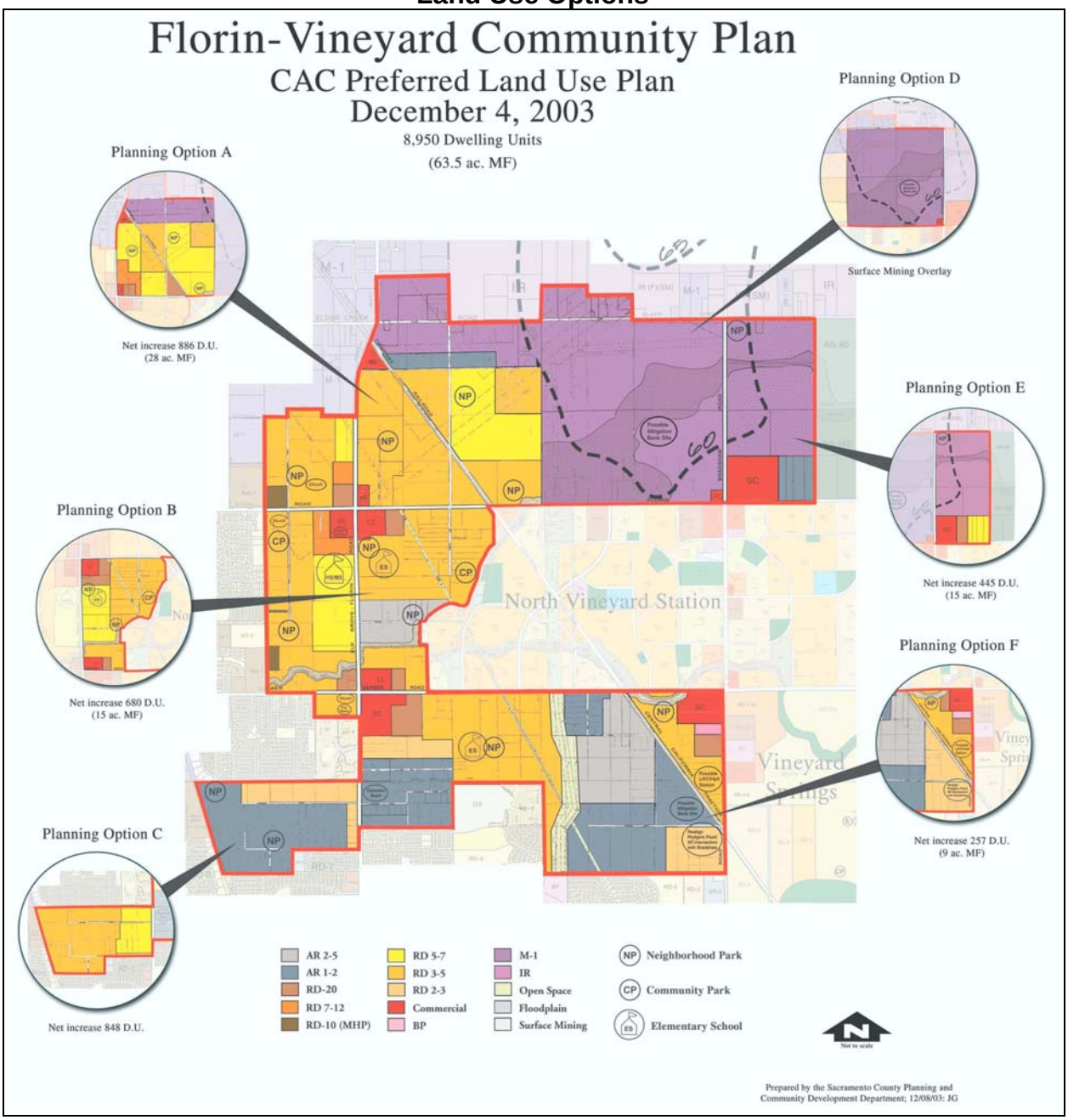


Table LU-2: Community Plan Land Use Comparison

Land Use Designations	Existing (ac.)	CAC Plan (ac.)	Planning Dept. Plan (ac.)
AG-20 / AG-20 (F)	160		
AG-80	160		
A-10 / AR-10 / AR-10 (F)	1698		
AR 1-2	392[1]	549.5	271
AR 2-5		207	129
BP		5	5
GC	7	10	10
IR (F) / IR (SM)	840		240
LC		21	18.3
M-1 / M-1 (F) / M-1 (SM)	486	1,102	879
OS		89.5	89.5
RM-1	9		
RD-10 (MHP)	5	13.7	13.7
RD 2-3		151.5	140.5
RD 3-5	9[2]	1172.3	1,084.5
RD 5-7		213	572.5
RD 7-12		30.5	69
RD-20		63.5	130.5
SC		137.5	113.5
Total	**3,766**	**3,766**	**3,766**

[1] The existing distribution of these 392 acres is: 31 acres AR-1/AR-1(F); 171 acres AR-2/AR-2(F); and 190 acres AR-5/AR-5(F).
[2] The existing land use designation of these 9 acres is RD-5.

PD Land Use Plan

The PD Land Use Plan is composed of several Option Areas which would apply land use designations that differ from those proposed under the CAC Land Use Plan.

Planning Option A Area

Both Community Plans would place residential development in an area currently designated Light Industrial and Industrial Reserve on the Vineyard Community Plan. The majority of the area under the CAC Land Use Plan would be RD 3-5 with areas of AR 1-2 and RD 5-7. The PD Land Use Plan would include RD-20, RD 7-12 and larger areas of RD 5-7; while changing the AR 1-2 area to M-1.

Both plans would involve substantial changes to the existing Community Plan designations. The CAC Land Use Plan would more closely comply with Vineyard Community Plan policy CI-4 which calls for buffering industrial uses from residential uses through the use of less-dense development, among other means. While both land use plans would place RD 3-5 and 5-7 uses next to the Industrial lands, implementation of the mitigation measures included in the Noise chapter of this Draft EIR, as well as adherence to setback requirements during development of the subject parcels, would avoid adverse impacts to future residents. The PD Land Use Plan complies with

Vineyard Community Urbanization Goal of providing a “wide range of housing types and living environments for present and future residents.” In addition, the PD Land Use Plan places urban density development “contiguous to approved urban uses” as required in Vineyard Community Plan FU-2. The PD Land Use Plan would result in the development of an additional 866 dwelling units and 28 acres of multi-family housing.

PLANNING OPTION B AREA

The existing Community Plan designation zoning is a mixture of AR-2, -5, and -10 in the Planning Option B area. The CAC Land Use Plan would include large areas of RD 3-5 and AR 2-5, as well as smaller areas of Commercial and RD-20 development. The PD Land Use Plan would mirror the proposed development on the west side of Elk Grove-Florin Road, by placing RD 5-7 development adjacent to the road, and wrapping RD-20 development around the commercial zoned parcel in the southeast corner of Florin Road and Elk Grove-Florin Road.

While the CAC Land Use Plan would maintain a significant AR area; both plans would result in extensive changes to existing Vineyard Community Plan designations. The PD Land Use Plan would result in an increase of 680 DU, and an additional 15 acres of multi-family housing.

PLANNING OPTION C AREA

Planning Area C is located within the South Sacramento Community Plan Area. The current community plan designation is AR-5. The CAC Land Use Plan calls for the creation of a large area of AR 1-2, and a smaller area of RD 2-3. The PD Land Use Plan calls for a large area of RD 3-5 and a smaller area of RD 5-7 adjacent to Elk Grove-Florin Road.

The South Sacramento Community Plan does not provide guidance on the preservation of agricultural residential land. Community Plan Goal 1 states that the Plan’s intent is to “ensure that land uses are mutually compatible, functional, healthful, and aesthetically pleasing.” Both of the proposed plans would comply with the guidance, however, the PD Land Use Plan would develop the area at densities that are closer to the existing development that surrounds the Planning Option C area. The PD Land Use Plan would result in an additional 848 DU.

PLANNING OPTION D AREA

Current Vineyard Community Plan designations for the Option D Area are Light Industrial and Industrial Reserve. The CAC Land Use Plan proposes a mixture of M-1 and IR zoning. The PD Land Use Plan would include a Surface Mining Overlay. The proposed mining overlay would be compatible with the community plan designations for the area.

PLANNING OPTION E AREA

Currently the Option E Area is designated as Permanent Agricultural AG-80 and AG-20. The CAC Land Use Plan would include a mixture of IR, Commercial, and AR 1-2 zoning. The PD Land Use Plan would include IR, Commercial, RD-20, and RD 5-7 parcels. While the CAC Land Use Plan would create a buffer of AR land between the proposed commercial areas and the existing agricultural uses east of the FVGCP, the PD Land Use Plan would create a potential mixed-use development along Florin Road (north of Bradshaw Road). The CAC Land Use Plan designations would be more compatible with the existing agricultural uses to the east. The PD Land Use Plan would result in an additional 445 DU, and 15 acres of multi-family housing.

PLANNING OPTION F AREA

Option Area F is currently composed entirely of AR-10 parcels. The CAC Land Use Plan would include a mixture of AR 1-5, a variety of RD parcels with densities ranging from 2 units an acre to 20 units per acre, Business and Professional Office, and Commercial land uses. The PD Land Use Plan would replace a portion of AR 1-2 with RD 2-3 and include additional RD-20 in place of Commercial and RD 3-5 development.

Both plans would significantly alter the current Community Plan designations. The CAC Land Use Plan would maintain a more rural character through less compact development and the use of AR zoning. However, the PD Land Use Plan would largely conform to the guidelines for urban development contained in the community plans by providing a variety of housing opportunities, use of incremental zoning, and creating contiguous urban uses. Implementation of the PD Land Use Plan would result in an additional 257 DU, including an additional 9 acres of multi-family housing.

CONCLUSION

Approval of either the CAC Land Use Plan or the PD Land Use Plan would require the amendment of the applicable community plans. Both the CAC and PD land use plans are the result of comprehensive planning efforts that included community and stakeholder input, and are in substantial conformity with the guidance provided within the community plans. Therefore, approval of either plan would establish a new framework to guide land use development within the FVGCP. As noted in the regulatory context, both plans make allowance for future urbanization. Approval of the proposed project by the County Board of Supervisors would establish the Florin-Vineyard Gap Community Plan. The proposed project includes amendments to the land use designations of both the South Sacramento and Vineyard Community Plans. The proposed amendments are consistent with the overall County policies related to urban development. Therefore, the proposed project would have a ***less-than-significant*** impact related to consistency with the South Sacramento and Vineyard Community Plans.

MITIGATION MEASURE(S)
None required.

CUMULATIVE IMPACTS

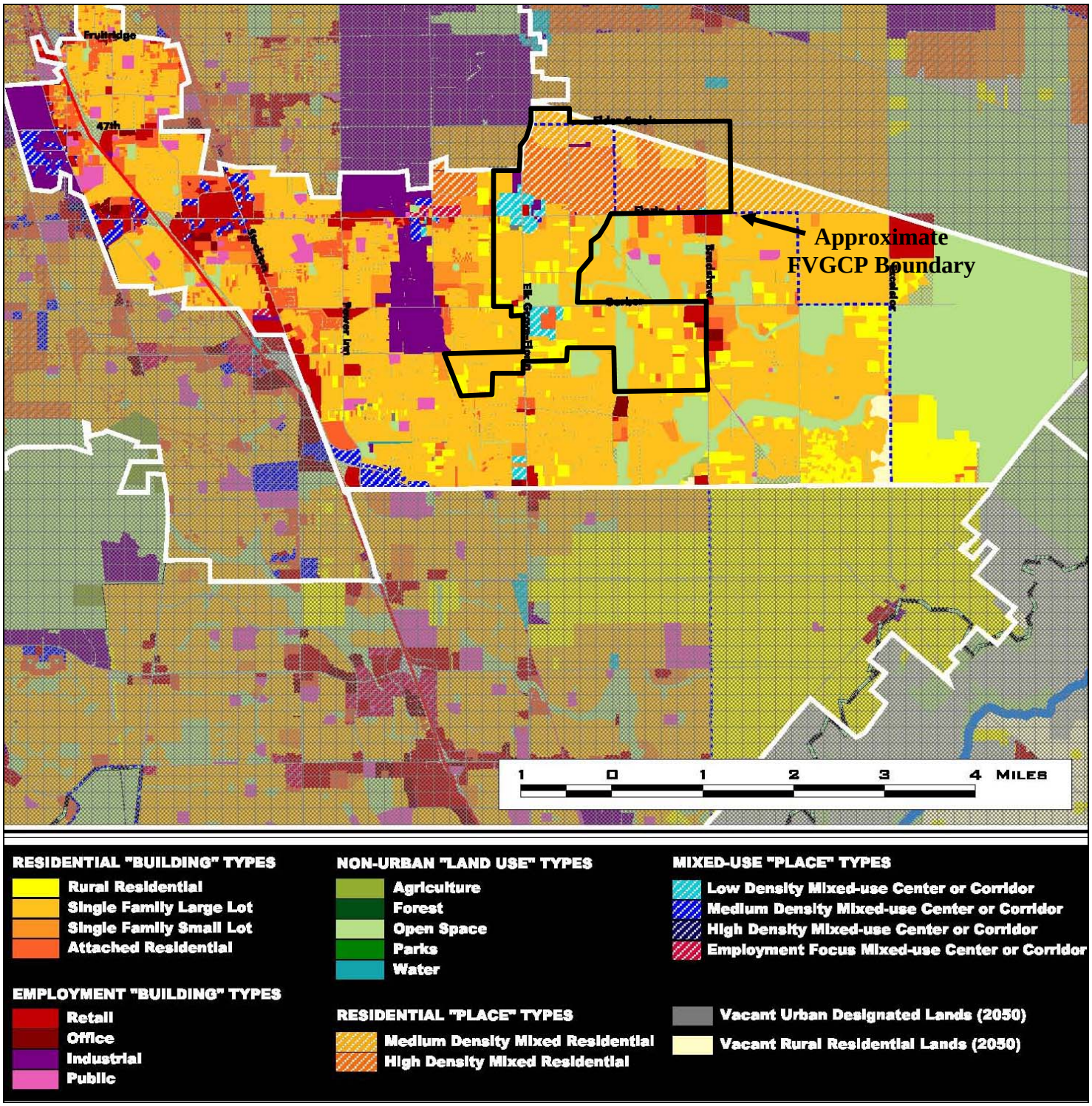
INCREASES IN THE INTENSITY OF LAND USES IN THE REGION DUE TO THE PROPOSED PROJECT AND ALL OTHER PROJECTS IN SACRAMENTO COUNTY.

Implementation of either the CAC Land Use Plan or the PD Land Use Plan would significantly increase the intensity of the land uses within the project area. In addition, Sacramento County and the greater Sacramento region are in the midst of significant increases in the intensity of land use. However, the proposed project occurs primarily within areas that have previously been designated for urban development.

The northeast corner of the project site includes 258 acres that are designated General Agriculture-20. This area has not been designated as a reserve for urban or industrial uses, and is located outside of the UPA. The proposed plans would convert the area to a combination of Industrial-Intensive (Surface Mining), Commercial and Office, and Low-Density Residential. Therefore, the proposed conversion would contribute to the increase in intensity of land use. However, urban development of the lands was included in the Sacramento Area Council of Government's (SACOG) Preferred Blueprint Scenario land use plan (See Plate LU-14). While aspects of the CAC Land Use Plan are Blueprint compliant, the PD Land Use Plan's higher residential densities, particularly in areas north of Florin Road, would potentially allow for the mixed-use place types included in the Blueprint.

The Blueprint is the result of a regional planning effort undertaken by SACOG, of which Sacramento County is a member, to envision development through the year 2050. While the Blueprint does not have any land use authority, the Blueprint has been used to guide transportation funding. Furthermore, the Blueprint will likely be the basis for the Sustainable Communities Strategy required in the recent Senate Bill 375. As such, the Blueprint may be understood as a lens through which to view cumulative land use impacts.

Plate LU-14
Blueprint Scenario for Eastern Sacramento County



Implementation of the CAC Land Use Plan would result in less-intensive land use than the PD Land Use Plan. However, the increased densities of the PD Land Use Plan would make more efficient use of the developable areas of Sacramento County that are adjacent to existing development, and would be closer to the Blueprint Scenario Land Use Plan. In addition, most of the project area has already been designated as an Urban Development Area; and the proposed development is in conformity with the Urban Development Area designation. As a result, the project's incremental contribution to the cumulative increase in land use intensity would not be cumulatively considerable. Therefore, the proposed project would have a ***less-than-significant*** impact on increased intensity of land uses in the Sacramento County area.

MITIGATION MEASURE(S)
None required.

5 PUBLIC SERVICES AND UTILITIES

INTRODUCTION

The Public Services and Utilities chapter of the EIR describes the public services and utilities provided in Sacramento County, including: fire protection, law enforcement, solid waste disposal, gas and electric service, schools, libraries, and parks and recreation. Information in this chapter is based on the *Sacramento County General Plan,* the *Sacramento County General Plan EIR*, the *Florin Vineyard Community Plan Public Facilities Financing Plan*, review of publicly available facilities documents, and personal conversations with individual service providers.

ENVIRONMENTAL SETTING

The Environmental Setting section describes the existing conditions of each of the aforementioned public services and utilities in the Sacramento County.

FIRE PROTECTION

Fire protection for the project area is provided by the Sacramento Metropolitan Fire District (SMFD). The SMFD's 750 uniformed and support personnel located at 42 stations serve a 417-square mile area containing a population of over 600,000 people, on a total annual budget of approximately $163 million. The SMFD provides prevention services and emergency response. The prevention services include fire safety inspections, fire investigation, plan review, public education, weed abatement, and permits. The emergency responses include pre-hospital emergency medical services, fire suppression, hazardous materials response, technical rescue, and public assistance.

Currently, the SMFD provides fire protection and emergency medical services from the following fire stations near the Florin-Vineyard Gap Community Plan (FVGCP):

- Station 50 (8880 Gerber Road) – a four-bay station located within the western boundary of the FVGCP.
- Station 54 (8900 Fredrick Avenue) – located approximately two miles north of the FVGCP. Station 54 is an outmoded facility that is proposed to be replaced with a new fire station at a to-be-determined location serving the Rosemont area.
- Station 55 (7776 Excelsior Road) – a three-bay station located two miles east of the FVGCP.
- Station 62 (3646 Bradshaw Road) – located approximately three miles north of the FVGCP.

- Station 52 (9780 Elder Creek Road) – an unused, outdated facility located one-quarter mile east of Bradshaw Road within the northern boundary of the FVGCP.

Within the vicinity of the FVGCP, the SMFD plans to construct a new fire station (Station 52) just outside the FVGCP within the next several years and to replace the Station 54 in the near future. Specific timing of the station construction will be determined by development patterns.

LAW ENFORCEMENT

The Sacramento County Sheriff's Department (SCSD) provides law enforcement services to the FVGCP area. The Community Plan area is located within the Sacramento County Sheriff's Department Central Division. The Central Division is largely composed of the South Sacramento and Vineyard Communities, and serves a current population of approximately 100,000 residents. The Central Division has 101 sworn staff, including 77 Deputy Sheriffs; the Department also includes an additional 15 non-sworn employees.

The Sheriff's Department seeks to maintain a service ratio standard of 1 officer per 1,000 population; the existing service level is roughly 0.77 officers per 1,000 population.

SOLID WASTE DISPOSAL

The Sacramento County Department of Waste Management and Recycling provides weekly garbage collection, and biweekly collection of recyclables and green waste. The Department operates the Kiefer Road Landfill, located near Kiefer Boulevard and Grant Line Road, which is the primary municipal solid waste disposal facility in Sacramento County. The landfill facility sits on 1,084 acres, of which 250 acres are currently in use. The ultimate permitted size of 660 acres is anticipated to be able to serve the County to the year 2035.

GAS AND ELECTRIC SERVICE

Electric service within the FVGCP area is provided by the Sacramento Metropolitan Utility District (SMUD), and natural gas is provided by Pacific Gas & Electric (PG&E). Electric transmission lines and gas mains are located within the FVGCP. Existing residences are connected to the electrical network; however, natural gas lines have not been extended throughout the FVGCP.

SCHOOLS

The FVGCP is located within the Elk Grove Unified School District (EGUSD). As shown in Table PS-1, the EGUSD currently serves over 62,000 elementary through high school students at ~~64~~ **63** schools. The FVGCP area is primarily served by Sierra Enterprise Elementary School, Katherine Albiani Middle School,

and Pleasant Grove High School. As shown in Plate(s) PS-1 and PS-2, smaller portions of the FVGCP are located within the boundaries for Sheldon High School and T. R. Smedberg Middle School, Maeola Beitzel Elementary, Robert J. Fite Elementary, Florin Elementary, and Mary Tsukamoto Elementary.

Table PS-1
Elk Grove Unified School District, 2008 – 09 ~~2007-08~~

School Type	Schools	Enrollment	Full-Time Equivalent Teachers	Ratio
Elementary	~~41~~ **39**	~~33,024~~ **32,522**	1,681.9	19.6
Middle	~~8~~ **9**	~~9,898~~ **9,796**	421.6	23.5
High School	~~8~~ **9**	~~17,530~~ **18,091**	775.8	22.6
Alternative	1	~~263~~ **271**	12.8	20.5
Special Education	1	~~168~~ **167**	15.3	11.0
Continuation	~~5~~ **4**	~~1,076~~ **1,018**	33.0	32.6
Nonpublic, Nonsectarian		~~335~~ **308**	Not Available	Not Available
Total	~~64~~ **63**	~~62,294~~ **62,173**	2,940.4	21.2

Source: California Department of Education, Ed-Data Website, http://www.ed-data.k12.ca.us/

As shown in Table PS-2, with the exception of Mary Tsukamoto Elementary, all of the project area schools have total enrollments below the design capacity of the school. Sierra Enterprise Elementary is operating at approximately 42 percent of capacity; however, Katherine Albiani Middle School and Pleasant Grove High School are operating at 99 percent and 93 percent of capacity, respectively.

Table PS-2
Project Area School Enrollment ~~and Average Class Size~~, 2008 – 09 ~~2007-08~~

School	Total Enrollment	Design Capacity	~~School Average Class Size~~	~~District Average Class Size~~
Sierra Enterprise Elementary	388	925	~~17.7~~	~~26.1~~
Maeola Beitzel Elementary	871	900	~~19.8~~	~~26.1~~
Robert J. Fite Elementary	670	950	~~21.5~~	~~26.1~~
Florin Elementary	518	950	~~19.0~~	~~26.1~~
Mary Tsukamoto Elementary	1,032	950	~~20.2~~	~~26.1~~
Katherine Albiani Middle School	1,317	1,323	~~30.0~~	~~26.1~~
T. R. Smedberg Middle School	1,219	1,269	~~32.7~~	~~26.1~~
Pleasant Grove High School	2,194	2,349	~~19.7~~	~~26.1~~
Sheldon High School	2,464	3,024	~~30.4~~	~~26.1~~

Sources: Personal communication with Kim Williams and Teresa Tholen of the Elk Grove Unified School District, December 8, 2008.
California Department of Education, Ed-Data Website, http://www.ed-data.k12.ca.us/

Plate PS-1
Existing Elementary School Boundaries

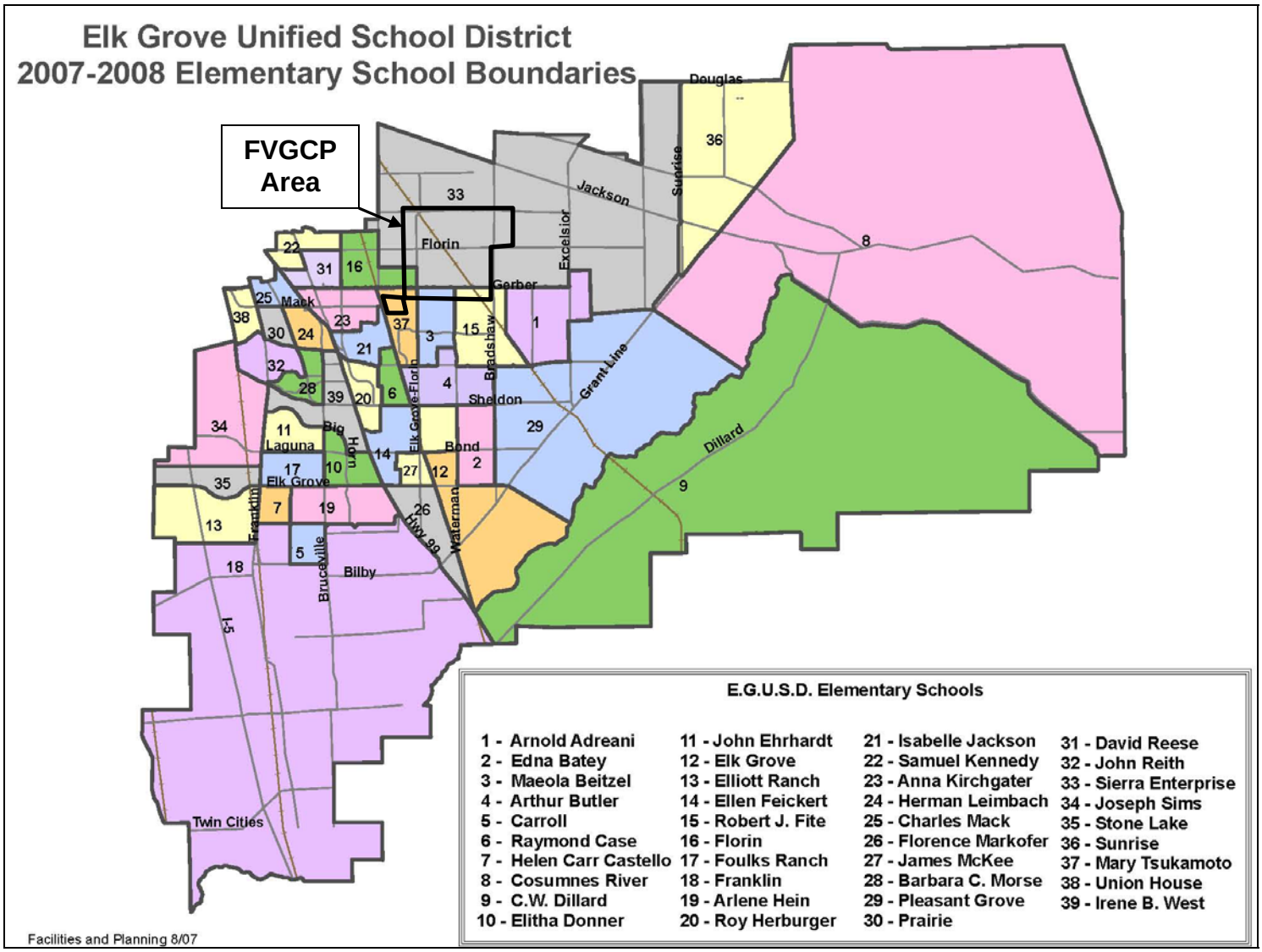
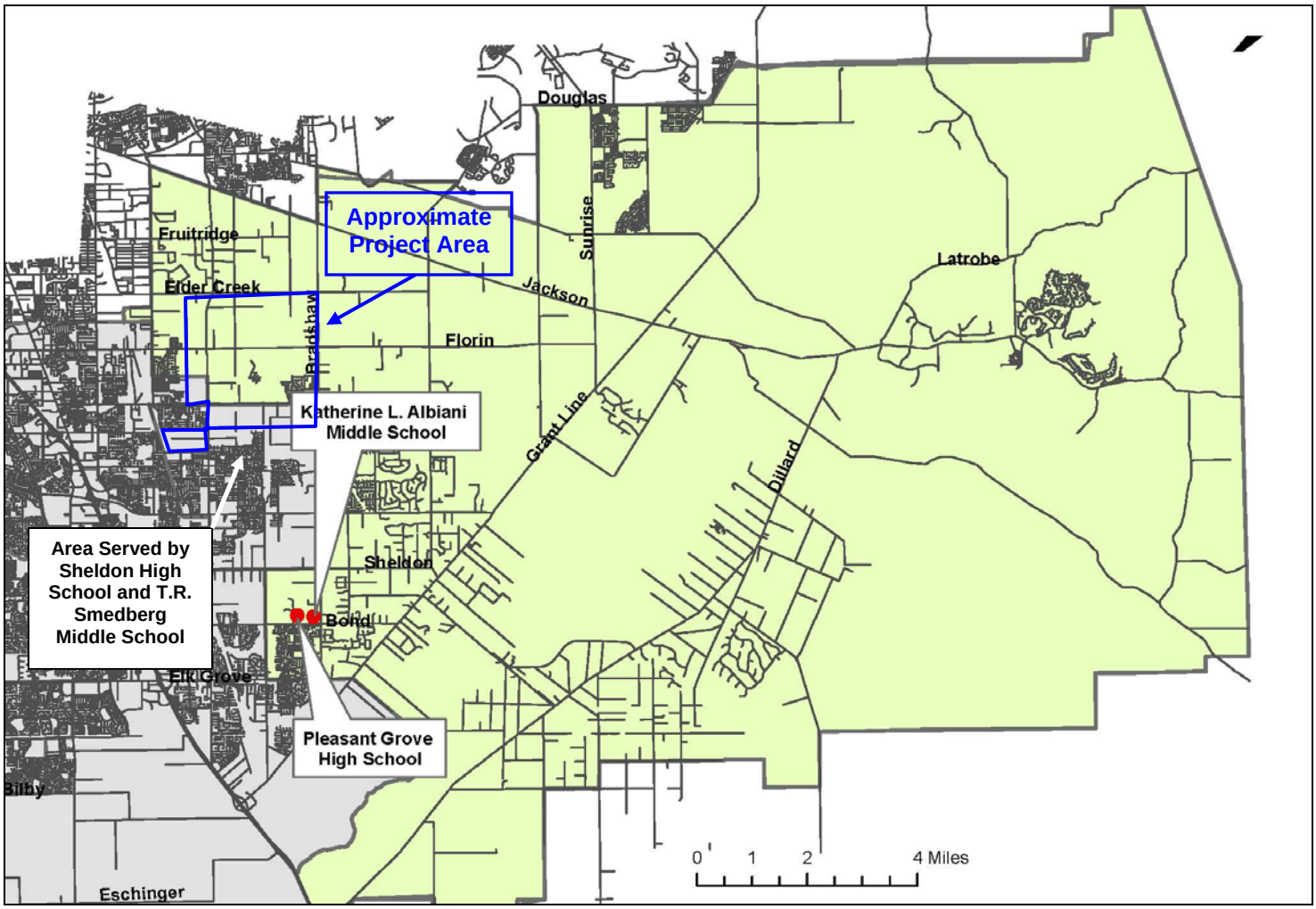


Plate PS-2
Middle School and High School Boundaries



PARKS AND RECREATION

The Southgate Recreation and Park District (SRPD) is an independent special district that manages parks and recreation facilities in the southeastern portion of Sacramento County, including the FVGCP. **The SRPD is responsible for the planning of parkland, open space and recreational facilities and the ownership and maintenance of existing and planned facilities within the District boundaries. Southgate's adopted park acreage standard is 5 acres of parkland for every 1,000 people.**

The SRPD encompasses 52 square miles and includes 44 parks that accommodate social gatherings, weddings, children's playgrounds, baseball, football, soccer, tennis, basketball, seniors, four community centers, three sports complexes, two swimming pools, an 18-hole golf course, and many parkways and landscape corridors.

The FVGCP comprises approximately six square miles in the center of the SRPD, which is approximately 11 percent of the District's territory. The SRPD has adopted a park acreage standard of 5 acres of parkland per 1,000 residents. The County standard for parks allows for variation between 3 and 5 acres per 1,000 residents based on the park district.

LIBRARIES

The Sacramento Public Library Authority provides library services for the FVGCP area. The Library Authority maintains 27 City and County library branches and two bookmobiles. Currently, libraries are not located within the FVGCP. The closest facilities include the Southgate Library (6132 66th Avenue, Sacramento), Valley Hi – North Laguna Library (6351 Mack Road, Sacramento), and the Elk Grove Library (8900 Elk Grove Boulevard). The new Vineyard 1 Library is planned as part of the North Vineyard Station Specific Plan.

REGULATORY CONTEXT

STATE OF CALIFORNIA

EDUCATION CODE SECTION 17620

Education Code Section 17620 authorizes school districts to levy a fee, charge, dedication, or other requirement against any development project for the construction or reconstruction of school facilities, provided that the district can show justification for levying of fees. Government Code 65995 limits the fee to be collected to the statutory fee unless a school district conducts a Facility Needs Assessment (Government Code Section 65995.6) and meets certain conditions.

Senate Bill 50 (SB 50)

Adopted in 1998, SB 50 instituted a new school facility program by which school districts can apply for state construction and modernization funds. The legislation imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development.

California Government Code Section 66477

Commonly referred to as the Quimby Act, Section 66477 allows local governments to exact land dedications or fees in lieu for park purposes from new subdivisions. The law prescribes a standard consistent with the circumstances of each park district based on a minimum of 3 acres and a maximum of 5 acres per 1,000 residents. Sacramento County's Planning Department and Municipal Services Agency oversee these requirements in the unincorporated area.

SACRAMENTO COUNTY GENERAL PLAN

The following are applicable General Plan policies related to public services.

PUBLIC FACILITIES ELEMENT

SOLID WASTE DISPOSAL

PF-22 Solid waste collection, handling, recycling, composting, recovery, transfer and disposal fees shall recover all capital, operating, facility closure and maintenance costs.

SCHOOLS

PF-26 Community plans shall identify all existing and planned school sites and shall include guidelines and conceptual examples for incorporating new schools into overall neighborhood design.

PF-27 Community and Specific Plans shall consider the needs of community colleges and address the feasibility and appropriateness of off-campus facilities, particularly in TODs.

PF-28 Schools shall be planned as a focal point of neighborhood activity and interrelated with neighborhood retail uses, churches, parks, greenways and off-street paths whenever possible.

PF-29 New elementary schools in the urban area should be planned whenever possible so that almost all residences will be within walking distance of the school (one mile or less) and all residences are within two miles of a school.

PF-30 New elementary and junior high schools shall be planned adjacent to neighborhood and community parks whenever possible and designed to promote joint use of appropriate facilities.

PF-31 Elementary schools shall not be located along arterials and thoroughfares. Junior high schools shall be located near arterials and thoroughfares to facilitate the transport of students.

PF-32 New community college campuses and high schools within the urban service boundary shall be located along arterial or thoroughfare streets, with a high priority to location adjacent to transportation corridors identified on the Transportation Plan Map.

PF-33 New schools should link with planned bikeways, pedestrian paths wherever possible.

PF-36 Land dedications or reservations for schools should meet state guidelines for school parcel size. Where more than one owner or development project is involved, there shall be appropriate assurances and conditions to assure that requisite acreage can and will be assembled to meet facility site requirements.

PF-37 Development projects shall not be approved unless the hearing body finds that provisions for reservation of school sites are adequate to meet the needs of the school district.

LIBRARIES

PF-49 The capital cost of community and regional library construction and renovation shall be shared by existing residents through bond financing or other appropriate measures and by new residents and workers through assessments on new development.

PF-50 Include community library needs among facilities to be financed by financing districts created in new urban areas.

PF-52 New commercial development in financing districts shall contribute to library financing such that fees based on projected employment are approximately equivalent to the fees for an equivalent number of new residents.

PF-53 Incorporate planned libraries into community and specific plans for new development.

PF-55 Future library sites shall be accessible by car, bicycle, foot, public transportation, and have sufficient off-street parking.

PF-56 Future library sites shall be located so as to be visible to people passing by and be accessible to children unaccompanied by adults.

SHERIFF

PF-58 Plan and develop law enforcement facilities in keeping with overall needs and the distribution of growth.

FIRE DEPARTMENT

PF-66 Mitigation fees may be established by the Board of Supervisors for the purpose of funding adequate fire protection and emergency medical response facilities provided they find that such fees are critical and

necessary to meet the facility funding needs of the fire district and that exiting methods of financing are inadequate.

PF-67 The Board of Supervisors shall not require the collection of mitigation fees unless it has certified that the fire district has:

a. Adopted a facilities plan consistent with industry norms and standards and the time horizon of the County General Plan that will maintain ISO ratings of 3 for hydrant areas and 8 for non-hydrant areas, and a response time of 5 minutes for emergency medical call, where staffing levels are adequate.

b. Adopted a financing plan delineating the source and amount of funds required to fully implement the facilities plan. Such plan shall indicate personnel requirements necessary to meet the standards in the facilities plan.

PF-68 Mitigation fees established by County ordinance shall, together with other reasonably assured sources of funding identified in the fire district's financing plan, be sufficient to implement the adopted financing plan.

PF-69 No building permit for new residential or commercial construction shall be issued when there is a Board of Supervisors certified fire district financing plan for any applicable fire district, which provides for mitigation fees, until the applicant has contributed all required mitigation fees.

ENERGY FACILITIES

PF-114 Public facility financing plans for developing neighborhoods may include the cost of undergrounding new and existing subtransmission lines. Costs may be shared by all participating developers.

PF-116 It is the policy of Sacramento County not to locate public schools or grant entitlements for private schools within, or directly adjacent to power line corridors as specified below:

Power Line Capacity	Setback from the Corridor (measured from the edge of the easement)
100-133 kV	100 feet
220-230 kV	150 feet
500-550 kV	350 feet

The construction of transmission lines proximate to an existing and/or planned public or private school site and subject to the County Siting

Process (100 kV or greater) should also comply with the distance criteria listed above unless compliance with these setbacks would result in a greater EMF impact on other adjacent uses.

PF-119 Community Plan land use designations and policies should be consistent with the policies of this Energy Facilities Siting section of the Public Facilities Element.

PF-120 All Community Plans shall include an Energy Facility Siting Element which indicates the location of all existing and planned energy facilities. Community Plan Siting Elements and SMUD's Electric Study Plans for the corresponding area shall be consistent.

PF-121 All tentative subdivision maps should identify the location of all utility easements sufficient to accommodate existing and future needs as determined by SMUD and PG&E.

PARKS

PF-123 New residential developments shall provide local parks for their residents consistent with the Quimby Act (CA Govt. Code Section 66477), through land dedication, fees in lieu, or on-site improvements according to the standards below:

A. Three acres of land for parks per 1,000 residents, based on calculations prescribed in Title 22 of the Sacramento County Code.

Or

B. If existing parklands within a park district exceed three acres per 1,000 population, that value shall be the standard for new developments up to five acres of land per 1,000 residents. The specific standards are contained in the Sacramento County Code, Land Use Ordinance (Title 22).

PF-124 Encourage local park districts to develop self-supporting recreation programs for those activities that go beyond providing for basic recreation needs. Examples include outdoor sports, complexes, aquatic centers, and community centers.

PF-125 Require new subdivisions to provide sufficient acreage of parks to meet the long-range needs of the community.

PF-126 Encourage local park districts to acquire and to meet adopted park acreage standards in favor of expanded site development and maintenance services.

PF-127 Encourage park development adjacent to school sites and the formation of joint use agreements between school and park districts.

PF-128 Until such time as a permanent financing system is established which will support an adequate level of park development and maintenance, require new developments to provide an interim financial program to establish a minimal level of park development and maintenance.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

An impact to the public services and utilities of the proposed project area would be considered potentially significant if the proposed project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities for the following public service providers, the construction of which could cause significant environmental impacts:
    - Fire protection;
    - Police protection;
    - Schools;
    - Parks; or
    - Other public facilities.
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

METHODS OF ANALYSIS

The Impacts and Mitigation Measures section evaluates the impacts of the proposed project on the existing public services and dry utilities that would occur if the project is developed as currently proposed. Impact significance is determined by comparing project conditions to the existing conditions. A combination of publicly available information and personal conversations with responsible agencies is used to identify potential impacts to public services.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

IMPACTS TO FIRE PROTECTION SERVICES.

CAC LAND USE PLAN/PD LAND USE PLAN

The proposed CAC Land Use Plan (with density bonus) would involve the construction of up to 10,292 residential units, with a total population of approximately 27,171 persons (See Chapter 17, Population and Housing for further analysis of population growth). The PD Land Use Plan (with density bonus) would result in the construction of up to 13,876 residential units, with a total population of approximately 36,333. In addition, both plans include areas for extensive commercial, industrial, and office opportunities. The SMFD does not plan on locating a fire station within the FVGCP. The project area would be served by the new Station 52 in the Vineyard Springs Comprehensive Plan, as well as the nearby Station 54 and Station 55. According to the Public Facilities Financing Plan, the SMFD has determined that the stations would be sufficient to serve the FVGCP and the surrounding development. The land for Station 52 has already been acquired, and construction is anticipated to occur within the next several years. The relocation of Station 54 to an as yet unidentified site is also anticipated in the near future. Both stations have been included in the SMFD Initial Fire Station Replacement Program Capital Improvement Program (CIP). The CIP is funded through the existing Capital Fire Facilities Fee. **The City of Sacramento Fire Department (SFD) has commented that although they are not the primary service provider, they do have an agreement to provide secondary and tertiary response within the SMFD service area. The SFD stated that with this level of proposed development, Station #9, which was closed in 1995, would need to be reopened. This facility is currently being used to house SFD reserve units. The reopening of this facility would not cause any substantial new physical impacts, because the facility is existing.**

Development within the FVGCP would be required to pay the Capital Fire Facilities Fee for the provision of fire protection services. In addition, the SMFD will update, supplement, or replace the Capital Fire Facilities Fee program as needed to respond to the service requirements of the District. Furthermore, all projects within the FVGCP would be required to comply with the standard access and street width requirements required by the SMFD. As a fee and a mechanism for implementing the necessary infrastructure and adding the required personnel has been established, payment of the fees would ensure that impacts to fire protection services are ***less-than-significant***.

MITIGATION MEASURE(S)
None required.

IMPACTS TO THE ADEQUATE PROVISION OF LAW ENFORCEMENT PERSONNEL.

CAC LAND USE PLAN

The CAC Land Use Plan (with density bonus) would allow for the construction of up to 10,292 residential units, which would result in a population increase in the Sacramento County Sheriff's Central Division of approximately 27,171 persons. Based on communication with Jeff Rodrigues of the Sacramento County Sheriff's Department,[1] the service ratio standard is 1 officer per 1,000 population and the existing service level is roughly 0.77 officers per 1,000 population. Utilizing the Sheriff's service ratio standard, the project would generate the need for an additional 27.2 officers (Officers required = total project population/1,000 x 1) to serve the project population.

PD LAND USE PLAN

The PD Land Use Plan (with density bonus) would allow for the construction of up to 13,876 residential units, which would result in a population increase in the Central Division of approximately 36,333. Utilizing the Sheriff's service ratio standard, the PD Land Use Plan would generate the need for an additional 36.3 officers (Officers required = total project population/1,000 x 1.0).

CONCLUSION

As outlined above, implementation of either the CAC of PD Land Use Plans would result in the need for additional law enforcement personnel and equipment. Such personnel and equipment would be funded through a combination of tax revenue and other sources to which individual projects within the FVGCP would contribute. In addition, individual projects within the FVGCP would be required to comply with the specific SCSD requirements for crime reduction. Furthermore, adequate access for law enforcement vehicles would be provided in the project area based on SMFD and SCSD requirements. Therefore, implementation of the proposed project would have a ***less-than-significant*** impact on law enforcement.

MITIGATION MEASURE(S)
None required.

[1] Personal communication with Jeff Rodrigues, Sacramento County Sheriffs Department, December 1, 2006.

IMPACTS RELATED TO THE INCREASED DEMAND FOR SCHOOL RESOURCES.

CAC LAND USE PLAN/PD LAND USE PLAN

As illustrated in Plates PS-1 and PS-2, students from within the FVGCP would primarily attend Sierra Enterprise Elementary School, Katherine Albiani Middle School, and Pleasant Grove High School during initial development phases. As development progresses additional school facilities would be required and school boundaries would be reconfigured. As shown in Table PS-3, buildout of the FVGCP could result in the introduction of up to 8,896 students to the EGUSD service area under the PD Land Use Plan with density bonus

Table PS-3: Student Generation Rates

	CAC Land Use Plan	PD Land Use Plan	Student Generation Rates		CAC K-6 Students (PD)	CAC 7-8 Students (PD)	CAC 9-12 Students (PD)	Total CAC Students (PD)
Potential Single-Family Residences	8,532	11,096	K-6	0.3941	3,362 (4,373)	927 (1,205)	1,742 (2,266)	6,031 (7,844)
			7-8	0.1086				
			9-12	0.2042				
Potential Multi-Family Residences	1,760	2,780	K-6	0.2077	366 (577)	92 (146)	208 (329)	666 (1,052)
			7-8	0.0525				
			9-12	0.1184				
Total CAC Land Use Plan Students		**6,697**						
Total PD Land Use Plan Students		**8,896**						

Source: Personal communication with Teresa Tholen, Elk Grove Unified School District, 12/8/08.
Notes: Multi-Family residences are from Table PH-2 of the Public Services Chapter.
Single-Family residences reflect maximum residential units minus projected multi-family units.

Based on the number of units planned in the FVGCP, the EGUSD has indicated that buildout would require four new elementary schools in the FVGCP area. Two of the four schools would be needed to serve the populations of the 26 participating properties. However, the location of the future school sites has not yet been identified.

The *Florin-Vineyard Community Plan* text document, released as a Revised Public Review Draft on March 20, 2010 and subsequently modified by the Sacramento County Planning Commission at the request of the EGUSD on August 23, 2010, identifies four 'quadrant' areas for logical elementary school sites, defined as:

- **Quadrant 1 – West of Elk Grove-Florin Road/South Watt Avenue**

- **Quadrant 2 – South of Gerber Road and east of Elk Grove-Florin Road**

- **Quadrant 3 – East of Elk Grove-Florin Road, north of Gerber Road, and south of Florin Road**

- **Quadrant 4 – North of Florin Road and east of South Watt Avenue**

The four quadrants are shown on Plate PS-2a, below. The *Community Plan* does not show specific elementary school sites that apply to particular properties within the Plan area, and explains the rationale for this approach as follows:

> **This is to allow flexibility in school site location as development occurs within the Plan, and not predispose a school land use on particular properties. However identification and evaluation of school sites shall be addressed via the subdivision map process or any other land use planning process used by the County for this purpose. School siting shall be resolved prior to recordation of final maps for projects generating a demand for school facilities.**

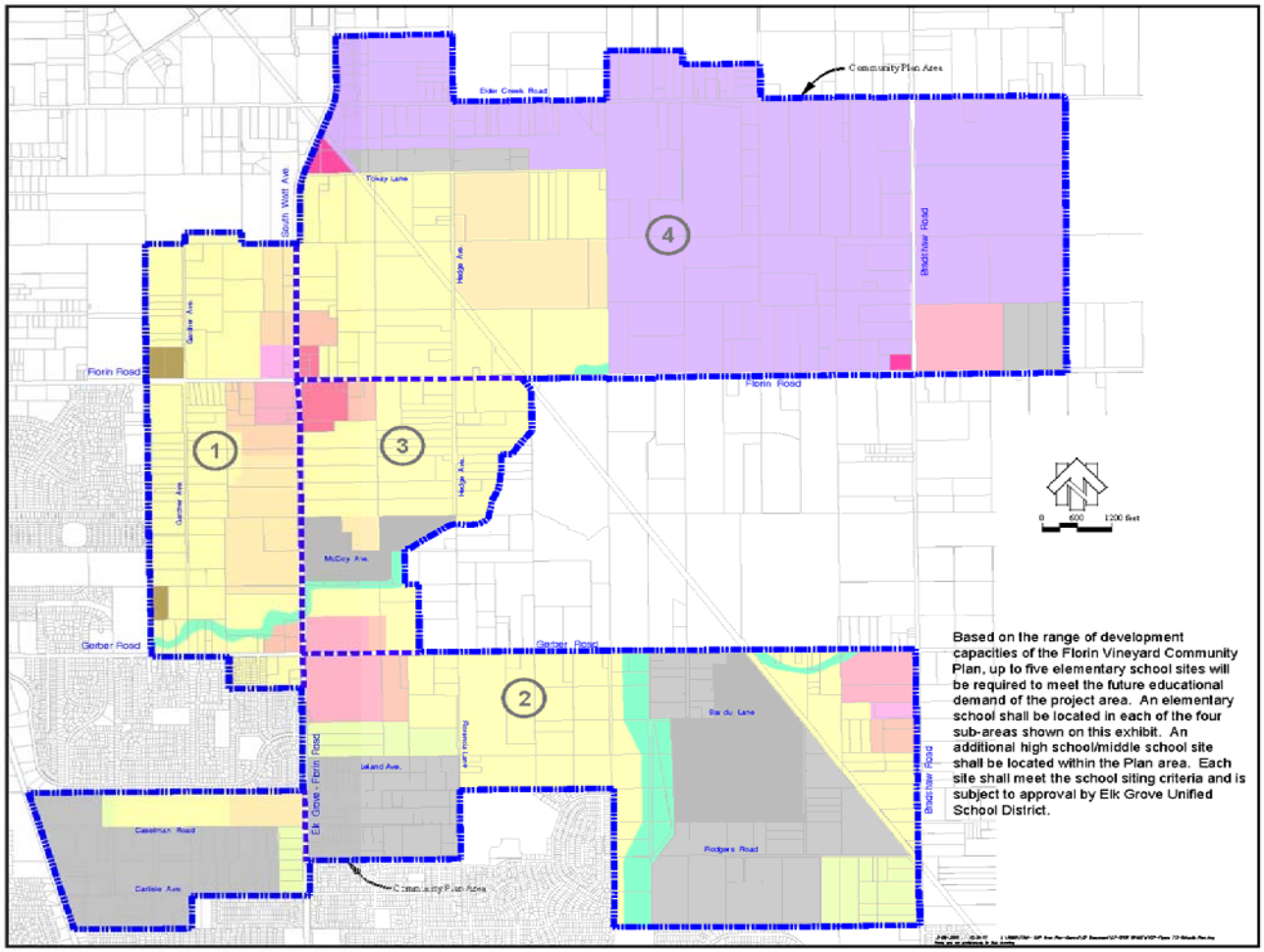
In addition to the four elementary schools discussed above, the plan specifies that an additional high school/middle school site shall be located in the Plan area.

The school facilities would be funded through a combination of Mello-Roos bonds, statewide school bonds, and developer mitigation fees. ~~New middle or high schools are not planned for the FVGCP; however, project applicants would be required to pay fees which would go toward middle and high school facilities located nearby which would serve students from the FVGCP area.~~ Development within the FVGCP would be required to pay the school impact fee in place at the time of project approval; in addition, new residences would be required to participate in the EGUSD's Mello-Roos Community Facilities District No. 1 annual tax. Payment of required impact fees and taxes is determined to be full mitigation for impacts to schools pursuant to SB 50. Therefore, implementation of the proposed project would have a ***less-than-significant*** impact on school resources.

MITIGATION MEASURE(S)
None required.

Plate PS-2a: School Plan

Figure 7.3 School Plan



Impacts to Library Services.

CAC Land Use Plan/PD Land Use Plan

The current Sacramento County Library Authority standards require one 20,000 square-foot library to serve 50,000 residents. Based on the maximum FVGCP buildout population of 36,333 persons (PD Land Use Plan with density bonus), the FVGCP would not require a new library. Rather, the project would contribute to the need for library facilities that would serve the larger community area. The FVGCP is anticipated to benefit from, and would therefore be required to contribute to the new Vineyard 1 Library. As outlined in the Public Facilities Financing Plan, all residential development would be required to participate in the funding of the Vineyard 1 Library. Therefore, implementation of the proposed project would provide for the funding of the necessary library services, and impacts would be ***less-than-significant***.

Mitigation Measure(s)

None required.

Impacts Related to an Increased Demand for Solid Waste Disposal/Recycling Services.

CAC Land Use Plan/PD Land Use Plan

As noted above, the Sacramento County Department of Waste Management and Recycling would provide garbage, green waste, and recycling collection services to the FVGCP. The collected solid waste is currently deposited at the Kiefer Road Landfill.

The Kiefer Road Landfill is classified as a major landfill, which is defined as a facility that receives more than 50,000 tons of solid waste per year. The landfill is permitted to receive a maximum of 10,815 tons per day. Currently, the Kiefer Road Landfill receives and average intake of 6,632 tons per day, and is operating below permitted capacity and will have capacity for the next 30 to 40 years based on current disposal rates.[2] Furthermore, the Department of Waste Management continues to research opportunities to increase the recycling and composting programs.

The proposed project would increase demand for solid waste services; however, existing and planned waste facilities at the Kiefer Road Landfill are sufficient to serve buildout of the FVGCP. In addition, all demolition and construction work would be required to comply with State regulations governing the disposal and recycling of building materials. Therefore, the proposed project would have a ***less-than-significant*** impact on solid waste disposal/recycling facilities.

Mitigation Measure(s)

[2] California Integrated Waste Management Board (www.ciwmb.ca.gov).

None required.

Impacts Related to the Increased Demand for Park and Recreation Services and Facilities.

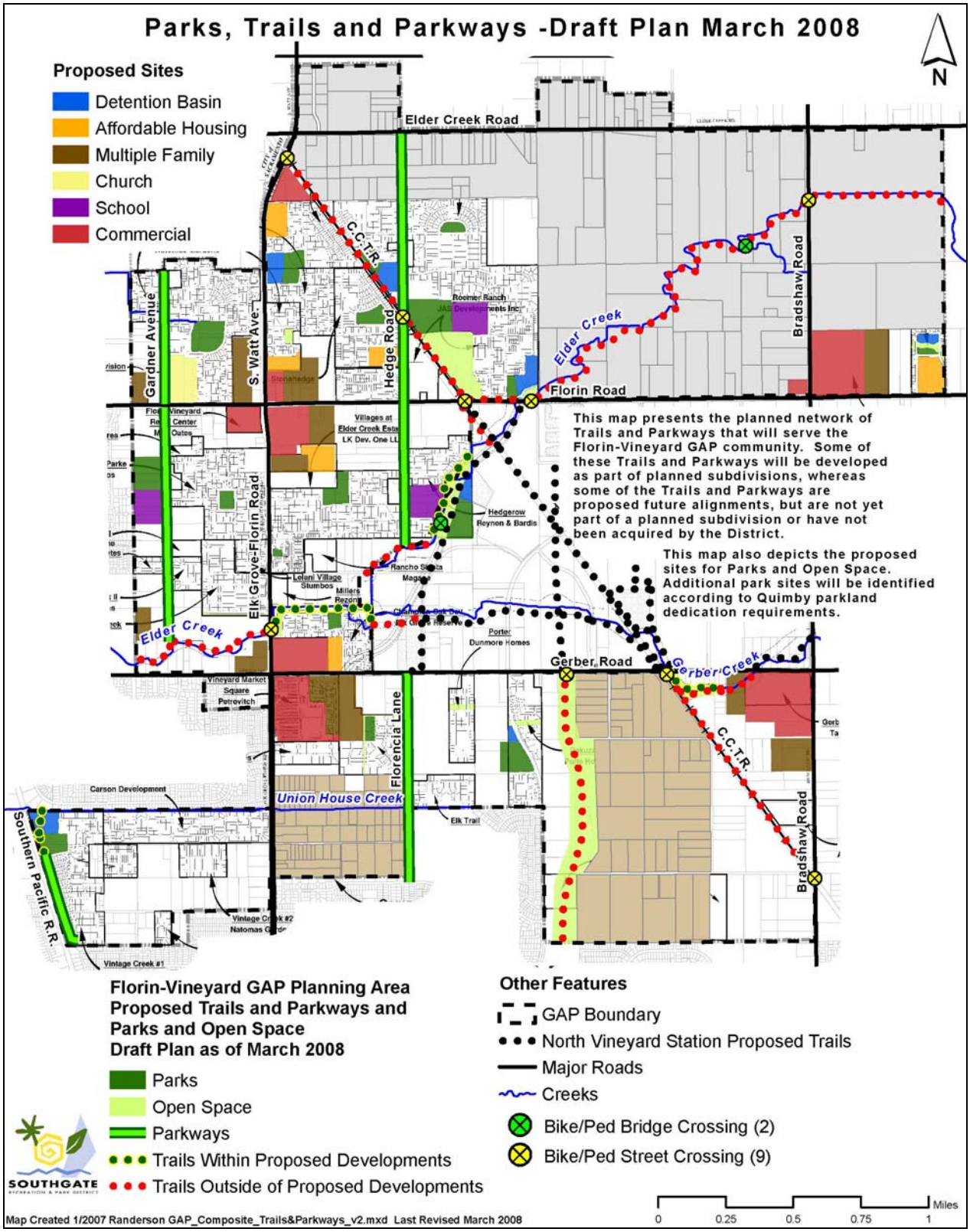
CAC Land Use Plan/PD Land Use Plan

Currently, the SRPD has not developed any parks within the boundaries of the FVGCP. Existing and planned park facilities are located immediately west, south, and east of the FVGCP. Neighboring parks include Sunrise Florin Park on Fletcher Farm Drive, Churchill Downs Community Park on Waterman Road, and Wildhawk Golf Club on Vineyard Road. The SRPD requires land dedication of five acres per 1,000 residents. According to the SRPD draft Planned Parks and Parkways System plan, at buildout the FVGCP is anticipated to contain 17.9 acres of mini-parks, 54.1 acres of small neighborhood parks, 41.1 acres of large neighborhood parks, 24.6 acres of community parks, additional playground facilities, and two community centers totaling 25,000 square feet. **However, the SRPD notes that full implementation of the density bonus for the CAC and PD Land Use Plans would result in 1,342 and 1,809 additional residential units respectively and would require an additional 17 – 24 acres of parkland.** In addition, an extensive parkway and trail network is incorporated into the design of the FVGCP (See Plate PS-3). It should be noted that the exact locations of the schools and parks are preliminary and do not represent finalized plans. As shown in Plate PS-3, the FVGCP parkway and trail network would connect to planned trails within the North Vineyard Station Specific Plan along the creeks, inactive California Traction Railroad line, high voltage electricity corridors, and a couple of north/south roads (Hedge Road, Gardner Avenue, and Florencia Lane). Parks and parkway access points would be located near affordable housing and multiple-family housing to ensure ease of access to underserved groups. In addition, parks would be located adjacent to schools to provide for conjunctive uses with the EGUSD. Finally, parks would be placed adjacent to planned detention basins to take advantage of the visual open space provided by the bodies of water.

The provision of park facilities would be accomplished through a combination of land donations, Quimby Act in-lieu fees, and fees as established in the Public Facilities Financing Plan. All fees would be updated periodically to account for increases in the cost of providing park facilities. **Additionally, it should be noted that full implementation of the density bonus will increase the parkland dedication requirements for each project.** All of the individual projects would be required to participate in the funding of the park facilities that are required by the SRPD in compliance with the established park standards. Therefore, implementation of the proposed project would have a ***less-than-significant*** impact on park facilities.

Mitigation Measure(s)
None required.

Plate PS-3
Planned Parks and Parkway System



IMPACTS TO GAS AND ELECTRIC FACILITIES.

CAC LAND USE PLAN/PD LAND USE PLAN

As noted above, SMUD and PG&E provide electric and gas facilities, respectively, to the FVGCP area. The FVGCP is anticipated to include up to 13,876 residential units (PD Land Use Plan with Density Bonus), as well as commercial, industrial, and office uses. As outlined in the Climate Change chapter, all projects would be required to achieve project-specific targets in the reduction of greenhouse gases. Many of the potential options for achieving the targets are directly related to reductions in the use of gas and electricity. Furthermore, development of the individual projects would be subject to project-specific review by SMUD and PG&E to identify the specific energy facilities required to serve the development and the most appropriate siting of such facilities.

The SMUD currently serves the businesses and rural residences located in the FVGCP. Additional service infrastructure would be required to serve the increased development densities that would occur under buildout of the FVGCP. Developers would be required to dedicate utility easements for the extension of these services. Construction within the easements would not result in additional environmental impacts beyond what is anticipated for buildout of the FVGCP. Prior to approval, tentative subdivision maps and improvement plans would identify the locations of these utility easements. The SMUD is continually reviewing and updating their electrical generation and service capacity in order to serve the development within Sacramento County.

The PG&E Company owns and operates gas facilities adjacent to portions of the FVGCP located west of Elk-Grove Florin Road and south of Gerber Road. To facilitate the extension of gas pipelines to provide service to new development, PG&E would require the dedication of a standard 12.5-foot Public Utility Easement for underground facilities and appurtenances adjacent to all public ways and private drives. The ultimate configuration of all natural gas lines within new development would require the approval of PG&E. Prior to approval, tentative subdivision maps and improvement plans would identify the location of these utility easements.

With implementation of the future project specific recommendations and/or requirements of SMUD and PG&E for facility improvements, as well as the energy efficiency measures required to address climate change, buildout of the FVGCP would have a ***less-than-significant*** impact on gas and electric facilities.

MITIGATION MEASURE(S)
None required.

CUMULATIVE CONDITIONS

CUMULATIVE IMPACTS TO PUBLIC SERVICES AND FACILITIES RESULTING FROM BUILDOUT OF THE FVGCP IN COMBINATION WITH EXISTING AND FUTURE DEVELOPMENTS WITHIN THE PROJECT AREA.

CAC LAND USE PLAN/PD LAND USE PLAN

As outlined above, project impacts to public services would occur within the service areas of the respective services providers. Service areas are established by the Sacramento County Local Agency Formation Commission to ensure the adequate provision of services. Impact fees, annual tax assessments, and service fees have been established by the respective service providers to ensure the adequate provision of services and the long-term financial security of the providers. Individual projects would be required to participate in all of the above mentioned funding mechanisms to ensure that buildout of the FVGCP would not result in adverse impacts to the service providers. Similarly, other projects within the service areas would be require to participate in the funding of services. Therefore, implementation of the proposed project in conjunction with cumulative development would have a ***less-than-significant*** impact on public services.

MITIGATION MEASURE(S)
None required.

6 SEWER SERVICE

INTRODUCTION

The Sewer Service chapter of the EIR describes the current and proposed sewer service for the project area. Documents referenced to prepare this section include the *Sanitary Sewer Master Plan for the Florin-Vineyard GAP Community Plan*, **the *2006 CSD-1 Sewerage Facilities Expansion Master Plan,*** and the *Sacramento Regional Wastewater Treatment 2020 Master Plan*.

ENVIRONMENTAL SETTING

The Environmental Setting section describes the existing conditions of the sewer service in the Florin-Vineyard Gap Community Plan Area (FVGCP) (See Plate SS-1, Project Area).

Project area elevations range from approximately 70 feet above mean sea level (msl) near the northeast boundary to approximately 40 feet above msl near the west boundary, resulting in a visually flat plan area across nearly 3 miles. The area is roughly bounded by: Elder Creek Road on the north, the Churchill Downs neighborhood on the south, Bradshaw Road on the east and the Union Pacific Railroad Tracks to the west. Historical land uses within the FVGCP include grazing and low intensity farming. The total area is approximately 3,766 acres composed of predominantly agricultural-residential and aggregate mining land uses, with scattered easements throughout. High voltage power line easements, a 75-foot PG&E easement and the Central California Traction Railroad 100-foot wide right-of-way are the major easements within the plan area.

The Sacramento Regional County Sanitation District (SRCSD) and Sacramento Area Sewer District (SASD) provide public sewer service to the urbanized portions of unincorporated Sacramento County~~, including the FVGCP~~. **The majority of the FVGCP is located within the SRCSD and the SASD; however, the area of the FVGCP located north of Florin Road and east of a point 1 mile west of Bradshaw Road (1/2 mile east of Hedge Avenue) is not currently within either district and would therefore need to be annexed to both the SRCSD and SASD prior to development (see Plate SS-1a).**

Local sewage collection and transport is provided by SASD facilities to the regional sewage transmission, treatment, and disposal facilities operated by SRCSD. SASD is responsible for the operation and maintenance of the local trunk and collection systems within the County that are not operated and maintained by the Cities of Sacramento or Folsom. The SRCSD's facilities include interceptor sewage lines and the Sacramento Regional Wastewater Treatment Plant (SRWTP) in Elk Grove.

Plate SS-1
Vicinity Map

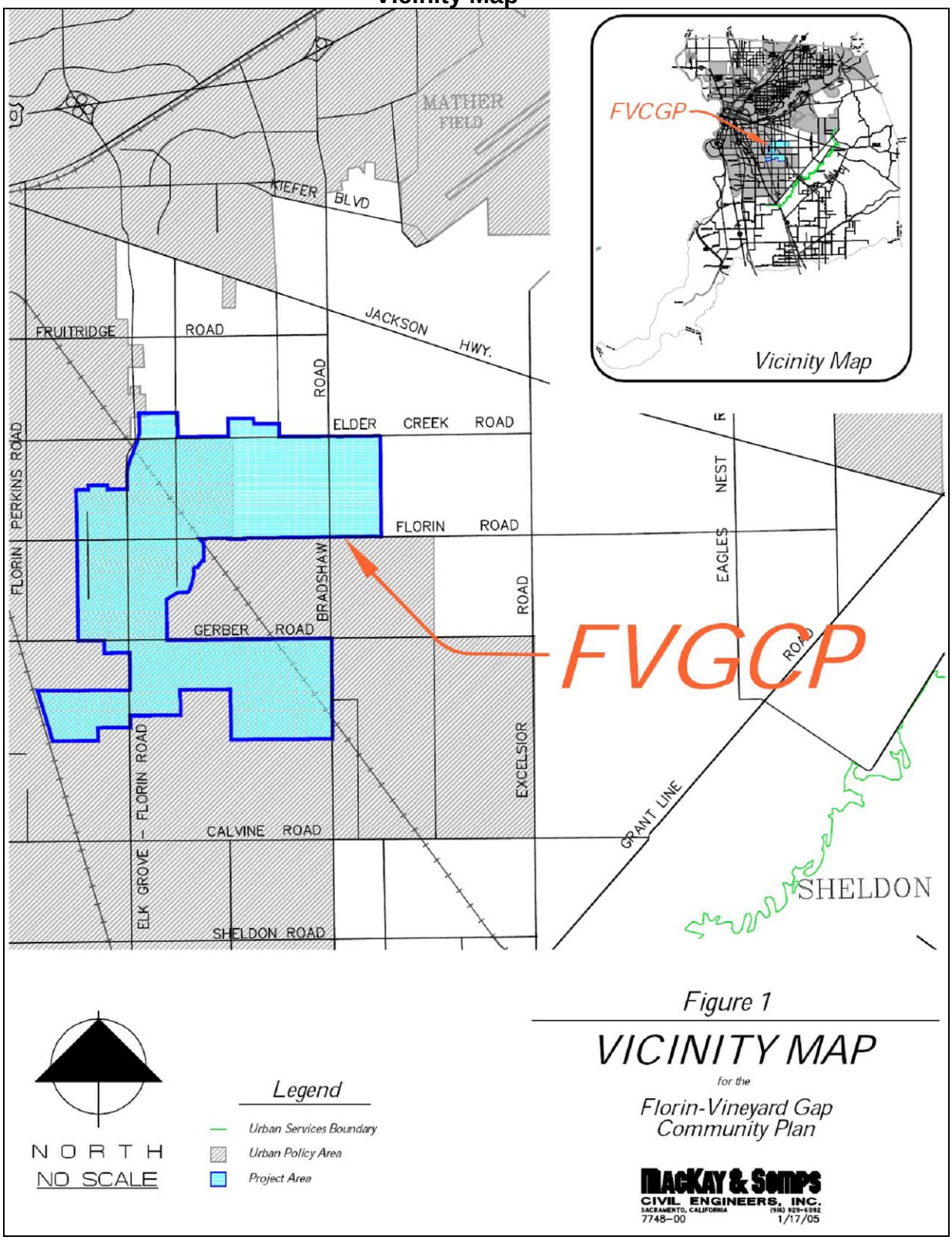


Plate SS-1a
Area Outside Sewer District Boundaries

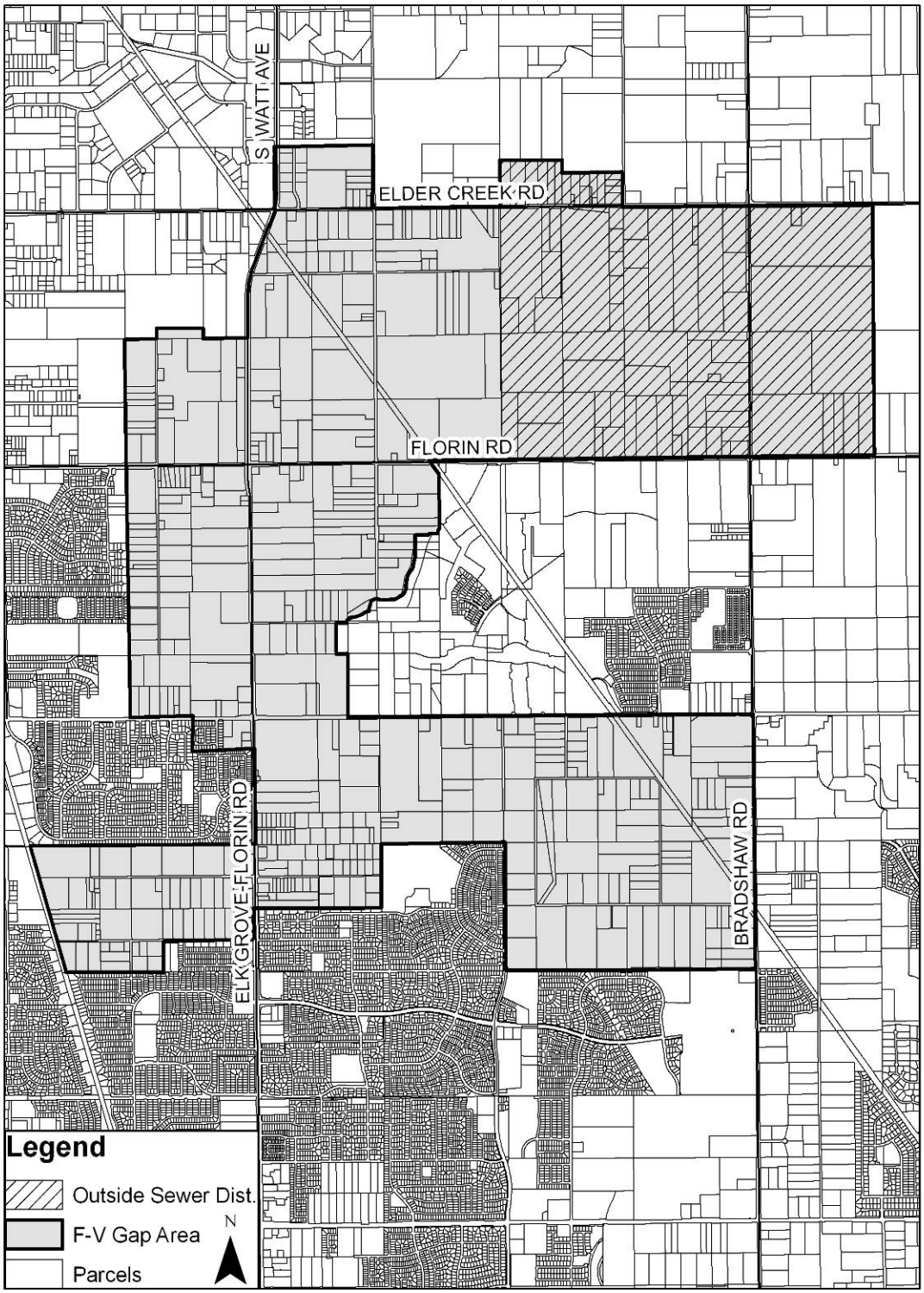
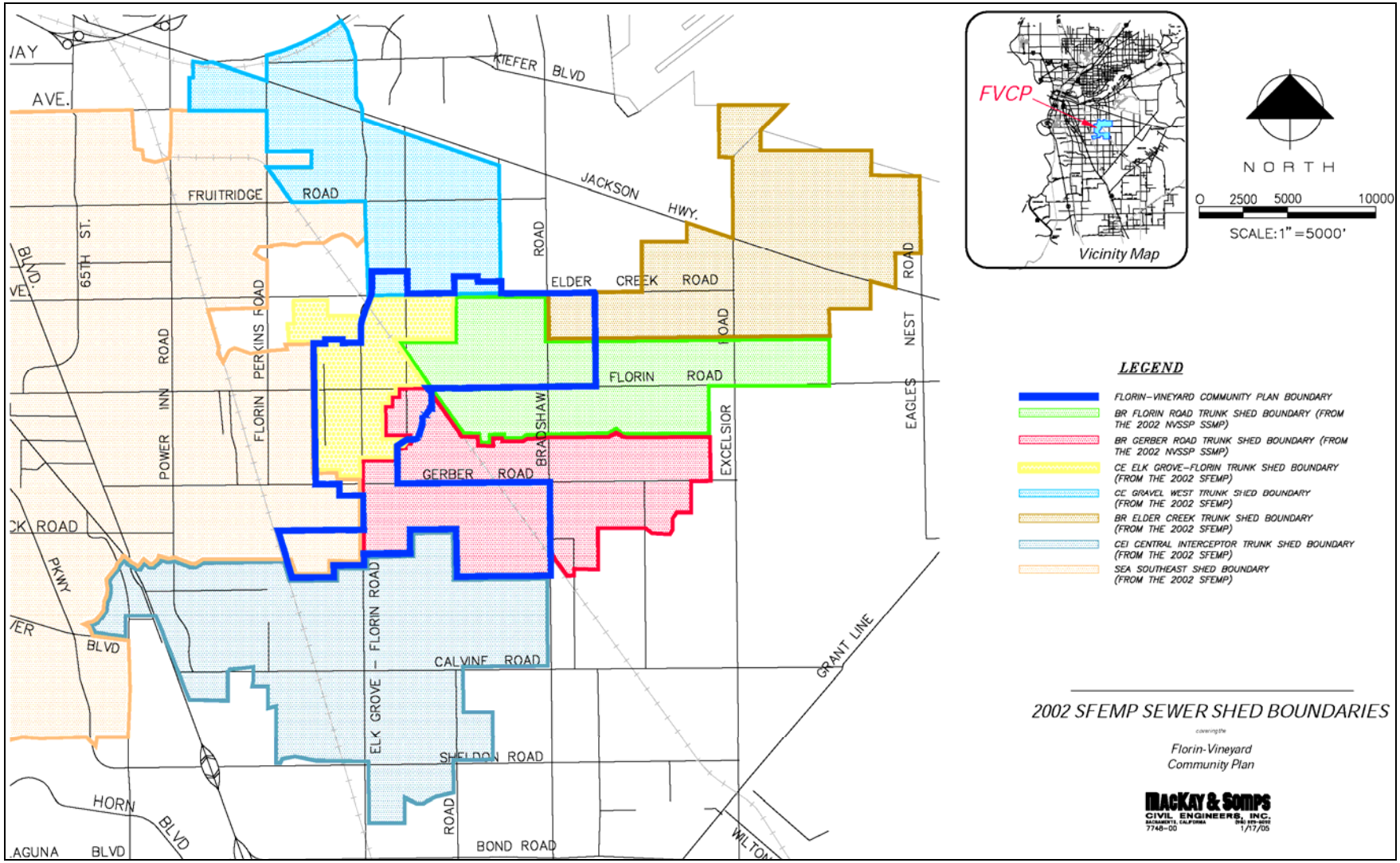


Plate SS-2
2002 SFEMP Sewer Shed Boundaries



As outlined in the FVGCP *Sanitary Sewer Master Plan*, the Sewerage Facilities Expansion Master Plan (SFEMP) designated numerous tributary trunk sewer sheds to serve specified locations throughout the County, based on analysis of the existing topography and the desire to sewer by gravity. Currently, six sheds cover the FVGCP (See Plate SS-2) (CE West Gravel Shed, CE Elk Grove-Florin Shed, BR Elder Creek Shed, BR Florin Road Shed, BR Gerber Road Shed, and SEA Southeast Shed).

Existing Sanitary Sewer Infrastructure

Existing sanitary sewer facilities within the FVGCP include the ~~Elk Grove-Florin Road Interceptor (~~Central Interceptor~~)~~, the Bradshaw 6A Interceptor, and various private septic systems serving the approximately 550 existing residences scattered throughout the FVGCP. The Central Interceptor is a 102-inch pipeline that runs from Fruitridge Road to Brittany Park Drive. The Bradshaw 6A Interceptor consists of a 108-inch pipeline that runs from Bradshaw Road to Elk Grove-Florin Road. Additional sewer infrastructure would be required to serve buildout of the FVGCP.

An interceptor is a sewer pipeline that carries 10 million gallons per day (mgd) or more; a trunk line is one that carries 1 mgd to 10 mgd, and a collector carries less than 1 mgd. Interceptors are designed, funded, and maintained by the SRCSD while trunks are funded, owned and maintained by SASD. Collectors are funded and designed by individual developers and once built they, too, are maintained by SASD.

The interceptors convey wastewater to the SRWTP. The SRWTP is a high purity oxygen-activated sludge facility, and is permitted to treat an average dry weather flow (ADWF) of 181 million gallons per day (mgd) and a daily peak wet weather flow of 392 mgd. Currently, the facility's ADWF is approximately 150 mgd. SRCSD's long-term planning effort, the SRWTP 2020 Master Plan, projects a population-based flow of 218 mgd ADWF. After secondary treatment and disinfection, a portion of the effluent from the plant is further treated in SRCSD's Water Reclamation Facility and then used for landscape irrigation within the City of Elk Grove. The majority of the treated wastewater is dechlorinated and discharged into the Sacramento River.

Regulatory Context

Existing policies, laws, and regulations that would apply to the proposed project are summarized below.

Federal Government

The Federal Clean Water Act (CWA) established regulatory requirements for discharge of pollutants into navigable waters. Waste treatment plants and

practices must provide treatment of waste using the best practicable technology before any pollutants are discharged into receiving waters. The CWA provides the authority for each state to issue discharge permits and regulate discharge limits through the designation of a regulatory agency.

STATE OF CALIFORNIA

The State Water Resources Control Board (SWRCB) manages all water rights and water quality issues in California under the terms of the Porter-Cologne Water Quality Control Act (1969).

SACRAMENTO COUNTY GENERAL PLAN

The following policies contained in the Sacramento County General Plan apply to the proposed project.

PUBLIC FACILITIES ELEMENT

PF-6 Interceptor, trunk lines and flow attenuation facilities shall operate within their capacity limits without overflowing.

PF-8 Do not permit development which would cause sewage flows into the trunk or interceptor system to exceed their capacity.

PF-9 Design trunk and interceptor systems to accommodate flows generated by full urban development at urban densities within the ultimate service area. This could include phased construction where deferred capital costs are appropriate.

PF-10 Development along corridors identified by the Sanitation Districts in their Master Plans as locations of future sewerage conveyance facilities shall incorporate appropriate easements as a condition of approval.

PF-15 Support SASD and SRCSD policies to fund new trunk and interceptor capital costs through connection fees for new development.

PF-16 Support SRCSD policy to fully fund treatment plant operation through monthly service charges to system users. Fund treatment plant expansion and upgrades, and existing trunk and interceptor replacements or improvements through connection fees or other revenue sources.

PF-18 New development projects which require extension or modification of the trunk or interceptor sewer systems shall be consistent with sewer facility plans and shall participate in established funding mechanisms.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

An impact to the sewer service for the proposed project area would be considered potentially significant if the proposed project would:

- Result in development without coordination with the provision of the necessary services and utilities; or
- Would result in an exceedence of the capacity of the wastewater treatment plant.

METHODS OF ANALYSIS

The Impacts and Mitigation Measures section evaluates the impacts of the proposed project on the existing sewage system that would occur if the project is developed as currently proposed. In addition, plans to provide sewage conveyance are evaluated to ensure that such plans are feasible and in compliance with the regulatory context. Impact significance is determined by comparing project conditions to the existing conditions and governing regulations, and assessing the ability of the project to provide sewage services.

In 1999, the County Board of Supervisors initiated the Florin-Vineyard Gap Community Plan (FVGCP) process to ensure orderly growth in the Florin-Vineyard area in the central-western portion of Sacramento County. Two possible land use plans are under review in this EIR as a result of that planning effort: the Citizens Advisory Committee (CAC) Land Use Plan and the Sacramento County Planning Department (PD) Land Use Plan. Of the two land use alternatives being considered for the FVGCP area, the PD Land Use Plan would result in higher densities, and therefore was used as the basis for analysis in this chapter of the EIR. Impacts resulting from implementation of the CAC Land Use Plan would be reduced as compared to the PD Land Use Plan.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

IMPACTS TO WASTEWATER TREATMENT FACILITIES.

CAC LAND USE PLAN / PD LAND USE PLAN

The proposed wastewater system would connect to countywide sewer system which has been previously planned in the 2002 Sewerage Facilities Expansion Master Plan (SFEMP), ~~and~~ July 2002 North Vineyard Station Specific Plan (NVSSP), **and *2006 CSD-1 Sewerage Facilities Expansion Master Plan***. Information from the respective plans was used in the preparation of the Sanitary Sewer Master Plan for the FVGCP.

To ensure that the analysis is conservative, the proposed land uses used to calculate flows are based on the higher density land use plan proposed by PD Land Use Plan. Wastewater flows were calculated based on the designation of Equivalent Single-family Dwelling (ESD) values to the different land uses (See Table SS-1).

Table SS-1 Equivalent Single-Family Dwelling (ESD) Values

Land Use	ESD Value
Business/Professional	6 Per Acre
Commercial	6 Per Acre
Single-Family Residential	1 Per Dwelling Unit (Minimum 6 Per Acre)
Medium Density Residential 7-12	12 Per Acre
Multi-Family Residential 12-22	16.5 Per Acre (0.75 Per Dwelling Unit)
Elementary School (assumed 11-acre sites each)	81 ESD equivalence
Parks	6 Per Acre
Public Service	6 Per Acre
Railroad Corridor	6 Per Acre
Open Space/Non-Constrained Areas (Including golf courses)	6 Per Acre
Open Space/Constrained Areas (Detention, drainage channels, and power line corridors)	6 Per Acre
Off-Site/Non-Constrained Areas	Per SFEMP (Minimum 6 Per Acre)
Source: Sanitary Sewer Master Plan for the Florin-Vineyard GAP Community Plan, MacKay & Somps, Inc. addendum information (August 3, 2006).	

As shown in Table SS-2, below, the demand from the proposed project for wastewater treatment would be approximately 21.99 mgd. The SFEMP assigned 69,580 ESDs to the project area, with an approximate average dry weather flow of 21.57 mgd. The difference between the two projections is approximately .42 mgd, or 2 percent of total projected flows. The ~~WWTP~~ **SRWTP** currently has a dry weather capacity of 181 mgd, and current dry weather flows are approximately 127 mgd. Therefore, while the proposed project is unlikely to be built out immediately, the existing ~~WWTP~~ **SRWTP** has enough capacity to accommodate the proposed project. In addition, based on population expansion projections the SRWTP 2020 Master Plan anticipates an average dry weather flow of 218 MGD, which would accommodate the proposed project in concert with other development served by the ~~WWTP~~ **SRWTP**. Furthermore, project applicants would be required by the SRCSD and SASD to pay sewer connection fees and fair share fees as outlined in the Public Facilities Financing Plan to pay for both the extension of sewerage and the ~~WWTP~~ **SRWTP** capacity required to serve the FVGCP. Therefore, implementation of the proposed project would result in a ***less-than-significant*** impact to wastewater treatment capacity at the SRWTP.

MITIGATION MEASURE(S)
None required.

Table SS-2 Trunk Shed Summary

Trunk Shed	Total Acres	Total Equivalent Single-family Dwelling (ESD)	Average Dry Weather Flow (mgd)	Peak Wet Weather Flows (mgd)
CE Gravel West	1,021.4	6,128	1.90	3.98
CE Elk Grove-Florin	1,191.9	8,232	2.55	5.45
BR Elder Creek	2,762.3	16,574	5.14	10.39
BR Florin	2,006.7	14,621	4.53	8.69
BR Gerber	2,426.1	15,871	4.92	9.96
Gerber-Florin Supplemental	1,233.2	7,833.9	2.43	5.35
SEA Southeast	241.6	1,665	.52	1.23
Totals	10,883.2	70,924.9	21.99	~~45.05~~ **43.82**
Source: Sanitary Sewer Master Plan for the Florin-Vineyard GAP Community Plan, MacKay & Somps, Inc.				

IMPACTS TO WASTEWATER CONVEYANCE.

CAC LAND USE PLAN/PD LAND USE PLAN

With the exception of the Central Interceptor and the Bradshaw 6A Interceptor, wastewater conveyance infrastructure has not been extended into the FVGCP Area. The following discussion addresses the proposed infrastructure and connections to the existing facilities located to the south and west.

Based on current topography, the project area was divided into sewer sheds. Preliminary analysis of the six sheds covering the FVGCP (CE West Gravel Shed, CE Elk Grove-Florin Road Shed, BR Elder Creek Shed, BR Florin Road Shed, BR Gerber Road Shed, and SEA Southeast Shed) raised some concerns about the ability to gravity sewer these sheds as indicated in the SFEMP while maintaining adequate cover. Plate SS-2, above, shows how these sheds, as identified within the SFEMP, relate to the proposed FVGCP. The first six shed areas were originally designated in the SFEMP. The Gerber- Florin Supplemental Shed was originally separated and renamed for clarity in the North Vineyard Station Sewer Study.

MacKay and Somps Civil Engineers, Inc. conducted an analysis of each sewer shed. To ensure a conservative analysis, the evaluation was based on the potential peak sewer flows for buildout of the PD Land Use Plan. The study recommended revisions shown in Plate SS-3 to the shed boundaries identified in the SFEMP (See Plate SS-2). The final design is shown below in Plate SS-4.

Plate SS-3
Proposed Sanitary Sewer Shed Boundary Modifications

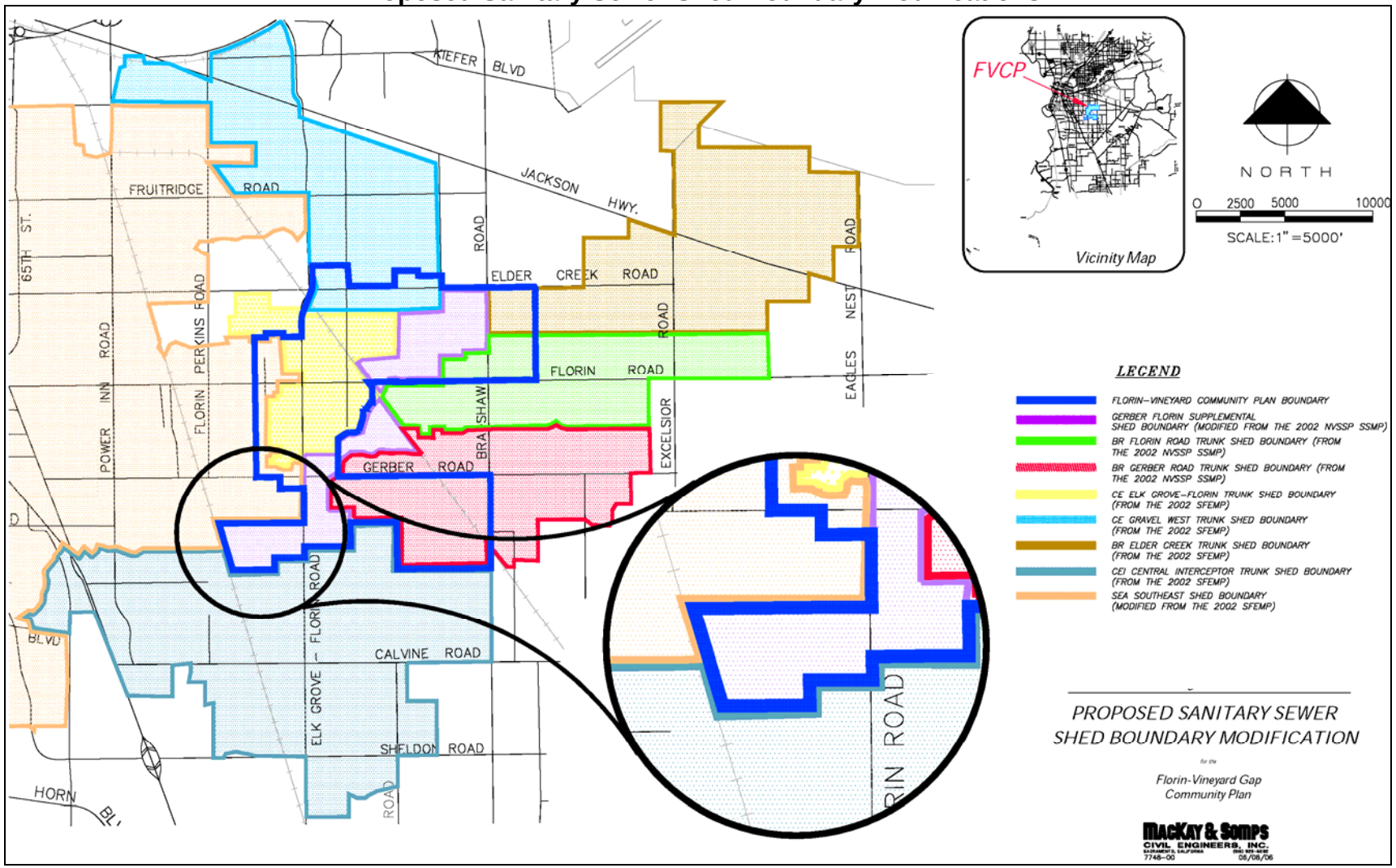
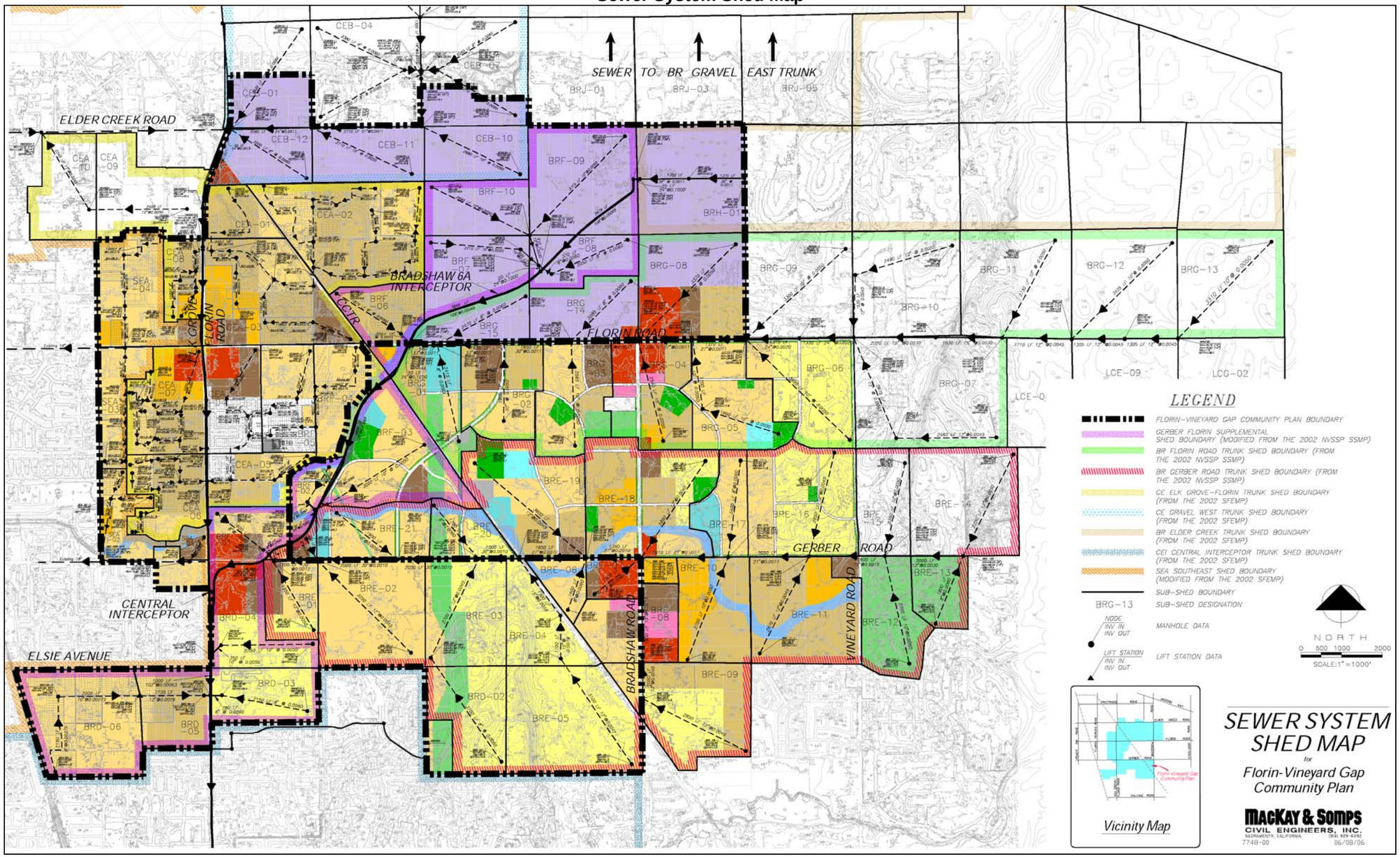


Plate SS-4
Sewer System Shed Map



CE GRAVEL AREA WEST TRUNK SHED:
The area associated with this shed was expanded to include properties south of Elder Creek Road (See Plate SS-3). Three new subsheds were created: CEB-10, 11, and 12. The subsheds were created to eliminate minimum pipe cover problems with lands previously within the CE Elk Grove Florin Shed (CEA01 and 02) and the BR Florin Road Trunk Shed (BRF-10) that could not convey sewage flows by gravity to their SFEMP-designated connections. Sub-sheds CEB-01, CEB-04, CEB-07, CEB-05 and CEB-08 drain south into the proposed 21-inch trunk within Elder Creek Road. Any remaining sub-sheds within the CE Gravel West Trunk Shed sewer into the existing Northeast Interceptor.

CE ELK GROVE-FLORIN TRUNK SHED:
The CE Elk Grove-Florin Trunk Shed and subsheds required significant rework in order to obtain gravity sewer ability for almost the entire shed. As mentioned in the above CE Gravel West Trunk Shed section, lands previously within the CE Elk Grove-Florin Trunk Shed (portions of subsheds CEA-01 and 02) were re-aligned with the CE Gravel Area West Trunk Shed. In addition, a portion of subshed BRF-06 from the BR Florin Road Trunk Shed has been redirected to flow through CEA-02 and 03. Based on preliminary calculations and findings in the analysis a 33-acre area located in the north east corner of subshed CEA-02 and zoned single family 3-5du/ac, was found to have pipe coverage issues no matter what direction/shed it was associated with. As a result preliminary calculations indicate a 0.10MGD Lift Station will be needed to service this area. A more detailed analysis would be required at the time of development to determine the exact requirements and size of the Lift Station.

The southwest corner of subshed CEA-03, which is designated for high density residential and commercial zoning, has the potential for a direct tie into an existing 8-inch line located within Elk Grove-Florin Road at the intersection with Florin Road. Currently this line serves a portion of the planned high-density parcel. Subsheds CEA-09 and 10, designated within the SFEMP to connect to the Central Interceptor in Elk Grove-Florin Road, have been schematically designed to flow northwest to an existing 18-inch main line in Elder Creek Road. The 18-inch line flows to an existing lift station on Elder Creek Road from which the flows are pumped east towards Elk Grove-Florin Road through a force main. The force main connects to an existing 21-inch line that continues to convey the flows east to its eventual connection to the Central Interceptor at the intersection of Elk Grove-Florin Road and Elder Creek Road. SASD has preliminarily indicated there to be available capacity in this line to accommodate additional flows from these subsheds. If, in the future, capacity constraints are identified in the existing 18-inch line and lift station, a portion of CEA-09 could connect directly to the existing 21-inch in Elder Creek Road. The natural fall of the land is in a northwesterly direction, making connection directly to the Central Interceptor in Elk Grove-Florin Road unrealistic and impractical.

Subsheds CEA-07 and 08, similar to subsheds CEA-09 and 10, topographically fall away from the Central Interceptor, their intended connection point. Upon investigation of the existing surrounding facilities for possible options, other than a lift station, a dry 12-inch line was discovered in Florin Road stubbed out to Gardner Avenue north of CEA-07 and south of CEA-08. SASD recommended using the line as the point of connection for portions of subsheds CEA-07 and 08. As a result, portions of these sheds have been removed from the CE Elk Grove-Florin Shed and diverted into the SEA Southeast Shed, SEA-03 and 04.

Subshed CEA-06, similar to subsheds CEA-09 and 10, topographically falls away from the Central Interceptor, the lines intended connection point. Upon investigation of the existing surrounding facilities for possible options, other than a lift station, an 18-inch line was discovered in Gerber Road along the sheds southern boundary. The line currently services the properties to the south (portions of the Tamarindo Subdivision) via a 12-inch line running north in Elk Grove-Florin Road and also services two parcels within the original CEA-06 subshed.

Although the above mentioned parcels already being served fall within the FVGCP area, flows from these sites have already been accounted for within the existing pipe system and therefore were left out of the calculations. Portions of this shed would be diverted to the SEA Southeast Shed via the existing 18-inch pipe. As a result, two additional subsheds have been created, SEA-01 and 02. Subsheds CEA-04 and 05 have had their connection points to the Central Interceptor combined, and the connection location changed from that outlined in the SFEMP. In addition, subsheds BRF-04 and 05 from the BR Gerber Road Trunk Shed have been redirected to flow through CEA-04 & 05 ultimately connecting to the Central Interceptor. Service to BRF-04 and 05 via the SFEMP planned Gerber Road Trunk connection would not be feasible due to existing topography and existing invert elevations.

BR ELDER CREEK TRUNK SHED:
Major shed or subshed changes were not found to be necessary for this shed.

BR FLORIN ROAD TRUNK SHED:
Subshed BRF-06 has a portion redirected through CEA-02 and 03 and subshed BRF-10 has a portion redirected through new subshed CEB-10. For more details on these subshed changes see above CE Gravel Area West Trunk Shed and CE Elk Grove-Florin Trunk Shed descriptions. In addition, slight changes to subsheds internal to the BR Florin Road Trunk Shed have been made due to more accurate topographic information and planned land uses.

BR GERBER ROAD TRUNK SHED:
Subsheds BRF-02 and 03 would still tie-in to their planned points of connection on the Bradshaw Interceptor but are no longer considered a part of the BR Gerber Road Trunk Shed. They are instead associated with the Gerber Florin

Supplemental Shed. Subsheds BRD-03 and 04 would still connect at their planned location of connection on Elk Grove Florin Road, but instead of connecting to the Bradshaw Interceptor as indicated in the SFEMP, they are shown connecting to the Central Interceptor. BRD-03 and 04 were associated with the Gerber-Florin Supplemental Trunk Shed, rather than the BR Gerber Trunk Shed as indicated in the SFEMP. However, the proposed connection to the Central Interceptor is for schematic reasons because the Central Interceptor was found to be shallower than the Bradshaw Interceptor at that point. Future in-depth design may result in a connection to the Bradshaw Interceptor upon development.

Subsheds BRF-04 and 05, as indicated in the CE Elk Grove-Florin Trunk Shed description above, are unable to connect to the Bradshaw Interceptor as depicted in the SFEMP. The North Vineyard Station Specific Plan Sanitary Sewer Master Plan (NVSSP SSMP) associated these sheds with the new Gerber Florin Supplemental Trunk Shed. The study identified a better service solution by incorporating these subsheds into the CE Elk Grove-Florin Trunk Shed and redirecting their associated flows to the Central Interceptor via subsheds CEA-04 and 05. For more details on these subshed changes see above CE Elk Grove-Florin Trunk Shed description. In addition, slight changes have been made to subsheds internal to the BR Gerber Road Trunk Shed due to more accurate topographic information and planned land uses. According to the SFEMP BR Gerber Road Trunk Shed master plan, sub-shed BRD-02 would drain directly west into Node BRD-02, which in turn is connected via an existing local collector located in the Churchill Downs neighborhood along Giant Panda Way. The line then connects to the Central Interceptor. However, current and more detailed land use information and topography indicates that the majority of this sub-shed could drain to the Gerber Road Trunk. The remaining portion is directed west into Node BRD-02 as described above.

GERBER FLORIN SUPPLEMENTAL TRUNK SHED:
Subsheds within the Gerber Florin Supplemental Trunk Shed have been modified as needed in order to accomplish a pure gravity based sewer system. The SFEMP originally depicted subsheds BRF-01, 03, and 04 as being within the BR Gerber Road Trunk. Approval of the North Vineyard Station Specific Plan Sanitary Sewer Master Plan (NVSSP SSMP) associated these subsheds with the Gerber Florin Supplemental Shed. These sheds have been identified as having pipe cover issues when connected as indicated in the NVSSP SSMP and therefore have been shifted again. Their flows are now directed to the west through CE Elk Grove-Florin Trunk Shed subshed CEA-05 to the Central Interceptor. For more details on these subshed changes see above CE Elk Grove-Florin Trunk Shed description.

SEA SOUTHEAST SHED:
Subsheds CEA-06, 07, and 08, as mentioned above in the CEA Elk Grove-Florin Trunk Shed description, were subdivided into subsheds SEA-01, 02, 03, and 04.

Their flows were direct westward into existing lines determined by SASD to have available capacity. As with all other major shed changes outlined previously, these shed changes were determined necessary so as to ensure proper design of a gravity based system along with maintaining adequate pipe coverage at the upper reaches of a shed. MacKay & Somps recommended that the Gerber-Florin Supplemental Shed be extended to serve the southwest portion of the FVGCP, so that all flows within said subshed are directed to the Central Interceptor in Elk Grove-Florin Road. Based on buildout conditions and the approximate tributary shed area for the 12-inch Elsie Avenue sewer, flows from the FVGCP cannot be directed to this sewer. The capacity downstream of the point of connection at the 12-inch sewer is 1.713 cubic feet per second (cfs) (1.107 MGD). The southwestern panhandle of the FVGCP would generate approximately 1.598 cfs (1.032 MGD) Peak Wet Weather Flow (PWWF). The combination of these flows and those downstream of the point of connection west of the railroad corridor would exceed the Elsie Avenue pipe capacity, thus not allowing all tributary FVGCP flows to be directed to the Elsie Avenue sewer. MacKay & Somps proposed to direct all sanitary sewer flows from this FVGCP subshed to the Central Interceptor within Elk Grove-Florin Road. Two new subsheds, BRD-05 & 06 and a lift station west of Elk Grove-Florin Road have thus been designated to serve this area. As future project-specific studies are done, there is a possibility that a portion of said area may be directed to the 12-inch trunk in Elsie Avenue such that a lift station may not be required. MacKay & Somps recommended that a point of connection to the Central Interceptor be located at Caselman Road to accommodate this future service. The small portion of the FVGCP directly south of sub-shed CEA-06 is within the existing SEA Southeast Shed and flows from said portion are expected to be directed to the 18-inch trunk sewer within Gerber Road west of Elk Grove-Florin Road.

The analysis conducted for this EIR found that with careful planning and payment of fees the proposed project could be accommodated. Therefore, implementation of the proposed project would result in a ***less-than-significant*** impact to wastewater conveyance.

MITIGATION MEASURE(S)
None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

LONG TERM IMPACTS TO SEWER SERVICE IN SACRAMENTO COUNTY RESULTING FROM THE DEVELOPMENT OF THE PROJECT IN CONJUNCTION WITH OTHER DEVELOPMENT.

CAC LAND USE PLAN / PD LAND USE PLAN

Implementation of the proposed project would result in increased demand for sewer service within Sacramento County. Extensive investments in infrastructure

would be required to service the proposed population increase in the Florin-Vineyard area. However, development would be required to construct and/or pay for the necessary infrastructure. However, the proposed project area is largely within the Urban Service Boundary and has already been anticipated for development within planning documents for both the County of Sacramento and the SCRSD. SCRSD has not indicated a difficulty in servicing ultimate buildout of the project area and greater Sacramento County. Therefore, as buildout would not result in an adverse impact to sewer service; the proposed project's incremental contribution to the cumulative impact would also be ***less-than-significant***.

MITIGATION MEASURE(S)
None required.

7 WATER SUPPLY

INTRODUCTION

The Water Supply chapter of the EIR describes the current and proposed water supply in the project area by Sacramento County. Documents referenced to prepare this section include the *Sacramento County General Plan,* the *Master Water Study for the Florin-Vineyard Community Plan*, the *Zone 41 Urban Water Management Plan,* the *Revised Water Supply Assessment for Florin-Vineyard Community Plan*, and the California American Water – Water Supply Assessment.

ENVIRONMENTAL SETTING

The Environmental Setting section describes the existing conditions of water supply in Sacramento County.

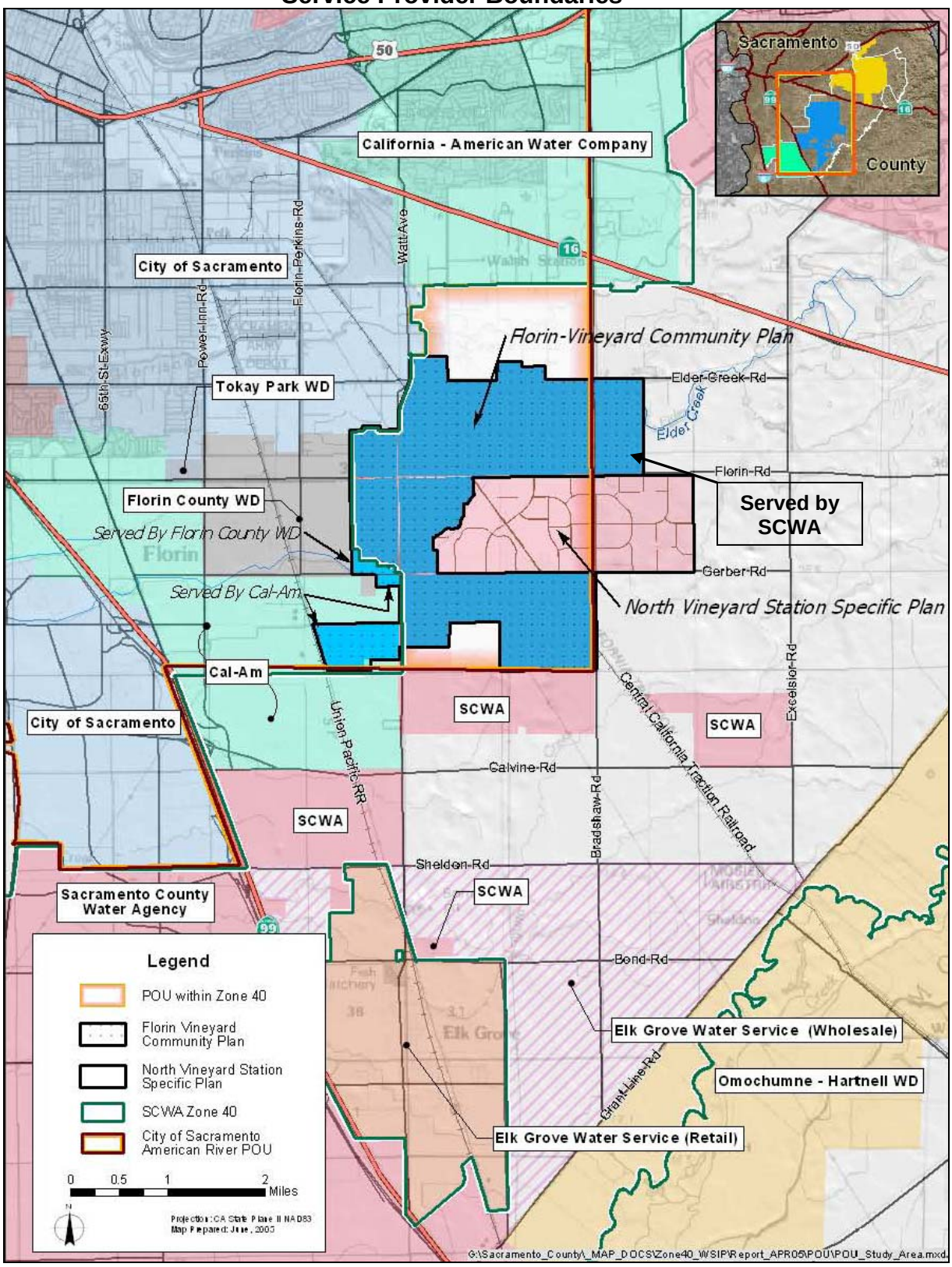
DOMESTIC WATER SUPPLY

Currently, municipal water supply and water distribution facilities are not located within the FVGCP area. Within Sacramento County, 28 water purveyors are responsible for treating and distributing surface and groundwater, as well as securing surface water rights. The Florin-Vineyard Gap Community Plan (FVGCP) is located within the spheres of three purveyors: the Sacramento County Water Agency (SCWA), California American Water Company (Cal-Am), and the Florin County Water District (See Plate WS-1).

SCWA is responsible for providing water to all areas not served by one of the other purveyors. The majority of the FVGCP lies within SCWA Zone 40. Zone 40 was established by SCWA to undertake the "… acquisition, construction, maintenance and operation of facilities for the production, conservation, transmittal, distribution and sale of ground or surface water or both for the present and future beneficial use of the lands or inhabitants within the zone." According to the *2005 SCWA Zone 40 Water Supply Master Plan,* the three main water supply sources would be: SCWA's Wildhawk and Waterman Groundwater Treatment Plants, the Vineyard Surface Water Treatment Plant, and the wholesale purchase of City of Sacramento American River Place of Use water.

The area of the FVGCP located west of Elk Grove-Florin Road and south of Gerber Road lies within Cal-Am's Parkway System Service Area. The Parkway System is one of several Cal-Am service areas within Sacramento County and comprises approximately 14,000 connections. The Parkway System area comprises approximately 240 mostly undeveloped acres out of the total 3,768 acres of the FVGCP.

Plate WS-1
Service Provider Boundaries



Another small portion of the FVGCP area lies outside of the Zone 40 service boundary near Gerber Road and Elk Grove-Florin Road and is within the area to be served by Florin County Water District. The area was included in the Master Water Study for the FVGCP. The inclusion of the area implies that the Zone 40 water system will be designated to serve this area; however, the decision as to which agency will be the retail water provider has not been made at this time.

Current Demand

As stated above, the FVGCP area is not currently served with municipal water. As such, the current residents and businesses are supplied by existing individual groundwater wells. The development pattern is sparse with rural residences on large lots and agricultural uses.

Current Supply

The following discussion addresses the current and projected water supplies of the water providers. Florin County Water District is not evaluated as SCWA Zone 40 would be the wholesale water source for future residents of the FVGCP within the Florin County Water District.

Cal-Am

The following discussion addresses the existing and projected water supplies available to the California American Water Company.

Surface Water Supplies

The Cal-Am Parkway System has two sources of supply; groundwater and purchased potable water from the City of Sacramento. Groundwater is used primarily in the summer and purchased water is used primarily in the winter. The contract amounts for purchased water from the City of Sacramento are shown in Table WS-1

Table WS-1: Cal-Am Annual Potable Water Contract

Contract Entitlement	Peak Allocation (May 15 – October 14) Maximum Daily Average	Off Peak Allocation (October 15 – May 14) Maximum Daily Average	Maximum Yearly Allocation
City of Sacramento	1.13 mgd (785 gpm)	5,76 mgd (4,000 gpm)	2,580 ac-ft (843 MG)
Source: CAL-AM Water Supply Assessment, August 2007.			

The contract with the City of Sacramento has an initial term to 2022, and also includes a one-time ten-year negotiated extension to 2032. Cal-Am's Capital Improvement Plan includes increasing the amount of water to be purchased for the Parkway System from the City of Sacramento. Table WS-2 contains the projected total water supply purchased from the City of Sacramento for the Parkway System.

Table WS-2: Projected Cal-Am Annual Potable Water Purchases

	2010 (acre-feet)	2015 (acre-feet)	2020 (acre-feet)	2025 (acre-feet)
Current City of Sacramento Contract	2,580	2,580	2,580	2,580
Proposed Additional Water to be Purchased from the City of Sacramento	920	920	1,420	1,920
Total	3,500	3,500	4,000	4,500

Source: CAL-AM Water Supply Assessment, August 2007.

Cal-Am is a signatory to the Sacramento Water Forum Agreement. The Agreement is a mutual understanding among water purveyors, agencies, municipalities, citizen's groups and business interests to plan for a reliable and safe water supply until 2030 and to preserve the environmental, recreational and aesthetic values of the lower American River. A major element of the Sacramento Water Forum Agreement is to reduce surface water diversions from the American River during dry years, and Cal-Am's contract for purchase of potable water from the City applies to diversions from both the American and Sacramento Rivers. However, the Water Supply Assessment assumed that the ability of the City of Sacramento to provide water to the Parkway System on an annual basis is not limited by the Sacramento Water Forum Agreement.

GROUNDWATER SUPPLIES

The Parkway System currently has 17 active groundwater wells. Groundwater is the primary source of supply for the Parkway System, and is supplemented by surface water during the winter months. Groundwater for the Parkway System comes from the underlying Central Sacramento Groundwater Basin.

The Central Sacramento County Groundwater Forum (CSCGF) was formed in association with the Water Forum to provide recommendations to protect the health and viability of the Central Sacramento Groundwater Basin as a sustainable resource. Cal-Am is a member of the CSCGF and has participated in the preparation of the Central Sacramento County Groundwater Management Plan. The Groundwater Management Plan established a sustainable yield of 273,000 acre-feet/year for the Central Basin, which is 23,000 acre-feet more than the 1990 amount of 250,000 acre-feet/year. By definition, the 1990 pumping

rates are within the sustainable yield, and Cal-Am plans on pumping groundwater at the 1990 rates under future normal conditions.

Historically the Suburban-Rosemont and Security Park Systems have been served entirely by groundwater sources. Historical groundwater usage for the Cal-Am systems within the Central Sacramento County Groundwater Basin are shown in Table WS-3.

Table WS-3: Cal-Am Historical Groundwater Usage

System	2002	2003	2004	2005	2006
Parkway	10,401	12,162	10,926	10,138	10,439
Suburban	9,844	9,815	9,910	9,037	8,364
Rosemont	4,321	4,203	4,435	4,199	3,961
Security Park	31	26	28	23	18
Total	24,597	26,206	25,299	23,397	22,782

Note: All numbers in acre-feet.
Source: CAL-AM Water Supply Assessment, August 2007.

To assist the CSCGF in management of the Central Sacramento Groundwater Basin and maintain the sustainable yield of 273,000 acre-feet, Cal-Am will continue to pump groundwater up to the historic 1990 levels, and supplement quantities above that amount with surface water purchases.

PROJECTED TOTAL WATER SUPPLY

As shown in Table WS-4, below, projected available supply within the Parkway system is anticipated to increase from the 12,243 acre-feet delivered in 2006 to 17,523 acre-feet in 2025 during a normal water year.

As shown in Table WS-5, below, Cal-Am would increase groundwater pumping in all service areas under a conjunctive use program during a very dry year and multiple dry years in order to reduce surface water diversions. The conjunctive use program allows the groundwater levels to increase during normal years, so that higher groundwater pumping rates can be used during dry years to reduce demands on surface water. During a normal year groundwater usage would be reduced to below historical usage (See Table WS-3), and well below 1990 levels. To comply with the Urban Water Management Plan, and to the extent surface water is not available, Cal-Am will utilize groundwater in very dry and multiple dry year scenarios for the Parkway Water System.

Table WS-4: Historical and Projected Water Supply for the Parkway System – Normal Year

	Actual Water Delivered, Acre-Feet					Projected Available Supply, Acre-Feet			
Water Supply Sources	**2002**	**2003**	**2004**	**2005**	**2006**	**2010**	**2015**	**2020**	**2025**
Historical Groundwater Usage	10,401	12,162	10,926	10,138	10,439				
Current City of Sacramento Contract	1,992	1,342	2,415	2,147	1,804	2,580	2,580	2,580	2,580
Proposed Additional Water to be Purchased from City of Sacramento						920	920	1,420	1,420
Projected Sustainable Groundwater Usage						13,023	13,023	13,023	13,023
Total Historical Deliveries/Projected Available Supply	12,293	13,504	13,340	12,286	12,243	16,523	16,523	17,023	17,523
Source: CAL-AM Water Supply Assessment, August 2007.									

Table WS-5: Supply Reliability and Sources of Supply Normal, Single Dry, and Multiple Dry Years for the Cal-Am Service Area (2025 Demand Levels)

	Normal Year (acre-feet)	Single Dry Year (acre-feet)	Multiple Dry Years (acre-feet)		
			Year 1	Year 2	Year 3
Groundwater	20,500	60,300	38,600	50,600	60,300
Surface Water (Conjunctive Use)	29,800	0	21,700	9,700	0
Percent of Normal	100%	100%	100%	100%	100%
Source: CAL-AM Water Supply Assessment, August 2007.					

SCWA ZONE 40

The following discussion addresses the existing and projected water supplies available to the SCWA Zone 40.

SURFACE WATER SUPPLIES

SCWA Zone 40 currently receives surface water, or anticipates receiving surface water in the future, from the following sources:

- SCWA has entered into a contract with the U.S. Bureau of Reclamation (USBR) for 22,000 acre-feet per year (AF/year) of Central Valley Project (CVP) supplies diverted from the American River pursuant to Public Law

(PL) 101-514 (often referred to as “Fazio water”). Of this 22,000 AF/year, 7,000 AF/year has been subcontracted to the City of Folsom for diversion from Folsom Lake. The remaining 15,000 AF/year will be diverted by SCWA from the Sacramento River.

- SCWA has entered into a three-party agreement with the City of Sacramento and the Sacramento Municipal Utility District (SMUD) for the assignment to SCWA of 15,000 AF/year of SMUD’s existing contract with the USBR. The intent is that this supply will be diverted by SCWA from the Sacramento River. This supply is often referred to as “SMUD I”. This contract assignment is complete.

- SCWA has negotiated with SMUD for the assignment of an additional 15,000 AF/year pursuant to SMUD’s existing contract with the USBR to be diverted by SCWA from the Sacramento River. This supply is often referred to as “SMUD II”. This contract assignment is complete.

- SCWA has made an application to the State Water Resources Control Board (SWRCB) for excess flows on the American River and the Sacramento River to be diverted by SCWA from the Sacramento River. These flows, which would be available on an intermittent basis, could range up to 71,000 AF/year.

- The source of supply for that portion of Zone 40 that lies within the American River Point of Use (POU) will be wholesale and wheeling capacity from the City of Sacramento through agreement with the Sacramento County Water Agency. Delivery of this water to customers within the POU has been included in the City of Sacramento’s long-range plan for perfecting their American River water rights. Surface water entitlements belonging to both the City and the County will be utilized by surface water diversion at the City’s diversion facilities. The timing and volume of delivery will be as described by the Delivery Criteria for Wheeling Water Service and the Delivery Criteria for Wholesale Water Service documents associated with the above mentioned wholesale and wheeling capacity agreement between the City and the County.

The SWRCB appropriated water is considered intermittent, and is typically available during winter months of normal or wet years. As a result, SWRCB water could be used for groundwater recharge. Zone 40 can receive a maximum of 45,000 acre-feet of CVP water per year, and is guaranteed a minimum of 8,700 acre-feet. As shown in Table WS-6, the total anticipated surface water supplies for 2030 is 28,386 acre-feet.

Table WS-6: Surface Water Supplies – Zone 40
(Number in Acre-Feet)

	2005	2010	2015	2020	2025	2030
U.S Bureau of Reclamation – CVP Supply	45,000	45,000	45,000	45,000	45,000	45,000
Appropriative Water Supplies	14,586	14,586	14,586	14,586	14,586	14,586
Wholesale Water Agreements to Serve Portion of Zone 40.	9,300	9,300	9,300	9,300	9,300	9,300
Total	**28,386**	**28,386**	**28,386**	**28,386**	**28,386**	**28,386**
Source: Zone 41 UWMP, December 2005.						

EXISTING GROUNDWATER SUPPLIES

Water demands within the FVGCP would initially be met entirely with groundwater. Groundwater currently makes up a substantial portion of the Zone 40 water supply. As Zone 40 grows and surface water is brought in though the Freeport Regional Water Authority's project, groundwater will become a supplement to surface water, and as a primary supply during dry years as part of a conjunctive use program. As shown in Table WS-7, groundwater pumping has been increasing over the past few years. Groundwater pumping is projected to almost double by 2020, and decline thereafter (See Table WS-8). However, during dry years groundwater production would increase to approximately 70,000 acre-feet/year to make up for the reduction in surface water.

Table WS-7: Amount of Groundwater Pumped (AF/year)

	2000	2001	2002	2003	2004
Zone 40	20,222	22,306	22,949	22,745	25,790
Source: Zone 41 UWMP, December 2005.					

Table WS-8: Projected Amount of Groundwater Pumped (AF/year)

	2010	2015	2020	2025	2030
Zone 40	34,125	28,837	40,470	31,324	39,097
Source: Zone 41 UWMP, December 2005.					

PROJECTED TOTAL WATER SUPPLY

As shown in Table WS-9, Zone 40 would provide approximately 113,000 acre-feet/year from a combination of surface water, groundwater, and recycled water. During single and multiple dry years the amount of groundwater used would increase substantially to offset declines in surface water usage. The Zone 41 Urban Water Management Plan found that Zone 40 would have sufficient water supplies to serve the 2035 population demands.

GROUNDWATER BASIN DESCRIPTION

Both Cal-Am and SCWA's Zone 40 depend on groundwater for the majority of their water supply. Both water providers draw from the Central Sacramento County Groundwater Basin as defined by the Groundwater Forum, which is largely composed of the South American Groundwater Subbasin. The South American Groundwater Subbasin has a surface area of 388 square miles, and is defined by the foothills of the Sierra Nevada to the east, the Sacramento River to the west, the Cosumnes River to the south, and the American River to the north (See Plate WS-2). Both Cal-Am and SCWA are members of the Sacramento Central Groundwater Authority, which has defined sustainable groundwater yields for the Central Sacramento County Groundwater Basin. While conjunctive use programs will require that groundwater use exceed the sustainable yield, long-term average groundwater use would be less-than the maximum sustainable yield of the groundwater basin. Long-term projections for both Cal-Am and the SCWA have identified sufficient water supplies to serve their customers without exceeding their allotted portions of the maximum sustainable groundwater yield. Current groundwater extractions are estimated to be 250,000 acre-feet/year, which is less than the long term average annual sustainable yield of 273,000 acre-feet/year.

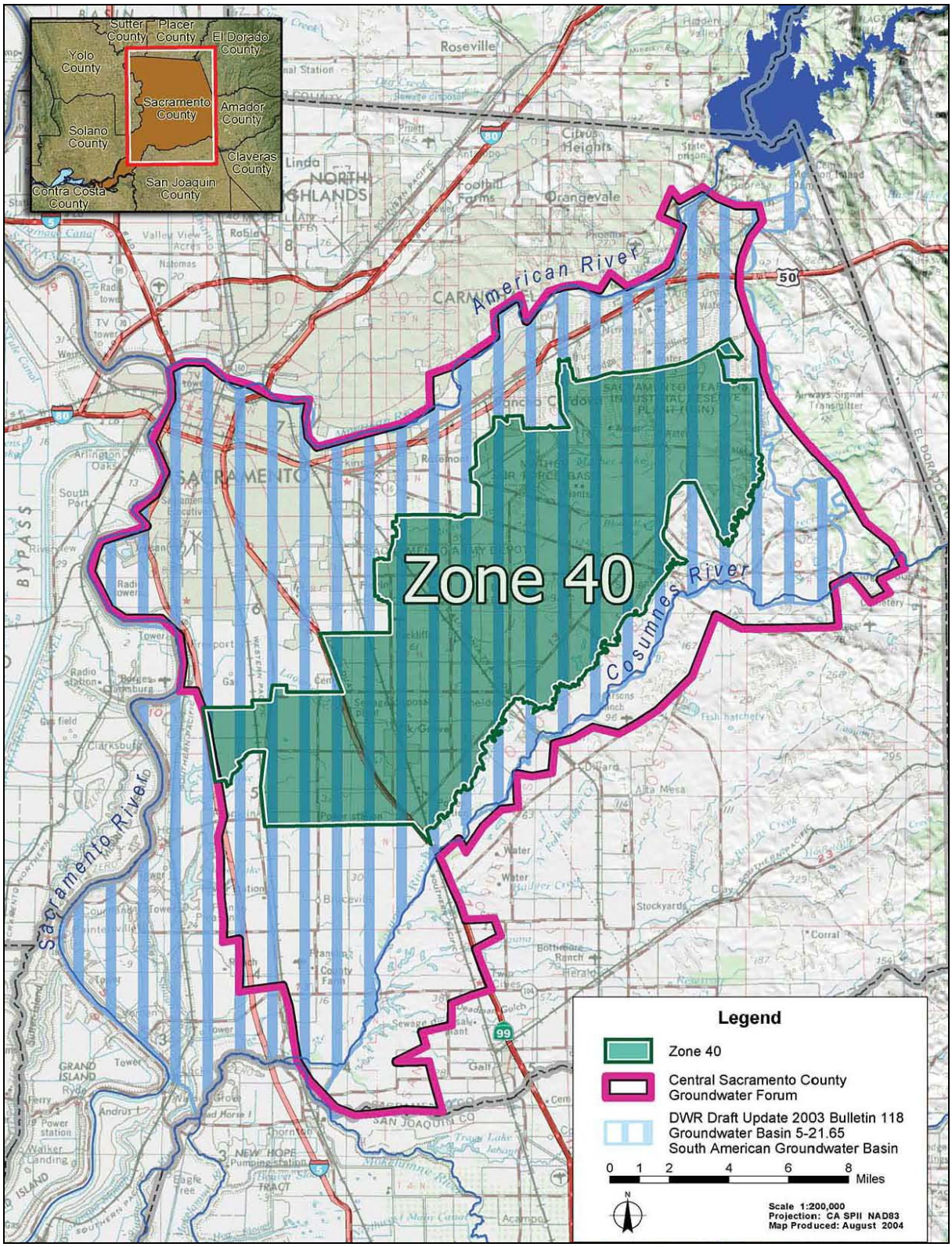
Table WS-9: 2035 Water Supply Scenarios – Zone 40

	Normal Water Year	Single Dry Water Year	Multiple Dry Water Years			
			Year 1	Year 2	Year 3	Year 4
Zone 40 Surface Water	69,567	34,683	26,106	26,106	23,183	20,909
Zone 40 Groundwater	39,097	68,327	65,599	65,599	68,522	70,795
Zone 40 Recycled Water	4,400	4,400	4,400	4,400	4,400	4,400
Total	113,064	107,410	96,105	96,105	96,105	96,105
Percent of Normal	100%	95%	85%	85%	85%	85%

Source: Zone 41 UWMP, December 2005.

Groundwater underlying the Central Sacramento County Groundwater Basin is contained within a shallow aquifer (Modesto Formation) and in a deep aquifer (Mehrten Formation). Groundwater is located from 20 to 100 feet below the ground surface. The shallow aquifer is typically used for private domestic wells and typically does not require treatment. The deep aquifer is separated from the shallow aquifer by a discontinuous clay layer that serves as a semi-confining layer. The deep aquifer typically requires treatment for iron and manganese which may cause mineral deposits and affect the taste of water.

Plate WS-2
South American Groundwater Subbasin



Intensive groundwater use over the past 60 years has resulted in a general lowering of the groundwater elevations. Over time isolated groundwater depressions have grown and coalesced into a single cone of depression that is centered in the southwestern portion of the Central Sacramento County Groundwater Basin.

Several known sources of groundwater contamination are located within the Central Sacramento County Groundwater Basin. The sources include: Mather Field, Aerojet, Boeing, the former Sacramento Army Depot, the Union Pacific railyards, and present and former landfills. Groundwater remediation and containment programs are ongoing in the contaminated areas.

REGULATORY CONTEXT

Existing policies, laws, and regulations that would apply to the proposed project are summarized below.

FEDERAL GOVERNMENT

The federal Clean Water Act establishes regulatory requirements for potable water supplies including raw and treated water quality criteria. The water providers are required to monitor water quality and conform to regulatory requirements of the federal Clean Water Act.

The federal Safe Drinking Water Act, which was enacted in 1974, gives the United States Environmental Protection Agency the authority to set standards for contaminants in drinking water supplies. The Safe Drinking Water Act was amended in 1986 and amended and reauthorized in 1996. For each of the 83 contaminants listed in the Safe Drinking Water Act, the Environmental Protection Agency sets a maximum contaminant level or treatment technique for contaminants in drinking water.

STATE OF CALIFORNIA

The SWRCB manages all water rights and water quality issues in California under the terms of the Porter-Cologne Water Quality Control Act (1969). The California Department of Health Services has been granted primary enforcement responsibility for the Safe Drinking Water Act. Title 22 of the California Administrative Code establishes California Department of Health Services authority and stipulates drinking water quality and monitoring standards. These standards are equal to or more stringent than the federal standards.

Senate Bill 610/Senate Bill 221

Senate Bills 610 and 221, which took effect January 1, 2002, require specific information about water availability be presented and considered by land use agencies during the processing of certain land use entitlement applications. Senate Bill 610 and Senate Bill 221 apply to projects that include more than 500 residential units.

Senate Bill 610

Senate Bill 610 refers to numerous details that must be addressed in the water supply assessment, which are described in portions of the amended Water Code §10910:

> (d)(1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system…under the existing water supply entitlements, water rights, or water service contracts.
>
> (2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system […] shall be demonstrated by providing information related to all of the following: (A) Written contracts or other proof of entitlement to an identified water supply. (B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system. (C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply. (D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.
>
> (e) If no water has been received in prior years by the public water system […] under the existing water supply entitlements, water rights, or water service contracts, the public water system […] shall also include in its water supply assessment […] an identification of the other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water…
>
> (f) If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment:

(1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.

(2) A description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long-term overdraft condition.

(3) A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(5) An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project.

A water supply assessment shall not be required to include the information required by this paragraph if the public water system determines…that the sufficiency of groundwater necessary to meet the initial and project demand associated with the project was addressed in [its urban water management plan].

SENATE BILL 221

Senate Bill 221 requires supporting documentation of verification that sufficient water supplies are available for a project. SB 221 provides that in determining whether water supply is sufficient, the water agency shall consider a myriad of factors:

(A) The availability of water supplies over a historical record of at least 20 years.

(B) The applicability of an urban water shortage contingency analysis […] that includes actions to be undertaken by the public water system in response to water supply shortages.

(C) The reduction in water supply allocated to a specific water use sector pursuant to a resolution or ordinance adopted, or a contract entered into, by the public water system […]

(D) The amount of water that the water supplier can reasonably rely on receiving from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer, including programs identified under federal, state, and local water initiatives such as CALFED and Colorado River tentative agreements [...]

If the water agency relies upon water supplies not then available to it, then the written verification must be based on the following elements, to the extent each is applicable:

(1) Written contracts or other proof of valid rights to the identified water supply that identify the terms and conditions under which the water will be available to serve the proposed subdivision.

(2) Copies of a capital outlay program for financing the delivery of a sufficient water supply that has been adopted by the applicable governing body.

(3) Securing of applicable federal, state, or local permits for construction of necessary infrastructure associated with supplying a sufficient water supply.

(4) Any necessary regulatory approvals that are required in order to be able to convey or deliver sufficient water supply to the subdivision.

If water supply for the proposed subdivision includes groundwater, the public water system shall also evaluate, based on substantial evidence, the extent to which it or the landowner has the right to extract the additional groundwater needed to supply the proposed subdivision.

The water agency's written verification must also "include a description, to the extent that data is reasonably available based on published records maintained by federal and state agencies, and public records of local agencies, of the reasonably foreseeable impacts of the proposed subdivision on the availability of water resources for agricultural and industrial uses within the public water system's service area that are not currently receiving water from the public water system but are utilizing the same sources of water." The water agency may rely upon a prior CEQA document for this analysis.

If the water agency determines that water supplies are insufficient, the local agency may override that decision. "The local agency may make a finding [based on substantial evidence], after consideration of the written verification by the applicable public water system, that additional water supplies not accounted for by the public water system are, or will be, available prior to completion of the subdivision that will satisfy the requirements of this section."

SACRAMENTO COUNTY GENERAL PLAN

The following policies contained in the Sacramento County General Plan apply to the proposed project.

PUBLIC FACILITIES ELEMENT

PF-1 New water facilities shall be planned to minimize impact to in-stream water flow in the Sacramento and American Rivers.

PF-2 Municipal and industrial development within the Urban Service Boundary but outside of existing water purveyors' service areas shall be served by

either annexation to an existing public agency providing water service or by creation or extension of a benefit zone of the SCWA.

PF-3 Public water agencies shall comply with General Plan policies prior to annexation of additional service areas.

PF-4 Connector fees for new development shall cover the fair share of costs to acquire and distribute surface water to the urban area.

PF-5 New treatment facilities and all facility operations shall be funded by beneficiaries.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

An impact to the public services and utilities of the proposed project area would be considered potentially significant if the proposed project would:

- Allow residences and businesses in areas that cannot be adequately served with potable water.

METHODS OF ANALYSIS

The Impacts and Mitigation Measures section evaluates the impacts of the proposed project relative to water supply that would occur if the project is developed as currently proposed. Impact significance is determined by comparing project conditions to the existing conditions. Extensive studies have been conducted to determine the potential impacts on water supply facilities.

In 1999, the County Board of Supervisors initiated the Florin-Vineyard Gap Community Plan (FVGCP) process to ensure orderly growth in the Florin-Vineyard area in the central-western portion of Sacramento County. Two possible land use plans are under review in this program level EIR as a result of that planning effort: the Citizens Advisory Committee (CAC) Land Use Plan and the Sacramento County Planning Department (PD) Land Use Plan. Of the two land use alternatives being considered for the FVGCP area, the PD Land Use Plan would result in higher densities. The higher land use densities would result in increased water demands; therefore, the PD Land Use Plan was used as the basis for the water supply assessments which served as the basis for the analysis in this chapter of the EIR. Such an approach conservatively evaluates the worst-case scenario. Potential impacts resulting from implementation of the CAC Land Use Plan would be reduced as compared to the PD Land Use Plan; therefore, should sufficient water supplies be available to serve buildout of the

PD Land Use Plan the water supply would be more than sufficient for buildout of the CAC Land Use Plan.

PROJECT IMPACTS AND MITIGATION MEASURES

The following discussion will address the potential impacts to water supply and water supply infrastructure for the FVGCP plan.

IMPACTS RELATED TO ADEQUATE WATER SUPPLY.

CAC LAND USE PLAN/PD LAND USE PLAN

As outlined above, the following analysis is based on an evaluation of the PD Land Use Plan, which if implemented would result in the greatest water demands. As such the analysis is conservative and serves to address the potential impacts of the CAC Land Use Plan.

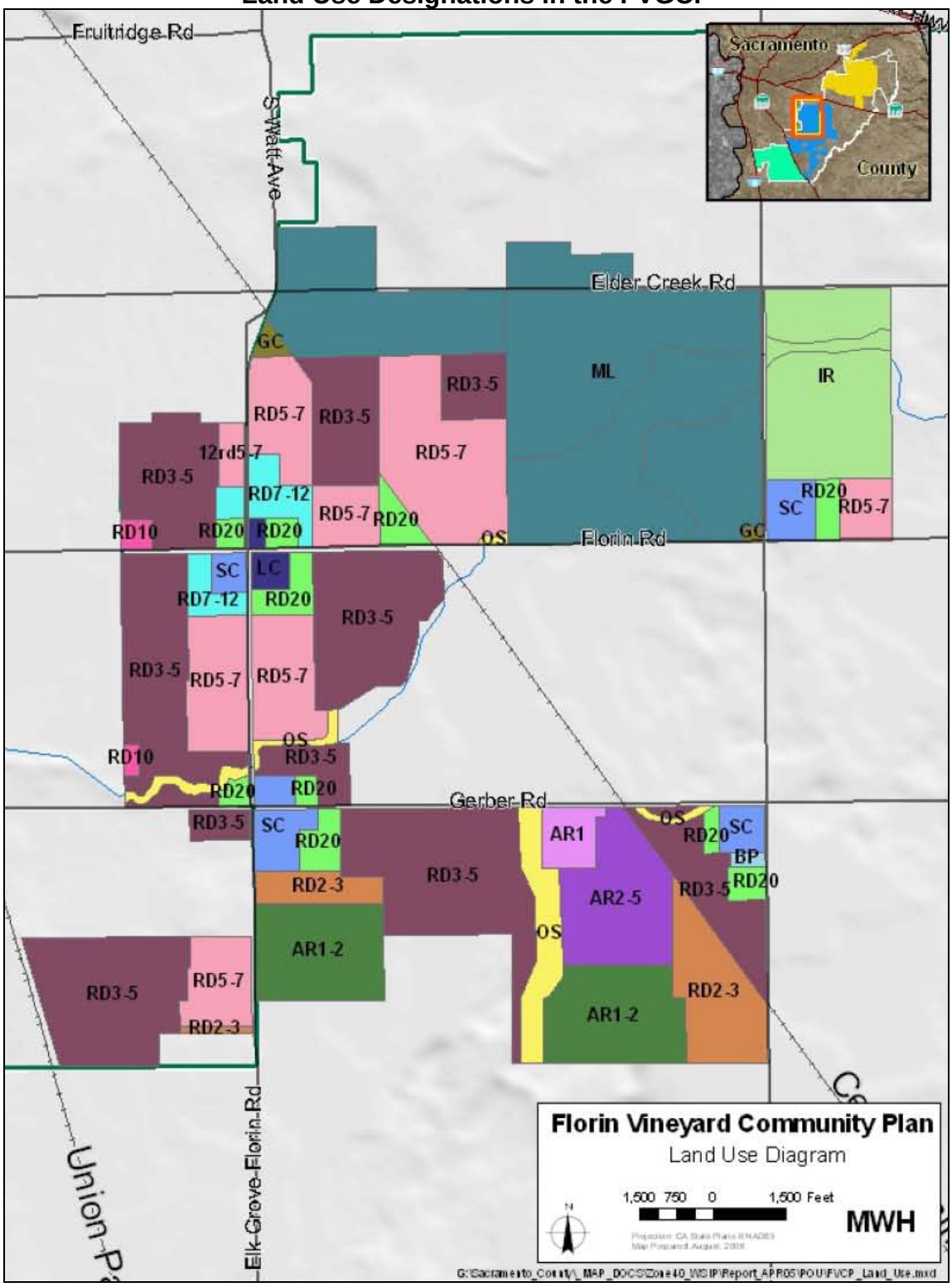
CAL-AM AREA

Plate WS-3 illustrates the land use designations proposed for the FVGCP under the PD Land Use Plan. As shown in Table WS-10, the Cal-Am serviced portion of the FVGCP would potentially contain a total of 1,351 dwelling units at a variety of residential densities under the PD Land Use Plan.

Table WS-10: FVGCP Dwelling Units within Cal-Am Service Area

Zoning	Area	Estimated Dwelling Units	Assumption
RD 2-3	3 acres	7.5	2.5 DU/acre
RD 3-5	183.2 acres	824.4	4.5 DU/acre
RD 5-7	57.2 acres	343.2	6 DU/acre
Subtotal		1,175	
Potential 15 percent per the Sacramento Affordable Housing Ordinance		176	
Total potential dwelling units under the PD Land Use Plan		**1,351**	
Source: CAL-AM Water Supply Assessment, August 2007.			

Plate WS-3
Land Use Designations in the FVGCP



As shown in Table WS-11, the FVGCP portion of the Parkway Service area is projected to contain 3,783 of the total 59,012 residents in 2025.

Table WS-11: Population Projections for Cal-Am Parkway Service Area

Scenario	2000	2005	2010	2015	2020	2025
Parkway Without FVGCP	47,085	53,735	54,841	54,957	54,980	55,229
FVGCP Portion of Parkway	0	0	946	1,891	2,837	3,783
Total Parkway Population	47,085	53,735	55,787	56,848	57,817	59,012
Source: CAL-AM Water Supply Assessment, August 2007.						

The Parkway System has projected the total number of water connections within their service area (See Table WS-12), which when multiplied by the water usage rate factors (See Table WS-13) provide the projected annual water use for the Parkway Area (See Table WS-14). It should be noted that the connections shown in Table WS-12 reflects the total estimated dwelling units listed in Table WS-10; however, the connection total is lower because a connection refers to an industry standard water demand figure that accounts for the variation in demand between different types of residential uses. A connection can reflect multiple units in a multi-family complex, or less-than one large lot residential unit. Current residential customers within the Parkway System area are largely non-metered, flat rate customers. Reductions in groundwater pumping are expected, even with additional growth outside of the overlap portion of the FVGCP area, because of anticipated conservation resulting from the installation of meters to all accounts before 2025. Additionally, reductions are expected due to planned implementation of tiered water rates together with active water reductions due to commercial and public water audits.

Table WS-12: Projected Cal-Am Connections by Customer Type

Customer Type	2010	2015	2020	2025
Parkway System – Non-FVGCP				
Residential	18,280	18,319	18,327	18,410
Commercial	1,541	1,509	1,457	1,408
Public Authorities	28	27	26	25
FVGCP Area				
Residential	315	630	946	1,261
Commercial	27	52	75	96
Public Authorities	0	1	1	2
Total	**20,191**	**20,538**	**20,832**	**21,202**
Source: CAL-AM Water Supply Assessment, August 2007.				

Table WS-13: Cal-Am Water Usage by Customer Type

Customer Type	Gallons Per Day Per Connection
Residential	481
Commercial	2,241
Public Authorities	10,204
Non-Revenue	9.4%
Source: CAL-AM Water Supply Assessment, August 2007.	

Table WS-14: Cal-AM Projected Annual Water Use (AF)

Customer Type	2010	2015	2020	2025
Parkway System – Non-FVGCP				
Residential	9,855	9,875	9,879	9,924
Commercial	3,869	3,788	3,658	3,535
Public (Parks, Schools, Municipalities)	314	307	296	284
Non-revenue	1,450	1,443	1,429	1,420
Parkway subtotal	**15,488**	**15,413**	**15,263**	**15,164**
FVGCP Area				
Residential	170	340	510	680
Commercial	67	130	189	242
Public (Parks, Schools, Municipalities)	5	11	15	19
Non-revenue	25	50	74	97
FVGCP Area Subtotal	**267**	**530**	**788**	**1,039**
Total	**15,755**	**15,943**	**16,051**	**16,203**
Source: CAL-AM Water Supply Assessment, August 2007.				

As shown in Table WS-15, the Parkway System would have sufficient water supply to satisfy the demand resulting from the projected growth within the Parkway System area, including the FVGCP portion.

As groundwater pumping is projected to decline in the Suburban-Rosemont area due to well contamination, reductions there can be used to offset increases in pumping in the Parkway system, if required, without a net impact on the overall groundwater basin. All in-basin pumping exchanges are monitored by the SCGA. As shown above in Table WS-15, the Parkway System has sufficient water supply to provide for the water needs of current and future residents, including the residents of the FVGCP area.

Table WS-15: Cal-AM Projected Water Use and Supply

	Actual, AF/Yr					Projected, AF/Yr			
	2002	2003	2004	2005	2006	2010	2015	2020	2025
Total Water Supply Sources									
Surface Water From City	1,992	1,342	2,415	2,147	1,804	3,500	3,500	4,000	4,500
Groundwater Sustainable	10,401	12,162	10,926	10,138	10,439	13,023	13,023	13,023	13,023
Subtotal	12,393	13,504	13,340	12,286	12,243	16,523	16,523	17,023	17,523
Total Parkway System Demand									
Less FVGCP Area						15,488	15,413	15,263	15,164
FVGCP Area						267	530	788	1,039
Subtotal						15,755	15,944	16,050	16,202
Surplus						**769**	**580**	**973**	**1,321**
Source: CAL-AM Water Supply Assessment, August 2007.									

ZONE 40

As shown in Table WS-16, approximately 1,115.7 acres of the FVGCP are located within SCWA Zone 40. Based on the SCWA demand factors, buildout of the Zone 40 area of the FVGCP would result in a demand for approximately 8,243 acre-feet of potable water (See Table WS-17). Water supply related to the development of Zone 40 was addressed in the Zone 41 Urban Water Management Plan.

The Zone 40 FVGCP water demands would ultimately be met by a combination of groundwater and surface water. Initial demands within the Zone 40 area would be met by groundwater supplied by an existing T-main located along Elk Grove-Florin Road, which is connected to existing SCWA facilities. As shown in Table WS-9, groundwater use would increase during dry years to offset the reductions in surface water diversions. Groundwater use during dry years would exceed the 40,900 acre-feet maximum long-term annual average use of groundwater in Zone 40. However, the Zone 40 conjunctive use program includes the delivery of surface water within the Zone 40 boundaries as part of a comprehensive program to maintain the long-term regional balance of groundwater.

As identified in the Revised Water Supply Assessment, the Zone 41 Urban Water Management Plan included the buildout of the FVGCP area. The Zone 41 Urban Water Management Plan identified sufficient capacity to serve buildout of the project area. Therefore, development of the FVGCP would not result in adverse impacts to water supply within Zone 40.

Table WS-16: Proposed Land Uses and Corresponding Zone 40 Classifications

Land Use Diagram Classification	Zone 40 Classification	Area (acres) Inside Zone 40
AR 1	Rural Estates	32.9
AR 1-2	Rural Estates	247.1
AR 2-5	Rural Estates	132.8
Subtotal		**412.9**
RD 2-3	Single Family	143.7
RD 3-5	Single Family	910.8
RD 5-7	Single Family	490.0
RD 10	Single Family	13.6
RD7-12	Single Family	65.2
Subtotal		**1,623.3**
RD 20	Multi-Family High Density	128.4
Subtotal		**128.4**
BP	Commercial	4.7
GC	Commercial	10.2
SC	Commercial	107.2
LC	Commercial	18.5
Subtotal		**140.5**
IR	Light Industrial	233.7
M1	Light Industrial	882.0
Subtotal		**1,115.7**
OS	Open Space	95.6
Subtotal		**95.6**
Total		**3,516.7**

Agricultural Residential (AR), Residential Density (RD), Business Professional (BP); General Commercial (GC), Service Commercial (SC), Limited Commercial (LC), Industrial Reserve (IR), Manufacturing (M1), Open Space (OS).

Source: Revised Water Supply Assessment for Florin-Vineyard Community Plan, December 2006).

Table WS-17: SCWA Annual Average Water Demand

Land Use	Unit Demand Factor AF/Ac/Yr	Area (Acres)	Annual Average Water Demand (AF/Yr)
		Zone 40	Zone 40
Rural Estates	1.33	412.9	549.16
Single Family	2.89	1,623.3	4,691.34
Multi-Family High-Density	4.12	128.4	529.0
Commercial	2.75	140.5	386.38
Light Industrial	1.36	1,115.7	1,511.7
Open Space	0	95.6	-
Subtotal			**7,667.58**
Water System Loss (7.5%)			575.08
Total Land and Demand		**3,516.7**	**8,242.66**
Source: Revised Water Supply Assessment for Florin-Vineyard Community Plan, December 2006).			

Conclusion

Cal-Am and the SCWA have identified sufficient water supplies to provide potable water their respective potential customers within the FVGCP area. Therefore, sufficient water exists to serve the future residents and businesses of the FVGCP for buildout of either the CAC or PD Land Use Plan. As a result, the proposed project would result in a ***less-than-significant*** impact to water supply

MITIGATION MEASURE(S)
None required.

IMPACTS TO WATER SUPPLY INFRASTRUCTURE.

CAC LAND USE PLAN/PD LAND USE PLAN

CAL-AM AREA

The areas of the FVGCP to be served by Cal-Am are located adjacent to existing development within the Parkway System that is already served by Cal-Am infrastructure. Therefore, existing water supply infrastructure would be extended to serve water users in the FVGCP area. In addition, developers would be required to build onsite water infrastructure to the specifications of Cal-Am.

ZONE 40

Ideally, the provision of water supply infrastructure is phased to coincide with the development that requires water supply. The Zone 40 Water System Infrastructure Plan provides the framework for water facility requirements for the entire Zone 40 wholesale service area including the FVGCP area. The provision of facilities is based on a buildout date of 2030. The first phase consists of the construction of the Vineyard Surface Water Treatment Plant, which will be capable of providing 50 MGD. The project is currently under design and is anticipated to begin operation in 2010. The second phase includes expansion of the Vineyard Surface Water Treatment Plant to a buildout capacity of 100 MGD, and is anticipated to be completed in the years 2022-2025.

To accommodate the rapid, short-term projected growth of the FVGCP and the North Vineyard Station Specific Plan (NVSSP), additional interim phase conditions have been developed to assist SCWA staff with the proper planning of water supply facilities to ensure reliable water supplies to the FVGCP until ultimate buildout conditions are met. Water supply for the FVGCP has been designed to occur in four phases.

Groundwater will be the Phase 1 water supply source for the FVGCP. Currently, there are two off-site groundwater treatment plants in the vicinity of the FVGCP area: the Waterman Groundwater Treatment Plant and the Wildhawk Groundwater Treatment Plant.

The Waterman Groundwater Treatment Plant has a treatment capacity of 8.6 MGD, and is located south of the FVGCP at Waterman Road north of Calvine Road. The Waterman Groundwater Treatment Plant currently serves the Vineyard and Vintage Park service areas. The Waterman Groundwater Treatment Plant is close to full utilization of its rated capacity to meet the existing service areas. As a result, the Waterman Groundwater Treatment Plant can only provide a small portion (approximately 1,000 gpm) of the water for the FVGCP and the NVSSP areas. The treated water from the Waterman Groundwater Treatment Plant is delivered to the FVGCP and NVSSP areas via the existing 24-

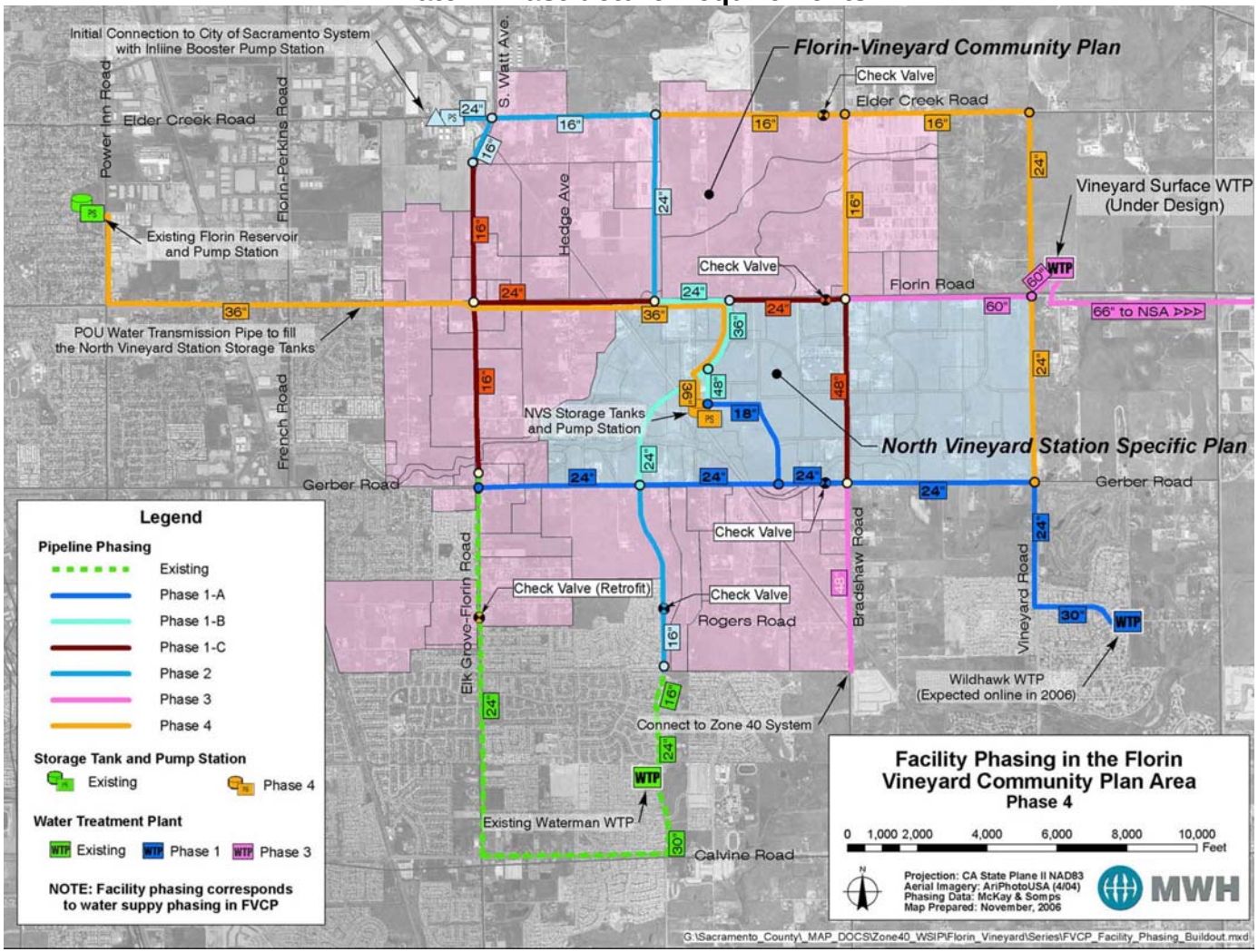
inch diameter T-main in Elk Grove-Florin Road that runs north to Gerber Road. As shown in Figure WS-3, Phase 1 would include the construction of a 24-inch diameter T-main in Gerber Road that would connect to the existing line in Elk Grove-Florin Road and extend east, ultimately connecting to the Wildhawk Groundwater Treatment Plant.

The Wildhawk Groundwater Treatment Plant has an ultimate treatment capacity of 10 MGD, and is located east of Vineyard Road and south of Gerber Road. The plant became operational in 2006. The Wildhawk Groundwater Treatment Plant will be the major near-term water supply source for new development in the FVGCP, the NVSSP, and the Vineyard Springs Community Plan areas. Even with the small contribution from the Waterman Groundwater Treatment Plant, the capacity of the Wildhawk Groundwater Treatment Plant will not be sufficient to meet the buildout maximum day demand for the three areas mentioned above.

Phase Two water supplies include the development of an initial POU water connection to the City of Sacramento's water system at Elder Creek Road and South Watt Avenue to supplement the groundwater supplies until the first phase of the Vineyard Surface Water Treatment Plant becomes operational. The initial POU water connection with the City will serve as a back up connection once the Vineyard Surface Water Treatment Plant becomes operational. The capacity of the initial POU connection is dependent on a number of factors, including: the growth of the FVGCP, the abilities of the City's water distribution system, and the time at which the Vineyard Surface Water Treatment Plant becomes operational. The needed capacity for the interim connection is estimated at 4,500 gpm. An inline booster pump station is proposed near the connection to the City's water distribution system in Elder Creek Road west of South Watt Avenue. The inline booster pump station will require three booster pumps installed (two service pumps, and one backup pump).

The first 50 MGD of the Vineyard Surface Water Treatment Plant is identified as the primary Phase Three water supply source for the FVGCP area. The treated water from the Vineyard Surface Water Treatment Plant will be uses in Zone 40 in conjunction with groundwater to meet the water demand in Zone 40's North Service Area (Sunrise Douglas Community Plan, Rio del Oro, Sun Creek Specific Plan, etc.) and the Central Service Area (FVGCP, NVSSP, and Vineyard Springs Community Plan areas). The Vineyard Surface Water Treatment Plant is identified as a critical water supply element in the Zone 40 Water Supply Master Plan and Water System Infrastructure Plan to implement Zone 40's conjunctive use objectives. The objective is to maximize the use of surface water in wet and normal years and allow the groundwater basin to recharge naturally to allow for sufficient groundwater availability in dry years when surface water cutbacks will occur.

Plate WS-4
Water Infrastructure Requirements



The water supply sources available in previous water supply phases, such as the Waterman and Wildhawk Groundwater Treatment Plant sources, will serve as supplemental water sources to the Vineyard Surface Water Treatment Plant. In addition, the SCWA anticipates buying water from the City of Sacramento's E. A. Fairbairn Surface Water Treatment Plant which diverts water from the American River. The treated surface water would serve as a bridge between the 50 MGD maximum capacity of the first phase of the Vineyard Surface Water Treatment Plant and the future construction of the additional 50 MGD of the expanded Vineyard Surface Water Treatment Plant.

The reliability of the water from the E. A. Fairbairn Surface Water Treatment Plant is considered "high" in the Zone 40 Water Supply Master Plan and the Water System Infrastructure Plan. The E. A. Fairbairn Surface Water Treatment Plant water would be the primary water supply sources once delivery is considered to be "dedicated capacity" from City water facilities. According to the Zone 40 Water System Infrastructure Plan, the maximum amount of E. A. Fairbairn Surface Water Treatment Plant water delivery is determined by the buildout water demand of the point of use area within Zone 40 estimated to be 10,644 AF/Year, including a 7.5 percent system loss.

As discussed above, a phasing system has been developed to provide water for development of the FVGCP. Development of the infrastructure would be funded through the collection of fees established by the Florin Vineyard Community Plan Public Facilities Financing Plan. All development would be required to pay the impact fees; therefore, implementation of the proposed project would have a ***less-than-significant*** impact on water supply infrastructure would occur.

MITIGATION MEASURE(S)
None required

IMPACTS TO THE GROUNDWATER AQUIFER.

CAC LAND USE PLAN/PD LAND USE PLAN

As discussed above, groundwater makes up a substantial portion of the water supplies for both Cal-Am and SCWA Zone 40. Future supplies would be supplemented by the use of surface water; however, during dry years groundwater pumping would increase substantially as part of conjunctive use programs. However, both Cal-Am and SCWA are parties to the Central Sacramento Groundwater Management Plan, which includes specific goals, objectives, and an action plan for managing the groundwater basin. The Water Forum has established an estimated long term average annual sustainable yield for the groundwater basin, and future plans for both Cal-Am and SCWA are based on staying within their respective portions of the average annual sustainable yield. As outlined above, both water providers have sufficient supplies to serve buildout of the FVGCP. As the projected supplies are within the

sustainable yield of the aquifer the proposed project would have a ***less-than-significant*** impact on the groundwater aquifer.

MITIGATION MEASURE(S)
None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

LONG-TERM IMPACTS TO PUBLIC SERVICES AND FACILITIES FROM THE PROPOSED PROJECT IN COMBINATION WITH EXISTING AND FUTURE DEVELOPMENT.

CAC LAND USE PLAN/PD LAND USE PLAN

As outlined above, planning documents related to the provision of water have been prepared which anticipate the development of the proposed project at densities commensurate with the PD Land Use Plan. Infrastructure and water supplies have been identified, and funding mechanisms prepared to ensure that development of the FVGCP would not result in adverse impacts to other water users. In addition, local water suppliers are parties to the Water Forum, which is meant to address regional water supply issues. Regional water supply agreements have been established which address development within the project area through 2035, and the proposed project would not conflict with those agreements. Therefore, cumulative impacts related to water supply would be ***less-than-significant***.

MITIGATION MEASURE(S)
None required.

8 Hydrology and Drainage

INTRODUCTION

The Hydrology and Drainage chapter of the EIR describes the current and proposed hydrologic conditions in the project area by Sacramento County. Documents referenced to prepare this section include the *Sacramento County General Plan* and the *Preliminary Drainage Study.*

ENVIRONMENTAL SETTING

The Environmental Setting section describes the existing drainage and water quality conditions in the Florin-Vineyard Gap Community Plan (FVGCP) area of Sacramento County.

EXISTING DRAINAGE CONDITIONS

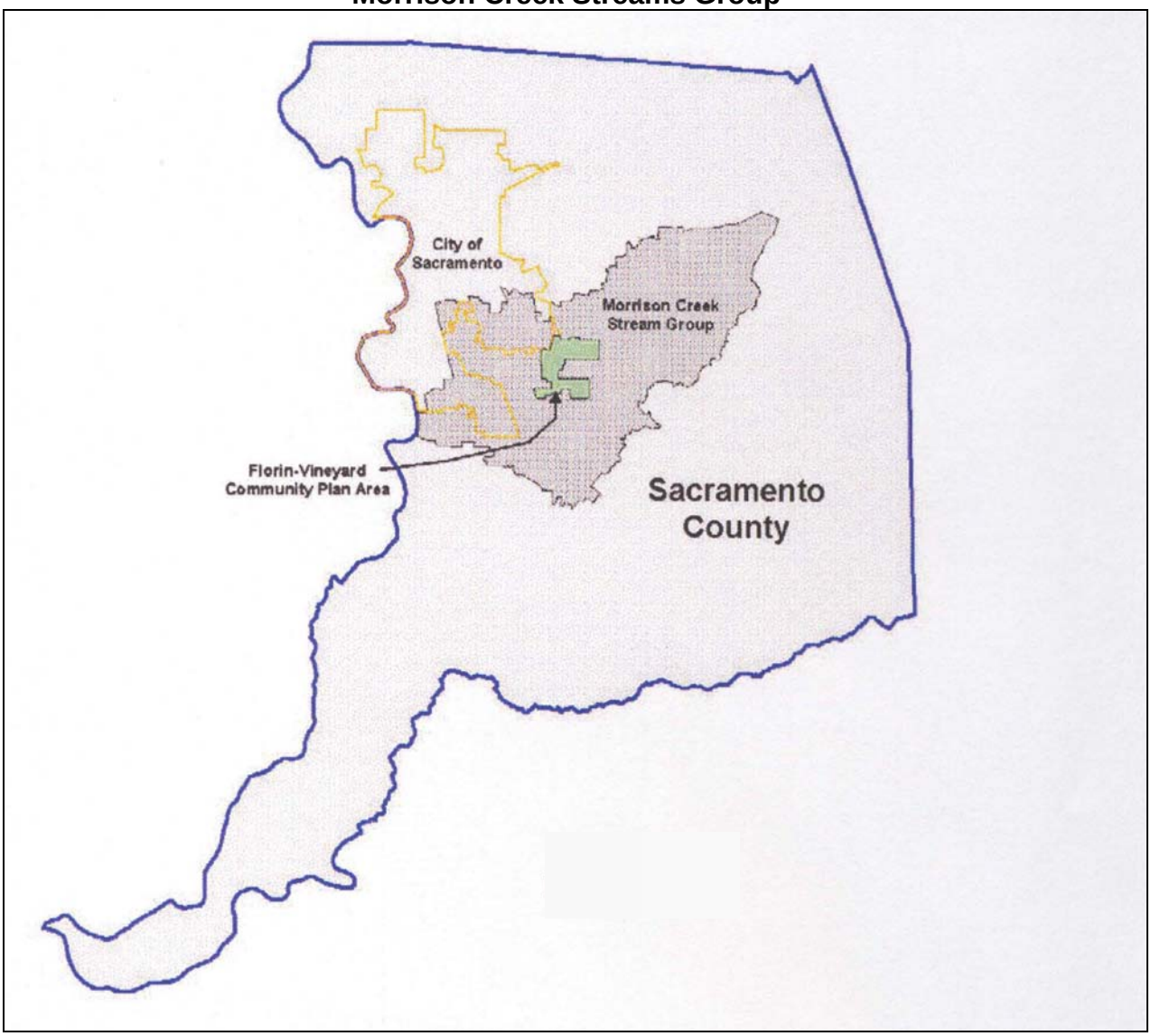
The 3,876-acre FVGCP is primarily located within the watershed boundaries of Florin Creek, Elder-Gerber Creeks, and Unionhouse Creek as shown in Plate HY-1. These creeks are tributary to the Morrison Creek Stream Group which drains to the Cosumnes River. 154 acres of the project area drain north into Morrison Creek proper, 824 acres drain to Florin Creek, 1,987 acres drain to the Elder Creek/Gerber Creek system, 816 acres drain to Unionhouse Creek, 88 acres drain into Strawberry Creek, and seven acres drain to Laguna Creek (See Plate HY-2). Elder and Gerber Creeks are affected during large storm events by an inter-basin transfer of flood waters from Laguna Creek into their watershed area.

TOPOGRAPHY AND SETTING

The Morrison Creek Streams Group is a gently sloping region south of the American River, between Folsom Lake and the Sacramento River. The streams flow in a generally west-southwest direction, from their origins near the base of the Sierra Nevada foothills to near the Sacramento River. The streams are contained east of the Sacramento River levee system, and flows are conveyed south to a discharge into the Consumes River.

Stream slopes for the three main streams flowing through the FVGCP area are relatively flat, with slopes of less-than 0.15 percent overall. The shallow slope results in generally slower moving wide flow paths, except where otherwise constrained or in short segments with steeper drops at road or bridge crossings.

Plate HY-1
Morrison Creek Streams Group

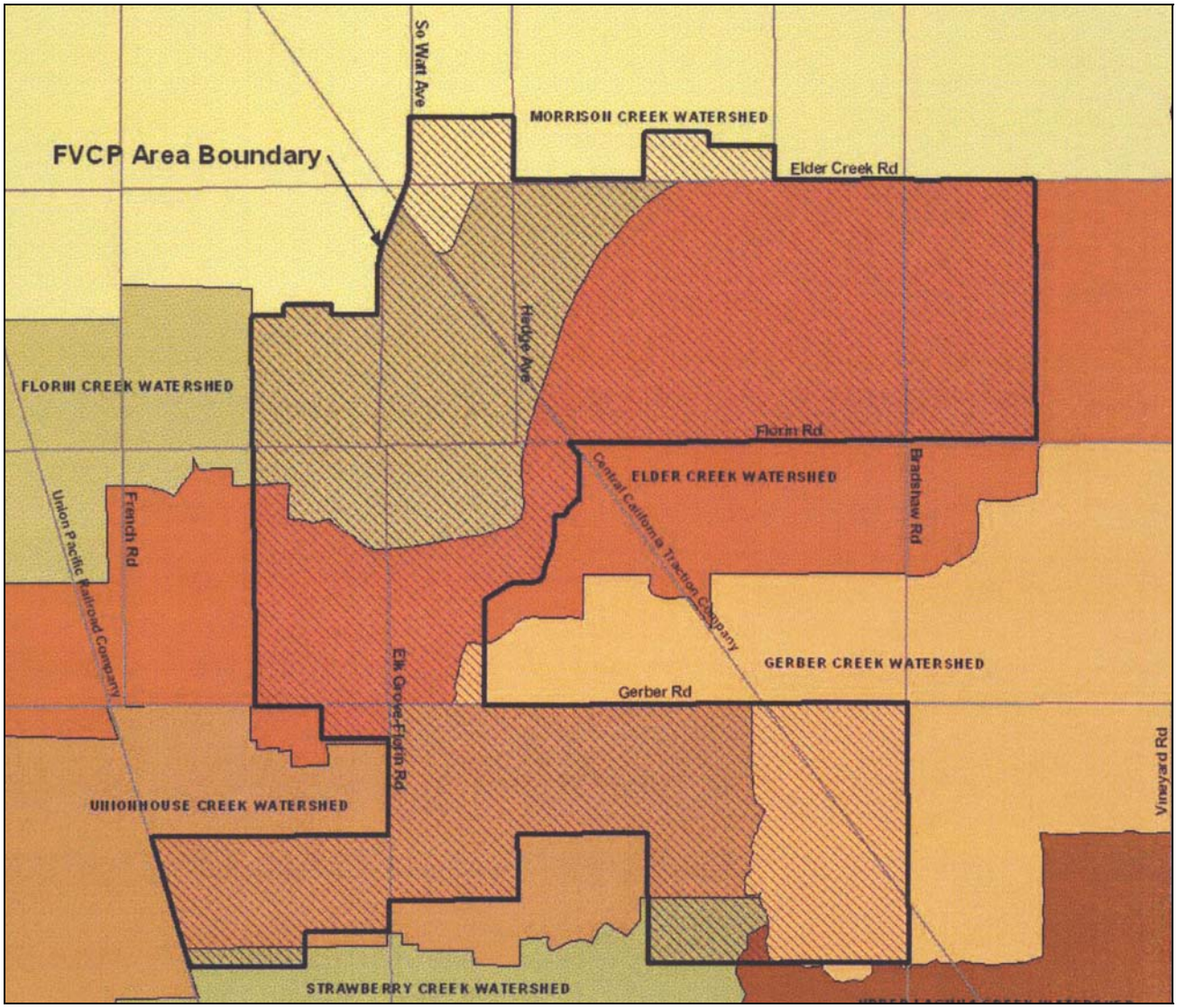


FLORIN CREEK

The overall Florin Creek watershed encompasses approximately 2,762 acres, of which approximately 824 acres (30 percent) are located within the FVGCP area. Florin Creek begins east of the intersection of Elk Grove-Florin Road and Florin Road and flows in a southwesterly direction.

The upper reach of the watershed is fed by runoff from ranches, small farms, gardens, pasture, and undeveloped lands. The main channel has been redirected from the original natural alignment and redefined within roadside ditches and excavated swales. The existing channel flows leave the study area at the northwest corner of the FVGCP, cross Florin-Perkins Road, and continue west.

Plate HY-2
FVGCP Watersheds



The south tributary of Florin Creek serves the area immediately north and south of Florin Road. The area is drained by an existing trunk drainage pipeline within Florin Road that begins at the intersection of Florin Road and South Watt Avenue. The trunk pipeline, which is 66 inches in diameter at the discharge point, conveys flows to the existing channel which subsequently joins the main channel of Florin Creek to the west, upstream of McComber Street. Florin Creek joins with Elder Creek, downstream of Franklin Boulevard, which discharges to Morrison Creek approximately four miles southwest of the FVGCP area.

ELDER AND GERBER CREEKS

The Elder-Gerber Creek system is the primary drainage within the FVGCP, encompassing 1,987 acres of the Plan area. The Elder Creek watershed is

composed of 7,636 acres, and the Gerber Creek watershed is 2,855 acres for a total of 10,491 acres.

Within the FVGCP, Elder and Gerber Creeks are subdivided into three sub-reaches. The portion of Elder Creek upstream of the confluence with Gerber Creek originates near the intersection of Kiefer Boulevard and Eagles Nest Road. Approximately half of the creek's upper reach through the northern portion of the FVGCP remains in natural channels with a broad and shallow floodplain. The creek conveys flows within natural swales and existing channels, and enters the FVGCP east of Bradshaw Road. Flow continues in a southwesterly direction to Florin Road where the creek leaves the FVGCP and flows through the North Vineyard Station Specific Plan Area. Elder Creek forms the north-south boundary between the FVGCP and the North Vineyard Station Specific Plan between Florin Road and Elder Creek's confluence with Gerber Creek. The flows reenter the FVGCP at the confluence of Elder and Gerber Creeks, and are conveyed in an existing channel (the combined creeks are now called Elder Creek) in a westerly direction. Elder Creek flows out of the FVGCP area approximately one mile downstream of the confluence. Elder Creek eventually discharges into Morrison Creek near Brookfield Drive in the City of Sacramento, approximately four miles west of the FVGCP area.

Portions of Gerber Creek convey flows through the southern portion of the FVGCP area south of Gerber Road. The Laguna Creek system also has a significant influence and impact on Gerber/Elder Creek through the Inter-Basin-Transfer, also referred to as the Laguna Spill. Gerber Creek receives floodwaters during the 100-year event from Laguna Creek via the Laguna Creek Inter-Basin Transfer. The Laguna Creek Inter-Basin Transfer spills approximately 840 cubic feet per second into Gerber Creek upstream of the California Central Traction Railroad right-of-way, and 200 cubic feet per second downstream of the California Central Traction Railroad right-of-way during a 100-year event.

UNIONHOUSE CREEK

Unionhouse Creek begins east of Elk Grove-Florin Road, near the end of Surlingham Court. Unionhouse Creek conveys flows in a westerly direction primarily within an excavated trapezoidal channel. Unionhouse Creek merges with Strawberry Creek approximately two miles southwest of the FVGCP. The total Unionhouse Creek watershed contains approximately 2,178 acres, of which 816 acres are contained within the FVGCP. To control floodwaters from existing development into Unionhouse Creek a detention basin has been partially constructed within the Tamarindo subdivision, located east of Elk Grove-Florin Road. Unionhouse Creek conveys flows west, in a trapezoidal channel, to where the creek exits the FVGCP area through two 72-inch culverts under the Union Pacific Railroad Corridor.

Flooding

As shown in Plates HY-3 and HY-4, some portions of the FVGCP planned for development under both the Community Advisory Committee Plan (CAC Land Use Plan) and Sacramento County Planning Department Land Use Plan (PD Land Use Plan) are located within the 100-year floodplain. The majority of those properties are located with Special Flood Hazard Zone AE. Some properties located within the southeastern portions of the FVGCP will remain in the 100-year floodplain until such time as the Laguna Creek Spill is shut-off. Areas that do not have 100-year flood projection are located within a Federal Emergency Management Agency designated Special Flood Hazard Zone. The Special Flood Hazard Zones are defined as follows:

A99 – Zone A99 is the flood insurance rate zone that corresponds to areas within the 1-percent annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No Base Flood Elevations or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

AE - Zone AE is the flood insurance rate zone that corresponds to the 1-percent annual chance floodplains that are determined in the Flood Insurance Study by detailed methods of analysis. In most instances, Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

AR – Zone AR is the flood insurance rate zone used to depict areas protected from flood hazards by flood control structures, such as a levee, that are being restored. The Federal Emergency Management Agency will consider using the Zone AR designation for a community if the flood protection system has been deemed restorable by a Federal agency in consultation with a local project sponsor; a minimum level of flood protection is still provided to the community by the system; and restoration of the flood protection system is scheduled to begin within a designated time period and in accordance with a progress plan negotiated between the community and the Federal Emergency Management Agency. Mandatory purchase requirements for flood insurance will apply in Zone AR, but the rate will not exceed the rate for an unnumbered Zone A if the structure is built in compliance with Zone AR floodplain management regulations.

Plate HY-3
Pre-Project Floodplain on PD Land Use Plan

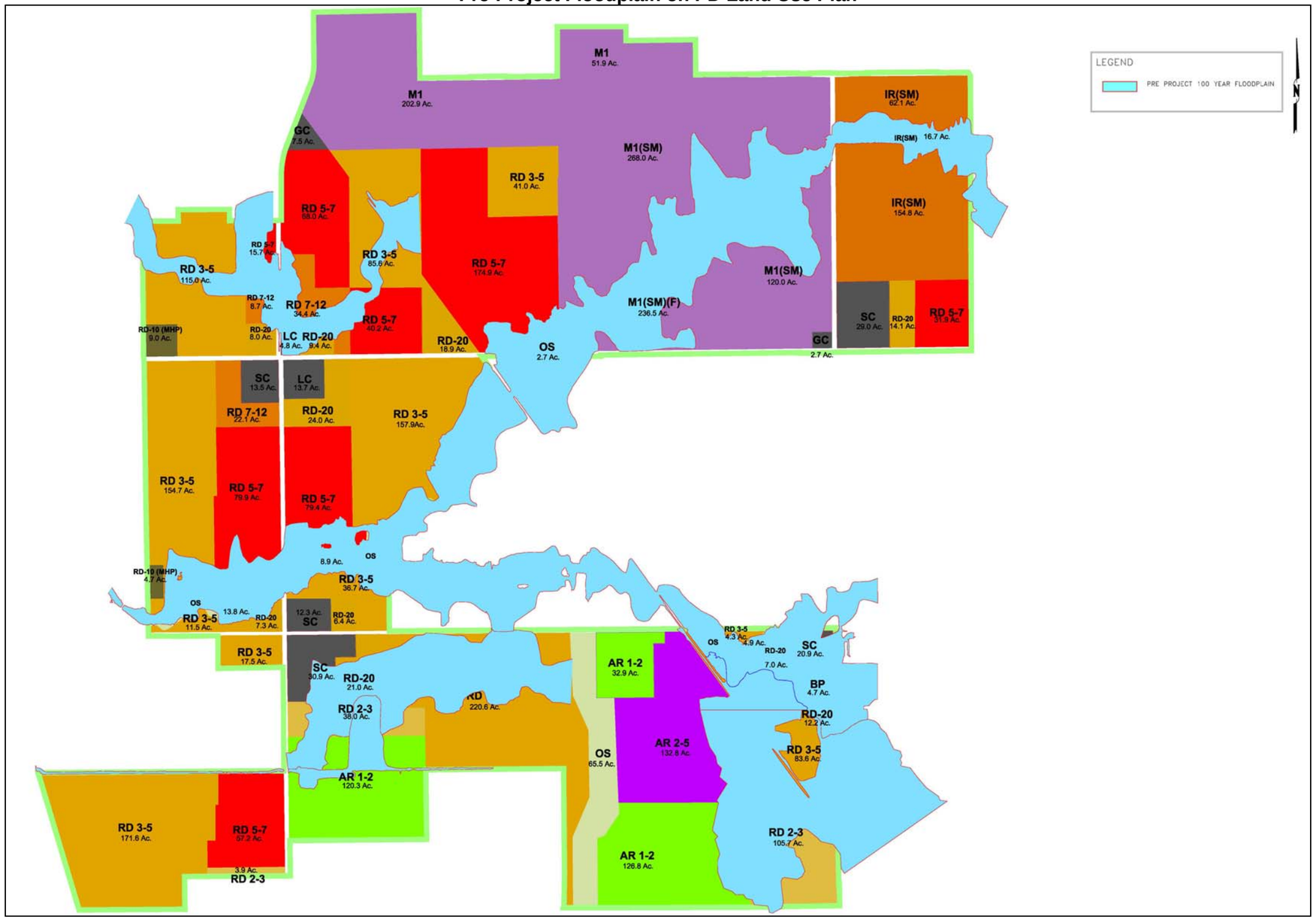
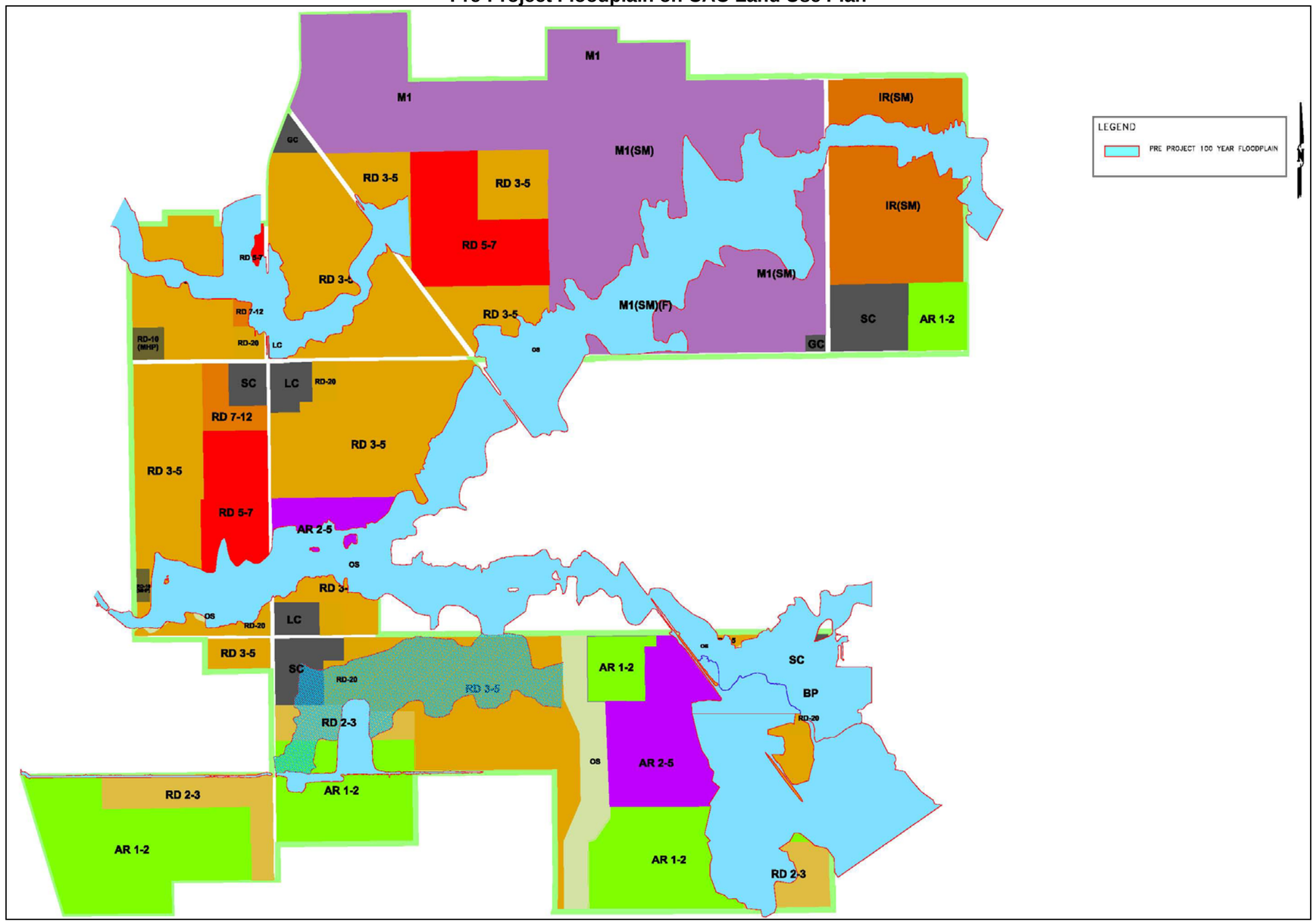


Plate HY-4
Pre-Project Floodplain on CAC Land Use Plan



REGULATORY CONTEXT

Existing policies, laws, and regulations that would apply to the proposed project are summarized below.

FEDERAL REGULATORY AUTHORITY

FEDERAL EMERGENCY MANAGEMENT AGENCY

The Federal Emergency Management Agency is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers studies. The Federal Emergency Management Agency is also responsible for distributing the Flood Insurance Rate Maps, which are used in the National Flood Insurance Program. These maps identify the locations of special flood hazard areas, including the 100-year floodplains.

The Federal Emergency Management Agency allows non-residential development in the floodplain; however, construction activities are restricted within the flood hazard areas, depending upon the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations. These standards are implemented at the State level through construction codes and local ordinances; however, these regulations only apply to residential and non-residential structure improvements. Although roadway construction or modification is not explicitly addressed in the Federal Emergency Management Agency regulations, the California Department of Transportation has also adopted criteria and standards for roadway drainage systems and projects situated within designated floodplains. Standards that apply to floodplain issues are based on federal regulations (Title 23, Part 650 of the Code of Federal Regulations). At the state level, roadway design must comply with drainage standards included in Chapters 800-890 of the California Department of Transportation Highway Design Manual. Code of Federal Regulations Section 60.3(c)(10) restricts cumulative development from increasing the water surface elevation of the base flood by more than one foot within the floodplain.

FEDERAL CLEAN WATER ACT

The National Pollutant Discharge Elimination System (NPDES) permit system was established in the federal Clean Water Act to regulate municipal and industrial discharges to surface waters of the U.S. Each National Pollutant Discharge Elimination System permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the federal Clean Water Act contain general requirements regarding National Pollutant Discharge Elimination System permits. Section 307 of the

federal Clean Water Act describes the factors that Environmental Protection Agency must consider in setting effluent limits for priority pollutants.

Nonpoint sources are diffuse and originate over a wide area rather than from a definable point. Nonpoint pollution often enters receiving water in the form of surface runoff, but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such nonpoint sources are generally exempt from federal NPDES permit program requirements.

However, two types of nonpoint source discharges are controlled by the NPDES program: nonpoint source discharge caused by general construction activities, and the general quality of stormwater in municipal stormwater systems. The 1987 amendments to the federal Clean Water Act directed the federal Environmental Protection Agency to implement the stormwater program in two phases. Phase I addressed discharges from large (population 250,000 or above) and medium (population 100,000 to 250,000) municipalities and certain industrial activities. Phase II addresses all other discharges defined by federal Environmental Protection Agency that are not included in Phase I.

STATE REGULATORY AUTHORITY

STATE WATER RESOURCES CONTROL BOARD

The State Water Resources Control Board and the Regional Water Quality Control Board are responsible for ensuring implementation and compliance with the provisions of the federal Clean Water Act and California's Porter-Cologne Water Quality Control Act. The project site is situated within the jurisdiction of the Central Valley Region of the Regional Water Quality Control Board (Region 5). The Central Valley Regional Water Quality Control Board has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction.

Water quality objectives for the Sacramento River and its tributaries are specified in the Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin (Basin Plan) prepared by the Central Valley Regional Water Quality Control Board in compliance with the federal Clean Water Act and the Porter-Cologne Act. The Basin Plan establishes water quality objectives, and implementation programs to meet stated objectives and to protect the beneficial uses of water in the Sacramento-San Joaquin River Basin. Because Sacramento County is located within the jurisdiction of the Central Valley Regional Water Quality Control Board, all discharges to surface water or groundwater are subject to the Basin Plan requirements.

Sacramento County has an NPDES Municipal Stormwater Permit issued by the Regional Board. The Municipal Stormwater Permit requires the County to reduce pollutants in stormwater discharges to the maximum extent practicable. The

County complies with this permit in part by developing and enforcing ordinances and requirements to reduce the discharge of sediments and other pollutants in runoff from newly developing and redeveloping areas of the County.

In addition to complying with the County's ordinances and requirements, construction sites disturbing one or more acres are required to comply with the State's General Stormwater Permit for Construction Activities. The Construction General Permit is issued by the State Water Resources Control Board (http://www.waterboards.ca.gov/stormwtr/construction.html) and enforced by the Regional Board. Coverage is obtained by submitting a Notice of Intent (NOI) to the State Board prior to construction. The General Permit requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) that must be kept on site at all times for review by the State inspector.

Applicable projects applying for a County grading permit must show proof that a NOI has been filed and must submit a copy of the SWPPP. Although the County has no enforcement authority related to the Construction General Permit, the County is required by its Municipal Stormwater Permit to verify that SWPPPs include six minimum components in the construction and post-construction measures.

SACRAMENTO COUNTY GENERAL PLAN

The following policies contained in the Sacramento County General Plan apply to the proposed project.

CONSERVATION ELEMENT

CO-9 Community and specific plans shall specify urban runoff control strategies and requirements, consistent with Master Drainage Plans and Public Work's urban runoff management program, for development in newly urbanizing areas and identify sites where retention and treatment are warranted consistent with discharge permit requirements and county-wide runoff measures.

CO-10 Development within newly urbanizing areas shall incorporate runoff control measures in their design or participate in an areawide runoff control management effort consistent with the urban runoff management program developed by the Public Work's Department.

CO-11 Hazardous materials shall not be stored in the 100 year floodplain in such a manner as to pose a significant potential for surface water contamination.

CO-12 The concentration and management of large animals on residential and agricultural-residential parcels shall be such that pasture runoff does not

contain excessive nutrient concentrations which would contribute to surface water quality degradation.

CO-13 Roads and structures shall be designed, built and landscaped so as to minimize erosion during and after construction.

CO-14 Roads and structures shall be designed to minimize grading on slopes above 20 percent.

CO-103 Allow no fill in the 100-year floodplain as delineated by currently effective FEMA Flood Insurance Rate Maps or subsequent comprehensive drainage plans adopted by the County unless the fill would cause no increase in flood surface elevation; in the absence of a floodway master plan the resulting floodplain would not be less than 600 feet in width or actual width of the floodplain, whichever is less, except at road crossings; depth of fill would not exceed two feet, except as may be specified for drainage swales in a comprehensive drainage plan; the proposed fill area is not necessary to serve as a detention basin for stormwater runoff; and no wetlands as defined by the U.S. Army Corps of Engineers exist within the proposed fill area.

CO-105 Channel modification projects within Urban Stream Corridors shall be considered for approval by the Board of Supervisors only after conducting a noticed public hearing examining the full range of alternatives, relative costs and benefits, and environmental, economic, and social benefits.

CO-106 Channel realignment within Urban Stream Corridors shall be permitted only when necessary to eliminate flood hazards; it is necessary to protect and preserve natural features and vegetation which would otherwise be removed; it is necessary as a result of surface mining within the floodplain; or the existing channel has been significantly disrupted by agricultural improvements or other man-made changes.

CO-107 To the maximum extent practical retain topographic diversity and variation when channels are realigned or modified, including maintaining meandering characteristics, varied berm width, naturalized side slope, and varied channel bottom elevation.

CO-108 Natural appearance channels will be encouraged for watercourses in newly developing areas (outside of identified in-fill areas).

CO-109 Channel lowering shall occur after consideration of alternatives and only when it is necessary to accommodate the gravity drainage of storm runoff and/or accommodate floodflows under existing bridge structures.

CO-110 Channel modifications shall not prevent minimum water flows necessary to protect and enhance fish habitats, native riparian vegetation, water quality, or ground water recharge.

CO-111 Improvements in watercourses in currently undeveloped areas will be designed for low maintenance. Appropriate Manning's "n" values will be used in design of the watercourses to reflect future vegetative growth (including mitigation plantings) associated with the low maintenance concept.

CO-112 Channel modifications shall retain marsh and riparian vegetation whenever possible or otherwise recreate the natural stream channel consistent with the ecological integrity of the preexisting stream. Modifications resulting in wetland or riparian loss shall be mitigated.

CO-113 The placement of concrete within watercourses will be strongly discouraged. However, it will not be prohibited in identified in-fill areas where it is consistent with the existing adjacent reaches of the watercourse.

CO-114 Encourage revegetation of native plant species and avoid nonindigenous species.

CO-115 Sacramento County stream courses within the Urban Service Boundary shall be planned so as to protect natural values.

CO-116 Where there is extensive existing riparian vegetation, consider construction of secondary flood control channels for flood control purposes.

CO-117 Provide a transition zone adjacent to stream corridors which incorporates:

1) A buffer zone on each side of the stream, between the outer edge of any existing or planned riparian or wetland vegetation and more intensive uses.
2) The transition zone for stream corridors shall provide sufficient width to allow a minimum 50 to 150 foot natural buffer, a 20 foot mowed fire break at the outer edge, sufficient additional width to provide for access for channel maintenance and flood control and for planned passive recreation uses.
3) The width of the natural buffers shall be based on:
    a. quality and quantity of existing and planned habitat;
    b. presence of species as well as species sensitivity to human disturbance;
    c. areas for regeneration of vegetation;

d. corridor for wildlife habitat linkage;
e. nature of planned urban uses adjacent to the corridor;
f. need for community greenways; and
g. the effective use of active barriers.

4) The transition zone shall not include containment ponds for other features implementing pollutant discharge requirements.
5) Master drainage plans may provide for other standards that meet the intent of this policy.

CO-118 Uses within the Urban Stream Corridor shall be limited to recreation and agricultural uses compatible with resource protection and flood control measures. Turfed areas are acceptable provided the natural grassland buffer is maintained.

CO-119 Roads, parking, and associated fill slopes shall be located outside of the Urban Stream Corridor, except at stream crossings. Crossings shall be minimized and be aesthetically compatible with naturalistic values of the stream channel.

CO-120 Development design shall minimize the total floodplain frontage which is fenced off from public view. Development adjacent to Urban Stream Corridors shall be encouraged to provide where physically reasonable a public street paralleling at least one side of the corridor with vertical curbs, gutters, foot path, street lighting, and post and cable barriers to prevent vehicular entry.

CO-121 Urban Stream Corridor trails shall be primarily located beyond the riparian corridor and wetlands to minimize wildlife impacts and shall be restricted to non-motorized traffic.

CO-122 Secure easement or fee title to open space lands within corridor as a condition of development approval.

CO-123 Accept ownership and maintenance responsibility of Lot A open space parcels within Urban Stream Corridors provided the lot(s) have good access, are not small or isolated, local park districts are unwilling to accept ownership responsibility, maintenance by a viable homeowners' association is not feasible, and there is no other feasible alternative.

CO-124 Development projects adjacent to the Urban Stream Corridor shall provide unencumbered maintenance access to the stream as necessary and consistent with policies of this plan.

CO-125 No grading, clearing, tree cutting, debris disposal or any other despoiling action shall be allowed in Urban Stream Corridors except for normal channel maintenance.

CO-126 Maintain streams to allow natural vegetation in and along streams, commensurate with flood control and public acceptance, to assist in removal of nutrients, pollutants, and silt.

CO-127 The use of special-status plant species, especially candidate 1 or 2 species, shall be encouraged on revegetation plans, if and only if such plant material can be propagated from local genetic stocks without significant adverse impacts upon the existing populations.

Open Space Element

OS-1 Permanently protect, as open space, areas of natural resource value, including wetlands preserves, riparian corridors, woodlands, and floodplains.

Safety Element

SA-5 A comprehensive drainage plan shall be prepared for urbanizing streams and their tributaries prior to any development within the 100-year floodplain defined by full watershed development without channel modifications. The plan shall:

a. Determine the future 100-year flood elevations associated with planned and full development of the watershed;
b. Determine the future 100-year floodplain boundaries for both flood elevations (planned and full development) based on minimum 2-foot contour intervals;
c. Assess the feasibility of gravity drainage into the existing flowline of the stream;
d. Assess the feasibility of alternative means of drainage into the stream;
e. Identify potential locations for sedimentation ponds and other stormwater treatment facilities;
f. Determine the minimum lowering of the stream bottom necessary and develop a channel design consistent with General Plan policies;
g. Determine the location and extent of marsh, vernal pool and riparian habitat;
h. Develop measures for protecting and mitigating natural habitat; and
i. Develop measures to ensure vector abatement control.

This policy is not applicable to downstream portions of urbanizing creeks identified as infill areas in Public Works Department policies for which the County does not intend to prepare master drainage plans.

SA-7 New and modified bridge structures shall not cause an increase in water surface elevations of the 100-year floodplain exceeding one foot, unless analysis clearly indicates that the physical and/or economic use of upstream property will not be adversely affected.

SA-9 The County shall implement the improvement of natural drainage channels in urbanized or urbanizing portions of the County to reduce local flooding. Such improvements shall comply with the General Plan policies contained in the Conservation Element, Urban Streams, Channel Modification Section.

SA-11 Where new upstream development in Sacramento County will increase or potentially impact runoff onto parcels downstream in a neighboring jurisdiction, such as the County of Placer and the City of Sacramento, Sacramento County will coordinate with the appropriate neighboring jurisdiction to mitigate such impacts.

SA-12 The County shall require all new urban development projects to incorporate runoff control measures to minimize peak flows of runoff and/or assist in financing or otherwise implementing Comprehensive Drainage Plans.

SA-13 The County shall regulate, through zoning and other ordinances, land use and development in all areas subject to potential flooding and prohibit urban uses on unprotected flood land.

SA-14 Sacramento County will participate with the City of Sacramento, the Army Corps of Engineers and other Federal, State and local governments and agencies to develop policies, to finance, construct, and plan flood improvements to eliminate flooding in Sacramento County.

SA-15 Deny creation of parcels that do not have buildable areas outside the 100-year floodplain. The buildable area may be constructed by the placement of fill as long as it conforms with other adopted floodplain policies.

SA-16 For residential zoning, the area outside the 100-year floodplain must be contiguous or reasonably situated to provide buildable area for a residence and associated structures. Examples of structures include swimming pools, sheds, barns, detached garages, and other outbuildings that are normally associated with residential development.

SA-17 Vehicular access to the buildable area of newly created parcels must be at or above the 10-year flood elevation. Exceptions may be made when the existing public street from which access is obtained is below the 10-year flood elevation.

SA-18 Watercourse crossings shall be minimized. Creation of lots that require watercourse crossings for single lots, or that will likely encourage watercourse crossings to be built by property owners (lots with useable area on both sides of a watercourse) will not be allowed.

SA-21 Areas within a 100-year floodplain shall not be upzoned to a more intensive use unless and until a Master Drainage Plan is prepared that identifies areas of the floodplain that may be developed.

SACRAMENTO COUNTY ORDINANCES

The County has established a Stormwater Ordinance (Sacramento County Code 15.12). The Stormwater Ordinance prohibits the discharge of unauthorized non-stormwater to the County's stormwater conveyance system and local creeks. The Ordinance applies to all private and public projects in the County, regardless of size or land use type. In addition, Sacramento County Code 16.44 (Land Grading and Erosion Control) requires private construction sites disturbing one or more acres or moving 350 cubic yards or more of earthen material to obtain a grading permit. To obtain a grading permit, project proponents must prepare and submit for approval an Erosion and Sediment Control (ESC) Plan describing erosion and sediment control best management practices (BMPs) that will be implemented during construction to prevent sediment from leaving the site and entering the County's storm drain system or local receiving waters. Construction projects not subject to SCC 16.44 are subject to the Stormwater Ordinance (SCC 15.12) described above.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Implementation of the project would result in significant hydrology and drainage impacts if the project would result in either of the following:

- Violate any water quality standards or waste discharge requirements;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;

- Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year floodplain structures which would impede or redirect flood flows; or
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

METHODS OF ANALYSIS

The Impacts and Mitigation Measures section evaluates the impacts of the proposed project relative to hydrology, water quality, and drainage that would occur if the project is developed as currently proposed. Impact significance is determined by comparing project conditions to the existing conditions. Extensive studies have been conducted to determine the potential impacts related to the hydrology of the project area. A design event of 100-year recurrence interval was used to evaluate the watershed impacts, regional hydrology, and stream flow hydraulics that would result from buildout of the FVGCP area.

Increasing densities can result in an increase in impervious surfaces; therefore, the following analysis conservatively evaluated development of the FVGCP under the PD Land Use Plan. The CAC Land Use Plan would result in larger parcels, with reduced impervious surfaces, as a result, impacts resulting from implementation of the CAC Land Use Plan would be reduced as compared to the PD Land Use Plan.

PROJECT IMPACTS AND MITIGATION MEASURES

The following discussion will address the potential impacts to hydrology, water quality, and drainage resulting from buildout of the FVGCP area.

IMPACTS RELATED TO FLOODING.

The following discussion addresses the potential for impacts related to flooding following development of the FVGCP.

CAC LAND USE PLAN/PD LAND USE PLAN

As outlined above, the following analysis is based on an evaluation of the PD Land Use Plan, which if implemented would result in the greatest stormwater runoff. As such the analysis is conservative and serves to address the potential impacts of the CAC Land Use Plan. As shown in Plates HY-5 to HY-9, the proposed Drainage Master Plan would include the use of trunk lines connected to regional detention basins to arrest stormwater flow; however, each development

would be responsible for constructing onsite drainage facilities that would connect to the trunk lines, as well as drainage facilities that are intended to improve water quality, such as vegetated swales.

ELDER-GERBER STREAM GROUP

The Elder-Gerber stream group drains the largest area portion of the FVGCP area. The stream group also receives a substantial impact from outside the actual drainage area of the system in the form of inflow from the Laguna Creek Spill. Development of the FVGCP would include channel improvements to provide flood control enhancements to both Elder Creek and Gerber Creek. The proposed improvements are also necessary for future development of the North Vineyard Station Specific Plan and Vineyard Springs Master Plan, and were included in the drainage plans and respective EIRs. Potential impacts to biological resources from implementation of the drainage improvements are assessed in Chapter 12, Biological Resources. The proposed channel improvements on Elder Creek would extend approximately 2.2 miles from the downstream boundary of the FVGCP to approximately 1,000 feet upstream of Florin Road. Channel improvements on Gerber Creek extend approximately 3.5 miles from the confluence with Elder Creek upstream to just before the crossing at Vineyard Road.

The County of Sacramento has recently obtained a Clean Water Act Section 404 Permit (Number 200300245) from the US Army Corps of Engineers for modifications within the Elder Creek and Gerber Creek corridors consistent with the approved North Vineyard Station Drainage Master Plan. The permit is effective January 31, 2009 and runs for ten years. The permitted project is the construction of a new Elder Creek corridor from 2667 feet west of Elk Grove Florin Road (APN 065-0070-024) to immediately north of Florin Road and Gerber Creek from the confluence of Elder to the crossing of Gerber Road about 1733 feet east of Bradshaw Road (APN 066-0110-009).

During extreme events, flow from Laguna Creek would continue to spill north along the California Central Traction Railroad to Gerber Creek. A portion of the FVGCP proposed for development is located within the path of the spill. The proposed drainage plan does not include measures to arrest the overland spill; therefore, until such times as the Laguna Creek spill is cut off, an adverse impact to drainage in the southeast portion of the FVGCP would occur. Future developments located north of Laguna Creek would raise road and pad elevations to create an effective levee which would cut off the Laguna Creek Spill. However, due to the substantial uncertainty regarding development timelines as a result of market conditions, a determination cannot be made as to when the area would develop and the resultant “cut-off” would be established.

Plate HY-5
Drainage Facilities

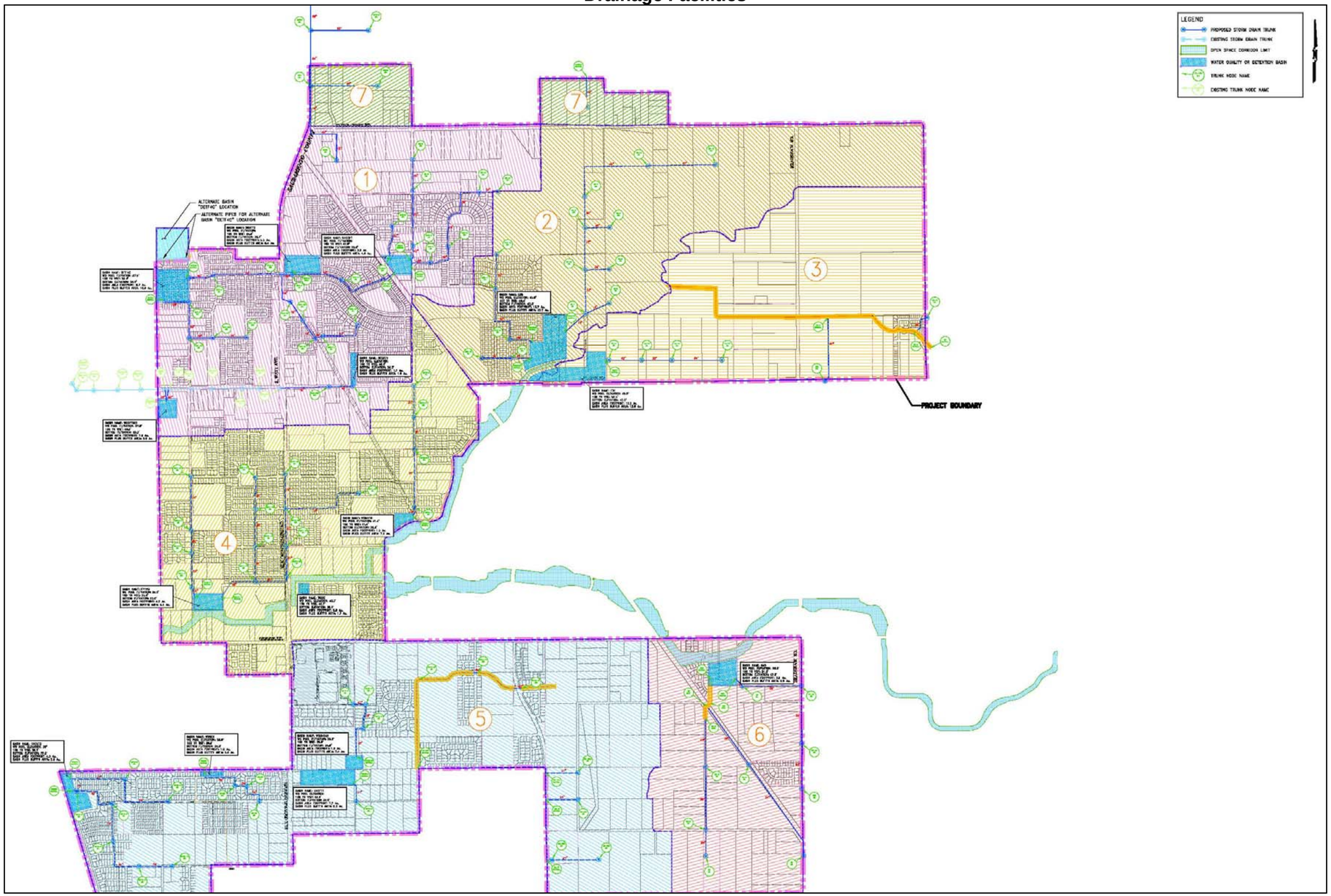


Plate HY-6
Northeast Drainage Facilities

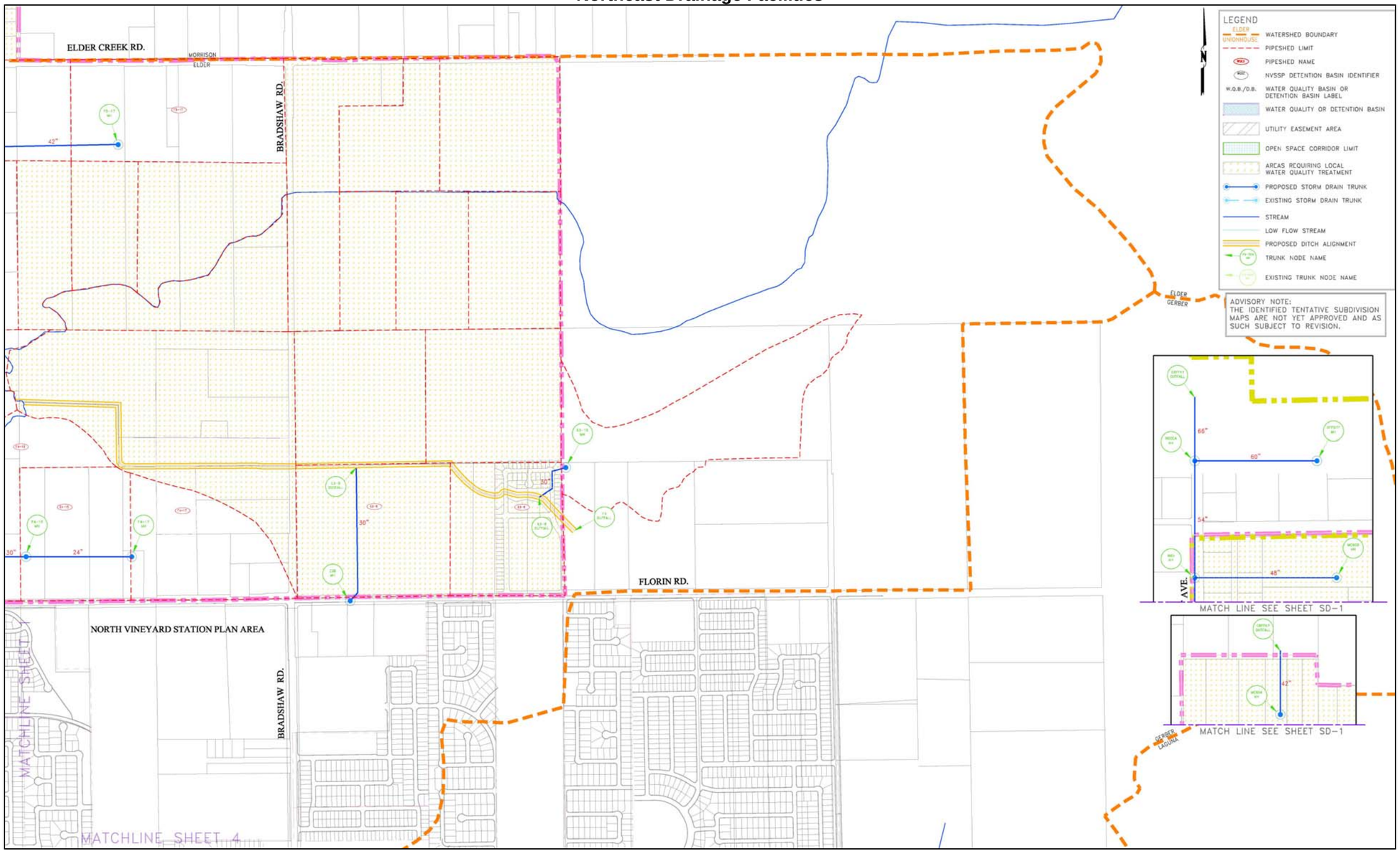


Plate HY-7
Northwest Drainage Facilities

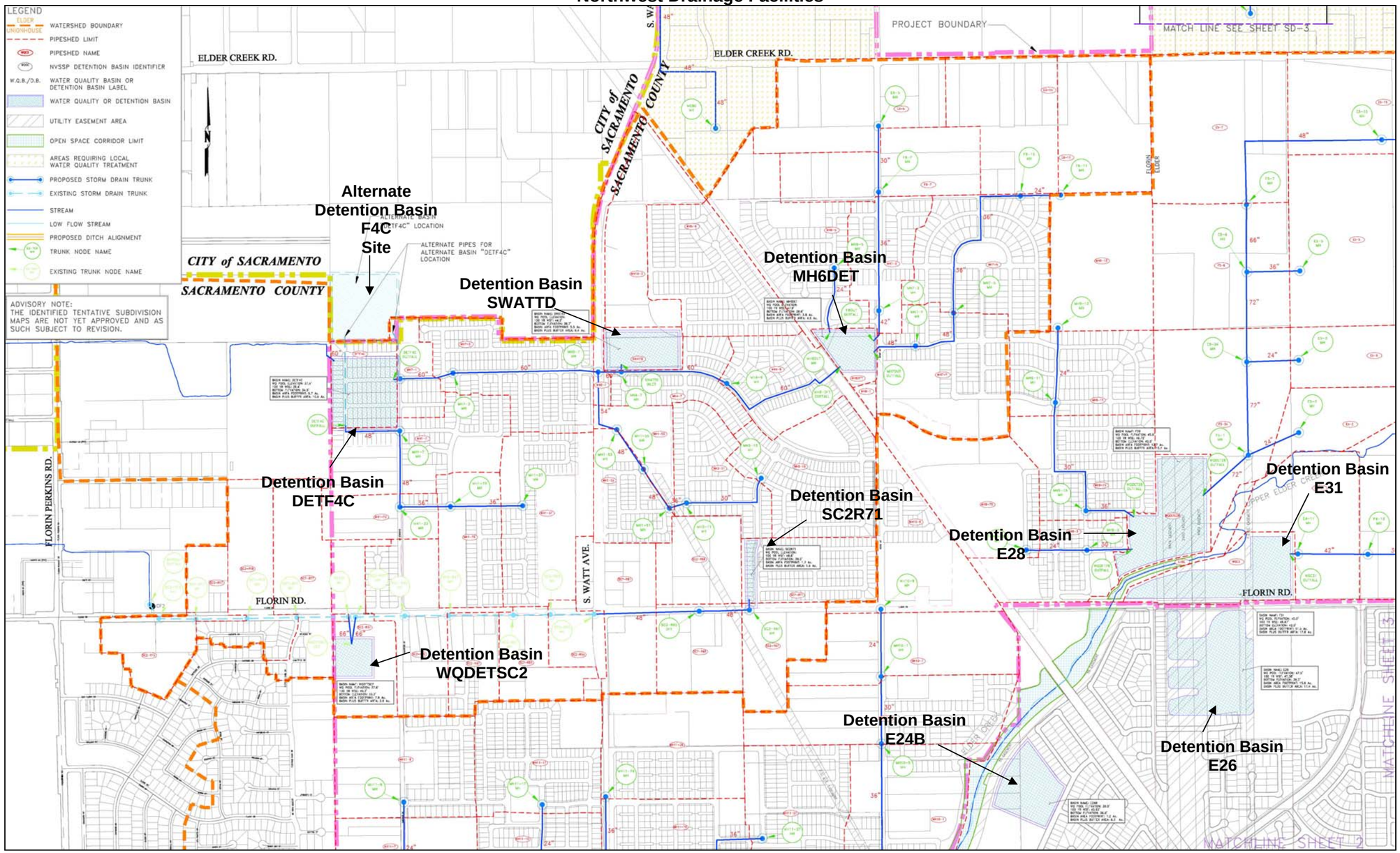


Plate HY-8
Southeast Drainage Facilities

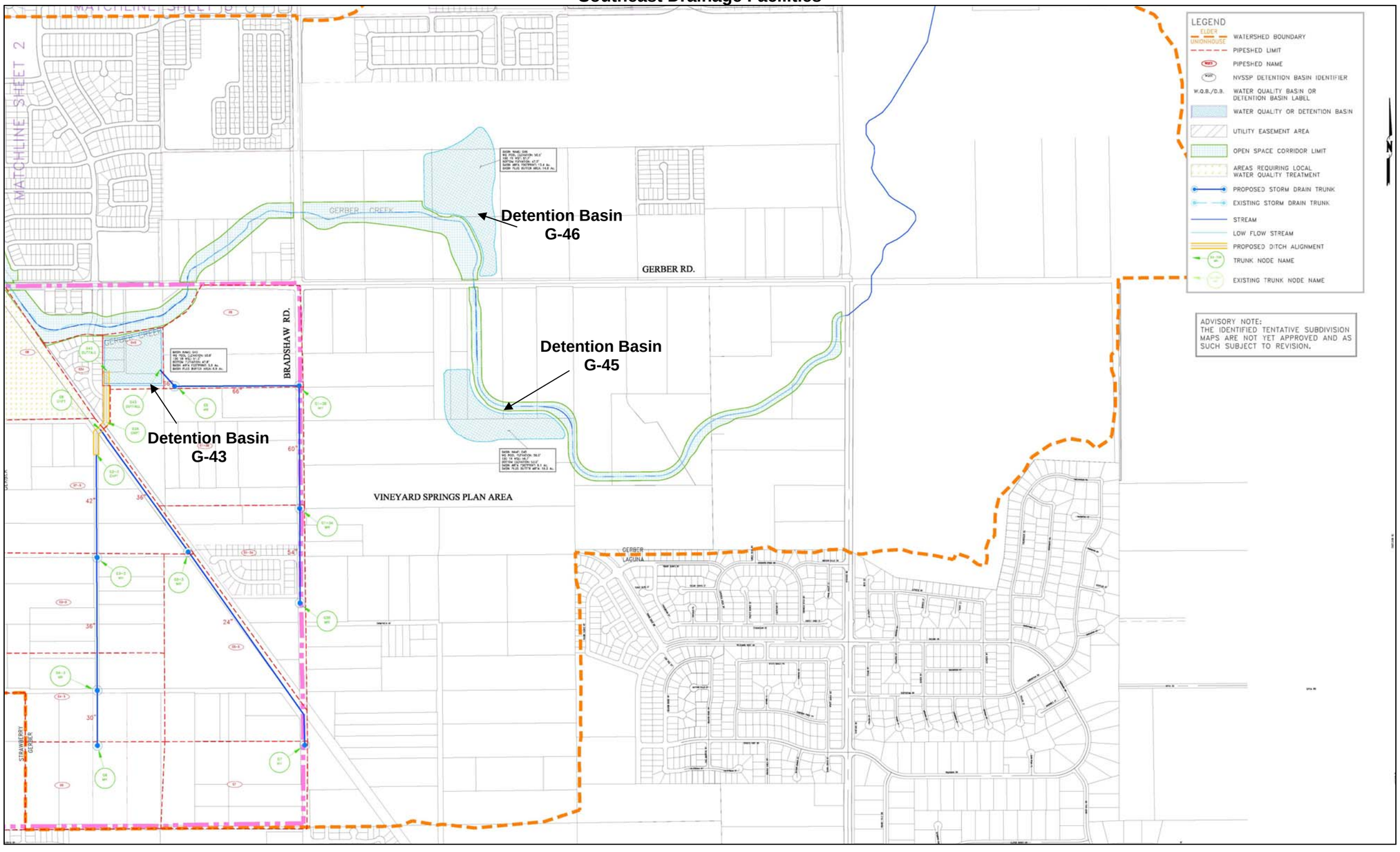
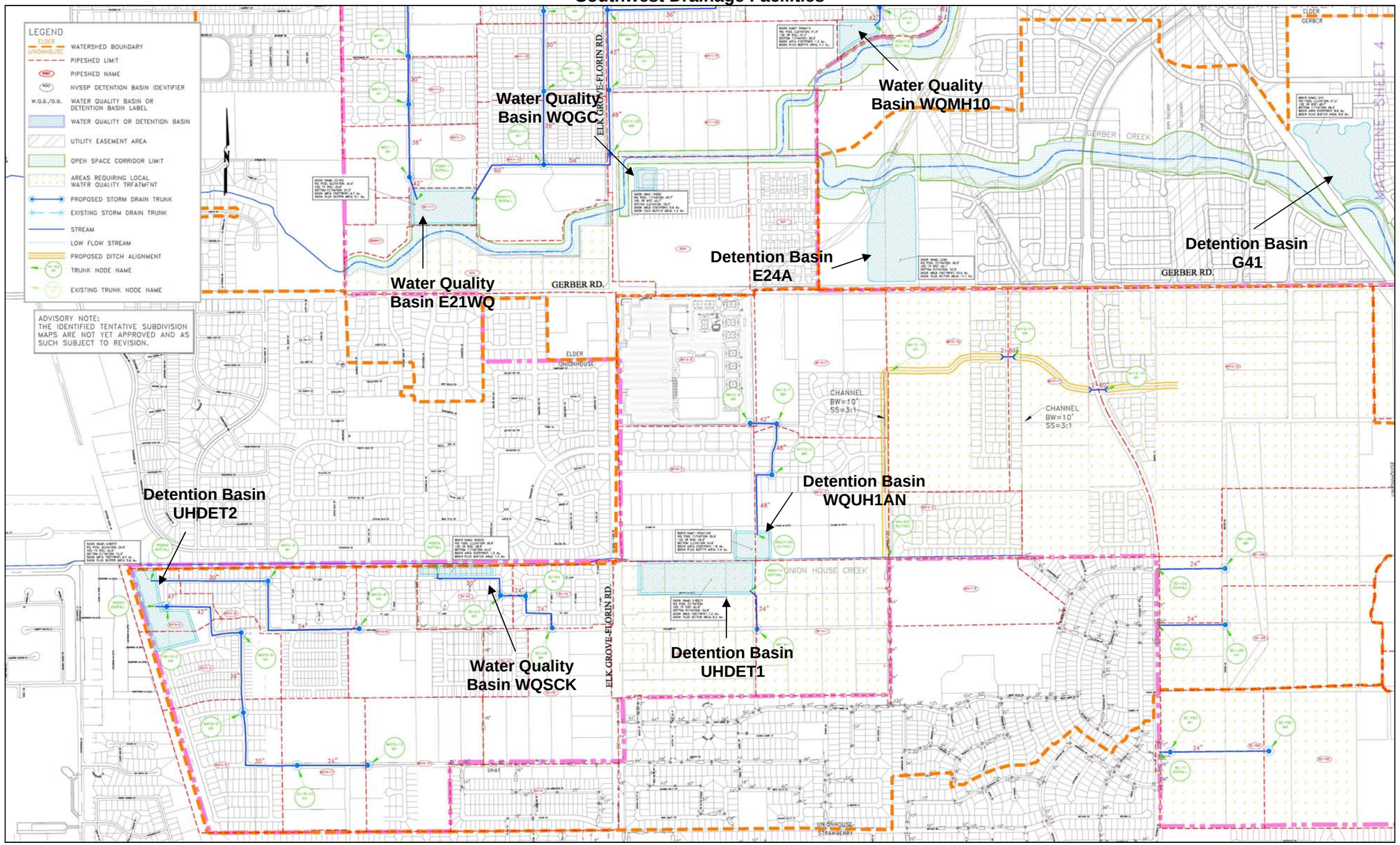


Plate HY-9
Southwest Drainage Facilities



The half-mile section of the Elder Creek channel upstream of Bradshaw Road is proposed to be relocated along the north boundary of the proposed Florin-Bradshaw Northeast Development. The channel is proposed to be widened to a 20-foot bottom width and 3:1 side slopes (vertical:horizontal). Two new 42-inch culverts are proposed to be added to the Bradshaw Road crossing to prevent the 100-year flood from overtopping the roadway under ultimate conditions. In addition to the channel modifications, water quality and flood control detention basins would be included in the Elder-Gerber stream group (See Table HY-1).

Table HY-1: Required Elder-Gerber Detention Facilities

Detention Basins	Water Quality Volume (AC-FT)	Flood Control Volume (AC-FT)	Detention Basin and Buffer Area Footprint (Acres)
Elder Creek Water Quality Only Basin			
WQMH10	4.8	N/A	2.1
Elder Creek With Laguna Spill			
E28	23.4	70.2	15.2
E31	6.0	73.0	12.8
Elder Creek Without Laguna Spill			
E28	23.4	70.2	15.2
E31	6.0	73.0	12.8
Gerber Creek Without Laguna Spill			
G43	12.4	14.5	6.9
Source: Civil Engineering Solutions, Inc., 2007.			

Development of the FVGCP would include improvements to the Elder-Gerber stream group as described above. As previously noted, improvements would include excavation of enhanced channels to deepen and widen the main channel and overbank areas. In addition to the proposed channel improvements, additional detention facilities would be required to mitigate for the increased runoff which is anticipated as a result of the increase in impervious surfaces that would result from development of the FVGCP area. The modification of existing and/or previously proposed facilities would be necessary due to changes in the channel configuration proposed by the Master Drainage Study. As shown in Table HY-2, eight detention basins are proposed for the Elder-Gerber stream group that would have maximum detention volumes ranging from 12.4 acre-feet to 79.0 acre-feet. Detention Basin G43 is only included under the Without Laguna Spill scenario as development within the area to be served by G43 is not feasible until the Laguna Spill is cut off.

Computer modeling results indicated that the peak 100-year water surface elevations for both Elder and Gerber Creek would be generally lower throughout the improved areas following implementation of the proposed improvements, including channel and detention facilities. Peak flow rates would also be reduced, with the exception of some portions of Gerber Creek within the plan area. Due to

the proposed channel improvements the peak flow increases would not have any adverse impact on Gerber Creek water surface elevations.

The proposed post-project with Laguna Spill 100-year water surface elevations would be lower than existing conditions; however, the water surface elevations are above the channel bank at some locations, in particular those locations where the proposed excavated channel deviates from the existing channel alignment. At other locations the water surface elevations are below the channel banks, but the available freeboard (the distance between the water surface and top of the bank) is less than one foot. As a result, fill material would be required to raise the low areas to at least one foot above the 100-year water surface (See Plate HY-10). Failure to raise the low areas would result in adverse impacts related to flooding along Elder and Gerber Creeks. Once the Laguna Spill is cut off the southeast portion of the FVGCP would not be located in the 100-year floodplain (See Plate HY-11).

Table HY-2: Proposed Elder–Gerber Detention Basins

Detention Basin	Maximum Water Surface Elevation (feet)	Minimum Detention Volume Elevation (feet)	Approximate Surface Area at Maximum Water Surface (acres)	Maximum Detained Volume (acre-feet)
With Laguna Spill				
E24A	44.1	36.5	13.6	67.3
E24B	45.6	39.0	6.07	35.7
E26	47.4	42.5	10.4	50.6
E28	49.7	45.0	13.3	93.6
E31	49.8	45.0	11.0	79.0
G41	48.8	41.5	7.9	48.5
G45	56.7	56.0	2.9	12.4
G46	57.2	50.5	11.4	76.7
Without Laguna Spill				
E24A	42.9	36.5	8.0	51.4
E24B	45.6	39.0	6.1	35.4
E26	47.4	42.5	10.4	50.6
E28	49.7	45.0	13.3	93.6
E31	49.9	45.0	11.0	78.7
G41	47.6	41.5	6.4	38.4
G43	51.3	50.8	5.2	24.7
G45	56.7	56.0	2.9	12.4
G46	57.2	50.5	11.4	76.7

Source: Civil Engineering Solutions, Inc., 2007.

Plate HY-10
Post-Project Floodplain with Laguna Spill

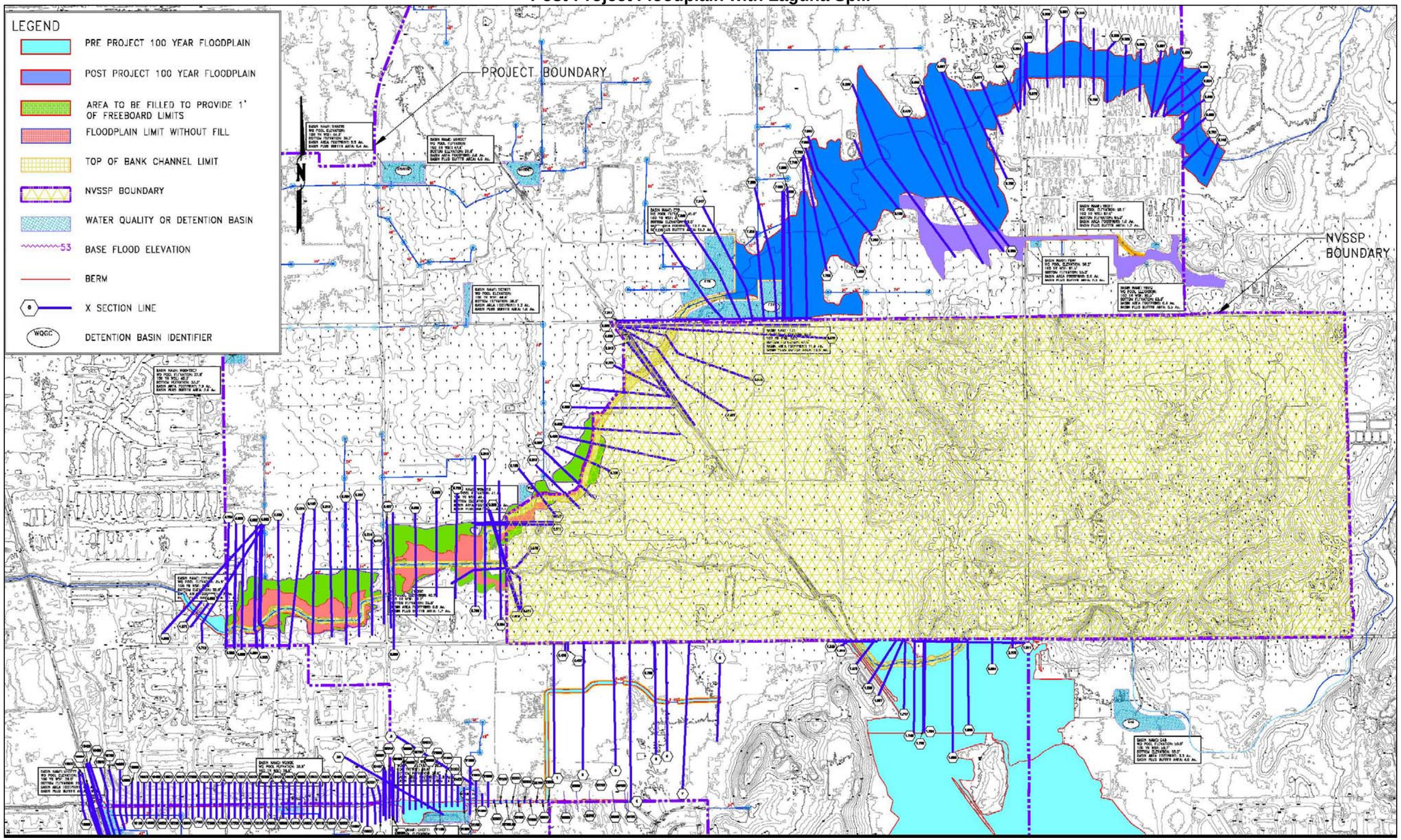
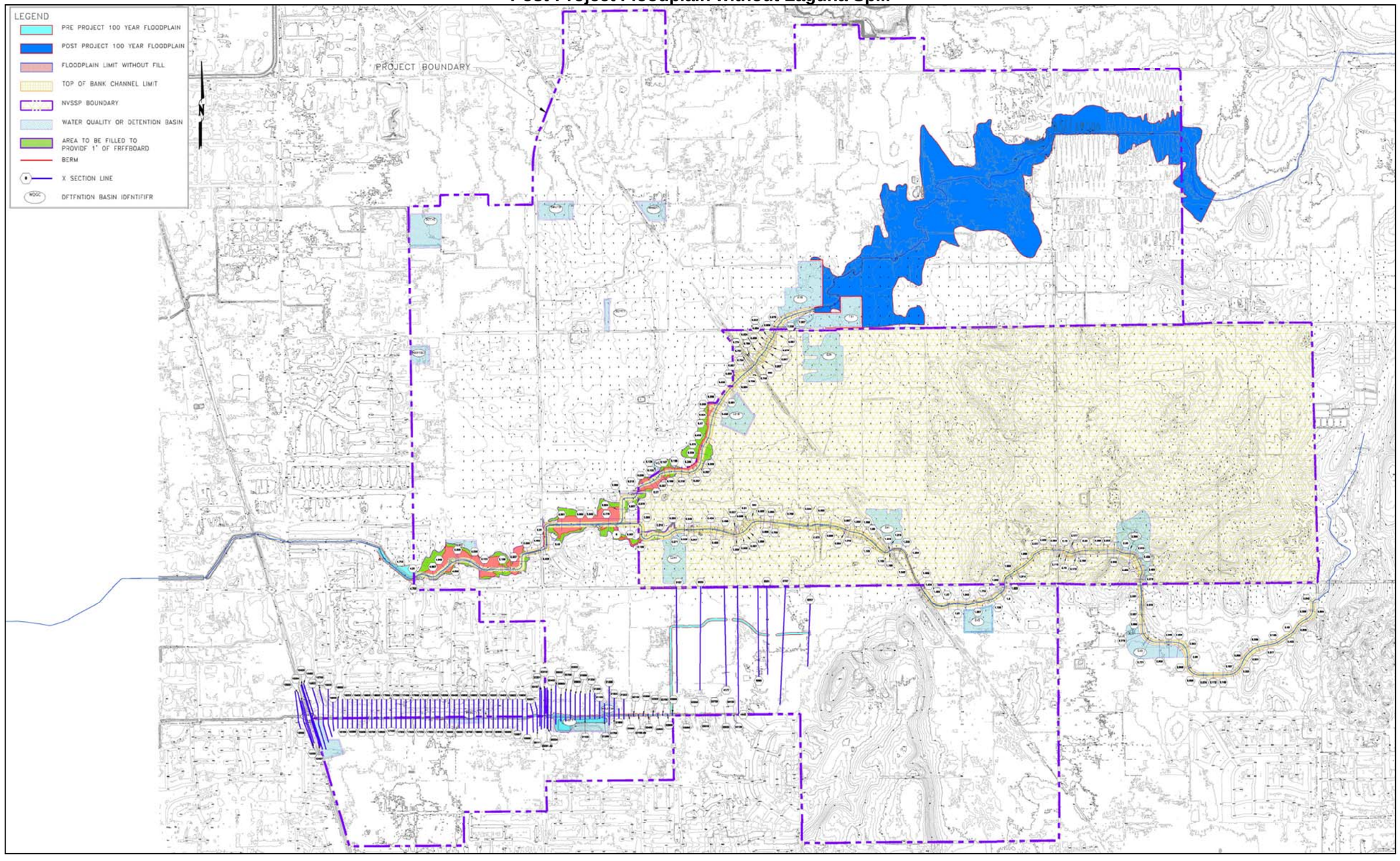


Plate HY-11
Post-Project Floodplain without Laguna Spill



FLORIN CREEK

Florin Creek consists largely of small shallow ditches and culverts in the FVGCP. Improvements to the Florin Creek drainages are intended to provide conveyance of expected 100-year flows to the downstream side of South Watt Avenue as well as to reduce the peak runoff in the south branch of Florin Creek to compensate for limitations in the capacity of the pre-project facilities (See Table HY-3).

Table HY-3: Required Florin Creek Detention Facilities

Detention Basins	Water Quality Volume (AC-FT)	Flood Control Volume (AC-FT)	Detention Basin and Buffer Area Footprint (Acres)
WQDETSC2	8.6	5.7	3.6
MH6DET	N/A	25.5	4.6
SWATTD	N/A	34.9	6.4
DETF4C	24.9	17.7	10.9
SC2R71	N/A	6.0	1.9
Source: Civil Engineering Solutions, Inc., 2007.			

In order to accomplish the above stated goals, and maintain post-project peak flows and water surface elevations at or below pre-project levels, a number of detention basins are proposed for the upstream portion of Florin Creek within the FVGCP area (See Plate HY-7 and Table HY-4). The most downstream of the basins would also provide the required water quality treatment storage. The existing southern reach of Florin Creek was determined to be inadequate to convey the peak 100-year flow rates. As a result, two detention basins were added in order to reduce the peak flows to a level which could be conveyed by the existing downstream system. The downstream basins would also provide capacity for water quality treatment.

Table HY-4: Proposed Florin Creek Detention Basins

Detention Basin	Maximum Water Surface Elevation (feet)	Minimum Detention Volume Elevation (feet)	Approximate Surface Area at Maximum Water Surface (acres)	Maximum Detained Volume (acre-feet)
WQDETSC2	40.3	37.8	2.4	14.3
MH6DET	47.9	39.6	3.6	25.5
SWATTD	44.3	36.7	5.2	34.9
DETF4C	39.4	37.5	9.1	42.6
SC2R71	46.6	39.5	1.1	6.0
Source: Civil Engineering Solutions, Inc., 2007.				

UNIONHOUSE CREEK

Buildout of the Unionhouse Creek drainage basin would not result in substantial unanticipated increase in water runoff. Expansion of existing detention facilities to

their previously estimated design capacity would be adequate to provide the necessary mitigation for increases in runoff due to development. The existing detention basin (UHDET1), which was partially constructed with the Tamarindo project to control flood waters, would be enlarged from 25 acre-feet to 37.7 acre-feet. Another detention basin (UHDET2) would be required at the downstream boundary of the FVGCP project at the Union Pacific Railroad to provide both water quality and flood control detention (See Table HY-5).

Table HY-5: Required Unionhouse Creek Detention Facilities

Detention Basins	Water Quality Volume (AC-FT)	Flood Control Volume (AC-FT)	Total Required Volume (AC-FT)	Detention Basin and Buffer Area Footprint (Acres)
UHDET2	5.6	32.6	38.2	5.6
WQSCK	2.5	N/A	2.5	1.4
UHDET1	N/A	30.5	30.5	8.3
WQUH1AN	5.8	N/A	5.8	2.4
Source: Civil Engineering Solutions, Inc., 2007.				

Implementation of the proposed floodwater detention basins (Table HY-6) would be adequate to ensure that increases in floodwater elevation or peak flow does not occur at the project boundary.

Table HY-6: Proposed Unionhouse Floodwater Detention Basins

Detention Basin	Maximum Water Surface Elevation (feet)	Minimum Detention Volume Elevation (feet)	Approximate Surface Area at Maximum Water Surface (acres)	Maximum Detained Volume (acre-feet)
UHDET1	41.6	34.8	4.9	30.5
UHDET2	35.6	25.0	3.6	38.2
Source: Civil Engineering Solutions, Inc., 2007.				

STAND ALONE CONDITIONS

As previously noted, the North Vineyard Station Specific Plan and Vineyard Springs Master Plan were required to participate in the implementation of the drainage improvements to Gerber Creek and Laguna Creek. Under Stand-Alone Conditions, the FVGCP would be built out without implementation of the North Vineyard Station Specific Plan. The Stand-Alone Conditions assumes that the Laguna Spill has not been shut off, and the areas south of Gerber Road and west of Bradshaw would not be developed. As shown in Table HY-7, construction of the detention basin storage volumes and associated infrastructure would be sufficient to maintain flows and stages at existing levels at the project boundary. Therefore, the FVGCP can be developed with or without the development of the North Vineyard Station Specific Plan and associated drainage improvements.

Table HY-7: Comparison of Flows and Stages for FVGCP Stand-Alone Conditions

Condition	Florin Creek at Project Boundary	Elder Creek at Project Boundary	City/County Boundary at Station 1.921	Unionhouse Creek at Project Boundary
100-year Flows (cfs)				
Existing	419	1897	1946	636
Stand-Alone	352	1852	1930	560
Increase in stage	-67	-45	-16	-76
100-year Water Surface Elevations (feet)				
Existing	35.61	38.80	20.19	36.48
Stand-Alone	35.21	38.79	20.21	35.59
Increase	-0.40	-0.01	0.02	-0.89
Source: Civil Engineering Solutions, Inc., 2007				

CONCLUSION

As shown in Table HY-8, post project flows at the FVGCP boundary would be less than the existing conditions following implementation of all of the proposed drainage improvements. Construction of the proposed detention basins concurrent with development of the areas draining to them would allow the development of the FVGCP to occur without relying on other projects inside or outside of the FVGCP. In addition, potential increases in housing densities that may occur though the implementation of the Density Bonus would not result in a noticeable increase in the overall runoff. However, the portion of the FVGCP south of Gerber Road and west of Bradshaw Road cannot develop until such time as the Laguna Spill is cut off, and Detention Basin G43 would not be constructed until that time. While completion of all facilities included in the Drainage Master Plan would provide detention of floodwaters, should development occur within a drainage basin prior to the completion of the drainage infrastructure a ***potentially significant*** impact to drainage would occur.

MITIGATION MEASURE(S)

The following mitigation measures would reduce adverse effects to drainage to a *less-than-significant* level.

HY-1 ***a.*** *Florin Vineyard Community Plan (FVGCP) development shall implement the proposed FVGCP Drainage Master Plan (DMP) [FVGCP Drainage Study, Civil Engineering Solutions, Inc. (October 12, 2007) as amended and accepted by the County Department of Water Resources (DWR) on May 19, 2008], or any subsequent amendments to the DMP that are reviewed and approved by the DWR. Detailed plans for the design and construction of all proposed drainage, flood control and water quality improvements, consistent with the FVGCP DMP, shall be submitted to the DWR for review and approval.*

b. Comply with one of the following measures, as applicable:

Projects within the Elder and Gerber Creek Watersheds

Construction of the FVGCP DMP improvements may be phased, subject to the approval of the DWR, so long as hydrologic/hydraulic analyses are provided that demonstrate the phased improvements will provide adequate (100-year) flood protection to proposed development areas and will not increase flood risks in downstream ***and upstream*** *areas****, and that such phased improvements are consistent with the County's 404 permit and the proposed phasing is submitted for approval to the Corps of Engineers as required by the conditions set forth in the County's 404 permit.****. Such analyses shall verify that the phased improvements will ~~reduce~~* ***mitigate*** *post-development peak flows and water surface elevations ~~to at least pre-development levels~~* ***in accordance with County standards****, and will provide water quality treatment of post-development runoff in compliance with County stormwater quality requirements.*

Projects within the Unionhouse and Florin Creek Watersheds

*Construction of the FVGCP DMP improvements may be phased, subject to the approval of the DWR, so long as hydrologic/hydraulic analyses are provided that demonstrate the phased improvements will provide adequate (100-year) flood protection to proposed development areas and will not increase flood risks in downstream areas****, and that such improvements are consistent with requirements of state and federal environmental regulators****. Such analyses shall verify that the phased improvements will reduce post-development peak flows and water surface elevations to at least pre-development levels, and will provide water quality treatment of post-development runoff in compliance with County stormwater quality requirements.*

HY-2 Prior to the approval of improvement plans for individual development projects within the FVGCP area, the project proponent shall demonstrate to the satisfaction of DWR that all FVGCP DMP improvements necessary to provide adequate flood protection to the project, and necessary to provide adequate mitigation for the project's downstream drainage/flooding and water quality impacts, have been implemented.

~~*HY-3 Prior to the issuance of grading permits, project applicants shall pay the drainage fee identified in the Florin Vineyard Community Plan Public Facilities Financing Plan for the implementation of drainage improvements within the FVGCP.*~~

HY-3 Comply with one of the following measures, as applicable:

Residential Projects within the Elder and Gerber Creek Watersheds

No residential final maps shall be recorded, no residential improvement plans shall be approved, and no residential building permits shall be issued until supplemental drainage fees are paid pursuant to an approved "Implementation Plan" that implements the financing mechanisms recommended in the approved Florin Vineyard Gap Community Plan Public Facilities Financing Plan (FVGCP Financing Plan). In addition to those financing mechanisms, the "Implementation Plan" shall specifically include the blending of the FVGCP Financing Plan and the North Vineyard Station Specific Plan Finance Plan (NVSSP). This blended plan shall include fair share funding and construction obligations by the FVGCP for those NVSSP Finance Plan drainage improvements and rights-of-way which are of shared benefit to developments in the Elder and Gerber Creek watersheds of the FVCGP.

Commercial Projects within the Elder and Gerber Creek Watersheds

For commercial development, all drainage fees required by the FVGCP PFFP and a fair share contribution, for NVSSP drainage improvements and rights-of-way which are of shared benefit to developments in the Elder and Gerber Creek watersheds of the FVGCP, shall be paid prior to approval of any commercial improvement plans for projects in the Elder and Gerber Creek watersheds of the FVGCP. Payment of fees pursuant to an interim fee agreement, that is adopted by the Board of Supervisors and which includes fair share contributions for the FVGCP and NVSSP drainage improvements and right of way acquisitions, shall satisfy the intent of this condition.

Projects within the Unionhouse and Florin Creek Watersheds

Prior to the issuance of grading permits, project applicants shall pay the drainage fee identified in the Florin Vineyard Community Plan Public Facilities Financing Plan for the implementation of drainage improvements within the FVGCP.

Table HY-8: Comparison of Flows and Stages for FVGCP Post-Development Conditions

Condition	Florin Creek at Project Boundary	Elder Creek at Project Boundary	City/County Boundary at Station 1.921	Unionhouse Creek at Project Boundary
Post-project with Laguna Spill 100-year Flows (cfs)				
Existing	419	1897	1946	636
Post-development	352	1807	1843	560
Increase in stage	-67	-90	-103	-76
Post-project with Laguna Spill 100-year Water Surface Elevations (feet)				
Existing	35.61	38.80	20.19	36.48
Post-development	35.21	38.71	19.97	35.59
Increase	-0.40	-0.09	-.022	-0.89
Post-project without Laguna Spill 100-year Flows (cfs)				
Existing	419	1897	1946	636
Post-development	352	1437	1740	560
Increase in stage	-67	-460	-206	-76
Post-project without Laguna Spill 100-year Water Surface Elevations (feet)				
Existing	35.61	38.80	20.19	36.48
Post-development	35.21	37.89	19.76	35.59
Increase	-0.40	-0.91	-0.43	-0.889
Source: Civil Engineering Solutions, Inc., 2007				

IMPACTS TO WATER QUALITY.

CAC LAND USE PLAN/PD LAND USE PLAN

The development of the FVGCP would involve the construction of houses, roadways, parking lots, and infrastructure, which would require grading, excavation, and other construction-related activities that could cause soil erosion at an accelerated rate during storm events. Following construction, long-term occupation of the FVGCP would result in materials being deposited by cars in the parking lots and floatable debris from trash as well as the contaminants of landscaping, fertilizers, and other contaminants, which would affect stormwater. All of these activities have the potential to affect water quality by contributing to localized violations of water quality standards, if untreated stormwater runoff enters receiving waters.

Construction activities such as grading, excavation, and trenching for site improvements would result in disturbance of soils at the individual project sites or at certain offsite locations (including the proposed drainage and wastewater system, and roadway areas). Construction site runoff can contain soil particles and sediments from these activities. Dust from construction sites can also be transported to other nearby locations, where the dust can enter runoff or water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites can also enter runoff. Typical pollutants could include petroleum products and heavy metals from equipment and products such as paints,

solvents, and cleaning agents that could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment entered receiving waters in sufficient quantities to exceed water quality objectives. Impacts from construction-related activities would generally be short-term and of limited duration.

Individual projects within the FVGCP that would involve construction activities resulting in a land disturbance of more than one acre would be required by the State to obtain the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit), which pertains to point-source pollution from grading and project construction. Compliance with the Permit requires the project applicant to file a Notice of Intent with the State Water Resources Control Board and prepare a Storm Water Pollution Prevention Plan prior to construction. The Storm Water Pollution Prevention Plan would incorporate Best Management Practices in order to prevent, or reduce to the greatest feasible extent, adverse impacts to water quality from erosion and sedimentation.

TEMPORARY CONSTRUCTION BEST MANAGEMENT PRACTICES

During the wet season (October 1 – April 30), the project must include an effective combination of erosion, sediment and other pollution control BMPs in compliance with the County ordinances and the State's Construction General Permit. During the rest of the year, typically erosion controls are not required, except in the case of predicted rain.

Erosion controls should always be the *first line of defense*, to keep soil from being mobilized in wind and water. Examples include stabilized construction entrances, tackified mulch, 3-step hydroseeding, spray-on soil stabilizers and anchored blankets. Sediment controls are the *second line of defense*; they help to filter sediment out of runoff before it reaches the storm drains and local waterways. Examples include rock bags to protect storm drain inlets, staked or weighted straw wattles/fiber rolls, and silt fences.

In addition to erosion and sediment controls, the project must have BMPs in place to keep other construction-related wastes and pollutants out of the storm drains. Such practices include, but are not limited to: filtering water from dewatering operations, providing proper washout areas for concrete trucks and stucco/paint contractors, containing wastes, managing portable toilets properly, and dry sweeping instead of washing down dirty pavement.

It is the responsibility of the project proponent to verify that the proposed BMPs for the project are appropriate for the unique site conditions, including topography, soil type and anticipated volumes of water entering and leaving the

site during the construction phase. In particular, the project proponent should check for the presence of colloidal clay soils on the site. Experience has shown that these soils do not settle out with conventional sedimentation and filtration BMPs. The project proponent may wish to conduct settling column tests in addition to other soils testing on the site, to ascertain whether conventional BMPs will work for the project.

If sediment-laden or otherwise polluted runoff discharges from the construction site are found to impact the County's storm drain system and/or Waters of the State, the property owner will be subject to enforcement action and possible fines by the County and the Central Valley Regional Water Quality Control Board.

POST-CONSTRUCTION STORMWATER QUALITY CONTROL MEASURES

Development and urbanization can increase pollutant loads, temperature, volume and discharge velocity of runoff over the predevelopment condition. The increased volume, increased velocity, and discharge duration of stormwater runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainage systems. Studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving waters. These impacts must be mitigated by requiring appropriate runoff reduction and pollution prevention controls to minimize runoff and keep runoff clean for the life of the project.

The County requires that projects include source and/or treatment control measures on selected new development and redevelopment projects. Source control BMPs are intended to keep pollutants from contacting site runoff. Examples include "No Dumping-Drains to Creek/River" stencils/stamps on storm drain inlets to educate the public, and providing roofs over areas likely to contain pollutants, so that rainfall does not contact the pollutants. Treatment control measures are intended to remove pollutants that have already been mobilized in runoff. Examples include vegetated swales and water quality detention basins. These facilities slow water down and allow sediments and pollutants to settle out prior to discharge to receiving waters. Additionally, vegetated facilities provide filtration and pollutant uptake/adsorption. The project proponent should consider the use of "low impact development" techniques to reduce the amount of imperviousness on the site, since this will reduce the volume of runoff and therefore will reduce the size/cost of stormwater quality treatment required. Examples of low impact development techniques include pervious pavement and bioretention facilities.

The County requires developers to utilize the *Stormwater Quality Design Manual for the Sacramento and South Placer Regions, 2007* (Design Manual) in selecting and designing post-construction facilities to treat runoff from the project. A new post construction design regulation was approved by the Municipal Services Agency Administrator (C. Creson) on May 18th 2006. This regulation

defines the development standards that the County is implementing and is reflected in the Design Manual. Treatment control measures are required on new development and redevelopment projects that meet or surpass the thresholds defined in Table 3-2 of the Design Manual. Updates and background on the County's requirements for post-construction stormwater quality treatment controls, along with several downloadable publications, can be found at the following websites:

http://www.msa.saccounty.net/sactostormwater/SSQP/development.asp
http://www.sactostormwater.org/newdevelopment.asp

The final selection and design of post-construction stormwater quality control measures is subject to the approval of the County Department of Water Resources; therefore, they should be contacted as early as possible in the design process for guidance.

MEASURES FOR PROJECTS KNOWN TO INCLUDE INDUSTRIAL LAND USES

Future industrial activities at the site may be subject to the State's NPDES General Stormwater Permit for Industrial Activities. Although this General Permit applies to the operation of the facility, the project proponent should consider the permit requirements during the planning process, since site layout and design could affect future pollutant loadings.

CONCLUSION

The majority of the FVGCP would be served by regional water quality and stormwater detention basins that would allow sediment and pollutants to settle out of stormwater runoff. However, as indicated in Plate HY-12, portions of the FVGCP would not have direct access to a regional water quality detention facilities. Areas that could not be served by the regional facilities would be required to construct onsite water quality detention facilities.

All projects would be required to comply with the State Construction Activities Storm Water General Permit, which would ensure that the buildout of the FVGCP would not substantially degrade surface water quality. In addition, individual projects would be required to implement project-specific BMPs during construction, and incorporate design elements to ensure to comply with the source control BMP requirements. Therefore, implementation of the proposed project could result in ***less-than-significant*** impacts to surface water quality.

MITIGATION MEASURE(S)

Mitigation is not required.

Cumulative Impacts and Mitigation Measures

Long-term impacts to drainage and water quality in combination with existing and future development.

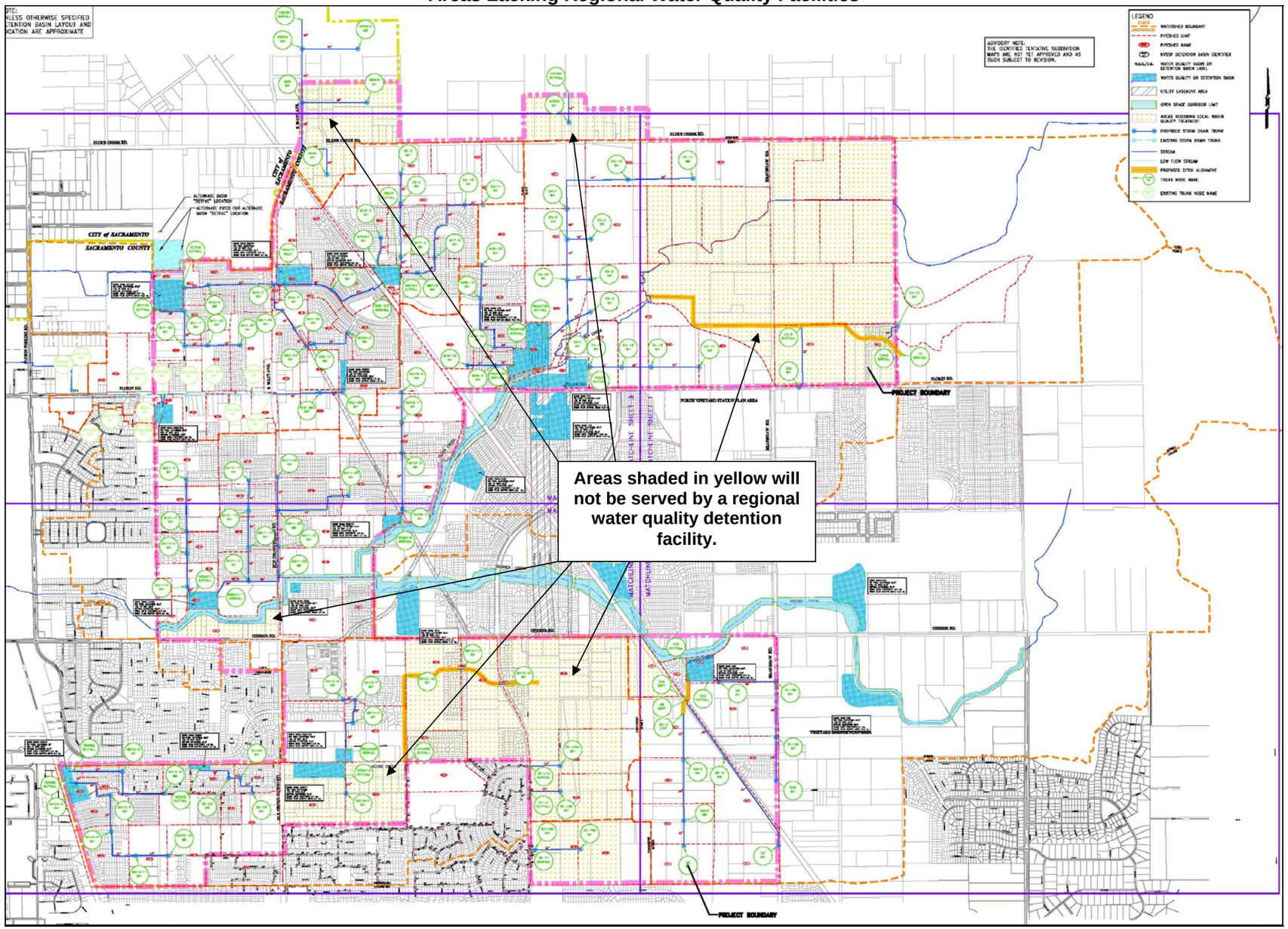
CAC LAND USE PLAN/PD LAND USE PLAN

As outlined above, planning documents related to the provision of drainage facilities have been prepared which anticipate the development of the proposed project at densities commensurate with the PD Land Use Plan. The necessary infrastructure and drainage improvements have been identified, and funding mechanisms prepared to ensure that development of the FVGCP would not result in adverse impacts to downstream properties located outside of the FVGCP. In addition, the project drainage plans have been designed to operate independent of improvements in the surrounding area. Future development in the surrounding areas would be required to comply with Sacramento County regulations which require that stormwater peak flows and water surface elevations do not exceed pre-project conditions. Therefore, cumulative development would not result in adverse impacts to drainage.

Individual projects would be required to implement Stormwater Pollution Prevention Plans and Best Management Practices to address water quality impacts. In addition, the FVGCP includes regional water quality detention basins that are intended to provide settling basins for sediments and other pollutants resulting from development within the respective drainage basins. Areas not served by a regional water quality detention basin would be required to implement a project-specific solutions to water quality issues. Therefore, plans and regulations are in place to address potential water quality impacts. As such, the proposed FVGCP would not result in a cumulatively considerable contribution to regional water quality impacts. Therefore, cumulative impacts related to drainage and water quality would be ***less-than-significant***.

MITIGATION MEASURE(S)
Mitigation is not required.

Plate HY-12
Areas Lacking Regional Water Quality Facilities



9 TRAFFIC AND CIRCULATION

INTRODUCTION

The implementation of the Florin-Vineyard Gap Community Plan (FVGCP) would substantially increase traffic volumes generated from the 3,766 ± acre project site. The increased traffic will be introduced to a road system that is primarily composed of rural roads. The Traffic and Circulation chapter will describe the potential traffic impacts caused by the project and require mitigation measures to improve future traffic circulation in the area. The section is based on the Traffic Impact Analysis prepared by Fehr & Peers Transportation Consultants.

ENVIRONMENTAL SETTING

PROJECT LOCATION

The Florin-Vineyard Gap Community Plan area is located in unincorporated Sacramento County east of the City of Sacramento and north of the City of Elk Grove. Plate TC-1 shows the location of the project and the adjacent roadway network. The project is generally located north of Calvine Road, south of State Route 16 (SR-16), east of Power Inn Road, and west of Bradshaw Road. U.S. Highway 50 (U.S. 50) and State Route 99 (SR 99) will provide primary freeway commute routes for the proposed project.

The community plan encompasses approximately 3,766 acres. Two plan-area concepts are being evaluated and are referred to as the Citizens Advisory Committee (CAC) Land Use Plan and the Planning Department (PD) Land Use Plan. Plate TC-2 shows and compares proposed land use for the CAC Land Use Plan and PD Land Use Plan. In general, the PD Land Use Plan has higher residential densities than the CAC Land Use Plan with higher density clusters located around major intersections.

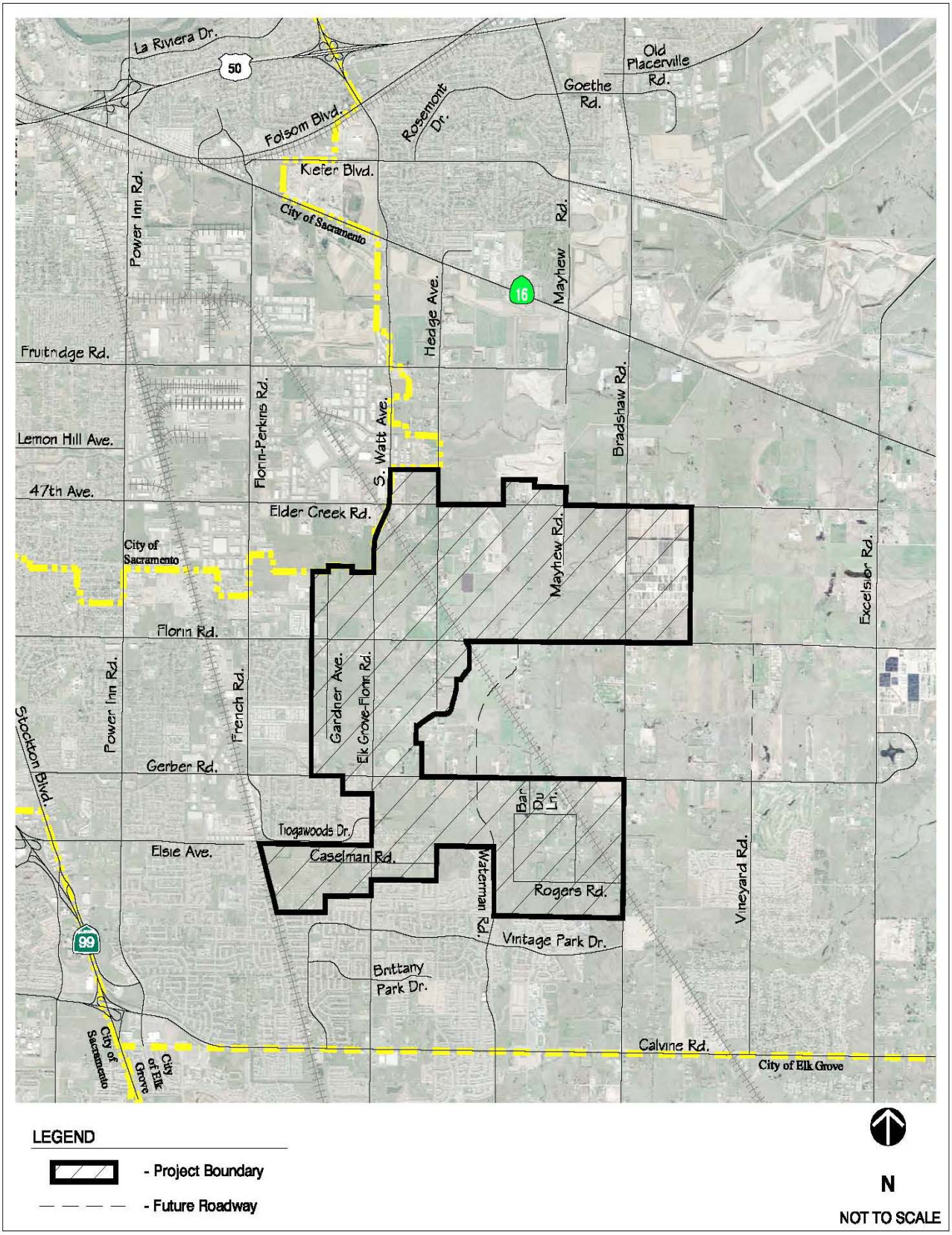
EXISTING CONDITIONS

The existing transportation system in the vicinity of the project site is heavily dependent on the roadway system for the movement of people and goods. Automobiles are the primary travel mode for most trips in this area, although limited transit service is provided within the study area. To a much lesser degree, the area is served by bicycle and pedestrian facilities. Each of the potentially affected travel modes is discussed in this chapter.

ROADWAY NETWORK

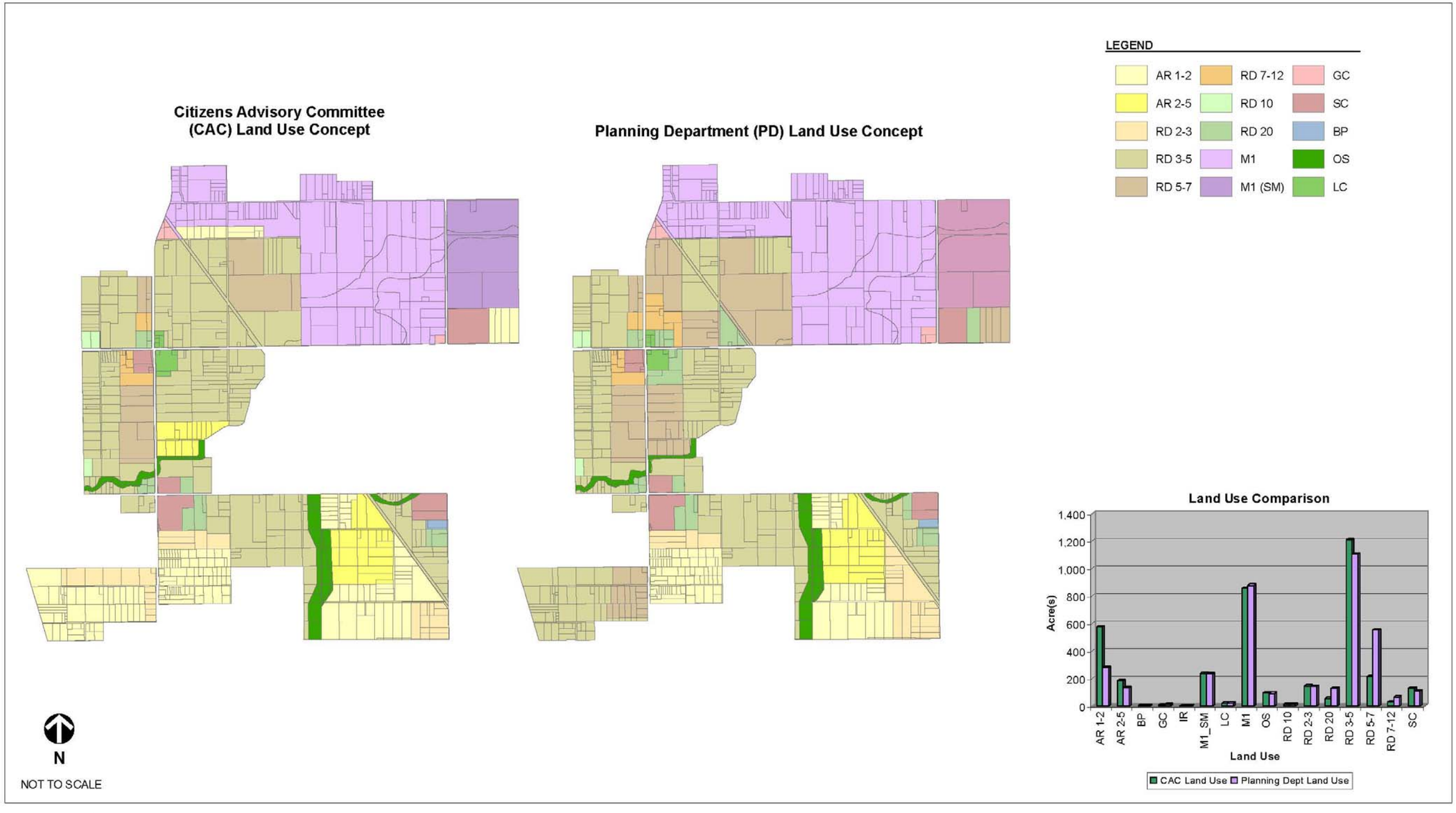
Figure TC-3 shows the existing number of lanes on study area roadways. Study area roadways range from two to six lanes and have speed limits from 35 to 55 miles per hour. The study area roads provide access to the industrial and residential uses in the vicinity of the project.

Plate TC-1
Project Location



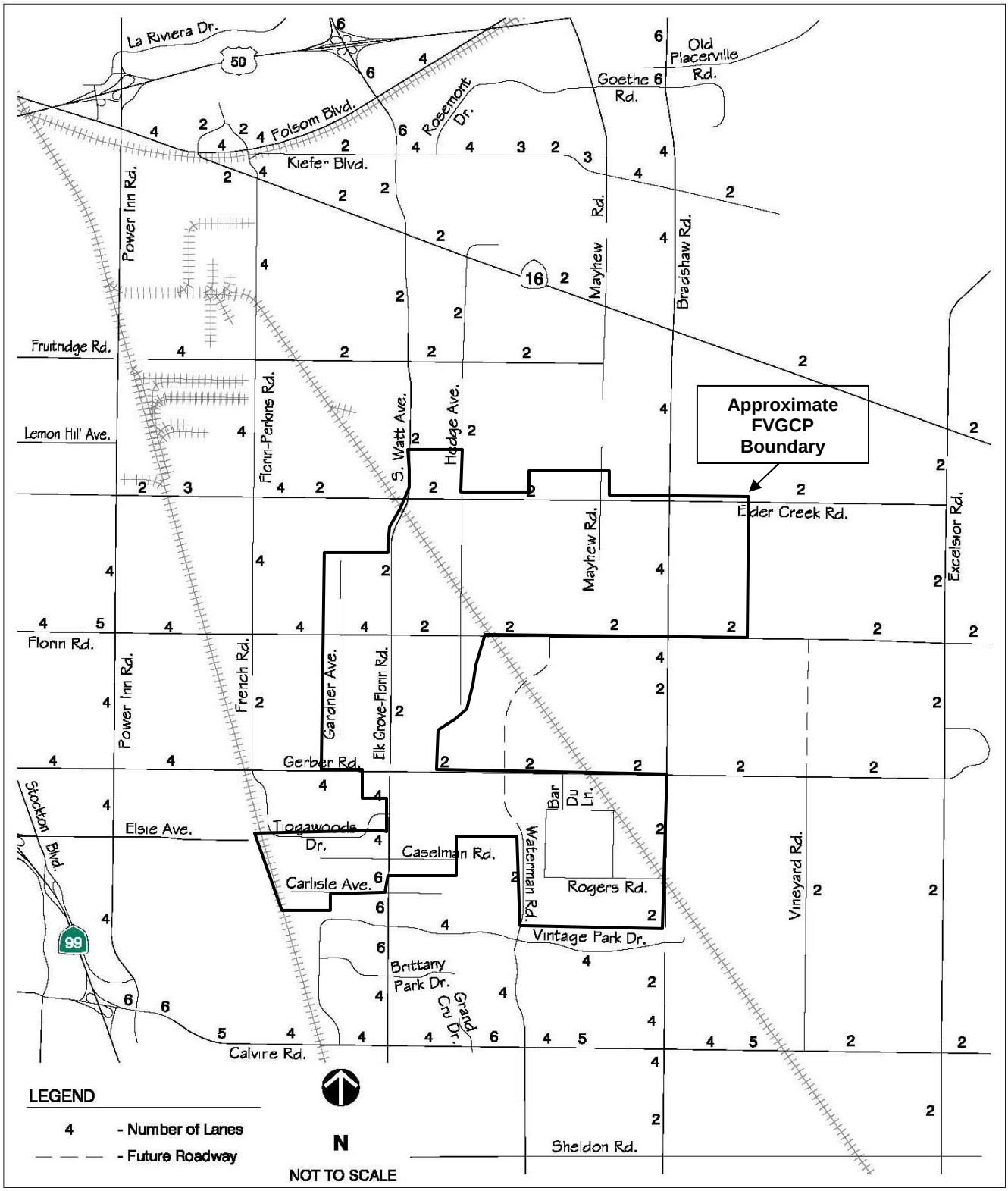
Source: Fehr & Peers, 2008.

Plate TC-2
Proposed Land Use Plans



Source: Fehr & Peers, 2008.

Plate TC-3
Existing Roadway System



Source: Fehr & Peers, 2008.

Several study roadway segments are considered rural roadways with 24 to 36 feet of pavement and paved shoulders and generally have a rural character. The following study roadway segments were evaluated as rural roadways:

- Fruitridge Road – South Watt Avenue to Mayhew Road;
- Elder Creek Road – South Watt Avenue to Excelsior Road;
- Florin Road – South Watt Avenue to Sunrise Boulevard;
- Gerber Road – Elk Grove-Florin Road to Excelsior Road;
- Calvine Road – Waterman Road to Grant Line Road;
- Hedge Avenue – SR 16 to Florin Road; and
- Excelsior Road – SR 16 to Calvine Road.

Existing Traffic Volumes

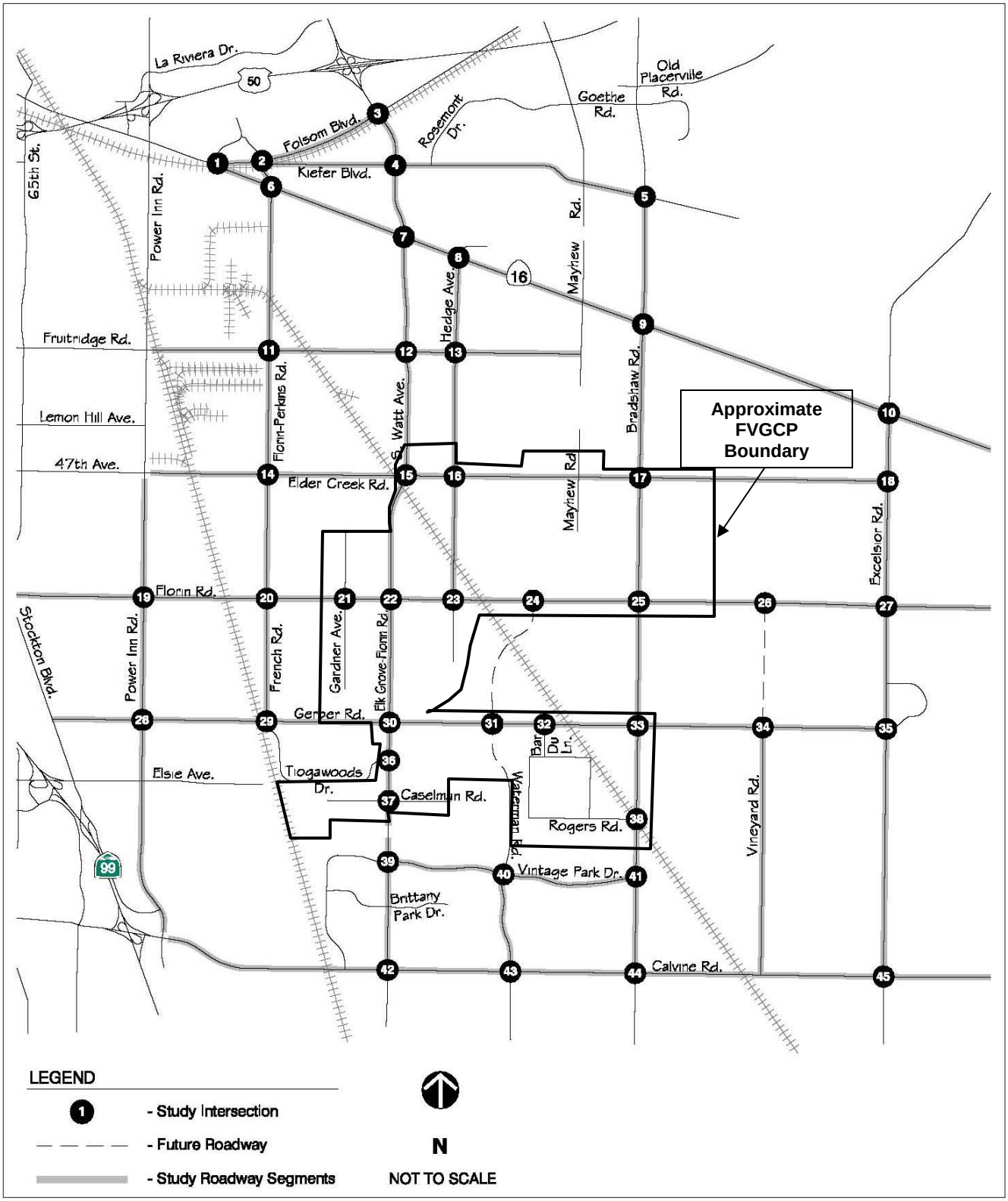
Fehr and Peers Associates, Inc. conducted daily roadway segment and AM and PM peak hour intersection turning movement counts in May 2004. New counts were collected at 36 of the 69 study roadway segments and 29 of the 45 intersections in January and April of 2007. Plate TC-4 shows the study roadway segments and intersections.

For a review of the figures showing existing daily roadway segment traffic volumes and existing AM and PM peak hour intersection turning movement volumes a copy of the complete traffic study is included in the DEIR Volume 3: Appendices, which is available upon request from the Sacramento County Department of Environmental Review and Assessment located at 827 7th Street, Sacramento California.

Methodology and Evaluation Criteria

The traffic chapter describes the analysis methodology and impact significance criteria used to analyze traffic operations. The analysis methodology and impact significance criteria used for the study facilities varies because the study area includes intersections and roadways in Sacramento County, the City of Sacramento, and the City of Elk Grove. The majority of intersections are located within the County; however, the following roadway segments and intersections are evaluated under the significance criteria established by their respective jurisdictions.

Plate TC-4
Study Roadway Segments and Intersections



Source: Fehr & Peers, 2008.

CITY OF SACRAMENTO ROADWAY SEGMENTS AND INTERSECTIONS

The following study roadway segments and intersections are located in the City of Sacramento:

ROADWAY SEGMENTS

Elder Creek Road – Florin-Perkins Road to South Watt Avenue
Power Inn Road – Elder Creek Road to Florin Road
Florin-Perkins Road – Folsom Boulevard to SR 16
Folsom Boulevard – SR 16 to Watt Avenue
Kiefer Boulevard – Florin-Perkins Road to Watt Avenue
Fruitridge Road – Power Inn Road to Florin-Perkins Road
Fruitridge Road – Florin-Perkins Road to South Watt Avenue
Fruitridge Road – South Watt Avenue to Hedge Avenue
Elder Creek Road – Power Inn Road to Florin-Perkins Road
Florin-Perkins Road – SR 16 to Fruitridge Road
Florin-Perkins Road – Fruitridge Road to Elder Creek Road
Florin-Perkins Road – Elder Creek Road to Florin Road
South Watt Avenue – SR 16 to Fruitridge Road
South Watt Avenue – Fruitridge Road to Elder Creek Road
South Watt Avenue – Elder Creek Road to Florin Road
Hedge Avenue – Fruitridge Road to Elder Creek Road

INTERSECTIONS

Folsom Boulevard/SR 16
Folsom Boulevard/Florin-Perkins Road
Folsom Boulevard/Watt Avenue
SR 16/Florin-Perkins Road
Fruitridge Road/Florin-Perkins Road
Fruitridge Road/South Watt Avenue
Elder Creek Road/Florin-Perkins Road
Elder Creek Road/South Watt Avenue

CITY OF ELK GROVE ROADWAY SEGMENTS AND INTERSECTIONS

The following study roadway segments and intersections are located in the City of Elk Grove:

ROADWAY SEGMENTS

Calvine Road – Power Inn Road to Elk Grove-Florin Road
Calvine Road – Elk Grove-Florin Road to Grand Cru Drive
Calvine Road – Grand Cru Drive to Waterman Road
Calvine Road – Waterman Road to Bradshaw Road

Calvine Road – Bradshaw Road to Vineyard Road
Calvine Road – Vineyard Road to Excelsior Road
Calvine Road – Excelsior Road to Grant Line Road

INTERSECTIONS

Calvine Road/Elk Grove-Florin Road
Calvine Road/Waterman Road
Calvine Road/Bradshaw Road
Calvine Road/Excelsior Road

SIGNIFICANCE CRITERIA

Significance criteria for Sacramento County, City of Sacramento, and City of Elk Grove study roadways and intersections are summarized below.

Consistent with Sacramento County's *Traffic Impact Guidelines*, the following thresholds of significance were used to determine if an impact to a study roadway or intersection located within Sacramento County was significant and required mitigation:

Roadways/Signalized Intersections: A project is considered to have a significant effect if it would:

1) Result in a roadway or signalized intersection operating at an acceptable LOS (LOS E or better) to deteriorate to LOS F

2) Increase the volume-to-capacity (V/C) ratio by more than 0.05 at a roadway or at a signalized intersection that is operating at LOS F without the project.

Unsignalized Intersections: A project is considered to have a significant effect if it would:

1) Result in an unsignalized intersection movement/approach operating at an acceptable LOS (LOS E or better) to deteriorate to LOS F and also cause the intersection to meet a traffic signal warrant.

2) Increase the delay by more than 5 seconds at a movement/approach that is operating at LOS F without the project for an unsignalized intersection that meets a signal warrant.

Bicycle and Pedestrian Facilities: A project is considered to have a significant effect if it would:

1) Eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage its use.

2) Interfere with the implementation of a planned bikeway as shown in the Bicycle Master Plan, or be in conflict with the Pedestrian Master Plan.

3) Result in unsafe conditions for bicyclists or pedestrians, including unsafe bicycle/pedestrian, bicycle/motor vehicle, or pedestrian/motor vehicle conflict.

Safety: A project is considered to have a significant effect if it would:

1) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Consistent with the City of Sacramento's *Revised Guidelines for the Preparation of Traffic Impact Analysis Study*, the following thresholds of significance were used to determine if an impact to a study roadway or intersection located within the City of Sacramento was significant and required mitigation:

Roadways: An impact is considered significant for roadways when the project causes:

1) A roadway to degrade from LOS C or better to LOS D or worse.

2) Increases the volume-to-capacity (V/C) ratio by 0.02 or more on a roadway that is operating worse than LOS C without the project.

Intersections: A project is considered to have a significant effect if it would:

1) Cause an intersection to degrade from LOS C or better to LOS D or worse.

2) Increase the average delay by 5 seconds or more at an intersection that is operating worse than LOS C without the project.

Consistent with the *City of Elk Grove Traffic Impact Analysis Guidelines*, the following thresholds of significance were used to determine if an impact to a study roadway or intersection located within the City of Elk Grove was significant and required mitigation:

Roadways: An impact is considered significant for roadways when the project causes:

1) A roadway to degrade from LOS D or better to LOS E or worse.

2) Increases the volume-to-capacity (V/C) ratio by 0.05 or more on a roadway that is operating worse than LOS D without the project.

Intersections: A project is considered to have a significant effect if it would:

1) Cause an intersection to degrade from LOS D or better to LOS E or worse.

2) Increase the average delay by 5 seconds or more at an intersection that is operating worse than LOS D without the project.

EXISTING TRAFFIC OPERATIONS

Existing traffic operations of the study roadways and intersections are discussed below.

ROADWAY SEGMENTS

The daily volumes for the Existing Conditions scenario were compared to the capacity criteria for arterial roadway segments presented in the Evaluation and Methodology Criteria Section contained in the Traffic Impact Analysis. The roadway segment operations analysis is summarized below by jurisdiction.

Table TC-1, below, summarizes study roadway segment operations.

SACRAMENTO COUNTY FACILITIES

Most of the Sacramento County study roadway segments operate acceptably, LOS E or better, except for the following:

- Elk Grove-Florin Road – Florin Road to Gerber Road;
- Bradshaw Road – Florin Road to Gerber Road;
- South Watt Avenue – Folsom Boulevard to Kiefer Boulevard; and
- South Watt Avenue – Kiefer Boulevard to SR 16.

CITY OF SACRAMENTO FACILITIES

Most of the City of Sacramento study roadway segments operate acceptably, LOS C or better, except for the following:

- Fruitridge Road – Florin-Perkins Road to South Watt Avenue;
- Elder Creek Road – Power Inn Road to Florin-Perkins Road;
- Power Inn Road – Elder Creek Road to Florin Road;
- Florin-Perkins Road – Fruitridge Road to Elder Creek Road;
- South Watt Avenue – SR 16 to Fruitridge Road;
- South Watt Avenue – Fruitridge Road to Elder Creek Road; and
- South Watt Avenue – Elder Creek Road to Florin Road.

City of Elk Grove Facilities

Most of the City of Elk Grove study roadway segments operate acceptably, LOS D or better, except for Calvine Road between Power Inn Road and Elk Grove-Florin Road, which operates at LOS E.

Table TC-1, below, summarizes study roadway segment operations.

Study Intersections

The existing AM and PM peak hour intersection turning movement volumes and lane configurations were used to calculate levels of service at the study intersections based on the methodology contained in the Traffic Impact Analysis. LOS for each study intersection is presented in Table TC-2, below.

As shown in Table TC-2, six of the 33 Sacramento County study intersections operate unacceptably, LOS F, during at least one peak hour, six of the eight City of Sacramento study intersections operate unacceptably, LOS D or worse, during both peak hours, and one of the four City of Elk Grove study intersections operate unacceptably, LOS E or worse, during both peak hours.

Unsignalized intersections were evaluated using the peak hour volume warrant (Warrant 11) published in the California Department of Transportation's Traffic Manual (1996) to determine if signal control is warranted under existing conditions. Most of the unsignalized intersections meet the Caltrans peak hour volume warrant except for the Florin Road/Excelsior Road intersection.

Transit System

In the greater Sacramento area, transit service is provided by Regional Transit (RT). The City of Elk Grove's E-Tran provides service on the southern edge of the study area along Calvine Road. The project site lies on the outskirts of the urbanized Sacramento area where existing transit service is limited. Plate TC-5 shows the existing transit service near the study area, which is available on the edges of the study area along Power Inn Road, Florin-Perkins Road, Folsom Boulevard, Kiefer Boulevard, and Calvine Road. Currently, transit service is not provided within the project area. A description of these transit routes is provided below.

Table TC-1: Roadway Level Of Service – Existing Conditions

Roadway Segment	Existing Conditions				
	Lanes	Type	Vol	V/C	LOS
1. Folsom Blvd.–SR 16 to Watt Avenue	4	Arterial	20,700	0.58	A
2. Kiefer Blvd.–Florin-Perkins Rd. to Watt Ave.	2	Arterial	6,400	0.36	A
3. Kiefer Blvd.– Watt Ave. to Rosemont Dr.	4	Arterial	21,300	0.59	A
4. Kiefer Blvd. – Rosemont Dr. to Bradshaw Rd.	4	Arterial	11,900	0.33	A
5. SR 16 - Folsom Blvd. to Watt Ave.	2	Arterial	12,200	0.68	B
6. SR 16 - Watt Ave. to Bradshaw Rd.	2	Arterial	14,900	0.83	D
7. SR 16 - Bradshaw Rd. to Sunrise Blvd.	2	Arterial	12,000	0.60	A
8. Fruitridge Rd. - Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	19,700	0.55	A
9. Fruitridge Rd-Florin-Perkins Rd. to South Watt Ave.	2	Arterial	14,800	0.82	D
10. Fruitridge Rd.-South Watt Ave. to Hedge Ave.	2	Rural	6,200	0.31	C
11. Elder Creek Rd.-Power Inn Rd. to Florin-Perkins Rd.	2	Arterial	16,000	0.89	D
12. Elder Creek Rd.-Florin-Perkins Rd. to South Watt Ave.	2	Arterial	10,700	0.59	A
13. Elder Creek Rd.-South Watt Ave. to Hedge Ave.	2	Rural	5,900	0.30	C
14. Elder Creek Rd. – Hedge Ave. to Bradshaw Rd.	2	Rural	6,800	0.34	C
15. Elder Creek Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	2,200	0.11	A
16. Florin Rd. – Stockton Blvd. to Power Inn Rd.	4	Arterial	28,500	0.79	C
17. Florin Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	22,400	0.62	B
18. Florin Rd.-Florin-Perkins Rd. to Gardner Ave.	4	Arterial	14,200	0.39	A
19. Florin Rd. – Gardner Ave. to South Watt Ave.	4	Arterial	17,300	0.48	A
20. Florin Rd.-South Watt Ave. to Hedge Ave.	2	Rural	12,700	0.64	E
21. Florin Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	6,000	0.30	C
22. Florin Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	4,900	0.25	C
23. Florin Rd. – Excelsior Rd. to Sunrise Blvd.	2	Rural	3,800	0.19	B
24. Gerber Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	18,700	0.52	A
25. Gerber Rd.-Power Inn Rd. to French Rd.	4	Arterial	26,200	0.73	C
26. Gerber Rd. – French Rd. to Elk Grove-Florin Rd.	4	Arterial	19,700	0.55	A
27. Gerber Rd.-Elk Grove-Florin Rd. to Bradshaw Rd.	2	Rural	8,500	0.43	D
28. Gerber Rd.-Bradshaw Rd. to Vineyard Rd.	2	Rural	5,800	0.29	C
29. Gerber Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	2,500	0.13	B
30. Vintage Park Dr.-Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	15,000	0.42	A
31. Vintage Park Dr. – Waterman Rd. to Bradshaw Rd.	4	Arterial	6,800	0.19	A
32. Calvine Rd.-Power Inn Rd. to Elk Grove-Florin Rd.	5	Arterial	42,600	0.95	E
33. Calvine Rd.-Elk Grove-Florin Rd. to Grand Cru Dr.	4	Arterial	27,600	0.77	C
34. Calvine Rd.-Grand Cru. Dr. to Waterman Rd.	6	Arterial	27,600	0.51	A
35. Calvine Rd.-Waterman Rd. to Bradshaw Rd.	4	Arterial	17,500	0.49	A
36. Calvine Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	11,500	0.32	A
37. Calvine Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	5,500	0.28	C
38. Calvine Rd.-Excelsior Rd. to Grant Line Rd.	2	Rural	3,700	0.19	B
39. Power Inn Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	30,400	0.84	D
40. Power Inn Rd. – Florin Rd. to Gerber Rd.	4	Arterial	28,900	0.80	D
41. Power Inn Rd.-Gerber Rd. to Calvine Rd.	4	Arterial	27,600	0.77	C
42. Florin-Perkins Rd.-Folsom Blvd. to SR 16	4	Arterial	18,500	0.51	A
43. Florin-Perkins Rd.-SR 16 to Fruitridge Rd.	4	Arterial	27,700	.077	C
44. Florin-Perkins Rd.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	30,000	0.83	D
45. Florin-Perkins Rd. –Elder Creek Rd. to Florin Rd.	4	Arterial	24,700	0.69	B
46. French Rd.-Florin Rd. to Gerber Rd.	2	Arterial	15,700	0.87	D
47. South Watt Ave.-Folsom Blvd. to Kiefer Blvd.	6	Arterial	61,000	1.02	F

Roadway Segment	Existing Conditions				
	Lanes	Type	Vol	V/C	LOS
48. South Watt Ave.-Kiefer Blvd. to SR 16	2	Arterial	43,500	2.42	F
49. South Watt Ave.-SR 16 to Fruitridge Rd.	2	Arterial	24,400	1.22	F
50. South Watt Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Arterial	20,100	1.12	F
51. South Watt Ave.-Elder Creek Rd. to Florin Rd.	2	Arterial	16,100	0.89	D
52. Elk Grove-Florin Rd.-Florin Rd. to Gerber Rd.	2	Arterial	22,900	1.27	F
53. Elk Grove-Florin Rd.-Gerber Rd to Carlisle Ave.	4	Arterial	35,000	0.97	E
54. Elk Grove-Florin Rd.-Carlisle Ave. to Vintage Park Dr.	6	Arterial	33,800	0.63	B
55. Elk Grove-Florin Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	31,800	0.88	D
56. Hedge Ave.-SR 16 to Fruitridge Rd.	2	Rural	4,400	0.22	C
57. Hedge Ave. – Fruitridge Rd. to Elder Creek Rd.	2	Rural	5,900	0.30	C
58. Hedge Ave.-Elder Creek Rd. to Florin Rd.	2	Rural	4,000	0.23	C
59. Waterman Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	6,100	0.17	A
60. Bradshaw Rd.-Kiefer Blvd. to SR 16	4	Arterial	31,600	0.88	D
61. Bradshaw Rd.-SR 16 to Elder Creek Rd.	4	Arterial	20,100	0.56	A
62. Bradshaw Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	16,200	0.45	A
63. Bradshaw Rd.-Florin Rd. to Gerber Rd.	2	Arterial	19,900	1.11	F
64. Bradshaw Rd.-Gerber Rd. to Vintage Park Dr.	2	Arterial	13,400	0.74	C
65. Bradshaw Rd.-Vintage Park Dr. to Calvine Rd.	2	Arterial	10,700	0.59	A
66. Vineyard Rd.-Gerber Rd. to Calvine Rd.	2	Arterial	6,600	0.37	A
67. Excelsior Rd.-SR 16 to Florin Rd.	2	Rural	5,800	0.29	C
68. Excelsior Rd.- Florin Rd. to Gerber Rd.	2	Rural	8,900	0.45	D
69. Excelsior Rd.-Gerber Rd. to Calvine Rd.	2	Rural	5,400	0.27	C

Notes: Shaded areas indicate unacceptable operations.
All arterial roadway segments assumed to have moderate access control except for Segments 7, 47, and 49, which were assumed to have high access control.
Blue – City of Sacramento Study Roadway Segments
Green – City of Elk Grove Study Roadway Segments

Source: *Fehr & Peers*, 2008.

Table TC-2: Intersection Level Of Service – Existing Conditions

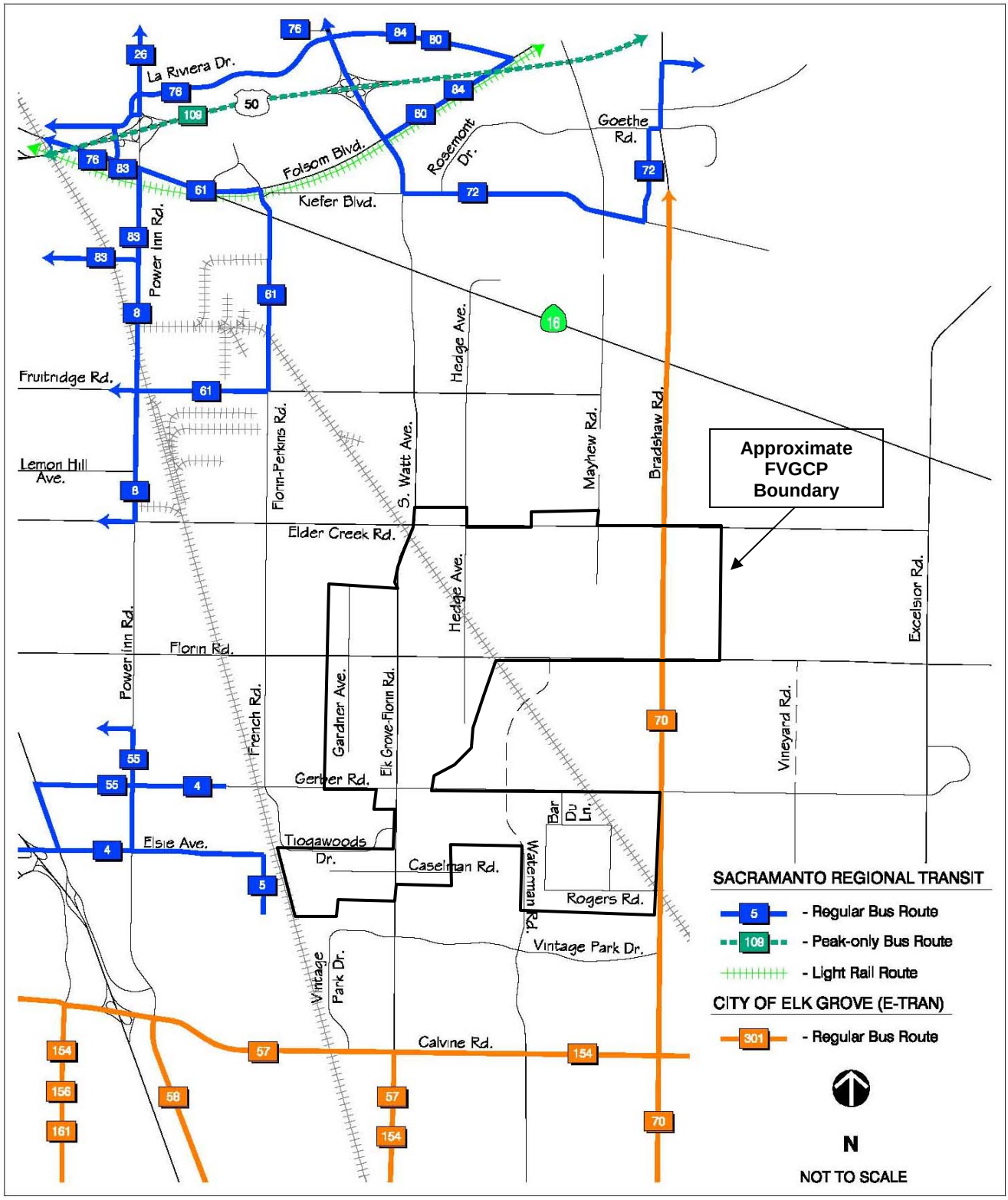
Intersection	Control	AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1. Folsom Boulevard/State Route 16 (SR 16)	Signal	22	C	22	C
2. Folsom Boulevard/Florin-Perkins Road	Signal	55	D	52	D
3. Folsom Boulevard/South Watt Avenue	Signal	>80	F	>80	F
4. Kiefer Boulevard/South Watt Avenue	Signal	0.79	C	0.73	C
5. Kiefer Boulevard/Bradshaw Road	Signal	0.67	B	0.88	D
6. SR 16/Florin-Perkins Road	Signal	45	D	60	E
7. SR 16/South Watt Avenue	Signal	0.91	E	1.16	F
8. SR 16/Hedge Avenue	Signal	0.55	A	0.58	A
9. SR 16/Bradshaw Road	Signal	1.03	F	0.90	E
10. SR 16/Excelsior Road	Signal	0.86	D	0.89	D
11. Fruitridge Road/Florin-Perkins Road	Signal	54	D	>80	F
12. Fruitridge Road/South Watt Avenue	4-Way Stop	>50	F	>50	F
13. Fruitridge Road/Hedge Avenue	4-Way Stop	31	D	21	C
14. Elder Creek Road/Florin-Perkins Road	Signal	>80	F	>80.0	F
15. Elder Creek Road/South Watt Avenue	Signal	30	C	28	C
16. Elder Creek Road/Hedge Avenue	4-Way Stop	18	C	17	C
17. Elder Creek Road/Bradshaw Road	Signal	0.60	A	0.50	A
18. Elder Creek Road/Excelsior Road	2-Way Stop	18	C	14	B
19. Florin Road/Power Inn Road	Signal	0.81	D	0.88	D
20. Florin Road/Florin-Perkins Road	Signal	0.83	D	0.76	C
21. Florin Road/Gardner Avenue	2-Way Stop	25	D	16	C
22. Florin Road/South Watt Avenue	Signal	0.72	C	0.86	D
23. Florin Road/Hedge Avenue	4-Way Stop	17	C	15	B
24. Florin Road/Waterman Road (cumulative only)					
25. Florin Road/Bradshaw Road	Signal	0.45	A	0.55	A
26. Florin Road/Vineyard Road (cumulative only)					
27. Florin Road/Excelsior Road	4-Way Stop	>50	F	23	C
28. Gerber Road/Power Inn Road	Signal	0.86	D	0.78	D
29. Gerber Road/French Road	Signal	0.88	D	0.79	C
30. Gerber Road/Elk-Grove Florin Road	Signal	0.78	C	1.02	F
31. Gerber Road/Waterman Road (plus project/cumulative)					
32. Gerber Road/Bar Du Lane	2-Way Stop	16	C	15	C
33. Gerber Road/Bradshaw Road	Signal	1.04	F	0.82	D
34. Gerber Road/Vineyard Road	2-Way Stop	>50	F	17	C
35. Gerber Road/Excelsior Road	4-Way Stop	15	B	23	C
36. Tiogawoods Drive/Elk Grove-Florin Road	Signal	0.83	D	0.53	A
37. Casselman Road/Elk Grove-Florin Road	2-Way	25	D	20	C

Intersection	Control	AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
	Stop				
38. Rogers Road/Bradshaw Road	2-Way Stop	22	C	18	C
39. Vintage Park Drive/Elk Grove-Florin Road	Signal	0.75	C	0.62	B
40. Vintage Park Drive/Waterman Road	Signal	0.43	A	0.30	A
41. Vintage Park Drive/Bradshaw Road	Signal	0.52	A	0.52	A
42. Calvine Road/Elk Grove-Florin Road	Signal	66	E	65	E
43. Calvine Road/Waterman Road	Signal	36	D	37	D
44. Calvine Road/Bradshaw Road	Signal	26	C	36	D
45. Calvine Road/Excelsior Road	4-Way Stop	15	B	15	C

Notes: Signal Control-Circular 212 Planning Methodology-Results present volume/capacity ratio and LOS.
2-Way Stop Control-2000 HCM Methodology-Results present delay and LOS for worst minor-street approach.
4-Way Stop Control-2000 HCM Methodology-Results present average delay and LOS.
Shaded areas indicate unacceptable operations.
Blue – City of Sacramento Study Intersections
Green – City of Elk Grove Study Intersections

Source: Fehr & Peers, 2008.

Plate TC-5
Existing Transit System



Source: Fehr & Peers, 2008.

BICYCLE AND PEDESTRIAN FACILITIES

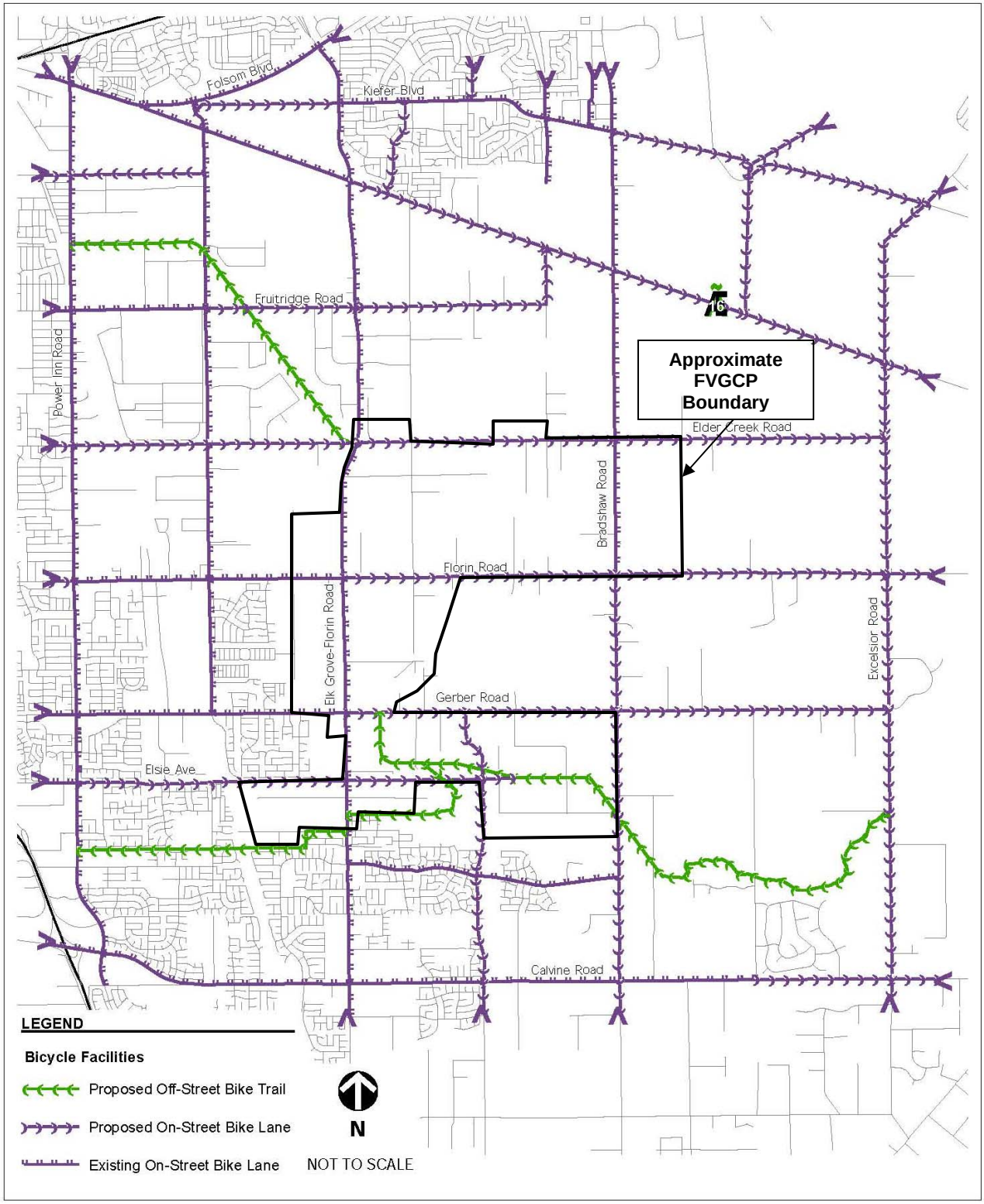
Bicycling and walking account for about 5.0 percent of work trips and about 6.2 percent of all trips made in the Sacramento metropolitan area according to the Sacramento Area Council of Governments' (SACOG) Pre-Census Travel Behavior Report – Analysis of the 2000 SACOG Household Travel Survey, (July 25, 2001). SACOG's household travel survey was conducted in Spring 2000 and included surveys of 9,130 people in 3,941 households living in Sacramento, Yolo, Yuba, and Sutter Counties, and western portions of Placer and El Dorado Counties.

Plate TC-6 shows existing and planned on- and off-street bicycle facilities within the study area. Proposed bicycle facilities are based on Exhibit 4-1b of the Sacramento City/County 2010 Bikeway Master Plan. **Additionally, Plate PS-3 (see Public Services chapter) shows the Southgate Recreation and Park District's planned trails and parkways for the FVGCP area, as of March 2008.** The California Department of Transportation's Highway Design Manual, Fourth Edition, identifies three categories of bikeways, which are summarized in Plate TC-7, below.

Pedestrian facilities are limited in the vicinity of the proposed project and generally exist only along improved frontages. For example, on Gerber Road pedestrian sidewalks are provided along residential frontages west of the Elk Grove-Florin Road/South Watt Avenue intersection, but not along the frontages of nearby properties.

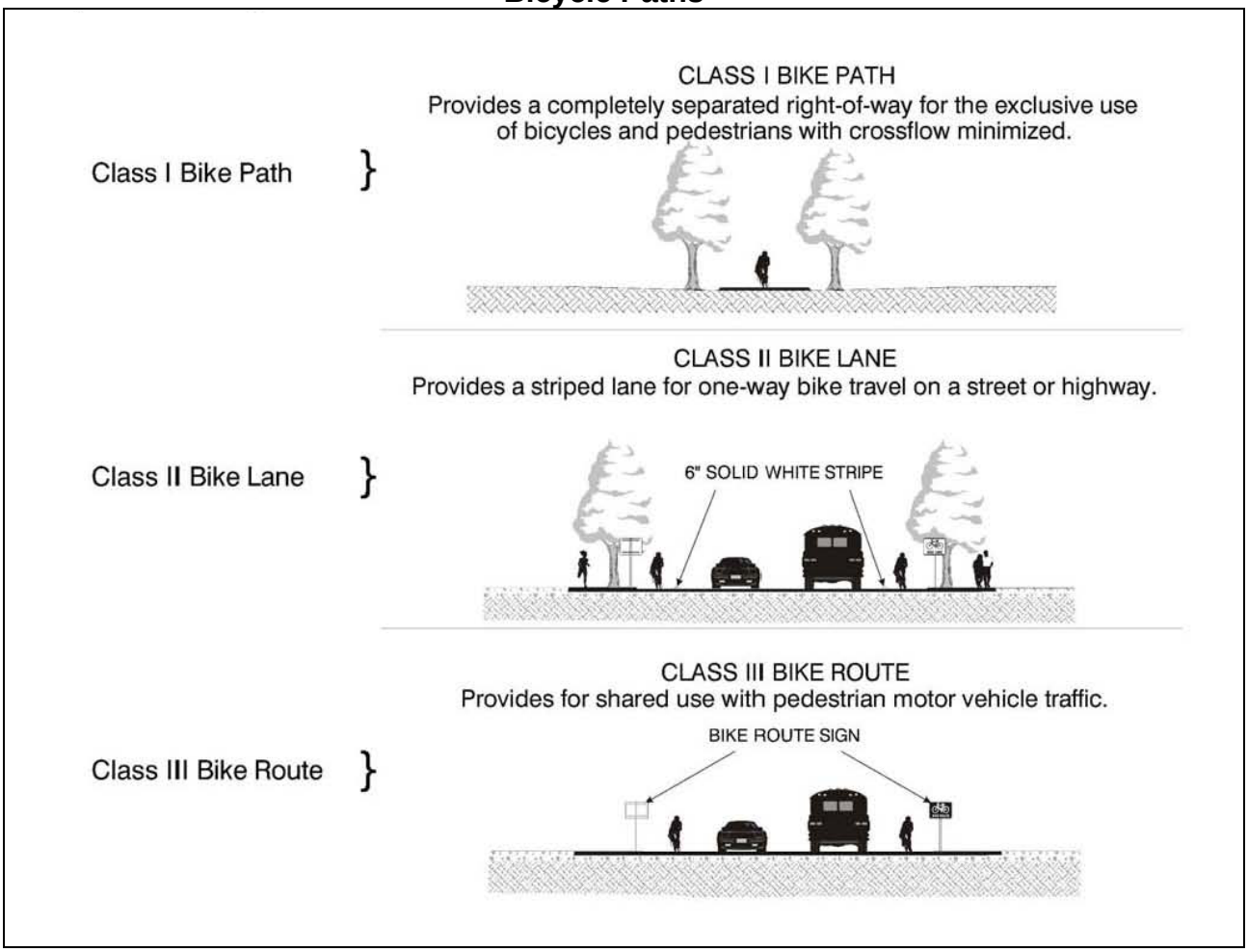
The *Florin-Vineyard Community Plan* text document, released as a Revised Public Review Draft on March 20, 2010, includes a comprehensive pedestrian and bicycle trail plan. As identified in that plan, Class II bicycle path and a separated 8-foot pedestrian path will be constructed for all major thoroughfares and arterial streets while Class II bicycle path and separated 10-foot join use path will be constructed for Parkway I streets (Hedge and Gardner Avenues). Parkway II streets will provide bicycle and pedestrian paths in the form of Class III bicycle paths. Off street trails are proposed along the Gerber Creek and Elder Creek open space corridors. A trail is also planned along the power line corridor east of Waterman Road and south of Gerber Road. The *Pedestrian and Bicycle Trail Plan* is included below as Plate TC-7a.

Plate TC-6
Existing and Planned Bicycle Facilities



Source: Fehr & Peers, 2008.

Plate TC-7
Bicycle Paths



Source: Fehr & Peers, 2008.

Plate TC-7a
Bicycle and Pedestrian Plan

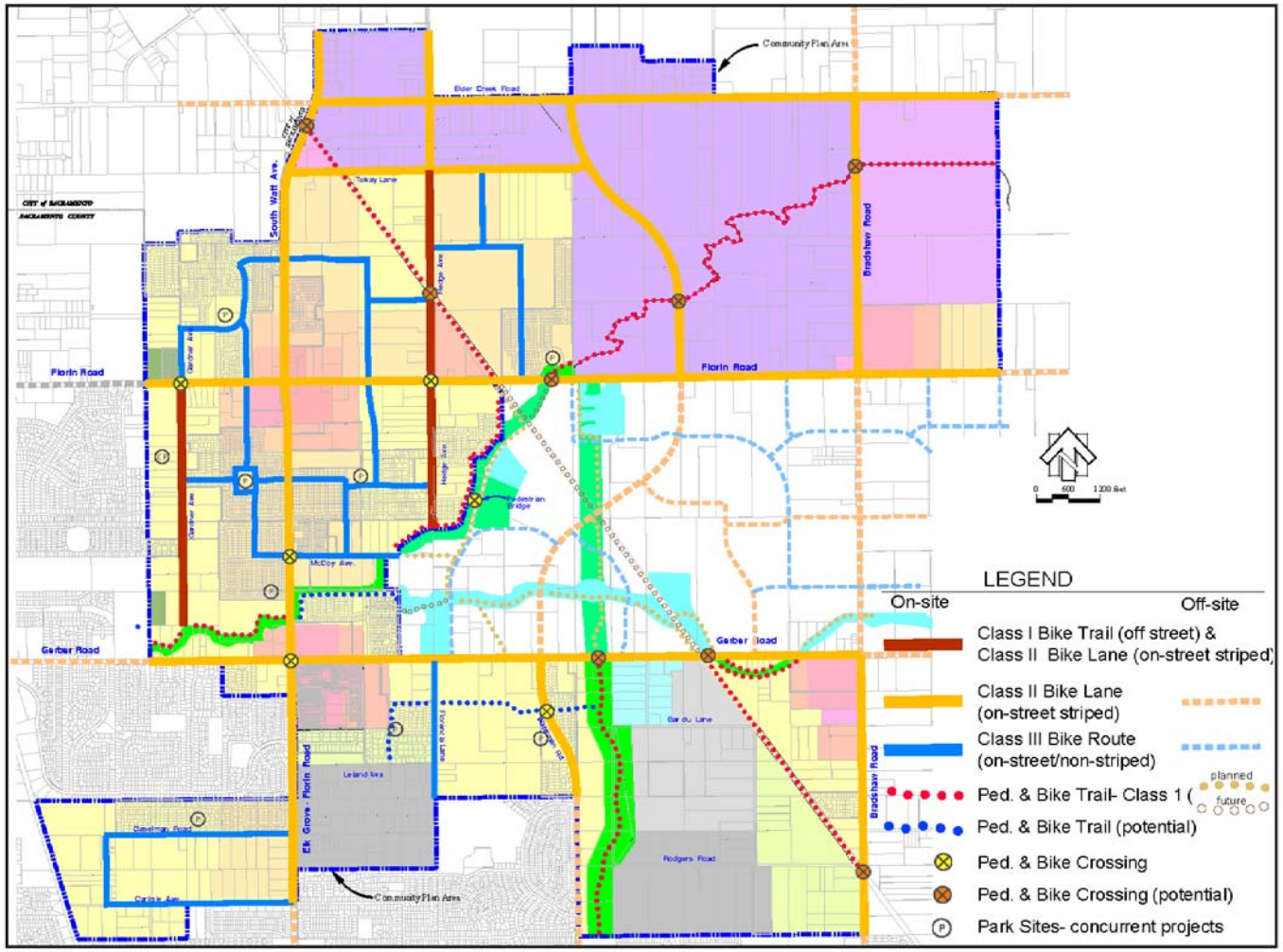


Figure 9.8 Pedestrian and Bicycle Trail Plan

TRAFFIC VOLUME FORECASTS

The following section summarizes the methodology used to develop traffic volume forecasts and presents daily roadway segment and AM and PM peak hour intersection turning movement forecasts for existing "plus project" conditions and cumulative year conditions without and with the proposed project. As outlined above, two plan-area concepts are being evaluated and are referred to as the CAC Land Use Plan and PD Land Use Plan. Traffic volume forecasts for the scenarios listed below were developed using a combination of the 2001 SACMET Travel Demand Forecasting (TDF) model and the VISSUM software. Traffic volume forecasts were developed for the following scenarios:

- Existing (2007 Base Year) Plus CAC Project Conditions – This scenario assumes build-out of the Florin-Vineyard Gap Community Plan based on the CAC Land Use Plan.

- Existing (2007 Base Year) Plus PD Project Conditions – This scenario assumes build-out of the Florin-Vineyard Gap Community Plan based on the PD Land Use Plan.

- Cumulative Conditions – This scenario assumes cumulative year development levels without the project that represent conditions beyond year 2025.

- Cumulative Plus CAC Project Conditions – This scenario assumes build-out of the Florin-Vineyard Gap Community Plan based on the CAC Land Use Plan under cumulative conditions.

- Cumulative Plus PD Project Conditions – This scenario assumes build-out of the Florin-Vineyard Gap Community Plan based on the PD Land Use Plan under cumulative conditions.

The traffic volume forecasts presented in this section are used in the Impacts and Mitigation section to identify impacts to the roadway system under the scenarios identified above.

Cumulative land use assumptions for planned and approved development projects in the City of Sacramento, City of Elk Grove, City of Rancho Cordova, City of Folsom, and unincorporated Sacramento County were reviewed. Specifically, the Rancho Cordova General Plan, Easton Estates, and Bradshaw Landing projects were added to the traffic model. In addition, expected project-area employment levels for cumulative conditions were identified based on current project-area zoning. Consequently, the cumulative year land use

assumptions likely represent conditions beyond the 2001 SACMET TDF model 2025 land use projections.

Roadway Network Modifications

Roadway network changes included adding new roads within the project area and creating new connections to the existing and planned roadway systems under base year and cumulative conditions.

Specific modifications included adding traffic analysis zone (TAZ) and roadway network detail to the traffic model to provide more accurate loading of vehicle trips on the transportation network. For the cumulative traffic model, detail was added to reflect new (proposed) development in the North Vineyard Station Specific Plan, which included the extension of Waterman Road and Vineyard Road to Florin Road.

Regional and local roadway improvements are generally consistent with Tier 1 improvements included in the MTP for 2025 and Sacramento County's Seven Year Transportation Improvement Plan with exceptions identified by Sacramento County staff due to uncertain funding sources like the widening of SR 16.

Plate TC-8 and 9 show the CAC and PD plan-area land use concept traffic analysis zone (TAZ) system boundaries and corresponding land use, respectively. Plate TC-10 shows the cumulative roadway system.

Vehicle-Trip Generation Estimates

Table TC-3, below, summarizes the final AM peak hour, PM peak hour, and daily vehicle-trip estimates for the CAC and PD Land Use Plans for the Florin-Vineyard Gap Community Plan under cumulative (Year 2025) conditions with and without the potential 15 percent density bonus.

Table TC-3: Vehicle Trip Generation Summary

Land Use Plan	Total Vehicle Trips		
	AM Peak Hour	PM Peak Hour	Daily (15 percent Density Bonus)
CAC	11,200	11,800	132,100 (140,600)
PD	12,500	12,800	145,000 (156,400)

Notes: Trip summary based on 2001 Version of the SACMET TDT Model. Represents total vehicle trips assigned to the traffic model roadway network and non trips internal to a TAZ.

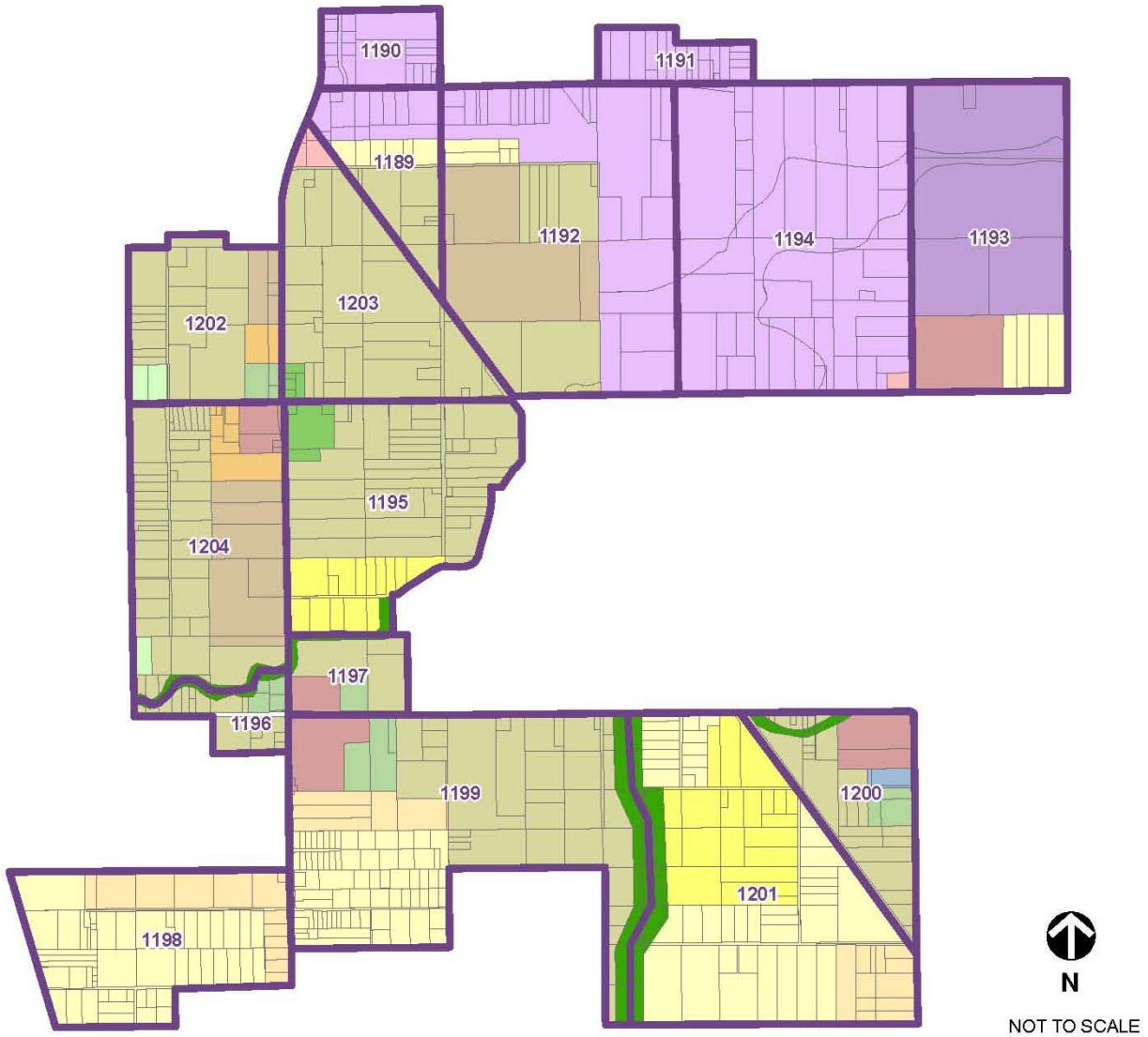
Source: Fehr & Peers, 2008.

Plate TC-8
Traffic Analysis Zones – CAC Land Use Plan

LEGEND

TAZ | AR 1-2 | AR 2-5 | RD 2-3 | RD 3-5 | RD 5-7 | RD 7-12 | RD 10 | RD 20 | M1 | M1 (SM) | GC | SC | BP | OS | LC

TAZ	Total Acre	Dwelling Units	Employment				
				Non-Retail			
			Retail	Office	Medical Office	Manufacturing	Other
1189	117.8	278	35	47	-	53	48
1190	56.9	-	71	285	17	320	294
1191	48.0	-	40	56	-	61	58
1192	453.1	1,132	189	254	14	288	264
1193	312.0	21	201	269	18	303	279
1194	475.9	-	398	538	28	606	554
1195	282.8	928	291	89	40	-	53
1196	42.4	261	-	-	-	-	-
1197	58.5	280	243	10	2	-	16
1198	233.0	288	-	-	-	-	-
1199	473.5	1,536	659	26	4	-	43
1200	138.9	606	610	204	34	-	46
1201	422.3	309	-	-	-	-	-
1202	157.3	946	-	-	-	-	-
1203	221.4	932	117	68	17	37	49
1204	284.5	1,433	298	11	2	-	21
Total	**3,778**	**8,950**	**3,152**	**1,857**	**176**	**1,668**	**1,725**



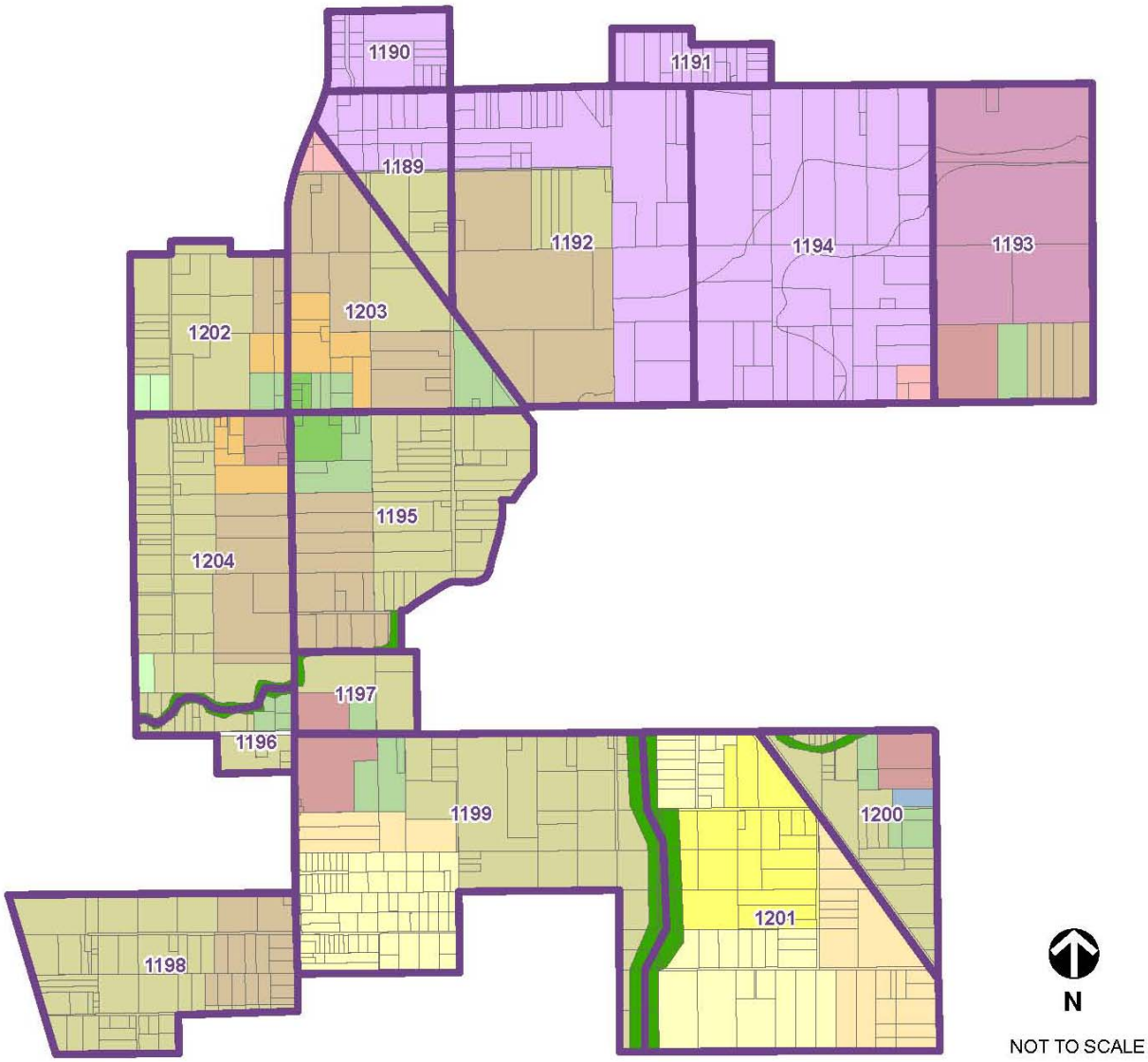
Source: Fehr & Peers, 2008.

Plate TC-9
Traffic Analysis Zones – PD Land Use Plan

LEGEND

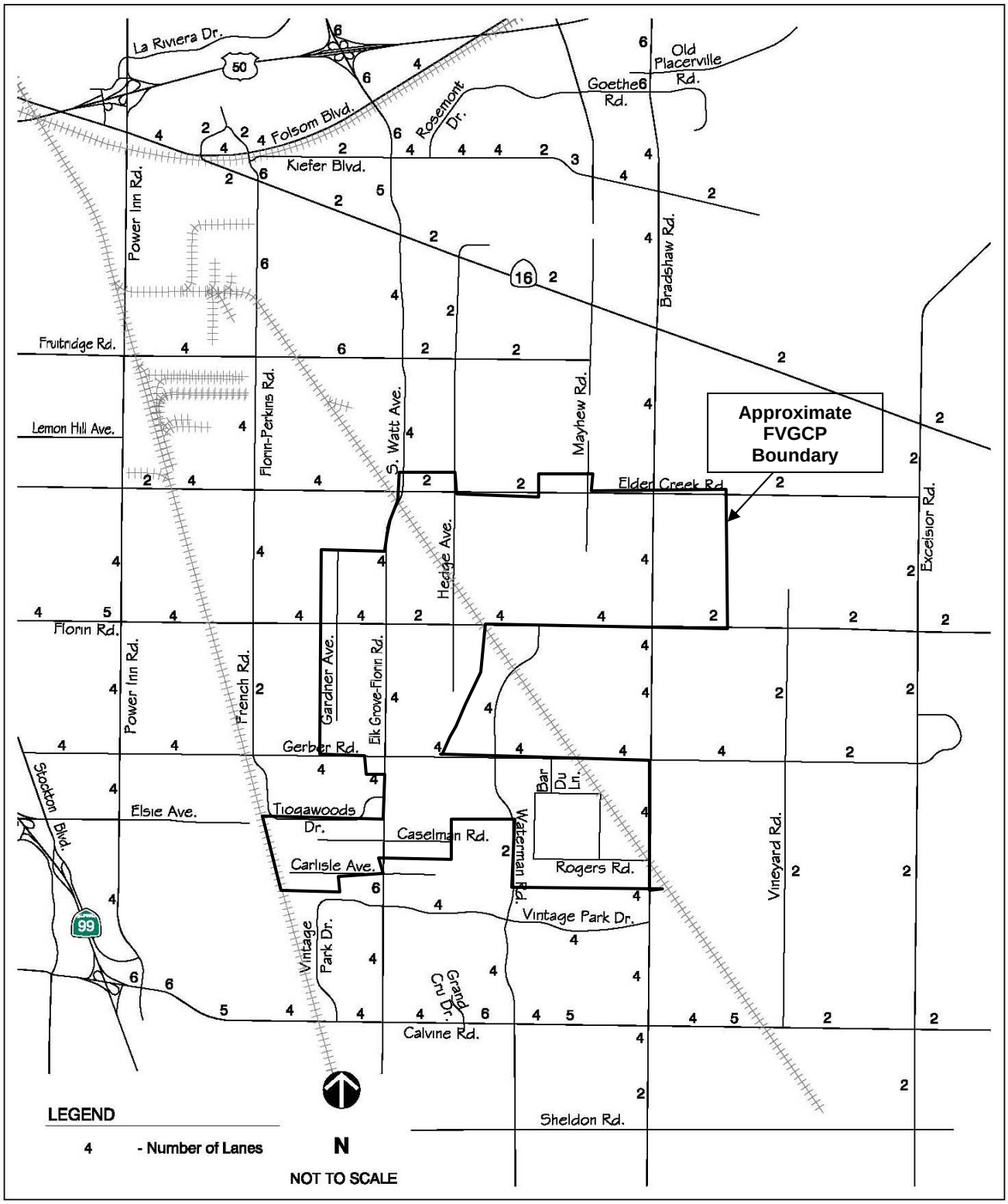
TAZ
AR 1-2
AR 2-5
RD 2-3
RD 3-5
RD 5-7
RD 7-12
RD 10
RD 20
M1
M1 (SM)
GC
SC
BP
OS
LC
IR
IR (SM)

TAZ	Total Acre	Dwelling Units	Employment				
				Non-Retail			
			Retail	Office	Medical Office	Manufacturing	Other
1189	117.8	211	50	67	-	75	69
1190	56.9	-	46	68	2	73	69
1191	48.0	-	40	56	-	61	58
1192	453.1	1,283	199	269	18	306	278
1193	312.0	523	199	271	22	305	278
1194	475.9	-	422	570	35	639	583
1195	282.8	1,636	245	75	34	-	45
1196	42.4	256	-	-	-	-	-
1197	58.5	277	264	10	2	-	17
1198	233.0	1,123	-	-	-	-	-
1199	473.5	1,570	672	27	5	-	44
1200	138.9	735	465	162	27	-	35
1201	422.3	409	-	-	-	-	-
1202	157.3	929	-	-	-	-	-
1203	221.4	1,687	116	67	17	36	48
1204	284.5	1,427	298	11	2	-	21
Total	3,778	12,066	3,016	1,653	164	1,495	1,545



Source: Fehr & Peers, 2008.

Plate TC-10
Cumulative Roadway System



Source: Fehr & Peers, 2008.

Table TC-3 indicates that the proposed project will generate approximately 132,000 and 145,000 vehicle trips per day with the CAC and PD Land Use Plans, respectively. Approximately nine percent of the trips will occur in the AM and PM peak hours. In December 2004, Sacramento County adopted an Affordable Housing Policy that includes a “density bonus” provision intended to offset the cost of providing affordable housing. For the Florin-Vineyard Gap Community Plan, the density bonus could result in an additional 1,342 single family dwelling units with the CAC Plan and 1,809 single family dwelling units with the PD Plan if the density bonus were applied.

Traffic Volume Forecasts

Under existing plus project and cumulative (Year 2025) conditions, the final adjusted traffic volume forecasts were developed using the VISSUM software. The development of the forecasts was coordinated with the Sacramento County Department of Transportation (DOT) staff prior to their use in the traffic operations analysis. *For a review of the figures showing the final adjusted daily roadway segment and AM and PM peak hour turning movement forecasts a copy of the complete traffic study can be reviewed at the Sacramento County Department of Environmental Review and Assessment located at 827 7th Street, Sacramento California.*

Existing Plus Project Conditions

Roadway Segments

The daily traffic volumes identified in the traffic study for Existing Plus Project Conditions were compared to the capacity criteria for roadway segments presented above. Tables TC-4 and TC-5 summarize the roadway segment analysis under existing conditions with the addition of the CAC and PD Land Use Plans, respectively. A total of 27 and 29 roadway segments would operate unacceptably with the addition of project traffic under the CAC and PD Land Use Plans, respectively. Project impacts based on the significance criteria are discussed in the Impacts and Mitigation Measures section below.

Table TC-4: Roadway Levels of Service – Existing Plus Project Conditions: CAC Land Use Plan

Roadway Segment	Existing Conditions					Existing Plus CAC Project Conditions		
	Lanes	Type	Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd.-SR 16 to Watt Avenue	4	Arterial	20,700	0.58	A	25,300	0.70	C
2. Kiefer Blvd.-Florin-Perkins Rd. to Watt Ave.	2	Arterial	6,400	0.36	A	8,100	0.45	A
3. Kiefer Blvd.-Watt Ave. to Rosemont Dr.	4	Arterial	21,300	0.59	A	23,200	0.64	B
4. Kiefer Blvd.-Rosemont Dr. to Bradshaw Rd.	4	Arterial	11,900	0.33	A	13,800	0.38	A
5. SR 16-Folsom Blvd. to Watt Ave.	2	Arterial	12,200	0.68	B	18,600	1.03	F
6. SR 16 - Watt Ave. to Bradshaw Rd.	2	Arterial	14,900	0.83	D	19,800	1.10	F
7. SR 16-Bradshaw Rd. to Sunrise Blvd.	2	Arterial	12,000	0.60	A	12,100	0.60	B
8. Fruitridge Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	19,700	0.55	A	22,600	0.63	B
9. Fruitridge Rd-Florin-Perkins Rd. to South Watt Ave.	2	Arterial	14,800	0.82	D	17,600	0.98	E
10. Fruitridge Rd.-South Watt Ave. to Hedge Ave.	2	Rural	6,200	0.31	C	8,100	0.41	D
11. Elder Creek Rd.-Power Inn Rd. to Florin-Perkins Rd.	2	Arterial	16,000	0.89	D	21,700	1.21	F
12. Elder Creek Rd.-Florin-Perkins Rd. to South Watt Ave.	2	Arterial	10,700	0.59	A	17,800	0.99	E
13. Elder Creek Rd.-South Watt Ave. to Hedge Ave.	2	Rural	5,900	0.30	C	15,700	0.79	E
14. Elder Creek Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	6,800	0.34	C	16,600	0.83	E
15. Elder Creek Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	2,200	0.11	A	4,300	0.22	B
16. Florin Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	28,500	0.79	C	36,800	1.02	F
17. Florin Rd. – Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	22,400	0.62	B	35,900	1.00	E
18. Florin Rd.-Florin-Perkins Rd. to Gardner Ave.	4	Arterial	14,200	0.39	A	29,500	0.82	D
19. Florin Rd – Gardner Ave. to South Watt Ave.	4	Arterial	17,300	0.48	A	34,400	0.96	E
20. Florin Rd.-South Watt Ave. to Hedge Ave.	2	Rural	12,700	0.64	E	27,700	1.39	F
21. Florin Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	6,000	0.30	C	15,500	0.78	E
22. Florin Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	4,900	0.25	C	6,600	0.33	C
23. Florin Rd. – Excelsior Rd. to Sunrise Blvd.	2	Rural	3,800	0.19	B	5,200	0.26	C
24. Gerber Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	18,700	0.52	A	23,400	0.65	B
25. Gerber Rd.-Power Inn Rd. to French Rd.	4	Arterial	26,200	0.73	C	37,200	1.03	F
26. Gerber Rd. – French Road to Elk Grove-Florin Rd.	4	Arterial	19,700	0.55	A	35,800	0.99	E
27. Gerber Rd.-Elk Grove-Florin Rd. to Bradshaw Rd.	2	Rural	8,500	0.43	D	21,100	1.06	F
28. Gerber Rd.-Bradshaw Rd. to Vineyard Rd.	2	Rural	5,800	0.29	C	6,300	0.32	C
29. Gerber Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	2,500	0.13	B	4,500	0.23	C
30. Vintage Park Dr.-Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	15,000	0.42	A	17,800	0.49	A
31. Vintage Park Dr. – Waterman Rd. to Bradshaw Rd.	4	Arterial	6,800	0.19	A	10,100	0.28	A
32. Calvine Rd.-Power Inn Rd. to Elk Grove-Florin Rd.	5	Arterial	42,600	0.95	E	47,600	1.06	F
33. Calvine Rd.-Elk Grove-Florin Rd. to Grand Cru Dr.	4	Arterial	27,600	0.77	C	31,400	0.87	D
34. Calvine Rd.-Grand Cru. Dr. to Waterman Rd.	6	Arterial	27,600	0.51	A	31,900	0.59	A
35. Calvine R.-Waterman Rd. to Bradshaw Rd.	4	Arterial	17,500	0.49	A	18,800	0.52	A
36. Calvine Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	11,500	0.32	A	17,000	0.47	A
37. Calvine Rd.-Vineyard Rd. to Excelsior Rd	2	Rural	5,500	0.28	C	11,000	0.55	D

Roadway Segment	Existing Conditions					Existing Plus CAC Project Conditions		
	Lanes	Type	Vol	V/C	LOS	Vol	V/C	LOS
38. Calvine Rd.-Excelsior Rd. to Grant Line Rd.	2	Rural	3,700	0.19	B	3,800	0.19	B
39. Power Inn Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	30,400	0.84	D	31,100	0.86	D
40. Power Inn Rd.-Florin Rd. to Gerber Rd.	4	Arterial	28,900	0.80	D	31,000	0.86	D
41. Power Inn Rd.-Gerber Rd. to Calvine Rd.	4	Arterial	27,600	0.77	C	29,700	0.83	D
42. Florin-Perkins Rd.-Folsom Blvd. to SR 16	4	Arterial	18,500	0.51	A	28,500	0.79	C
43. Florin-Perkins Rd.-SR 16 to Fruitridge Rd.	4	Arterial	27,700	.077	C	37,500	1.04	F
44. Florin-Perkins Rd.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	30,000	0.83	D	40,000	1.11	F
45. Florin-Perkins Rd. –Elder Creek Rd. to Florin Rd.	4	Arterial	24,700	0.69	B	38,100	1.06	F
46. Florin-Perkins Rd.-Florin Rd. to Gerber Rd.	2	Arterial	15,700	0.87	D	20,800	1.16	F
47. Watt Ave.-Folsom Blvd. to Kiefer Blvd.	6	Arterial	61,000	1.02	F	64,300	1.07	F
48. South Watt Ave.-Kiefer Blvd. to SR 16	2	Arterial	43,500	2.42	F	46,800	2.60	F
49. South Watt Ave.-SR 16 to Fruitridge Rd.	2	Arterial	24,400	1.22	F	28,000	1.40	F
50. South Watt Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Arterial	20,100	1.12	F	22,100	1.23	F
51. South Watt Ave.-Elder Creek Rd. to Florin Rd.	2	Arterial	16,100	0.89	D	20,300	1.13	F
52. Elk Grove-Florin Rd.-Florin Rd. to Gerber Rd.	2	Arterial	22,900	1.27	F	29,300	1.63	F
53. Elk Grove-Florin Rd.-Gerber Rd to Carlisle Ave.	4	Arterial	35,000	0.97	E	43,300	1.20	F
54. Elk Grove-Florin Rd.-Carlisle Ave. to Vintage Park Dr.	6	Arterial	33,800	0.63	B	44,800	0.83	D
55. Elk Grove-Florin Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	31,800	0.88	D	40,200	1.12	F
56. Hedge Ave.-SR 16 to Fruitridge Rd.	2	Rural	4,400	0.22	C	8,700	0.44	D
57. Hedge Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Rural	5,900	0.30	C	17,900	0.90	E
58. Hedge Ave.-Elder Creek Rd. to Florin Rd.	2	Rural	4,600	0.23	C	16,300	0.82	E
59. Waterman Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	6,100	0.17	A	12,100	0.34	A
60. Bradshaw Rd.-Kiefer Blvd. to SR 16	4	Arterial	31,600	0.88	D	45,500	1.26	F
61. Bradshaw Rd.-SR 16 to Elder Creek Rd.	4	Arterial	20,100	0.56	A	32,500	0.90	E
62. Bradshaw Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	16,200	0.45	A	27,500	0.76	C
63. Bradshaw Rd.-Florin Rd. to Gerber Rd.	2	Arterial	19,900	1.11	F	26,700	1.48	F
64. Bradshaw Rd.-Gerber Rd. to Vintage Park Dr.	2	Arterial	13,400	0.74	C	17,400	0.97	E
65. Bradshaw Rd.-Vintage Park Dr. to Calvine Rd.	2	Arterial	10,700	0.59	A	14,700	0.81	D
66. Vineyard Rd.-Gerber Rd. to Calvine Rd.	2	Arterial	6,600	0.37	A	7,300	0.41	A
67. Excelsior Rd.-SR 16 to Florin Rd.	2	Rural	5,800	0.29	C	12,500	0.63	E
68. Excelsior Rd.-Florin Rd to Gerber Rd.	2	Rural	8,900	0.45	D	16,900	0.85	E
69. Excelsior Rd.-Gerber Rd. to Calvine Rd.	2	Rural	5,400	0.27	C	11,500	0.58	D

Notes: Shaded areas indicate unacceptable operations. All arterial roadway segments assumed to have moderate access control except for Segments 7, 47, and 49, which were assumed to have high access control.
Blue – City of Sacramento Study Roadway Segments
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Table TC-5: Roadway Levels of Service – Existing Plus Project Conditions: PD Land Use Plan

Roadway Segment	Existing Conditions					Existing Plus CAC Project Conditions		
	Lanes	Type	Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd.-SR 16 to Watt Avenue	4	Arterial	20,700	0.58	A	25,500	0.71	C
2. Kiefer Blvd.-Florin-Perkins Rd. to Watt Ave.	2	Arterial	6,400	0.36	A	8,700	0.48	A
3. Kiefer Blvd.-Watt Ave. to Rosemont Dr.	4	Arterial	21,300	0.59	A	23,900	0.66	B
4. Kiefer Blvd.-Rosemont Dr. to Bradshaw Rd.	4	Arterial	11,900	0.33	A	14,300	0.40	A
5. SR 16-Folsom Blvd. to Watt Ave.	2	Arterial	12,200	0.68	B	19,500	1.08	F
6. SR 16 - Watt Ave. to Bradshaw Rd.	2	Arterial	14,900	0.83	D	20,700	1.15	F
7. SR 16-Bradshaw Rd. to Sunrise Blvd.	2	Arterial	12,000	0.60	A	12,000	0.60	A
8. Fruitridge Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	19,700	0.55	A	23,300	0.65	B
9. Fruitridge Rd-Florin-Perkins Rd. to South Watt Ave.	2	Arterial	14,800	0.82	D	18,700	1.04	F
10. Fruitridge Rd.-South Watt Ave. to Hedge Ave.	2	Rural	6,200	0.31	C	8,600	0.43	D
11. Elder Creek Rd.-Power Inn Rd. to Florin-Perkins Rd.	2	Arterial	16,000	0.89	D	22,000	1.22	F
12. Elder Creek Rd.-Florin-Perkins Rd. to South Watt Ave.	2	Arterial	10,700	0.59	A	18,700	1.04	F
13. Elder Creek Rd.-South Watt Ave. to Hedge Ave.	2	Rural	5,900	0.30	C	16,700	0.84	E
14. Elder Creek Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	6,800	0.34	C	17,700	0.89	E
15. Elder Creek Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	2,200	0.11	A	4,700	0.24	C
16. Florin Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	28,500	0.79	C	38,200	1.06	F
17. Florin Rd. – Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	22,400	0.62	B	37,500	1.04	F
18. Florin Rd.-Florin-Perkins Rd. to Gardner Ave.	4	Arterial	14,200	0.39	A	29,800	0.83	D
19. Florin Rd – Gardner Ave. to South Watt Ave.	4	Arterial	17,300	0.48	A	35,200	0.98	E
20. Florin Rd.-South Watt Ave. to Hedge Ave.	2	Rural	12,700	0.64	E	29,400	1.47	F
21. Florin Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	6,000	0.30	C	16,800	0.84	E
22. Florin Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	4,900	0.25	C	7,100	0.36	C
23. Florin Rd. – Excelsior Rd. to Sunrise Blvd.	2	Rural	3,800	0.19	B	5,400	0.27	C
24. Gerber Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	18,700	0.52	A	23,900	0.66	B
25. Gerber Rd.-Power Inn Rd. to French Rd.	4	Arterial	26,200	0.73	C	38,800	1.08	F
26. Gerber Rd. – French Road to Elk Grove-Florin Rd.	4	Arterial	19,700	0.55	A	35,600	0.99	E
27. Gerber Rd.-Elk Grove-Florin Rd. to Bradshaw Rd.	2	Rural	8,500	0.43	D	21,500	1.08	F
28. Gerber Rd.-Bradshaw Rd. to Vineyard Rd.	2	Rural	5,800	0.29	C	6,400	0.32	C
29. Gerber Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	2,500	0.13	B	5,200	0.26	C
30. Vintage Park Dr.-Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	15,000	0.42	A	18,600	0.52	A
31. Vintage Park Dr. – Waterman Rd. to Bradshaw Rd.	4	Arterial	6,800	0.19	A	10,400	0.29	A
32. Calvine Rd.-Power Inn Rd. to Elk Grove-Florin Rd.	5	Arterial	42,600	0.95	E	48,600	1.08	F
33. Calvine Rd.-Elk Grove-Florin Rd. to Grand Cru Dr.	4	Arterial	27,600	0.77	C	31,600	0.88	D
34. Calvine Rd.-Grand Cru. Dr. to Waterman Rd.	6	Arterial	27,600	0.51	A	32,600	0.60	B
35. Calvine R.-Waterman Rd. to Bradshaw Rd.	4	Arterial	17,500	0.49	A	19,000	0.53	A
36. Calvine Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	11,500	0.32	A	18,000	0.50	A
37. Calvine Rd.-Vineyard Rd. to Excelsior Rd	2	Rural	5,500	0.28	C	11,200	0.56	D

Roadway Segment	Existing Conditions					Existing Plus CAC Project Conditions		
	Lanes	Type	Vol	V/C	LOS	Vol	V/C	LOS
38. Calvine Rd.-Excelsior Rd. to Grant Line Rd.	2	Rural	3,700	0.19	B	3,800	0.19	B
39. Power Inn Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	30,400	0.84	D	31,400	0.87	D
40. Power Inn Rd.-Florin Rd. to Gerber Rd.	4	Arterial	28,900	0.80	D	31,500	0.88	D
41. Power Inn Rd.-Gerber Rd. to Calvine Rd.	4	Arterial	27,600	0.77	C	30,200	0.84	D
42. Florin-Perkins Rd.-Folsom Blvd. to SR 16	4	Arterial	18,500	0.51	A	29,100	0.81	D
43. Florin-Perkins Rd.-SR 16 to Fruitridge Rd.	4	Arterial	27,700	.077	C	38,500	1.07	F
44. Florin-Perkins Rd.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	30,000	0.83	D	40,800	1.13	F
45. Florin-Perkins Rd. –Elder Creek Rd. to Florin Rd.	4	Arterial	24,700	0.69	B	39,600	1.10	F
46. Florin-Perkins Rd.-Florin Rd. to Gerber Rd.	2	Arterial	15,700	0.87	D	21,000	1.17	F
47. Watt Ave.-Folsom Blvd. to Kiefer Blvd.	6	Arterial	61,000	1.02	F	64,900	1.08	F
48. South Watt Ave.-Kiefer Blvd. to SR 16	2	Arterial	43,500	2.42	F	47,200	2.62	F
49. South Watt Ave.-SR 16 to Fruitridge Rd.	2	Arterial	24,400	1.22	F	28,500	1.43	F
50. South Watt Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Arterial	20,100	1.12	F	22,400	1.24	F
51. South Watt Ave.-Elder Creek Rd. to Florin Rd.	2	Arterial	16,100	0.89	D	21,000	1.17	F
52. Elk Grove-Florin Rd.-Florin Rd. to Gerber Rd.	2	Arterial	22,900	1.27	F	29,400	1.63	F
53. Elk Grove-Florin Rd.-Gerber Rd to Carlisle Ave.	4	Arterial	35,000	0.97	E	43,800	1.22	F
54. Elk Grove-Florin Rd.-Carlisle Ave. to Vintage Park Dr.	6	Arterial	33,800	0.63	B	49,600	0.92	D
55. Elk Grove-Florin Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	31,800	0.88	D	41,000	1.14	F
56. Hedge Ave.-SR 16 to Fruitridge Rd.	2	Rural	4,400	0.22	C	9,100	0.46	D
57. Hedge Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Rural	5,900	0.30	C	19,500	0.98	E
58. Hedge Ave.-Elder Creek Rd. to Florin Rd.	2	Rural	4,600	0.23	C	18,600	0.93	E
59. Waterman Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	6,100	0.17	A	12,700	0.35	A
60. Bradshaw Rd.-Kiefer Blvd. to SR 16	4	Arterial	31,600	0.88	D	47,100	1.31	F
61. Bradshaw Rd.-SR 16 to Elder Creek Rd.	4	Arterial	20,100	0.56	A	34,000	0.94	E
62. Bradshaw Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	16,200	0.45	A	29,100	0.81	D
63. Bradshaw Rd.-Florin Rd. to Gerber Rd.	2	Arterial	19,900	1.11	F	27,100	1.51	F
64. Bradshaw Rd.-Gerber Rd. to Vintage Park Dr.	2	Arterial	13,400	0.74	C	16,900	0.94	E
65. Bradshaw Rd.-Vintage Park Dr. to Calvine Rd.	2	Arterial	10,700	0.59	A	14,200	0.79	C
66. Vineyard Rd.-Gerber Rd. to Calvine Rd.	2	Arterial	6,600	0.37	A	8,000	0.44	A
67. Excelsior Rd.-SR 16 to Florin Rd.	2	Rural	5,800	0.29	C	13,300	0.67	E
68. Excelsior Rd.-Florin Rd to Gerber Rd.	2	Rural	8,900	0.45	D	17,900	0.90	E
69. Excelsior Rd.-Gerber Rd. to Calvine Rd.	2	Rural	5,400	0.27	C	11,700	0.59	D

Notes: Shaded areas indicate unacceptable operations. All arterial roadway segments assumed to have moderate access control except for Segments 7, 47, and 49, which were assumed to have high access control.
Blue – City of Sacramento Study Roadway Segments
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

STUDY INTERSECTIONS

The traffic volumes identified in the traffic study Existing Plus Project Conditions were used to calculate peak hour levels of service at the study intersections. Tables TC-6 and TC-7 summarize intersection LOS with the addition of the CAC and PD plans, respectively. Of the 45 study intersections 31 intersections (20 signalized and 11 unsignalized) would operate unacceptably with the addition of the CAC Plan. Thirty-three of the 45 intersections (22 signalized and 11 unsignalized) would operate unacceptably with the addition of the PD Plan. Project impacts based on the significance criteria are discussed in the Impacts and Mitigation Measures section below.

CUMULATIVE CONDITIONS

ROADWAY SEGMENTS

The daily traffic volumes identified in the traffic study for Cumulative Conditions were compared to the capacity criteria for roadway segments presented above. Tables TC-8 and TC-9 summarize the roadway segment analysis under cumulative conditions with the addition of the CAC and PD Land Use Plans, respectively. Thirty-two and 31 roadway segments would operate unacceptably with the addition of project traffic under the CAC and PD Land Use Plans, respectively. Project impacts based on the significance criteria are discussed in the Impacts and Mitigation Measures section below.

STUDY INTERSECTIONS

The traffic volumes identified in the traffic study for Cumulative Conditions were used to calculate peak hour levels of service at the study intersections. Tables TC-10 and TC-11 summarize intersection LOS with the addition of the CAC and PD plans, respectively. A total of 34 intersections would operate unacceptably with the addition of project traffic under both the CAC and PD Land Use Plans. Project impacts based on the significance criteria are discussed in the Impacts and Mitigation Measures section below.

Unsignalized intersections were evaluated using the peak hour volume warrant (Warrant 11) published in the California Department of Transportation's *Traffic Manual* (1996) to determine if signal control is warranted under cumulative conditions. Most of the unsignalized intersections meet the Caltrans peak hour volume warrant except for the Rogers Road/Bradshaw Road intersection with the addition of either the CAC or PD plans.

Table TC-6: Intersection Levels of Service – Existing Plus Project Conditions: CAC Land Use Plan

Intersection	Control	Existing Conditions				Existing Plus CAC Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. Folsom Blvd./SR 16	Signal	22	C	22	C	32	C	36	D
2. Folsom Blvd./Florin-Perkins Rd.	Signal	55	D	52	D	69	E	67	E
3. Folsom Blvd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	>80	F
4. Kiefer Blvd./South Watt Ave.	Signal	0.79	C	0.73	C	0.98	E	0.90	D
5. Kiefer Blvd./Bradshaw Rd.	Signal	0.67	B	0.88	D	0.91	E	**1.19**	**F**
6. SR 16/Florin-Perkins Rd.	Signal	45	D	60	E	>80	F	>80	F
7. SR 16/South Watt Ave.	Signal	0.91	E	1.16	F	**1.39**	**F**	**1.73**	**F**
8. SR 16/Hedge Ave.	2-Way Stop	0.55	A	0.58	A	0.73	C	0.75	C
9. SR 16/Bradshaw Rd.	Signal	1.03	F	0.90	E	**1.27**	**F**	**1.06**	**F**
10. SR 16/Excelsior Rd.	Signal	0.86	D	0.89	D	0.89	D	0.92	E
11. Fruitridge Rd./Florin-Perkins Rd.	Signal	54	D	>80	F	80	F	>80.0	F
12. Fruitridge Rd./South Watt Ave.	4-Way Stop	>50	F	>50	F	>50	F	>50	F
13. Fruitridge Rd./Hedge Ave.	4-Way Stop	31	D	21	C	**>50**	**F**	**>50**	**F**
14. Elder Creek Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
15. Elder Creek Rd./South Watt Ave.	Signal	30	C	28	C	>80	F	>80	F
16. Elder Creek Rd./Hedge Ave.	4-Way Stop	18	C	17	C	**>50**	**F**	**>50**	**F**
17. Elder Creek Rd./Bradshaw Rd.	Signal	0.60	A	0.50	A	0.86	D	0.92	E
18. Elder Creek Rd./Excelsior Rd.	2-Way Stop	18	C	14	B	24	C	17	C
19. Florin Rd./Power Inn Rd.	Signal	0.81	D	0.88	D	0.96	E	**1.02**	**F**
20. Florin Rd./Florin-Perkins Rd.	Signal	0.83	D	0.76	C	**1.24**	**F**	**1.04**	**F**
21. Florin Rd./Gardner Ave.	2-Way Stop	25	D	16	C	**>50**	**F**	**>50**	**F**
22. Florin Rd./South Watt Ave.	Signal	0.72	C	0.86	D	**1.45**	**F**	**1.63**	**F**
23. Florin Rd./Hedge Ave.	4-Way Stop	17	C	15	B	**>50**	**F**	**>50**	**F**
24. Florin Rd./Waterman Rd.	Cumulative –Scenario Intersection								
25. Florin Rd./Bradshaw Rd.	Signal	0.45	A	0.55	A	0.76	C	**1.00**	**F**
26. Florin Rd./Vineyard Rd.	Cumulative –Scenario Intersection								
27. Florin Rd./Excelsior Rd.	4-Way Stop	>50.0	F	23	C	**>50**	**F**	**>50**	**F**
28. Gerber Rd./Power Inn Rd.	Signal	0.86	D	0.78	D	**1.03**	**F**	0.94	E
29. Gerber Rd./French Rd.	Signal	0.88	D	0.79	C	**1.21**	**F**	**1.05**	**F**
30. Gerber Rd./Elk-Grove Florin Rd.	Signal	0.78	C	1.02	F	**1.10**	**F**	**1.36**	**F**
31. Gerber Rd./Waterman Rd.	2-Way Stop	Not an Existing Intersection				**>50**	**F**	**>50**	**F**
32. Gerber Rd./Bar Du Ln.	2-Way Stop	16	C	15	C	**>50**	**F**	**>50**	**F**
33. Gerber Rd./Bradshaw Rd.	Signal	1.04	F	0.82	D	**1.47**	**F**	**1.26**	**F**
34. Gerber Rd./Vineyard Rd.	2-Way Stop	>50.0	F	17	C	**>50**	**F**	26	D
35. Gerber Rd./Excelsior Rd.	4-Way Stop	15	B	23	C	28	D	**>50**	**F**

Intersection	Control	Existing Conditions				Existing Plus CAC Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
36. Tiogawoods Dr./Elk Grove-Florin Rd.	Signal	0.83	D	0.53	A	**1.03**	**F**	0.75	C
37. Casselman Rd./Elk Grove-Florin Rd.	2-Way Stop	25	D	20	C	**>50**	**F**	34	D
38. Rogers Rd./Bradshaw Rd.	2-Way Stop	22	C	18	C	13	B	19	C
39. Vintage Park Dr./Elk Grove-Florin Rd.	Signal	0.75	C	0.62	B	0.85	D	0.73	C
40. Vintage Park Dr./Waterman Rd.	Signal	0.43	A	0.30	A	0.69	B	0.60	A
41. Vintage Park Dr./Bradshaw Rd.	Signal	0.52	A	0.52	A	0.65	B	0.68	B
42. Calvine Rd./Elk Grove-Florin Rd.	Signal	66	E	65	E	>80	F	>80	F
43. Calvine Rd./Waterman Rd.	Signal	36	D	37	D	51	F	>80	E
44. Calvine Rd./Bradshaw Rd.	Signal	26	C	36	D	35	C	50	D
45. Calvine Rd./Excelsior Rd.	4-Way Stop	15	B	15	C	22	C	27	D

Notes: Signal Control-Circular 212 Planning Methodology-Results present volume/capacity ratio and LOS.
2-Way Stop Control-2000 HCM Methodology-Results present delay and LOS for worst minor-street approach.
4-Way Stop Control-2000 HCM Methodology-Results present average delay and LOS.
Shaded areas indicate unacceptable operations.

Blue – City of Sacramento Study Intersections
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Table TC-7: Intersection Level of Service – Existing Plus Project Conditions: PD Land Use Plan

Intersection	Control	Existing Conditions				Existing Plus CAC Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. Folsom Blvd./SR 16	Signal	22	C	22	C	33	C	36	D
2. Folsom Blvd./Florin-Perkins Rd.	Signal	55	D	52	D	74	E	74	E
3. Folsom Blvd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	>80	F
4. Kiefer Blvd./South Watt Ave.	Signal	0.79	C	0.73	C	**1.01**	**F**	0.90	D
5. Kiefer Blvd./Bradshaw Rd.	Signal	0.67	B	0.88	D	0.94	E	**1.23**	**F**
6. SR 16/Florin-Perkins Rd.	Signal	45	D	60	E	>80	F	>80	F
7. SR 16/South Watt Ave.	Signal	0.91	E	1.16	F	**1.44**	**F**	**1.77**	**F**
8. SR 16/Hedge Ave.	2-Way Stop	0.55	A	0.58	A	0.80	C	0.79	C
9. SR 16/Bradshaw Rd.	Signal	1.03	F	0.90	E	**1.32**	**F**	**1.13**	**F**
10. SR 16/Excelsior Rd.	Signal	0.86	D	0.89	D	0.89	D	0.92	E
11. Fruitridge Rd./Florin-Perkins Rd.	Signal	54	D	>80	F	>80	F	>80.0	F
12. Fruitridge Rd./South Watt Ave.	4-Way Stop	>50	F	>50	F	>50	F	>50	F
13. Fruitridge Rd./Hedge Ave.	4-Way Stop	31	D	21	C	**>50**	**F**	**>50**	**F**
14. Elder Creek Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
15. Elder Creek Rd./South Watt Ave.	Signal	30	C	28	C	>80	F	>80	F
16. Elder Creek Rd./Hedge Ave.	4-Way Stop	18	C	17	C	**>50**	**F**	**>50**	**F**
17. Elder Creek Rd./Bradshaw Rd.	Signal	0.60	A	0.50	A	0.93	E	**1.03**	**F**
18. Elder Creek Rd./Excelsior Rd.	2-Way Stop	18	C	14	B	24	C	17	C
19. Florin Rd./Power Inn Rd.	Signal	0.81	D	0.88	D	0.99	E	**1.02**	**F**
20. Florin Rd./Florin-Perkins Rd.	Signal	0.83	D	0.76	C	**1.34**	**F**	**1.13**	**F**
21. Florin Rd./Gardner Ave.	2-Way Stop	25	D	16	C	**>50**	**F**	**>50**	**F**
22. Florin Rd./South Watt Ave.	Signal	0.72	C	0.86	D	**1.54**	**F**	**1.66**	**F**
23. Florin Rd./Hedge Ave.	4-Way Stop	17	C	15	B	**>50**	**F**	**>50**	**F**
24. Florin Rd./Waterman Rd.	Cumulative –Scenario Intersection								
25. Florin Rd./Bradshaw Rd.	Signal	0.45	A	0.55	A	0.84	D	**1.05**	**F**
26. Florin Rd./Vineyard Rd.	Cumulative –Scenario Intersection								
27. Florin Rd./Excelsior Rd.	4-Way Stop	>50.0	F	23	C	**>50**	**F**	**>50**	**F**
28. Gerber Rd./Power Inn Rd.	Signal	0.86	D	0.78	D	**1.06**	**F**	0.96	E
29. Gerber Rd./French Rd.	Signal	0.88	D	0.79	C	**1.27**	**F**	**1.05**	**F**
30. Gerber Rd./Elk-Grove Florin Rd.	Signal	0.78	C	1.02	F	**1.14**	**F**	**1.39**	**F**
31. Gerber Rd./Waterman Rd.	2-Way Stop	Not an Existing Intersection				**>50**	**F**	**>50**	**F**
32. Gerber Rd./Bar Du Ln.	2-Way Stop	16	C	15	C	**>50**	**F**	**>50**	**F**
33. Gerber Rd./Bradshaw Rd.	Signal	1.04	F	0.82	D	**1.49**	**F**	**1.29**	**F**
34. Gerber Rd./Vineyard Rd.	2-Way Stop	>50.0	F	17	C	**>50**	**F**	25	D
35. Gerber Rd./Excelsior Rd.	4-Way Stop	15	B	23	C	29	D	**>50**	**F**
36. Tiogawoods Dr./Elk Grove-Florin Rd.	Signal	0.83	D	0.53	A	**1.04**	**F**	0.87	D

Intersection	Control	Existing Conditions				Existing Plus CAC Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
37. Casselman Rd./Elk Grove-Florin Rd.	2-Way Stop	25	D	20	C	**>50**	**F**	**>50**	**F**
38. Rogers Rd./Bradshaw Rd.	2-Way Stop	22	C	18	C	14	B	19	C
39. Vintage Park Dr./Elk Grove-Florin Rd.	Signal	0.75	C	0.62	B	0.92	E	0.78	C
40. Vintage Park Dr./Waterman Rd.	Signal	0.43	A	0.30	A	0.73	C	0.58	A
41. Vintage Park Dr./Bradshaw Rd.	Signal	0.52	A	0.52	A	0.63	B	0.70	C
42. Calvine Rd./Elk Grove-Florin Rd.	Signal	66	E	65	E	>80	F	>80	F
43. Calvine Rd./Waterman Rd.	Signal	36	D	37	D	56	F	>80	E
44. Calvine Rd./Bradshaw Rd.	Signal	26	C	36	D	35	C	51	D
45. Calvine Rd./Excelsior Rd.	4-Way Stop	15	B	15	C	21	C	23	D

Notes: Signal Control-Circular 212 Planning Methodology-Results present volume/capacity ratio and LOS.
2-Way Stop Control-2000 HCM Methodology-Results present delay and LOS for worst minor-street approach.
4-Way Stop Control-2000 HCM Methodology-Results present average delay and LOS.
Shaded areas indicate unacceptable operations.
Blue – City of Sacramento Study Intersections
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Table TC-8: Roadway Levels of Service – Cumulative Conditions: CAC Land Use Plan

Roadway Segment	Lanes	Type	Cumulative Conditions			Cumulative Plus CAC Project Conditions		
			Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd.-SR 16 to Watt Avenue	4	Arterial	29,000	0.81	D	29,400	0.82	D
2. Kiefer Blvd.-Florin-Perkins Rd. to Watt Ave.	2	Arterial	9,200	0.51	A	9,600	0.53	A
3. Kiefer Blvd.-Watt Ave. to Rosemont Dr.	4	Arterial	23,900	0.66	B	26,700	0.74	C
4. Kiefer Blvd.-Rosemont Dr. to Bradshaw Rd.	4	Arterial	15,000	0.42	A	17,400	0.48	A
5. SR 16-Folsom Blvd. to Watt Ave.	2	Arterial	20,100	1.12	F	22,500	1.25	F
6. SR 16 - Watt Ave. to Bradshaw Rd.	2	Arterial	23,600	1.31	F	26,500	1.47	F
7. SR 16-Bradshaw Rd. to Sunrise Blvd.	2	Arterial	21,500	1.08	F	27,800	1.39	F
8. Fruitridge Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	31,100	0.86	D	33,300	0.93	E
9. Fruitridge Rd-Florin-Perkins Rd. to South Watt Ave.	6	Arterial	28,500	0.53	A	32,100	0.59	A
10. Fruitridge Rd.-South Watt Ave. to Hedge Ave.	2	Rural	12,100	0.61	D	12,100	0.61	D
11. Elder Creek Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	23,500	0.65	B	26,800	0.74	C
12. Elder Creek Rd.-Florin-Perkins Rd. to South Watt Ave.	4	Arterial	16,500	0.46	A	19,200	0.53	A
13. Elder Creek Rd.-South Watt Ave. to Hedge Ave.	2	Rural	16,200	0.81	E	19,600	0.98	E
14. Elder Creek Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	17,700	0.89	E	20,500	1.03	F
15. Elder Creek Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	7,900	0.40	D	10,500	0.53	D
16. Florin Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	37,900	1.05	F	42,000	1.17	F
17. Florin Rd. – Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	34,300	0.95	E	39,600	1.10	F
18. Florin Rd.-Florin-Perkins Rd. to Gardner Ave.	4	Arterial	29,800	0.83	D	38,700	1.08	F
19. Florin Rd – Gardner Ave. to South Watt Ave.	4	Arterial	32,800	0.91	E	42,500	1.18	F
20. Florin Rd.-South Watt Ave. to Hedge Ave.	2	Rural	23,800	1.19	F	28,100	1.41	F
21. Florin Rd.-Hedge Ave. to Bradshaw Rd.	4	Arterial	30,700	0.85	D	33,700	0.94	E
22. Florin Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	16,800	0.84	E	17,900	0.90	E
23. Florin Rd. – Excelsior Rd. to Sunrise Blvd.	2	Rural	10,800	0.54	D	14,400	0.72	E
24. Gerber Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	24,000	0.67	B	25,100	0.70	B
25. Gerber Rd.-Power Inn Rd. to French Rd.	4	Arterial	34,200	0.95	E	37,200	1.03	F
26. Gerber Rd. – French Road to Elk Grove-Florin Rd.	4	Arterial	32,800	0.91	E	39,900	1.11	F
27. Gerber Rd.-Elk Grove-Florin Rd. to Bradshaw Rd.	4	Arterial	22,700	0.63	B	30,000	0.83	D
28. Gerber Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	15,800	0.44	A	17,700	0.49	A
29. Gerber Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	4,700	0.24	C	7,000	0.35	C
30. Vintage Park Dr.-Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	18,000	0.50	A	19,800	0.55	A
31. Vintage Park Dr. – Waterman Rd. to Bradshaw Rd.	4	Arterial	9,700	0.27	A	9,800	0.27	A
32. Calvine Rd.-Power Inn Rd. to Elk Grove-Florin Rd.	5	Arterial	64,700	1.44	F	66,800	1.48	F
33. Calvine Rd.-Elk Grove-Florin Rd. to Grand Cru Dr.	4	Arterial	37,800	1.05	F	40,000	1.11	F
34. Calvine Rd.-Grand Cru. Dr. to Waterman Rd.	6	Arterial	38,700	0.72	C	41,100	0.76	C
35. Calvine R.-Waterman Rd. to Bradshaw Rd.	4	Arterial	29,000	0.81	D	30,100	0.84	D
36. Calvine Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	20,500	0.57	A	21,000	0.58	A
37. Calvine Rd.-Vineyard Rd. to Excelsior Rd	2	Arterial	12,700	0.71	C	13,200	0.73	C
38. Calvine Rd.-Excelsior Rd. to Grant Line Rd.	2	Rural	7,300	0.37	D	7,900	0.40	D

Roadway Segment	Lanes	Type	Cumulative Conditions			Cumulative Plus CAC Project Conditions		
			Vol	V/C	LOS	Vol	V/C	LOS
39. Power Inn Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	30,400	0.84	D	31,100	0.87	D
40. Power Inn Rd.-Florin Rd. to Gerber Rd.	4	Arterial	35,300	0.98	E	36,700	1.02	F
41. Power Inn Rd.-Gerber Rd. to Calvine Rd.	4	Arterial	34,000	0.94	E	35,400	0.98	E
42. Florin-Perkins Rd.-Folsom Blvd. to SR 16	6	Arterial	35,100	0.65	B	38,500	0.71	C
43. Florin-Perkins Rd.-SR 16 to Fruitridge Rd.	6	Arterial	42,200	0.78	C	45,300	0.84	D
44. Florin-Perkins Rd.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	41,600	1.16	F	43,700	1.21	F
45. Florin-Perkins Rd. –Elder Creek Rd. to Florin Rd.	4	Arterial	37,400	1.04	F	39,700	1.10	F
46. French Rd.-Florin Rd. to Gerber Rd.	2	Arterial	21,000	1.17	F	22,400	1.24	F
47. Watt Ave.-Folsom Blvd. to Kiefer Blvd.	6	Arterial	81,700	1.36	F	84,200	1.40	F
48. South Watt Ave.-Kiefer Blvd. to SR 16	5	Arterial	63,500	1.41	F	66,200	1.47	F
49. South Watt Ave.-SR 16 to Fruitridge Rd.	4	Arterial	42,400	1.06	F	45,000	1.13	F
50. South Watt Ave.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	38,500	1.07	F	44,700	1.24	F
51. South Watt Ave.-Elder Creek Rd. to Florin Rd.	4	Arterial	31,800	0.88	D	37,200	1.03	F
52. Elk Grove-Florin Rd.-Florin Rd. to Gerber Rd.	4	Arterial	36,200	1.01	F	42,500	1.18	F
53. Elk Grove-Florin Rd.-Gerber Rd to Carlisle Ave.	4	Arterial	39,700	1.10	F	45,500	1.26	F
54. Elk Grove-Florin Rd.-Carlisle Ave. to Vintage Park Dr.	6	Arterial	38,600	0.71	C	44,300	0.82	D
55. Elk Grove-Florin Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	37,800	1.05	F	40,100	1.11	F
56. Hedge Ave.-SR 16 to Fruitridge Rd.	2	Rural	5,100	0.26	C	5,200	0.26	C
57. Hedge Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Rural	16,700	0.84	E	18,600	0.93	E
58. Hedge Ave.-Elder Creek Rd. to Florin Rd.	2	Rural	17,600	0.88	E	19,300	0.97	E
59. Waterman Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	23,000	0.64	B	24,600	0.68	B
60. Bradshaw Rd.-Kiefer Blvd. to SR 16	4	Arterial	49,100	1.36	F	53,700	1.49	F
61. Bradshaw Rd.-SR 16 to Elder Creek Rd.	4	Arterial	37,700	1.05	F	39,300	1.09	F
62. Bradshaw Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	37,900	1.05	F	38,700	1.08	F
63. Bradshaw Rd.-Florin Rd. to Gerber Rd.	4	Arterial	37,300	1.04	F	38,800	1.08	F
64. Bradshaw Rd.-Gerber Rd. to Vintage Park Dr.	4	Arterial	29,400	0.82	D	31,800	0.88	D
65. Bradshaw Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	22,800	0.63	B	24,900	0.69	B
66. Vineyard Rd.-Gerber Rd. to Calvine Rd.	2	Arterial	17,200	0.96	E	16,900	0.94	E
67. Excelsior Rd.-SR 16 to Florin Rd.	2	Rural	12,500	0.63	E	14,000	0.70	E
68. Excelsior Rd.-Florin Rd to Gerber Rd.	2	Rural	13,100	0.66	E	15,100	0.76	E
69. Excelsior Rd.-Gerber Rd. to Calvine Rd.	2	Rural	8,800	0.44	D	8,700	0.44	D
70. Waterman Rd.-Vintage Park to Gerber Rd.	2	Arterial	26,600	1.48	F	29,900	1.66	F
71. Waterman Rd.-Gerber Rd. Florin Rd.	4	Arterial	24,700	0.69	B	26,600	0.74	C
72. Vineyard Rd.-Gerber Rd. to Florin Rd.	2	Arterial	9,900	0.55	A	9,900	0.54	A

Notes: Shaded areas indicate unacceptable operations. All arterial roadway segments assumed to have moderate access control except for Segments 7, 47, and 49, which were assumed to have high access control.
Blue – City of Sacramento Study Roadway Segments
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Table TC-9: Roadway Levels of Service – Cumulative Conditions: PD Land Use Plan

Roadway Segment	Lanes	Type	Cumulative Conditions			Cumulative Plus PD Project Conditions		
			Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd.-SR 16 to Watt Avenue	4	Arterial	29,000	0.81	D	30,400	0.84	D
2. Kiefer Blvd.-Florin-Perkins Rd. to Watt Ave.	2	Arterial	9,200	0.51	A	9,500	0.53	A
3. Kiefer Blvd.-Watt Ave. to Rosemont Dr.	4	Arterial	23,900	0.66	B	26,800	0.74	C
4. Kiefer Blvd.-Rosemont Dr. to Bradshaw Rd.	4	Arterial	15,000	0.42	A	17,600	0.49	A
5. SR 16-Folsom Blvd. to Watt Ave.	2	Arterial	20,100	1.12	F	22,100	1.23	F
6. SR 16 - Watt Ave. to Bradshaw Rd.	2	Arterial	23,600	1.31	F	26,900	1.49	F
7. SR 16-Bradshaw Rd. to Sunrise Blvd.	2	Arterial	21,500	1.08	F	28,100	1.41	F
8. Fruitridge Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	31,100	0.86	D	33,500	0.93	E
9. Fruitridge Rd-Florin-Perkins Rd. to South Watt Ave.	6	Arterial	28,500	0.53	A	32,800	0.61	B
10. Fruitridge Rd.-South Watt Ave. to Hedge Ave.	2	Rural	12,100	0.61	D	12,600	0.63	E
11. Elder Creek Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	23,500	0.65	B	27,200	0.76	C
12. Elder Creek Rd.-Florin-Perkins Rd. to South Watt Ave.	4	Arterial	16,500	0.46	A	19,400	0.54	A
13. Elder Creek Rd.-South Watt Ave. to Hedge Ave.	2	Rural	16,200	0.81	E	19,700	0.99	E
14. Elder Creek Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	17,700	0.89	E	21,000	1.05	F
15. Elder Creek Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	7,900	0.40	D	10,700	0.54	D
16. Florin Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	37,900	1.05	F	42,300	1.18	F
17. Florin Rd. – Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	34,300	0.95	E	40,200	1.12	F
18. Florin Rd.-Florin-Perkins Rd. to Gardner Ave.	4	Arterial	29,800	0.83	D	39,700	1.10	F
19. Florin Rd – Gardner Ave. to South Watt Ave.	4	Arterial	32,800	0.91	E	43,400	1.21	F
20. Florin Rd.-South Watt Ave. to Hedge Ave.	2	Rural	23,800	1.19	F	28,700	1.44	F
21. Florin Rd.-Hedge Ave. to Bradshaw Rd.	4	Arterial	30,700	0.85	D	33,800	0.94	E
22. Florin Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	16,800	0.84	E	18,000	0.90	E
23. Florin Rd. – Excelsior Rd. to Sunrise Blvd.	2	Rural	10,800	0.54	D	14,400	0.72	E
24. Gerber Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	24,000	0.67	B	25,800	0.72	C
25. Gerber Rd.-Power Inn Rd. to French Rd.	4	Arterial	34,200	0.95	E	37,800	1.05	F
26. Gerber Rd. – French Road to Elk Grove-Florin Rd.	4	Arterial	32,800	0.91	E	41,000	1.14	F
27. Gerber Rd.-Elk Grove-Florin Rd. to Bradshaw Rd.	4	Arterial	22,700	0.63	B	30,900	0.86	D
28. Gerber Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	15,800	0.44	A	17,500	0.49	A
29. Gerber Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	4,700	0.24	C	7,100	0.36	C
30. Vintage Park Dr.-Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	18,000	0.50	A	20,800	0.58	A
31. Vintage Park Dr. – Waterman Rd. to Bradshaw Rd.	4	Arterial	9,700	0.27	A	9,900	0.28	A
32. Calvine Rd.-Power Inn Rd. to Elk Grove-Florin Rd.	5	Arterial	64,700	1.44	F	67,600	1.50	F
33. Calvine Rd.-Elk Grove-Florin Rd. to Grand Cru Dr.	4	Arterial	37,800	1.05	F	40,000	1.11	F
34. Calvine Rd.-Grand Cru. Dr. to Waterman Rd.	6	Arterial	38,700	0.72	C	41,100	0.76	C
35. Calvine R.-Waterman Rd. to Bradshaw Rd.	4	Arterial	29,000	0.81	D	30,100	0.84	D
36. Calvine Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	20,500	0.57	A	20,800	0.58	A
37. Calvine Rd.-Vineyard Rd. to Excelsior Rd	2	Arterial	12,700	0.71	C	13,100	0.73	C
38. Calvine Rd.-Excelsior Rd. to Grant Line Rd.	2	Rural	7,300	0.37	D	7,900	0.40	D

Roadway Segment	Lanes	Type	Cumulative Conditions			Cumulative Plus PD Project Conditions		
			Vol	V/C	LOS	Vol	V/C	LOS
39. Power Inn Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	30,400	0.84	D	30,800	0.86	D
40. Power Inn Rd.-Florin Rd. to Gerber Rd.	4	Arterial	35,300	0.98	E	36,000	1.00	E
41. Power Inn Rd.-Gerber Rd. to Calvine Rd.	4	Arterial	34,000	0.94	E	34,700	0.96	E
42. Florin-Perkins Rd.-Folsom Blvd. to SR 16	6	Arterial	35,100	0.65	B	38,700	0.72	C
43. Florin-Perkins Rd.-SR 16 to Fruitridge Rd.	6	Arterial	42,200	0.78	C	46,400	0.86	D
44. Florin-Perkins Rd.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	41,600	1.16	F	43,800	1.22	F
45. Florin-Perkins Rd. -Elder Creek Rd. to Florin Rd.	4	Arterial	37,400	1.04	F	40,800	1.13	F
46. French Rd.-Florin Rd. to Gerber Rd.	2	Arterial	21,000	1.17	F	22,700	1.26	F
47. Watt Ave.-Folsom Blvd. to Kiefer Blvd.	6	Arterial	81,700	1.36	F	84,500	1.41	F
48. South Watt Ave.-Kiefer Blvd. to SR 16	5	Arterial	63,500	1.41	F	67,000	1.49	F
49. South Watt Ave.-SR 16 to Fruitridge Rd.	4	Arterial	42,400	1.06	F	45,500	1.14	F
50. South Watt Ave.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	38,500	1.07	F	44,900	1.25	F
51. South Watt Ave.-Elder Creek Rd. to Florin Rd.	4	Arterial	31,800	0.88	D	38,700	1.08	F
52. Elk Grove-Florin Rd.-Florin Rd. to Gerber Rd.	4	Arterial	36,200	1.01	F	43,400	1.21	F
53. Elk Grove-Florin Rd.-Gerber Rd to Carlisle Ave.	4	Arterial	39,700	1.10	F	46,600	1.29	F
54. Elk Grove-Florin Rd.-Carlisle Ave. to Vintage Park Dr.	6	Arterial	38,600	0.71	C	48,600	0.90	D
55. Elk Grove-Florin Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	37,800	1.05	F	40,700	1.13	F
56. Hedge Ave.-SR 16 to Fruitridge Rd.	2	Rural	5,100	0.26	C	5,200	0.26	C
57. Hedge Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Rural	16,700	0.84	E	19,400	0.97	E
58. Hedge Ave.-Elder Creek Rd. to Florin Rd.	2	Rural	17,600	0.88	E	19,800	0.99	E
59. Waterman Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	23,000	0.64	B	24,500	0.68	B
60. Bradshaw Rd.-Kiefer Blvd. to SR 16	4	Arterial	49,100	1.36	F	54,400	1.51	F
61. Bradshaw Rd.-SR 16 to Elder Creek Rd.	4	Arterial	37,700	1.05	F	40,200	1.12	F
62. Bradshaw Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	37,900	1.05	F	40,000	1.11	F
63. Bradshaw Rd.-Florin Rd. to Gerber Rd.	4	Arterial	37,300	1.04	F	38,600	1.07	F
64. Bradshaw Rd.-Gerber Rd. to Vintage Park Dr.	4	Arterial	29,400	0.82	D	31,800	0.88	D
65. Bradshaw Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	22,800	0.63	B	24,800	0.69	B
66. Vineyard Rd.-Gerber Rd. to Calvine Rd.	2	Arterial	17,200	0.96	E	16,700	0.93	E
67. Excelsior Rd.-SR 16 to Florin Rd.	2	Rural	12,500	0.63	E	14,200	0.71	E
68. Excelsior Rd.-Florin Rd to Gerber Rd.	2	Rural	13,100	0.66	E	15,200	0.76	E
69. Excelsior Rd.-Gerber Rd. to Calvine Rd.	2	Rural	8,800	0.44	D	8,800	0.44	D
70. Waterman Rd.-Vintage Park to Gerber Rd.	2	Arterial	26,600	1.48	F	30,000	1.67	F
71. Waterman Rd.-Gerber Rd. Florin Rd.	4	Arterial	24,700	0.69	B	26,200	0.73	C
72. Vineyard Rd.-Gerber Rd. to Florin Rd.	2	Arterial	9,900	0.55	A	9,900	0.54	A

Notes: Shaded areas indicate unacceptable operations. All arterial roadway segments assumed to have moderate access control except for Segments 7, 47, and 49, which were assumed to have high access control.
Blue – City of Sacramento Study Roadway Segments
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Table TC-10: Intersection Levels of Service – Cumulative Conditions: CAC Land Use Plan

Intersection	Control	Cumulative No Project Conditions				Cumulative Plus CAC Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. Folsom Blvd./SR 16	Signal	58	E	47	D	62	E	54	D
2. Folsom Blvd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
3. Folsom Blvd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	>80	F
4. Kiefer Blvd./South Watt Ave.	Signal	0.98	E	0.89	D	**1.02**	**F**	0.89	D
5. Kiefer Blvd./Bradshaw Rd.	Signal	1.06	F	1.32	F	1.10	F	**1.39**	**F**
6. SR 16/Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
7. SR 16/South Watt Ave.	Signal	1.30	F	1.64	F	**1.45**	**F**	**1.69**	**F**
8. SR 16/Hedge Ave.	Signal	1.03	F	1.03	F	1.03	F	1.03	F
9. SR 16/Bradshaw Rd.	Signal	1.86	F	1.70	F	**2.00**	**F**	**1.77**	**F**
10. SR 16/Excelsior Rd.	Signal	2.31	F	2.45	F	2.13	F	**2.54**	**F**
11. Fruitridge Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
12. Fruitridge Rd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	>80	F
13. Fruitridge Rd./Hedge Ave.	4-Way Stop	>50	F	>50	F	**>50**	**F**	**>50**	**F**
14. Elder Creek Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
15. Elder Creek Rd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	>80	F
16. Elder Creek Rd./Hedge Ave.	4-Way Stop	>50	F	>50	F	**>50**	**F**	**>50**	**F**
17. Elder Creek Rd./Bradshaw Rd.	Signal	1.51	F	1.58	F	1.49	F	**1.68**	**F**
18. Elder Creek Rd./Excelsior Rd.	2-Way Stop	>50	F	>50	F	>50	F	**>50**	**F**
19. Florin Rd./Power Inn Rd.	Signal	1.12	F	1.11	F	**1.21**	**F**	1.15	F
20. Florin Rd./Florin-Perkins Rd.	Signal	1.59	F	1.22	F	**1.71**	**F**	1.23	F
21. Florin Rd./Gardner Ave.	2-Way Stop	>50	F	>50	F	**>50**	**F**	**>50**	**F**
22. Florin Rd./South Watt Ave.	Signal	1.04	F	1.27	F	**1.16**	**F**	**1.45**	**F**
23. Florin Rd./Hedge Ave.	Signal	1.99	F	1.81	F	2.01	F	**1.91**	**F**
24. Florin Rd./Waterman Rd.	Signal	1.01	F	1.06	F	**0.88**	**D**	1.04	F
25. Florin Rd./Bradshaw Rd.	Signal	1.49	F	1.63	F	**1.55**	**F**	1.62	F
26. Florin Rd./Vineyard Rd.	2-Way Stop	>50	F	>50	F	**>50**	**F**	42	E
27. Florin Rd./Excelsior Rd.	Signal	1.41	F	1.21	F	1.35	F	1.22	F
28. Gerber Rd./Power Inn Rd.	Signal	1.14	F	1.07	F	1.15	F	1.09	F
29. Gerber Rd./French Rd.	Signal	1.45	F	1.04	F	**1.51**	**F**	1.06	F
30. Gerber Rd./Elk-Grove Florin Rd.	Signal	1.28	F	1.31	F	**1.37**	**F**	**1.41**	**F**
31. Gerber Rd./Waterman Rd.	Signal	1.08	F	0.80	D	**1.21**	**F**	0.85	D
32. Gerber Rd./Bar Du Ln.	2-Way Stop	>50	F	>50	F	**>50**	**F**	**>50**	**F**
33. Gerber Rd./Bradshaw Rd.	Signal	1.38	F	1.44	F	1.32	F	**1.63**	**F**
34. Gerber Rd./Vineyard Rd.	2-Way Stop	>50	F	>50	F	>50	F	**>50**	**F**
35. Gerber Rd./Excelsior Rd.	Signal	0.81	D	0.97	E	0.79	C	**1.02**	**F**
36. Tiogawoods Dr./Elk Grove-Florin Rd.	Signal	1.01	F	0.83	D	1.06	F	0.90	E
37. Casselman Rd./Elk Grove-Florin Rd.	2-Way Stop	49	E	37	E	**>50**	**F**	47	E
38. Rogers Rd./Bradshaw Rd.	2-Way Stop	13	B	24	C	14	B	25	C

Intersection	Control	Cumulative No Project Conditions				Cumulative Plus CAC Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
39. Vintage Park Dr./Elk Grove-Florin Rd.	Signal	1.14	F	0.85	D	1.17	F	0.90	D
40. Vintage Park Dr./Waterman Rd.	Signal	0.91	E	0.87	D	0.92	E	0.88	D
41. Vintage Park Dr./Bradshaw Rd.	Signal	0.68	B	0.63	B	0.67	B	0.64	B
42. Calvine Rd./Elk Grove-Florin Rd.	Signal	>80	F	>80	F	>80	F	>80	F
43. Calvine Rd./Waterman Rd.	Signal	>80	F	>80	F	>80	F	>80	F
44. Calvine Rd./Bradshaw Rd.	Signal	69	E	46	D	68	E	50	D
45. Calvine Rd./Excelsior Rd.	4-Way Stop	>50	F	>50	F	>50	F	>50	F

Notes: Signal Control-Circular 212 Planning Methodology-Results present volume/capacity ratio and LOS.
2-Way Stop Control-2000 HCM Methodology-Results present delay and LOS for worst minor-street approach.
4-Way Stop Control-2000 HCM Methodology-Results present average delay and LOS.
Shaded areas indicate unacceptable operations.
Bold indicates project impact.
Blue – City of Sacramento Study Intersections
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Table TC-11: Intersection Levels of Service – Cumulative Conditions: PD Land Use Plan

Intersection	Control	Cumulative No Project Conditions				Cumulative Plus PD Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. Folsom Blvd./SR 16	Signal	58	E	47	D	65	E	53	D
2. Folsom Blvd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
3. Folsom Blvd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	>80	F
4. Kiefer Blvd./South Watt Ave.	Signal	0.98	E	0.89	D	**1.05**	**F**	0.88	D
5. Kiefer Blvd./Bradshaw Rd.	Signal	1.06	F	1.32	F	**1.15**	**F**	**1.40**	**F**
6. SR 16/Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
7. SR 16/South Watt Ave.	Signal	1.30	F	1.64	F	**1.38**	**F**	**1.71**	**F**
8. SR 16/Hedge Ave.	Signal	1.03	F	1.03	F	1.02	F	1.08	F
9. SR 16/Bradshaw Rd.	Signal	1.86	F	1.70	F	1.89	F	1.74	F
10. SR 16/Excelsior Rd.	Signal	2.31	F	2.45	F	2.21	F	**2.55**	**F**
11. Fruitridge Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
12. Fruitridge Rd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	>80	F
13. Fruitridge Rd./Hedge Ave.	4-Way Stop	>50	F	>50	F	**>50**	**F**	**>50**	**F**
14. Elder Creek Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
15. Elder Creek Rd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	>80	F
16. Elder Creek Rd./Hedge Ave.	4-Way Stop	>50	F	>50	F	**>50**	**F**	**>50**	**F**
17. Elder Creek Rd./Bradshaw Rd.	Signal	1.51	F	1.58	F	**1.67**	**F**	**1.72**	**F**
18. Elder Creek Rd./Excelsior Rd.	2-Way Stop	>50	F	>50	F	>50	F	**>50**	**F**
19. Florin Rd./Power Inn Rd.	Signal	1.12	F	1.11	F	**1.27**	**F**	**1.18**	**F**
20. Florin Rd./Florin-Perkins Rd.	Signal	1.59	F	1.22	F	**1.77**	**F**	1.27	F
21. Florin Rd./Gardner Ave.	2-Way Stop	>50	F	>50	F	**>50**	**F**	**>50**	**F**
22. Florin Rd./South Watt Ave.	Signal	1.04	F	1.27	F	**1.21**	**F**	**1.49**	**F**
23. Florin Rd./Hedge Ave.	Signal	1.99	F	1.81	F	**2.07**	**F**	**1.89**	**F**
24. Florin Rd./Waterman Rd.	Signal	1.01	F	1.06	F	0.92	E	1.06	F
25. Florin Rd./Bradshaw Rd.	Signal	1.49	F	1.63	F	1.53	F	1.66	F
26. Florin Rd./Vineyard Rd.	2-Way Stop	>50	F	>50	F	**>50**	**F**	**>50**	**F**
27. Florin Rd./Excelsior Rd.	Signal	1.41	F	1.21	F	**1.46**	**F**	**1.31**	**F**
28. Gerber Rd./Power Inn Rd.	Signal	1.14	F	1.07	F	1.19	F	1.09	F
29. Gerber Rd./French Rd.	Signal	1.45	F	1.04	F	**1.55**	**F**	**1.10**	**F**
30. Gerber Rd./Elk-Grove Florin Rd.	Signal	1.28	F	1.31	F	**1.38**	**F**	**1.40**	**F**
31. Gerber Rd./Waterman Rd.	Signal	1.08	F	0.80	D	**1.19**	**F**	0.84	D
32. Gerber Rd./Bar Du Ln.	2-Way Stop	>50	F	>50	F	**>50**	**F**	**>50**	**F**
33. Gerber Rd./Bradshaw Rd.	Signal	1.38	F	1.44	F	1.30	F	**1.61**	**F**
34. Gerber Rd./Vineyard Rd.	2-Way Stop	>50	F	>50	F	>50	F	**>50**	**F**
35. Gerber Rd./Excelsior Rd.	Signal	0.81	D	0.97	E	0.84	D	**1.05**	**F**
36. Tiogawoods Dr./Elk Grove-Florin Rd.	Signal	1.01	F	0.83	D	1.06	F	0.97	E
37. Casselman Rd./Elk Grove-Florin Rd.	2-Way Stop	49	E	37	E	**>50**	**F**	**>50**	**F**
38. Rogers Rd./Bradshaw Rd.	2-WaY Stop	13	B	24	C	14	B	23	C

Intersection	Control	Cumulative No Project Conditions				Cumulative Plus PD Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
39. Vintage Park Dr./Elk Grove-Florin Rd.	Signal	1.14	F	0.85	D	**1.28**	**F**	0.98	E
40. Vintage Park Dr./Waterman Rd.	Signal	0.91	E	0.87	D	0.96	E	0.93	E
41. Vintage Park Dr./Bradshaw Rd.	Signal	0.68	B	0.63	B	0.68	B	0.62	B
42. Calvine Rd./Elk Grove-Florin Rd.	Signal	>80	F	>80	F	>80	F	>80	F
43. Calvine Rd./Waterman Rd.	Signal	>80	F	>80	F	>80	F	>80	F
44. Calvine Rd./Bradshaw Rd.	Signal	69	E	46	D	62	E	48	D
45. Calvine Rd./Excelsior Rd.	4-Way Stop	>50	F	>50	F	>50	F	>50	F

Notes: Signal Control-Circular 212 Planning Methodology-Results present volume/capacity ratio and LOS.
2-Way Stop Control-2000 HCM Methodology-Results present delay and LOS for worst minor-street approach.
4-Way Stop Control-2000 HCM Methodology-Results present average delay and LOS.
Shaded areas indicate unacceptable operations.
Bold indicates project impact.
Blue – City of Sacramento Study Intersections
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

TRANSIT SYSTEM OPERATIONS

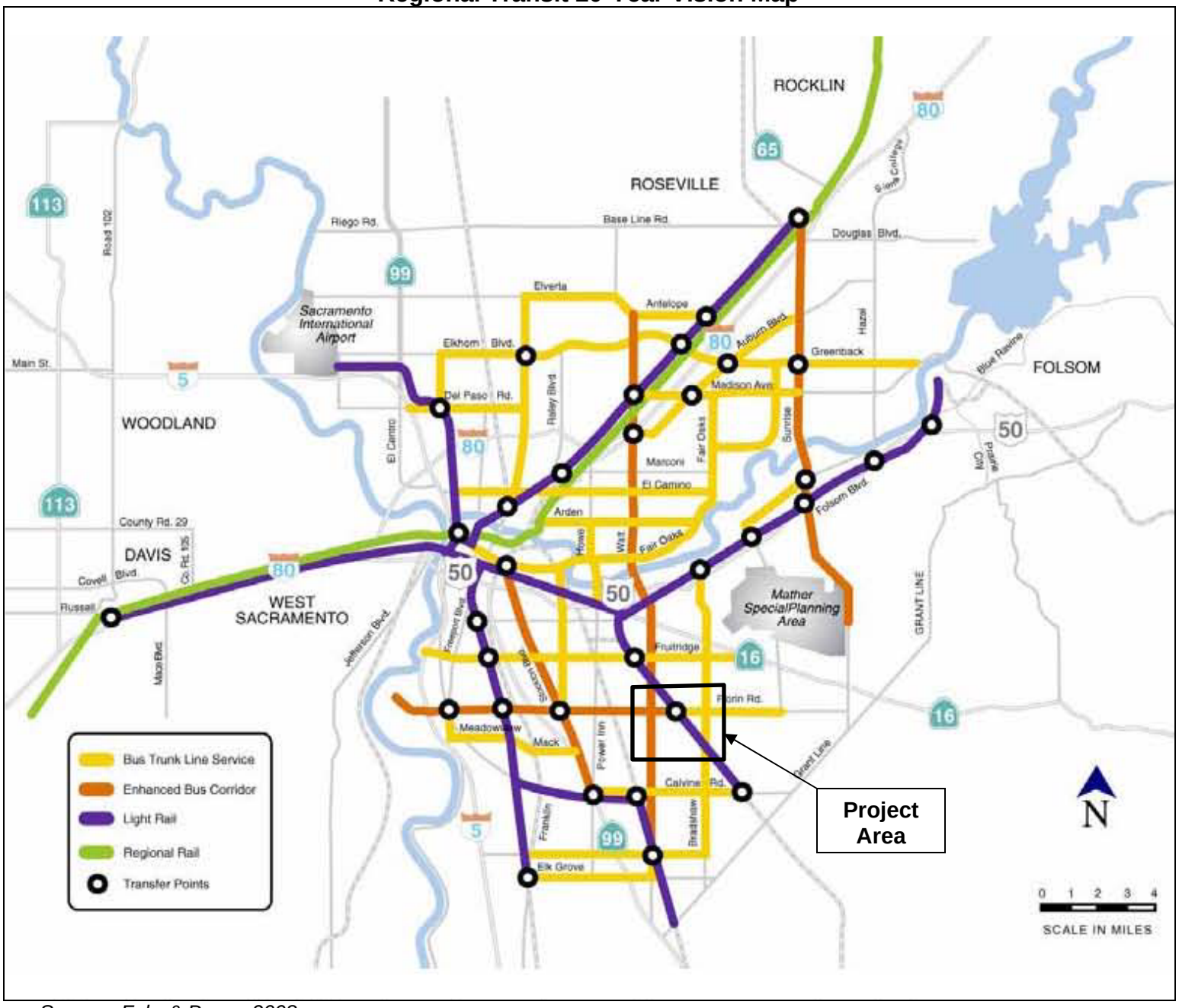
Transit system operations were evaluated by considering the potential effects of the project on planned transit services in the vicinity of the project site. Regional Transit (RT) maintains a 20-year master plan of transit facilities for the Sacramento region. Plate TC-11, Regional Transit 20-Year Vision Map, is shown below.

The 20-year vision includes the following elements near the proposed project:

- Bus trunk line service on Bradshaw Road, Calvine Road, and portions of Florin Road and Fruitridge Road;
- An enhanced bus corridor on Watt Avenue/South Watt Avenue/Elk Grove-Florin Road and portions of Florin Road;
- Light Rail Transit (LRT) along the Central California Traction Railroad (CCTR) corridor; and
- Transfer points along the CCTR corridor on Calvine Road, Florin Road, and Fruitridge Road.

The County's draft General Plan Update shows that bus rapid transit (BRT) will be accommodated in mixed-flow lanes on Elk Grove-Florin Road and Florin Road and has not identified the need for additional, exclusive rights-of-way for transit. This differs from the latest version of the RT Transit Master Plan, which shows BRT on Elk Grove-Florin Road, Florin Road east to Bradshaw Road, and Bradshaw Road north of Florin Road; RT has tentatively identified these corridors in their TMP as accommodating BRT in exclusive rights-of-way or dedicated bus corridors. These discrepancies will likely be worked out between the agencies at a later date; either plan is subject to modifications up through final approval by their respective Boards.

Plate TC-11
Regional Transit 20-Year Vision Map



Source: Fehr & Peers, 2008.

CUMULATIVE CONDITIONS – SR 99 AND U.S. 50

The Caltrans District 3 *Highway Congestion Monitoring Program (HICOMP) for Sacramento Metropolitan Area*, Fall 2005 identifies congested (LOS F) conditions on the following segments of SR 99 and U.S. 50 during the AM and PM peak hours:

SR 99 AM Peak Hour
- Laguna Boulevard to U.S. 50 (northbound)

SR 99 PM Peak Hour
- Mack Road to Florin Road (northbound)
- U.S. 50 to Sheldon Road (southbound)

U.S. 50 AM Peak Hour
- Bass Lake Road to 59th Street (westbound)
- South River Road to Mayhew Road Overcrossing (eastbound)

U.S. 50 PM Peak Hour
- Zinfandel Drive to 16th Street (westbound)
- 59th Street to Mayhew Road Overcrossing and Bradshaw Road to Folsom Boulevard (eastbound)

According to the Sacramento Area Council of Governments (SACOG), the Sacramento region is forecast to see a 49 percent increase in population, a 50 percent increase in housing, and a 60 percent increase in employment by 2025. Over the same time period, SACOG forecasts that vehicle miles of travel (VMT) will increase by approximately 58 percent. However, the current regional transportation plan will only increase the capacity of the transportation system (if fully realized) by about 20 percent. Consequently, the number of congested locations and the duration of congestion will continue to increase.

IMPACTS AND MITIGATION MEASURES

The traffic impacts and mitigation measures are summarized below for the proposed project. The improvements outlined below as mitigation would be completed through the Public Facilities Financing Program, which would be funded by development within the FVGCP. The timing of individual improvements would be determined by the pattern in which buildout of the FVGCP occurs. The mitigation was developed using a systemic approach that considered ultimate improvements consistent with the General Plan circulation diagram. The approach included the following steps:

- Step 1 – Identify initial impacts and mitigation based on the results of the no project and with project analysis.

- Step 2 – Test sensitivity of identified mitigation to roadway improvements consistent with the General Plan circulation diagram and develop a refined set of mitigation.

- Step 3 – Develop new traffic volume forecasts based on the refined mitigation and update impact and mitigation analysis.

- Step 4 – Identify and document potential secondary impacts caused by refined mitigation.

A prioritized Capital Improvement Program (CIP) has been developed to guide the necessary roadway improvements in the FVGCP. First priority would be given to South Watt Avenue/Elk Grove-Florin Road. Second priority would be given to other major roads that provide primary access to the FVGCP, and third priority to the improvements on the remaining roads. All projects within the FVGCP would be required to participate in the Florin Vineyard Community Plan Public Financing Plan, which includes a fee component to fund the FVGCP CIP.

PROJECT SPECIFIC IMPACTS AND MITIGATION MEASURES

For a more detailed discussion of the impacts and mitigation measures identified for all scenarios, please refer to the complete traffic study, which is included in Volume 3, Appendices, of this Draft EIR, and which is available upon request from the Sacramento County Department of Environmental Review and Assessment located at 827 7th Street, Sacramento, California.

IMPACTS TO ROADWAY SEGMENTS UNDER EXISTING PLUS PROJECT CONDITIONS

CAC LAND USE PLAN/PD LAND USE PLAN

Implementation of the proposed project would result in the addition of substantial traffic to the FVGCP area. As such, the Traffic Impact Analysis identified the necessary roadway network required to accommodate the increase in traffic. As shown in Table TC-4 and TC-5, a total of 27 and 29 roadway segments would operate unacceptably with the addition of project traffic under the CAC and PD Land Use Plans, respectively. It is important to note that six (6) additional traffic impacts would occur to roadways as a result of implementation of the 27 recommended system-wide roadway mitigation measures. These additional impacts occurring as a result of the completion of project-specific roadway mitigation measures are hereafter referred to as “secondary impacts.” Overall, implementation of either the CAC Land Use Plan or the PD Land Use Plan would result in 32 and 36 ***potentially significant*** primary and secondary impacts, respectively, to the study roadway segments shown in Table TC-12, below.

Table TC-12: Impacts to Roadway Segments

Impact Number	Roadway Segment	CAC Land Use Plan Impact	PD Land Use Plan Impact	Primary or Secondary Impact?
TC-1(a)	SR 16 – Folsom Boulevard to South Watt Avenue	PS	PS	Primary
TC-1(b)	SR 16 – South Watt Avenue to Bradshaw Road	PS	PS	Primary
TC-1(c)	Fruitridge Road – Florin-Perkins Road to South Watt Avenue	PS	PS	Primary
TC-1(d)	Fruitridge Road – South Watt Avenue to Hedge Avenue	PS	PS	Primary
TC-1(e)	Elder Creek Road – Power Inn Road to Florin-Perkins Road	PS	PS	Primary
TC-1(f)	Elder Creek Road – Florin-Perkins Road to South Watt Avenue	PS	PS	Primary
TC-1(g)	Florin Road – Stockton Boulevard to Power Inn Road	PS	PS	Primary
TC-1(h)	Florin Road – Power Inn Road to Florin-Perkins Road	LS	PS	Primary
TC-1(i)	Florin Road – South Watt Avenue to Hedge Avenue	PS	PS	Primary
TC-1(j)	Gerber Road – Power Inn Road to French Road	SU	SU	Primary
TC-1(k)	Gerber Road – Elk Grove-Florin Road to Bradshaw Road	PS	PS	Primary
TC-1(l)	Calvine Road – Power Inn Road to Elk Grove-Florin Road	PS	PS	Primary
TC-1(m)	Power Inn Road – Elder Creek Road to Florin Road	LS	SU	Primary
TC-1(n)	Florin-Perkins Road – Folsom Boulevard to SR 16	LS	PS	Primary
TC-1(o)	Florin-Perkins Road – SR 16 to Fruitridge Road	PS	PS	Primary
TC-1(p)	Florin-Perkins Road – Fruitridge Road to Elder Creek Road	SU	SU	Primary
TC-1(q)	Florin-Perkins Road – Elder Creek Road to Florin Road	SU	SU	Primary
TC-1(r)	French Road – Florin Road to Gerber Road	PS	PS	Primary
TC-1(s)	South Watt Avenue – Folsom Boulevard to Kiefer Boulevard	SU	SU	Primary
TC-1(t)	South Watt Avenue – Kiefer Boulevard to SR 16	PS	PS	Primary
TC-1(u)	South Watt Avenue – SR 16 to Fruitridge Road	PS	PS	Primary
TC-1(v)	South Watt Avenue – Fruitridge Road to Elder Creek Road	PS	PS	Primary
TC-1(w)	South Watt Avenue – Elder Creek Road to Florin Road	PS	PS	Primary
TC-1(x)	Elk Grove-Florin Road – Florin Road to Gerber Road	PS	PS	Primary
TC-1(y)	Elk Grove-Florin Road – Gerber Road to Carlisle Avenue	PS	PS	Primary
TC-1(z)	Elk Grove-Florin Road – Vintage Park Drive to Calvine Road	PS	PS	Primary
TC-1(aa)	Hedge Avenue – Fruitridge Road to Elder Creek Road	PS	PS	Primary
TC-1(bb)	Bradshaw Road – Kiefer Boulevard to SR 16	PS	PS	Primary
TC-1(cc)	Bradshaw Road – Florin Road to Gerber Road	PS	PS	Primary
TC-1(dd)	Elder Creek Road – South Watt Avenue to Hedge Avenue	PS	PS	Secondary
TC-1(ee)	Elder Creek Road – Hedge Avenue to Bradshaw Road	LS	PS	Secondary
TC-1(ff)	Bradshaw Road – SR 16 to Elder Creek Road	PS	PS	Secondary

Impact Number	Roadway Segment	CAC Land Use Plan Impact	PD Land Use Plan Impact	Primary or Secondary Impact?
TC-1(gg)	Bradshaw Road – Gerber Road to Vintage Park Drive	PS	PS	Secondary
TC-1(hh)	Bradshaw Road – Vintage Park Drive to Calvine Road	PS	PS	Secondary
TC-1(ii)	Florin Road – Florin-Perkins Road to Gardner Avenue	PS	PS	Secondary
TC-1(jj)	Florin Road – Gardner Avenue to South Watt Avenue	PS	PS	Secondary

LS = Less-than-Significant PS = Potentially Significant S = Significant and Unavoidable

Note: Total PS impacts for CAC Land Use Plan = 33
Total PS impacts for PD Land Use Plan = 36

Source: Fehr & Peers, 2008.

MITIGATION MEASURE(S)

Implementation of the following mitigation measures would reduce impacts to many of the adversely impacted roadway segments. It should be noted that for some mitigation measures, only one of the two Land Use Plans is listed (CAC or PD). This is because the below section only provides mitigation measures for impacts determined to be potentially significant.

Several of the adversely affected roadway segments are not located within the jurisdiction of Sacramento County. While the Traffic Impact Analysis identified mitigation for areas outside of the County jurisdiction, Sacramento County does not have the land use authority to ensure that the improvements are implemented. As such, the impacts to roadway segments outside of County jurisdiction are considered *significant and unavoidable.* In addition, mitigation identified for four and five roadway segments in the CAC Land Use Plan and PD Land Use Plan, respectively, are infeasible. Therefore, implementation of either land use plan would result in *significant and unavoidable* impacts to roadway segments.

TC-1 All development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. Pursuant to the Program the following improvements shall be implemented subject to the approval of the controlling jurisdiction.

CAC LAND USE PLAN/PD LAND USE PLAN

TC-1(a) Widen the section of SR 16 between Folsom Boulevard and South Watt Avenue from one to two lanes in each direction.

TC-1 (b) Widen the section of SR 16 between South Watt Avenue and Bradshaw Road from one to two lanes in each direction.

TC-1(c) Widen the section of Fruitridge Road between Florin-Perkins Road and South Watt Avenue from one to two lanes in each direction.

TC-1(d) Widen the section of South Watt Avenue between Elder Creek Road and SR 16 from one to three lanes in each direction.

TC-1(e) Widen the section of Elder Creek Road between Power Inn Road and Florin-Perkins Road from one to two lanes in each direction.

TC-1(f) Widen the section of Elder Creek Road between Florin-Perkins Road and South Watt Avenue from one to two lanes in each direction.

TC-1(g) *Widen the section of Florin Road between Stockton Boulevard and Power Inn Road from two to three lanes in each direction.*

TC-1(h) *Widen the section of Florin Road between South Watt Avenue and Hedge Avenue from one to two lanes in each direction.*

TC-1(i) *Widen the section of Gerber Road between Elk Grove-Florin Road and Bradshaw Road from one to two lanes in each direction.*

TC-1(j) *Widen the four-lane section of Calvine Road between Power Inn Road and Elk Grove-Florin Road from two to three lanes in each direction.*

TC-1(k) *Widen the section of Florin-Perkins Road between SR 16 and Fruitridge Road from two to three lanes in each direction.*

TC-1(l) *Widen the section of French Road between Florin Road and Gerber Road from one to two lanes in each direction.*

TC-1(m) *Widen the section of South Watt Avenue between Kiefer Boulevard and SR 16 from one lane to three lanes in each direction.*

TC-1(n) *Widen the section of South Watt Avenue between SR 16 and Fruitridge Road from one to three lanes in each direction.*

TC-1(o) *Widen the section of South Watt Avenue between Fruitridge Road and Elder Creek Road from one to three lanes in each direction.*

TC-1(p) *Widen the section of South Watt Avenue between Elder Creek Road and Florin Road from one to three lanes in each direction.*

TC-1(q) *Widen the section of Elk Grove-Florin Road between Florin Road and Gerber Road from one to three lanes in each direction.*

TC-1(r) *Widen the section of Elk Grove-Florin Road between Gerber Road and Carlisle Avenue from two to three lanes in each direction.*

TC-1(s) *Widen the four-lane section of Elk Grove-Florin Road between Vintage Park Drive and Calvine Road from two to three lanes in each direction and construct Waterman Road as a two-lane roadway between Gerber Road and its current terminus.*

TC-1(t) *Widen the section of South Watt Avenue between Elder Creek Road and SR 16 from one to three lanes in each direction.*

TC-1(u) *Widen the section of Bradshaw Road between Kiefer Boulevard and SR 16 from two to three lanes in each direction.*

TC-1(v) *Widen the section of Bradshaw Road between Florin Road and Gerber Road from one to two lanes in each direction.*

TC-1(w) *Widen the section of Elder Creek Road between South Watt Avenue and Hedge Avenue from one to two lanes in each direction.*

TC-1(x) *Widen the section of Bradshaw Road between SR 16 and Elder Creek Road from two to three lanes in each direction.*

TC-1(y) *Widen the section of Bradshaw Road between Gerber Road and Vintage Park Drive from one to two lanes in each direction.*

TC-1(z) *Widen the section of Bradshaw Road between Vintage Park Drive and Calvine Road from one to two lanes in each direction.*

TC-1(aa) *Widen the section of Florin Road between Florin-Perkins Road to Gardner Avenue from two to three lanes in each direction.*

TC-1(bb) *Widen the section of Florin Road between Gardner Avenue and South Watt Avenue from two to three lanes in each direction.*

PD LAND USE PLAN

TC-1(cc) *Widen the section of French Road between Florin Road and Gerber Road from one to two lanes in each direction.*

TC-1(dd) *Widen the section of SR 16 between Folsom Boulevard and South Watt Avenue from one to two lanes in each direction.*

TC-1(ee) *Widen the section of Elder Creek Road between Hedge Avenue and Bradshaw Road from one to two lanes in each direction.*

PROPOSED IMPROVEMENTS THAT WOULD NOT REDUCE IMPACTS TO A LESS-THAN-SIGNIFICANT LEVEL

CAC LAND USE PLAN/PD LAND USE PLAN

TC-1(ff) *Widen the section of Gerber Road between Power Inn Road and French Road from two to three lanes in each direction. However, with this improvement, Gerber Road would be widened beyond the General Plan designation as a 4-lane arterial. Consequently, there may not be sufficient right-of-way to construct the improvement.*

TC-1(gg) *Widen the section of Florin-Perkins Road between Fruitridge Road and Elder Creek Road from two to three lanes in each direction. However, with this improvement, Florin-Perkins Road would be widened beyond the General Plan designation as a 4-lane arterial. Consequently, there may not be sufficient right-of-way to construct the improvement.*

TC-1(hh) *Widen the section of Florin-Perkins Road between Elder Creek Road and Florin Road from two to three lanes in each direction. With this improvement, Florin-Perkins Road would be widened beyond the roadway's designation as a 4-lane arterial in the General Plan. Consequently, there may not be sufficient right-of-way to construct the improvement.*

TC-1(ii) *The section of South Watt Avenue between Folsom Boulevard and Kiefer Boulevard is currently six lanes, which is consistent with the County of Sacramento's General Plan designation as a 108-foot wide thoroughfare. Widening from three to four lanes in each direction would eliminate the impact; however, widening to eight lanes would require additional right-of-way. Improvements are planned along the Watt Avenue/South Watt Avenue corridor, which include the grade separation of the Regional Transit LRT and improvements at the South Watt Avenue/Folsom Boulevard. Technical studies are currently being conducted for operational improvements along the Watt Avenue/South Watt Avenue corridor, which include the grade-separation of*

the Regional Transit LRT and improvements at the South Watt Avenue/Folsom Boulevard intersection. Due to the right-of-way constraints and the uncertainty of planned improvements, implementation of this mitigation measure is infeasible.

PD LAND USE PLAN

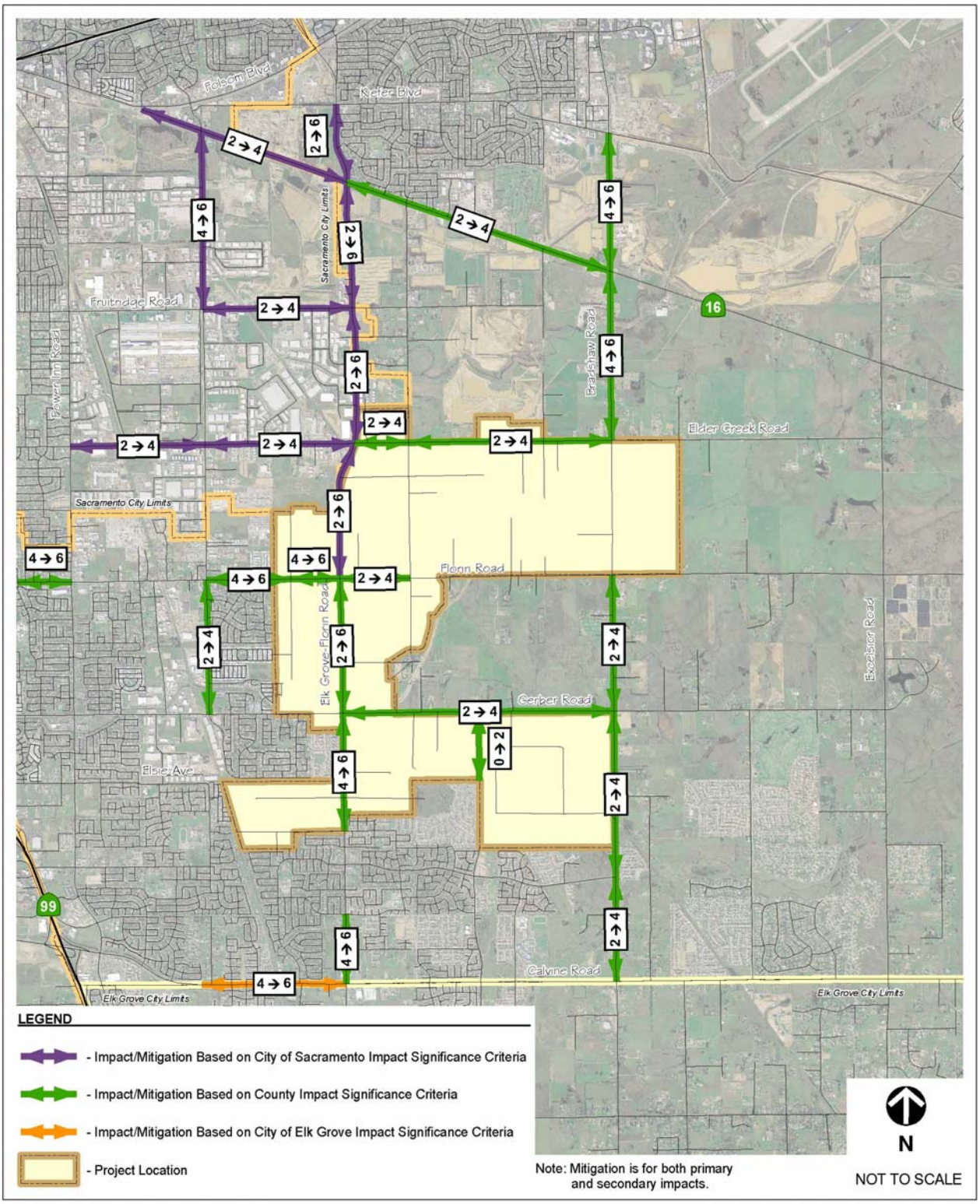
TC-1(jj) *Widen the section of Power Inn Road between Elder Creek Road and Florin Road from two to three lanes in each direction. Implementation of this mitigation measure would reduce the impact to a less-than-significant level. However, with this improvement, Power Inn Road would be widened beyond the City of Sacramento General Plan designation as a 4-lane arterial. Consequently, there may not be sufficient right-of-way to construct the improvement.*

DISPOSITION OF EXISTING PLUS PROJECT IMPACTS TO ROADWAY SEGMENTS FOLLOWING MITIGATION

As outlined above, several mitigation measures are proposed to reduce the significance of impacts to roadway segments. Plates TC-12, -13 and -14 show the existing roadway system, intersection traffic control, and lane configurations with proposed mitigation, respectively. Tables TC-13 and -14 summarize roadway segment operations with proposed mitigation for the CAC and PD Land Use Plans, respectively.

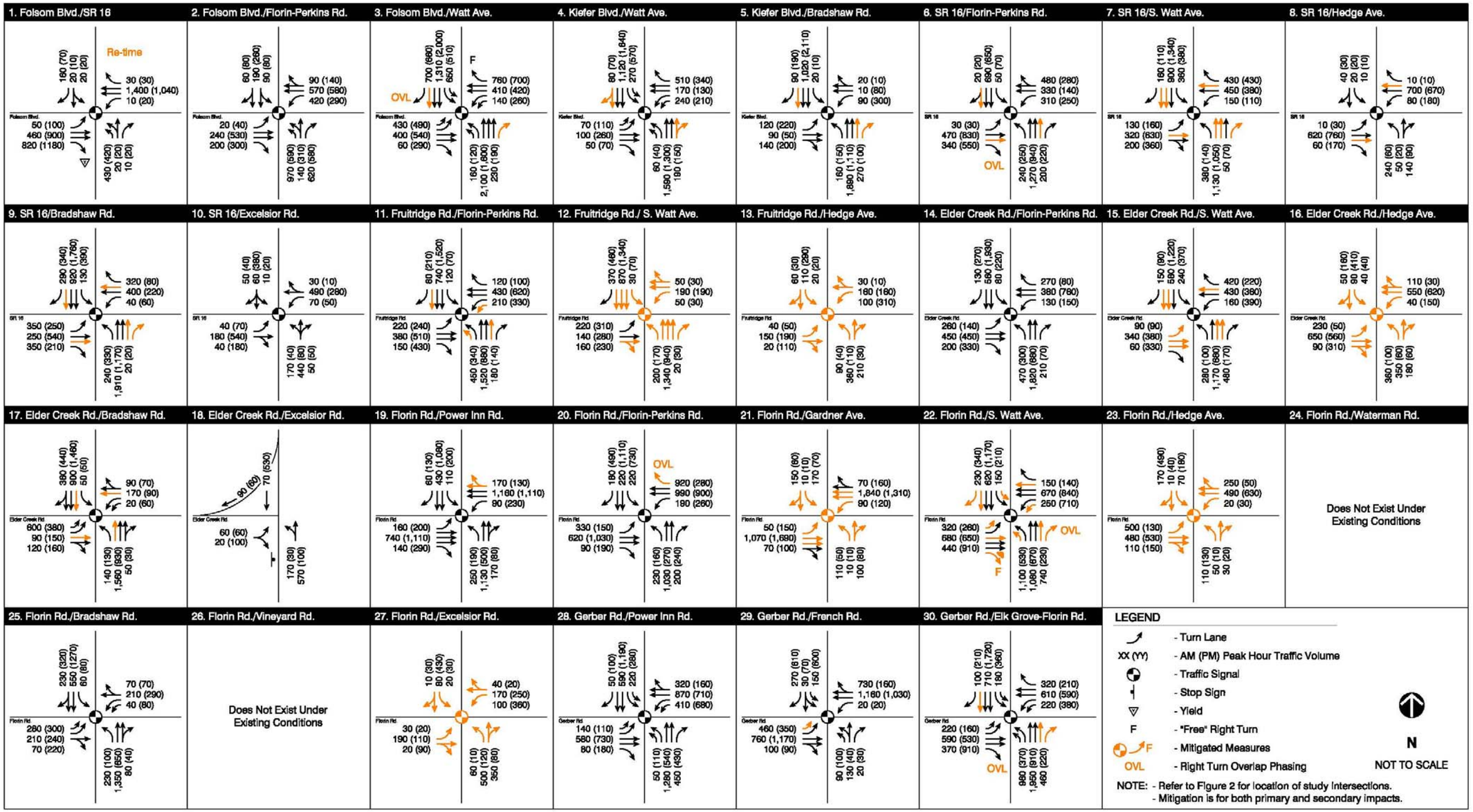
As outlined above, four of the roadway improvements proposed as mitigation for impacts under the CAC Land Use Plan are considered infeasible, and five (consisting of four CAC improvements and one additional roadway improvement) of the roadway improvements proposed as mitigation under the PD Land Use Plan may be infeasible. In addition, several of the proposed improvements are not located within the jurisdiction of Sacramento County. As noted above, mitigation of impacts outside of County jurisdictions may not be feasible. Therefore, impacts to roadway segments under both the CAC Land Use Plan and the PD Land Use Plan would remain ***significant and unavoidable***.

Plate TC-12
Proposed Roadway Mitigation – Existing with Project Conditions



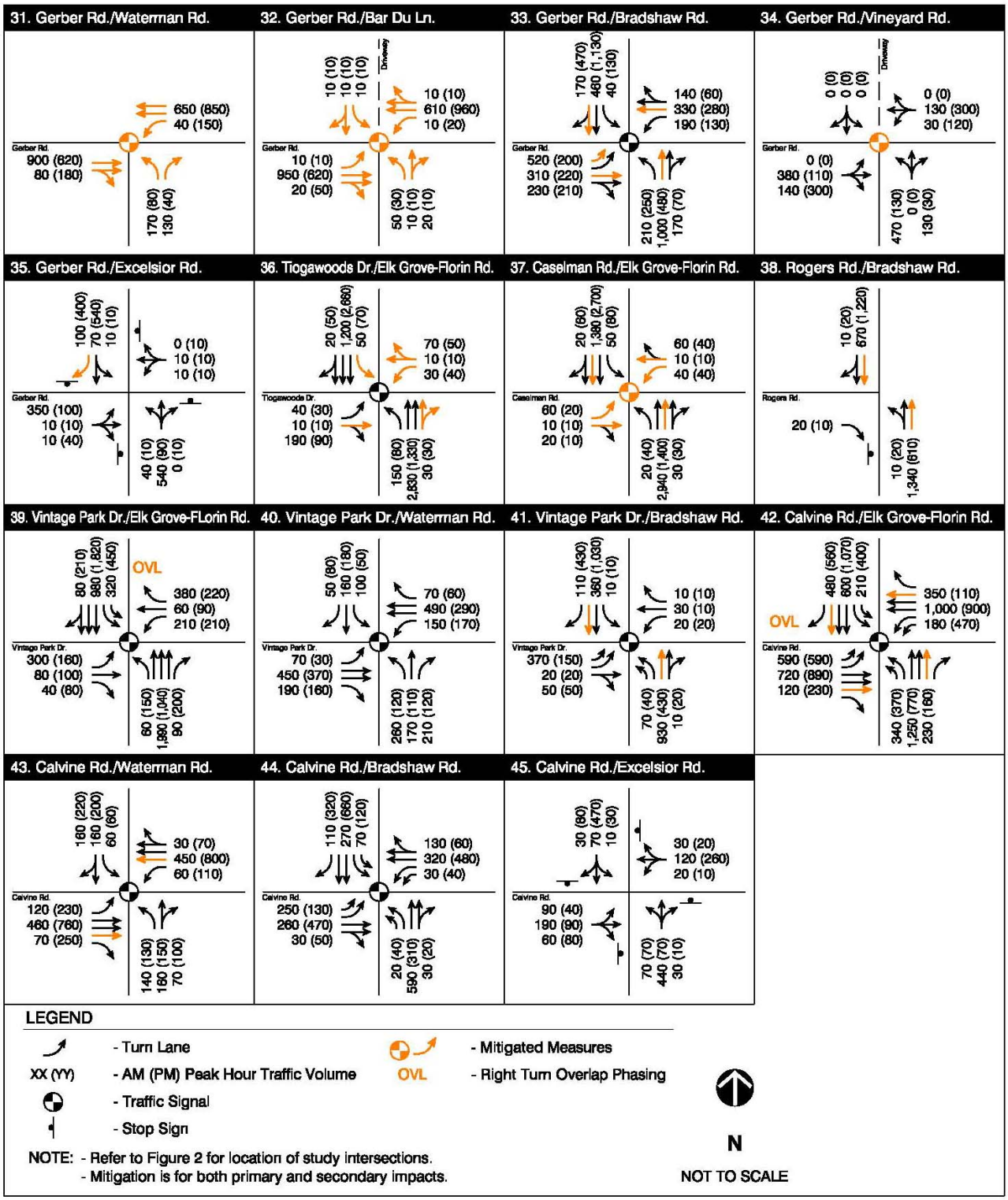
Source: Fehr & Peers, 2008.

Plate TC-13A
Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Existing Plus CAC Conditions with Mitigation



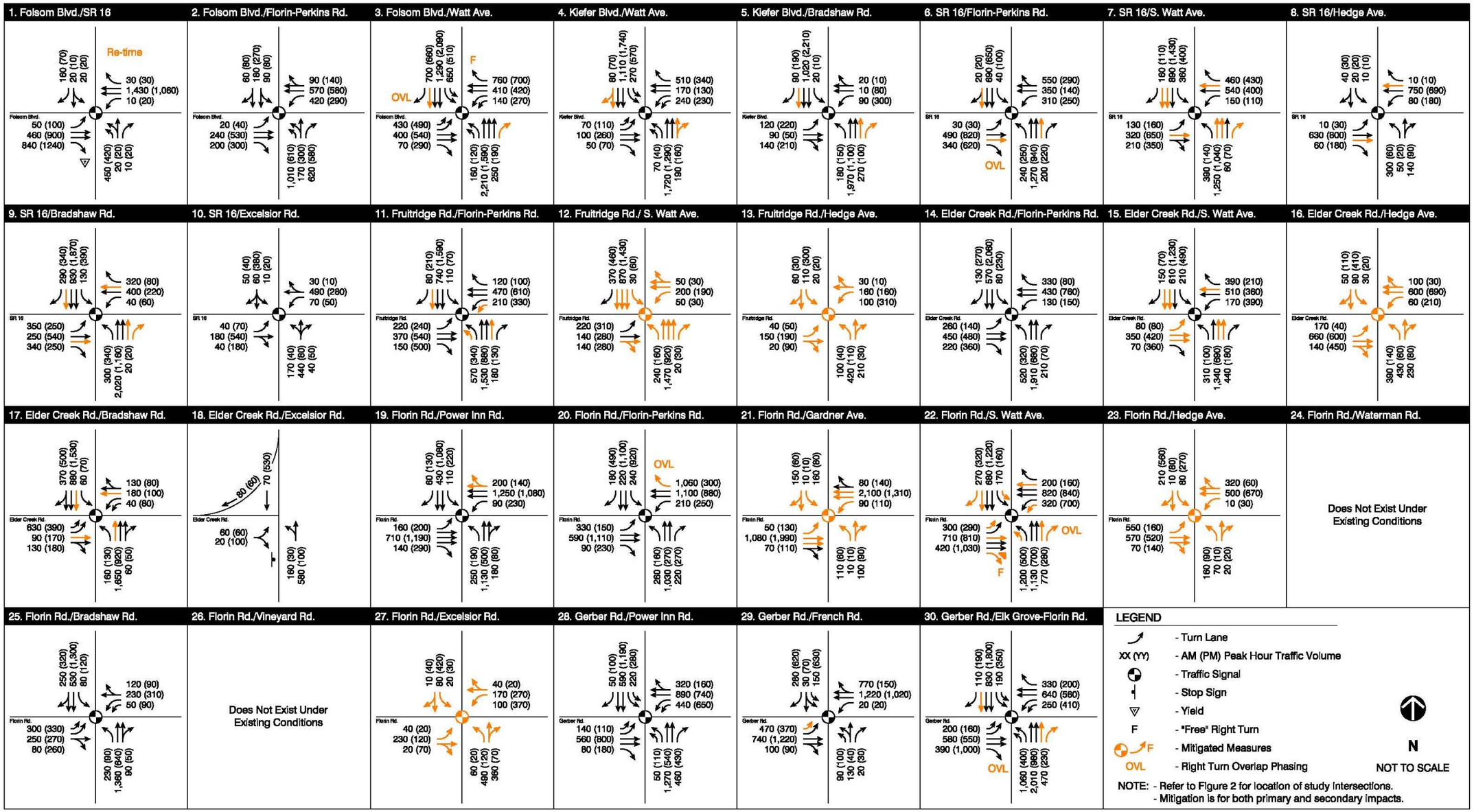
Source: Fehr & Peers, 2008.

Plate TC-13B
Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Existing Plus CAC Conditions with Mitigation



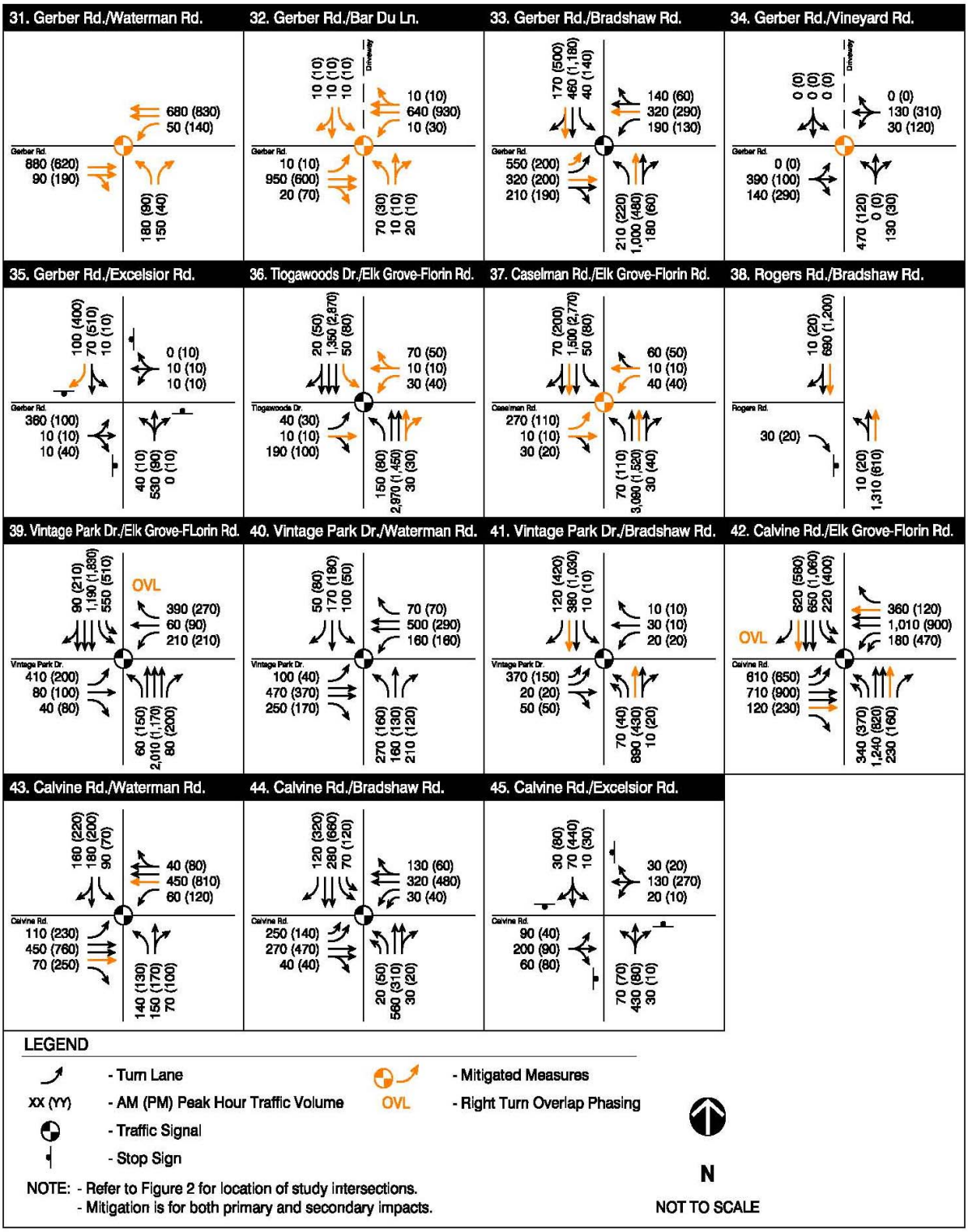
Source: Fehr & Peers, 2008.

Plate TC-14A
Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Existing Plus PD Conditions with Mitigation



Source: Fehr & Peers, 2008.

Plate TC-14B
Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Existing Plus PD Conditions with Mitigation



Source: Fehr & Peers, 2008.

Table TC-13: Roadway Levels of Service – Existing Plus Project Mitigated Conditions: CAC Land Use Plan

Roadway Segment	Lanes (Mitigated)	Type	Existing Plus CAC Project Conditions			Existing Plus CAC Project Conditions With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd.-SR 16 to Watt Avenue	4	Arterial	25,300	0.70	C	22,000	0.61	B
2. Kiefer Blvd.-Florin-Perkins Rd. to Watt Ave.	2	Arterial	8,100	0.45	A	6,400	0.36	A
3. Kiefer Blvd.-Watt Ave. to Rosemont Dr.	4	Arterial	23,200	0.64	B	21,300	0.59	A
4. Kiefer Blvd.-Rosemont Dr. to Bradshaw Rd.	4	Arterial	13,800	0.38	A	11,900	0.33	A
5. SR 16-Folsom Blvd. to Watt Ave.	2(4)	Arterial	18,600	1.03	F	18,600	0.52	A
6. SR 16 - Watt Ave. to Bradshaw Rd.	2(4)	Arterial	19,800	1.10	F	22,700	0.63	B
7. SR 16-Bradshaw Rd. to Sunrise Blvd.	2	Arterial	12,100	0.60	B	12,100	0.61	B
8. Fruitridge Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	22,600	0.63	B	22,600	0.63	B
9. Fruitridge Rd-Florin-Perkins Rd. to South Watt Ave.	2(4)	Arterial	17,600	0.98	E	18,200	0.51	A
10. Fruitridge Rd.-South Watt Ave. to Hedge Ave.	2	Rural	8,100	0.41	D	6,200	0.34	A
11. Elder Creek Rd.-Power Inn Rd. to Florin-Perkins Rd.	2(4)	Arterial	21,700	1.21	F	21,700	0.60	B
12. Elder Creek Rd.-Florin-Perkins Rd. to South Watt Ave.	2(4)	Arterial	17,800	0.99	E	17,900	0.50	A
13. Elder Creek Rd.-South Watt Ave. to Hedge Ave.	2(4)	Rural	15,700	0.79	E	21,200	0.59	A
14. Elder Creek Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	16,600	0.83	E	19,900	1.00	E
15. Elder Creek Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	4,300	0.22	B	4,000	0.22	A
16. Florin Rd.-Stockton Blvd. to Power Inn Rd.	4(6)	Arterial	36,800	1.02	F	36,800	0.68	B
17. Florin Rd. – Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	35,900	1.00	E	26,500	0.74	C
18. Florin Rd.-Florin-Perkins Rd. to Gardner Ave.	4(6)	Arterial	29,500	0.82	D	36,300	0.67	B
19. Florin Rd – Gardner Ave. to South Watt Ave.	4(6)	Arterial	34,400	0.96	E	42,300	0.78	C
20. Florin Rd.-South Watt Ave. to Hedge Ave.	2(4)	Rural	27,700	1.39	F	26,300	0.73	C
21. Florin Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	15,500	0.78	E	11,700	0.59	D
22. Florin Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	6,600	0.33	C	6,500	0.33	C
23. Florin Rd. – Excelsior Rd. to Sunrise Blvd.	2	Rural	5,200	0.26	C	5,200	0.26	C
24. Gerber Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	23,400	0.65	B	23,400	0.65	B
25. Gerber Rd.-Power Inn Rd. to French Rd.	4	Arterial	37,200	1.03	F	42,000	1.17	F
26. Gerber Rd. – French Road to Elk Grove-Florin Rd.	4	Arterial	35,800	0.99	E	29,100	0.81	D
27. Gerber Rd.-Elk Grove-Florin Rd. to Bradshaw Rd.	2(4)	Rural	21,100	1.06	F	21,200	0.59	A
28. Gerber Rd.-Bradshaw Rd. to Vineyard Rd.	2	Rural	6,300	0.32	C	6,800	0.34	C
29. Gerber Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	4,500	0.23	C	3,000	0.15	B
30. Vintage Park Dr.-Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	17,800	0.49	A	15,100	0.42	A
31. Vintage Park Dr. – Waterman Rd. to Bradshaw Rd.	4	Arterial	10,100	0.28	A	7,100	0.20	A
32. Calvine Rd.-Power Inn Rd. to Elk Grove-Florin Rd.	5	Arterial	47,600	1.06	F	47,600	0.88	D

Roadway Segment	Lanes (Mitigated)	Type	Existing Plus CAC Project Conditions			Existing Plus CAC Project Conditions With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
33. Calvine Rd.-Elk Grove-Florin Rd. to Grand Cru Dr.	4	Arterial	31,400	0.87	D	29,700	0.83	D
34. Calvine Rd.-Grand Cru. Dr. to Waterman Rd.	6	Arterial	31,900	0.59	A	29,600	0.55	A
35. Calvine R.-Waterman Rd. to Bradshaw Rd.	4	Arterial	18,800	0.52	A	19,600	0.54	A
36. Calvine Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	17,000	0.47	A	12,000	0.33	A
37. Calvine Rd.-Vineyard Rd. to Excelsior Rd	2	Rural	11,000	0.55	D	5,800	0.29	C
38. Calvine Rd.-Excelsior Rd. to Grant Line Rd.	2	Rural	3,800	0.19	B	3,800	0.19	B
39. Power Inn Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	31,100	0.86	D	31,100	0.86	D
40. Power Inn Rd.-Florin Rd. to Gerber Rd.	4	Arterial	31,000	0.86	D	28,900	0.80	D
41. Power Inn Rd.-Gerber Rd. to Calvine Rd.	4	Arterial	29,700	0.83	D	27,600	0.77	C
42. Florin-Perkins Rd.-Folsom Blvd. to SR 16	4	Arterial	28,500	0.79	C	23,200	0.64	B
43. Florin-Perkins Rd.-SR 16 to Fruitridge Rd.	4	Arterial	37,500	1.04	F	27,700	0.51	A
44. Florin-Perkins Rd.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	40,000	1.11	F	33,000	0.91	E
45. Florin-Perkins Rd. –Elder Creek Rd. to Florin Rd.	4	Arterial	38,100	1.06	F	32,700	0.91	E
46. French Rd.-Florin Rd. to Gerber Rd.	2	Arterial	20,800	1.16	F	24,400	0.68	B
47. Watt Ave.-Folsom Blvd. to Kiefer Blvd.	6	Arterial	64,300	1.07	F	68,500	1.14	F
48. South Watt Ave.-Kiefer Blvd. to SR 16	2	Arterial	46,800	2.60	F	64,500	1.08	F
49. South Watt Ave.-SR 16 to Fruitridge Rd.	2	Arterial	28,000	1.40	F	46,500	0.78	C
50. South Watt Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Arterial	22,100	1.23	F	42,000	0.78	C
51. South Watt Ave.-Elder Creek Rd. to Florin Rd.	2	Arterial	20,300	1.13	F	41,700	0.77	C
52. Elk Grove-Florin Rd.-Florin Rd. to Gerber Rd.	2	Arterial	29,300	1.63	F	49,600	0.92	E
53. Elk Grove-Florin Rd.-Gerber Rd to Carlisle Ave.	4	Arterial	43,300	1.20	F	49,500	0.92	E
54. Elk Grove-Florin Rd.-Carlisle Ave. to Vintage Park Dr.	6	Arterial	44,800	0.83	D	46,600	0.86	D
55. Elk Grove-Florin Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	40,200	1.12	F	42,500	0.79	C
56. Hedge Ave.-SR 16 to Fruitridge Rd.	2	Rural	8,700	0.44	D	4,400	0.22	C
57. Hedge Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Rural	17,900	0.90	E	6,500	0.33	C
58. Hedge Ave.-Elder Creek Rd. to Florin Rd.	2	Rural	16,300	0.82	E	8,900	0.45	E
59. Waterman Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	12,100	0.34	A	9,300	0.26	A
60. Bradshaw Rd.-Kiefer Blvd. to SR 16	4	Arterial	45,500	1.26	F	39,200	0.73	C
61. Bradshaw Rd.-SR 16 to Elder Creek Rd.	4	Arterial	32,500	0.90	E	36,800	0.68	B
62. Bradshaw Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	27,500	0.76	C	25,600	0.71	C
63. Bradshaw Rd.-Florin Rd. to Gerber Rd.	2	Arterial	26,700	1.48	F	29,100	0.81	E
64. Bradshaw Rd.-Gerber Rd. to Vintage Park Dr.	2	Arterial	17,400	0.97	E	20,300	0.56	A
65. Bradshaw Rd.-Vintage Park Dr. to Calvine Rd.	2	Arterial	14,700	0.81	D	18,600	0.51	A
66. Vineyard Rd.-Gerber Rd. to Calvine Rd.	2	Arterial	7,300	0.41	A	6,800	0.38	A
67. Excelsior Rd.-SR 16 to Florin Rd.	2	Rural	12,500	0.63	E	6,400	0.36	A
68. Excelsior Rd.-Florin Rd to Gerber Rd.	2	Rural	16,900	0.85	E	10,000	0.56	A

Roadway Segment	Lanes (Mitigated)	Type	Existing Plus CAC Project Conditions			Existing Plus CAC Project Conditions With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
69. Excelsior Rd.-Gerber Rd. to Calvine Rd.	2	Rural	11,500	0.58	D	6,100	0.34	A

Notes: Shaded areas indicate unacceptable operations. All arterial roadway segments assumed to have moderate access control except for Segments 7, 47, and 49, which were assumed to have high access control.
Blue – City of Sacramento Study Roadway Segments
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Table TC-14: Roadway Level of Service – Existing Plus Project Mitigated Conditions: PD Land Use Plan

Roadway Segment	Lanes (Mitigated)	Type	Existing Plus PD Project Conditions			Existing Plus PD Project Conditions with Mitigation With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd.-SR 16 to Watt Avenue	4	Arterial	25,500	0.71	C	22,200	0.62	B
2. Kiefer Blvd.-Florin-Perkins Rd. to Watt Ave.	2	Arterial	8,700	0.48	A	6,400	0.36	A
3. Kiefer Blvd.-Watt Ave. to Rosemont Dr.	4	Arterial	23,900	0.66	B	21,300	0.59	A
4. Kiefer Blvd.-Rosemont Dr. to Bradshaw Rd.	4	Arterial	14,300	0.40	A	11,900	0.33	A
5. SR 16-Folsom Blvd. to Watt Ave.	2(4)	Arterial	19,500	1.08	F	18,900	0.53	A
6. SR 16 - Watt Ave. to Bradshaw Rd.	2(4)	Arterial	20,700	1.15	F	23,500	0.65	B
7. SR 16-Bradshaw Rd. to Sunrise Blvd.	2	Arterial	12,000	0.60	A	12,000	0.60	A
8. Fruitridge Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	23,300	0.65	B	23,300	0.65	B
9. Fruitridge Rd-Florin-Perkins Rd. to South Watt Ave.	2(4)	Arterial	18,700	1.04	F	18,300	0.51	A
10. Fruitridge Rd.-South Watt Ave. to Hedge Ave.	2	Rural	8,600	0.43	D	6,200	0.34	A
11. Elder Creek Rd.-Power Inn Rd. to Florin-Perkins Rd.	2(4)	Arterial	22,000	1.22	F	22,000	0.61	B
12. Elder Creek Rd.-Florin-Perkins Rd. to South Watt Ave.	2(4)	Arterial	18,700	1.04	F	18,200	0.51	A
13. Elder Creek Rd.-South Watt Ave. to Hedge Ave.	2(4)	Rural	16,700	0.84	E	22,700	0.63	B
14. Elder Creek Rd.-Hedge Ave. to Bradshaw Rd.	2(4)	Rural	17,700	0.89	E	21,300	0.59	A
15. Elder Creek Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	4,700	0.24	C	4,400	0.24	A
16. Florin Rd.-Stockton Blvd. to Power Inn Rd.	4(6)	Arterial	38,200	1.06	F	38,200	0.71	C
17. Florin Rd. – Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	37,500	1.04	F	28,000	0.78	C
18. Florin Rd.-Florin-Perkins Rd. to Gardner Ave.	4(6)	Arterial	29,800	0.83	D	39,500	0.73	C
19. Florin Rd – Gardner Ave. to South Watt Ave.	4(6)	Arterial	35,200	0.98	E	45,500	0.84	D
20. Florin Rd.-South Watt Ave. to Hedge Ave.	2(4)	Rural	29,400	1.47	F	29,000	0.81	D
21. Florin Rd.-Hedge Ave. to Bradshaw Rd.	2	Rural	16,800	0.84	E	13,400	0.67	E
22. Florin Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	7,100	0.36	C	7,000	0.35	C
23. Florin Rd. – Excelsior Rd. to Sunrise Blvd.	2	Rural	5,400	0.27	C	5,400	0.27	C
24. Gerber Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	23,900	0.66	B	23,900	0.66	B
25. Gerber Rd.-Power Inn Rd. to French Rd.	4(6)	Arterial	38,800	1.08	F	42,900	0.79	C
26. Gerber Rd. – French Road to Elk Grove-Florin Rd.	4	Arterial	35,600	0.99	E	30,700	0.85	D
27. Gerber Rd.-Elk Grove-Florin Rd. to Bradshaw Rd.	2(4)	Rural	21,500	1.08	F	21,700	0.60	B
28. Gerber Rd.-Bradshaw Rd. to Vineyard Rd.	2	Rural	6,400	0.32	C	6,800	0.34	C
29. Gerber Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	5,200	0.26	C	3,100	0.16	B
30. Vintage Park Dr.-Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	18,600	0.52	A	15,000	0.42	A
31. Vintage Park Dr. – Waterman Rd. to Bradshaw Rd.	4	Arterial	10,400	0.29	A	7,300	0.20	A

Roadway Segment	Lanes (Mitigated)	Type	Existing Plus PD Project Conditions			Existing Plus PD Project Conditions with Mitigation With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
32. Calvine Rd.-Power Inn Rd. to Elk Grove-Florin Rd.	5(6)	Arterial	48,600	1.08	F	48,600	0.90	D
33. Calvine Rd.-Elk Grove-Florin Rd. to Grand Cru Dr.	4	Arterial	31,600	0.88	D	29,700	0.83	D
34. Calvine Rd.-Grand Cru. Dr. to Waterman Rd.	6	Arterial	32,600	0.60	B	29,500	0.55	A
35. Calvine R.-Waterman Rd. to Bradshaw Rd.	4	Arterial	19,000	0.53	A	19,500	0.54	A
36. Calvine Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	18,000	0.50	A	12,000	0.33	A
37. Calvine Rd.-Vineyard Rd. to Excelsior Rd	2	Rural	11,200	0.56	D	5,800	0.29	C
38. Calvine Rd.-Excelsior Rd. to Grant Line Rd.	2	Rural	3,800	0.19	B	3,800	0.19	B
39. Power Inn Rd.-Elder Creek Rd. to Florin Rd.	4(6)	Arterial	31,400	0.87	D	31,400	0.58	A
40. Power Inn Rd.-Florin Rd. to Gerber Rd.	4	Arterial	31,500	0.88	D	28,900	0.80	D
41. Power Inn Rd.-Gerber Rd. to Calvine Rd.	4	Arterial	30,200	0.84	D	27,600	0.77	C
42. Florin-Perkins Rd.-Folsom Blvd. to SR 16	4	Arterial	29,100	0.81	D	24,000	0.67	B
43. Florin-Perkins Rd.-SR 16 to Fruitridge Rd.	4(6)	Arterial	38,500	1.07	F	27,700	0.51	A
44. Florin-Perkins Rd.-Fruitridge Rd. to Elder Creek Rd.	4(6)	Arterial	40,800	1.13	F	35,400	0.66	B
45. Florin-Perkins Rd. –Elder Creek Rd. to Florin Rd.	4(6)	Arterial	39,600	1.10	F	35,300	0.65	B
46. French Rd.-Florin Rd. to Gerber Rd.	2(4)	Arterial	21,000	1.17	F	25,800	0.72	C
47. Watt Ave.-Folsom Blvd. to Kiefer Blvd.	6	Arterial	64,900	1.08	F	68,900	1.15	F
48. South Watt Ave.-Kiefer Blvd. to SR 16	2(6)	Arterial	47,200	2.62	F	65,400	1.09	F
49. South Watt Ave.-SR 16 to Fruitridge Rd.	2(6)	Arterial	28,500	1.43	F	46,900	0.78	C
50. South Watt Ave.-Fruitridge Rd. to Elder Creek Rd.	2(6)	Arterial	22,400	1.24	F	42,700	0.79	C
51. South Watt Ave.-Elder Creek Rd. to Florin Rd.	2(6)	Arterial	21,000	1.17	F	43,400	0.80	D
52. Elk Grove-Florin Rd.-Florin Rd. to Gerber Rd.	2(6)	Arterial	29,400	1.63	F	50,600	0.94	E
53. Elk Grove-Florin Rd.-Gerber Rd to Carlisle Ave.	4(6)	Arterial	43,800	1.22	F	51,100	0.95	E
54. Elk Grove-Florin Rd.-Carlisle Ave. to Vintage Park Dr.	6	Arterial	49,600	0.92	D	50,700	0.94	E
55. Elk Grove-Florin Rd.-Vintage Park Dr. to Calvine Rd.	4(6)	Arterial	41,000	1.14	F	44,100	0.82	D
56. Hedge Ave.-SR 16 to Fruitridge Rd.	2	Rural	9,100	0.46	D	4,400	0.22	C
57. Hedge Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Rural	19,500	0.98	E	6,100	0.31	C
58. Hedge Ave.-Elder Creek Rd. to Florin Rd.	2	Rural	18,600	0.93	E	10,000	0.50	D
59. Waterman Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	12,700	0.35	A	9,500	0.26	A
60. Bradshaw Rd.-Kiefer Blvd. to SR 16	4(6)	Arterial	47,100	1.31	F	40,600	0.75	C
61. Bradshaw Rd.-SR 16 to Elder Creek Rd.	4(6)	Arterial	34,000	0.94	E	38,900	0.72	C
62. Bradshaw Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	29,100	0.81	D	27,200	0.76	C
63. Bradshaw Rd.-Florin Rd. to Gerber Rd.	2(4)	Arterial	27,100	1.51	F	29,400	0.82	D
64. Bradshaw Rd.-Gerber Rd. to Vintage Park Dr.	2(4)	Arterial	16,900	0.94	E	20,200	0.56	A
65. Bradshaw Rd.-Vintage Park Dr. to Calvine Rd.	2(4)	Arterial	14,200	0.79	C	18,300	0.51	A

Roadway Segment	Lanes (Mitigated)	Type	Existing Plus PD Project Conditions			Existing Plus PD Project Conditions with Mitigation With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
66. Vineyard Rd.-Gerber Rd. to Calvine Rd.	2	Arterial	8,000	0.44	A	6,800	0.38	A
67. Excelsior Rd.-SR 16 to Florin Rd.	2	Rural	13,300	0.67	E	6,500	0.36	A
68. Excelsior Rd.-Florin Rd to Gerber Rd.	2	Rural	17,900	0.90	E	10,100	0.56	A
69. Excelsior Rd.-Gerber Rd. to Calvine Rd.	2	Rural	11,700	0.59	D	6,100	0.34	A

Notes: Shaded areas indicate unacceptable operations. All arterial roadway segments assumed to have moderate access control except for Segments 7, 47, and 49, which were assumed to have high access control.
Blue – City of Sacramento Study Roadway Segments
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Impacts to Intersections Under Existing Plus Project Conditions

CAC Land Use Plan/PD Land Use Plan

As shown in Tables TC-6 and TC-7, the implementation of the CAC Land Use Plan or PD Land Use Plan would cause traffic volumes to increase, which would result in ***potentially significant*** impacts to intersection service levels. Thirty-two (32) of the 45 intersections (21 signalized and 11 unsignalized) would operate unacceptably with the addition of the CAC Land Use Plan (See Table TC-15). Thirty-four (34) of the 45 intersections (23 signalized and 11 unsignalized) would operate unacceptably with the addition of the PD Land Use Plan. It should be noted that a secondary impact would occur for both the CAC and PD Land Use Plans as a result of the recommended system-wide mitigation for the Vintage Park Drive / Elk Grove-Florin Road intersection impacts. Therefore, in total, the CAC Land Use Plan would result in 33 potentially significant impacts to intersections and the PD Land Use Plan would result in 35 potentially significant impacts to intersections.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce impacts to many of the adversely impacted intersections. It should be noted that for some mitigation measures, only one of the two Land Use Plans is listed (CAC or PD). This is because the below section only provides mitigation measures for impacts determined to be potentially significant.

Several of the adversely affected intersections are not located within the jurisdiction of Sacramento County. While the Traffic Impact Analysis identified mitigation for areas outside of the County jurisdiction, Sacramento County does not have the land use authority to ensure that the improvements are implemented. As such, the impacts to intersections outside of County jurisdiction are considered *significant and unavoidable.* In addition, two intersection mitigation measures identified for the CAC and PD Land Use Plans are infeasible. Therefore, implementation of either land use plan would result in *significant and unavoidable* impacts to intersections.

Table TC-15: Impacts to Intersections

Impact Number	Intersection	CAC Land Use Plan Impact	PD Land Use Plan Impact	Primary or Secondary Impact?
TC-2(a)	Folsom Boulevard/SR 16	PS	PS	Primary
TC-2(b)	Folsom Boulevard/Florin-Perkins Road	SU	SU	Primary
TC-2(c)	Folsom Boulevard/South Watt Avenue	PS	PS	Primary
TC-2(d)	Kiefer Boulevard/South Watt Avenue	LS	PS	Primary
TC-2(e)	Kiefer Boulevard/Bradshaw Road	PS	PS	Primary
TC-2(f)	SR 16/Florin-Perkins Road	PS	PS	Primary
TC-2(g)	SR 16/South Watt Avenue	PS	PS	Primary
TC-2(h)	SR 16/Bradshaw Road	PS	PS	Primary
TC-2(i)	Fruitridge Road/Florin-Perkins Road	PS	PS	Primary
TC-2(j)	Fruitridge Road/South Watt Avenue	PS	PS	Primary
TC-2(k)	Fruitridge Road/Hedge Avenue	PS	PS	Primary
TC-2(l)	Elder Creek Road/Florin-Perkins Road	PS	PS	Primary
TC-2(m)	Elder Creek Road/South Watt Avenue	PS	SU	Primary
TC-2(n)	Elder Creek Road/Hedge Avenue	PS	PS	Primary
TC-2(o)	Elder Creek Road/Bradshaw Road	LS	PS	Primary
TC-2(p)	Florin Road/Power Inn Road	PS	PS	Primary
TC-2(q)	Florin Road/Florin-Perkins Road	SU	SU	Primary
TC-2(r)	Florin Road/Gardner Avenue	PS	PS	Primary
TC-2(s)	Florin Road/South Watt Avenue	SU	SU	Primary
TC-2(t)	Florin Road/Hedge Avenue	PS	PS	Primary
TC-2(u)	Florin Road/Bradshaw Road	PS	PS	Primary
TC-2(v)	Florin Road/Excelsior Road	PS	PS	Primary
TC-2(w)	Gerber Road/Power Inn Road	PS	PS	Primary
TC-2(x)	Gerber Road/French Road	SU	SU	Primary
TC-2(y)	Gerber Road/Elk Grove-Florin Road	SU	SU	Primary
TC-2(z)	Gerber Road/Waterman Road	PS	PS	Primary
TC-2(aa)	Gerber Road/Bar Du Lane	PS	PS	Primary
TC-2(bb)	Gerber Road /Bradshaw Road	PS	PS	Primary
TC-2(cc)	Gerber Road/Vineyard Road	PS	PS	Primary
TC-2(dd)	Gerber Road/Excelsior Road	PS	PS	Primary
TC-2(ee)	Tiogawoods Drive/Elk Grove-Florin Road	PS	PS	Primary
TC-2(ff)	Caselman Road/Elk Grove-Florin Road	PS	PS	Primary

Impact Number	Intersection	CAC Land Use Plan Impact	PD Land Use Plan Impact	Primary or Secondary Impact?
TC-2(gg)	Calvine Road/Elk Grove-Florin Road	PS	PS	Primary
TC-2(hh)	Calvine Road/Waterman Road	PS	PS	Primary
TC-2(ii)	Vintage Park Drive/Elk Grove-Florin Road	PS	PS	Secondary

LS = Less-than-Significant PS = Potentially Significant S = Significant and Unavoidable

Note: Total PS impacts for CAC Land Use Plan = 32
Total PS impacts for PD Land Use Plan = 34

Source: Fehr & Peers, 2008.

TC-2 All development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. Pursuant to the Program the following improvements shall be implemented subject to the approval of the controlling jurisdiction.

CAC LAND USE PLAN/PD LAND USE PLAN

TC-2(a) Modify the traffic signal timings at the Folsom Boulevard/SR 16 intersection to accommodate the projected PM peak hour traffic volumes, which would require reallocating traffic signal green time to critical turning movements.

TC-2(b) Widen the northbound and southbound approaches to the Folsom Boulevard/South Watt Avenue intersection to provide the following lane configurations:

- *Two left-turn lanes, three through lanes, and one right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lanes, and one right-turn lane on the southbound approach (with overlap phasing).*

TC-2(c) Widen the northbound and southbound approaches to the Kiefer Boulevard/Bradshaw Road intersection to provide the following lane configurations:

- *One left-turn lane, three through lanes, and one right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and one right-turn lane on the southbound approach.*

TC-2(d) Widen the northbound, southbound, and eastbound approaches to the SR 16/Florin-Perkins Road intersection to provide the following lane configurations:

- *One left-turn lane, three through lanes, and one right-turn lane on the northbound approach.*
- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, two through lanes, and a right-turn lane on the eastbound approach with overlap phasing.*

TC-2(e) Widen the northbound, southbound, eastbound, and westbound approaches to the SR 16/South Watt Avenue intersection to provide the following lane configurations:

- *One left-turn lane, three through lanes, and a right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *On left-turn lane, two through lanes, and one right-turn lane on the westbound approach.*

TC-2(f) *Widen the northbound, southbound, eastbound, and westbound approaches to the SR 16/Bradshaw Road intersection to provide the following lane configurations:*

- *One left-turn lane, three through lanes, and a right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the southbound approach.*
- *One left-turn lane, two through lanes, and a right-turn lane on the eastbound approach.*
- *One left-turn lane, two through lanes, and a right-turn lane on the westbound approach.*

TC-2(g) *Widen the northbound, southbound, and westbound approaches to the Fruitridge Road/Florin-Perkins Road intersection to provide the following lane configurations:*

- *Two left-turn lanes, three through lanes, and right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and right-turn lane on the southbound approach.*
- *Two left-turn lanes, two through lanes, and right-turn lane on the westbound approach.*

TC-2(h) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/South Watt Avenue intersection to provide the following lane configurations:*

- *One left-turn lane, three through lanes, and a right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-2(i) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/Hedge Avenue intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the westbound approach.*

TC-2(j) *Widen South Watt Avenue between Florin Road and Fruitridge Road from two to three lanes in each direction.*

TC-2(k) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/Hedge Avenue intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-2(l) *Widen the westbound approach to the Florin Road/Power Inn Road intersection to provide one left-turn lane, two through lanes, and a shared through/right-turn lane.*

TC-2(m) *Install a traffic signal and widen the northbound and southbound approaches and modify the eastbound, and westbound approaches to the Florin Road/Gardner Avenue intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the eastbound approach.*

- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the westbound approach.*

TC-2(n) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/Hedge Avenue intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-2(o) *Implement the system-wide study area roadway improvements identified in Mitigation Measure TC-1. (Note: mitigation is for the Florin Road/Bradshaw Road intersection impact.)*

TC-2(p) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/Excelsior Road intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the westbound approach.*

TC-2(q) *Implement the system-wide study area roadway improvements identified in Mitigation Measure TC-1. (Note: mitigation measure is for the Gerber Road/Power Inn Road intersection impact.)*

TC-2(r) *Install a traffic signal and widen the eastbound approach to the Gerber Road/Waterman Road intersection to provide one through lane and a shared through/ right-turn lane, widen the westbound approach to one left-turn lane and two through lanes, and widen the northbound approach to provide one left-turn lane and one right-turn lane.*

TC-2(s) *Install a traffic signal and widen the intersection approaches to the Gerber Road/Bar Du Lane intersection to include the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-2(t) *Widen the northbound, southbound, eastbound, and westbound approaches to the Gerber Road/Bradshaw Road intersection to provide the following lane configurations:*

- *One left-turn lane, one through lane, and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the southbound approach.*
- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-2(u) *Install a traffic signal at the Gerber Road/Vineyard Road intersection.*

TC-2(v) *Widen the southbound approach to the Gerber Road/Excelsior Road intersection to provide a shared through/left-turn lane and a right-turn lane.*

TC-2(w) *Widen the northbound approach to the Tiogawoods Drive/Elk Grove-Florin Road intersection to provide a one left-turn lane, two through lanes, and a shared through/right-turn lane.*

TC-2(x) *Install a traffic signal, provide full access, and widen the northbound, southbound, eastbound, and westbound approaches to the Caselman Road/Elk Grove-Florin Road intersection to provide the following lane configurations:*

- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the northbound approach.*

- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the westbound approach.*

TC-2(y) *Widen the northbound and southbound approaches to the Calvine Road/Elk Grove-Florin Road intersection to provide the following lane configurations:*

- *Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane (with overlap phasing) on the southbound approach.*

TC-2(z) *Widen the eastbound and westbound approaches to the Calvine Road/Waterman Road intersection to provide the following lane configurations:*

- *One left-turn lane, three through lanes, and a right-turn lane on the eastbound approach.*
- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the westbound approach.*
- *Provide right-turn overlap phasing for the westbound right-turn lane at the Vintage Park Drive/Elk Grove-Florin Road intersection, which would require prohibiting southbound u-turn movements.*

PD LAND USE PLAN

TC-2(bb) *Widen the northbound and southbound approach to the Kiefer Boulevard/South Watt Avenue intersection to provide two left-turn lanes, two through lanes, and a shared through/right-turn lane.*

TC-2(cc) *Widen the northbound and southbound approaches to the Elder Creek Road/Bradshaw Road intersection to provide one left-turn lane, two through lanes, and shared through/right-turn lane.*

PROPOSED IMPROVEMENTS THAT WOULD NOT REDUCE IMPACTS TO A LESS-THAN-SIGNIFICANT LEVEL

PD LAND USE PLAN

TC-2(dd) *Widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/South Watt Avenue intersection to provide the following lane configurations:*

- *One left-turn lane, three through lanes, and a right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the southbound approach.*
- *One left-turn lane, two through lanes, and right-turn lane on the eastbound approach.*
- *One left-turn lane, two through lanes, and right-turn lane on the westbound approach.*

Implementation of this mitigation measure would reduce the impact to a less-than-significant level for the CAC Land Use Plan and PD Land Use Plan in the AM peak hour. However, the impact would remain ***significant and unavoidable*** *during the PM peak hour with the PD Plan.*

CAC LAND USE PLAN/PD LAND USE PLAN

TC-2(ee) *Widen the westbound approach to the Florin Road/Florin-Perkins Road intersection to provide the following lane configuration:*

- *One left-turn lane, two through lanes, and a right-turn lane (with overlap phasing) on the westbound approach.*

While this improvement would reduce the magnitude of the impact, the impact would remain ***significant and unavoidable****.*

TC-2(ff) *Widen the eastbound approach to the Gerber Road/French Road intersection to provide the following lane configurations:*

- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the eastbound approach.*

The above improvement would improve PM peak hour operations; however, the AM peak hour operations would remain unacceptable. Therefore, this impact would remain ***significant and unavoidable****.*

TC-2(gg) *Widen the northbound and southbound approaches to the Gerber Road/Elk Grove-Florin Road intersection to provide the following lane configurations in addition to right-turn overlap phasing for the eastbound right-turn lane:*

- *Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach.*

This improvement would reduce the volume-to-capacity ratio in the PM peak hour, but not to a less-than-significant level. Therefore, this impact would remain ***significant and unavoidable****.*

TC-2(hh) *Widen the westbound approach to the Folsom Boulevard/Florin-Perkins Road intersection to provide two left-turn lanes, one through lane, and one shared through/right-turn lane. The improvement would provide LOS D operations in the both the AM and PM peak hours with the CAC and PD Plans. However, this improvement would require additional right-of-way. The acquisition of additional right-of-way may not be feasible as a building is located on the southwest corner of the intersection, and the intersection is located in the City of Sacramento. Due to the right-of-way constraints, implementation of this mitigation measure is infeasible.*

TC-2(ii) *Widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/South Watt Avenue intersection to provide the following lane configurations:*

- *Two left-turn lanes, three through lanes, and a right-turn lane (with overlap phasing) on the northbound approach.*
- *Two left-turn lane, three through lanes, and a right-turn lane on the southbound approach.*
- *Two left-turn lanes, three through lanes, and a free right-turn lane on the eastbound approach (this would require a lane transition east of South Watt Avenue, a*

southbound receiving lane for the free right-turn lane, and a island separating the eastbound through and free right turn).

- *Two left-turn lanes, three through lanes, and a right-turn lane on the westbound approach.*

Implementation of this mitigation measure would reduce the impact to a less-than-significant level. However, the intersection mitigation requires an extra lane on South Watt Avenue to the south of the intersection, above and beyond what was required in Mitigation Measure TC-1. It should be noted that the construction of a free right-turn lane on the eastbound approach may not be feasible due to right-of-way availability for the southbound receiving lane or may not be desired due to the potential difficulty for pedestrians to navigate. Without this feature, the impact would remain ***significant and unavoidable****.*

DISPOSITION OF EXISTING PLUS PROJECT IMPACTS TO INTERSECTIONS FOLLOWING MITIGATION

As outlined above, several mitigation measures are proposed to reduce the significance of impacts to study intersections. Plates TC-12, -13 and -14, above, show the existing roadway system, intersection traffic control, and lane configurations with proposed mitigation, respectively. Tables TC-16 and TC-17 summarize intersection operations with proposed mitigation for the CAC and PD Land Use Plans, respectively.

The proposed mitigation would reduce the impacts to 28 of the 33 intersections adversely affected by implementation of the CAC Land Use Plan and 29 of the 35 intersections adversely affected by the PD Land Use Plan to a less-than-significant level. However, the required improvements for five intersections under the CAC Land Use Plan and six of the intersections under the PD Land Use Plan would not reduce impacts to a less-than-significant level. Therefore, impacts to intersections would remain ***significant and unavoidable***.

Table TC-16: Intersection Levels of Service – Existing Plus Project Mitigated Conditions: CAC Land Use Plan

Intersection	Control	Existing Plus CAC Project Conditions				Existing Plus CAC Project Mitigated Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. Folsom Blvd./SR 16	Signal	32	C	36	D	30	C	27	C
2. Folsom Blvd./Florin-Perkins Rd.	Signal	69	E	67	E	51	D	52	D
3. Folsom Blvd./South Watt Ave.	Signal	>80	F	>80	F	57	E	43	D
4. Kiefer Blvd./South Watt Ave.	Signal	0.98	E	0.90	D	0.85	D	0.78	C
5. Kiefer Blvd./Bradshaw Rd.	Signal	0.91	E	**1.19**	**F**	0.59	A	0.90	E
6. SR 16/Florin-Perkins Rd.	Signal	>80	F	>80	F	34	C	49	D
7. SR 16/South Watt Ave.	Signal	**1.39**	**F**	**1.73**	**F**	0.86	D	0.89	D
8. SR 16/Hedge Ave.	Signal	0.73	C	0.75	C	0.46	A	0.45	A
9. SR 16/Bradshaw Rd.	Signal	**1.27**	**F**	**1.06**	**F**	0.96	E	0.85	D
10. SR 16/Excelsior Rd.	Signal	0.89	D	0.92	E	0.89	D	0.92	E
11. Fruitridge Rd./Florin-Perkins Rd.	Signal	80	F	>80.0	F	51	D	53	D
12. Fruitridge Rd./South Watt Ave.	4-Way Stop	>50	F	>50	F	28	C	29	C
13. Fruitridge Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.57	A	0.65	B
14. Elder Creek Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
15. Elder Creek Rd./South Watt Ave.	Signal	>80	F	>80	F	31	C	26	C
16. Elder Creek Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.75	C	0.84	D
17. Elder Creek Rd./Bradshaw Rd.	Signal	0.86	D	0.92	E	0.68	B	0.69	B
18. Elder Creek Rd./Excelsior Rd.	2-Way Stop	24	C	17	C	21	C	16	C
19. Florin Rd./Power Inn Rd.	Signal	0.96	E	**1.02**	**F**	0.91	E	0.90	D
20. Florin Rd./Florin-Perkins Rd.	Signal	**1.24**	**F**	**1.04**	**F**	1.18	F	1.16	F
21. Florin Rd./Gardner Ave.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.64	B	0.58	A
22. Florin Rd./South Watt Ave.	Signal	**1.45**	**F**	**1.63**	**F**	0.78	C	0.82	D
23. Florin Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.77	C	0.75	C
24. Florin Rd./Waterman Rd.	Cumulative – Scenario Intersection								
25. Florin Rd./Bradshaw Rd.	Signal	0.76	C	**1.00**	**F**	0.80	C	0.94	E
26. Florin Rd./Vineyard Rd.	Cumulative – Scenario Intersection								
27. Florin Rd./Excelsior Rd.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.79	C	0.69	B
28. Gerber Rd./Power Inn Rd.	Signal	**1.03**	**F**	0.94	E	0.94	E	0.90	E
29. Gerber Rd./French Rd.	Signal	**1.21**	**F**	**1.05**	**F**	1.05	F	0.97	E
30. Gerber Rd./Elk-Grove Florin Rd.	Signal	**1.10**	**F**	**1.36**	**F**	0.78	C	1.12	F
31. Gerber Rd./Waterman Rd.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.45	A	0.41	A
32. Gerber Rd./Bar Du Ln.	2-Way	**>50**	**F**	**>50**	**F**	0.38	A	0.36	A

Intersection	Control	Existing Plus CAC Project Conditions				Existing Plus CAC Project Mitigated Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
	Stop								
33. Gerber Rd./Bradshaw Rd.	Signal	**1.47**	**F**	**1.26**	**F**	0.75	C	0.93	E
34. Gerber Rd./Vineyard Rd.	2-Way Stop	**>50**	**F**	26	D	0.83	D	0.64	B
35. Gerber Rd./Excelsior Rd.	4-Way Stop	28	D	**>50**	**F**	26	D	17	C
36. Tiogawoods Dr./Elk Grove-Florin Rd.	Signal	**1.03**	**F**	0.75	C	0.80	C	0.73	C
37. Casselman Rd./Elk Grove-Florin Rd.	2-Way Stop	**>50**	**F**	34	D	0.78	C	0.69	B
38. Rogers Rd./Bradshaw Rd.	2-Way Stop	13	B	19	C	11	B	14	B
39. Vintage Park Dr./Elk Grove-Florin Rd.	Signal	0.85	D	0.73	C	0.90	D	0.76	C
40. Vintage Park Dr./Waterman Rd.	Signal	0.69	B	0.60	A	0.53	A	0.44	A
41. Vintage Park Dr./Bradshaw Rd.	Signal	0.65	B	0.68	B	0.75	C	0.74	C
42. Calvine Rd./Elk Grove-Florin Rd.	Signal	>80	F	>80	F	43	D	47	D
43. Calvine Rd./Waterman Rd.	Signal	51	F	>80	E	22	C	28	C
44. Calvine Rd./Bradshaw Rd.	Signal	35	C	50	D	36	D	50	D
45. Calvine Rd./Excelsior Rd.	4-Way Stop	22	C	27	D	22	C	24	C

Notes: Signal Control-Circular 212 Planning Methodology-Results present volume/capacity ratio and LOS.
2-Way Stop Control-2000 HCM Methodology-Results present delay and LOS for worst minor-street approach.
4-Way Stop Control-2000 HCM Methodology-Results present average delay and LOS.
Shaded areas indicate unacceptable operations.
Blue – City of Sacramento Study Intersections
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Table TC-17: Intersection Levels of Service – Existing Plus Project Mitigated Conditions: PD Land Use Plan

Intersection	Control	Existing Conditions				Existing Plus PD Project Mitigated Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. Folsom Blvd./SR 16	Signal	33	C	36	D	33	C	27	C
2. Folsom Blvd./Florin-Perkins Rd.	Signal	74	E	74	E	44	D	42	D
3. Folsom Blvd./South Watt Ave.	Signal	>80	F	>80	F	66	E	44	D
4. Kiefer Blvd./South Watt Ave.	Signal	**1.01**	**F**	0.90	D	0.88	D	0.78	C
5. Kiefer Blvd./Bradshaw Rd.	Signal	0.94	E	**1.23**	**F**	0.60	B	0.93	E
6. SR 16/Florin-Perkins Rd.	Signal	>80	F	>80	F	44	D	53	D
7. SR 16/South Watt Ave.	Signal	**1.44**	**F**	**1.77**	**F**	0.91	E	0.9	E
8. SR 16/Hedge Ave.	2-Way Stop	0.80	C	0.79	C	0.50	A	0.47	A
9. SR 16/Bradshaw Rd.	Signal	**1.32**	**F**	**1.13**	**F**	0.98	E	0.88	D
10. SR 16/Excelsior Rd.	Signal	0.89	D	0.92	E	0.89	D	0.92	E
11. Fruitridge Rd./Florin-Perkins Rd.	Signal	>80	F	>80.0	F	52	D	54	D
12. Fruitridge Rd./South Watt Ave.	4-Way Stop	>50	F	>50	F	32	C	31	C
13. Fruitridge Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.61	B	0.61	B
14. Elder Creek Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
15. Elder Creek Rd./South Watt Ave.	Signal	>80	F	>80	F	30	C	36	D
16. Elder Creek Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.81	D	0.93	E
17. Elder Creek Rd./Bradshaw Rd.	Signal	0.93	E	**1.03**	**F**	0.73	C	0.73	C
18. Elder Creek Rd./Excelsior Rd.	2-Way Stop	24	C	17	C	20	C	16	C
19. Florin Rd./Power Inn Rd.	Signal	0.99	E	**1.02**	**F**	0.94	E	0.90	E
20. Florin Rd./Florin-Perkins Rd.	Signal	**1.34**	**F**	**1.13**	**F**	1.27	F	1.33	F
21. Florin Rd./Gardner Ave.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.7	B	0.66	B
22. Florin Rd./South Watt Ave.	Signal	**1.54**	**F**	**1.66**	**F**	0.86	D	0.85	D
23. Florin Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.89	D	0.84	D
24. Florin Rd./Waterman Rd.	Cumulative –Scenario Intersection								
25. Florin Rd./Bradshaw Rd.	Signal	0.84	D	**1.05**	**F**	0.87	D	0.98	E
26. Florin Rd./Vineyard Rd.	Cumulative –Scenario Intersection								
27. Florin Rd./Excelsior Rd.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.81	D	0.69	B
28. Gerber Rd./Power Inn Rd.	Signal	**1.06**	**F**	0.96	E	0.95	E	0.92	E
29. Gerber Rd./French Rd.	Signal	**1.27**	**F**	**1.05**	**F**	1.09	F	0.97	E
30. Gerber Rd./Elk-Grove Florin Rd.	Signal	**1.14**	**F**	**1.39**	**F**	0.82	D	1.20	F
31. Gerber Rd./Waterman Rd.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.46	A	0.41	A
32. Gerber Rd./Bar Du Ln.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.39	A	0.35	A
33. Gerber Rd./Bradshaw Rd.	Signal	**1.49**	**F**	**1.29**	**F**	0.76	C	0.92	E
34. Gerber Rd./Vineyard Rd.	2-Way Stop	**>50**	**F**	25	D	0.83	D	0.63	B

Intersection	Control	Existing Conditions				Existing Plus PD Project Mitigated Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
35. Gerber Rd./Excelsior Rd.	4-Way Stop	29	D	**>50**	**F**	265	D	15	C
36. Tiogawoods Dr./Elk Grove-Florin Rd.	Signal	**1.04**	**F**	0.87	D	0.83	D	0.78	C
37. Casselman Rd./Elk Grove-Florin Rd.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.95	E	0.82	D
38. Rogers Rd./Bradshaw Rd.	2-Way Stop	14	B	19	C	11	B	14	B
39. Vintage Park Dr./Elk Grove-Florin Rd.	Signal	0.92	E	0.78	C	0.98	E	0.76	C
40. Vintage Park Dr./Waterman Rd.	Signal	0.73	C	0.58	A	0.57	A	0.46	A
41. Vintage Park Dr./Bradshaw Rd.	Signal	0.63	B	0.70	C	0.73	C	0.74	C
42. Calvine Rd./Elk Grove-Florin Rd.	Signal	>80	F	>80	F	42	D	48	D
43. Calvine Rd./Waterman Rd.	Signal	56	F	>80	E	36	D	48	D
44. Calvine Rd./Bradshaw Rd.	Signal	35	C	51	D	25	D	51	D
45. Calvine Rd./Excelsior Rd.	4-Way Stop	21	C	23	D	22	C	24	C

Notes: Signal Control-Circular 212 Planning Methodology-Results present volume/capacity ratio and LOS.
2-Way Stop Control-2000 HCM Methodology-Results present delay and LOS for worst minor-street approach.
4-Way Stop Control-2000 HCM Methodology-Results present average delay and LOS.
Shaded areas indicate unacceptable operations.
Blue – City of Sacramento Study Intersections
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Impacts to Transit System Operations

Transit system operations were evaluated by considering the potential effects of the project on existing transit services near the project site. All major arterial and collector streets within the project would be designed to accommodate transit facilities such as turnouts, bus stops, and shelters. Therefore, implementation of the proposed project is not expected to disrupt or interfere with existing transit operations. Therefore, the proposed project would result in a ***less-than-significant*** impact to transit system operations.

Impacts to Bicycle and Pedestrian System Operations

All major arterial and collector streets within the project would be designed to accommodate planned bikeways and pedestrian sidewalks. Therefore, implementation of the proposed project will not disrupt or interfere with existing or planned bikeways and pedestrian facilities in the study area. As a result, the proposed project would result in a ***less-than-significant*** impact to bicycle and pedestrian system operations.

Cumulative Impacts and Mitigation Measures

Impacts to Roadway Segments Under Cumulative Conditions

CAC Land Use Plan/PD Land Use Plan

As shown in Table TC-8 above, implementation of the CAC Land Use Plan would result in unacceptable operations at 36 of the 72 study roadway segments. In addition, as shown in Table TC-9 above, the PD Land Use Plan would result unacceptable operations at 35 of the 72 roadway segments. Implementation of either the CAC Land Use Plan or the PD Land Use Plan would result in ***potentially significant*** impacts to the study roadway segments shown in Table TC -16, below.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce impacts to many of the adversely impacted roadway segments. It should be noted that for some mitigation measures, only one of the two Land Use Plans is listed (CAC or PD). This is because the below section only provides mitigation measures for impacts determined to be potentially significant.

Table TC-18: Cumulative Impacts to Roadway Segments

Impact Number	Roadway Segment	CAC Land Use Plan Impact	PD Land Use Plan Impact	Primary or Secondary Impact?
TC-3(a)	Folsom Boulevard – SR 16 to Watt Avenue	SU	SU	Primary
TC-3(b)	SR 16 – Folsom Boulevard to South Watt Avenue	PS	PS	Primary
TC-3(c)	SR 16 –South Watt Avenue to Bradshaw Road	PS	PS	Primary
TC-3(d)	SR 16 – Bradshaw Road to Sunrise Boulevard	PS	PS	Primary
TC-3(e)	Fruitridge Road – Power Inn Road to Florin-Perkins Road	SU	SU	Primary
TC-3(f)	Fruitridge Road – South Watt Avenue to Hedge Avenue	PS	PS	Primary
TC-3(g)	Elder Creek Road – Hedge Avenue to Bradshaw Road	PS	PS	Primary
TC-3(h)	Florin Road – Stockton Boulevard to Power Inn Road	PS	PS	Primary
TC-3(i)	Florin Road – Power Inn Road to Florin-Perkins Road	SU	SU	Primary
TC-3(j)	Florin Road – Florin-Perkins Road to Gardner Avenue	PS	PS	Primary
TC-3(k)	Florin Road – Gardner Avenue to South Watt Avenue	PS	PS	Primary
TC-3(l)	Florin Road – South Watt Avenue to Hedge Avenue	PS	PS	Primary
TC-3(m)	Gerber Road – Power Inn Road to French Road	SU	SU	Primary
TC-3(n)	Gerber Road – French Road to Elk Grove-Florin Road	SU	SU	Primary
TC-3(o)	Calvine Road – Power Inn Road to Elk Grove-Florin Road	LS	PS	Primary
TC-3(p)	Calvine Road – Elk Grove-Florin Road to Grand Cru Drive	PS	PS	Primary
TC-3(q)	Power Inn Road – Elder Creek Road to Florin Road	SU	PS	Primary
TC-3(r)	Power Inn Road –Florin Road to Gerber Road	PS	LS	Primary
TC-3(s)	Florin-Perkins Road – SR 16 to Fruitridge Road	PS	PS	Primary
TC-3(t)	Florin-Perkins Road – Fruitridge Road to Elder Creek Road	SU	SU	Primary
TC-3(u)	Florin-Perkins Road – Elder Creek Road to Florin Road	PS	SU	Primary
TC-3(v)	French Road – Florin Road to Gerber Road	PS	PS	Primary
TC-3(w)	South Watt Avenue – Kiefer Boulevard to SR 16	PS	PS	Primary
TC-3(x)	South Watt Avenue – SR 16 to Fruitridge Road	PS	PS	Primary
TC-3(y)	South Watt Avenue – Fruitridge Road to Elder Creek Road	PS	PS	Primary
TC-3(z)	South Watt Avenue – Elder Creek Road to Florin Road	PS	PS	Primary
TC-3(aa)	Elk Grove-Florin Road – Florin Road to Gerber Road	PS	PS	Primary
TC-3(bb)	Elk Grove-Florin Road – Gerber Road to Carlisle Avenue	PS	PS	Primary
TC-3(cc)	Elk Grove-Florin Road – Vintage Park Drive to Calvine Road	PS	PS	Primary
TC-3(dd)	Hedge Avenue – Fruitridge Road to Elder Creek Road	PS	PS	Primary
TC-3(ee)	Bradshaw Road – Kiefer Boulevard to SR 16	PS	PS	Primary
TC-3(ff)	Bradshaw Road – SR 16 to Elder Creek Road	LS	PS	Primary

Impact Number	Roadway Segment	CAC Land Use Plan Impact	PD Land Use Plan Impact	Primary or Secondary Impact?
TC-3(gg)	Bradshaw Road – Elder Creek Road to Florin Road	LS	PS	Primary
TC-3(hh)	Waterman Road – Vintage Park Drive to Gerber Road	PS	PS	Primary
TC-3(ii)	Elder Creek Road – South Watt Avenue to Hedge Avenue	PS	PS	Secondary
TC-3(jj)	Florin Road – Bradshaw Road to Excelsior Road	PS	PS	Secondary
TC-3(kk)	Bradshaw Road – Florin Road to Gerber Road	PS	PS	Secondary

LS = Less-than-Significant PS = Potentially Significant S = Significant and Unavoidable

Note: Total PS impacts for CAC Land Use Plan = 33
Total PS impacts for PD Land Use Plan = 35

Source: Fehr & Peers, 2008.

Several of the adversely affected roadway segments are not located within the jurisdiction of Sacramento County. While the Traffic Impact Analysis identified mitigation for areas outside of the County jurisdiction, Sacramento County does not have the land use authority to ensure that the improvements are implemented. As such, the impact to roadway segments outside of County jurisdiction is considered *significant and unavoidable.* In addition, mitigation identified for some of the roadways is infeasible. Therefore, implementation of either land use plan would result in *significant and unavoidable* impacts to roadway segments.

TC-3 All development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. Pursuant to the Program the following improvements shall be implemented subject to the approval of the controlling jurisdiction.

CAC LAND USE PLAN/PD LAND USE PLAN

TC-3(b) Widen the two-lane section of SR 16 between Folsom Boulevard and South Watt Avenue from one to two lanes in each direction.

TC-3(c) Widen the section of SR 16 between South Watt Avenue and Bradshaw Road from one to three lanes in each direction.

TC-3(d) Widen the section of SR 16 between Bradshaw Road and Sunrise Boulevard from one to two lanes in each direction.

TC-3(g) Widen the section of Elder Creek Road between Hedge Avenue and Bradshaw Road from one to two lanes in each direction.

TC-3(h) Widen the section of Florin Road between Stockton Boulevard and Power Inn Road from two to three lanes in each direction.

TC-3(j) Widen the section of Florin Road between Florin-Perkins Road and Gardner Avenue from two to three lanes in each direction.

TC-3(k) Widen the section of Florin Road between Gardner Avenue and South Watt Avenue from two to three lanes in each direction.

TC-3(l) Widen the section of Florin Road between South Watt Avenue and Hedge Avenue from one to two lanes in each direction.

TC-3(o) *Widen the four-lane section of Calvine Road between Power Inn Road and Elk Grove-Florin Road from two to three lanes in each direction.*

TC-3(p) *Widen the four-lane section of Calvine Road between Elk Grove-Florin Road and Grand Cru Drive from two to three lanes in each direction.*

TC-3(s) *Widen the section of South Watt Avenue between SR 16 and Fruitridge Road from two to three lanes in each direction.*

TC-3(v) *Widen the section of French Road between Florin Road and Gerber Road from one to two lanes in each direction.*

TC-3(w) *Widen the section of South Watt Avenue between Kiefer Boulevard and SR 16 from three lanes (northbound) and two lanes (southbound) to three lanes (northbound) and three lanes (southbound).*

TC-3(x) *Widen the section of South Watt Avenue between SR 16 and Fruitridge Road from two to three lanes in each direction.*

TC-3(y) *Widen the section of South Watt Avenue between Fruitridge Road and Elder Creek Road from two to three lanes in each direction.*

TC-3(z) *Widen the section of South Watt Avenue between Elder Creek Road and Florin Road from two to three lanes in each direction.*

TC-3(aa) *Widen the section of Elk Grove-Florin Road between Florin Road and Gerber Road from two to three lanes in each direction.*

TC-3(bb) *Widen the section of Elk Grove-Florin Road between Gerber Road and Carlisle Avenue from two to three lanes in each direction.*

TC-3(cc) *Widen the four-lane section of Elk Grove-Florin Road between Vintage Park Drive and Calvine Road from two to three lanes in each direction.*

TC-3(dd) *Widen the section of South Watt Avenue between Elder Creek Road and SR 16 from two to three lanes in each direction.*

TC-3(ff) *Widen the section of Bradshaw Road between Kiefer Boulevard and SR 16 from two to three lanes in each direction.*

TC-3(hh) *Widen the section of Waterman Road between Vintage Park Drive and Gerber Road from one to two lanes in each direction.*

TC-3(ii) *Widen the section of Elder Creek Road between South Watt Avenue and Hedge Avenue from one to two lanes in each direction.*

TC-3(jj) *Widen the section of Florin Road between Bradshaw Road and Excelsior Road from one to two lanes in each direction.*

TC-3(kk) *Widen the section of Bradshaw Road between Florin Road and Gerber Road from two to three lanes in each direction.*

PD LAND USE PLAN

TC-3(ff) *Widen the section of Bradshaw Road between SR 16 and Elder Creek Road from two to three lanes in each direction.*

TC-3(gg) *Widen the section of Bradshaw Road between Elder Creek Road and Florin Road from two to three lanes in each direction.*

CAC LAND USE PLAN

TC-3(r) *Widen the section of French Road between Florin Road and Gerber Road from one to two lanes in each direction.*

TC-3(u) *Widen the section of South Watt Avenue between Elder Creek Road and Florin Road from two to three lanes in each direction.*

PROPOSED IMPROVEMENTS THAT WOULD NOT REDUCE IMPACTS TO A LESS-THAN-SIGNIFICANT LEVEL

CAC LAND USE PLAN/PD LAND USE PLAN

TC-3(a) *Widen the four-lane section of Folsom Boulevard between SR 16 and Watt Avenue from two to three lanes in each direction. Based on the traffic volume thresholds presented above, this improvement would accommodate the projected daily traffic volume and provide LOS A (volume-to-capacity ratio = 0.56) operations with the PD Plan and provide LOS A (volume-to-capacity ratio = 0.55) operations with the CAC*

Plan, and would reduce the volume-to-capacity ratio to less than "no project" conditions. Implementation of this mitigation measure would reduce the impact to a less-than-significant level. However, with this improvement, Folsom Boulevard would be widened beyond the roadway's designation as a 4-lane arterial in the City of Sacramento General Plan. Consequently, there may not be sufficient right-of-way to construct the improvement; therefore, this impact is considered ***significant and unavoidable****.*

TC-3(e) *Widen the section of Fruitridge Road between Power Inn Road and Florin-Perkins Road from two to three lanes in each direction. Based on the traffic volume thresholds presented above, this improvement would accommodate the projected daily traffic volume and provide LOS B (volume-to-capacity ratio = 0.62) operations with the CAC Plan and LOS B (volume-to-capacity ratio = 0.62) operations with the PD Plan. Implementation of this mitigation measure would reduce the impact to a less-than-significant level. With this improvement, Fruitridge Road would be widened beyond the roadway's designation as a 4-lane arterial in the City of Sacramento General Plan. Consequently, there may not be sufficient right-of-way to construct the improvement, so this impact is considered* ***significant and unavoidable****.*

TC-3(i) *Construct Alta Florin Road north of Florin Road between Power Inn Road and Florin-Perkins Road. Based on the traffic volume thresholds presented above, this improvement would reduce the projected daily traffic volume but the LOS would remain LOS F (volume-to-capacity ratio = 1.03) operations with the CAC Plan and LOS F (volume-to-capacity ratio = 0.04) operations with the PD Plan. Implementation of this mitigation measure would reduce the impact. However, this improvement would exacerbate conditions at the Florin Road/Power Inn Road intersection resulting in a* ***significant and unavoidable*** *impact.*

TC-3(m) *Widen the section of Gerber Road between Power Inn Road and French Road from two to three lanes in each direction. Based on the traffic volume thresholds presented above, this improvement would accommodate the projected daily traffic volume and provide LOS C (volume-to-capacity ratio: CAC=0.71, PD=0.72) operations with the CAC and PD Plans. Implementation of this mitigation measure would reduce the impact to a less-than-significant level. With this improvement, Gerber Road would be widened beyond the*

roadway's designation as a 4-lane arterial in the Sacramento County General Plan. Consequently, there may not be sufficient right-of-way to construct the improvement; therefore, this impact is considered ***significant and unavoidable****.*

TC-3(n) *Widen the section of Gerber Road between French Road and Elk Grove-Florin Road from two to three lanes in each direction. Based on the traffic volume thresholds presented above, this improvement would accommodate the projected daily traffic volume and provide LOS C (volume-to-capacity ratio: CAC=0.74, PD=0.76) operations with the CAC and PD Plans. Implementation of this mitigation measure would reduce the impact to a less-than-significant level. With this improvement, Gerber Road would be widened beyond the roadway's designation as a 4-lane arterial in the Sacramento County General Plan. Consequently, there may not be sufficient right-of-way to construct the improvement; therefore, this impact is considered* ***significant and unavoidable****.*

TC-3(t) *Widen the section of Florin-Perkins Road between Fruitridge Road and Elder Creek Road from two to three lanes in each direction. Based on the traffic volume thresholds presented above, this improvement would accommodate the projected daily traffic volume and provide LOS C (volume-to-capacity ratio: CAC=0.77, PD=0.76) operations with the CAC and PD Plans. Implementation of this mitigation measure would reduce the impact to a less-than-significant level. With this improvement, Florin-Perkins Road would be widened beyond the roadway's designation as a 4-lane arterial in the City of Sacramento General Plan. Consequently, there may not be sufficient right-of-way to construct the improvement, so this impact is considered* ***significant and unavoidable****.*

CAC LAND USE PLAN

TC-3(q) *Widen the section of Power Inn Road between Elder Creek Road and Florin Road from two to three lanes in each direction. Based on the traffic volume thresholds presented above, this improvement would accommodate the projected daily traffic volume and provide LOS A (volume-to-capacity ratio = 0.58) operations and reduce the volume-to-capacity ratio to less than "no project" conditions. Implementation of this mitigation measure would reduce the impact to a less-than-significant level. With this improvement, Power Inn*

Road would be widened beyond the roadway's designation as a 4-lane arterial in the City of Sacramento General Plan. Consequently, there may not be sufficient right-of-way to construct the improvement, so this impact is considered ***significant and unavoidable****.*

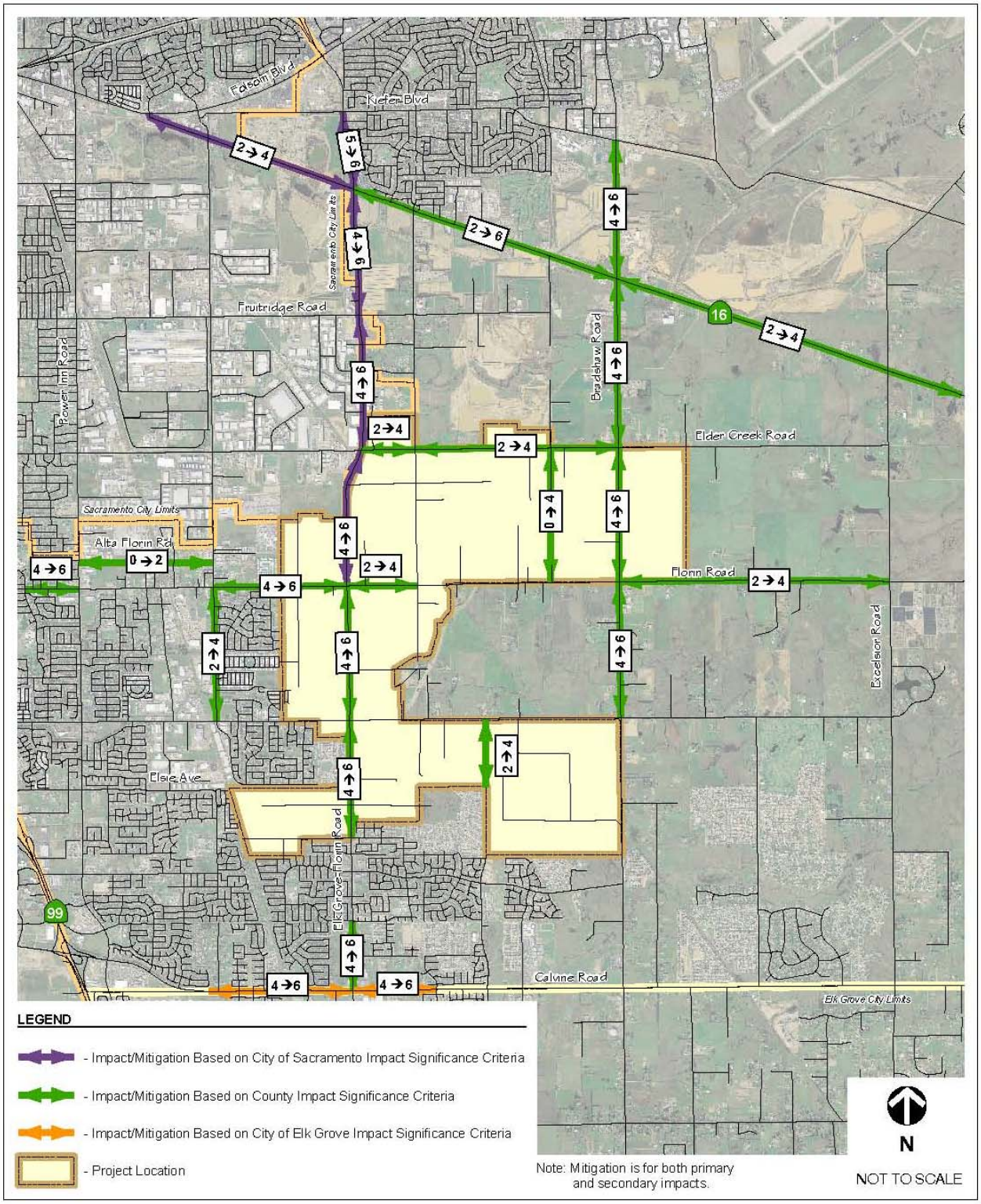
PD LAND USE PLAN

TC-3(u) *Widen the section of South Watt Avenue between Elder Creek Road and Florin Road from two to three lanes in each direction. Based on the traffic volume thresholds presented above, this improvement would reduce the volume-to-capacity ratio; however, the volume to capacity would remain 0.02 higher than No Project conditions. Therefore, widen Florin-Perkins Road between Elder Creek Road and Florin Road from two to three lanes in each direction would provide LOS C (volume-to-capacity ratio: 0.71) operations with the PD Plan. With this improvement, Florin-Perkins Road would be widened beyond its designation as a 4-lane arterial in the General Plan. Consequently, there may not be sufficient right-of-way to construct the improvement, so this impact is considered* ***significant and unavoidable****.*

DISPOSITION OF IMPACTS TO ROADWAY SEGMENTS FOLLOWING MITIGATION FOR CUMULATIVE CONDITIONS

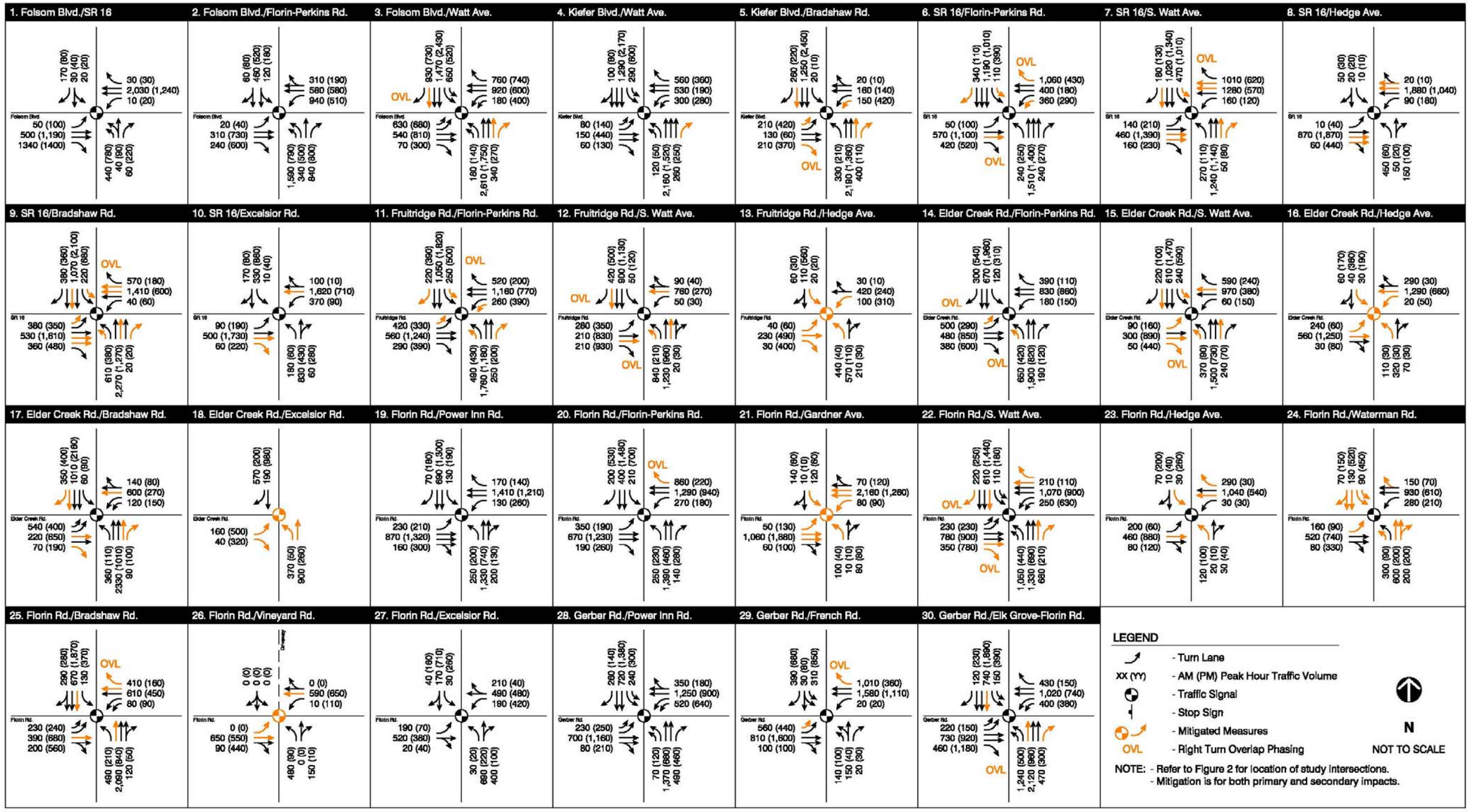
Plates TC-15, -16 and -17 show the cumulative roadway system, intersection traffic control, and lane configurations with proposed mitigation, respectively. Tables TC-19 and -20 summarize roadway segment operations under cumulative conditions with proposed mitigation for the CAC and PD Plans, respectively. As outlined above mitigation measures are proposed to reduce the significance of 26 of the 33 adversely affected intersections under the CAC Land Use Plan and 28 of the 35 adversely affected intersections under the PD Land Use Plan to a less-than-significant level. However, the required improvements for seven of the roadway segments are not feasible, and one improvement would exacerbate conditions at another intersection; therefore, impacts to roadway segments would remain ***significant and unavoidable***.

Plate TC-15
Proposed Roadway Mitigation – Cumulative With Project Conditions



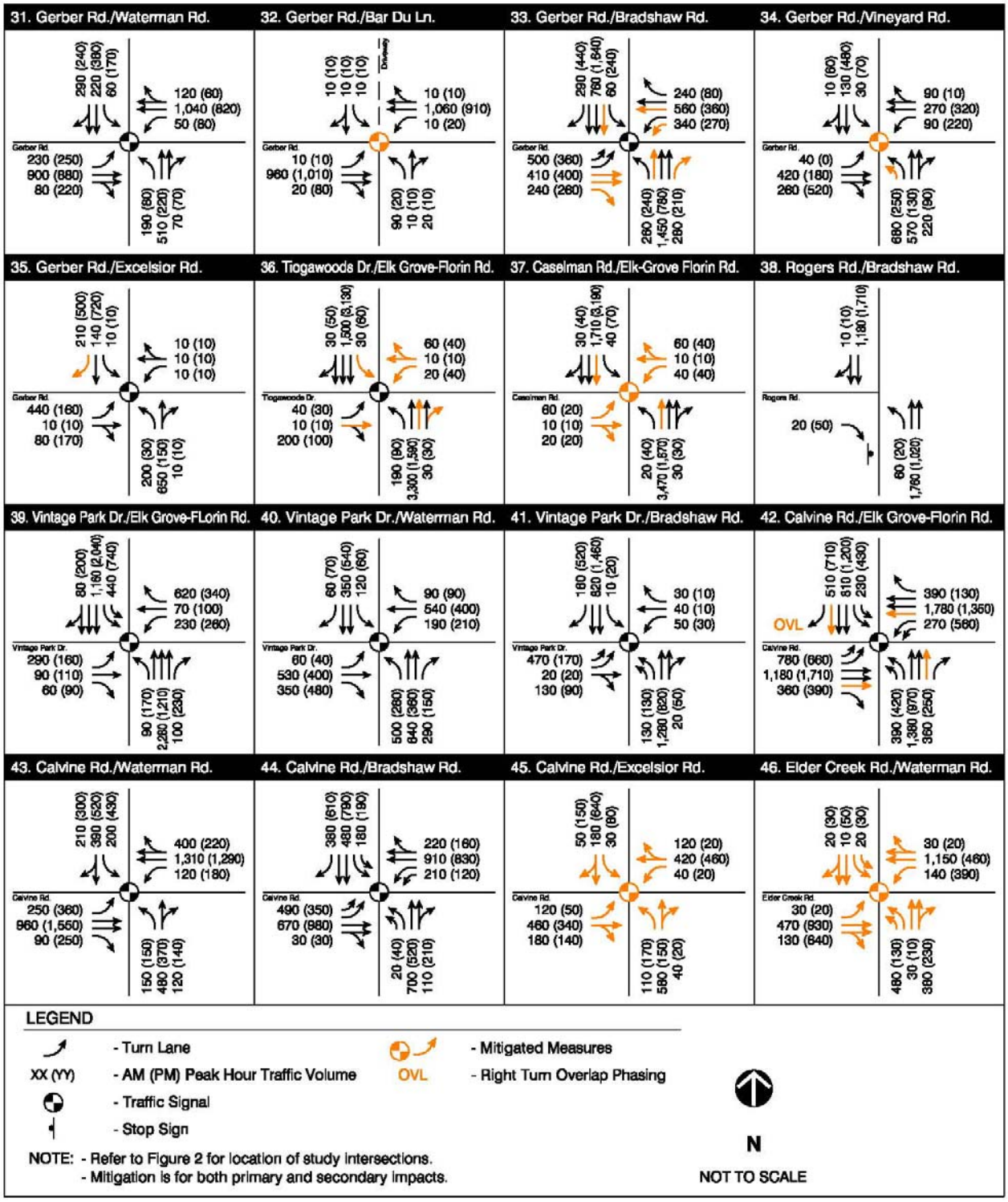
Fehr & Peers, 2008.

Plate TC-16A
Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Cumulative Plus CAC Land Use Conditions With Mitigation



Fehr & Peers, 2008.

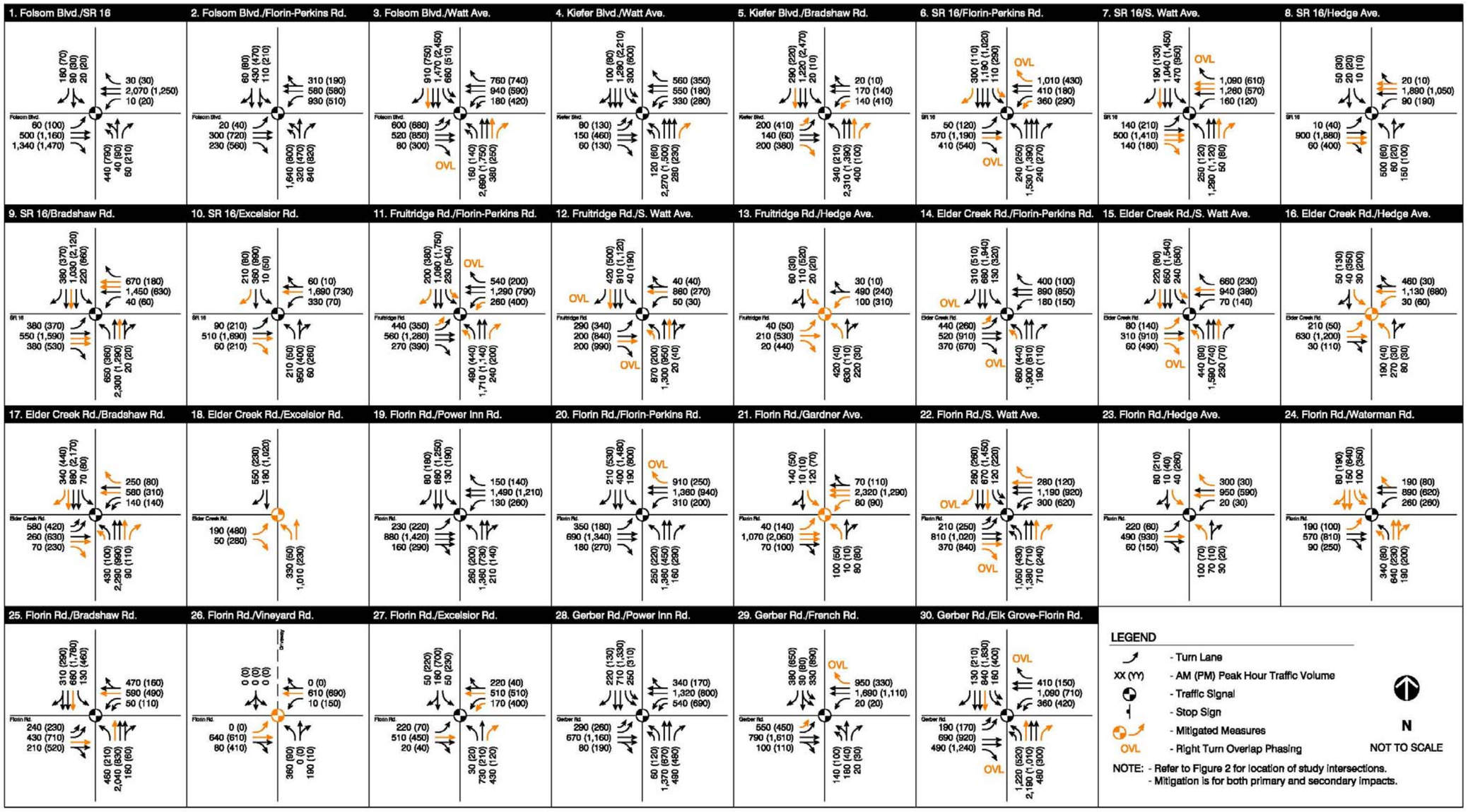
Plate TC-16B
Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Cumulative Plus CAC Land Use Conditions With Mitigation



Fehr & Peers, 2008.

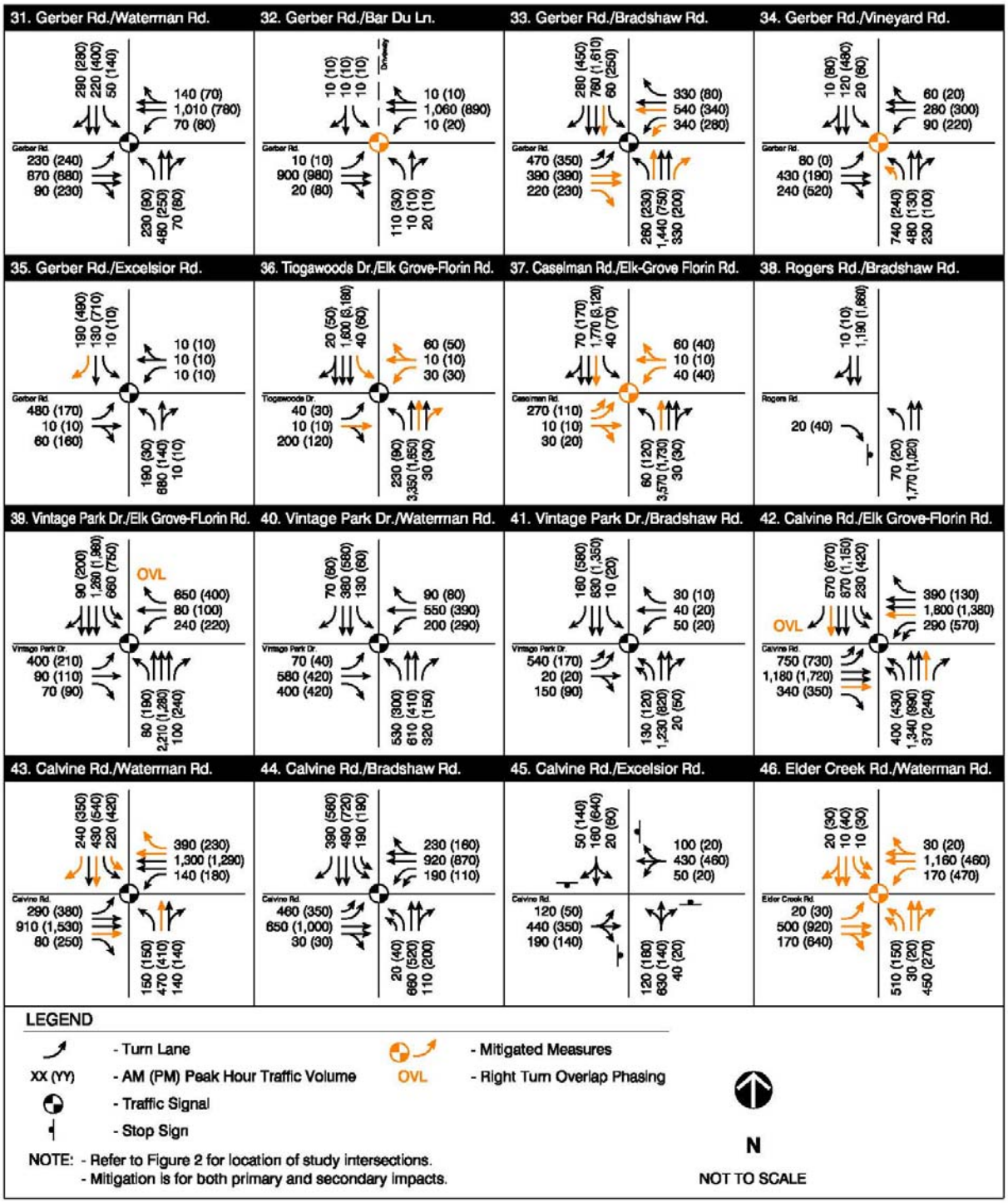
Plate TC-17A

Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Cumulative Plus PD Land Use Conditions With Mitigation



Fehr & Peers, 2008.

Plate 17B
Peak Hour Traffic Volumes, Intersection Traffic Control, and Lane Configurations for Cumulative Plus PD Land Use Conditions With Mitigation



Fehr & Peers, 2008.

Table TC-19: Roadway Levels of Service – Cumulative Mitigated Conditions: CAC Land Use Plan

Roadway Segment	Lanes	Type[1]	Cumulative Plus CAC Project Conditions			Cumulative Plus CAC Project Conditions With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd. - State Route 16 to Watt Ave.	4	Arterial	29,400	0.82	D	30,000	0.83	D
2. Kiefer Blvd. - Florin-Perkins Rd. to Watt Ave.	2	Arterial	9,600	0.53	A	8,700	0.48	A
3. Kiefer Blvd. - Watt Ave. to Rosemont Dr.	4	Arterial	26,700	0.74	C	24,100	0.67	B
4. Kiefer Blvd. - Rosemont Dr. to Bradshaw Rd.	4	Arterial	17,400	0.48	A	15,700	0.44	A
5. SR 16 - Folsom Blvd. to Watt Ave.	2(4)	Arterial	22,500	1.25	F	26,800	0.74	C
6. SR 16 - Watt Ave. to Bradshaw Rd.	2(6)	Arterial	26,500	1.47	F	37,800	0.70	B
7. SR 16 - Bradshaw Rd. to Sunrise Blvd	2(4)	Arterial	27,800	1.39	F	29,100	0.73	C
8. Fruitridge Rd. - Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	33,300	0.93	E	33,300	0.93	E
9. Fruitridge Rd. - Florin-Perkins Rd. to South Watt Ave.	6	Arterial	32,100	0.59	A	27,200	0.50	A
10. Fruitridge Rd. - South Watt Ave. to Hedge Ave.	2	Rural	12,100	0.61	D	10,200	0.51	D
11. Elder Creek Rd. - Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	26,800	0.74	C	26,800	0.74	C
12. Elder Creek Rd. - Florin-Perkins Rd. to South Watt Ave.	4	Arterial	19,200	0.53	A	18,500	0.51	A
13. Elder Creek Rd. - South Watt Ave. to Hedge Ave.	2(4)	Rural	19,600	0.98	E	20,200	0.56	A
14. Elder Creek Rd. – Hedge Ave. to Bradshaw Rd.	2(4)	Rural	20,500	1.03	F	25,700	0.71	C
15. Elder Creek Rd. - Bradshaw Rd. to Excelsior Rd.	2	Rural	10,500	0.53	D	10,700	0.54	D
16. Florin Rd. - Stockton Blvd to Power Inn Rd.	4(6)	Arterial	42,000	1.17	F	42,000	0.78	C
17. Florin Rd. - Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	39,600	1.10	F	37,000	1.03	F
18. Florin Rd. - Florin-Perkins Rd. to Gardner Ave.	4(6)	Arterial	38,700	1.08	F	39,900	0.74	C
19. Florin Rd. - Gardner Ave. to South Watt Ave.	4(6)	Arterial	42,500	1.18	F	44,000	0.81	D
20. Florin Rd. - South Watt Ave. to Hedge Ave.	2(4)	Rural	28,100	1.41	F	30,200	0.84	D
21. Florin Rd. - Hedge Ave. to Bradshaw Rd.	4	Arterial	33,700	0.94	E	21,700	0.60	B
22. Florin Rd. - Bradshaw Rd. to Excelsior Rd.	2(4)	Rural	17,900	0.90	E	18,600	0.52	A
23. Florin Rd. - Excelsior Rd. to Sunrise Blvd	2	Rural	14,400	0.72	E	14,400	0.72	E
24. Gerber Rd. - Stockton Blvd to Power Inn Rd.	4	Arterial	25,100	0.70	B	25,100	0.70	B
25. Gerber Rd. - Power Inn Rd. to French Rd.	4	Arterial	37,200	1.03	F	38,400	1.07	F
26. Gerber Rd. - French Rd. to Elk Grove-Florin Rd.	4	Arterial	39,900	1.11	F	40,100	1.11	F
27. Gerber Rd. - Elk Grove-Florin Rd. to Bradshaw Rd.	4	Arterial	30,000	0.83	D	26,400	0.73	C

Roadway Segment	Lanes	Type[1]	Cumulative Plus CAC Project Conditions			Cumulative Plus CAC Project Conditions With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
28. Gerber Rd. - Bradshaw Rd. to Vineyard Rd.	4	Arterial	17,700	0.49	A	14,100	0.39	A
29. Gerber Rd. - Vineyard Rd. to Excelsior Rd.	2	Rural	7,000	0.35	C	7,200	0.36	D
30. Vintage Park Dr. - Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	19,800	0.55	A	21,600	0.60	A
31. Vintage Park Dr. - Waterman Rd. to Bradshaw Rd.	4	Arterial	9,800	0.27	A	9,200	0.26	A
32. Calvine Rd. - Power Inn Rd. to Elk Grove-Florin Rd.[2]	5(6)	Arterial	66,800	1.48	F	66,800	1.24	F
33. Calvine Rd. - Elk Grove-Florin Rd. to Grand Cru Dr.	4(6)	Arterial	40,000	1.11	F	38,600	0.71	C
34. Calvine Rd. - Grand Cru Dr. to Waterman Rd.	6	Arterial	41,100	0.76	C	39,100	0.72	C
35. Calvine Rd. - Waterman Rd. to Bradshaw Rd.	4	Arterial	30,100	0.84	D	29,900	0.83	D
36. Calvine Rd. - Bradshaw Rd. to Vineyard Rd.	4	Arterial	21,000	0.58	A	20,600	0.57	A
37. Calvine Rd. - Vineyard Rd. to Excelsior Rd.	2	Arterial	13,200	0.73	C	13,000	0.72	A
38. Calvine Rd. - Excelsior Rd. to Grant Line Rd.	2	Rural	7,900	0.40	D	7,900	0.40	D
39. Power Inn Rd - Elder Creek Rd. to Florin Rd.	4	Arterial	31,300	0.87	D	31,300	0.87	D
40. Power Inn Rd - Florin Rd. to Gerber Rd.	4	Arterial	36,700	1.02	F	35,200	0.98	E
41. Power Inn Rd - Gerber Rd. to Calvine Rd.	4	Arterial	35,400	0.98	E	33,900	0.94	E
42. Florin-Perkins Rd. - Folsom Blvd. to SR 16	6	Arterial	38,500	0.71	C	36,200	0.67	B
43. Florin-Perkins Rd. - SR 16 to Fruitridge Rd.	6	Arterial	45,300	0.84	D	38,200	0.71	C
44. Florin-Perkins Rd. - Fruitridge Rd. to Elder Creek Rd.	4	Arterial	43,700	1.21	F	41,600	1.16	F
45. Florin-Perkins Rd. - Elder Creek Rd. to Florin Rd.	4	Arterial	39,700	1.10	F	37,600	1.04	F
46. French Rd. - Florin Rd. to Gerber Rd.	2(4)	Arterial	22,400	1.24	F	26,200	0.73	C
47. Watt Ave. - Folsom Blvd. to Kiefer Blvd.	6	Arterial	84,200	1.40	F	84,100	1.40	F
48. South Watt Ave. - Kiefer Blvd. to SR 16	5(6)	Arterial	66,200	1.47	F	68,300	1.14	F
49. South Watt Ave. - SR 16 to Fruitridge Rd.	4(6)	Arterial	45,000	1.13	F	43,400	0.80	D
50. South Watt Ave. - Fruitridge Rd. to Elder Creek Rd.	4(6)	Arterial	44,700	1.24	F	46,600	0.86	D
51. South Watt Ave. - Elder Creek Rd. to Florin Rd.	4(6)	Arterial	37,200	1.03	F	37,400	0.69	B
52. Elk Grove-Florin Rd. - Florin Rd. to Gerber Rd.	4(6)	Arterial	42,500	1.18	F	44,300	0.82	D
53. Elk Grove-Florin Rd. - Gerber Rd. to Carlisle Ave.	4(6)	Arterial	45,500	1.26	F	50,900	0.94	E
54. Elk Grove-Florin Rd. - Carlisle Ave. to Vintage Park Dr.	6	Arterial	44,300	0.82	D	48,500	0.90	D
55. Elk Grove-Florin Rd. - Vintage Park Dr. to Calvine Rd.	4(6)	Arterial	40,100	1.11	F	42,100	0.78	C
56. Hedge Ave. - SR 16 to Fruitridge Rd.	2	Rural	5,200	0.26	C	4,900	0.25	C

Roadway Segment	Lanes	Type[1]	Cumulative Plus CAC Project Conditions			Cumulative Plus CAC Project Conditions With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
57. Hedge Ave. - Fruitridge Rd. to Elder Creek Rd.	2	Rural	18,600	0.93	E	8,700	0.44	D
58. Hedge Ave. - Elder Creek Rd. to Florin Rd.	2	Rural	19,300	0.97	E	10,800	0.54	D
59. Waterman Rd. - Vintage Park Dr. to Calvine Rd.	4	Arterial	24,600	0.68	B	23,400	0.65	B
60. Bradshaw Rd. - Kiefer Blvd. to SR 16	4(6)	Arterial	53,700	1.49	F	52,300	0.97	E
61. Bradshaw Rd. - SR 16 to Elder Creek Rd.	4(6)	Arterial	39,300	1.09	F	48,000	0.89	D
62. Bradshaw Rd. - Elder Creek Rd. to Florin Rd.	4(6)	Arterial	38,700	1.08	F	36,200	0.67	B
63. Bradshaw Rd. - Florin Rd. to Gerber Rd.	4(6)	Arterial	38,800	1.08	F	40,300	0.75	C
64. Bradshaw Rd. - Gerber Rd. to Vintage Park Dr.	4	Arterial	31,800	0.88	D	31,200	0.87	D
65. Bradshaw Rd. - Vintage Park Dr. to Calvine Rd.	4	Arterial	24,900	0.69	B	24,000	0.67	B
66. Vineyard Rd. - Gerber Rd. to Calvine Rd.	2	Arterial	16,900	0.94	E	16,900	0.94	E
67. Excelsior Rd. - SR 16 to Florin Rd.	2	Rural	14,000	0.70	E	13,200	0.66	E
68. Excelsior Rd. - Florin Rd. to Gerber Rd.	2	Rural	15,100	0.76	E	14,600	0.73	E
69. Excelsior Rd. - Gerber Rd. to Calvine Rd.	2	Rural	8,700	0.44	D	8,400	0.42	D
70. Waterman Rd. - Vintage Park Dr. to Gerber Rd.	2(4)	Arterial	29,900	1.66	F	26,600	0.74	C
71. Waterman Rd. - Gerber Rd. to Florin Rd.	4	Arterial	26,600	0.74	C	27,600	0.77	C
72. Vineyard Rd. - Gerber Rd. to Florin Rd.	2	Arterial	9,900	0.54	A	8,000	0.44	A
73. Waterman Rd. - Florin Rd. to Elder Creek Rd.	0(4)	-	-	-	-	21,900	0.61	B

[1] Facility type for unmitigated condition
[2] This segment of Calvine Road is four to six lanes.

Notes: Shaded areas indicate unacceptable operations.
All arterial roadway segments assumed to have moderate access control except for Segments 7, 47, and 49, which were assumed to have high access control.
Mitigation is for both primary and secondary impacts.
Bold indicates secondary impact.
Blue – City of Sacramento Study Roadway Segments
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Table TC-20: Roadway Levels of Service – Cumulative Mitigated Conditions: PD Land Use Plan

Roadway Segment	Lanes	Type[1]	Cumulative Plus PD Project Conditions			Cumulative Plus PD Project Conditions With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd. - State Route 16 to Watt Ave.	4	Arterial	30,400	0.84	D	30,300	0.84	D
2. Kiefer Blvd. - Florin-Perkins Rd. to Watt Ave.	2	Arterial	9,500	0.53	A	8,800	0.49	A
3. Kiefer Blvd. - Watt Ave. to Rosemont Dr.	4	Arterial	26,800	0.74	C	24,100	0.67	B
4. Kiefer Blvd. - Rosemont Dr. to Bradshaw Rd.	4	Arterial	17,600	0.49	A	15,800	0.44	A
5. SR 16 - Folsom Blvd. to Watt Ave.	2(4)	Arterial	22,100	1.23	F	27,200	0.76	C
6. SR 16 - Watt Ave. to Bradshaw Rd.	2(6)	Arterial	26,900	1.49	F	38,500	0.71	C
7. SR 16 - Bradshaw Rd. to Sunrise Blvd	2(4)	Arterial	28,100	1.41	F	29,300	0.73	C
8. Fruitridge Rd. - Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	33,500	0.93	E	33,500	0.93	E
9. Fruitridge Rd. - Florin-Perkins Rd. to South Watt Ave.	6	Arterial	32,800	0.61	B	27,900	0.52	A
10. Fruitridge Rd. - South Watt Ave. to Hedge Ave.	2	Rural	12,600	0.63	E	10,500	0.53	D
11. Elder Creek Rd. - Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	27,200	0.76	C	27,200	0.76	C
12. Elder Creek Rd. - Florin-Perkins Rd. to South Watt Ave.	4	Arterial	19,400	0.54	A	19,000	0.53	A
13. Elder Creek Rd. - South Watt Ave. to Hedge Ave.	2(4)	Rural	19,700	0.99	E	21,300	0.59	A
14. Elder Creek Rd. – Hedge Ave. to Bradshaw Rd.	2(4)	Rural	21,000	1.05	F	26,800	0.74	C
15. Elder Creek Rd. - Bradshaw Rd. to Excelsior Rd.	2	Rural	10,700	0.54	D	11,000	0.55	D
16. Florin Rd. - Stockton Blvd to Power Inn Rd.	4(6)	Arterial	42,300	1.18	F	42,300	0.78	C
17. Florin Rd. - Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	40,200	1.12	F	37,500	1.04	F
18. Florin Rd. - Florin-Perkins Rd. to Gardner Ave.	4(6)	Arterial	39,700	1.10	F	41,600	0.77	C
19. Florin Rd. - Gardner Ave. to South Watt Ave.	4(6)	Arterial	43,400	1.21	F	45,000	0.83	D
20. Florin Rd. - South Watt Ave. to Hedge Ave.	2(4)	Rural	28,700	1.44	F	31,200	0.87	D
21. Florin Rd. - Hedge Ave. to Bradshaw Rd.	4	Arterial	33,800	0.94	E	22,400	0.62	B
22. Florin Rd. - Bradshaw Rd. to Excelsior Rd.	2(4)	Rural	18,000	0.90	E	18,900	0.52	A
23. Florin Rd. - Excelsior Rd. to Sunrise Blvd	2	Rural	14,400	0.72	E	14,400	0.72	E
24. Gerber Rd. - Stockton Blvd to Power Inn Rd.	4	Arterial	25,800	0.72	C	25,800	0.72	C
25. Gerber Rd. - Power Inn Rd. to French Rd.	4	Arterial	37,800	1.05	F	39,000	1.08	F
26. Gerber Rd. - French Rd. to Elk Grove-Florin Rd.	4	Arterial	41,000	1.14	F	40,800	1.13	F

Roadway Segment	Lanes	Type[1]	Cumulative Plus PD Project Conditions			Cumulative Plus PD Project Conditions With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
27. Gerber Rd. - Elk Grove-Florin Rd. to Bradshaw Rd.	4	Arterial	30,900	0.86	D	26,400	0.73	C
28. Gerber Rd. - Bradshaw Rd. to Vineyard Rd.	4	Arterial	17,500	0.49	A	13,700	0.38	A
29. Gerber Rd. - Vineyard Rd. to Excelsior Rd.	2	Rural	7,100	0.36	C	7,400	0.37	D
30. Vintage Park Dr. - Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	20,800	0.58	A	21,900	0.61	B
31. Vintage Park Dr. - Waterman Rd. to Bradshaw Rd.	4	Arterial	9,900	0.28	A	9,100	0.25	A
32. Calvine Rd. - Power Inn Rd. to Elk Grove-Florin Rd.[2]	5(6)	Arterial	67,600	1.50	F	67,600	1.25	F
33. Calvine Rd. - Elk Grove-Florin Rd. to Grand Cru Dr.	4(6)	Arterial	40,000	1.11	F	38,300	0.71	C
34. Calvine Rd. - Grand Cru Dr. to Waterman Rd.	6	Arterial	41,100	0.76	C	38,800	0.72	C
35. Calvine Rd. - Waterman Rd. to Bradshaw Rd.	4	Arterial	30,100	0.84	D	29,700	0.83	D
36. Calvine Rd. - Bradshaw Rd. to Vineyard Rd.	4	Arterial	20,800	0.58	A	20,500	0.57	A
37. Calvine Rd. - Vineyard Rd. to Excelsior Rd.	2	Arterial	13,100	0.73	C	12,700	0.71	C
38. Calvine Rd. - Excelsior Rd. to Grant Line Rd.	2	Rural	7,900	0.40	D	7,900	0.40	D
39. Power Inn Rd - Elder Creek Rd. to Florin Rd.	4	Arterial	30,800	0.86	D	30,800	0.86	D
40. Power Inn Rd - Florin Rd. to Gerber Rd.	4	Arterial	36,000	1.00	E	34,400	0.96	E
41. Power Inn Rd - Gerber Rd. to Calvine Rd.	4	Arterial	34,700	0.96	E	33,100	0.92	E
42. Florin-Perkins Rd. - Folsom Blvd. to SR 16	6	Arterial	38,700	0.72	C	36,900	0.68	B
43. Florin-Perkins Rd. - SR 16 to Fruitridge Rd.	6	Arterial	46,400	0.86	D	38,900	0.72	C
44. Florin-Perkins Rd. - Fruitridge Rd. to Elder Creek Rd.	4	Arterial	43,800	1.22	F	41,200	1.14	F
45. Florin-Perkins Rd. - Elder Creek Rd. to Florin Rd.	4	Arterial	40,800	1.13	F	38,200	1.06	F
46. French Rd. - Florin Rd. to Gerber Rd.	2(4)	Arterial	22,700	1.26	F	26,200	0.73	C
47. Watt Ave. - Folsom Blvd. to Kiefer Blvd.	6	Arterial	84,500	1.41	F	84,300	1.41	F
48. South Watt Ave. - Kiefer Blvd. to SR 16	5(6)	Arterial	67,000	1.49	F	69,200	1.15	F
49. South Watt Ave. - SR 16 to Fruitridge Rd.	4(6)	Arterial	45,500	1.14	F	44,200	0.82	D
50. South Watt Ave. - Fruitridge Rd. to Elder Creek Rd.	4(6)	Arterial	44,900	1.25	F	47,400	0.88	D
51. South Watt Ave. - Elder Creek Rd. to Florin Rd.	4(6)	Arterial	38,700	1.08	F	38,000	0.70	C
52. Elk Grove-Florin Rd. - Florin Rd. to Gerber Rd.	4(6)	Arterial	43,400	1.21	F	46,600	0.82	D
53. Elk Grove-Florin Rd. - Gerber Rd. to Carlisle Ave.	4(6)	Arterial	46,600	1.29	F	52,500	0.97	E

Roadway Segment	Lanes	Type[1]	Cumulative Plus PD Project Conditions			Cumulative Plus PD Project Conditions With Mitigation		
			Vol	V/C	LOS	Vol	V/C	LOS
54. Elk Grove-Florin Rd. - Carlisle Ave. to Vintage Park Dr.	6	Arterial	48,600	0.90	D	52,400	0.97	E
55. Elk Grove-Florin Rd. - Vintage Park Dr. to Calvine Rd.	4(6)	Arterial	40,700	1.13	F	43,000	0.80	C
56. Hedge Ave. - SR 16 to Fruitridge Rd.	2	Rural	5,200	0.26	C	5,000	0.25	C
57. Hedge Ave. - Fruitridge Rd. to Elder Creek Rd.	2	Rural	19,400	0.97	E	9,100	0.46	D
58. Hedge Ave. - Elder Creek Rd. to Florin Rd.	2	Rural	19,800	0.99	E	12,700	0.64	E
59. Waterman Rd. - Vintage Park Dr. to Calvine Rd.	4	Arterial	24,500	0.68	B	23,500	0.65	B
60. Bradshaw Rd. - Kiefer Blvd. to SR 16	4(6)	Arterial	54,400	1.51	F	52,900	0.98	E
61. Bradshaw Rd. - SR 16 to Elder Creek Rd.	4(6)	Arterial	40,200	1.12	F	49,100	0.91	E
62. Bradshaw Rd. - Elder Creek Rd. to Florin Rd.	4(6)	Arterial	40,000	1.11	F	37,800	0.70	C
63. Bradshaw Rd. - Florin Rd. to Gerber Rd.	4(6)	Arterial	38,600	1.07	F	40,200	0.74	C
64. Bradshaw Rd. - Gerber Rd. to Vintage Park Dr.	4	Arterial	31,800	0.88	D	30,700	0.85	D
65. Bradshaw Rd. - Vintage Park Dr. to Calvine Rd.	4	Arterial	24,800	0.69	B	23,600	0.66	B
66. Vineyard Rd. - Gerber Rd. to Calvine Rd.	2	Arterial	16,700	0.93	E	16,800	0.93	E
67. Excelsior Rd. - SR 16 to Florin Rd.	2	Rural	14,200	0.71	E	13,300	0.67	E
68. Excelsior Rd. - Florin Rd. to Gerber Rd.	2	Rural	15,200	0.76	E	14,600	0.73	E
69. Excelsior Rd. - Gerber Rd. to Calvine Rd.	2	Rural	8,800	0.44	D	8,200	0.41	D
70. Waterman Rd. - Vintage Park Dr. to Gerber Rd.	2(4)	Arterial	30,000	1.67	F	27,100	0.75	C
71. Waterman Rd. - Gerber Rd. to Florin Rd.	4	Arterial	26,200	0.73	C	28,600	0.79	C
72. Vineyard Rd. - Gerber Rd. to Florin Rd.	2	Arterial	9,900	0.54	A	7,800	0.43	A
73. Waterman Rd. - Florin Rd. to Elder Creek Rd.	0(4)	-	-	-	-	22,900	0.64	B

[1] Facility type for unmitigated condition
[2] This segment of Calvine Road is four to six lanes.

Notes: Shaded areas indicate unacceptable operations.
All arterial roadway segments assumed to have moderate access control except for Segments 7, 47, and 49, which were assumed to have high access control.
Mitigation is for both primary and secondary impacts.
Bold indicates secondary impact.
Blue – City of Sacramento Study Roadway Segments
Green – City of Elk Grove Study Roadway Segments

Source: Fehr & Peers, 2008.

Impacts to Study Intersections Under Cumulative Conditions

CAC Land Use Plan/PD Land Use Plan

As shown in Table TC-10 and TC-11 above, the implementation of the cumulative plus CAC Land Use Plan would result in adverse impacts to 34 intersections, and the PD Land Use Plan would result in adverse impacts to 35 intersections. Therefore, as shown in Table TC-21, below, implementation of either land use plan would cause ***potentially significant*** impacts to intersections.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce impacts to many of the adversely impacted intersections. It should be noted that for some mitigation measures, only one of the two Land Use Plans is listed (CAC or PD). This is because the below section only provides mitigation measures for impacts determined to be potentially significant.

Several of the adversely affected intersections are not located within the jurisdiction of Sacramento County. While the Traffic Impact Analysis identified mitigation for areas outside of the County jurisdiction, Sacramento County does not have the land use authority to ensure that the improvements are implemented. As such, the impact to intersections outside of County jurisdiction is considered *significant and unavoidable.* In addition, some mitigation measures identified for the CAC and PD Land Use Plans are infeasible. Therefore, implementation of either land use plan would result in *significant and unavoidable* impacts to intersections.

Table TC-21: Cumulative Impacts to Intersections

Impact Number	Roadway Segment	CAC Land Use Plan Impact	PD Land Use Plan Impact	Primary or Secondary Impact?
TC-4(a)	Folsom Boulevard/SR 16	SU	SU	Primary
TC-4(b)	Folsom Boulevard/Florin-Perkins Road	SU	SU	Primary
TC-4(c)	Folsom Boulevard/South Watt Avenue	PS	PS	Primary
TC-4(d)	Kiefer Boulevard/South Watt Avenue	PS	PS	Primary
TC-4(e)	Kiefer Boulevard/Bradshaw Road	PS	PS	Primary
TC-4(f)	SR 16/Florin-Perkins Road	PS	PS	Primary
TC-4(g)	SR 16/South Watt Avenue	PS	PS	Primary
TC-4(h)	SR 16/Bradshaw Road	PS	LS	Primary
TC-4(i)	SR 16/Excelsior Road	PS	PS	Primary
TC-4(j)	Fruitridge Road/Florin-Perkins Road	SU	SU	Primary
TC-4(k)	Fruitridge Road/South Watt Avenue	PS	PS	Primary
TC-4(l)	Fruitridge Road/Hedge Avenue	PS	PS	Primary
TC-4(m)	Elder Creek Road/Florin-Perkins Road	SU	SU	Primary
TC-4(n)	Elder Creek Road/South Watt Avenue	PS	PS	Primary
TC-4(o)	Elder Creek Road/Hedge Avenue	PS	PS	Primary
TC-4(p)	Elder Creek Road/Bradshaw Road	PS	PS	Primary
TC-4(q)	Elder Creek Road/Excelsior Road	PS	PS	Primary
TC-4(r)	Florin Road/Power Inn Road	SU	SU	Primary
TC-4(s)	Florin Road/Florin-Perkins Road	PS	PS	Primary
TC-4(t)	Florin Road/Gardner Avenue	PS	PS	Primary
TC-4(u)	Florin Road/South Watt Avenue	PS	PS	Primary
TC-4(v)	Florin Road/Hedge Avenue	PS	PS	Primary
TC-4(w)	Florin Road/Bradshaw Road	PS	LS	Primary
TC-4(x)	Florin Road/Vineyard Road	PS	PS	Primary
TC-4(y)	Florin Road/Excelsior Road	LS	PS	Primary
TC-4(z)	Gerber Road/French Road	PS	PS	Primary
TC-4(aa)	Gerber Road/Elk Grove-Florin Road	PS	PS	Primary
TC-4(bb)	Gerber Road/Waterman Road	PS	PS	Primary
TC-4(cc)	Gerber Road/Bar Du Lane	PS	PS	Primary
TC-4(dd)	Gerber Road/Bradshaw Road	PS	PS	Primary
TC-4(ee)	Gerber Road/Vineyard Road	PS	PS	Primary
TC-4(ff)	Gerber Road/Excelsior Road	PS	PS	Primary

TC-4(gg)	Caselman Road/Elk Grove-Florin Road	PS	PS	Primary
TC-4(hh)	Vintage Park Drive/Elk Grove-Florin Road	LS	PS	Primary
TC-4(ii)	Calvine Road/Elk Grove-Florin Road	PS	PS	Primary
TC-4(jj)	Calvine Road/Waterman Road	LS	PS	Primary
TC-4(kk)	Calvine Road/Excelsior Road	PS	LS	Primary
Notes: LS = Less-than-Significant PS = Potentially Significant SU = Significant and Unavoidable				

TC-4 All development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. Pursuant to the Program the following improvements shall be implemented subject to the approval of the controlling jurisdiction.

CAC LAND USE PLAN/PD LAND USE PLAN

TC-4(c) Widen the northbound and southbound approaches to the Folsom Boulevard/South Watt Avenue intersection to provide the following lane configurations:

- *Two left-turn lanes, three through lanes, and one right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lanes, and one right-turn lane on the southbound approach (with overlap phasing).*

TC-4(d) Widen the Kiefer Boulevard/South Watt Avenue intersection northbound approach to provide two left-turn lanes, three through lanes, and a right-turn lane.

TC-4(e) Widen the northbound, southbound, eastbound, and westbound approaches to the Kiefer Boulevard/Bradshaw Road intersection to provide the following lane configurations:

- *One left-turn lane, three through lanes, and one right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and one right-turn lane on the southbound approach.*
- *Two left-turn lanes, two through lanes, and one right-turn lane (with overlap phasing) on the eastbound approach.*
- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-4(f) Widen the southbound and westbound approaches to the SR 16 /Florin Perkins Road Intersection and modify the lane configurations on the eastbound approach to provide the following lane configurations:

- *Two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach.*
- *One left-turn lane, two through lanes, and one right-turn lane (with overlap phasing) on the eastbound approach.*
- *Two left-turn lanes, two through lanes, and one right-turn lane (with overlap phasing) on the westbound approach.*

TC-4(g) *Widen the northbound, southbound, eastbound, and westbound approaches to the SR 16/South Watt Avenue intersection to provide the following lane configurations:*

- *One left-turn lane, three through lanes, and a right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the eastbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane (with overlap phasing) on the westbound approach.*

TC-4(h) *Widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/South Watt Avenue intersection to provide the following lane configurations:*

- *Two left-turn lanes, two through lanes, and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and one right-turn lane (with overlap phasing) on the southbound approach.*
- *One left-turn lane, two through lanes, and one right-turn lane (with overlap phasing) on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-4(l) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/Hedge Avenue intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a right-turn lane on the eastbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the westbound approach.*

TC-4(n) *Widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/South Watt Avenue intersection to provide the following lane configurations:*

- *Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lane, and a right-turn lane on the southbound approach.*
- *One left-turn lane, two through lanes, and a right-turn lane (with overlap phasing) on the eastbound approach.*
- *One left-turn lane, two through lanes, and a right-turn lane on the westbound approach.*

TC-4(o) *EITHER:*

A. Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/Hedge Avenue intersection to provide the following lane configurations:

- *One left-turn lane, one through lane, and a shared through/right-turn lane on the northbound approach (This improvement would require a lane transition north of Elder Creek Road).*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the southbound approach (This improvement would require a lane transition south of Elder Creek Road).*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

OR

B. Construct a four-lane extension of Waterman Road between Florin Road and Elder Creek Road in the plan area;

-and-

Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/Hedge Avenue intersection to provide the following lane configurations:

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*

- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

-and-

Install a traffic signal and provide the following lane configurations at the Elder Creek Road/Waterman Road intersection:

- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the northbound approach.*
- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-4(q) *Install a traffic signal and widen the northbound and eastbound approaches to the Elder Creek Road/Excelsior Road intersection to provide the following lane configurations:*

- *One left-turn lane and one through lane on the northbound approach.*
- *One left-turn lane and one right-turn lane on the eastbound approach.*

TC-4(s) *Widen the westbound approach to the Florin Road/Florin-Perkins Road intersection to provide the following lane configurations:*

- *One left-turn lane, two through lanes, and right-turn lane (with overlap phasing) on the westbound approach.*

TC-4(t) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/Gardner Avenue intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*

- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the westbound approach.*

TC-4(u) *Widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/South Watt Avenue intersection to provide the following lane configurations:*

- *Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lanes, and right-turn (with overlap phasing) on the southbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane (with overlap phasing) on the eastbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane on the westbound approach.*

TC-4(v) *EITHER:*

A. Widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/Hedge Avenue intersection to provide the following lane configurations:

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *Two left-turn lanes and a shared through/right-turn lane on the southbound approach.*
- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the eastbound approach (this improvement will require a northbound transition lane north of Florin Road).*
- *One left-turn lane, two through lanes, and a right-turn lane on the westbound approach.*

OR

B. Construct a four-lane extension of Waterman Road between Florin Road and Elder Creek Road in the plan area.

-and-

Widen the northbound, southbound, eastbound, and westbound approaches to the Florin Road/Hedge Avenue intersection to provide the following lane configurations:

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, two through lanes, and a right-turn lane on the westbound approach.*

-and-

Construct the north leg and widen the northbound, eastbound, and westbound approaches to the Florin Road/Waterman Road intersection to provide the following lane configurations:

- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the northbound approach.*
- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

-and-

Install a traffic signal at the Elder Creek Road/Waterman Road intersection and provide the following lane configurations:

- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the northbound approach.*
- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-4(x) *Install a traffic signal at the Florin Road/Vineyard Road intersection and widen the eastbound and westbound approaches to the intersection to provide the following lane configurations:*

- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-4(z) *Widen the eastbound and westbound approaches to the Gerber Road/French Road intersection to provide the following lane configurations:*

- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane, two through lanes, and a right-turn lane (with overlap phasing) on the westbound approach.*

TC-4(aa) *Widen the northbound, southbound, eastbound, and westbound approaches to the Gerber Road/Elk Grove-Florin Road intersection to provide the following lane configurations:*

- *Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach.*
- *Two left-turn lanes, two through lanes, and a right-turn lane (with overlap phasing) on the eastbound approach.*
- *Two left-turn lanes, two through lanes, and a right-turn lane (with overlap phasing) on the westbound approach.*

TC-4(cc) *Install a traffic signal and at the Gerber Road/Bar Du Lane intersection.*

TC-4(dd) *Widen the northbound, southbound, eastbound, and westbound approaches to the Gerber Road/Bradshaw Road intersection to provide the following lane configurations:*

- *One left-turn lane, three through lanes, and a right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the southbound approach.*
- *Two left-turn lanes, two through lanes, and a right-turn lane on the eastbound approach.*
- *Two left-turn lanes, two through lanes, and a right-turn lane on the westbound approach.*

TC-4(ee) *Install a traffic signal and widen the northbound approach to the Gerber Road/Vineyard Road intersection to provide two*

left-turn lanes, one through lane, and a shared through/right-turn lane.

TC-4(ff) *Widen the southbound approach to the Gerber Road/Excelsior Road intersection to provide one left-turn lane, one through lane and right-turn lane.*

TC-4(gg) *Improve the northbound, southbound, eastbound, and westbound approaches to the Calvine Road/Elk Grove-Florin Road intersection to provide the following lane configurations:*

- *Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane (with overlap phasing) on the southbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane on the eastbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane on the westbound approach.*

CAC LAND USE PLAN

TC-4(h) *Widen the northbound, eastbound, and westbound approaches to the SR 16/Bradshaw Road intersection to provide the following lane configurations:*

- *Two left-turn lanes, three through lanes, and a right-turn lane on the northbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach.*
- *Two left-turn lanes, three through lanes, and a right-turn lane on the eastbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane (with overlap phasing) on the westbound approach.*

TC-4(i) *Widen the northbound, southbound, and eastbound, and westbound approaches to the SR 16/Excelsior Road intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane, two through lanes, and a right-turn lane on the eastbound approach.*

- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-4(p) *Widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/Bradshaw Road intersection to provide the following lane configurations:*

- *One left-turn lane, three through lanes, and a right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the southbound approach.*
- *Two left-turn lanes, two through lanes, and a right-turn lane on the eastbound approach (this will require a lane transition east of Bradshaw Road).*
- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-4(dd) *Widen the westbound approach to the Florin Road/Bradshaw Road intersection to provide the following lane configurations in addition to through lane improvements associated with roadway mitigation:*

- *Two left-turn lanes and two through lanes and a right-turn lane (with overlap phasing) on the westbound approach.*

TC-4(gg) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Caselman Road/Elk Grove-Florin Road intersection to provide the following lane configurations:*

- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the westbound approach.*

TC-4(kk) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approach to the Calvine Road/Excelsior Road intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on all approaches.*

PD LAND USE PLAN

TC-4(i) *Widen the northbound, southbound, eastbound, and westbound approaches to the SR 16/Excelsior Road intersection to provide the following lane configurations:*

- *One left-turn lane and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane, one through lane, and a right-turn lane on the southbound approach.*
- *One left-turn lane, two through lanes, and a right-turn lane on the eastbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-4(p) *Widen the northbound, southbound, eastbound, and westbound approaches to the Elder Creek Road/Bradshaw Road intersection to provide the following lane configurations:*

- *One left-turn lane, three through lanes, and a right-turn lane on the northbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the southbound approach.*
- *Two left-turn lanes, two through lanes, and a right-turn lane on the eastbound approach (this will require a lane transition east of Bradshaw Road).*
- *Two left-turn lanes, two through lanes, and a right-turn lane on the westbound approach.*

TC-4(y) *Widen the northbound, eastbound, and westbound approaches to the Florin Road/Excelsior Road intersection to provide the following lane configurations:*

- *One left-turn lane, one through lane, and a right-turn lane on the northbound approach.*
- *One left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound approach.*
- *Two left-turn lanes, one through lane, and a shared through/right-turn lane on the westbound approach.*

TC-4(gg) *Install a traffic signal and widen the northbound, southbound, eastbound, and westbound approaches to the Caselman*

Road/Elk Grove-Florin Road intersection to provide the following lane configurations:

- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the northbound approach.*
- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach.*
- *Two left-turn lanes and a shared through/right-turn lane on the eastbound approach.*
- *One left-turn lane and a shared through/right-turn lane on the westbound approach.*

TC-4(hh) *Modify the traffic signal to include right-turn overlap phasing on the westbound approach to the Vintage Park Drive/Elk Grove-Florin Road intersection.*

TC-4(jj) *Widen the northbound, southbound, eastbound, and westbound approaches to the Calvine Road/Waterman Road intersection to provide the following lane configurations:*

- *One left-turn lane, one through lane, and a shared through/right-turn lane on the northbound approach.*
- *Two left-turn lanes, two through lanes, and a right-turn lane on the southbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the eastbound approach.*
- *One left-turn lane, three through lanes, and a right-turn lane on the westbound approach.*

PROPOSED IMPROVEMENTS WHICH WOULD NOT REDUCE IMPACTS TO A LESS-THAN-SIGNIFICANT LEVEL

CAC Land Use Plan/PD Land Use Plan

TC-4(b) *Widen the westbound approach to the Folsom Boulevard/Florin-Perkins Road intersection to provide two left-turn lanes, one through lane, and one shared through/right-turn lane. The improvement would provide LOS F operations in both the AM and PM peak hours, respectively, with the CAC and PD plans; however, implementation of the improvement would not reduce delay to within five seconds of delay under cumulative "no project" conditions. In addition, this improvement would require additional right-of-way. Due to the right-of-way constraints and unacceptable LOS this impact would remain* ***significant and unavoidable****.*

TC-4(j) *Widen the northbound, southbound, eastbound, and westbound approaches to the Fruitridge Road/Florin-Perkins Road intersection to provide the following lane configurations:*

- *Two left-turn lanes, two through lanes, and right-turn lane on the northbound approach.*
- *Two left-turn lanes, two through lanes, and right-turn lane on the southbound approach.*
- *Two left-turn lanes, two through lanes, and right-turn lane on the eastbound approach.*
- *Two left-turn lanes, two through lanes, and right-turn lane (with overlap phasing) on the westbound approach.*

The above improvements would result LOS F operations in the AM and PM peak hours, both the CAC and PD Plans; however, although the improvements would reduce delay they would not reduce delay to within 0.05 of the cumulative "no project" conditions. Therefore, this impact would remain ***significant and unavoidable****.*

TC-4(m) *Widen the northbound, southbound, and eastbound approaches to the Elder Creek Road/Florin-Perkins Road intersection to provide the following lane configurations:*

- *Two left-turn lanes, two through lanes, and one right-turn lane on the northbound approach.*
- *One left-turn lane, two through lanes, and one right-turn lane (with overlap phasing) on the southbound approach.*
- *Two left-turn lanes, two through lanes, and one right-turn lane (with overlap phasing) on the eastbound approach.*

The above improvement would result in LOS F operations in both the AM and PM peak hours with the CAC and PD Plans; however, although the improvements would reduce delay they would not reduce delay to within 0.05 of the cumulative "no project" conditions. Therefore, this impact would remain ***significant and unavoidable****.*

TC-4(r) *Widen the southbound approach to the Florin Road/Power Inn Road intersection to provide the following lane configurations:*

- *One left-turn lane, two through lanes, and a shared through/right-turn lane on the southbound approach.*

The above improvement would provide LOS F operations in both the AM and PM peak hours with the CAC and PD Plans but does not reduce the volume-to-capacity ratio to within 0.05 of the "no project" conditions volume-to-capacity ratio due to the construction of Alta Florin identified in Mitigation Measure CP-3. The roadway improvement would reduce the impact to the roadway segment to a less-than-significant level but exacerbates conditions at the Florin Road/Power Inn Road intersection. Due to the right-of-way constraints presented by utility lines installed adjacent to this intersection, implementation of a further mitigation measures are infeasible; therefore, this impact would remain ***significant and unavoidable****.*

PROPOSED IMPROVEMENTS WHICH MAY BE INFEASIBLE

CAC Land Use Plan/PD Land Use Plan

TC-4(b) *Widen the westbound approach to the Folsom Boulevard/Florin-Perkins Road intersection to provide two left-turn lanes, one through lane, and one shared through/right-turn lane. The improvement would provide LOS F operations in both the AM and PM peak hours, respectively, with the CAC and PD plans; however, implementation of the improvement would not reduce delay to within five seconds of delay under cumulative "no project" conditions. In addition, this improvement would require additional right-of-way. The acquisition of additional right-of-way may not be feasible as a building is located on the southwest corner of the intersection, and the intersection is located in the City of Sacramento. Due to the right-of-way constraints, implementation of this mitigation measure is infeasible. Due to the right-of-way constraints and unacceptable LOS this impact would remain* ***significant and unavoidable****.*

CAC LAND USE PLAN

TC-4(a) *Widen the eastbound approach to the Folsom Boulevard/SR 16 intersection to provide one left-turn lane, two through lanes, and two right-turn lanes (with overlap phasing). The improvement would provide LOS E and D operations in the AM and PM peak hours, respectively, with the CAC Plan. However, this improvement would require additional right-of-way. The acquisition of additional right-of-way may not be*

feasible as railroad tracks are located south of Folsom Boulevard, and the intersection is located in the City of Sacramento. Due to the right-of-way constraints, implementation of this mitigation measure is infeasible; therefore, this impact would remain ***significant and unavoidable****.*

PD LAND USE PLAN

TC-4(a) *Widen the eastbound approach to the Folsom Boulevard/SR 16 intersection to provide one left-turn lane, two through lanes, and two right-turn lanes (with overlap phasing). The improvement would provide LOS E and C operations in the AM and PM peak hours, respectively, with the PD Plan. The delay would increase under AM peak hour conditions with this improvement. However, this improvement would require additional right-of-way. The acquisition of additional right-of-way may not be feasible as railroad tracks are located south of Folsom Boulevard, and the intersection is located in the City of Sacramento. Due to the right-of-way constraints this impact would remain* ***significant and unavoidable****.*

DISPOSITION OF IMPACTS TO INTERSECTIONS UNDER CUMULATIVE PLUS CONDITIONS FOLLOWING MITIGATION

As outlined above mitigation measures are proposed to reduce the significance of cumulative impacts to the study intersections. Plates TC-15, -16 and -17, above, show the cumulative roadway system, intersection traffic control, and lane configurations with proposed mitigation, respectively. Tables TC-22 and TC-23 summarize intersection operations with proposed mitigation for the CAC and PD Plans, respectively.

The proposed mitigation would reduce the impacts to the majority of the adversely affected intersections; however, the feasible mitigation for four intersections would not reduce impacts to a less-than-significant level under either Land Use Plan. In addition, right-of-way constraints render the mitigation proposed for two intersections infeasible for both the CAC and PD Land Use Plans. As a result, impacts to intersections under the cumulative scenario would remain ***significant and unavoidable***

Table TC-22: Intersection Levels of Service – Cumulative Mitigated Conditions: CAC Land Use Plan

Intersection	Control	Cumulative Plus CAC Project Conditions				Cumulative Mitigated Plus CAC Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. Folsom Blvd./SR 16	Signal	62	E	54	D	64	E	36	D
2. Folsom Blvd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
3. Folsom Blvd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	77	E
4. Kiefer Blvd./South Watt Ave.	Signal	**1.02**	**F**	0.89	D	0.98	E	0.82	D
5. Kiefer Blvd./Bradshaw Rd.	Signal	1.10	F	**1.39**	**F**	0.63	B	0.93	E
6. SR 16/Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	76	E
7. SR 16/South Watt Ave.	Signal	**1.45**	**F**	**1.69**	**F**	1.04	F	0.98	E
8. SR 16/Hedge Ave.	Signal	1.03	F	1.03	F	0.78	C	0.72	C
9. SR 16/Bradshaw Rd.	Signal	**2.00**	**F**	**1.77**	**F**	1.02	F	0.99	E
10. SR 16/Excelsior Rd.	Signal	2.13	F	**2.54**	**F**	1.23	F	1.32	F
11. Fruitridge Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
12. Fruitridge Rd./South Watt Ave.	Signal	>80	F	>80	F	62	E	51	D
13. Fruitridge Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.86	D	0.95	E
14. Elder Creek Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
15. Elder Creek Rd./South Watt Ave.	Signal	>80	F	>80	F	41	D	42	D
16. Elder Creek Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.97	E	0.85	D
17. Elder Creek Rd./Bradshaw Rd.	Signal	1.49	F	**1.68**	**F**	0.98	E	0.82	D
18. Elder Creek Rd./Excelsior Rd.	2-Way Stop	>50	F	**>50**	**F**	0.71	C	0.99	E
19. Florin Rd./Power Inn Rd.	Signal	**1.21**	**F**	1.15	F	1.22	F	1.01	F
20. Florin Rd./Florin-Perkins Rd.	Signal	**1.71**	**F**	1.23	F	1.27	F	1.18	F
21. Florin Rd./Gardner Ave.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.70	B	0.60	B
22. Florin Rd./South Watt Ave.	Signal	**1.16**	**F**	**1.45**	**F**	0.80	D	1.05	F
23. Florin Rd./Hedge Ave.	Signal	2.01	F	**1.91**	**F**	0.61	B	0.58	A
24. Florin Rd./Waterman Rd.	2-Way Stop	0.88	D	1.04	F	0.76	C	0.78	C
25. Florin Rd./Bradshaw Rd.	Signal	**1.55**	**F**	1.62	F	0.86	D	1.06	F
26. Florin Rd./Vineyard Rd.	2-Way Stop	**>50**	**F**	42	E	0.56	A	0.45	A
27. Florin Rd./Excelsior Rd.	Signal	1.35	F	1.22	F	0.84	D	0.87	D
28. Gerber Rd./Power Inn Rd.	Signal	1.15	F	1.09	F	1.15	F	1.17	F
29. Gerber Rd./French Rd.	Signal	**1.51**	**F**	1.06	F	0.96	E	0.89	D
30. Gerber Rd./Elk-Grove Florin Rd.	Signal	**1.37**	**F**	**1.41**	**F**	0.99	E	1.33	F
31. Gerber Rd./Waterman Rd.	Signal	**1.21**	**F**	0.85	D	0.86	D	0.72	D
32. Gerber Rd./Bar Du Ln.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.44	A	0.40	F
33. Gerber Rd./Bradshaw Rd.	Signal	1.32	F	**1.63**	**F**	0.72	C	0.79	C
34. Gerber Rd./Vineyard Rd.	2-Way Stop	>50	F	**>50**	**F**	0.57	A	0.76	A
35. Gerber Rd./Excelsior Rd.	Signal	0.79	C	**1.02**	**F**	0.75	C	0.63	C
36. Tiogawoods Dr./Elk Grove-Florin Rd.	Signal	1.06	F	0.90	E	0.88	D	0.84	C

Intersection	Control	Cumulative Plus CAC Project Conditions				Cumulative Mitigated Plus CAC Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
37. Casselman Rd./Elk Grove-Florin Rd.	2-Way Stop	**>50**	**F**	47	E	0.89	D	0.89	B
38. Rogers Rd./Bradshaw Rd.	2-WaY Stop	14	B	25	C	13	B	19	C
39. Vintage Park Dr./Elk Grove-Florin Rd.	Signal	1.17	F	0.90	D	1.11	F	0.86	D
40. Vintage Park Dr./Waterman Rd.	Signal	0.92	E	0.88	D	0.93	E	0.83	D
41. Vintage Park Dr./Bradshaw Rd.	Signal	0.67	B	0.64	B	0.62	B	0.62	B
42. Calvine Rd./Elk Grove-Florin Rd.	Signal	>80	F	>80	F	>80	F	78	E
43. Calvine Rd./Waterman Rd.	Signal	>80	F	>80	F	>80	F	>80	F
44. Calvine Rd./Bradshaw Rd.	Signal	68	E	50	D	47	D	40	E
45. Calvine Rd./Excelsior Rd.	4-Way Stop	>50	F	>50	F	54	D	>80	D
46. Elder Creek/Waterman Rd.	Signal	-	-	-	-	0.66	B	0.82	D

Notes: Signal Control-Circular 212 Planning Methodology-Results present volume/capacity ratio and LOS.
2-Way Stop Control-2000 HCM Methodology-Results present delay and LOS for worst minor-street approach.
4-Way Stop Control-2000 HCM Methodology-Results present average delay and LOS.
Shaded areas indicate unacceptable operations.
Blue – City of Sacramento Study Intersections Green – City of Elk Grove Study Roadway Segments
Source: Fehr & Peers, 2008.

Table TC-23: Intersection Levels of Service – Cumulative Mitigated Conditions: PD Land Use Plan

Intersection	Control	Cumulative Plus PD Project Conditions				Cumulative Mitigated Plus PD Project Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. Folsom Blvd./SR 16	Signal	65	E	53	D	68	E	34	C
2. Folsom Blvd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
3. Folsom Blvd./South Watt Ave.	Signal	>80	F	>80	F	>80	F	78	E
4. Kiefer Blvd./South Watt Ave.	Signal	**1.05**	**F**	0.88	D	0.90	E	0.78	C
5. Kiefer Blvd./Bradshaw Rd.	Signal	**1.15**	**F**	**1.40**	**F**	0.66	B	0.94	E
6. SR 16/Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	76	E
7. SR 16/South Watt Ave.	Signal	**1.38**	**F**	**1.71**	**F**	1.11	F	0.96	E
8. SR 16/Hedge Ave.	Signal	1.02	F	1.08	F	0.81	D	0.72	C
9. SR 16/Bradshaw Rd.	Signal	1.89	F	1.74	F	1.36	F	1.12	F
10. SR 16/Excelsior Rd.	Signal	2.21	F	**2.55**	**F**	1.32	F	1.30	F
11. Fruitridge Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
12. Fruitridge Rd./South Watt Ave.	Signal	>80	F	>80	F	70	E	58	E
13. Fruitridge Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.95	E	0.95	E
14. Elder Creek Rd./Florin-Perkins Rd.	Signal	>80	F	>80	F	>80	F	>80	F
15. Elder Creek Rd./South Watt Ave.	Signal	>80	F	>80	F	50	D	44	D
16. Elder Creek Rd./Hedge Ave.	4-Way Stop	**>50**	**F**	**>50**	**F**	0.92	E	0.82	D
17. Elder Creek Rd./Bradshaw Rd.	Signal	**1.67**	**F**	**1.72**	**F**	0.94	E	0.77	C
18. Elder Creek Rd./Excelsior Rd.	2-Way Stop	>50	F	**>50**	**F**	0.77	C	1.00	E
19. Florin Rd./Power Inn Rd.	Signal	**1.27**	**F**	**1.18**	**F**	1.26	F	1.10	F
20. Florin Rd./Florin-Perkins Rd.	Signal	**1.77**	**F**	1.27	F	1.29	F	1.31	F
21. Florin Rd./Gardner Ave.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.72	C	0.65	B
22. Florin Rd./South Watt Ave.	Signal	**1.21**	**F**	**1.49**	**F**	0.85	D	1.09	F
23. Florin Rd./Hedge Ave.	Signal	**2.07**	**F**	**1.89**	**F**	0.59	A	0.59	A
24. Florin Rd./Waterman Rd.	Signal	0.92	E	1.06	F	0.79	C	0.83	D
25. Florin Rd./Bradshaw Rd.	Signal	1.53	F	1.66	F	1.01	F	1.05	F
26. Florin Rd./Vineyard Rd.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.47	A	0.48	A
27. Florin Rd./Excelsior Rd.	Signal	**1.46**	**F**	**1.31**	**F**	0.91	E	0.92	E
28. Gerber Rd./Power Inn Rd.	Signal	1.19	F	1.09	F	1.19	F	**1.16**	**F**
29. Gerber Rd./French Rd.	Signal	**1.55**	**F**	**1.10**	**F**	1.12	F	1.07	F
30. Gerber Rd./Elk-Grove Florin Rd.	Signal	**1.38**	**F**	**1.40**	**F**	1.02	F	1.37	F
31. Gerber Rd./Waterman Rd.	Signal	**1.19**	**F**	0.84	D	0.88	D	0.73	C
32. Gerber Rd./Bar Du Ln.	2-Way Stop	**>50**	**F**	**>50**	**F**	0.45	A	0.40	A
33. Gerber Rd./Bradshaw Rd.	Signal	1.30	F	**1.61**	**F**	0.74	C	0.76	C
34. Gerber Rd./Vineyard Rd.	2-Way Stop	>50	F	**>50**	**F**	0.62	B	0.95	E
35. Gerber Rd./Excelsior Rd.	Signal	0.84	D	**1.05**	**F**	0.80	D	0.62	B
36. Tiogawoods Dr./Elk Grove-Florin Rd.	Signal	1.06	F	0.97	E	0.90	E	0.85	D
37. Casselman Rd./Elk Grove-Florin	2-Way	**>50**	**F**	**>50**	**F**	0.96	E	0.89	D

Rd.	Stop								
38. Rogers Rd./Bradshaw Rd.	2-WaY Stop	14	B	23	C	13	B	18	C
39. Vintage Park Dr./Elk Grove-Florin Rd.	Signal	**1.28**	**F**	0.98	E	1.19	F	0.83	D
40. Vintage Park Dr./Waterman Rd.	Signal	0.96	E	0.93	E	1.00	E	0.87	D
41. Vintage Park Dr./Bradshaw Rd.	Signal	0.68	B	0.62	B	0.63	B	0.58	A
42. Calvine Rd./Elk Grove-Florin Rd.	Signal	>80	F	>80	F	>80	F	79	E
43. Calvine Rd./Waterman Rd.	Signal	>80	F	>80	F	40	D	53	D
44. Calvine Rd./Bradshaw Rd.	Signal	62	E	48	D	45	D	40	D
45. Calvine Rd./Excelsior Rd.	4-Way Stop	>50	F	>50	F	57	E	55	E
46. Elder Creek Rd/Waterman Rd.	Signal	-	-	-	-	0.71	C	0.87	D

Notes: Signal Control-Circular 212 Planning Methodology-Results present volume/capacity ratio and LOS.
2-Way Stop Control-2000 HCM Methodology-Results present delay and LOS for worst minor-street approach.
4-Way Stop Control-2000 HCM Methodology-Results present average delay and LOS.
Shaded areas indicate unacceptable operations.
Blue – City of Sacramento Study Intersections Green – City of Elk Grove Study Roadway Segments
Source: Fehr & Peers, 2008.

Impacts to Transit System Operations Under Cumulative Conditions

Transit system operations were evaluated by considering the potential effects of the project on planned transit services in the vicinity of the project site. Regional Transit maintains a 20-year master plan of transit facilities for the Sacramento region. Regional Transit's 20-year Vision Map is shown above as Plate TC-11.

The 20-year vision includes the following elements near the proposed project:

- Bus trunk line service on Bradshaw Road, Calvine Road, and portions of Florin Road and Fruitridge Road.
- An enhanced bus corridor on Watt Avenue/South Watt Avenue/Elk Grove-Florin Road and portions of Florin Road.
- Light Rail Transit (LRT) along the Central California Traction Railroad (CCTR) corridor.
- Transfer points along the CCTR corridor on Calvine Road, Florin Road, and Fruitridge Road.

The County's draft General Plan Update shows that bus rapid transit (BRT) will be accommodated in mixed-flow lanes on Elk Grove-Florin Road and Florin Road and has not identified the need for additional, exclusive rights-of-way for transit. This differs from the latest version of the RT Transit Master Plan, which shows BRT on Elk Grove-Florin Road, Florin Road east to Bradshaw Road, and Bradshaw Road north of Florin Road; RT has tentatively identified these corridors in their TMP as accommodating BRT in exclusive rights-of-way or dedicated bus corridors. These discrepancies will likely be worked out between the agencies at a later date; either plan is subject to modifications up through final approval by their respective Boards.

All major arterial and collector streets in the vicinity of the project site would be designed to accommodate transit facilities such as turnouts, bus stops, and shelters. Therefore, implementation of the proposed project would have a ***less-than-significant*** impact on planned transit operations in the area.

Impacts to Bicycle and Pedestrian System Operations Under Cumulative Conditions

The planned bicycle facilities identified in the Final Environmental Impact Report for the 2010 Sacramento City/County Bikeway Master Plan (July 1993) are shown on Plate TC-6. All major arterial and collector streets in the vicinity of the project site would be designed to accommodate planned bikeways and pedestrian sidewalks. Therefore, implementation of the proposed project would have a ***less-than-significant*** impact on existing or planned bikeways and pedestrian facilities in the study area.

Impacts to State Route 99 and U.S. 50 Under Cumulative Conditions

CAC & PD – Table TC-24 summarizes traffic share estimates for both the CAC and PD Plans on SR 99 between Calvine Road and U.S. 50 and on U.S. 50 between Watt Avenue and SR 99. The estimates were developed using the modified version of the SACMET regional travel demand forecasting model developed for this study. Specifically, a select zone assignment was used to identify the percentage of total traffic on SR 99 and U.S. 50 with an origin or destination in the proposed project. The addition of the proposed project will increase demand for travel on SR 99 and U.S. 50, which will exacerbate LOS F conditions, which is considered a ***significant*** impact.

Table TC-24: Freeway Segment Traffic Share Estimates – Cumulative Conditions

Freeway Segment	CAC Preferred Plan	Planning Department Plan
SR 99		
Calvine Road to Mack Road	0.2%	0.4%
Mack Road to Florin Road	1.0%	1.2%
Florin Road to 47th Street	3.1%	3.6%
47th Street to Martin Luther King Jr. Boulevard	2.8%	3.3%
Martin Luther King Jr. Boulevard to Fruitridge Road	2.8%	3.4%
Fruitridge Road to Sutterville Road	2.2%	2.7%
Sutterville Road to U.S. 50	1.7%	2.1%
U.S. 50		
Watt Avenue to Howe Avenue	0.5%	0.5%
Howe Avenue 65th Street	1.2%	1.4%
65th Street to 59th Street	1.6%	1.7%
59th Street to SR 99	1.4%	1.6%
Notes: Traffic shares developed using select zone assignment of the SACMET travel demand forecasting model. *Source: Fehr & Peers, 2008.*		

Mitigation Measure (SR 99 & U.S. 50)

CAC & PD –

TC-5 *All projects within the FVGCP shall pay a fair share contribution towards SR 99 and U.S. 50 corridor improvements. Improvements could include the following:*

SR 99

- *Installation of ramp metering at interchange on-ramps on southbound SR 99*
- ~~*Completion of ITS communication infrastructure (like fiber optic lines)*~~
- ~~*Upgrade of the Florin Road, 47th Street, and Fruitridge Road interchanges from full cloverleaf to partial cloverleaf configurations*~~

- ~~*Construction of auxiliary lanes*~~
- ~~*Traffic signal coordination at freeway interchanges to minimize impact of vehicle queue spillback onto SR 99*~~

U.S. 50

- ~~*Upgrade of the Watt Avenue interchange from a full cloverleaf to partial cloverleaf configuration*~~
- ~~*Traffic signal coordination at freeway interchanges to minimize impact of vehicle queue spillback onto U.S. 50*~~
- *The extension of HOV lanes from ~~Sunrise Boulevard~~ **Watt Avenue** to Downtown Sacramento ~~(or an interim project to Watt Avenue)~~*
- ~~*HOV enhancements to existing interchanges such as bypass lanes at existing metered onramps*~~
- ~~*Completion of ITS improvements on U.S. 50 like the installation of a changeable message sign east of the Mayhew Road overcrossing*~~

Implementation of the proposed mitigation would contribute to improvements to both SR 99 and U.S. 50; however, both routes would continue to operate at LOS F conditions during peak hours. Additionally, the improvements fall under jurisdictions outside of the County, and their implementation cannot be guaranteed. Furthermore, the proposed project's incremental contribution to traffic levels would be cumulatively considerable. Therefore, the impact would remain ***significant and unavoidable***.

CUMULATIVE CONDITIONS – DENSITY BONUS

In December, 2004, Sacramento County adopted an Affordable Housing Policy that includes a "density bonus" provision intended to offset the cost of providing affordable housing. For the Florin-Vineyard Gap Specific Plan, the density bonus could result in an additional 1,342 single family dwelling units with the CAC Plan and 1,809 single family dwelling units with the PD Plan if the density bonus were applied.

IMPACTS TO ROADWAY SEGMENTS UNDER CUMULATIVE PLUS PROJECT WITH DENSITY BONUS CONDITIONS

The trip generation from the additional dwelling units allowed under the density bonus (for the CAC and PD Plans) was added to the study roadway segments under Cumulative "Plus Project" conditions. It should be noted that the County has not determined if the density bonus would be applied or if the bonus were applied where the additional dwelling units would be located in the plan area. Therefore, the analysis assumes the total density bonus potential (outlined above) and allocates the additional dwelling units proportionally (based on density) to the areas of the plan designated for residential land uses.

Tables TC-25 and TC-26 summarize the roadway segment analysis under cumulative mitigated conditions with the density bonus for the CAC and PD Plans, respectively. The analysis shown in Tables TC-25 and TC-26 are based on the mitigated roadway network to identify additional impacts and mitigation beyond what was identified previously.

The addition of traffic resulting from the density bonus would result in an additional impact beyond what is anticipated for the cumulative without density bonus scenario at one roadway segment. As shown in Table TC-27, the additional adverse impact would occur with implementation of the PD Land Use Plan (with density bonus). All other impacts would be substantially similar to the impacts identified for the cumulative (without density bonus) scenarios.

MITIGATION MEASURE(S)

Implementation of the mitigation measure required for the PD Land Use Plan (with density bonus) would require expanding roadways beyond their General Plan designated widths. Such mitigation measures are considered to be infeasible. Therefore, implementation of the PD Land Use Plan (with density bonus) would result in ***significant and unavoidable*** impacts to intersections.

~~*TC-5*~~ *All development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. Pursuant to the Program the following improvements shall be implemented subject to the approval of the controlling jurisdiction.*

PD LAND USE PLAN

1. *Widen the section of Elk Grove-Florin Road between Carlisle Avenue and Vintage Park Drive from a six-lane arterial to an eight-lane arterial. This improvement would accommodate the projected daily traffic volume and provide LOS C (volume-to-capacity ratio = 0.76) operations with the PD Plan. With this improvement, Elk Grove-Florin Road would be widened beyond its General Plan designation as a six-lane arterial. Implementation of this mitigation measure would reduce the impact to a less-than-significant level; however, due to conflict with the General Plan designation, the impact would remain* ***significant and unavoidable****.*

Table TC-25: Roadway Levels of Service – Cumulative Mitigated Conditions With Density Bonus: CAC Land Use Plan

Roadway Segment	Lanes	Type	Without 15 Percent Density Bonus			With 15 Percent Density Bonus		
			Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd.-SR 16 to Watt Avenue	4	Arterial	30,000	0.83	D	30,300	0.84	D
2. Kiefer Blvd.-Florin-Perkins Rd. to Watt Ave.	2	Arterial	8,700	0.48	A	8,800	0.49	A
3. Kiefer Blvd.-Watt Ave. to Rosemont Dr.	4	Arterial	24,100	0.67	B	24,200	0.67	B
4. Kiefer Blvd.-Rosemont Dr. to Bradshaw Rd.	4	Arterial	15,700	0.44	A	15,700	0.44	A
5. SR 16-Folsom Blvd. to Watt Ave.	4	Arterial	26,800	0.74	C	26,900	0.75	C
6. SR 16 - Watt Ave. to Bradshaw Rd.	6	Arterial	37,800	0.70	B	37,800	0.70	B
7. SR 16-Bradshaw Rd. to Sunrise Blvd.	4	Arterial	29,100	0.73	C	29,100	0.73	C
8. Fruitridge Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	33,300	0.93	E	33,600	0.93	E
9. Fruitridge Rd-Florin-Perkins Rd. to South Watt Ave.	6	Arterial	27,200	0.50	A	27,700	0.51	A
10. Fruitridge Rd.-South Watt Ave. to Hedge Ave.	2	Rural	10,200	0.51	D	10,400	0.52	D
11. Elder Creek Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	26,800	0.74	C	27,100	0.75	C
12. Elder Creek Rd.-Florin-Perkins Rd. to South Watt Ave.	4	Arterial	18,500	0.51	A	19,200	0.53	A
13. Elder Creek Rd.-South Watt Ave. to Hedge Ave.	2(4)	Rural	20,200	0.56	A	21,500	0.60	A
14. Elder Creek Rd.-Hedge Ave. to Bradshaw Rd.	2 (4)	Rural	25,700	0.71	C	26,800	0.74	C
15. Elder Creek Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	10,700	0.54	D	10,800	0.30	A
16. Florin Rd.-Stockton Blvd. to Power Inn Rd.	4(6)	Arterial	42,000	0.78	C	42,800	0.79	C
17. Florin Rd. – Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	37,000	1.03	F	38,000	1.06	F
18. Florin Rd.-Florin-Perkins Rd. to Gardner Ave.	4(6)	Arterial	39,900	0.74	C	41,800	0.77	C
19. Florin Rd – Gardner Ave. to South Watt Ave.	4(6)	Arterial	44,000	0.81	D	45,800	0.85	D
20. Florin Rd.-South Watt Ave. to Hedge Ave.	2(4)	Rural	30,200	0.84	D	31,200	0.87	D
21. Florin Rd.-Hedge Ave. to Bradshaw Rd.	4	Arterial	21,700	0.60	B	22,700	0.63	B
22. Florin Rd.-Bradshaw Rd. to Excelsior Rd.	2(4)	Rural	18,600	0.52	A	18,900	0.53	A
23. Florin Rd. – Excelsior Rd. to Sunrise Blvd.	2	Rural	14,400	0.72	E	14,600	0.73	E
24. Gerber Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	25,100	0.70	B	25,500	0.71	C
25. Gerber Rd.-Power Inn Rd. to French Rd.	4	Arterial	38,400	1.07	F	39,200	1.09	F
26. Gerber Rd. – French Road to Elk Grove-Florin Rd.	4	Arterial	40,100	1.11	F	41,000	1.14	F
27. Gerber Rd.-Elk Grove-Florin Rd. to Bradshaw Rd.	4	Arterial	26,400	0.73	C	27,000	0.75	C
28. Gerber Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	14,100	0.39	A	14,300	0.40	A
29. Gerber Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	7,200	0.36	D	7,300	0.37	D
30. Vintage Park Dr.-Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	21,600	0.60	A	22,000	0.61	B
31. Vintage Park Dr. – Waterman Rd. to Bradshaw Rd.	4	Arterial	9,200	0.26	A	9,400	0.26	A
32. Calvine Rd.-Power Inn Rd. to Elk Grove-Florin Rd.[2]	5(6)	Arterial	66,800	1.24	F	67,300	1.25	F
33. Calvine Rd.-Elk Grove-Florin Rd. to Grand Cru Dr.	4(6)	Arterial	38,600	0.71	C	38,700	0.72	C
34. Calvine Rd.-Grand Cru. Dr. to Waterman Rd.	6	Arterial	39,100	0.72	C	39,200	0.73	C
35. Calvine R.-Waterman Rd. to Bradshaw Rd.	4	Arterial	29,900	0.83	D	30,000	0.83	D

Roadway Segment	Lanes	Type	Without 15 Percent Density Bonus			With 15 Percent Density Bonus		
			Vol	V/C	LOS	Vol	V/C	LOS
36. Calvine Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	20,600	0.57	A	20,700	0.58	A
37. Calvine Rd.-Vineyard Rd. to Excelsior Rd	2	Arterial	13,000	0.72	A	13,000	0.36	A
38. Calvine Rd.-Excelsior Rd. to Grant Line Rd.	2	Rural	7,900	0.40	D	7,900	0.40	D
39. Power Inn Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	31,300	0.87	D	31,400	0.87	D
40. Power Inn Rd.-Florin Rd. to Gerber Rd.	4	Arterial	35,200	0.98	E	35,200	0.98	E
41. Power Inn Rd.-Gerber Rd. to Calvine Rd.	4	Arterial	33,900	0.94	E	33,900	0.94	E
42. Florin-Perkins Rd.-Folsom Blvd. to SR 16	6	Arterial	36,200	0.67	B	36,900	0.68	B
43. Florin-Perkins Rd.-SR 16 to Fruitridge Rd.	6	Arterial	38,200	0.71	C	38,700	0.72	C
44. Florin-Perkins Rd.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	41,600	1.16	F	42,000	1.17	F
45. Florin-Perkins Rd. –Elder Creek Rd. to Florin Rd.	4	Arterial	37,600	1.04	F	37,800	1.05	F
46. Florin-Perkins Rd.-Florin Rd. to Gerber Rd.	2(4)	Arterial	26,200	0.73	C	26,900	0.75	C
47. Watt Ave.-Folsom Blvd. to Kiefer Blvd.	6	Arterial	84,100	1.40	F	84,500	1.41	F
48. South Watt Ave.-Kiefer Blvd. to SR 16	5(6)	Arterial	68,300	1.14	F	69,100	1.15	F
49. South Watt Ave.-SR 16 to Fruitridge Rd.	4	Arterial	43,400	0.80	D	44,300	0.82	D
50. South Watt Ave.-Fruitridge Rd. to Elder Creek Rd.	6	Arterial	46,600	0.86	D	47,500	0.88	D
51. South Watt Ave.-Elder Creek Rd. to Florin Rd.	6	Arterial	37,400	0.69	B	38,300	0.71	C
52. Elk Grove-Florin Rd.-Florin Rd. to Gerber Rd.	6	Arterial	44,300	0.82	D	45,700	0.85	D
53. Elk Grove-Florin Rd.-Gerber Rd to Carlisle Ave.	6	Arterial	50,900	0.94	E	52,700	0.98	E
54. Elk Grove-Florin Rd.-Carlisle Ave. to Vintage Park Dr.	6	Arterial	48,500	0.90	D	50,200	0.93	E
55. Elk Grove-Florin Rd.-Vintage Park Dr. to Calvine Rd.	6	Arterial	42,100	0.78	C	43,200	0.80	C
56. Hedge Ave.-SR 16 to Fruitridge Rd.	2	Rural	4,900	0.25	C	4,900	0.25	C
57. Hedge Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Rural	8,700	0.44	D	9,500	0.48	D
58. Hedge Ave.-Elder Creek Rd. to Florin Rd.	2	Rural	10,800	0.54	D	12,400	0.62	E
59. Waterman Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	23,400	0.65	B	23,900	0.66	B
60. Bradshaw Rd.-Kiefer Blvd. to SR 16	6	Arterial	52,300	0.97	E	52,800	0.98	E
61. Bradshaw Rd.-SR 16 to Elder Creek Rd.	6	Arterial	48,000	0.89	D	48,500	0.90	D
62. Bradshaw Rd.-Elder Creek Rd. to Florin Rd.	6	Arterial	36,200	0.67	B	37,200	0.69	B
63. Bradshaw Rd.-Florin Rd. to Gerber Rd.	6	Arterial	40,300	0.75	C	40,900	0.78	C
64. Bradshaw Rd.-Gerber Rd. to Vintage Park Dr.	4	Arterial	31,200	0.87	D	31,600	0.88	D
65. Bradshaw Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	24,000	0.67	B	24,200	0.67	B
66. Vineyard Rd.-Gerber Rd. to Calvine Rd.	2	Arterial	16,900	0.94	E	16,900	0.94	E
67. Excelsior Rd.-SR 16 to Florin Rd.	2	Rural	13,200	0.66	E	13,200	0.66	E
68. Excelsior Rd.-Florin Rd to Gerber Rd.	2	Rural	14,600	0.73	E	14,700	0.74	E
69. Excelsior Rd.-Gerber Rd. to Calvine Rd.	2	Rural	8,400	0.42	D	8,400	0.42	D
70. Waterman Rd.-Vintage Park to Gerber Rd.	4	Arterial	26,600	0.74	C	27,200	0.76	C
71. Waterman Rd.-Gerber Rd. Florin Rd.	4	Arterial	27,600	0.77	C	28,900	0.80	D
72. Vineyard Rd.-Gerber Rd. to Florin Rd.	2	Arterial	8,000	0.44	A	8,000	0.44	A
73. Waterman Rd.-Florin Rd. to Elder Creek Rd.	4	Arterial	21,900	0.61	B	22,500	0.63	B

Notes: Shaded areas indicate unacceptable operations. All arterial roadway segments assumed to have moderate access control except for Segments 6, 47, and 49, which were assumed to have high access control.
Blue – City of Sacramento Study Roadway Segments Green – City of Elk Grove Study Roadway Segments
Bold text identifies impacts resulting from the 15 percent Density Bonus
Source: Fehr & Peers, 2008.

Table TC-26: Roadway Levels of Service – Cumulative Mitigated Conditions With Density Bonus: PD Land Use Plan

Roadway Segment	Lanes	Type	Without 15 Percent Density Bonus			With 15 Percent Density Bonus		
			Vol	V/C	LOS	Vol	V/C	LOS
1. Folsom Blvd.-SR 16 to Watt Avenue	4	Arterial	30,300	0.84	D	31,000	0.86	D
2. Kiefer Blvd.-Florin-Perkins Rd. to Watt Ave.	2	Arterial	8,800	0.49	A	8,800	0.49	A
3. Kiefer Blvd.-Watt Ave. to Rosemont Dr.	4	Arterial	24,100	0.67	B	24,200	0.67	B
4. Kiefer Blvd.-Rosemont Dr. to Bradshaw Rd.	4	Arterial	15,800	0.44	A	15,800	0.44	A
5. SR 16-Folsom Blvd. to Watt Ave.	4	Arterial	27,200	0.76	C	27,500	0.76	C
6. SR 16 - Watt Ave. to Bradshaw Rd.	6	Arterial	38,500	0.71	C	38,700	0.72	C
7. SR 16-Bradshaw Rd. to Sunrise Blvd.	4	Arterial	29,300	0.73	C	29,400	0.74	C
8. Fruitridge Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	33,500	0.93	E	33,900	0.94	E
9. Fruitridge Rd-Florin-Perkins Rd. to South Watt Ave.	6	Arterial	27,900	0.52	A	28,900	0.54	A
10. Fruitridge Rd.-South Watt Ave. to Hedge Ave.	2	Rural	10,500	0.53	D	10,800	0.54	D
11. Elder Creek Rd.-Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	27,200	0.76	C	27,800	0.77	C
12. Elder Creek Rd.-Florin-Perkins Rd. to South Watt Ave.	4	Arterial	19,000	0.53	A	19,800	0.55	A
13. Elder Creek Rd.-South Watt Ave. to Hedge Ave.	4	Rural	21.300	0.59	A	22,600	0.63	B
14. Elder Creek Rd.-Hedge Ave. to Bradshaw Rd.	4	Rural	26,800	0.74	C	27,900	0.78	C
15. Elder Creek Rd.-Bradshaw Rd. to Excelsior Rd.	2	Rural	11,000	0.55	D	11,200	0.31	A
16. Florin Rd.-Stockton Blvd. to Power Inn Rd.	6	Arterial	42,300	0.78	C	43,400	0.80	D
17. Florin Rd. – Power Inn Rd. to Florin-Perkins Rd.	4	Arterial	37,500	1.04	F	38,600	1.07	F
18. Florin Rd.-Florin-Perkins Rd. to Gardner Ave.	6	Arterial	41,600	0.77	C	43,400	0.80	D
19. Florin Rd – Gardner Ave. to South Watt Ave.	6	Arterial	45,000	0.83	D	47,200	0.87	D
20. Florin Rd.-South Watt Ave. to Hedge Ave.	4	Rural	31,200	0.87	D	32,900	0.91	E
21. Florin Rd.-Hedge Ave. to Bradshaw Rd.	4	Arterial	22,400	0.62	B	23,800	0.66	B
22. Florin Rd.-Bradshaw Rd. to Excelsior Rd.	4	Rural	18,900	0.52	A	19,200	0.53	A
23. Florin Rd. – Excelsior Rd. to Sunrise Blvd.	2	Rural	14,400	0.72	E	14,700	0.74	E
24. Gerber Rd.-Stockton Blvd. to Power Inn Rd.	4	Arterial	25,800	0.72	C	26,300	0.73	C
25. Gerber Rd.-Power Inn Rd. to French Rd.	4	Arterial	39,000	1.08	F	40,100	1.11	F
26. Gerber Rd. – French Road to Elk Grove-Florin Rd.	4	Arterial	40,800	1.13	F	42,500	1.18	F
27. Gerber Rd.-Elk Grove-Florin Rd. to Bradshaw Rd.	4	Arterial	26,400	0.73	C	27,600	0.77	C
28. Gerber Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	13,700	0.38	A	14,200	0.39	A
29. Gerber Rd. – Vineyard Rd. to Excelsior Rd.	2	Rural	7,400	0.37	D	7,700	0.39	D
30. Vintage Park Dr.-Elk Grove-Florin Rd. to Waterman Rd.	4	Arterial	21,900	0.61	B	21,800	0.61	B
31. Vintage Park Dr. – Waterman Rd. to Bradshaw Rd.	4	Arterial	9,100	0.25	A	9,500	0.26	A
32. Calvine Rd.-Power Inn Rd. to Elk Grove-Florin Rd. [2]	6	Arterial	67,600	1.25	F	68,300	1.26	F
33. Calvine Rd.-Elk Grove-Florin Rd. to Grand Cru Dr.	6	Arterial	38,300	0.71	C	38,600	0.71	C
34. Calvine Rd.-Grand Cru. Dr. to Waterman Rd.	6	Arterial	38,800	0.72	C	39.000	0.72	C
35. Calvine R.-Waterman Rd. to Bradshaw Rd.	4	Arterial	29,700	0.83	D	29,800	0.83	D

Roadway Segment	Lanes	Type	Without 15 Percent Density Bonus			With 15 Percent Density Bonus		
			Vol	V/C	LOS	Vol	V/C	LOS
36. Calvine Rd.-Bradshaw Rd. to Vineyard Rd.	4	Arterial	20,500	0.57	A	20,600	0.57	A
37. Calvine Rd.-Vineyard Rd. to Excelsior Rd	2	Arterial	12,700	0.71	C	12,800	0.36	A
38. Calvine Rd.-Excelsior Rd. to Grant Line Rd.	2	Rural	7,900	0.40	D	7,900	0.40	D
39. Power Inn Rd.-Elder Creek Rd. to Florin Rd.	4	Arterial	30,800	0.86	D	30,900	0.86	D
40. Power Inn Rd.-Florin Rd. to Gerber Rd.	4	Arterial	34,400	0.96	E	34,400	0.96	E
41. Power Inn Rd.-Gerber Rd. to Calvine Rd.	4	Arterial	33,100	0.92	E	33,100	0.92	E
42. Florin-Perkins Rd.-Folsom Blvd. to SR 16	6	Arterial	36,900	0.68	B	38,000	0.70	C
43. Florin-Perkins Rd.-SR 16 to Fruitridge Rd.	6	Arterial	38,900	0.72	C	39,600	0.73	C
44. Florin-Perkins Rd.-Fruitridge Rd. to Elder Creek Rd.	4	Arterial	41,200	1.14	F	41,600	1.15	F
45. Florin-Perkins Rd. –Elder Creek Rd. to Florin Rd.	4	Arterial	38,200	1.06	F	38,400	1.07	F
46. Florin-Perkins Rd.-Florin Rd. to Gerber Rd.	4	Arterial	26,200	0.73	C	27,000	0.75	C
47. Watt Ave.-Folsom Blvd. to Kiefer Blvd.	6	Arterial	84,300	1.41	F	84,600	1.41	F
48. South Watt Ave.-Kiefer Blvd. to SR 16	6	Arterial	69,200	1.15	F	70,000	1.17	F
49. South Watt Ave.-SR 16 to Fruitridge Rd.	6	Arterial	44,200	0.82	D	45,100	0.84	D
50. South Watt Ave.-Fruitridge Rd. to Elder Creek Rd.	6	Arterial	47,400	0.88	D	48,600	0.90	D
51. South Watt Ave.-Elder Creek Rd. to Florin Rd.	6	Arterial	38,000	0.70	C	39,800	0.73	C
52. Elk Grove-Florin Rd.-Florin Rd. to Gerber Rd.	6	Arterial	46,600	0.82	D	46,300	0.86	D
53. Elk Grove-Florin Rd.-Gerber Rd to Carlisle Ave.	6	Arterial	52,500	0.97	E	54,300	1.01	F
54. Elk Grove-Florin Rd.-Carlisle Ave. to Vintage Park Dr.	6	Arterial	52,400	0.97	E	54,500	**1.01**	**F**
55. Elk Grove-Florin Rd.-Vintage Park Dr. to Calvine Rd.	6	Arterial	43,000	0.80	C	44,400	0.82	D
56. Hedge Ave.-SR 16 to Fruitridge Rd.	2	Rural	5,000	0.25	C	5,400	0.27	C
57. Hedge Ave.-Fruitridge Rd. to Elder Creek Rd.	2	Rural	9,100	0.46	D	10,600	0.53	D
58. Hedge Ave.-Elder Creek Rd. to Florin Rd.	2	Rural	12,700	0.64	E	14,500	0.73	E
59. Waterman Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	23,500	0.65	B	24,200	0.67	B
60. Bradshaw Rd.-Kiefer Blvd. to SR 16	6	Arterial	52,900	0.98	E	53,600	0.99	E
61. Bradshaw Rd.-SR 16 to Elder Creek Rd.	6	Arterial	49,100	0.91	E	49,800	0.92	E
62. Bradshaw Rd.-Elder Creek Rd. to Florin Rd.	6	Arterial	37,800	0.70	C	39,100	0.72	C
63. Bradshaw Rd.-Florin Rd. to Gerber Rd.	6	Arterial	40,200	0.74	C	41,100	0.76	C
64. Bradshaw Rd.-Gerber Rd. to Vintage Park Dr.	4	Arterial	30,700	0.85	D	31,400	0.87	D
65. Bradshaw Rd.-Vintage Park Dr. to Calvine Rd.	4	Arterial	23,600	0.66	B	24,000	0.67	B
66. Vineyard Rd.-Gerber Rd. to Calvine Rd.	2	Arterial	16,800	0.93	E	17,000	0.94	E
67. Excelsior Rd.-SR 16 to Florin Rd.	2	Rural	13,300	0.67	E	13,400	0.67	E
68. Excelsior Rd.-Florin Rd to Gerber Rd.	2	Rural	14,600	0.73	E	14,900	0.75	E
69. Excelsior Rd.-Gerber Rd. to Calvine Rd.	2	Rural	8,200	0.41	D	8,300	0.42	D
70. Waterman Rd.-Vintage Park to Gerber Rd.	4	Arterial	27,100	0.75	C	28,600	0.79	C
71. Waterman Rd.-Gerber Rd. Florin Rd.	4	Arterial	28,600	0.79	C	30,000	0.83	D
72. Vineyard Rd.-Gerber Rd. to Florin Rd.	2	Arterial	7,800	0.43	A	7,900	0.44	A
73. Waterman Rd.-Florin Rd. to Elder Creek Rd.	4	Arterial	22,900	0.64	B	24,400	0.68	B

Notes: Shaded areas indicate unacceptable operations. All arterial roadway segments assumed to have moderate access control except for Segments 6, 47, and 49, which were assumed to have high access control.
Blue – City of Sacramento Study Roadway Segments Green – City of Elk Grove Study Roadway Segments
Bold text identifies impacts resulting from the 15 percent Density Bonus
Source: Fehr & Peers, 2007.

Table TC-27: Cumulative Impacts to Roadway Segments – Density Bonus

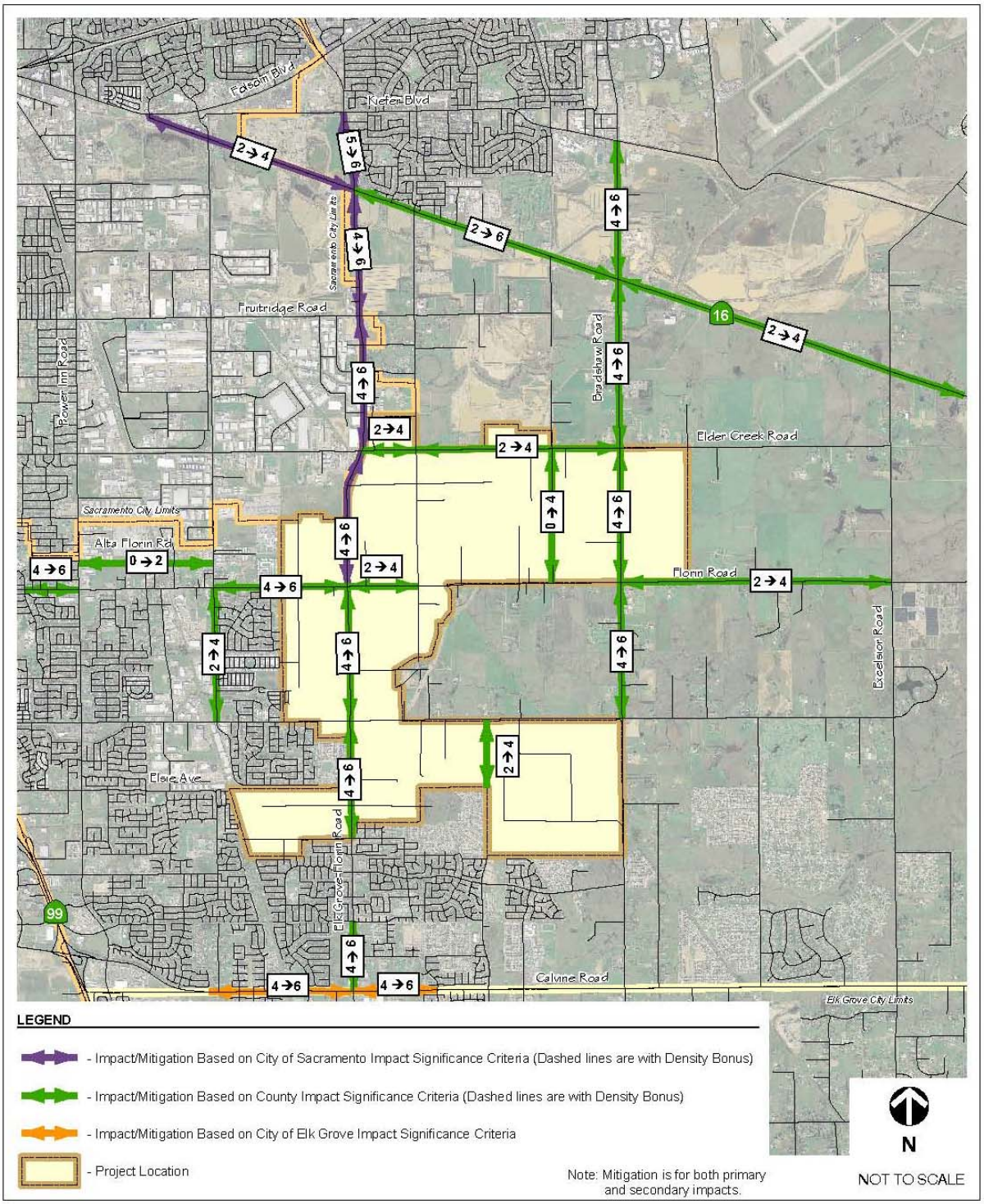
Impact Number	Roadway Segment	CAC Land Use Plan Impact	PD Land Use Plan Impact
CPD-1	Elk Grove-Florin Road – Carlisle Avenue to Vintage Park Drive	LS	SU
Notes: LS = Less-than-Significant PS = Potentially Significant SU = Significant and Unavoidable			

DISPOSITION OF IMPACTS TO ROADWAY SEGMENTS UNDER CUMULATIVE CONDITIONS WITH DENSITY BONUS FOLLOWING MITIGATION

As outlined above mitigation is proposed to reduce the significance of Impact CPD-1 which would result from the increased traffic associated with the Density Bonus under the PD Land Use Plan. Plate 18, below, shows the cumulative plus density bonus roadway system mitigation.

Implementation of the PD Plan would result in one additional significant and unavoidable impacts to roadway segments beyond what is anticipated for the PD Plan under cumulative conditions; therefore, impacts to roadway segments under the cumulative plus density bonus scenario would remain ***significant and unavoidable***.

Plate 18
Proposed Roadway Mitigation Cumulative with Project Conditions
(Plus 15 Percent Housing Density Bonus)



Source: Fehr & Peers, 2008

10 AIR QUALITY

INTRODUCTION

The Air Quality chapter of the EIR describes the effects of the Florin-Vineyard Gap Community Plan (FVGCP) on local and regional air quality. The chapter includes a discussion of the existing air quality; construction-related air quality impacts resulting from grading and equipment emissions; direct and indirect emissions associated with the project; the impacts of these emissions on both the local and regional scale; and mitigation measures warranted to reduce or eliminate any identified significant impacts. The chapter is based on an *Air Quality Impact Analysis* provided by Don Ballanti, Certified Consulting Meteorologist.

ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing air quality in the FVGCP area, located in southern Sacramento County. In addition, the regulatory agencies and required permits associated with air quality are described.

AIR BASIN CHARACTERISTICS

Sacramento lies at the southern end of the Sacramento Valley, a broad, flat valley bounded by the coastal ranges to the west and the Sierra Nevada to the east. A sea level gap in the Coast Range (the Carquinez Strait) is located approximately 50 miles southwest and the intervening terrain is very flat. The prevailing wind direction is southwesterly, which is the wind direction when marine breezes flow through the Carquinez Strait. Marine breezes dominate during the spring and summer months, and show strong daily variations. Highest average wind speeds occur in the afternoon and evening hours; lightest winds occur in the night and morning hours. During fall and winter, when the sea breeze diminishes, northerly winds occur more frequently, but southwesterly winds still predominate.

The project is within the Sacramento Metropolitan Air Quality Management District, which is part of the Sacramento Valley Air Basin. The Sacramento Valley Air Basin has been further divided into Planning Areas called the Northern Sacramento Valley Air Basin (NSVAB) and the Greater Sacramento Air region, designated by the U.S. Environmental Protection Agency (EPA) as the Sacramento Federal Ozone non-attainment area. The non-attainment area consists of all of Sacramento and Yolo counties and parts of El Dorado, Solano, Placer, and Sutter counties.

The San Francisco Bay Area Air Basin lies to the west, and the San Joaquin Valley Air Basin is located to the south of the Planning Area. Considerable transport of pollutants occurs between these air basins, so that air quality in Sacramento is partially determined by the release of pollutants elsewhere. In turn, pollutants generated in Sacramento affect air quality in areas to the north and east.

AMBIENT AIR QUALITY STANDARDS

Both the U. S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants that represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called “criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The federal and State ambient air quality standards are summarized in Table AQ-1 for important pollutants. The federal and State ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and particulate matter (PM_{10} and $PM_{2.5}$)

AMBIENT AIR QUALITY

The Sacramento Metropolitan Air Quality Management District (SMAQMD) and California Air Resources Board (CARB) maintain several air quality monitoring sites in the Sacramento area. Table AQ-2 shows data for the years 2005-2007 for the Sacramento T Street and Sacramento-Heath Dept. Stockton Street monitoring sites, the closest monitoring sites to the proposed project.

All federal ambient air quality standards are met in the project area, with the exception of ozone. However, the State ambient standards of ozone and PM_{10} are regularly exceeded.

ATTAINMENT STATUS

Federal and state air quality laws require identification of areas not meeting the ambient air quality standards. Non-attainment areas must develop regional air quality plans to eventually attain the standards. Under the federal Clean Air Act, Sacramento County is a non- attainment area for ozone and PM_{10} and unclassified or attainment for other federal standards. Under the California Clean Air Act Sacramento County is a non-attainment area for ozone and particulate matter (PM_{10} and $PM_{2.5}$) and attainment for other State standards.

Table AQ-1: Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour 8-Hour	-- 0.075 PPM	0.09 PPM 0.07 PPM
Carbon Monoxide	8-Hour 1-Hour	9.0 PPM 35.0 PPM	9.0 PPM 20.0 PPM
Nitrogen Dioxide	Annual Average 1-Hour	0.05 PPM --	0.03 PPM 0.18 PPM
Sulfur Dioxide	Annual Average 24-Hour 1-Hour	0.03 PPM 0.14 PPM --	-- 0.04 PPM 0.25 PPM
PM_{10}	Annual Average 24-Hour	-- 150 µg/m^3	20 µg/m^3 50 µg/m^3
$PM_{2.5}$	Annual 24-Hour	15 µg/m^3 35 µg/m^3	12 µg/m^3 --
Lead	Calendar Quarter 30 Day Average	1.5 µg/m^3 --	-- 1.5 µg/m^3
Sulfates	24 Hour		25 µg/m^3
Hydrogen Sulfide	1-Hour		0.03 PPM
Vinyl Chloride	24-Hour		0.01 PPM

PPM = Parts per Million
µg/m^3 = Micrograms per Cubic Meter

Source: California Air Resources Board, Ambient Air Quality Standards (06/26/08) http://www.arb.ca.gov/research/aaqs/aaqs2.pdf

Table AQ-2: Days Exceeding Air Quality Standards at the Sacramento – T Street and Sacramento – Health Dept. (Stockton Blvd.) Monitoring Sites, 2005-2007

Pollutant/Standard	Year	Days Exceeding Standard:
Ozone/State 1-Hour	2005 2006 2007	6 4 1
Ozone/Fed. 1-Hour	2005 2006 2007	0 0 0
Ozone Fed. 8-Hour	2005 2006 2007	3 1 0
Nitrogen Dioxide/State 1-Hour	2005 2006 2007	0 0 0
PM_{10}/State-Hour	2005 2006 2007	3 4 4
PM_{10}/Federal 24-Hour	2005 2006 2007	0 0 0
$PM_{2.5}$/Federal 24-Hour	2005 2006 2007	0 0 0
Carbon Monoxide/Fed. And State 8-Hour	2005 2006 2007	0 0 0
Source: California Air Resources Board, Aerometric Data Analysis and Management (ADAM), 2008. (http: //www.arb.ca.gov./adam/cgi-bin/adamtop/d2wstart)		

HEALTH EFFECTS OF POLLUTANTS

The following is a discussion of the health effects of important pollutants in the Sacramento Valley Air Basin.

OZONE

Ozone is produced by chemical reactions involving nitrogen oxides (NO_X) and reactive organic gases (ROG), which are triggered by sunlight. Nitrogen oxides are created during combustion of fuels, while reactive organic gases are emitted during combustion and evaporation of organic solvents. Because ozone is not directly emitted to the atmosphere, but is formed as a result of photochemical reactions, ozone is considered a secondary pollutant. In the Sacramento Valley Air Basin ozone is a seasonal problem, occurring roughly from April through October.

Ozone is a strong irritant that attacks the respiratory system, leading to the damage of lung tissue. Asthma, bronchitis and other respiratory ailments as well as cardiovascular diseases are aggravated by exposure to ozone. A healthy person exposed to high concentrations may become nauseated or dizzy, may develop headache or cough, or may experience a burning sensation in the chest.

Research has shown that exposure to ozone damages the alveoli (the individual air sacs in the lung where the exchange of oxygen and carbon dioxide between the air and blood takes place). Research has shown that ozone also damages vegetation.

Suspended Particulate Matter

Suspended particulate matter (PM) is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. "Inhalable" PM consists of particles less than 10 microns in diameter, and is defined as "suspended particulate matter" or PM_{10}. Particles between 2.5 and 10 microns in diameter arise primarily from natural processes, such as wind-blown dust or soil.

Fine particles are less than 2.5 microns in diameter ($PM_{2.5}$). $PM_{2.5}$, by definition, is included in PM_{10}. Fine particles are produced mostly from combustion or burning activities. Fuel burned in cars and trucks, power plants, factories, fireplaces and wood stoves produces fine particles.

The level of fine particulate matter in the air is a public health concern because fine particles can bypass the body's natural filtration system more easily than larger particles, and can lodge deep in the lungs. The health effects vary depending on a variety of factors, including the type and size of particles. Research has demonstrated a correlation between high PM concentrations and increased mortality rates. Elevated PM concentrations can also aggravate chronic respiratory illnesses such as bronchitis and asthma.

Carbon Monoxide

Carbon monoxide is a local pollutant in that high concentrations are found only very near the source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes.

Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

Carbon monoxide concentrations are highly seasonal, with the highest concentrations occurring in the winter. The seasonality is partly due to the fact that automobiles create more carbon monoxide in colder weather and partly due to the very stable atmospheric conditions that exist on cold winter evenings when winds are calm. Concentrations typically are highest during stagnant air periods within the period November through January.

Toxic Air Contaminants

Many different types of Toxic Air Contaminants (TAC) exist, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage and death. Unlike criteria pollutants, safe levels of exposure to TACs cannot be established.

Diesel exhaust is a TAC of growing concern in California. The California Air Resources Board in 1998 identified diesel engine particulate matter as a TAC. The exhaust from diesel engines contains hundreds of different gaseous and particulate components, many of which are toxic. Many of these compounds adhere to the particles, and because diesel particles are so small, they penetrate deep into the lungs. Diesel engine particulate has been identified as a human carcinogen. Mobile sources, such as trucks, buses, automobiles, trains, ships and farm equipment are by far the largest source of diesel emissions.

CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines. High volume freeways, stationary diesel engines and facilities attracting heavy and constant diesel vehicle traffic were identified as having the highest associated risk.

Regulatory Context

Air quality is monitored through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly and individually to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for regulating and improving the air quality within the Sacramento County area are discussed below.

Federal Clean Air Act

Sacramento County's first federal ozone clean air plan was adopted in 1994 in compliance with the 1990 Amendments to the Federal Clean Air Act. At that time,

the region could not show that the federal 1-hour standard could be attained by 1999. In exchange for moving the deadline to 2005, the region accepted a designation of “severe nonattainment,” with additional emission requirements on stationary sources.

In July 1997, EPA promulgated a new 8-hour standard for ozone. The change lowered the standard for ambient ozone from 0.12 parts per million of ozone averaged over one hour to 0.08 parts per million of ozone averaged over eight hours (since revised downward to 0.075 parts per million). The 8-hour ozone rule required new designations in June 2004 and the revocation of the 1-hour ozone standard in June 2005.

The Sacramento region was classified by EPA as a “serious” nonattainment area on June 15, 2004, for the federal 8-hour ozone standard with an attainment deadline of June 15, 2013. An evaluation of proposed new control measures and associated VOC and NO_X emission reductions concluded that a set of feasible controls were not available to provide the needed emission reductions before the attainment deadline year

The Board of Director’s for each of the five air districts which comprises the Sacramento Federal Nonattainment Area (SFNA) requested that the California Air Resources Board (CARB) submit a formal request for voluntary reclassification from a “serious” to a “severe” for the 8-hour ozone nonattainment area with an associated attainment deadline of June 15, 2019.

On October 16, 2006, the EPA promulgated a new 24-hour standard for $PM_{2.5}$. This change lowered the daily standard from 65µg/m^3 to 35µg/m^3 to protect the general public from short term exposure to fine particulate matter. Sacramento County does not meet the new standard. In December, 2007, the California Air Resources Board made their recommendations to the USEPA, recommending that Sacramento County be designated nonattainment. Areas so designated must prepare an attainment plan to be submitted not later than 3 years after the effective date of the designation (EPA estimates this to be April 2012).

CALIFORNIA CLEAN AIR ACT

The California Clean Air Act (CCAA) of 1988 required nonattainment areas to achieve and maintain the state ambient air quality standards by the earliest practicable date and local air districts to develop plans for attaining the state ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide standards. In compliance with the CCAA, the Sacramento Metropolitan Air Quality Management District (AQMD) prepared and submitted the 1991 Air Quality Attainment Plan (AQAP) to mainly address Sacramento County’s nonattainment status for ozone and carbon monoxide (CO), and although not required, particulate matter (PM_{10}). The 1991 AQAP was designed to make expeditious progress toward attaining the state ozone standard and contained preliminary

implementation schedules for control programs on stationary sources, transportation, and indirect sources, and a vehicle/fuels program.

Sacramento County has met the ambient air quality standards for sulfur dioxide and nitrogen dioxide. The CCAA also requires that by the end of 1994 and once every three years thereafter, the districts are to assess their progress toward attaining the air quality standards. The triennial assessment is to report the extent of air quality improvement and the amounts of emission reductions achieved from control measures for the preceding three year period. The AQMD Board of Directors adopted the 2003 Triennial Report April 28, 2005. The report, prepared pursuant to California Health and Safety Code section 40925, identifies "all feasible measures" the AQMD will study or adopt over the next three years.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

The Sacramento Metropolitan Air Quality Management District (SMAQMD) shares responsibility with the California Air Resources Board (CARB) for ensuring that the State and federal ambient air quality standards are met within Sacramento County. State law assigns local air districts the primary responsibility for control of air pollution from stationary sources while reserving to the CARB control of mobile sources. The SMAQMD is responsible for developing regulations governing emissions of air pollution, permitting and inspecting stationary sources, monitoring air quality and air quality planning activities. Under the California Environmental Quality Act (CEQA) the District may participate as a "responsible agency" or "reviewing agency" or "lead agency." The SMAQMD has adopted the document *Guide to Air Quality Assessment in Sacramento County* to provide lead agencies, consultants and project proponents with uniform procedures for assessing potential air quality impacts for proposed projects and for preparing the air quality section of environmental documents.

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan is applicable to the proposed project. The General Plan sets forth various goals, policies and programs that would apply to projects in Sacramento County. The following goals, policies and programs are applicable to the proposed project.

Sacramento County General Plan: Air Quality Element

GOAL: Air Quality which protects and promotes the public health, safety, welfare, and environmental quality of the community.

POINT AND AREA SOURCE CONTROL POLICIES

AQ-3 Promote optimal air quality benefits through energy conservation measures in new development.

AQ-5 Require the use of Best Available Control Technology (BACT) to reduce air pollution emissions.

MOBILE SOURCE CONTROL POLICIES

AQ-6 Provide disincentives for single-occupant vehicle trips through parking supply and pricing controls in areas where supply is limited and alternative transportation modes are available so as not to cause economic disruption, or through other measures identified by SMAQMD and incorporated into regional plans.

AQ-7 Support the use of demand management and pricing controls as near-term measures for attaining Air Quality Attainment Plan goals and policies.

AQ-10 Provide incentives for the use of transportation alternatives, including a program for the provision of financial incentives for builders that construct ownership housing within a quarter mile of existing and proposed light rail stations.

AQ-11 Require as a building standard the installation of electrical service in all new residential development that can be used for the overnight charging of electrical vehicles.

AQ-12 The County shall establish an incentive based program for the installation of electrical service for recharging electrical vehicles in public and private parking facilities sufficient to meet demand.

AQ-13 Require the consideration of HOV lanes in all street and highway widening and new construction projects for arterials and wider rights-of-way.

AQ-15 All new major indirect sources of emissions shall be reviewed and modified or conditioned to achieve a reduction in emissions. This indirect source review program will be developed in coordination with SACOG and SMAQMD, and include the following features:

A. A 15 percent reduction in emissions from the level that would be produced by a base-case project assuming full trip generation per the current ITE Trip Generation Handbook.

B. A focus on cost-effectiveness measured in terms of cost per ton of pollutant avoided.
C. A list of cost-effective measures to be developed, maintained, and annually reviewed by SMAQMD.
D. A maximum expenditure cap which will be computed for each indirect source on the basis of factors including, but not limited to, total emissions and project value.
E. A process for obtaining a waiver from the 15 percent requirement if it is found that a lower level of reduction is all that can be achieved with cost-effective measures and offsets, or that achieving the full 15 percent reduction would cost more than expenditure cap.
F. An exception for projects which have already undergone the indirect source review at some point in the development approval process.
G. A procedure to give full credit for other measures required in a project that may also achieve a reduction in emissions.

LAND USE CONTROL POLICIES

AQ-17 Require that development projects be located and designed in a manner which will conserve air quality and minimize direct and indirect emission of air contaminants.

AQ-18 Encourage employment-intensive development, having the potential to employ 200 or more employees, where adequate transit service is planned, and discourage such development where adequate transit service is not planned.

AQ-19 Identify the air quality impacts of development proposals to avoid significant adverse impacts and require appropriate mitigation measures or offset fees.

AQ-20 Submit development proposals to AQMD for review and comment in compliance with CEQA prior to consideration by the appropriate decision making body.

AQ-21 Provide for the location of ancillary employee services (including, but not limited to, child care, restaurants, banking facilities, convenience markets) at major employment centers for the purpose of reducing midday vehicle trips.

AQ-22 Provide for buffers between sensitive land uses and sources of air pollution or odor.

AQ-23 Promote mixed-use development to reduce the length and frequency of vehicle trips.

AQ-24 Provide for increased intensity of development along existing and proposed transit corridors.

AQ-25 Require that new development be designed to promote pedestrian and bicycle access and circulation.

AQ-26 Accommodate growth within existing urban areas (infill) as a priority over urban expansion.

AQ-27 Require that all employee parking areas for new development be designed with controllable access.

AQ-28 Require that large new developments dedicate land for use as park-and-ride lots if suitably located.

AQ-29 Require traffic counter loops and traffic management hardware at nonresidential garage entrances, driveways, new intersections, and other appropriate locations.

AQ-30 Require that new commercial and industrial projects adjacent to bus stops make provisions in their project design for park-and-ride spaces.

AQ-31 Preserve and ensure the dedication of rights-of-way and station sites along future light rail extensions.

AQ-32 Require that new and replacement fuel storage tanks at automobile and light duty truck refueling stations be clean-fuel compatible, if technically and economically feasible.

OTHER RELEVANT POLICIES

AQ-37 Maximize air quality benefits through selective use of vegetation in landscaping and through revegetation of appropriate areas.

AQ-38 A conformity analysis shall be conducted to assure that transportation plans, programs, and projects will not impair efforts to meet air quality standards.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The Sacramento Metropolitan AQMD has published a guidance document for the preparation of the air quality portions of environmental documents that includes thresholds of significance to be used in evaluating land use proposals. The following thresholds serve as the basis for evaluating impacts to air quality:[1]

Ozone Precursors Significance Thresholds - The District considers increases in emissions of nitrogen oxides (NO_X) greater than 85 pounds per day as significant during construction. For operation of a project, the District's threshold of significance is 65 pounds per day of either NO_X or ROG.

Other Criteria Pollutant -Significance Thresholds - A project that may cause an exceedance of a state air quality standard, or may make a substantial contribution to an existing exceedance of an air quality standard will have a significant adverse air quality impact. "Substantial" is defined as making measurably worse, which is five percent or more of an existing exceedance of a State ambient air quality standard.

Offensive Odors Significance Threshold - A qualitative assessment indicating that a project may reasonably be expected to generate odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property will have a significant adverse air quality impact.

Toxic Air Contaminants Significance Thresholds - The recommended significance thresholds for TACs are a lifetime probability of contracting cancer greater than 10 in one million and a ground-level concentration of non-carcinogenic toxic air pollutants that would result in a Hazard Index of greater than one.

METHOD OF ANALYSIS

Donald Ballanti, certified Consulting Meteorologist, prepared an air quality report for the proposed project (*Air Quality Impact Analysis for the Florin-Vineyard Gap Community Plan Project, County of Sacramento)*. The following information outlines the methods of analysis in the report.

[1] Sacramento Metropolitan Air Quality Management District, *Guide to Air Quality Assessment in Sacramento County*, July 2004.

Carbon Monoxide Concentrations

The CALINE-4 program for estimating carbon monoxide concentrations was applied to worst-case intersections in the study area. Worst-case intersections were selected based on the worst Level of Service (LOS) intersections identified in the traffic study conducted for the FVGCP by Fehr & Peers (2008). The modeling procedures contained in *Transportation Project-Level Carbon Monoxide Protocol* were utilized.[2] The CALINE-4 computer model was used to predict worst-case concentrations of carbon monoxide at receptors located near the intersections.

Regional Emissions

Estimates of operational emissions generated by project traffic and area sources were made using the URBEMIS-2007 program. URBEMIS-2007 estimates the emissions that result from various land uses. The URBEMIS-2007 program includes considerations for trip generation rates, vehicle mix, average trip length by trip type, and average speed.

The URBEMIS-2007 program was used to calculate daily operational emissions during the summer months with an ambient temperature of 95 degrees Fahrenheit and during the winter months with an ambient temperature of 50 degrees Fahrenheit. Summer results from URBEMIS-2007 are used to assess ozone precursors, reactive organic gases (ROG) and nitrogen oxides (NO_X), while winter results are used to assess particulate matter (PM_{10} and $PM_{2.5}$) and carbon monoxide (CO) emissions. In addition, the annual results were used to estimate the project carbon dioxide (CO_2) emissions per year.

Project-Specific Impacts and Mitigation Measures

Impacts to Air Quality Resulting from Fugitive Dust During Construction Activities.

CAC Land Use Plan/PD Land Use Plan

Construction would result in numerous activities that would generate dust. The fine, silty soils in the project area and often strong afternoon winds exacerbate the potential for dust, particularly in the summer months. Grading, leveling, earthmoving and excavation are the activities that generate the most fugitive dust, a particulate emission. Impacts would be localized and variable, and construction impacts would last for a period of several months at any one location. Construction dust impacts are considered to be potentially adverse on a

[2] Garza, Vincente J.; Peter Granly; Daniel Sperling. 1997. *Transportation Project-Level Carbon Monoxide Protocol*. Institute of Transportation Studies, University of California, Davis, Report UCD-ITS-RR-97-21.

localized basis. In particular, the potential for dust nuisance would exist during early stages of construction when disturbance of soil is greatest.

Construction activities would temporarily affect local air quality, causing a temporary increase in particulate matter and dust emissions. Although the future amount of construction activity on any given day is unknown, it is likely that dust emissions during construction would have the potential to exceed local ambient air quality standards and result in nuisance complaints. Therefore, construction activities associated with implementation of the proposed project would have a ***significant*** impact on air quality.

MITIGATION MEASURE(S)

~~Appendix B of~~ SMAQMD's *Guide to Air Quality Assessment in Sacramento County* provides ~~recommended mitigation measures that are dependant on the size of the project site and maximum disturbed area at any given time~~ **a list of Basic Construction Emissions Control Practices that should be implemented on all projects, regardless of size, and Enhanced Fugitive Dust Control Practices that should be implemented on significant projects. Dust abatement practices are required pursuant to SMAQMD Rule 403 and California Code of Regulations, Title 13, sections 2449(d)(3) and 2485; the SMAQMD Guide simply lays out the basic practices needed to comply. Since these are already required by existing rules and regulations, it is not necessary to include them as mitigation.** As the proposed project covers a large area in which construction would likely occur on multiple sites at any given time the amount of construction activity on any given day within the project area cannot be predicted. Therefore, while the ~~following mitigation measure~~ **SMAQMD-recommended dust control measures** would reduce project fugitive particulate matter impacts, impacts to air quality from fugitive dust emissions would be considered a short-term *significant and unavoidable* impact.

No further feasible mitigation available.

~~*AQ-1 All development within the Florin Vineyard Gap Community Plan area shall employ the following measures* **(or the current SMAQMD-recommended mitigation in effect at the time of project application)**, *to reduce grading/construction particulate emissions.*~~

- ~~*Keep soil moist at all times;*~~
- ~~*Maintain two feet of freeboard space(or cover loads) on haul trucks; and*~~
- ~~*Use emulsified diesel or diesel catalysts on applicable heavy duty diesel construction equipment.*~~

Impacts to Air Quality Resulting from Ozone Precursor Emissions and Diesel Particulate Caused by Construction Activities.

CAC Land Use Plan/PD Land Use Plan

Although the future amount of construction activity on any given day is unknown, it is reasonable to assume that construction activities for one or more developments could result in construction emissions above the SMAQMD construction threshold of significance for ozone precursors (85 pounds per day of NO_X). Therefore, construction-related emissions of ozone precursors resulting from implementation of the proposed project would likely result in an adverse impact to air quality.

In addition, construction activities require the use of various diesel-powered vehicles and equipment. As noted above, diesel equipment produces particulate matter during combustion which can have an adverse impact on air quality.

Implementation of the proposed project would likely include construction activities on numerous sites on any given day. Therefore, calculating the daily emissions is not possible. However, given the size of the project area, exceedance of SMAQMD standards is likely. As a result, ozone precursor emissions and diesel particulate matter emissions associated with implementation of the proposed project would have a ***potentially significant*** impact on air quality.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce impacts associated with construction emissions of ozone precursors and diesel particulate matter to a *less-than-significant* level.

*AQ-2 Development proposals that exceed the SMAQMD NO_X screening levels shown in Table AQ-3, or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance **(currently** ~~of~~ 85 pounds per day of NO_X**)** ~~or the applicable standard in place at the time of application,~~ the following measure shall be implemented **(or the current SMAQMD-recommended mitigation in effect at the time of project application)**:*

> *The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A*

visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which construction activity does not occur. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance;

~~Table AQ-3: SMAQMD Construction Screening Levels~~

~~Land Use Development Type~~	~~Construction Screening Level~~
~~Single Family Residential~~	~~120 units~~
~~Apartments – Low Rise~~	~~330 units~~
~~Apartments – Mid Rise~~	~~600 units~~
~~General Office~~	~~550,000 square feet~~
~~Medical Office Building~~	~~550,000 square feet~~
~~Warehouse~~	~~220,000 square feet~~
~~Manufacturing~~	~~220,000 square feet~~
~~Industrial Park~~	~~220,000 square feet~~
~~Hospital~~	~~550,000 square feet~~
~~Bank, with Drive Thru~~	~~550,000 square feet~~
~~Restaurant, Fast with Drive Thru~~	~~550,000 square feet~~
~~Office Park~~	~~550,000 square feet~~
~~Convenience Market (24 hours)~~	~~550,000 square feet~~
~~Convenience Market with Gas Pumps~~	~~550,000 square feet~~
~~Supermarket~~	~~550,000 square feet~~
~~Shopping Center, Regional~~	~~550,000 square feet~~
~~Strip Mall~~	~~550,000 square feet~~
~~Hotel~~	~~1,150 rooms~~
~~Motel~~	~~1,150 rooms~~
~~Church/Place of Worship~~	~~550,000 square feet~~
~~Library~~	~~550,000 square feet~~
~~Day Care Center~~	~~550,000 square feet~~
~~High School~~	~~550,000 square feet~~
~~*Source: SMAQMD Guide to Air Quality Assessment in Sacramento County, http://www.airquality.org/ceqa/CEQAFAQ.pdf.*~~ ~~Screening level is based on either ROG or NO_x threshold of 65 lbs./day, whichever is achieved first.~~	

Table AQ-3: SMAQMD Construction Screening Levels

Urbemis2007 Land Use Category	Urbemis2007 Land Use	Screening Level	Units
Residential	Single family housing	180	du
Residential	Apartment low rise	980	du
Residential	Apartment mid rise	1,895	du
Residential	Apartment high rise	2,100	du
Residential	Condo/townhouse general	960	du
Residential	Condo/townhouse high rise	2,100	du
Residential	Mobile home park	360	du
Residential	Retirement community	305	du
Residential	Congregate care facility	960	du
Education	Day-care center, Elementary school, Junior high school, High school	1,307	ksf
Education	Junior college (2 yrs)	1,307	ksf
		14,205	students
Education	University/college (4 yrs)	14,205	students
Education	Library	1,307	ksf
Recreational	City park	60	acres
Recreational	Racquet club	1,307	ksf
Recreational	High turnover restaurant	1,307	ksf
Recreational	Hotel	2,614	rooms
Large Retail	Regional shopping center	1,307	ksf
Large Retail	Home improvement superstore	1,308	ksf
Retail	Strip mall	1,307	ksf
Retail	Supermarket	1,307	ksf
Retail	Convenience market with gas pumps	1,307	ksf
Commercial	General office building, Office park	1,307	ksf
Commercial	Medical office building	1,307	ksf
Commercial	Hospital	1,307	ksf
		1,590	beds
Industrial	Warehouse, Manufacturing, Industrial Park	625	ksf
Industrial	General light industry	625	ksf
		29	acres
		1,280	employees

Notes: Modeling performed using URBEMIS2007 Version 9.2.4
du = dwelling units; ksf = thousand square feet

Modeling performed to determine construction screening levels assumed typical construction activities, including mass site grading, asphalt paving, building construction, and architectural coatings, but not demolition. These screening levels were developed assuming some overlap of construction phases (e.g., asphalt paving and mass site grading may occur simultaneously for 2 weeks).

Source: SMAQMD Guide to Air Quality Assessment in Sacramento County, http://www.airquality.org/ceqa/ceqaguideupdate/Ch3ConstructionNOxScreeningLevelsFINAL.pdf

and,

The contractor shall provide a plan for approval by SMAQMD demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_X reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction; and the project sponsor shall submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

If at the time of construction, the District has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with the District prior to construction will be necessary to make this determination.

If, after the 20 percent NO_X reduction afforded by implementation of the above, the SMAQMD thresholds of significance are still exceeded, then that development shall pay SMAQMD off-site air quality mitigation fees to reduce the project's net construction NO_X emissions below the significance threshold. The off-site mitigation fees shall be paid to SMAQMD prior to the approval of improvement plans or the issuance of grading permits. Developers should contact the SMAQMD for assistance in assessing the fee, based on the current rate of $16,000/ton of NO_X or the prevailing rate in effect at the time of construction.

Impacts Resulting from the Elevated Carbon Monoxide Levels Along Roads and Near Intersections Resulting from Operational Vehicle Emissions.

CAC Land Use Plan/PD Land Use Plan

Carbon monoxide is a local pollutant (i.e., high concentrations of carbon monoxide are normally only found very close to its source). Carbon monoxide is a colorless, odorless, poisonous gas, the major source of which is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volume and congestion.

Existing concentrations of carbon monoxide within the FVGCP are well below the State and federal standards. Future predicted concentrations resulting from operational emissions are below current levels, despite increased traffic, due to the lower emission rate from the future vehicle mix resulting from emission controls. Based on the projected Levels of Service contained in the Fehr & Peers traffic study (2008), predicted concentrations would remain below the State/federal standards with the addition of traffic from either the CAC Land Use Plan or the PD Land Use Plan (with and without application of the density bonus); as well as cumulative traffic (See Table AQ-4, below). As the project area is not currently in violation of the ambient air quality standards for carbon monoxide, and implementation of the proposed project would not cause a violation of either ambient air quality standard for carbon monoxide, the impact of the project on local carbon monoxide concentrations is considered to be ***less-than-significant***.

Table AQ-4: Project Carbon Monoxide Concentrations at Worst Case Intersections

Intersection	Existing (2008) 1-Hour	Existing (2008) 8-Hour	Cumulative + CAC Project (2025)[1] 1-Hour	Cumulative + CAC Project (2025)[1] 8-Hour	Cumulative + PD Project (2025)[1] 1-Hour	Cumulative + PD Project (2025)[1] 8-Hour
Kiefer Blvd./ Bradshaw Rd.	7.0	4.9	4.3	3.0	4.3	3.0
Elder Creek Rd./ Florin-Perkins Rd.	7.1	5.0	4.6	3.2	4.6	3.2
Florin Rd./ Florin-Perkins Rd.	6.3	4.4	4.3	3.0	4.4	3.1
Florin Rd./ Bradshaw Rd.	5.1	3.6	4.2	2.9	4.3	3.0
Gerber Rd./ French Rd.	5.6	3.9	4.1	2.9	4.2	2.9
Gerber Rd./ Elk Grove-Florin Rd.	7.2	5.0	4.5	3.2	4.6	3.2
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0

Note: all concentrations are in Parts Per Million.

[1] The CALINE-4 modeling does not reflect the 15 percent housing density bonus. With the housing density bonus, traffic volumes and CO concentrations would be somewhat higher. The housing density bonus would increase traffic on affected roads by from 0 to 6.25%. Even with this increased traffic, modeled carbon monoxide concentrations would remain well below the State/federal ambient standards.

MITIGATION MEASURE(S)

None required.

IMPACTS RESULTING FROM INCREASES IN EMISSIONS OF OZONE PRECURSORS FROM OPERATIONAL SOURCES.

CAC LAND USE PLAN/PD LAND USE PLAN

Operation of the proposed project would result in substantial new auto and area source emissions of regional pollutants (See Table AQ-5). Sacramento County General Plan Policy AQ-15 requires all new major sources of emissions to be reviewed and modified or conditioned to achieve a reduction of emissions. The goal of the review is to achieve a 15 percent reduction of emissions from the base-case level. The SMAQMD has prepared a list of measures with corresponding point values that can be applied to a project to achieve a reduction of emissions.

Table AQ-5: Estimated New Regional Emissions

Alternative	ROG	NO_X
CAC Land Use Plan	1,315.1	571.2
PD Land Use Plan	1,648.7	682.4
SMAQMD Significance Threshold	65.0	65.0
Note: All measurements are in pounds per day.		

The SMAQMD has already ~~approved~~ **endorsed** the FVGCP area's AQ-15 Plan (Air Quality Mitigation Program (3/26/07); **Appendix D**). The implementation of the measures identified in the AQ-15 Plan achieves a 12.5 percent reduction in emissions. The remaining 2.5 percent reduction will be met by each individual project within the FVGCP area. **The measures include the provision of bicycle lockers, pedestrian facilities, bus service, direct street routing, other measures. Southgate Recreation and Park District is also planning an extensive bicycle and pedestrian trail and parkway system along the Gerber and Elder Creek corridors, utility corridors, and Gardner and Hedge Avenues. These trails will serve as alternate transportation routes and will provide linkages to public transit, parks, schools, offices and shopping centers. As roadways become more congested, bicycle and pedestrian facilities may aid in decreasing the number of personal vehicle trips for residents.** This tiered approach to reaching the 15 percent target will provide individual projects the flexibility to implement measures that complement their individual developments and site constraints.

While implementation of the plan would reduce project emissions, both the CAC Land Use Plan and PD Land Use Plan would generate emissions of reactive organic gases ROG and NO_X that would exceed the SMAQMD significance threshold of 65 pounds per day. Therefore, implementation of the proposed project would have a ***significant*** impact to regional ozone air quality.

MITIGATION MEASURE(S)

Implementation of the following mitigation measure would reduce project impacts by a minimum of 15 percent. The measure would reduce estimated project regional emissions, but not to levels below the SMAQMD thresholds of significance for ozone precursors; therefore, project regional air quality impacts would be *significant and unavoidable*.

AQ-3 All development projects within the FVGCP shall comply with the SMAQMD ***endorsed*** ~~*approved*~~ *Florin Vineyard Gap Community Plan Air Quality Mitigation Program (March 26,* ~~*2008*~~ ***2007****), which requires implementation of a combination of Plan-wide and project-specific emission reduction measures that will achieve a minimum of 15 percent reduction in operational and area source emissions, consistent with General Plan Policy AQ-15.*

IMPACTS TO SENSITIVE RECEPTORS FROM NEW SOURCES OF TOXIC AIR CONTAMINANTS.

CAC LAND USE PLAN/PD LAND USE PLAN

In 2005, CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective*. The handbook was developed in response to recent studies that have demonstrated a link between exposure to poor air quality and respiratory illnesses, both cancer and non-cancer related. The CARB handbook recommends that planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools and playgrounds. Air pollution sources of concern include high traffic freeways and roads, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and large gasoline dispensing facilities.

The above sources are either direct sources of TAC emissions or attract significant numbers of diesel vehicles. The FVGCP area does not include any lands within 500 feet of a freeway. While rail lines do pass directly adjacent to the southwest corner of the FVGCP, and the potential exists for the Central California Traction Company tracks located within the FVGCP to be reactivated, rail yards are not located within or near the FVGCP. Nor is there room within the existing railroad right-of-ways to establish rail yard. The potential exists that some of the above uses would be located within the industrial and commercially zoned areas of the FVGCP (e.g., dry cleaners). However, the Sacramento Zoning Code contains setback and proximity requirements which would reduce the potential for adverse impacts to sensitive land uses. Furthermore, any new sources of toxic air contaminants would be subject to the permitting procedures and risk assessment requirements of the SMAQMD. Therefore, project impacts related to exposure to toxic air contaminants would be ***less-than-significant***.

MITIGATION MEASURE(S)
None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

IMPACTS TO REGIONAL AIR QUALITY RESULTING FROM THE PROPOSED PROJECT IN COMBINATION WITH OTHER REASONABLY FORESEEABLE PROJECTS IN THE SACRAMENTO AIR BASIN.

CAC LAND USE PLAN/PD LAND USE PLAN

As noted above, the Sacramento Air Basin is a non-attainment area for ozone. As shown in Table AQ-5, the CAC Land Use Plan would produce approximately 1,315 pounds per day of ROG and 571 pounds per day of NO_X when the project

is built out. The PD Land Use Plan would produce approximately 1,649 pounds per day of ROG and 682 pounds per day of NO_X when the project is built out. Ongoing development in the Sacramento Air Basin is anticipated to produce long-term mobile and area source emissions of ozone precursors which would contribute to the ongoing non-attainment status. The level of regional emissions would depend on the volumes of traffic generated by the projects and types of land uses. As the proposed project would exceed the SMAQMD thresholds for ROG and NO_X, the project's incremental contribution to the significant cumulative impact would be cumulatively considerable. Therefore, the implementation of either the CAC or PD Land Use Plans would result in a ***significant*** cumulative impact on air quality. It should be noted that cumulative impacts related to greenhouse gas emissions are addressed in Chapter 11, Climate Change.

Mitigation Measures

As required by Mitigation Measure AQ-3, individual projects' would be required to comply with the endorsed FVGCP Air Quality Mitigation Plan. However, the mitigation would not reduce impacts to a less-than-significant level. Therefore, the project's incremental contribution to regional air quality impacts would remain cumulatively *significant and unavoidable*.

AQ-4 Implement Mitigation Measure AQ-3.

11 CLIMATE CHANGE

INTRODUCTION TO CLIMATE CHANGE AND GLOBAL WARMING

The average surface temperature of the Earth has risen by about one degree Fahrenheit in the past century, with most of that occurring during the past two decades (World Meteorological Organization, 2005). To the layperson, this apparently small amount of warming may appear insignificant. Correspondingly, the probable increases in average temperatures of between three to eight degrees Fahrenheit (Cayan, et al., 2006) may appear noticeable, but still insignificant. The word *average* is of critical importance to understanding climate change and global warming. In July, the average high temperature in Sacramento is 94 degrees Fahrenheit (The Weather Channel website, 2007). This number is created by averaging temperatures over decades, not just for one particular year. Although the average is 94 degrees Fahrenheit, residents know that the individual days and weeks making up that average are as much as 20 degrees warmer or cooler in the extreme cases and up to 10 degrees warmer or cooler on a more regular basis. Therefore, applying an average increase of 8 degrees in a strictly linear way (omitting forcing effects) would mean that the *average* July temperature in Sacramento would be 102 degrees, and that temperatures could get as hot as 122 degrees in an extreme event (the current record is 114) and could regularly reach 112 degrees. This kind of temperature shift would have significant consequences to citizens and the environment alike.

There is evidence that most of the warming over the last 50 years is due to human activities. Human activities, such as energy production and internal combustion vehicles, have increased the amount of greenhouse gases in the atmosphere, which in turn is causing the Earth's average temperature to rise. Rises in average temperature are leading to changes in climate patterns, shrinking polar ice caps and a rise in sea level, with a host of corresponding impacts to humans and ecosystems.

Greenhouse gases are atmospheric gases that act as global insulators by reflecting visible light and infrared radiation back to Earth. Some greenhouse gases, such as water vapor, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), occur naturally and are emitted to the atmosphere through natural processes. Although CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From 1750 to 2004, concentrations of CO_2, CH_4, and N_2O have increased globally by 35, 143, and 18 percent, respectively. Other greenhouse gases, such as fluorinated gases, are created and emitted solely through human activities (EPA, 2006).

The principal greenhouse gases that enter the atmosphere because of human activities are CO_2, CH_4, N_2O, and fluorinated gases. Carbon dioxide, or CO_2, is the gas that is most commonly referenced when discussing climate change

because it is the most commonly emitted gas. While some of the less common gases do make up less of the total greenhouse gases emitted to the atmosphere, some have a greater climate-forcing effect per molecule and/or are more toxic than carbon dioxide.

"In order to stabilize the concentration of GHGs in the atmosphere, emissions would need to peak and decline thereafter. The lower the stabilization level, the more quickly this peak and decline would need to occur. Mitigation efforts over the next two to three decades will have a large impact on opportunities to achieve lower stabilization levels" (IPCC, 2007c).

Carbon Dioxide

The natural production and absorption of carbon dioxide (CO_2) is achieved through the terrestrial biosphere and the ocean. However, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, each of these activities has increased in scale and distribution. Carbon dioxide was the first greenhouse gas demonstrated to be increasing in atmospheric concentration, with the first conclusive measurements being made in the last half of the 20th Century. Prior to the industrial revolution, concentrations were fairly stable at 280 ppm. Today, they are around 370 ppm, an increase of well over 30 percent (EPA, 2006). Left unchecked, the concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 535 ppm by 2100 as a direct result of anthropogenic sources (IPCC, 2007a). This could result in an average global temperature rise of at least two degrees Celsius (IPCC, 2007a).

Carbon dioxide emissions are mainly associated with combustion of carbon-bearing fossil fuels such as gasoline, diesel, and natural gas used in mobile sources and energy-generation-related activities. The U.S. EPA estimates that CO_2 emissions accounted for 84.6 percent of greenhouse gas emissions in the United States in 2004 (EPA, 2006). The California Energy Commission (CEC) estimates that CO_2 emissions account for 84 percent of California's anthropogenic (manmade) greenhouse gas emissions, nearly all of which is associated with fossil fuel combustion (CEC, 2005). Total CO_2 emissions in the United States increased by 20 percent from 1990 to 2004 (EPA, 2006).

Methane

Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10-12 years), compared to some other greenhouse gases (such as CO_2, N_2O, and CFCs). CH_4 has both natural and anthropogenic sources. Landfills, natural gas distribution systems, agricultural activities, fireplaces and wood stoves, stationary and mobile fuel combustion, and gas and

oil production fields categories are the major sources of these emissions (EPA 2006).

The U.S. EPA estimates that CH_4 emissions accounted for 7.9 percent of total greenhouse gas emissions in the United States in 2004 (EPA, 2006). The CEC estimates that CH_4 emissions from various sources represent 6.2 percent of California's total greenhouse gas emissions (CEC, 2005). Total CH_4 emissions in the United States decreased by 10% from 1990 to 2004 (EPA, 2006).

Nitrous Oxide

Concentrations of nitrous oxide (N_2O) also began to rise at the beginning of the industrial revolution. N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizers that contain nitrogen. Use of these fertilizers has increased over the last century. Global concentration for N_2O in 1998 was 314 ppb, and in addition to agricultural sources for the gas, some industrial processes (fossil fuel fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load (EPA, 2006).

The U.S. EPA estimates that N_2O emissions accounted for 5.5 percent of total greenhouse gas emissions in the United States in 2004 (EPA, 2006). The CEC estimates that nitrous oxide emissions from various sources represent 6.6 percent of California's total greenhouse gas emissions (CEC, 2005). Total N_2O emissions in the United States decreased by 2 percent from 1990 to 2004 (EPA 2006).

Fluorinated Gases (HFCs, PFCs, and SF_6)

Fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfurhexafluoride (SF_6), are powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are occasionally used as substitutes for ozone-depleting substances such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and halons, which have been regulated since the mid-1980s because of their ozone destroying potential. Fluorinated gases are typically emitted in smaller quantities than CO_2, CH_4, and N_2O, but each molecule can have a much greater global warming effect. Therefore, fluorinated gases are sometimes referred to as High Global Warming Potential (GWP) gases (EPA, 2006).

The primary sources of fluorinated gas emissions in the United States include the production of HCFC-22 production, electrical transmission and distribution systems, semiconductor manufacturing, aluminum production, magnesium production and processing, and substitution for ozone-depleting substances. The U.S. EPA estimates that fluorinated gas (HFC, PFC, and SF_6) emissions accounted for 2.0 percent of total greenhouse gas emissions in the United States

in 2004 (EPA, 2006). The CEC estimates that fluorinated gas emissions from various sources represent 3.4 percent of California's total greenhouse gas emissions (CEC, 2005). Total fluorinated gas emissions in the United States increased by 58 percent from 1990 to 2004 (EPA, 2006).

WORLDWIDE, NATIONAL AND STATEWIDE EMISSIONS

Table CC-1 presents estimated GHG emissions from California, the United States, and from worldwide sources. The results are presented in units of million metric tons per year of CO_2 equivalents (MMTCO2Eq). Worldwide GHG emissions were taken from the World Resources Institute's Climate Analysis Indicators Tool (CAIT) version 4 for calendar year 2000 (the latest year for which complete data are available). The United States GHG emissions were taken from Energy Information Administration's Emissions of Greenhouse Gases in the United States 2004. While data for 2005 are available, 2004 data were used because the California data are for 2004. California GHG emissions were taken from the California Energy Commission's Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 (the latest year for which complete data are available).

Table CC-1: Greenhouse Gas Emissions Worldwide, United States, and California

Geographic Region	CO_2	CH_4	N_2O
	$MMTCO_2Eq$[a]	$MMTCO_2Eq$[b]	$MMTCO_2Eq$[c]
Worldwide GHG Emissions for calendar year 2000[1]	32,541.3	5,854.9	3,349.4
United States GHG Emissions for calendar year 2004[2]	5,973.0	639.5	353.7
California GHG Emissions for calendar year 2004[3]	484.4	27.9	33.3

Notes:
[a]$MMTCO_2Eq$ means million metric tons per year of CO_2 equivalent, using Global Warming Potential (GWP) values provided by IPCC in its Fourth Assessment Report (TAR) (IPCC 2007a). The GWP for CO_2 is 1.
[b]The GWP from IPCC's TAR for CH_4 is 21.
[c]The GWP from IPCC's TAR for N_2O is 310.
CO_2 = carbon dioxide; N_2O = Nitrous oxide; CH_4 = Methane.
[1]Worldwide GHG emissions taken from Climate Analysis Indicators Tool (CAIT) version 4.0. Washington, DC: World Resources Institute, 2007. Available at http://cait.wri.org.
[2]United States GHG emissions taken from *Emissions of Greenhouse Gases in the United States 2004*, Energy Information Administration, U.S. Department of Energy, Washington, DC, December 2005.
[3]California GHG emissions taken from *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*, California Air Resources Board, November 2007.

EMISSIONS THRESHOLDS

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of carbon dioxide needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of greenhouse gases at 400-450 ppm carbon dioxide-equivalent concentration is

required to keep global mean warming below 2°C, which in turn is assumed to be necessary to avoid dangerous climate change (IPCC, 2007a). The California Climate Change Center (CCCC) at UC Berkeley has determined that an 11 percent reduction of greenhouse gases from present levels is required by year 2010, a 25 percent reduction is required by 2020, and an 80 percent reduction by 2050 in order to stabilize greenhouse gases at 400-450 ppm carbon dioxide-equivalent concentrations and avoid potentially dangerous climate change impacts (CCCC, 2006). The California Legislature required these reduction levels by enacting AB 32.

Though reduction rates were established in California law (AB 32), as of the writing of this document there are no established CEQA thresholds for greenhouse gases. AB 32 requires ARB to adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990 to be achieved by 2020, as specified.

Executive Order S-3-05

Executive Order S-3-05 was the precursor to Assembly Bill 32 (AB 32 is described in the next section) and was signed by Governor Schwarzenegger in June 2005. This Executive Order was significant because of its clear declarative statements that climate change poses a threat to the State of California. The Executive Order states that California is “particularly vulnerable” to the impacts of climate change, and that climate change has the potential to reduce Sierra snowpack (a primary source of drinking water), exacerbate existing air quality problems, adversely impact human health, threaten coastal real estate and habitat by causing sea level rise, and impact crop production. The Executive Order also states that “mitigation efforts will be necessary to reduce greenhouse gas emissions”.

To address the issues described above, the Executive Order established emission reduction targets for the state: reduce GHG emissions to 2000 levels by 2010, to 1990 levels by 2020 and to 80 percent below 1990 levels by 2050. The Secretary of the California Environmental Protection Agency was named as coordinator for this effort, and the Executive Order required a progress report by January 2006 and biannually thereafter. As a result, the Climate Act Team was created by the California Environmental Protection Agency. The first report from the Climate Act Team was released in March of 2006, which proposed to meet the emissions targets through voluntary compliance and state incentive and regulatory programs.

Assembly Bill 32

In September 2006, Assembly Bill (AB) 32 was signed by Governor Schwarzenegger of California. AB 32 requires that California GHG emissions be reduced to 1990 levels by the year 2020, just like Executive Order S-3-05. However, AB 32 is a comprehensive bill that requires the California Air Resources Board (ARB) to adopt regulations requiring the reporting and verification of statewide greenhouse gas emissions, and it establishes a schedule of action measures. AB 32 also requires that a list of emission reduction strategies be published to achieve emissions reduction goals.

The following is a list of critical path items incorporated into AB 32 – deadlines that cannot be extended unless the Governor agrees there are "extraordinary circumstances", and then only for one year:

January 1, 2007: AB 32 goes into effect;

June 30, 2007: CARB must publish "a list of discrete early action GHG emission reduction measures" (Cal. Health & Safety Code § 38560.5(a)); this list is not just advisory - the measures must be implemented by regulations by 2010;

January 1, 2008: ARB must establish the 1990 baseline of statewide GHG emissions that will be the cap to be implemented by 2020 (*id*. at § 38550);

January 1, 2008: ARB must also adopt regulations requiring the monitoring and annual reporting of GHG emissions from all significant sources (*id.* at § 38530);

January 1, 2009: ARB must prepare and approve a "scoping plan" for "achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHG gases by 2020" (*id.* at § 38561); this scoping plan will be the template for the regulations that will be adopted by 2011;

January 1, 2010: ARB must "adopt regulations to implement" the list of reduction measures that it publishes by June 30, 2007 *(id.* at § 38560.5(b));

January 1, 2011: ARB must adopt regulations establishing "GHG emission limits and emission reduction measures" (*id.* at § 38562(a)); and

January 1, 2012: the 2011 regulations must become operative. (*Id.)*

As of this writing, the first four critical path items have occurred. AB 32 is in effect and the list of early action measures was adopted by the ARB on June 21, 2007 (Resolution 07-25). Three early action measures were identified by the deadline: establishment of a low-carbon fuel standard, restrictions on the use of refrigerants, and the establishment of statewide standards for the installation and

performance of landfill methane capture. Subsequently, the California Air Resources Board added many additional items to the early action measures list, at a hearing on October 25, 2007.

STATE OF CALIFORNIA EMISSION REDUCTION STRATEGIES

Several strategies to reduce vehicle emissions have been identified by the California Environmental Protection Agency's Climate Action Team. These include, but are not limited to, the following:

VEHICLE CLIMATE CHANGE STANDARDS

With the passage of AB 1493, Pavley, Chapter 200, Statutes of 2002, California moved to the forefront of reducing vehicle climate change emissions. This bill required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the ARB in September 2004. The ARB analysis of this regulation indicates emissions savings of 1 million tons CO_2 equivalent ($MMtCO_2e$) by 2010 and 30 million tons CO_2 equivalent by 2020.

DIESEL ANTI-IDLING

Reduced idling times and the electrification of truck stops can reduce diesel use in trucks by about 4 percent, with major air quality benefits. In July 2004 the ARB adopted a measure to limit diesel-fueled commercial motor vehicle idling. AB 32 analysis indicates that anti-idling measures could reduce climate change emissions by 1.2 MMtCO2e in 2020.

OTHER NEW LIGHT DUTY VEHICLE TECHNOLOGY IMPROVEMENTS

In September 2004 the California Air Resources Board approved regulations to reduce climate change emissions from new motor vehicles. The regulations apply to new passenger vehicles and light duty trucks beginning with the 2009 model year. The standards adopted by the Board phase in during the 2009 through 2016 model years. When fully phased in, the near term (2009–2012) standards will result in about a 22 percent reduction as compared to the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30 percent reduction.

New standards would be adopted to phase in beginning in the 2017 model year (following up on the existing mid-term standards that reach maximum stringency in 2016). Assuming that the new standards call for about a 50 percent reduction, phased in beginning in 2017, this measure would achieve about a 4 MMT reduction in 2020. The reduction achieved by this measure would significantly

increase in subsequent years as clean new vehicles replace older vehicles in the fleet—staff estimates a 2030 reduction of about 27 MMT.

Executive Order S-01-07

This Executive Order was signed by Governor Schwarzenegger on January 18, 2007 and directed the Climate Action Team to determine whether the items in the Order could be established as an early action measure pursuant to AB 32 – which the Climate Action Team has now done. The Executive Order states that the State of California relies on petroleum-based fuels for 96 percent of its transportation needs, there were more than 24 million motor vehicles registered in California, and statewide gasoline consumption was almost 16 billion gallons in 2005. To address the carbon emitted by this use of fuel, the Executive Order states that a statewide goal must be established to reduce the "carbon intensity of California's transportation fuels" by at least 10 percent by the year 2020 and that a Low Carbon Fuel Standard for transportation fuels be established. The Low Carbon Fuel Standard applies to all "refiners, blenders, producers or importers of transportation fuels in California".

Senate Bill 375

In September 2008, Governor Arnold Schwarzenegger signed Senate Bill (SB) 375, which is intended to build on AB 32 by attempting to control GHG emissions through land use and circulation planning. SB 375 enhances ARB's ability to reach goals set by AB 32 by directing ARB to develop regional GHG emission reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035. In addition, ARB will work with the State's 18 metropolitan planning organizations to align their regional transportation, housing, and land-use plans and prepare a "sustainable communities strategy" to reduce the amount of vehicle miles traveled in their respective regions and demonstrate the region's ability to attain its greenhouse gas reduction targets. SB 375 provides incentives for creating walkable and sustainable communities and revitalizing existing communities, and allows home builders to get relief from certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Furthermore, SB 375 encourages the development of alternative transportation options, which will reduce traffic congestion. It is not anticipated that ARB will adopt targets until September 30, 2010.

SACRAMENTO COUNTY EMISSION REDUCTION EFFORTS

CHICAGO CLIMATE EXCHANGE

In February 2007, the County joined the Chicago Climate Exchange. The Chicago Climate Exchange is the world's first and North America's only voluntary, legally binding rules-based greenhouse gas (GHG) emission reduction and trading system. Chicago Climate Exchange Phase I members commit to reduce GHG emissions 1 percent per year over the years 2003 through 2006 relative to a 1998 through 2001 average baseline. Members agree to reduce GHG emissions by a total of 4 percent below the baseline by 2006. Chicago Climate Exchange Phase II members commit to reduce GHG emissions from 0.5 percent to 1.25 percent per year through the years 2007 through 2010 for grand total of 6 percent below the baseline.

Those members that reduce their emissions annually beyond the committed level can sell surplus emission allowances on the Chicago Climate Exchange or bank them. A member that cannot achieve the annual reduction target within its organization can meet its commitment by purchasing emissions allowances through the Chicago Climate Exchange from other Chicago Climate Exchange members that reduce their emissions beyond the reduction target.

The goals of Chicago Climate Exchange are:

1. To facilitate the transaction of GHG emissions allowance trading with price transparency, design excellence and environmental transparency.

2. To build the skills and institutions needed to cost-effectively manage GHG emissions.

3. To facilitate capacity-building in both public and private sector to facilitate mitigation.

4. To strengthen the intellectual framework required for cost effective and valid reduction.

5. To help inform the public debate on managing the risk of global climate change.

Chicago Climate Exchange members make a commitment to:

1. Measure, report, and reduce GHG emissions.

2. Establish an emission reduction schedule.

3. Implement GHG emissions management.

4. Participate in annual emissions audits.

Energy Conservation/Energy Efficiency Program

For years, the County of Sacramento has taken a leadership role in implementing policies and programs to conserve energy in County facilities and reduce emissions from the County fleet of vehicles.

The Board of Supervisors approved an Energy Conservation/Energy Efficiency Program in 2001. The essence of the program is to reduce electrical energy usage during peak periods of the day. The program contains ten measures such as participating in Sacramento Municipal Utility Districts Voluntary Emergency Curtailment Program, setting building temperatures to 78° F to decrease cooling demand and dual switching of lights.

The County converted 108 of 150 trucks to liquid natural gas (LNG) in the Refuse Collection Fleet. The Heavy Rental Fleet now includes 18 propane powered vehicles. The Light Fleet includes 95 hybrid vehicles and 3 Compressed Natural Gas (CNG) vehicles. Replacement vehicles to the Light Fleet will be hybrid vehicles. The Sacramento International Airport operates LNG Shuttle buses.

GHG emissions from County operations are either direct emissions or indirect emissions. Direct emissions result from on-site direct combustion by the County of fossil fuels such as natural gas to heat facilities and gasoline to fuel vehicles. Therefore, increasing the number of vehicles, which use alternative fuels, reduces GHG emissions.

Indirect emissions result from the purchase of energy, such as electricity, and the corresponding emissions associated with that generation. Therefore, purchasing electricity from green energy sources, or reducing energy use reduces GHG emissions. Direct and indirect emissions are the GHG emissions, expressed in metric tons of carbon dioxide (CO_2) equivalent.

The County provided Chicago Climate Exchange current and historical energy and fuel purchase data for fiscal years 2000, 2001, 2002, 2003, 2004, and 2005. The data submitted is for County-owned facilities and vehicles. The County's commitment to join does not apply to businesses, other government agencies or residents within the County boundary, only to emissions generated by Sacramento County as an organization. Preliminary review by the Chicago Climate Exchange indicates the County could be in a position to sell surplus emission allowances for the period of 2003 through 2010. This data will be subject to an audit before a formal Baseline is established and exact credits can be calculated.

It is expected, based on information available and preliminary review by the Chicago Climate Exchange, that the County will receive potential financial reward from participation in the Chicago Climate Exchange. The County may be eligible to sell excess allowances for 2003, 2004 and 2005. The ongoing ability of the County to continue selling allowances will be dependent on the County's continued commitment to energy conservation and fleet conversion. The preliminary baseline for direct and indirect emissions for the County is 226,700 metric tons of CO_2.

Sustainability Cabinet

Recognizing the need to work together as a County to address climate change, the Sacramento County Sustainability Cabinet was formed in September of 2007. The cabinet will develop a County sustainability plan for County energy management, develop a County green building policy and explore legislative priorities. The intent is to gather together the various environmental initiatives that are currently underway to ensure a coordinated County effort. The Sustainability Cabinet will also facilitate the baseline reporting for the Chicago Climate Exchange, CCAR, ICLEI and conformance with AB 32.

National Association of Counties

The National Association of Counties (NACo) represents county governments in the United States. NACo offers legislative, research, technical, and public affairs assistance to member counties, and facilitates conferences and meetings on issues of concern to counties throughout the country.

California Climate Action Registry

The County joined the California Climate Action Registry (Registry) in December 2006. The Registry is non-profit public/private partnership that serves as a voluntary GHG registry to protect, encourage and promote early actions to reduce GHG emissions. Registry participants agree to calculate, certify and publicly report GHG emissions. The Registry provides a reporting tool, standards and protocol for reporting GHG emissions.

AB 32 recognizes participation in the Registry in a number of ways. First, AB 32 requires the ARB to incorporate the standards and protocols developed by the Registry in the rulemaking process. Second, AB 32 provides that entities that join the Registry prior to December 31, 2006 and report their emissions according to the Registry protocols will not be required to significantly alter their reporting program.

Cities for Climate Protection (ICLEI)

Sacramento County joined ICLEI in 2007. The Cities for Climate Protection is administered under the International Council for Local Environmental Initiatives (ICLEI). The following is a brief description of the program from their website (www.iclei.org):

> The Cities for Climate Protection™ (CCP) Campaign enlists cities to adopt policies and implement measures to achieve quantifiable reductions in local greenhouse gas emissions, improve air quality, and enhance urban livability and sustainability. More than 650 local governments participate in the CCP, integrating climate change mitigation into their decision-making processes.
>
> The campaign is based on an innovative performance framework structured around five milestones that local governments commit to undertake. The milestones allow local governments to understand how municipal decisions affect energy use and how these decisions can be used to mitigate global climate change while improving community quality of life. The CCP methodology provides a simple, standardized way of acting to reduce greenhouse gas emissions and of monitoring, measuring, and reporting performance.

BENEFITS OF PARTICIPATION

Communities that participate in the CCP benefit from the actions that they take to reduce greenhouse gas emissions through:

- Financial savings in reduced utility and fuel costs to the local government, households, and businesses.
- Improved local air quality, contributing to the general health and well being of the community. Economic development and new local jobs as investments in locally produced energy products and services keep money circulating in the local economy.
- ICLEI provides regionally specific tools and technical assistance to assist local governments in reducing their greenhouse gas emissions.

Cities for Climate Protection® (CCP) is ICLEI's flagship campaign. The program is designed to educate and empower local governments worldwide to take action on climate change. CCP is a performance-oriented campaign that offers a framework for local governments to reduce greenhouse gas emissions and improve livability within their municipalities. This campaign would give Sacramento County a framework and tools to develop a plan for greenhouse emissions. The basic framework is called the 5 Milestones and consists of the following steps:

1. Conduct a baseline emissions inventory and forecast. Based on energy and waste data, the member calculates greenhouse gas emissions for a

base year (e.g., 2000) and for a forecast year (e.g., 2015). The inventory and the forecast capture emissions from all municipal operations (e.g., city owned and/or operated buildings, streetlights, transit systems, wastewater treatment facilities) and from all community-related activities (e.g., residential and commercial buildings, motor vehicles, waste streams, industry). The inventory and forecast provide a benchmark against which the city can measure progress.

2. Adopt an emissions reduction target for the forecast year. The city passes a council resolution establishing an emission reduction target for the city. The target is essential both to foster political will and to create a framework to guide the planning and implementation of measures.

3. Develop a Local Action Plan. The local government develops a Local Action Plan that describes or lists the policies and measures that the local government will take to reduce greenhouse gas emissions and achieve its emissions reduction target. Most plans include a timeline, a description of financing mechanisms, and an assignment of responsibility to departments and staff. In addition to direct greenhouse gas reduction measures, most plans also incorporate public awareness and education efforts. The development of the Local Action Plan should include strong public input and involvement in order to build the consensus among stakeholders required to implement measures.

4. Implement policies and measures. The city implements the policies and measures contained in their Local Action Plan. Typical policies and measures implemented by CCP participants include energy efficiency improvements to municipal buildings and water treatment facilities, streetlight retrofits, public transit improvements, installation of renewable power applications, and methane recovery from waste management.

5. Monitor and verify results. Monitoring and verifying progress on the implementation of measures to reduce or avoid greenhouse gas emissions is an ongoing process. Monitoring begins once measures are implemented and continues for the life of the measures, providing important feedback that can be use to improve the measures over time. ICLEI's software provides a uniform methodology for cities to report on measures.

The County has completed the emissions inventory and it is available on the Department of Environmental Review and Assessment website at www.dera.saccounty.net (see the home page under special studies).

GREEN FLEETS

The City and County of Sacramento have adopted a heavy-duty low-emission vehicle (LEV) acquisition policy. The policy goal is to reduce oxides of nitrogen (NO_X) emissions from heavy-duty fleet vehicles to meet the year 2005 standard for ozone in the Sacramento Federal Ozone Non-attainment area.

The foundation statements for this project are:

1. We recognize that the region has an air quality problem which is related to vehicle operations, especially the operation of heavy-duty vehicles;

2. We recognize that public agencies in Sacramento County operate large vehicle fleets which have significant numbers of heavy-duty vehicles.

3. We recognize that public agencies have a significant role to play in improving air quality by reducing the emissions from their fleet operations, especially their heavy-duty vehicles.

The commitments of this program are to show how fleets can aggressively incorporate low-emission vehicles into fleet operations, and how fleets can overcome training, facility and operational issues with resolve. The efforts will focus on the conversion of the on-road, heavy-duty equipment fleets to certified low-emission vehicles as these vehicles are replaced as part of regular systematic replacement programs. As of 2004 the County has committed to replace 50 percent off the fleet to low-emission vehicles.

COOL COUNTIES INITIATIVE

On July 16, 2007 at the National Association of Counties Annual Conference in Richmond, Virginia, 12 pioneering counties representing 17 million people launched “Cool Counties.” The Cool Counties initiative seeks to marshal the resources of all 3,066 counties across the nation to address the challenges climate change poses to our communities. On May 27, 2008 the Sacramento County Board of Supervisors approved a resolution to become a Cool County and participate in the initiative.

Participating counties commit to the following four smart actions:

1. Reducing our own contributions to climate change through our internal operations;

2. Demonstrating regional leadership to achieve climate stabilization and protect our communities;

3. Helping our community become climate resilient;

4. Urging the federal government to support our efforts.

These actions are consistent with the state requirements under Assembly Bill (AB) 32 and Executive Order S-3-05, including:

- Assessing local operations that impact greenhouse gas emissions;
- Working to reduce greenhouse gas emissions 80% below current levels by 2050; and
- Identifying local vulnerabilities to climate change and creating a plan to address them.

Working with counties nationally to urge the federal government to adopt legislation to reduce greenhouse gas emissions 80% below current levels by 2050.

IMPACTS AND MITIGATION MEASURES

The following section discloses the potential impacts of the proposed project on global climate change, and the potential impacts of global climate change on the proposed project. Mitigation measures have been identified where feasible.

STANDARDS OF SIGNIFICANCE

Though it is clear that emissions throughout the state must be reduced in order to meet reductions targets, none of the Air Districts in California have identified a significance threshold for GHG emissions, a methodology for making a finding, or developed a measuring tool to determine when mitigation reduces emissions "enough". The California Office of Planning and Research, the agency responsible for development and updates to the CEQA Guidelines, is not required to have a draft set of guidelines for climate change until July 1, 2009 (pursuant to Senate Bill 97, Chapter 185, 2007). One could use the emissions reduction targets established through AB 32. However, the measures listed in the published Proposed Scoping Plan (not yet adopted) do not clearly identify the reduction targets that will apply specifically to local government. The Proposed Scoping Plan states that local government should set the same ultimate targets as those set forth in AB 32, but does not provide the details necessary to understand how much of the target will be achieved through State actions (such as the low-carbon fuel standard) and how much will be achieved by local action. Even after this inventory is complete, it is recognized that for most projects there is no clear or established method to determine if a particular project will negatively impact the ability of the state to meet the emissions goals. At the time of this writing, a host of white papers on the subject have been published, and many conferences and workshops are being held each month. While all conclude that actions must be taken, the subject of significance criteria is a matter of great debate.

Sacramento County has prepared a GHG emissions inventory as part of preparation of the Environmental Impact Report for the General Plan Update project (Control Number 02-GPB-0105). It is the intent of this process to identify reductions targets for the County that would mirror those of AB 32, and to recommend policies that new development must follow in order to allow achievement of the reductions. Once this is in place, a significance finding can be made based on whether the project does or does not comply with the adopted policies. Even in absence of the completion of the inventory and the General Plan Update, the basic premise of the above strategy can be implemented.

Sacramento County has developed both a screening criteria and a significance threshold for GHG. The screening criteria is used to determine whether a project is large enough to warrant quantitative analysis, instead of relying on qualitative analysis. If quantitative analysis is warranted, emissions are quantified using URBEMIS (or other models, as appropriate). Because traffic is a significant contributor of GHG emissions, the screening threshold is based on the number of trips a given project may generate. If a project generates less than 100 peak-hour trips and less than 1,000 total daily trips, quantitative modeling will not be required.

All GHG impacts to climate change are exclusively cumulative impacts, and all projects that result in an expansion of use also result in cumulative climate change impacts. The issue is determining which projects result in significant impacts, and which projects are *less-than-significant*. Sacramento County will determine that a project is *less-than-significant* if approval of the project without mitigation will not jeopardize the State's GHG emissions reductions goals, when considered as part of cumulative development in Sacramento County. The Air Resources Board is currently estimating that the State as a whole will need to reduce emissions by up to 33 percent by 2020, so Sacramento County must reduce it's emissions by that same amount as it's fair-share contribution. This must be achieved both through requirements placed on new discretionary projects and by measures targeted at existing development and operations. As a policy decision, Sacramento County has also determined that new discretionary projects should bear a larger burden to offset emissions, because greater reductions can be achieved at lower cost from new sources than from existing sources. Based on this premise, projects must comply with the following criteria shown in Table CC-2[1], or impacts are significant:

[1] All project types NOT listed on the table above will be examined on a case-by-case basis, as will projects which fall into more than one category.

Table CC-2: Climate Change Impact Criteria

Project	Criteria	Mitigation
Small/Infill	Project of < 100 peak hour or 1,000 daily trips/ Infill[1] or redevelopment[2] project	None
Medium	Project of > 100 peak-hour trips or 1,000 daily trips, unless it meets below criteria	33% offset
Large/Regional	Includes a General Plan Amendment, is a Specific Plan (or similar), or is a Project as defined by SB 221 or 610	100% offset

1. A project area must be within the Urban Policy Area, surrounded on all sides by urban development, and less than 5 acres in size to be infill.
2. A project must be within the Urban Policy Area, and must involve a change in use or development of an existing developed site.

The SMAQMD has developed interim guidelines for GHG emissions reductions, similar to the guidelines for AQ-15 Plans. In the guidelines, one point is equivalent to a 1 percent reduction. There are a total of 48.825 points provided for commercial projects, 58.825 points for mixed use developments, and 61.475 for residential projects. Medium projects, as defined in the above table, would be able to achieve most of their required reductions through inclusion of measures from the SMAQMD interim guidelines. However, Large or Regional projects will require implementation of additional measures beyond those listed in the guidelines.

Method of Analysis

During operation, the proposed project would contribute to long-term increases in GHGs as a result of traffic increases (mobile sources) and residential and commercial operations associated with heating and energy use (area sources). Mobile sources and area sources are considered direct project emissions. The project would also indirectly result in GHG emissions from off-site electricity generation at power plants. These emissions are compared, in the form of a percentage, to current ARB estimates of statewide emissions and 1990 emissions. Project emissions are also examined in light of existing statewide or County emissions reductions strategies, to determine whether the project would significantly offset anticipated reductions. Finally, there are published white papers and other documents (including a letter published by the Attorney General's office) that list potential means of reducing emissions. The project will be examined to determine whether any of these strategies have been incorporated, or need to be incorporated through mitigation. As much as possible, the amount these measures would reduce potential impacts will be quantified. However, the research on many measures is scanty, so it is not always clear how much of an emissions reduction could be expected. A menu of

mitigation measures are offered that are reasonable, feasible and germane to the project.

DIRECT EMISSIONS FROM MOBILE SOURCES

Estimates of carbon dioxide generated by project traffic were made by the URBEMIS 9.2.4 program. While URBEMIS 9.2.4 estimates carbon dioxide emissions from land use projects, there are other greenhouse gases that should be considered. Emissions of methane (CH_4) and nitrous oxide (N_2O) were estimated separately based on the URBEMIS 9.2.4 estimates of carbon dioxide from vehicles and natural gas combustion. CH_4 and N_2O emission factors from Table 3 in BAAQMD's "Source Inventory of Bay Area Greenhouse Gas Emissions" were utilized to estimate project emissions of these gases. Because these gases are more powerful greenhouse gases the emissions were multiplied by a correction factor to estimate “carbon dioxide equivalents”. CH_4 was assumed to have a Global Warming Potential of 21 times that of CO_2, while N_2O was assumed to have a Global Warming Potential of 310 times that of CO_2.

DIRECT EMISSIONS FROM AREA SOURCES

Area source emissions of carbon dioxide were also quantified by the URBEMIS 9.2.4 program. The URBEMIS program identifies 5 categories of area source emissions: Natural Gas Combustion, Hearth Emissions, Landscaping Emissions, Architectural Coating, and Consumer Products.

Natural gas emissions result from the combustion of natural gas for cooking, space heating and water heating. Estimates are based on the number of residential land uses and the number and size of nonresidential land uses. Hearth emissions consist of emissions from wood stoves and natural gas fireplaces related to residential uses.

URBEMIS calculates emissions from fuel combustion and evaporation of unburned fuel by landscape maintenance equipment. Equipment in this category includes lawn mowers, rotor tillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used in residential and commercial applications. The landscaping category also includes air compressors, generators, and pumps used primarily in commercial applications.

Consumer product emissions are generated by a wide range of product categories, including air fresheners, automotive products, household cleaners and personal care products. Emissions associated with these products primarily depend on the increased population associated with residential development. In URBEMIS 9.2.4, these sources generate ROG emissions but not carbon dioxide.

Architectural coating emissions result from the evaporation of solvents contained in paints, varnished, primers and other surface coatings associated with

maintenance of residential and nonresidential structures. In URBEMIS 9.2.4, this source generates ROG emissions but not carbon dioxide.

INDIRECT EMISSIONS

Indirect emissions are related to secondary emissions of greenhouse gases emitted away from the site and not directly related to project activities. The largest of this type of source is the electricity used by the project, a portion of which is generated by fossil-fueled power plants that generate greenhouse gases.

Greenhouse gas emissions related to electricity use were estimated using average annual electrical consumption per square foot of interior space recommended by the California Energy Commission. Emission rates for CO_2, CH_4 and N_2O per megawatt hour were taken from the California Climate Action Registry General Reporting Protocol, Version 3.0. Project square footage was multiplied by the electrical usage factor and emission rates per megawatt hour to obtain annual emissions for CO_2, CH_4 and N_2O. The emissions figures were then converted to CO_2 equivalents.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

IMPACTS TO THE PROJECT FROM CLIMATE CHANGE.

CAC LAND USE PLAN/PD LAND USE PLAN

Global climate change is a complex phenomenon that is influenced by many environmental factors. There are also many different climate or hydrologic modeling tools available, each with strengths and weaknesses. While changes to the existing climate landscape can be demonstrated by looking at the historic record, it becomes challenging to predict future trends. The process must be simplified to some extent. Climatologists and others who model climate change must make certain assumptions, such as establishing a fixed rate of temperature change, in order to proceed with modeling. Therefore, scientists involved in these modeling efforts do not try to be absolutely predictive, but instead use different model types with different sets of assumptions to capture a range of possible scenarios. It is also necessary to update the model with the latest available data on a regular basis in order to sync the models with current conditions. Therefore, there is no single, certain prediction related to the probability of environmental effects. Scenarios are rated as being very likely if many different models come up with very similar results, and as uncertain if many different models report very different results. The sections below rely on information from several different published sources and provide a qualitative analysis of potential impacts as they affect North America, California, Sacramento County, and the project area.

TEMPERATURE

Significant increases in the frequency, intensity, and duration of summertime extreme heat days, defined as the 10 percent warmest days of summer, are projected due to climate change (Miller et. al., 2007). Temperature change is the driver for climate change, impacting environmental processes that will in turn impact human life. Plate CC-1, below, is taken directly from the IPCC 2007 report prepared by the second Working Group. This table represents the potential impacts to various segments of the environment depending on how much the temperature increases relative to the 1980 to 1990 period. Bear in mind that all of the data in the following sections use the metric standard, so all temperatures are typically given in Celsius. To convert from Celsius to Fahrenheit one uses the formula Tf = (9/5)*Tc+32 (Tc = temperature in degrees Celsius, Tf = temperature in degrees Fahrenheit). To understand the exhibit below, simply note that a change of one degree Celsius equals a change of 1.8 degrees Fahrenheit.

There is strong agreement that many of the most damaging effects of climate change will begin to occur after temperatures increase beyond 2 degrees Celsius into the 3 or 4 degree range. This is observable in Plate CC-1. The IPCC Working Group III report determined that reductions of 50 to 80% would be needed by 2050 in order to stabilize temperature rise at no more than 2 degrees Celsius (IPCC, 2007c). The limits set forth in Executive Order S-3-05 and in AB 32 mirror this research.

For California as a whole, the total number of days of extreme heat is projected to *double* relative to historical mean of 12 days per summer, to an average of 23–24 days per summer by 2034. By 2064, this is projected to increase to 27 – 39 days.

Aside from this global research, various research papers and technical studies have been produced that look specifically at impacts in California. One of these is a white paper titled “Climate Scenarios for California”, sponsored by the California Energy Commission, which used many of the same assumptions and scenarios as the IPCC reports, but scaled the modeling down to the California level. Plate CC-2 is an exhibit from the white paper depicting average winter and summer temperatures in the past and in the projected 2070 – 2099 future, with the degrees of change on the right-hand side (Cayan et. al., 2006a). As shown, the amount of change that resulted from the modeling is greater during the summer months than during the winter months.

Plate CC-1
Impacts as a Function of Increasing Average Global Temperature Change (IPCC, 2007b)

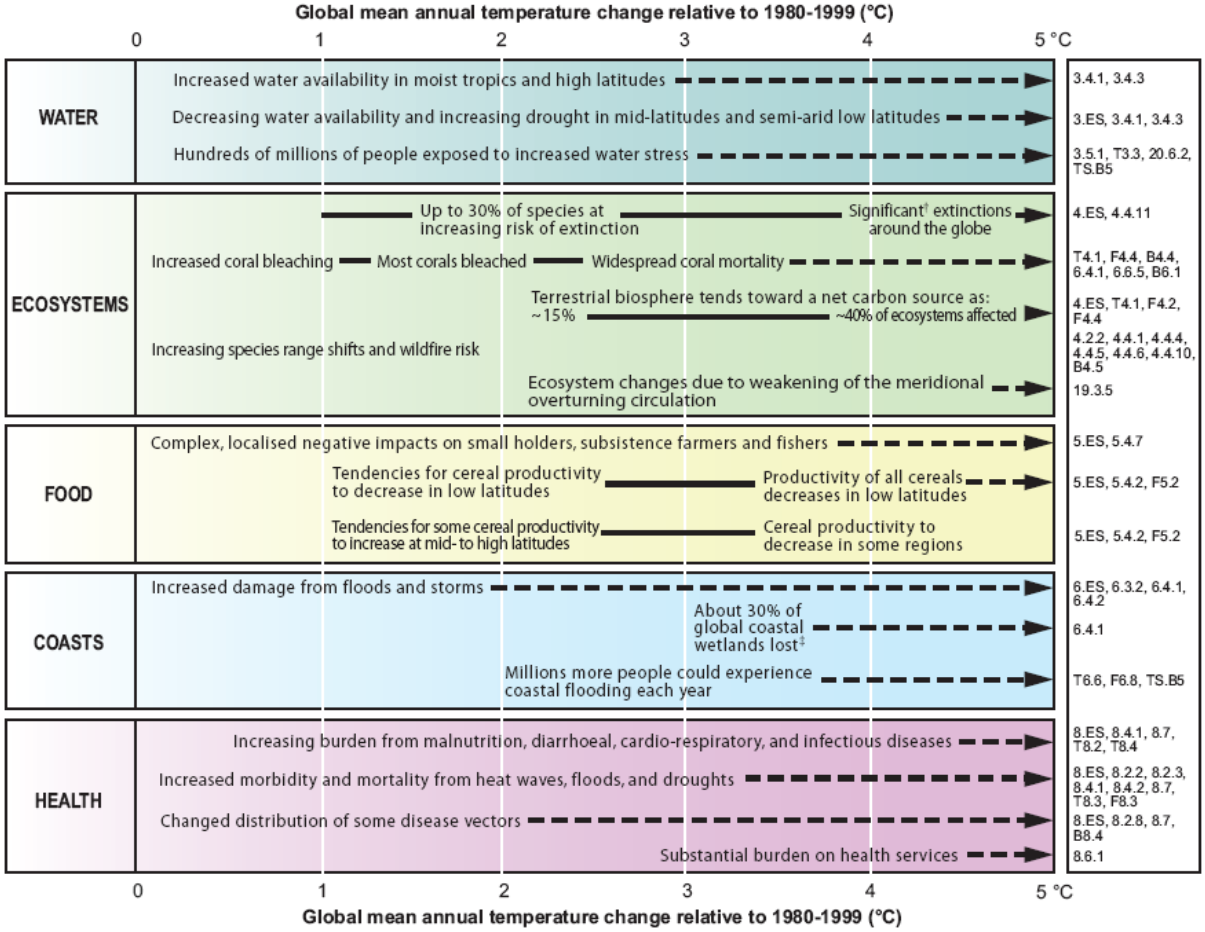


Figure SPM.2. *Illustrative examples of global impacts projected for climate changes (and sea level and atmospheric carbon dioxide where relevant) associated with different amounts of increase in global average surface temperature in the 21st century [T20.8]. The black lines link impacts, dotted arrows indicate impacts continuing with increasing temperature. Entries are placed so that the left-hand side of the text indicates the approximate onset of a given impact. Quantitative entries for water stress and flooding represent the additional impacts of climate change relative to the conditions projected across the range of Special Report on Emissions Scenarios (SRES) scenarios A1FI, A2, B1 and B2 (see Endbox 3). Adaptation to climate change is not included in these estimations. All entries are from published studies recorded in the chapters of the Assessment. Sources are given in the right-hand column of the Table. Confidence levels for all statements are high.*

Plate CC-2
Projected California Temperature Change, December through February (DJF) and June through July (JJA), Degrees Celsius

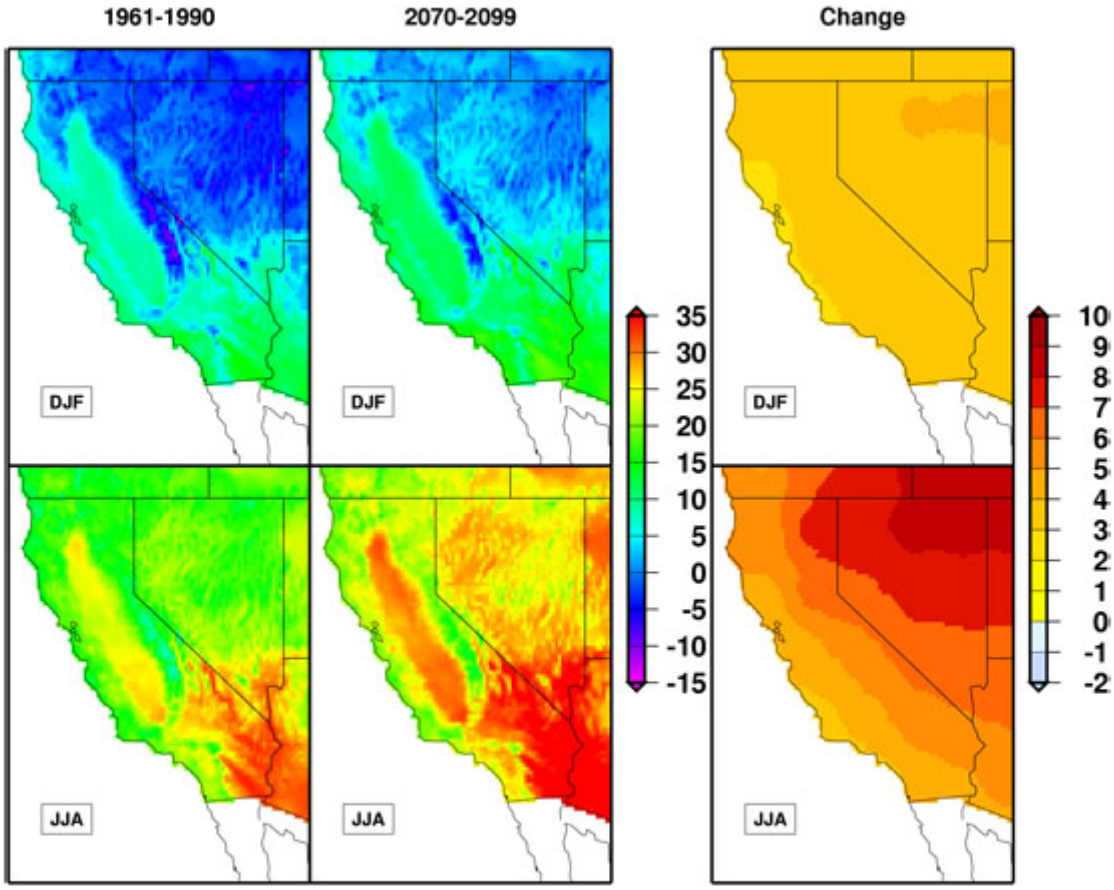


Figure 14. Temperature change from GFDL A2 simulation (right), and downscaled temperatures for (1961–1990) and (2070–2099) using Wood et al. (2002) statistical scheme (left).

Higher temperatures would have direct effects on the health of many organisms, including humans. It is probable that rising temperatures will cause an increase in the number of humans who die or become ill due to heatwaves, may change the range (geographically or seasonally) of various infectious disease vectors (such as mosquitoes), and increase cardio-respiratory disease prevalence and mortality associated with ground-level ozone (IPCC, 2007b). Many individual plants may also die or become damaged during heatwaves, as even if there is ample water in the soil, water loss through the leaves will outpace the ability of the plant to draw water from the soil. Warmer winters would bring some benefits to some parts of California, where cold-related deaths and illnesses during the wintertime would be reduced. (Cayan et. al., 2006a) However, the greater Sacramento area does not typically experience extreme cold under current

conditions, and in any case the stated negative effects would be expected to outweigh this positive effect.

WATER SUPPLY AND FLOODING

Although current forecasts vary, the effects of global climate change on precipitation and temperature regimes in California could lead to significant challenges in securing an adequate water supply for a growing population and California's agricultural industry. An increase in precipitation falling as rain rather than snow could also lead to increased potential for floods because water that would normally be held in the Sierra Nevada until spring could flow into the Central Valley concurrently with winter storm events. This scenario would place more pressure on California's levee/flood control system. California also relies heavily on gradual snowmelt from the Sierra Nevada to supply water.

According to the Intergovernmental Panel on Climate Change (IPCC) 2007 report, the annual mean warming in North America is likely to exceed the global mean warming in most areas and snow season length and snow depth are very likely to decrease in most of North America (IPCC, 2007a). These trends have already been observed, as the snow pack in the Sierra Nevada and the Cascade Range has been declining over the last few decades of record, and the average temperature in California has increased one degree Fahrenheit over the past 50 years (Cayan et.al., 2006a). Although these general statements are made, it is recognized that although there is high model agreement on warming trends the agreement among precipitation and hydrologic trend models is not nearly so strong.

The Climate Scenarios for California white paper modeled changes in Snow Water Equivalent as of April 1, when the snow season begins to taper off. Snow Water Equivalent is the amount of water contained within the snowpack. It can be thought of as the depth of water that would theoretically result if you melted the entire snowpack instantaneously. The analysis results differ widely depending on which model and emissions scenario is used. As compared to the 1961 – 1990 period of record, the net change in Snow Water Equivalent ranges from +6 percent to -29 percent (for the 2005 – 2034 period), from -12 percent to -42 percent (for 2035 – 2064), and from -32 percent to -79 percent (for the 2070 – 2099 period). These results highlight the lack of agreement found amongst hydrologic models. The ranges of projected change vary widely, and in the near-term some modeling even predicts an *increase* in Snow Water Equivalent. However, in the long-term all of the models do agree that Snow Water Equivalent will be reduced, even though further refinement of the modeling will need to be completed to narrow down the range of reductions. (Cayan et. al., 2006a)

The modeling results indicate that snow losses have greatest impact in relatively warm low-middle and middle elevations between about 3280 feet and 6560 feet (losses of 60 percent to 93 percent) and between about 6560 feet and 9840 feet (losses of 25 percent to 79 percent). The central and northern portions of the

Sierra Nevada contain large portions of this low-middle and middle elevations, and are subject to the heaviest reductions in snow accumulation. This is depicted on Plate CC-3 (Cayan et. al., 2006a).

The effect of climate change on future demand of water supply remains uncertain (DWR 2006), but changes in water supply are expected. The California Department of Water Resources (DWR) has sponsored or published a number of papers on the interaction between climate change and water supply, and has included a Climate Change Portal on the DWR website (www.climatechange.water.ca.gov). Climate change will also be addressed in the 2009 California Water Plan update. Adaptation (e.g. expanding reservoirs, changing water release schedules, etc) is expected to play a key role in addressing the effects of climate change on water supply.

The changes in snowmelt described above are not because significantly less precipitation is projected to fall, but rather on earlier melting of the snowpack and more precipitation falling as rain than as snow. If in future conditions more of the precipitation in the watersheds falls as rain rather than snow, runoff into the area rivers and creeks will increase and the potential for flooding will increase. The outcome of climate change on flooding will depend on several factors, including whether or not storms increase in severity, duration, or frequency. If more precipitation is falling as rain in the Sierra Nevada, then soils will be warmer and will have an opportunity to dry between storms rather than remaining wet with snow or frozen. Warmer, drier soils would absorb more of the rainfall, and therefore lessen the amount of runoff that could be expected. On the contrary, if greater portions of the watershed are subject to a mix of rain events and snow events, there could be a larger incidence of flood events that are driven by the sudden melting of snow by rain. The possible negative results are either an increase in the average number of flooding events and/or an increase in the severity of flood events.

Although strong model agreement has not been reached, it is probable that flooding regimes will alter in the Sacramento region. Current floodplain locations could expand or contract, changing the number of people in the region that would be affected by flood events, and floods could increase in number, increasing the frequency of negative effects to residents.

SURFACE WATER QUALITY

Water quality is affected by several variables, including the physical characteristics of the watershed, water temperature, and runoff rate and timing. A combination of a reduction in precipitation, and/or shifts in volume and timing of runoff flows, and the increased temperature in lakes and rivers could affect a number of natural processes that eliminate pollutants in water bodies. For

Plate CC-3
Potential Changes in Snow Accumulation, as of April 1

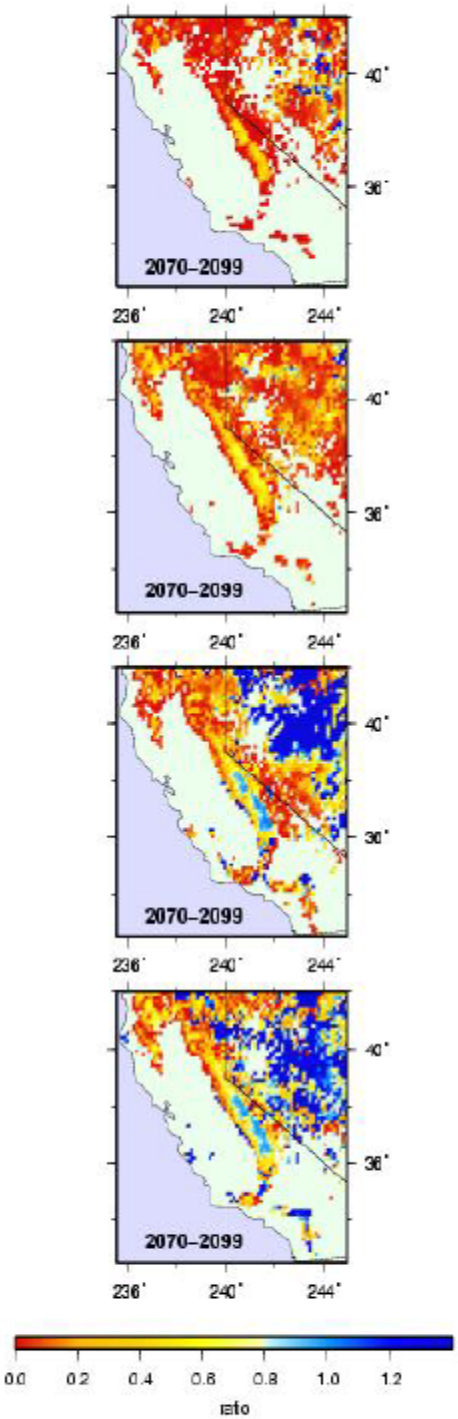


Figure 19. Change in spring snow accumulation from VIC, as driven by climate changes from four different climate change simulations. Changes are expressed as. ratio of 2070-2099 April 1 snow water equivalent (SWE) to that of historical (1961-1990).

example, although there may be more flood events, the overall stream flow decrease from a lack of summer snowpack could potentially concentrate pollutants and prevent the flushing of contaminants from point sources. The increased storm flows could tax urban water systems and cause greater flushing of pollutants to the Sacramento-San Joaquin Delta and coastal regions (Kiparsky and Gleick 2003). Still, considerable work remains to determine the potential effect of global climate change to water quality.

GROUNDWATER

A shift from snowfall to rainfall could reduce groundwater recharge, even if total precipitation remains constant. However, little work has been done on the effects of climate change on specific groundwater basins, groundwater quality or groundwater recharge characteristics (Kiparsky and Gleick, 2003). Research has focused more heavily on solidifying precipitation and streamflow projections, which are both necessary elements to determining which of the many possible groundwater scenarios are most probable. Water recharge could be increased if winters are warmer and wetter, and more water can filter into the soil, or this benefit could be offset by greater rates of evaporation and shorter rainfall seasons. Until more research into groundwater effects is completed, climate change impacts to groundwater will remain highly uncertain.

FISHERIES AND AQUATIC RESOURCES

The health of river ecosystems is highly dependent on water temperatures and stream flows. The IPCC Working Group II report recites a litany of temperature and flow effects on fisheries that have already been observed: the sea-run salmon stocks are in steep decline throughout much of North America (Gallagher and Wood, 2003), Pacific salmon have been appearing in Arctic rivers (Babaluk et al., 2000), and salmonid species have been affected by warming in U.S. streams (O'Neal, 2002). Many species that either live, migrate through or breed in the rivers and creeks of Sacramento County are cold-water species. It is probable that increases in average temperatures in the state will cause corresponding increases in water temperatures. Rates of fish-egg development and mortality increase with temperature rise within species-specific tolerance ranges (Kamler, 2002). Also, many fish species migrate into Sacramento County waterways during specific seasons to breed, and these fish rely on increased late-fall and early winter flows in order to complete the migration. If increased flows are delayed, possibly as a result of lessened groundwater recharge or shifts in the onset of the rainy season, this would be a barrier to migration. These potential effects could further endanger the sustainability of aquatic populations that are already listed through the Federal or California Endangered Species Acts, or could cause non-listed species to require listing under the Act.

SEA LEVELS

The IPCC Working Group I report contains a thorough discussion of the current understanding of sea level rise and climate change. After the last ice age ended, it is estimated that sea levels rose 120 meters (394 feet) before ultimately stabilizing. This period of stabilization lasted for several thousand years, until the late 19th century when sea levels began to rise. Part of this rise is attributed to thermal expansion (most substances expand when they warm, including water) and part is attributed to the melting of land ice. As global mean temperatures warm, the rate at which the sea level rises is expected to increase. While there is strong model agreement that sea levels will continue to rise and that the rate of rise will increase, the ultimate amount of rise is uncertain (IPCC, 2007a). A white paper entitled Projecting Future Sea Level, published by the California Climate Change Center, estimated a sea level rise from 4 – 35 inches every century (0.3 – 2.9 feet), depending on the model and assumptions used (Cayan et. al., 2006b).

Although Sacramento County contains no coastal land, the Delta region of Sacramento County is hydrologically connected to the San Francisco Bay and will be directly influenced by sea level rise. Moreover, as water levels rise in the bay and estuary environments, there will be a rise in the ordinary water surface elevations of the rivers and streams that feed the seas. Therefore, sea level rise can be expected to impact the Delta region as well as the ordinary high water elevations of the rivers in Sacramento County.

Among the more critical potential effects of sea level rise in Sacramento County are threats to flood protection and increased salinity in the Delta (Kiparsky and Gleick, 2003). Many areas in Sacramento County are protected from floods by systems of levees. In addition to the potential negative effects of increased runoff and rainfall discussed in the flooding discussion above, rises in the ordinary water surface elevations of area rivers will leave less freeboard in the rivers (freeboard is the distance between the water surface and the top of the levee) to accommodate flood flows. Some of the “islands” in the Delta region which are protected by levees are actually below sea level, and would be particularly vulnerable to flooding if a levee were overtopped or breached. In recognition of this concern, California passed a bond measure intended to finance the process of stabilizing and improving California’s levee systems. The California Department of Water Resources is also continuing to study the issue to determine what other system improvements may be necessary to adapt to changes in water surface elevations.

Water for the State Water Project and the federal Central Valley Project is taken from the south Delta. The 1993 Sacramento County General Plan indicates that the State has contracts to export up to 4.2 million acre-feet per year, and the federal project another 3.3 million acre-feet per year, approximately 83 percent of which is used for agriculture with the remainder used for “urban” purposes. If salt

water from the San Francisco Bay backs upward through the Delta system, freshwater supplies could be degraded. There are potential solutions to this problem, should it occur, that continue to be examined by the California Department of Water Resources. A purification process could be implemented, but extracting salt from water tends to be costly. A peripheral canal that would bypass the Delta is another option that was originally suggested in the early 1980's, but remains highly controversial.

RAPID CLIMATE CHANGE

Most global climate models project that anthropogenic climate change will be a continuous and fairly gradual process through the end of this century (DWR, 2006). California is expected to be able to adapt to the water supply challenges posed by climate change, even at some of the warmer and dryer projections for change. However, sudden and unexpected changes in climate could leave many of the agencies responsible for management of vulnerable sectors (water supply, levees, health, etc) unprepared, and in extreme situations would have significant implications for California and the health and safety of its denizens. For example, there is speculation that some of the recent droughts that occurred in California and the western United States could have been due, at least in part, to oscillating oceanic conditions resulting from climatic changes. The exact causes of these events are, however, unknown, and evidence suggests such events have occurred during at least the past 2,000 years (DWR, 2006).

CONCLUSION

The effects of climatic changes on the Sacramento region are potentially-significant, and can only be mitigated through both adaptation and mitigation strategies. Sacramento County is requiring that this project, as well as other projects in the County, mitigate for their emissions. Adaptation strategies related to climate change may involve new water supply reservoirs or other storage options, changes to dam release schedules, changes to medical and social service programs, and other broad-level actions. Most of these strategies are within the auspices of the State of California, not local government. This is recognized within the AB 32 Scoping Plan that has been adopted by the State, as well as publications by agencies such as the California Department of Water Resources. Therefore, by requiring mitigation of projects that may result in significant greenhouse gas emissions, and by adopting County programs and changes in government operations (as described in the Sacramento County Emission Reduction Efforts section), the County is implementing all feasible strategies to reduce the effects of climate change on the region.

It will be challenging for the State to implement appropriate adaptation strategies given that the ultimate severity and type of climate change effects are difficult to model. Furthermore, though the State and many local governments are taking steps to address emissions, the entire world must do likewise in order for serious

climate effects to be avoided. This being the case, impacts to the project from climate change remain ***potentially significant***.

MITIGATION MEASURE(S)
No further feasible mitigation available.

CONSTRUCTION ACTIVITIES ASSOCIATED WITH BUILDOUT OF THE FVGCP WOULD GENERATE A SUBSTANTIAL INCREASE IN GHG EMISSIONS WHEN COMPARED WITH EXISTING CONDITIONS.

CAC LAND USE PLAN/PD LAND USE PLAN

Construction of the project would result in short-term CO_2 emissions from construction equipment exhaust and haul truck exhaust throughout buildout of the FVGCP. As construction activities are anticipated to occur over a long period of time, and the type and number of vehicles associated with construction is not known, construction emissions of CO_2 have not been calculated. However, based on the magnitude of the project area, the construction activities may reasonably be assumed to result in the generation of CO_2 emissions that would result in a small but cumulatively considerable incremental contribution to global climate change. Therefore, construction emissions would result in a ***significant*** impact on climate change.

MITIGATION MEASURE(S)
As discussed below, the project applicants would be required to comply with a greenhouse gas reduction plan. The plan includes FVGCP-wide measures and project-specific measures that award points for various actions and design elements. The point system primarily focuses on project design elements, and only two of the measures relate to construction (reduction of construction waste and building materials recycling, and use of **low or** zero-emission construction equipment). Selection of individual measures would be up to the individual project applicants. In addition to these measures, all individual projects within the FVGCP that result in significant construction emissions of ozone precursors are required to take steps to make their construction equipment cleaner-burning. This mitigation will also reduce greenhouse gas emissions from the equipment.

Even in the case that all applicants select the construction related GHG reduction measures, construction impacts to climate change would remain *significant and unavoidable* because construction related CO_2 emissions would still be substantial compared with existing conditions.

Operational Emissions Resulting from Development of the FVGCP Would Generate a Substantial Increase in GHG Emissions when Compared With Existing Conditions.

As shown in Table CC-3 and CC-4, below, the land uses associated with development of the FVGCP under either the CAC Land Use Plan or the PD Land Use Plan are projected to result in substantial GHG emissions **(refer to Appendix B)**.

Table CC-3: Projected Annual Greenhouse Gas Emissions by Land Use Type (Unmitigated)

Land Use Plan	Annual GHG Emission (MT/Year)
CAC Land Use Plan (with Density Bonus)	
Residential	174,314.1
Retail	79,906.8
Office	10,406.0
Medical	1,046.4
Manufacturing	20,879.4
Other	16,754.1
Total	**303,306.8**
PD Land Use Plan (with Density Bonus)	
Residential	234,998.9
Retail	76,459.2
Office	9,262.6
Medical	975.0
Manufacturing	18,730.5
Other	15,005.9
Total	**355,432.1**
Source: Ballanti, 2008.	

Table CC-4: Projected Annual Greenhouse Gas Emissions (Unmitigated)

Land Use Plan	Annual GHG Emission (MT/Year)
CAC Land Use Plan (with Density Bonus)	
Direct Mobile Sources	188,100.4
Direct Area Sources	48.649.9
Indirect Sources	66,556.5
Total	**303,306.8**
PD Land Use Plan (with Density Bonus)	
Direct Mobile Sources	215,469.8
Direct Area Sources	63,453.7
Indirect Sources	76,508.6
Total	**355,432.1**
Source: Ballanti, 2008.	

As shown in Table CC-5, implementation of either the CAC or PD Land Use Plans would result in greenhouse gas emissions that total less than one-tenth of one percent of the State emissions in either 1990 or 2004. However, emissions would make up 7.6 to 8.9 percent of the emissions of unincorporated Sacramento County.

Table CC-5 Relative CO_2 Emissions (in CO_2 Equivalents)

Source	CO_2	% of State - 2004	% of State - 1990	% of Unincorporated County
CAC Land Use Plan (PD Land Use Plan)	0.303 (0.355) MMT/yr	0.07% (0.08%)	0.07% (0.09%)	7.58% (8.88%)
Unincorporated County	4 MMT/yr	0.9%	1.0%	
State – 1990	389 MMT/yr			
State – 2004	427 MMT/yr			
MMT: Million Metric Tons				

~~As shown in Table CC-6~~ A greenhouse gas reduction plan has been prepared for the FVGCP that includes measures recommended by the SMAQMD and the Attorney General to address GHG emissions. **The GHG reduction plan, as amended January 28, 2010, has been endorsed by the SMAQMD and is included in its entirety as Appendix C of this Final EIR.** ~~Compliance with the plan is based on a point system in which points are assigned for area-wide community design elements, as well as project-specific points based on elements~~

~~selected by the individual project applicants. The FVGCP area would implement a variety of measures throughout the FVGCP area that address the reduction of emissions. The first 15 points in Table CC-6 reflect the FVGCP area's AQ-15 Plan which has been approved by the SMAQMD. Table CC-6 further indicates that an additional 27 points will be achieved through the FVGCP-wide measures for a total of 42 points.~~ **The amended GHG reduction plan incorporates both area-wide community design elements and project specific elements selected by individual project applicants.**

The first section of the amended GHG reduction plan, summarized in Table CC-6, below, reflects the FVGCP area's SMAQMD-endorsed AQ-15 Plan. Each item in this section is from the SMAQMD's current "Guidance for Land Use Emission Reductions", which was updated subsequent to the district's endorsement of the AQ-15 plan. The point values assigned to this section are CO_2 equivalent points (percentage reductions) developed by the SMAQMD through research conducted by a consulting firm.

The second section of the amended GHG reduction plan, summarized in Table CC-7, below, reflects strategies recommended by the California Attorney General for the reduction of CO_2 emissions. Some of the strategies can be incorporated into all projects within the FVGCP area, and are considered to have plan level application. As definitive research has not yet been conducted to quantify the effectiveness of these strategies, no points have been assigned, FVGCP-wide measures would include, but are not limited to: the provision of bicycle racks and storage, inclusion of bicycle lanes and walking paths that connect to destinations, incorporation of public transit, inclusion of mixed-use and higher density areas into the project, and provision of a development pattern that does not obstruct pedestrian and bicycle circulation. **Southgate Recreation and Park District is also planning an extensive bicycle and pedestrian trail and parkway system along the Gerber and Elder Creek corridors, utility corridors, and Gardner and Hedge Avenues. These trails will serve as alternate transportation routes and will provide linkages to public transit, parks, schools, offices and shopping centers. As roadways become more congested, bicycle and pedestrian facilities may aid in decreasing the number of personal vehicle trips for residents.** In addition, project-specific measures, selected by the applicants, would require each project in the FVGCP area to incorporate additional measures that have a total point value of at least 10 points. **It should be noted that the points assigned to these project-specific measures roughly correspond to the relative significance of each measure and may or may not have a representative correlation to the estimated percentage of CO_2 emissions reduction.** Project-specific points are assigned for actions that include, but are not limited to: exceedance of Title 24 efficiency standards by 20 percent, installation of natural gas and electrical outlets in the rear yard, installation of Energy Star labeled (or equivalent) roof materials, installation of solar systems, and designing buildings to be energy efficient.

Table CC-6: GREENHOUSE GAS REDUCTION PLAN:
SMAQMD Measures for the Entire Plan Area

Reduction Measures	Points Assigned
MEASURES INCLUDED IN THE APPROVED FLORIN VINEYARD COMMUNITY PLAN AREA AIR QUALITY AND EMISSIONS REDUCTION PLAN	
Non-residential projects provide plentiful short-term and long-term bicycle parking facilities to meet peak season maximum demand.	**0.625 Point**
The project provides a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site.	**1.0 Point**
Project provides high density office or mixed use proximate to transit.	**1.5 Points**
Project provides high-density residential development.	**2.5 Points**
Multiple and direct street routing.	**1.0 Point**
Site design and building placement minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential uses that impede bicycle or pedestrian circulation are eliminated.	**1.0 Point**
ADDITIONAL SMAQMD MEASURES, NOT INCLUDED IN THE APPROVED FVGCP AQ-15 PLAN, THAT FURTHER REDUCE EMISSIONS PLAN-WIDE	
Have at least three of the following on site and/or offsite within ¼ mile: Residential Development, Retail Development, Park, Open Space, or Office.	**3.0 Points**

Table CC-7: GREENHOUSE GAS REDUCTION PLAN:
Measures identified in the Attorney General's "Project Elements Addressing CO2 Emissions Reductions

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
ENERGY EFFICIENCY STRATEGIES		
Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.		**Exceed Title 24 energy efficiency standards by 20%. (1 Point.)**
		Install EPA approved fireplaces and woodstoves or project does not feature fireplaces or woodstoves. (1 Point.)
		Install natural gas line in rear yard for BBQ and install exterior electrical outlets for electric yard equipment compatibility. (1 Point.)
		Provide an electric mower to each residential buyer. (.5 Point.)
		Install attic insulation in excess of R-38 value. (1 Point.)

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
		Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use. (1 - 2 Points.)
		Install whole-house fan in each residential unit. (1 Point.)
Install efficient lighting and lighting control systems. Use of daylight as an integral part of lighting systems of buildings.	Provide CFD light bulbs for all fixtures to each homeowner upon initial sale.	Install efficient lighting and lighting control systems. Use of daylight as an integral part of lighting systems of buildings. (1 Point.)
Install light colored "cool" roofs, cool pavements, and strategically placed shade trees.	The Plan area has developed an enhanced Green Streets/Parkway Plan that encourages pedestrian circulation and bicycle usage throughout area. Thoroughfares, arterials and collector streets will have shade-tree planted medians and shade-tree planted landscape buffers between the roadway and the separated sidewalk. Additionally, shade trees will be incorporated into all projects as required by County Code.	Install parking lot shading 10% beyond what is required by the Sacramento County Code. (1 Point.)
Provide information on energy management services for large energy users.		Provide information on energy management services for large energy users. (.25 Point.)
Install energy efficient heating and cooling systems, appliances and equipment, and control systems.	Install Energy Star (or equivalent) heating and cooling systems, appliances and control systems.	
Install light emitting diodes (LEDs) for traffic, street and other outdoor lighting.	LED lighting will be installed for traffic and street lighting to the extent that the proposed lighting complies with the illumination and construction standards for the County and/or other agencies.	

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Limit the hours of operation of outdoor lighting.	**Outdoor lighting in non-residential uses and in the common areas of multi-family housing will be limited, subject to illumination and safety standards.**	
Use solar heating, automatic covers, and efficient pumps and motors for pools and spas.		**Use solar heating, automatic covers, and efficient pumps and motors for pools and spas. (.5 Point.)**
Provide education on energy efficiency.		**Provide education on energy efficiency. (.25 Point.)**
RENEWABLE ENERGY STRATEGIES		
Install solar and wind power systems, solar and tankless hot water heaters and energy-efficient heating ventilation and air conditioning. Educate consumers about existing incentives.		**Install tankless hot water heater. (.5 Point.)**
		Install solar hot water heater. (1 Point.)
		Install solar and/or wind power systems. (2 - 5 Points.)
		Install hot water recirculating system. (.5 Point.)
Install solar panels on carports and over parking areas.		**Install solar panels on carports and over parking areas. (2 - 5 Points.)**
Use combined heat and power in appropriate applications.		**Use combined heat and power. (2 - 5 Points.)**
WATER CONSERVATION AND EFFICIENCY MEASURES		
Create water-efficient landscapes.		**Create water-efficient landscapes. (.5 Point.)**
Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.		**Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. (.5 Point.)**
Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water.		**Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water. (1 Point.)**

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Design buildings to be water-efficient. Install water-efficient fixtures and appliances.		**Design buildings to be water-efficient. Install low-flow toilets, shower heads and faucet aerators. Install water efficient appliances. (0.5 – 1 Point.)**
Use graywater. (Graywater is untreated household waste water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines.) For example, install dual plumbing in all new development allowing graywater to be used for landscape irrigation.		**Use graywater for landscape irrigation. (.5 Point.)**
Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.	**Individual projects CC&R's will prohibit the application of irrigation water to non-vegetated surfaces.**	
Restrict the use of water for cleaning outdoor surfaces and vehicles.		**Restrict the use of water for cleaning outdoor surfaces and vehicles. (.25 Point.)**
Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site.)	**The Plan area's drainage plan protects creeks that flow through the area. The drainage plan also includes water detention basins that not only improves the quality of runoff into the creeks by allowing sedimentation to settle prior to discharge, but also recharges groundwater by holding water before discharge into creeks.**	

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.		**Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project. (1 - 3 Points.)**
Provide education about water conservation and available programs and incentives.		**Provide education about water conservation and available programs and incentives. (.25 Point.)**
SOLID WASTE STRATEGIES		
Reuse and recycle construction and demolition waste (including, but not limited to soil, vegetation, concrete, lumber, metal, and cardboard).		**Reuse and recycle 50% of construction and demolition waste (including, but not limited to, soil, vegetation, and concrete, lumber, metal, and cardboard). (.5 Point.)**
Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.	**Provide interior and exterior storage areas for recyclables in residential units and adequate recycling containers located in public areas.**	
Recover by-product methane to generate electricity.	**This is not feasible for the proposed Plan.**	
Provide education and publicity about reducing waste and available recycling services.		**Provide education and publicity about reducing waste and available recycling services. (.25 Point.)**

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
LAND USE STRATEGIES		
Include mixed-use, infill, and higher density in development projects to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods.	**Sacramento County initiated a community planning program for the Florin-Vineyard area, also known as the "Gap" area. The term "Gap" has been used to refer to this area because it is located between the existing urban area to the west of Elk Grove-Florin Road and a comprehensively planned urban area to the east (i.e., North Vineyard Station and Vineyard Springs).** **The Plan has developed an enhanced Green Streets/Parkway Plan that encourages pedestrian circulation and bicycle usage throughout the Plan area, thus reducing vehicle trips. Pedestrian and bicycle paths throughout the Plan connect commercial areas, parks, schools and the hike/bike trail that runs along the riparian corridor.** **Higher density residential development within the Plan is located in close proximity to commercial services and to anticipated transit lines.**	
Educate the public about the benefits of well-designed, higher density development.		**Provide information regarding the benefits of well-designed, higher density development. (.25 Point.)**

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Incorporate public transit into project design.	**This area is not currently served by transit. The Plan includes a transit fee to cover the cost of transit-related facilities and infrastructure within the Plan area. The fee will cover the cost of new buses to serve the Plan area, bus shelters in the Plan area, land acquisition and construction cost of a planned park and ride facility, the Plan area's share of a new bus maintenance facility. Specifically, the transit fees are identified for use by the Sacramento Regional Transit District for the acquisition of up to 15 bus vehicles, to acquire land for a 5 acre, 500 space park-and-ride lot, to contribute toward a new bus maintenance facility and to construct 40 bus shelters within the Plan area. It is estimated that the Plan area will generate approximately $11,907.000 for transit. The payments to transit are not required by ordinance or regulation.** **There will be convenient pedestrian and bicycle access to the transit facilities through the system of interconnected pedestrian and bicycle paths within the Plan and connecting to areas outside of the Plan area. The pedestrian and bicycle paths will connect residential areas to commercial areas, schools, parks and other destinations.**	

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.	**The Plan includes preserves riparian areas that are adjacent to creeks and wetlands and mitigates wetlands where appropriate. The Plan also includes numerous parks. The Plan also contains a linear power line corridor that will remain as open space. The Plan also includes project-specific and Plan-area serving detention basins that will also remain as open space.**	
Develop "brownfields" and other underused or defunct properties near existing public transportation and jobs.	**The Plan area is comprised of underused properties that are, in the regional context, close to downtown and other central parts of the Sacramento region. The Plan area is comprised of 3766 acres over 670 separate parcels. Sacramento County initiated a community planning program for this area, also known as the "Gap" area, to comprehensively plan this area. The term "Gap" has been used to refer to this area because it is located between existing urban areas. The areas to the west, north and south are either developed with residential, commercial or industrial uses or are comprehensively planned urban areas. The development that will occur under the Community Plan will be much denser than what would occur on a project-by-project basis and will be better connected with streets, bicycle trails and pedestrian routes than would be developed on a project-by-project basis.**	

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
	This area has been identified for development in the County's General Plan and the SACOG Regional Blueprint for Growth. The Plan also supports the seven growth principles identified in the Blueprint: **1. Transportation Choices: The Plan area is designed to encourage people to walk, ride bicycles, ride the bus and ride light rail.** **2. Mixed-Use Developments: Residences, commercial areas, and offices are located near each other to create active neighborhoods.** **3. Compact Development: The Plan area projects will be more compactly built and will use space in a more efficient manner than the existing land uses in the area. The Community Plan will encourage more walking, biking, and public transit use, and will shorten auto trips than what is currently available in the Plan area.** **4. Housing Choice and Diversity: The Community Plan will include a variety of places where people can live – apartments, condominiums, townhouses, and single-family detached homes on varying lot sizes – creating housing options for the variety of people who will reside and work in the area.**	

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
	5. Use of Existing Assets: The Plan area is a very low-density area comprised of 670 parcels that will be comprehensively planned under the Community Plan, promoting the intensification of underutilized parcels. The areas around the Plan area are either developed or will be developed under a comprehensive plan. **6. Quality Design: The Community Plan will include an enhanced Green Streets/Parkway Plan that encourages pedestrian circulation and bicycle usage throughout the Plan area, thus reducing vehicle trips. Pedestrian and bicycle paths throughout the Plan area connect commercial areas, parks, schools and the hike/bike trail that runs along the riparian corridor. The Plan area is approximately four miles from light rail; an easy bus ride for access to the light rail system, providing a strong transit connection.** **Natural Resources Conservation: The Community Plan preserves creeks and other riparian areas and provides access to these areas through bike and pedestrian trails. Landscaping will frequently be drought tolerant and shade trees will be incorporated into the area to promote pedestrian activity as well as reduce energy consumption.**	

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.	The Plan has developed an enhanced Green Streets/Parkway Plan that encourages pedestrian circulation and bicycle usage throughout the Plan area, thus reducing vehicle trips. The Plan area will include several miles of Class I and Class II bike paths adjacent to major roadways, which are intended to serve both commuter and recreational cyclists. Additionally, there are segments of off-street hike/bike paths that are adjacent to riparian areas and parks. The entire Plan area is located within ½ mile of either a Class I or Class II bike path and the bicycle circulation system is designed to connect to existing and planned bike paths outside of the Plan area. Non-residential projects will provide a bicycle lockers and bicycle racks. Class I bicycle storage will be provided at apartment complexes or condominium complexes without garages.	
TRANSPORTATION AND MOTOR VEHICLE STRATEGIES		
Limit idling time for commercial vehicles, including delivery and construction vehicles.		Limit idling time for commercial vehicles, including delivery and construction vehicles. (.5 Point.)
Use low or zero-emission vehicles, including construction vehicles.		Use low or zero-emission vehicles, including construction vehicles. (1 - 2 Points.)

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Promote ride sharing programs e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides.		**Promote ride sharing programs by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles and / or providing a web site or message board for coordinating rides. (.25 Point.)**
		Install the minimum parking allowed by the Sacramento County Code. (1 Point.)
Create car sharing programs. Accommodations for such programs include providing parking spaces for the car share vehicles at convenient locations accessible by public transportation.		**Create a car sharing program that includes providing parking spaces for the car share vehicles at convenient locations accessible by public transportation. (.5 Point.)**
Create local "light vehicle" networks, such as neighborhood electric vehicle (NEV) systems.	**The Plan area is not being designed to accommodate an additional vehicular circulation network, as the majority of the property within the plan area is not currently proposed for development and the installation of a complete system within the Plan area could be speculative.**	
Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).		**Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles such as electric vehicle charging facilities and alternative fueling stations. (.5 Point.)**
		Provide priority parking to hybrid vehicles. (.5 Point.)

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Increase the cost of driving and parking private vehicles by, e.g., imposing tolls and parking fees.		**Increase the cost of driving and parking private vehicles by establishing parking fees. (1 Point.)**
Build or fund a transportation center where various public transportation modes intersect.	**The Plan area will provide essential bus stop improvements so that future bus service can provide an efficient connection to the Watt Avenue LRT station and to other bus routes. Commercial properties will provide low cost transit passes to employees, as coordinated through the Transportation Systems Management program.** **Each commercial development will include a display case or kiosk that displays transportation information.** **There will be convenient pedestrian and bicycle access to the transit facilities through the system of interconnected pedestrian and bicycle paths within the Plan area and connecting to areas outside of the Plan area. The pedestrian and bicycle paths will connect residential areas to commercial areas, schools, parks and other destinations. The Plan area provides a development pattern that eliminates physical barriers that impede pedestrian and bicycle circulation, such as walls, berms, landscaping and slopes between residential and non-residential uses.**	
Provide shuttle service to public transit.		**Provide shuttle service to public transit. (1 Point.)**
Provide public transit incentives such as free or low-cost monthly transit passes.		**Provide public transit incentives such as free or low-cost monthly transit passes. (1 to 3 Points.)**

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments. Incorporate bicycle-friendly intersections into street design.	The Plan area has developed an enhanced Green Streets/Parkway Plan that encourages pedestrian circulation and bicycle usage throughout the Plan area. Pedestrian and bicycle paths throughout the Plan area connect commercial areas, parks, schools and the hike/bike trail that runs along the riparian corridor. Additionally, site design and building placement minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential uses that impede bicycle or pedestrian circulation are eliminated.	
Incorporate bicycle-friendly intersections into street design.	Site design and building placement minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential uses that impede bicycle or pedestrian circulation are eliminated.	
For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, e.g., locked bicycle storage or covered or indoor bicycle parking.	Non-residential projects will provide bicycle lockers or bicycle racks near building entrances.	

California Attorney General Strategy	Plan Level Application	Project Level Application (Each project will need to implement measures with a collective value of at least 10 points.)
Create bicycle lanes and walking paths directed to the location of schools, parks and other destination Points.	**The Plan area has developed an enhanced Green Streets/Parkway Plan that encourages pedestrian circulation and bicycle usage throughout the Plan area. Pedestrian and bicycle paths throughout the Plan area connect commercial areas, parks, schools and the hike/bike trail that runs along the riparian corridor.**	
Work with the school district to restore or expand school bus services.	**The property owners within the Plan area will work with the Elk Grove Unified School District to include school bus services within the Plan area.**	
Institute a telecommute work program. Provide information, training, and incentives to encourage participation. Provide incentives for equipment purchases to allow high-quality teleconferences.		**Establish a telecommute work program and provide information, training and incentives to encourage participation. (.5 Point.)**
Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation.		**Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation. (.25 Point.)**
ADDITIONAL STRATEGIES		
Each proposed project may propose other measures that do not appear on this matrix through consultation with and approval by the County of Sacramento Department of Environmental Review and Assessment. **It is anticipated that the County will adopt Phase 2 of the County's Climate Action Plan within a year of the County's adoption of the 2030 General Plan. The Phase 2 document will include additional resources to reduce greenhouse gas emissions that may be implemented by projects within the Florin Vineyards Gap Community Plan area.**		

~~Table CC-6: Greenhouse Gas Reduction Measures~~

~~Reduction Measures~~	~~Points Assigned~~
~~**RECOMMENDED SMAQMD GUIDANCE FOR LAND USE EMISSION REDUCTIONS**~~	
~~Non-residential projects provide bicycle lockers and/or racks~~	~~0.5 Point~~
~~The Plan provides for pedestrian facilities and improvements.~~	~~1.0 Point~~
~~Bus Service providing headways of 15 minutes of less for stops within ¼ mile; the Plan provides essential bus stop improvements.~~	~~1.0 Point~~
~~Provide a display case or kiosk within each commercial development, displaying transportation information.~~	~~0.5 Point~~
~~High density residential, mixed or retail / commercial uses within ¼ mile of planned transit, linking activity centers and other planned infrastructure.~~	~~0.5 Point~~
~~Average residential density of 7 dwelling units per acre or greater.~~	~~1.5 Points~~
~~Multiple and direct street routing.~~	~~2.5 Points~~
~~The Plan provides a development pattern that eliminates physical barriers such as walls, berms, landscaping and slopes between residential and non-residential uses that impede bicycle or pedestrian circulation.~~	~~1.0 Points~~
~~Proximate location of complementary uses and on and off street connections between uses. There is an extensive network of non-vehicular circulation throughout the Community Plan area.~~	~~4.0 Points~~
~~***Subtotal SMAQMD***~~	~~***12.5 Points***~~
~~**Additional SMAQMD Measures, Not Included in the Approved FVGCP AQ-15 Plan, that Further Reduce Emissions Plan-Wide**~~	
~~Have at least three of the following on site and/or offsite within ¼ mile: Residential Development, Retail Development, Park, Open Space, or Office.~~	~~3.0 Points~~
~~***Subtotal***~~	~~***3.0 Points***~~
~~**MEASURES IDENTIFIED IN THE ATTORNEY GENERAL'S "PROJECT ELEMENTS ADDRESSING CO_2 EMISSIONS REDUCTIONS"[1]**~~	
~~Install light colored "cool" roofs, cool pavements, and strategically placed shade trees.~~	~~1.0 Point~~
~~Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site.)~~	~~0.5 Points~~
~~Incorporate public transit into project design.~~	~~8.0 Point~~
~~Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.~~	~~2.0 Points.~~
~~Develop "brownfields" and other underused or defunct properties near existing public transportation and jobs~~	~~15.0 Points~~
~~***Subtotal***~~	~~***26.5 Points***~~
~~**PROJECT-SPECIFIC MEASURES**~~	
~~Exceed Title 24 energy efficiency standards by 20%. (1 Point)~~	
~~Install EPA approved fireplaces and woodstoves. (1Point)~~	
~~Install natural gas line in rear yard for BBQ and install exterior electrical outlets for electric yard equipment compatibility. (1 Point)~~	
~~Install Energy Star labeled (or equivalent) roof materials. (1 Point)~~	
~~Install Energy Star (or equivalent) heating and cooling systems, appliances and control systems. (3.0 Points)~~	
~~Install LED lighting. (0.5 Points)~~	
~~Use solar heating, automatic covers, and efficient pumps and motors for pools and spas. (0.5 Points)~~	

~~Reduction Measures~~	~~Points Assigned~~
~~Install solar and wind power systems, solar and tankless hot water heaters and energy efficient heating ventilation and air conditioning.~~ ~~a. Tankless hot water heaters. (0.5 Points)~~ ~~b. Solar hot water heaters. (1 Point)~~ ~~c. Installation of solar and/or wind power systems. (2 to 5 Points)~~ ~~d. Install hot water recirculating system in each residential unit or non-residential use. (0.5 Points)~~	
~~Install solar panels on carports and over parking areas. (2 to 5 Points)~~	
~~Use combined heat and power in appropriate applications. (2 TO 5 Points)~~	
~~Provide an electric mower to each residential buyer. (.5 Points)~~	
~~Provide CFD light bulbs for all fixtures to each homeowner upon initial sale. (2.0 Points)~~	
~~Install attic insulation in excess of R-38 value. (1 Point)~~	
~~Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use. (1 to 2 Points)~~	
~~Install efficient lighting and lighting control systems. Use of daylight as an integral part of lighting systems of buildings. (1 Point)~~	
~~Limit the hours of operation of outdoor lighting. (0.5 Points)~~	
~~Install whole-house fan in each residential unit. (1 Point)~~	
~~Provide information on energy management services for large energy users. (0.25 Point)~~	
~~Provide education on energy efficiency. (0.25 Point)~~	
~~Educate the public about the benefits of well-designed, higher density development. (0.25 Points)~~	
~~Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project. (1 to 3 Points)~~	
~~Create water-efficient landscapes. (0.5 Points)~~	
~~Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. (0.5 Points)~~	
~~Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water. (1 Point)~~	
~~Use graywater for landscape irrigation. (0.5 Points)~~	
~~Provide education about water conservation and available programs and incentives. (0.25 Points)~~	
~~Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. (0.25 Points)~~	
~~Restrict the use of water for cleaning outdoor surfaces and vehicles. (0.25 Points)~~	
~~Design buildings to be water-efficient. Install low-flow toilets, shower heads and faucet aerators. Install water efficient appliances. (0.5 – 1.0 Points)~~	
~~Reuse and recycle 50% of construction and demolition waste (including, but not limited to, soil, vegetation, and concrete, lumber, metal, and cardboard). (0.5 Points)~~	
~~Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas. (0.5 Points)~~	
~~Provide education and publicity about reducing waste and available recycling services. (0.25 Points)~~	
~~Parking Lot Shading 10% beyond what it required by the Sacramento County Code. (1 Point)~~	
~~Promote ride sharing programs e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting~~	

~~Reduction Measures~~	~~Points Assigned~~
~~areas for ride sharing vehicles, and providing a web site or message board for coordinating rides. (0.25 Point)~~	
~~Create car sharing programs. Accommodations for such programs include providing parking spaces for the car share vehicles at convenient locations accessible by public transportation. (0.5 Points)~~	
~~Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations). (0.5 Points)~~	
~~Increase the cost of driving and parking private vehicles by, e.g., imposing tolls and parking fees. (1 Point)~~	
~~Install the minimum parking allowed by the Sacramento County Code. (1 Point)~~	
~~Provide one bicycle to each homeowner. (0.5 Points)~~	
~~Provide priority parking to hybrid vehicles. (0.5 Points)~~	
~~Provide shuttle service to public transit. (1 Point)~~	
~~Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation. (0.25 Points)~~	
~~Use low or zero-emission vehicles, including construction vehicles. (1 to 2 Points)~~	
~~Limit idling time for commercial vehicles, including delivery and construction vehicles. (0.5 Points)~~	
~~Provide public transit incentives such as free or low-cost monthly transit passes. (1 to 3 Points)~~	
~~***Each applicant must achieve 10 or more points.***~~	
~~Total of FVGCP-Wide Measures~~	~~42.0 Points~~
~~Total of Project-Specific Measures~~	~~10.0 Points~~
~~**Total**~~	~~**52.0 Points**~~
~~[1]It should be noted that all of the applicable Attorney General Recommendations not listed here are incorporated into either the SMAQMD recommendations or the Project-Specific options.~~	

As shown in Table CC-2, residential and non-residential uses in the project area would generate a total of approximately 303,306.8 metric tons of CO_2 per year after project buildout of the CAC Land Use Plan (with density bonus), and approximately 355,432.1 metric tons of CO_2 per year after project buildout of the PD Land Use Plan (with density bonus). ~~Each point in the greenhouse gas reduction measures would reduce the emissions by approximately one percent. As a result, the CAC Land Use Plan with density bonus would generate approximately 145,587.3 metric tons of CO_2 per year after project buildout, and the PD Land Use Plan (with density bonus) would generate approximately 170,607.4 metric tons of CO_2 per year (approximately 8.1 MT per residential dwelling and 0.01 MT per non-residential square foot for both plans). While such a reduction is substantial~~ **While implementation of the proposed GHG reduction plan would substantially reduce CO_2 emissions**, the increase in GHG emissions would remain cumulatively considerable and a substantial contribution to global climate change would occur. Therefore, implementation of

either the CAC or PD Land Use Plans would result in a ***significant*** impact to climate change.

MITIGATION MEASURE(S)

The mitigation measures listed below would offset ~~approximately 52 percent~~ **a substantial portion** of the project emissions; however, even with the described mitigation, this project's cumulative climate change impacts are considered *significant and unavoidable*. While recognizing this impact as significant and unavoidable, this EIR also acknowledges that some of the design elements the project contains in regard to open space corridors and multi-use trails, while not completely quantifiable at this time represent the type of visionary thinking that will be required to solve the global climate change crisis. **Though additional off-site mitigation was considered, it was rejected as unreasonable for this project, at this time. Off-site mitigation programs have not been established yet, and even information about what level of mitigation is required is in flux state-wide. Under these circumstances, it was determined that using the list of measures published by the Attorney General's office, SMAQMD, and others constituted all reasonable and feasible mitigation.**

CC-1 All development projects within the FVGCP shall comply with the requirements of the ***SMAQMD-endorsed*** *FVGCP Climate Change Plan, dated ~~11-6-08~~* ***January 28, 2010****. Individual development projects shall provide the County of Sacramento Department of Environmental Review and Assessment with written documentation demonstrating compliance with the FVGCP-wide greenhouse gas reduction measures and incorporation of ~~the~~ project-specific measures that achieve a minimum of ten points* ***selected in consultation with SMAQMD*** *from the list of approved greenhouse gas reduction measures.* ***Written evidence of SMAQMD consultation shall be required at the time of plan submittal for individual development projects.***

12 BIOLOGICAL RESOURCES

BIOLOGICAL SETTING

The following sections describe the setting of the site as well as the biological resources occurring in the proposed project area (site). This section is based primarily off of the *Biological Baseline Information Report*, prepared by Gibson and Skordal, LLC.

PROJECT SETTING

The Florin-Vineyard Gap Community Plan (FVGCP) area is located south of the City of Sacramento on the floor of the Great Central Valley in Section 36, Township 8 North, Range 5 East; Sections 29, 30, 31, 32, and 33, Township 8 North, Range 6 East; Sections 1 and 12, Township 7 North, Range 5 East; Sections 4, 5, 6, 7, and 8, Township 7 North, Range 6 East; MDB&M, Sacramento County, California. The Plan Area is in the Elk Grove, Florin, Sacramento East, and Carmichael, California 7. 5 Minute Series Quadrangles (See Plate BR-1).

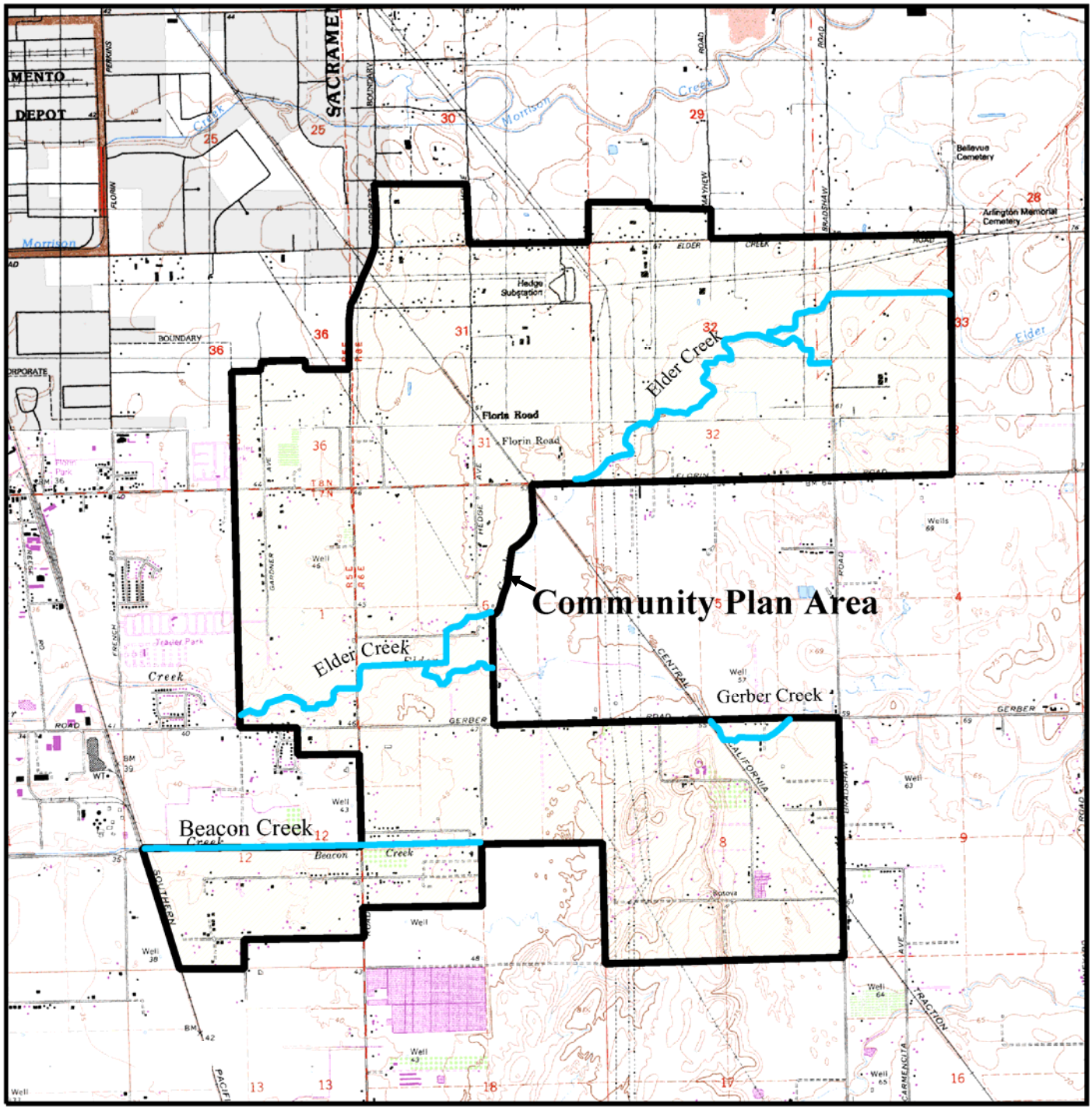
BIOLOGICAL COMMUNITIES

The parcels within the plan area contain several habitat types including: non-native annual grasslands, agricultural lands, irrigated pastures, vernal pools/swales, seasonal wetlands, emergent marshes, ponds, channels, trees/shrubs, and urban areas. A general description of each habitat type follows.

NON-NATIVE ANNUAL GRASSLANDS

Non-native annual grasslands associated with the various properties in the FVGCP support plant communities typical of historically farmed/ranched areas. Farmed/ranched areas are typically dominated by exotic grasses and forbs such as soft chess (*Bromus mollis*), perennial rye (*Lolium perenne*), medusa head (*Taeniatherum caput-medusae*), rip-gut brome (*Bromus diandrus*), Mediterranean barley (*Hordeum hystrix*), tarweed (*Holocarpha virgata*), and rattail fescue (*Vulpia myuros*). Other common species include filaree (*Erodium botrys*), curly dock (*Rumex crispus*), prickly lettuce (*Lactuca serriola*), wild radish (*Raphanus sativus*), yellow star-thistle (*Centaurea solstitialis*), hairy hawkbit (*Leontodon leysseri*), and wild oats (*Avena fatua*). In many cases these areas have been leveled, graded, and/or drained to accommodate past or present agricultural practices. For the purpose of this evaluation, this habitat category also applies to lands utilized for hay production, non-irrigated pasturage/rangeland, or fallow fields that historically supported row crops.

Plate BR-1
Community Plan Vicinity Map



Source: USGS Elk Grove, Florin, Sacramento East, and Carmichael, California 7.5 Minute Quadrangles. N.T.S.

Agricultural Lands

Agricultural lands include those areas that are actively cultivated for the production of crops such as strawberries and walnuts. Like many non-native annual grasslands, agricultural lands have been altered by historic and on-going earth moving activities, which has changed the topography, soil profiles, and drainage patterns. Land used for dairy farming operations is also considered agricultural land for the purpose of this evaluation.

Irrigated Pastures

The FVGCP area contains several pastures that are flood irrigated during the dry season to facilitate the growth of grazeable vegetation. The vegetative communities often include species associated with wetter habitats such as perennial rye grass, tall flat-sedge (*Cyperus eragrostis*), bird's-foot trefoil (*Lotus corniculatus*), knotweed (*Polygonum aviculare*), loosestrife (*Lythrum hyssopifolia*), white clover (*Trifolium repens*), and dallis grass (*Paspalum dilatatum*). Soils in these areas often develop hydric indicators such as oxidized rhizospheres, mottles, and manganese concretions. The artificially enhanced hydrology of irrigated pastures sometimes creates or enlarges on-site wetlands.

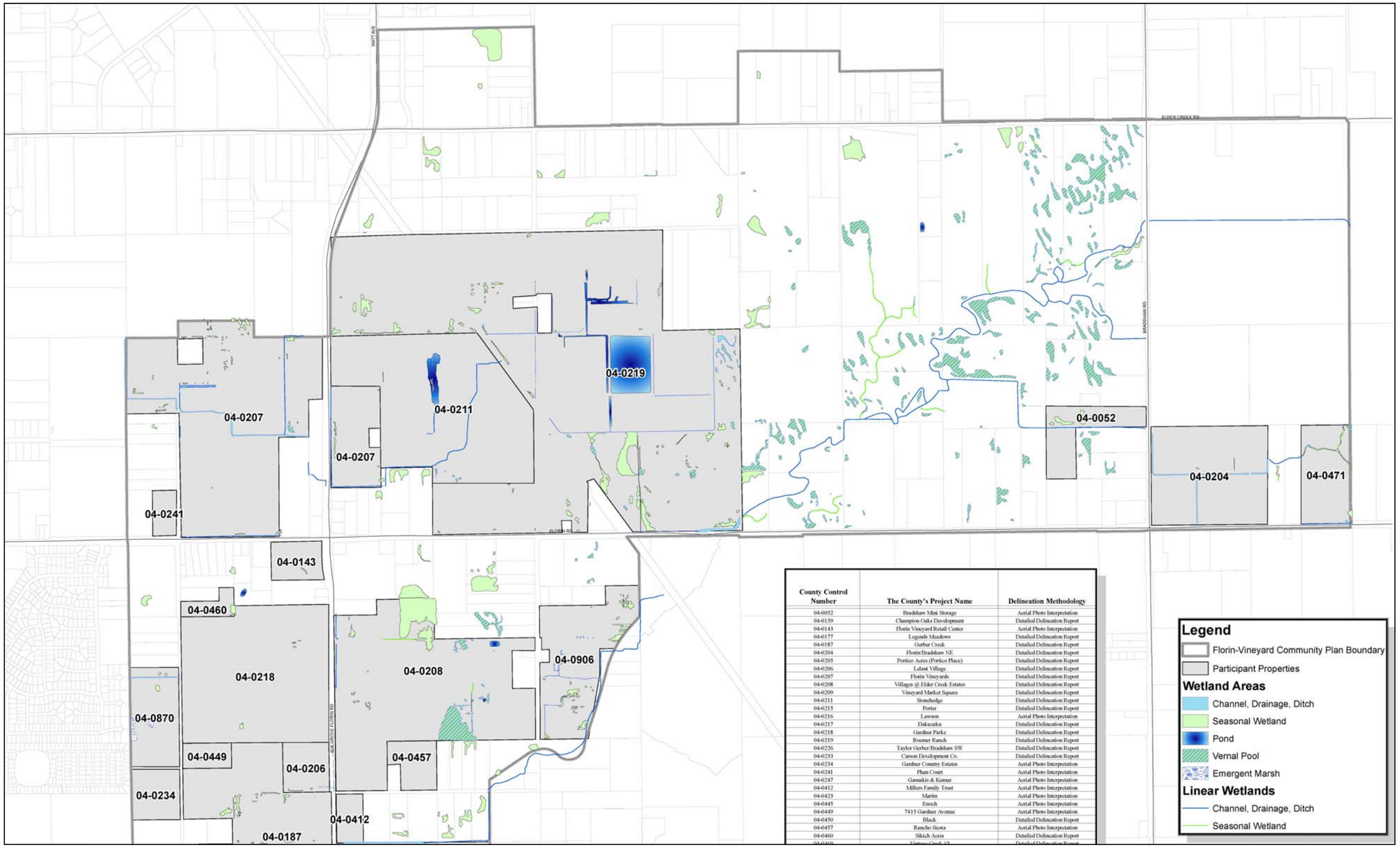
Vernal Pools

Vernal pools are wetlands that will sustain long-term ponding and/or saturated soil conditions during and following periods of heavy precipitation in the winter and early spring. Additional water is provided by surface sheet flow and subsurface discharge onto the perched water-tables or impermeable surfaces which underlie vernal pools. Plants commonly observed within vernal pools include native California species such as coyote thistle (*Eryngium vaseyi*), dwarf wooly marbles (*Psilocarphus brevissimus*), slender popcorn flower (*Plagiobothrys stipitatus*), double-horned downingia (*Downingia bicornuta*), goldfields (*Lasthenia sp*.), and purple hairgrass (*Deschampsia danthonioides*). The entire FVGCP area contains approximately 44.6 acres of vernal pool habitat (See Plate BR-2(A and B)).

Seasonal Wetlands

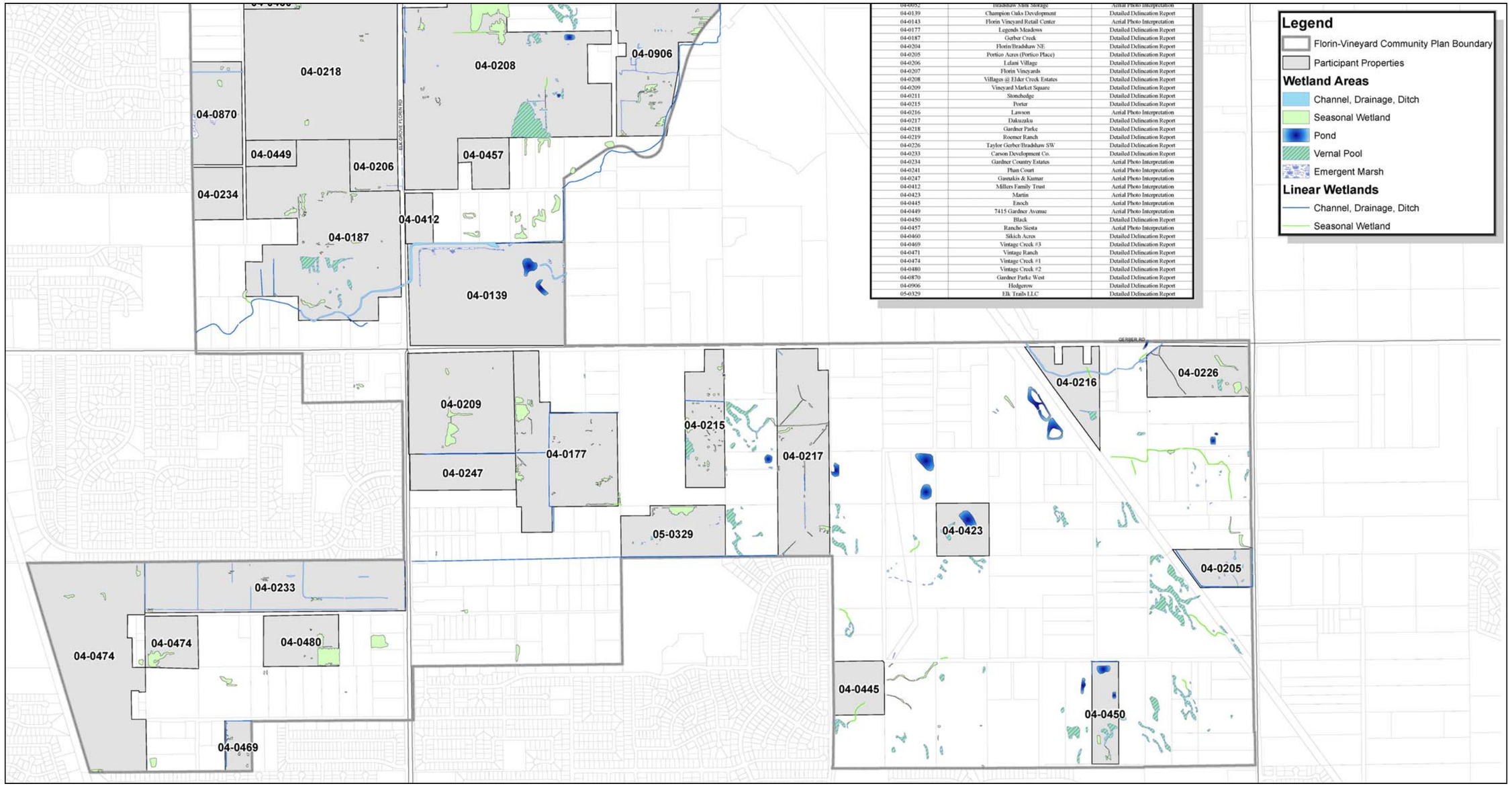
Seasonal wetlands, including depressional seasonal wetlands, maintain similar hydrology regimens as vernal pools but lack the endemic native plant communities. Often seasonal plant communities are dominated by loosestrife, perennial ryegrass, and Mediterranean barley. Wet swales are also included in this category. Wet swales occur in linear sloping drainages that lack a defined bed and bank, and support a wetland plant community. Perennial rye, Mediterranean barley, spiny-fruited buttercup (*Ranunculus muricatus*), and curly dock (*Rumex crispus*) are some species typically found in swales. The entire FVGCP area contains approximately 43.7 acres of seasonal wetland habitat (See Plate BR-2 (A and B)).

Plate BR-2(A)
FVGCP Area Wetlands



County Control Number	The County's Project Name	Delineation Methodology
04-0052	Bradshaw Mini Storage	Aerial Photo Interpretation
04-0139	Champion Oaks Development	Detailed Delineation Report
04-0143	Florin Vineyard Retail Center	Aerial Photo Interpretation
04-0177	Legends Meadows	Detailed Delineation Report
04-0187	Gerber Creek	Detailed Delineation Report
04-0204	Florin/Bradshaw NE	Detailed Delineation Report
04-0205	Portico Acres (Portico Place)	Detailed Delineation Report
04-0206	Lelani Village	Detailed Delineation Report
04-0207	Florin Vineyards	Detailed Delineation Report
04-0208	Villages @ Elder Creek Estates	Detailed Delineation Report
04-0209	Vineyard Market Square	Detailed Delineation Report
04-0211	Stonehedge	Detailed Delineation Report
04-0215	Porter	Detailed Delineation Report
04-0216	Lawson	Aerial Photo Interpretation
04-0217	Dakuzaku	Detailed Delineation Report
04-0218	Gardner Parke	Detailed Delineation Report
04-0219	Roemer Ranch	Detailed Delineation Report
04-0226	Taylor Gerber Bradshaw SW	Detailed Delineation Report
04-0233	Carson Development Co.	Detailed Delineation Report
04-0234	Gardner Country Estates	Aerial Photo Interpretation
04-0241	Phan Court	Aerial Photo Interpretation
04-0247	Gasnakis & Kumar	Aerial Photo Interpretation
04-0412	Millers Family Trust	Aerial Photo Interpretation
04-0423	Martin	Aerial Photo Interpretation
04-0445	Enoch	Aerial Photo Interpretation
04-0449	7415 Gardner Avenue	Aerial Photo Interpretation
04-0450	Black	Detailed Delineation Report
04-0457	Rancho Siesta	Aerial Photo Interpretation
04-0460	Sikich Acres	Detailed Delineation Report
04-0469	Vineyard Creek #3	Detailed Delineation Report

Plate BR-2(B)
FVGCP Area Wetlands



04-0052	Bradshaw Mini Storage	Aerial Photo Interpretation
04-0139	Champion Oaks Development	Detailed Delineation Report
04-0143	Florin Vineyard Retail Center	Aerial Photo Interpretation
04-0177	Legends Meadows	Detailed Delineation Report
04-0187	Gerber Creek	Detailed Delineation Report
04-0204	Florin/Bradshaw NE	Detailed Delineation Report
04-0205	Portico Acres (Portico Place)	Detailed Delineation Report
04-0206	Lelani Village	Detailed Delineation Report
04-0207	Florin Vineyards	Detailed Delineation Report
04-0208	Villages @ Elder Creek Estates	Detailed Delineation Report
04-0209	Vineyard Market Square	Detailed Delineation Report
04-0211	Stonehedge	Detailed Delineation Report
04-0215	Porter	Detailed Delineation Report
04-0216	Lawson	Aerial Photo Interpretation
04-0217	Dakuzaku	Detailed Delineation Report
04-0218	Gardner Parke	Detailed Delineation Report
04-0219	Roemer Ranch	Detailed Delineation Report
04-0226	Taylor Gerber/Bradshaw SW	Detailed Delineation Report
04-0233	Carson Development Co.	Detailed Delineation Report
04-0234	Gardner Country Estates	Aerial Photo Interpretation
04-0241	Phan Court	Aerial Photo Interpretation
04-0247	Giasnakis & Kumar	Aerial Photo Interpretation
04-0412	Millers Family Trust	Aerial Photo Interpretation
04-0423	Martin	Aerial Photo Interpretation
04-0445	Enoch	Aerial Photo Interpretation
04-0449	7415 Gardner Avenue	Aerial Photo Interpretation
04-0450	Black	Detailed Delineation Report
04-0457	Rancho Siesta	Aerial Photo Interpretation
04-0460	Sikich Acres	Detailed Delineation Report
04-0469	Vintage Creek #3	Detailed Delineation Report
04-0471	Vintage Ranch	Detailed Delineation Report
04-0474	Vintage Creek #1	Detailed Delineation Report
04-0480	Vintage Creek #2	Detailed Delineation Report
04-0870	Gardner Parke West	Detailed Delineation Report
04-0906	Hodgerow	Detailed Delineation Report
05-0329	Elk Trails LLC	Detailed Delineation Report

Emergent Marsh

Emergent marshes, also referred to as depressional perennial marsh for the purpose of this evaluation, generally occur in deep, defined basins that sustain long term ponding during most, if not all, of the growing season. They can be found along the periphery of ponds, lakes, and other open water habitats as well as in abandoned rice fields and ditches or canals. Common plants include cattails (*Typha sp.*), floating primrose (*Ludwigia peploides*), smartweed (*Polygonum sp.*), and broadleaf arrowhead (*Sagittaria latifolia*). The entire FVGCP area contains approximately 1.5 acres of emergent marsh habitat (See Plate BR-2 (A and B)).

Ponds

Ponds include golf course water hazards, stock ponds, and ornamental pools as well as detention basins designed to hold irrigation tailwater, flood water, and cattle waste. Ponds generally support a mix of open water habitat, emergent marsh along the edges, and seasonal wetlands during periods of water draw-down. The FVGCP contains approximately 8.3 acres of ponds (See Plate BR-2 (A and B)).

Channels

For the purpose of this evaluation streams, creeks, drainage/irrigation/roadside ditches, and ephemeral drainages are classified as channels. The major channel features of the FVGCP area include Gerber Creek, Elder Creek, Union House (also known as Beacon) Creek, and numerous smaller unnamed tributaries that traverse the study area. Many channels within the plan area have been heavily impacted to accommodate various rural and urban projects. As a result of past rural and urban development most channels have been captured, channelized, denuded of natural vegetation, and redirected from their original courses. Large reaches presently possess steep banks and support emergent species including floating primrose, tall flatsedge, smartweed, and dallis grass, as well as various trees and shrubs. Ephemeral drainages are typically described as smaller channels that receive all or the vast majority of their hydrological impetus from overland flow, rather than from subsurface discharge. Ephemeral drainages usually display a bed, bank, and an ordinary high water mark, but not of the same magnitude as that of a creek, river, or stream. The bed is often composed of bedrock, gravel, sand, or cobble, and plant communities may be absent during times of water flow. The entire FVGCP area contains approximately 8.0 acres of channels (See Plate BR-2 (A and B)).

Trees

Trees represent the minority of plant species and plant biomass in the study area. Most of the trees in the FVGCP area occur in conjunction with maintained

ornamental landscaping, windbreaks, or creek corridors. Recorded species associated with ranchettes and residences include fruitless mulberry (*Morus alba*), gum (*Eucalyptus sp.*), Lombardi poplar (*Populus lombardii*), apple (*Malus sp.*), fig (*Ficus carica*), olive (*Olea europaea*), and Oregon ash (*Fraxinalus latifolia*). Native species include the northern California black walnut (*Juglans hindsii*), California sycamore (*Platanus racemosa*), willow (*Salix sp.*), valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), coastal live oak (*Quercus agrifolia*), California box elder (*Acer negundo var. californicum*), and cottonwood (*Populus fremontii*).

Urban Areas

For the purpose of the DEIR, urban areas denote commercial and residential locations with manipulated plant communities such as maintained lawns and decorative landscaping. The trees in urban areas include many of the above listed ornamental/fruit species as well. Often, leveling or grading has occurred to accommodate building foundations, roads, utility lines, and other infrastructure.

SPECIAL-STATUS SPECIES

The special-status species are those species identified as having relative scarcity and/or declining populations by the United States Fish & Wildlife Service (FWS) or California Department of Fish & Game (CDFG). Special-status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as species of concern by FWS or species of special concern by CDFG. Some species that are considered to be "special animals" or "fully protected" by the CDFG and those plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS) were also included. Habitat evaluations were preformed through aerial photo interpretation and a record search of the California Natural Diversity Database (CNDDB) to identify all documented sightings of special-status species within the portions of the plan area not evaluated in previous reports. Several species not listed in the CNDDB search were evaluated based on historic range data.

MAMMALS

AMERICAN BADGER

American badger (*Taxidea taxus*) is a listed CDFG species of special concern. This burrowing carnivorous mammal is solitary, territorial, and prefers to feed on small mammals, lizards, snakes, insects, and carrion. The badger does not have known natural enemies and inhabits dry open fields, grasslands, and pastures. However, the CNDDB sighting records for badgers within the project area are 17 and 18 years old, and as a result of the continued urbanization since that point in time badgers are unlikely to occur within the FVGCP.

BIRDS

SWAINSON'S HAWK

Swainson's hawk (*Buteo swainsoni*) is a raptor species currently listed as threatened in California by the CDFG. Swainson's hawks typically nests in tall cottonwoods, valley oaks, or willows associated with riparian corridors, grasslands, irrigated pastures, and croplands with a high density of rodents. The Central Valley population typically breeds and nests in late spring through early summer before migrating to Central and South America for the winter. Both nesting sites and foraging areas for the Swainson's hawk are likely to be present within the FVGCP.

COOPER'S HAWK

The Cooper's hawk (*Accipiter cooperi*), which is also known as the blue darter or chicken hawk, is listed by CDFG as a species of special concern. Cooper's hawk is an ambush predator that prefers to forage in or near wooded locations for birds, domestic poultry, and small mammals. Unlike falcons, which use their beaks to kill, Cooper's hawks subdue prey by continuously squeezing with talon-equipped feet. The species nests in trees in wooded areas typically 10 to 60 feet above ground level. Both nesting sites and foraging habitat for the Cooper's hawk are likely to be present within the FVGCP.

SHARP-SHINNED HAWK

Sharp-shinned hawk (*Accipiter striatus*) is a CDFG-listed species of special concern. Many are known to migrate to Canada and Alaska during the summer to nest and rear young, though other populations including some in California remain local during the breeding season. Sharp-shinned hawks prefer to nest and forage in larger wooded areas, but they have been observed hunting in open fields and pastures near forests for small birds, reptiles, and mammals, which compose the majority of their diet. Foraging habitat for the sharp-shinned hawk is likely to be present within the FVGCP; nesting sites potentially occur, but are not likely.

BURROWING OWL

Burrowing owl (*Athene cunicularia*) is a ground nesting raptor species that is afforded protection by CDFG as a species of special concern due to potentially declining populations in the Central Valley of California. The owls typically inhabit open grassland habitats where they nest in abandoned ground squirrel burrows and cavities associated with raised mounds, levees, or soft berm features. Both nesting sites and foraging habitat for the burrowing owl are likely to be present within the FVGCP.

WHITE-TAILED KITE

White-tailed kite (*Elanus leucurus*), also known as black-shouldered kite, is a CDFG fully protected species. The white-tailed kite is a non-migrating bird, and attains a wingspan of approximately 40 inches. The kite feeds primarily on insects, small mammals, reptiles, and amphibians, which are foraged from open grasslands. The kite builds a platform-like nest of sticks in trees or shrubs and lays 3 to 5 eggs, but may brood a second clutch if prey is abundant. The kite's distinct style of hunting includes hovering before diving onto a target. Both nesting sites and foraging habitat for the white-tailed kite are likely to be present within the FVGCP.

TRICOLORED BLACKBIRD

Tricolored blackbirds (*Agelaius tricolor*) are afforded protection by CDFG as a species of special concern due to declining populations in the region. The blackbirds are colonial nesters favoring dense stands of cattails, bullrush, or blackberry thickets associated with drainages, ditches, and canals. The birds commonly forage in areas adjacent to the central colony for a variety of insects. Both nesting sites and foraging habitat for the tricolored blackbird are likely to be present within the FVGCP.

NORTHERN HARRIER

The northern harrier (*Circus cyaneus*), which is also known as the marsh hawk, is listed by CDFG as a species of special concern. The harrier feeds on small birds, mammals, reptiles, and frogs foraged from open wetlands, meadows, croplands, grasslands, and riparian woodlands. Northern harriers construct nests of vegetation on the ground in open fields and meadows. Both nesting sites and foraging habitat for the northern harrier are likely to be present within the FVGCP.

GOLDEN EAGLE

The golden eagle (*Aquila chrysaetos*) is afforded protection by CDFG as a species of special concern and a fully protected species. The golden eagle is a very large, solitary, tree nesting raptor that feeds on mammals, carrion, and reptiles. Though the bird's natural densities are low, the golden eagle once was relatively common to the open areas of California. Today, the eagle is rarely observed in the Central Valley. Foraging habitat for the golden eagle is likely to be present within the FVGCP; nesting sites could occur, but are not likely.

LOGGERHEAD SHRIKE

Loggerhead shrike (*Lanius ludovicianus*), which is also known as the butcher bird, is a solitary hunter that feeds on small mammals, insects, reptiles, and birds. The bird favors open habitats such as central oak woodland and creosote bush scrub and mostly nests in mid-canopy. Both nesting sites and foraging habitat for the loggerhead shrike are likely to be present within the FVGCP.

MERLIN

The merlin (*Falco columbarius*) is a CDFG species of special concern that has never been observed nesting in California. While the merlin is a transient throughout most of the state, wintering populations are known to occur in the Central Valley and along the coast. Foraging habitat is likely to occur within the FVGCP.

FERRUGINOUS HAWK

The ferruginous hawk (*Buteo regalis*) is a solitary tree nester that prefers to forage in grasslands or other open areas for small mammals, birds, reptiles, and large insects. The large and powerful hawk often winters in California. Foraging habitat is likely to occur within the FVGCP.

GREAT EGRET

The great egret (*Ardea alba*) is listed by CDFG as a special animal. The great egret usually forages alone in shallow open water and wetlands for fish, amphibians, and aquatic invertebrates. Great egrets favor breeding habitat in or near open waters and wetlands. Foraging habitat is present within the FVGCP; however, nesting sites are not likely to occur.

BANK SWALLOW

The bank swallow (*Riparia riparia*) is a federal species of concern and a California threatened species. The swallow nests in colonies of two or three pairs to a few thousand in vertical cliffs and banks associated with riparian zones, lakes, and streams. The species is known to colonize human-made vertical banks or building structures. Both nesting sites and foraging habitat for the bank swallow are likely to be present within the FVGCP.

CALIFORNIA HORNED LARK

The California horned lark (*Eremophila alpestris actia*) is a CDFG species of special concern. The lark prefers to forage and nest in areas with sparse vegetation and exposed soil, such as agricultural fields, desert brushlands, grasslands, and similar open habitats. The California horned lark, which feeds

on seeds and insects, seems to avoid all habitats dominated by dense vegetation. Both nesting sites and foraging habitat for the California horned lark are likely to be present within the FVGCP.

PURPLE MARTIN

The purple martin (*Progne subis*) is a California species of special concern. This bird winters in South America and migrates to Mexico, the United States, and southern Canada to breed. The martin is a colonial nester and utilizes natural cavities such as hollow trees, cliffs, and abandoned woodpecker dens, but it will also take advantage of created hollows such as bird houses or gourds. Purple martins feed on winged insects that they catch on the fly commonly in open areas near lakes, ponds, marshes or other water features. Both nesting sites and foraging habitat for the purple martin are likely to be present within the FVGCP.

GREAT BLUE HERON

The great blue heron (*Ardea herodias*) is listed by CDFG as a species of special concern. The heron is a wading bird that forages in wetlands and shallow open waters for fish, aquatic invertebrates, small mammals, and amphibians. The great blue heron usually nests in rookeries that are situated in wetlands or near open waters. Foraging habitat is present within the FVGCP, however, nesting sites are not likely to occur.

DOUBLE-CRESTED CORMORANT

The double-crested cormorant (*Phalacrocorax auritus*) is listed by CDFG as a species of special concern. The double-crested cormorant is a diving aquatic bird, and is the most widespread cormorant in North America. The cormorant prefers open water habitats such as ponds, rivers, estuaries, lagoons, and open coastlines where the cormorant forages for fish, amphibians, and crustaceans. The double-breasted cormorant nests near water in colonies on cliffs, rocks, or in trees. Foraging habitat is present within the FVGCP; however, nesting sites are not likely to occur.

FISH

SACRAMENTO SPLITTAIL

Sacramento splittail (*Pogonichthys macrolepidotus*) is a California species of special concern and a federal species of concern that was recently de-listed by the FWS. Adult fish migrate upstream from brackish areas to spawn in freshwater on submerged vegetation in temporarily flooded upland and riparian habitat. The young remain in shallow, vegetated areas near spawning sites and eventually migrate to deeper waters upon maturation. The Sacramento splittail is likely to occur in streams located within the FVGCP.

AMPHIBIANS AND REPTILES

CALIFORNIA TIGER SALAMANDER

The California tiger salamander (*Ambystoma californiense*) is a federally-listed threatened species and a California species of special concern that typically breeds in fish-free seasonal or permanent ponds associated with grassland communities. California tiger salamander may also breed in deeper vernal pools, seasonal wetlands, and/or other seasonal pools within swales or channels. They spend the majority of their life cycle below ground in ground squirrel or pocket gopher burrows in grasslands situated adjacent to breeding sites. Given the availability of suitable habitat, the tiger salamander is likely to exist within the FVGCP.

GIANT GARTER SNAKE

Giant garter snake (*Thamnophis gigas*) is designated as a federal threatened and state threatened species afforded special protection by FWS and CDFG. The giant garter snake is generally associated with larger canals, irrigation ditches, and other semi-permanent to permanent aquatic sites with slow moving water and an abundance of emergent vegetation. Given the availability of suitable habitat, the giant garter snake is likely to exist within the FVGCP.

WESTERN SPADEFOOT TOAD

The western spadefoot toad (*Spea hamondii)* is a California species of special concern and a federal species of concern. The toad is a nocturnally active animal that prefers to forage in grassland, scrub, and chaparral for a variety of insects, worms, and other invertebrates. The western spadefoot toad breeds from January to May in vernal pools, pools in ephemeral stream courses, and other fish-free water features. Females commonly lay more than 500 eggs in one season. The tadpoles develop in 3 to 11 weeks, and must complete their metamorphosis before the temporary pools dry. Given the availability of suitable habitat, the western spadefoot toad is likely to exist within the FVGCP.

WESTERN POND TURTLE

The western pond turtle (*Clemmys marmorata marmorata*) is a California species of special concern and a federal species of concern. The turtle's preferred habitat includes streams, large rivers and canals with slow-moving water, and marshes. Although the turtles must live near water, they can tolerate drought by burrowing into the muddy beds of dried drainages. The western pond turtle feeds mainly on invertebrates such as insects and worms, but will also eat small fish, frogs, mammals, and some plants. Western pond turtle predators include raccoons, coyotes, raptors, weasels, large fish, and bullfrogs. The turtles breed from mid to

late spring and may live up to 50 years. Given the availability of suitable habitat, the western pond turtle is likely to exist within the FVGCP.

INVERTEBRATES

VALLEY ELDERBERRY LONGHORN BEETLE

The valley elderberry longhorn beetle (*Desmocerus californicus*) is a federal threatened species that is dependent upon the elderberry plant (*Sambucus sp.*) as a primary host species. Though elderberry shrubs are a common component of riparian areas throughout the Sacramento Valley region, they are also found considerable distances from drainages. The elderberry plant is likely to be found within the FVGCP, therefore, the potential exists for the valley elderberry longhorn beetle to be found as well.

VERNAL POOL BRANCHIOPODS

The federally threatened vernal pool fairy shrimp *(Branchinecta lynchi*) and the endangered vernal pool tadpole shrimp (*Lepidurus packardi*) as well as the non-listed California linderiella (*Linderiella occidentalis*) and midvalley fairy shrimp (*Branchinecta mesovallensis*) have been documented by the CNDDB as occurring within the vicinity of the plan area. Locally occurring branchiopod species exclusively inhabit vernal pools or other seasonally ponded wetlands that sustain inundation during the winter before drying in the late spring. Vernal pools exist within the FVGCP, and branchiopods are likely located within the pools.

PLANTS

VERNAL POOL PLANTS

Special-status plant species identified on the CNDDB as occurring in close proximity to the plan area include dwarf downingia (*Downinia pusila*), Ahart's dwarf rush (*Juncus leiospermus var. ahartii*), Sacramento orcutt grass (*Orcuttia viscida*), slender orcutt grass (*Orcuttia tenuis*), and legenere (*Legenere limosa*). All of these plants are strongly associated with vernal pools and other seasonally ponded wetlands. Vernal pool plants are likely to occur within the vernal pools located within the FVGCP.

BOGG'S LAKE HEDGE-HYSSOP

Bogg's Lake hedge-hyssop (*Gratiola heterosepala*) is a state-listed endangered species and a CNPS 1B plant. Though the Bogg's Lake hedge-hyssop is found in vernal pools, the plant also favors other shallow water habitats such as lake margins and marshes. The Bogg's Lake hedge-hyssop is potentially located within the FVGCP.

NORTHERN CALIFORNIAN BLACK WALNUT

Northern California black walnut (*Juglans hindsii*) is listed as a 1B plant by the CNPS. The tree presently occurs in only two of three known natural stands, but the walnut has been widely introduced into California's cismontane habitats. Though the northern Californian black walnut favors riparian scrub and riparian woodlands under natural circumstances, historically the tree was widely cultivated as rootstock for English walnut (*Juglans regia*). Black walnuts are present within the FVGCP.

SANFORD'S ARROWHEAD

Sanford's arrowhead (*Sagittaria sanfordii*) is listed as a 1B plant by the CNPS. The plant favors deeper aquatic habitats associated with drainages, canals, and larger ditches that sustain inundation and/or slow moving water into early summer. The Sanford's arrowhead is likely to occur within the FVGCP.

SUMMARY

Special-status species potentially occurring in the plan area are summarized below in Table BR-1.

REGULATORY SETTING

The following is a description of federal, state, and local environmental laws and policies that are relevant to the California Environmental Quality Act (CEQA) review process.

FEDERAL REGULATORY AUTHORITY

FEDERAL ENDANGERED SPECIES ACT

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. The FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

The FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined as harassing, harming (including significantly modifying or degrading habitat), pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct (16 USC 1532, 50 CFR 17.3). Taking can result in civil or criminal penalties.

Table BR-1: Potentially Occurring Special-Status Species and Associated Habitats

Species	State Status	Federal Status	CNPS Listing	Habitat Association	Potentially Present
Mammals					
Taxidea taxus (American badger)	Species of Special Concern	None		This species prefers dry open fields, grasslands, and pastures.	Unlikely.
Birds					
Accipiter cooperi (Cooper's hawk)	Species of Special Concern	None		Inhabits forested habitats, forest edge, and riparian habitat, may forage in adjacent grassland and fields.	Yes.
Accipiter striatus (sharp-shinned hawk)	Species of Special Concern	None		Inhabits forested habitats, forest edge, and riparian habitat; may forage in adjacent grassland and fields.	Yes.
Agelaius tricolor (tricolored blackbird)	Species of Special Concern	Species of Concern		Colonial nester in cattails, bulrush, or blackberries associated with marsh habitats.	Yes.
Aquila chrysaetos (golden eagle)	CDFG-Species of Special Concern/Fully Protected Species	None		Solitary nester preferring larger trees. Forages in open areas.	Yes.
Ardea alba (great egret)	CDFG-Special Animal	None		Rivers, streams, lakes, marshes, and other aquatic habitats.	Yes.

(Table is continued below)

Table BR-1(Continued): Potentially Occurring Special-Status Species and Associated Habitats

Species	State Status	Federal Status	CNPS Listing	Habitat Association	Potentially Present
Ardea herodias (great blue heron)	CDFG-Special Animal	None		Rivers, streams, lakes, marshes, and other aquatic habitats.	Yes.
Athene cunicularia (burrowing owl)	Species of Special Concern	Species of Concern		Nests in abandoned ground squirrel burrows associated with open grassland habitats.	Yes.
Buteo regalis (ferruginous hawk)	None	None		Solitary tree nester. Forages in open areas such as grasslands and fields for ground squirrels as well as other small mammals, birds, lizards, snakes, and rabbits.	Yes.
Buteo swainsoni (Swainson's hawk)	Threatened	None		Nests in tall cottonwoods, valley oaks or willows. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	Yes.
Circus cyaneus (northern harrier)	Species of Special Concern	None		Forages in open grasslands, nests on ground in shrubby vegetation.	Yes.
Elanus leucurus (white-tailed kite)	Fully Protected	None		Nests in riparian corridors along streams and rivers, and forages in nearby grasslands and fields.	Yes.
Eromophila alpestris actia (California horned lark)	Species of Special Concern	None		Forages and breeds in open grasslands and fields.	Yes.
Falco columbarius (Merlin)	None	None		The Merlin is not known to nest in California, but the raptor is a winter transient throughout most of California with wintering populations in the Central Valley.	Yes.

(Table is continued below)

Table BR-1(Continued): Potentially Occurring Special-Status Species and Associated Habitats

Species	State Status	Federal Status	CNPS Listing	Habitat Association	Potentially Present
Lanius ludovicianus (loggerhead shrike)	Species of Special Concern	None		Forages in open habitats such as central oak woodland and creosote bush scrub. The shrike nests in mid-canopy	Yes.
Phalacrocorax auritus (double-crested cormorant)	None	Species of Concern		This aquatic bird nests in colonies on rocks, cliff, or in trees. The cormorant prefers open water habitats such as coastlines, ponds, rivers, lakes, estuaries, or lagoons.	Yes.
Progne subis (purple martin)	Species of Special Concern	None		This insectivore prefers open areas near bodies of water or wetlands. The purple martin is a colonial nester which utilizes cavities in trees, cliff faces, and buildings.	Yes.
Riparia riparia (bank swallow)	Threatened	Species of Concern		Colonial nester in vertical cliffs and banks associated with riparian zones along streams, rivers, and lakes.	Yes.
Amphibians & Reptiles					
Ambystoma californiense (California tiger salamander)	Species of Special Concern	Threatened		Breeds in ponds or other deeply ponded wetlands, and uses gopher holes and ground squirrel burrows in adjacent grasslands for upland refugia/foraging.	Yes.
Clemmys marmorata marmorata (western pond turtle)	Species of Special Concern	Species of Concern		Ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	Yes.

(Table is continued below)

Table BR-1(Continued): Potentially Occurring Special-Status Species and Associated Habitats

Species	State Status	Federal Status	CNPS Listing	Habitat Association	Potentially Present
Spea (=Scaphiopus) hammondii (western spadefoot toad)	Species of Special Concern	Species of Concern		Breeds in vernal pools, seasonal wetlands and associated swales. Forages and hibernates in adjacent grasslands.	Yes.
Thamnophis gigas (giant garter snake)	Threatened	Threatened		Rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow moving water and heavy emergent vegetation.	Yes.
Fish					
Pogonichthys macrolepidotus (Sacramento splittail)	Species of Special Concern	Species of Concern		Adults migrate upstream from brackish areas to spawn in freshwater on submerged vegetation in temporarily flooded upland and riparian habitat in the lower reaches of rivers, bypasses, sloughs. The young remain in shallow, weedy areas inshore near spawning sites and move to deeper offshore habitat as they mature.	Yes.
Invertebrates					
Branchinecta lynchi (vernal pool fairy shrimp)	None	Threatened		Vernal pools.	Yes.
Branchinecta mesovallensis (midvalley fairy shrimp)	None	None		Vernal pools.	Yes.
Desmocerus californicus dimorphus (valley elderberry longhorn beetle)	None	Threatened		Dependent upon elderberry plant (*Sambucus mexicana*) as primary host species.	Yes.

(Table is continued below)

Table BR-1(Continued): Potentially Occurring Special-Status Species and Associated Habitats

Species	State Status	Federal Status	CNPS Listing	Habitat Association	Potentially Present
Lepidurus packardi (vernal pool tadpole shrimp)	None	Endangered		Vernal pools.	Yes.
Linderiella occidentalis (California linderiella)	None	None		Vernal pools.	Yes.
Plants					
Downingia pusilla (dwarf downingia)	None	None	CNPS-2	Vernal pools.	Yes.
Gratiola heterosepala (Bogg's Lake hedge-hyssop)	Endangered	None	CNPS-1B	Vernal pools and margins of lakes/ponds	Yes.
Juglans hindsii (Northern California black walnut)	None	None	CNPS-1B	Only two of three known native stands are still in existence. This species prefers riparian scrub and riparian woodland habitats.	Yes
Juncus leiospermus var. ahartii (Ahart's dwarf rush)	None	Species of Concern	CNPS-1B	Vernal pools.	Yes.
Legenere limosa (legenere)	None	Species of Concern	CNPS-1B	Vernal pools.	Yes.
Orcuttia tenuis (slender orcutt grass)	Endangered	Threatened	CNPS-1B	Vernal pools.	Yes.

(Table is continued below)

Table BR-1(Continued): Potentially Occurring Special-Status Species and Associated Habitats

Species	State Status	Federal Status	CNPS Listing	Habitat Association	Potentially Present
Orcuttia viscida (Sacramento orcutt grass)	Endangered	Threatened	CNPS-1B	Vernal pools.	Yes.
Sagittaria sanfordii (Sanford's arrowhead)	None	Species of Concern	CNPS-1B	Emergent marsh habitat, typically associated with drainages, canals, or irrigation ditches.	Yes.

Procedures for addressing impacts to federally listed species follow two principal pathways, both of which require consultation with the U.S. Fish and Wildlife Service (USFWS), which administers the FESA for all terrestrial species. The first pathway, Section 10(a) incidental take permit, applies to situations where a non-federal government entity proposes an incidental take of a species protected under the FESA. The second pathway, Section 7 consultation, is required when projects directly undertaken by a federal agency or private projects requiring a federal permit or approval may adversely affect species or critical habitat protected by the FESA. As a requirement of the Department of Interior, U.S. Fish and Wildlife Service, the following notification is provided by Sacramento County to proponents of any project that has the potential to adversely affect threatened or endangered species:

> "The applicant is hereby notified of additional conditions as stipulated by the U.S. Fish and Wildlife Service. Features of the applicant's project may adversely affect federally listed threatened or endangered species. An applicant must go through one of two processes to obtain authorization to take federally listed species incidental to completing his or her project. One of the processes is formal consultation. When the authorization or funding of a Federal agency is an aspect of a project that may affect federally listed species, section 7 of the Endangered Species Act requires the Federal agency to formally consult with the Service. Formal consultation is concluded when the Service issues a biological opinion to the Federal agency. The biological opinion includes terms and conditions to minimize the effect of take on listed species. The Federal agency must make the terms and conditions of the biological opinion into binding conditions of its own authorization to the project applicant. An example of this process is when the U.S. Army Corps of Engineers consults with the Service prior to issuing a permit to fill jurisdictional waters under Section 404 of the Clean Water Act. The terms and conditions of the biological opinion become binding on the project applicant through the Corps' 404 authorization. When no Federal funding or authorization is involved in a project, an applicant must prepare a habitat conservation plan and obtain a permit directly from the Service in accordance with section 10(a)(1)(B) of the Act. For additional information on these processes please contact the Endangered Species Division of the U.S. Fish and Wildlife Service's Sacramento Fish and Wildlife Office at (916) 979-2725".

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to

take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Clean Water Act

The U.S. Army Corps of Engineers regulates discharge of dredged or fill material into Waters of the United States under Section 404 of the Clean Water Act (CWA). "Discharge of fill material" is defined as the addition of fill material into Waters of the U.S., including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 C.F.R. §328.2(f)). In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 C.F.R. §328.3(b)).

Furthermore, Jurisdictional Waters of the U.S. can be defined by exhibiting a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the Corps as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 C.F.R. §328.3(e)).

The FESA and NEPA Section 404 guidelines prohibit the issuance of wetland permits for projects that would jeopardize the existence of threatened or endangered wildlife or plant species. In addition, the U.S. Army Corps of Engineers must consult with the U.S. Fish and Wildlife Service (USFWS) and National Oceanic Atmospheric Administration (NOAA) when threatened or endangered species may be affected by a proposed project to determine whether issuance of a Section 404 permit would jeopardize the species.

STATE REGULATORY AUTHORITY

CALIFORNIA ENDANGERED SPECIES ACT

The State of California enacted the California Endangered Species Act (CESA) in 1984. The CESA is similar to the FESA but pertains to state-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Game (CDFG) when preparing California Environmental Quality Act (CEQA) documents to ensure that the state lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFG on projects or actions that could affect listed species, directs CDFG to determine whether jeopardy would occur, and allows CDFG to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that "overriding considerations" exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

The CESA prohibits the taking of state-listed endangered or threatened plant and wildlife species. CDFG exercises authority over mitigation projects involving state-listed species, including those resulting from CEQA mitigation requirements. CDFG may authorize taking if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. CDFG requires preparation of mitigation plans in accordance with published guidelines.

CDFG SPECIES OF SPECIAL CONCERN

In addition to formal listing under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern" developed by the CDFG. CDFG tracks species in California whose numbers, reproductive success, or habitat may be threatened.

OTHER STATUTES, CODES, AND POLICIES AFFORDING LIMITED SPECIES PROTECTION

CALIFORNIA NATIVE PLANT SOCIETY

The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (Tibor, 2001). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review. The following identifies the definitions of the CNPS listings:

List 1A:	Plants believed extinct.
List 1B:	Plants rare, threatened, or endangered in California and elsewhere.
List 2:	Plants rare, threatened, or endangered in California, but more numerous elsewhere.
List 3:	Plants about which we need more information - a review list.
List 4:	Plants of limited distribution - a watch list.

SACRAMENTO COUNTY GENERAL PLAN

As the project area includes riparian resources, wetlands, and tree resources, the following *Sacramento County General Plan* policies apply to the proposed project.

The Conservation Element of the *Sacramento County General Plan* contains policies designed to protect riparian vegetation, wetlands, and native or landmark trees.

CO-62. Ensure no net loss of marsh and riparian woodland acreage, values or functions.

CO-63 Community Plans and specific plans shall include a complete inventory of seasonal and permanent marshland, riparian habitat, and riparian woodland.

CO-69 Review projects for potential to restore marsh/riparian woodlands, considering effects on vernal pools, ground water, flooding, and proposed fill or removal of marsh and riparian habitat.

CO-70 Public or private projects involving filling or removal of marsh/riparian habitat shall be mitigated outside of natural preserves where on-site mitigation is not desirable or appropriate shall be mitigated through the purchase of mitigation credits for restored wetlands/riparian areas at no net loss.

CO-71 Community and Specific Plans shall identify potential areas, if any, where marsh or riparian habitat restoration/creation can be undertaken.

CO-72 New or restored marsh/riparian woodland shall be under ownership of a public agency or subject to a permanent conservation easement.

CO-73 Specific restoration/creation areas identified in Community Plans in accordance with Policy CO-71 shall be adequate in characteristics and

acreage to accommodate mitigation for likely wetland impacts resulting from development as designated in the respective Community Plans.

CO-83 Ensure no net loss of vernal pool acreage, and/or values and functions, and mitigate any loss in relation to the values of quality of habitat.

CO-84 Evaluate feasible on-site alternatives in the environmental review process that reduce impacts on vernal pools and provide effective on-site preservation in terms of minimum management requirements, effective size, and evaluation criteria identified in the report "Sacramento County Vernal Pools" (1990).

CO-85 Require in-kind compensation for the type and functional values of vernal pools eliminated by development.

CO-86 When on-site preservation or mitigation is infeasible or undesirable require off-site mitigation at County-approved mitigation banks within Sacramento County.

CO-87 Mitigation for vernal pool loss shall be considered in the environmental review process, and mitigation shall be required based on information contained within the environmental documents on the quality of those resources and their ability to be sustained within an urban setting.

CO-96 Prior to adoption of the mitigation banking ordinance, utilize on a county-wide basis, the adopted interim wetland mitigation/compensation policy: All wetland acreage proposed to be disturbed by any project over which the Board of Supervisors has discretionary approval shall be mitigated/compensated for by either one or a combination of the following methods:

1) Preserve or create wetlands sufficient to result in a no net loss of wetland acreage, and protect their required watersheds as is necessary for the continued function of wetlands on the project site. The appropriate hearing body shall determine that project design, configuration, and wetland management plan, provide reasonable assurances that the wetlands will be protected and their long-term ecological health maintained.

2) Where a Section 404 Permit has been issued by the Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the Corps for granting a permit may be submitted for purposes of satisfying paragraph 1, provided a no net loss of wetlands is achieved and, provided, further, that such mitigation and management plan shall

be subject to the independent, discretionary approval of the Board of Supervisors.

3) Pay to the County of Sacramento an amount based on a rate of $35,000 per acre for the unmitigated/uncompensated wetlands, which shall constitute mitigation for purposes of implementing adopted no net loss policies and CEQA required mitigation. The payment shall be collected by the Department of Planning and Community Development at the time of Improvement Plan or Building Permit approval, whichever occurs earlier, and deposited into the Wetlands Restoration Trust Fund.

CO-106 Channel realignment within Urban Stream Corridors shall be considered only when necessary to eliminate flood hazards; it is necessary to protect and preserve natural features and vegetation which would otherwise be removed; it is necessary as a result of surface mining within the floodplain; or the existing channel has been significantly disrupted by agricultural improvements or other man-made changes.

CO-117 Provide a transition zone adjacent to stream corridors which incorporates:

1) A buffer zone on each side of the stream, between the outer edge of any existing or planned riparian or wetland vegetation and more intensive uses.

2) The transition zone for stream corridors shall provide sufficient width to allow a minimum 50 to 150 foot natural buffer, a 20 foot mowed fire break at the outer edge, sufficient additional width to provide for access for channel maintenance and flood control and for planned passive recreation uses.

3) The width of the natural buffers shall be based on:
    a. quality and quantity of existing and planned habitat,
    b. presence of species as well as species sensitivity to human disturbance,
    c. areas for regeneration of vegetation,
    d. corridor for wildlife habitat linkage,
    e. nature of planned urban uses adjacent to the corridor,
    f. need for community greenways, and
    g. the effective use of active barriers.

4) The transition zone shall not include containment ponds for other features implementing pollutants discharge requirements.

5) Master drainage plans may provide for other standards that meet the intent of this policy.

CO-130 Make every effort to protect and preserve non-oak native, excluding cottonwoods, and landmark trees and protect and preserve native oak trees measuring 6 inches in diameter at 4.5 feet above ground in urban and rural areas, excluding parcels zoned exclusively for agriculture.

CO-131 Native trees other than oaks, which cannot be protected shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed. In addition, with respect to oaks, a provision for a comparable on-site area for the propagation of oak trees may substitute for replacement tree planting requirements at the discretion of the County Tree Coordinator when removal of a mature oak tree is necessary in accordance with consistent policy.

CO-132 If the project site is not capable of supporting all the required replacement trees a sum equivalent to the replacement cost of the number of trees that cannot be accommodated shall be paid to the County's Tree Preservation Fund. The replacement cost of trees shall be established in accordance with the Council of Tree and Landscape Appraiser's standards for appraising trees.

CO-133 For discretionary projects involving native oaks, ensure no net loss of canopy area by (1) preserving the main, central portions of consolidated and isolated groves constituting the existing healthy and unhealthy native oak canopy and (2) provide an area on-site to mitigate any canopy lost. Native oak mitigation area must be a contiguous area on-site which is equal to the size of canopy area lost and shall be adjacent to existing oak canopy to ensure opportunities for regeneration. If on-site mitigation area is not available due to area limitations, developer shall provide off-site mitigation consistent with policy proposed in CO-136.

CO-134 Mitigate for loss of trees for road expansion and development consistent with County Tree Ordinance and General Plan policies.

CO-136 If on-site mitigation is not possible given site limitation, off-site mitigation may be considered. Such a mitigation area must meet all of the following criteria to preserve, enhance, and maintain a natural woodland habitat in perpetuity, preferably by transfer of title to an appropriate public entity. Protected woodland habitat could be used as a suitable site for replacement tree plantings required by ordinances or other mitigations.

a. Equal or greater in area to the total area that is included within a radius of 30 feet of the dripline of all trees to be removed;
b. Adjacent to protected stream corridor or other preserved natural areas;
c. Supports a significant number of native broadleaf trees; and
d. Offers good potential for continued regeneration of an integrated woodland community.

CO-146 The proximity of diverse habitat types shall be considered in identifying nondevelopment areas in Community Plans and in identifying potential or preferred natural preserves and mitigation banks.

CO-147 Identify suitable habitat for threatened and endangered species through the Community and Specific Plan process.

CO-150 To the extent feasible, plans for urban development and flood control projects shall incorporate habitat corridors connecting on-site or adjoining areas (if any) not designated for alteration.

VINEYARD COMMUNITY PLAN

The Vineyard Community Plan contains Natural Environmental Resources Policies and Programs that relate to the proposed project.

NER-3 Protect natural areas from the effects of urbanization through the utilization of appropriate zoning techniques which support local, state, and federal preservation policies.

NER-4 Protect vernal pools and potential endangered species such as the Sacramento Orcutt Grass by evaluating development project sites on a case-by-case basis for the presence of vernal pools and inventorying those sites where pools are found.

NER-5 Encourage the development of linear parkways along stream channels, within floodplains, and within power transmission easements for environmentally compatible recreation facilities and open space.

SWAINSON'S HAWK MITIGATION PROGRAM

The Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code) has been established as a means of providing mitigation for the loss of foraging habitat within Sacramento County. Provision of lands for habitat by a project proponent may not always be feasible. Therefore, the ordinance provides for the establishment of impact mitigation fees for the actual acquisition of foraging habitat. For projects that meet certain criteria, these mitigation fees may be paid in lieu of providing lands for foraging habitat. For projects that are 40 acres or more in size, the project applicant shall preserve

through conservation easement or fee title 1 acre of similar, suitable habitat for each acre developed. For projects that are less than 40 acres in size, the project applicant can preserve 1 acre of similar, suitable habitat for each acre developed or submit payment of a Swainson's hawk impact mitigation fee per acre of calculated habitat affected to the County in the amount established. These fees accumulate and are held in trust by the County until used for the acquisition of foraging habitat of a size large enough to be biologically and economically viable. The amount may be amended from time to time to ensure that the fee will keep pace with the inflation of land prices. The current mitigation fee is $~~16,000~~ **$10,550** per acre with an operations/management fee of $2,375 per acre and a one-time administrative fee of $500.00.

The Swainson's hawk mitigation fee amount was reduced in December 2009 from $16,000 per acre to $10,550 per acre. The following excerpt from the *Planning Staff Report* explains how the current fee amount was determined:

> **The current fee amount was based on information prepared by a consultant, ENTRIX Inc., as part of the draft South Sacramento Habitat Conservation Plan. This was determined to be appropriate because the SSHCP covers much of the same area as covered by this Ordinance; therefore the land value analysis is directly applicable to this fee amount. ENTRIX collected sales transaction data for agricultural land throughout the SSHCP Plan Area for the years 2002 to 2006 and estimated average per-acre agricultural land values throughout the County based on a statistical model. These land values were reviewed and validated by an agricultural land appraiser with experience in the study area. Based on changing conditions in the real estate market, land value estimates were subsequently adjusted to reflect 2008 prices by applying a land value index based on real estate trends within the SSHCP Plan Area. The average agricultural land value per acre was calculated by dividing the total estimated cost of all land for full SSHCP agricultural mitigation ($137,548,396) by the total number of acres (13,035 ac) to get $10,550/acre. This provides a broad average across all types of agricultural land in all areas. The breakdown of the proposed per acre Swainson's Hawk Impact Mitigation Fee is:**

	Fee Component		
Year	**Acquisition per Acre**	**Operations & Mgmt. per Acre**	**Total Per Acre**
Proposed	**$10,550**	**$2,375**	**$12,927**

This proposed fee reflects a significant decrease in the price of agricultural land, as adjusted for 2008. The current adjustment is based on both the current and projected easement and land costs for habitat mitigation over the foreseeable future. Planning staff does not recommended a value based on the lowest mitigation comparables in order to avoid a fee that will quickly become inadequate when land prices begin to rise.

TREE PRESERVATION ORDINANCE

Chapter 19.12 of the Sacramento County Code establishes regulations for the protection of native oak trees and landmark trees. The Tree Preservation Ordinance establishes basic standards and measures for the preservation and protection of trees. The County's policy is to preserve all trees possible through the development review process. The Tree Preservation Ordinance establishes a process for preserving existing trees and requiring mitigation for impacts to protected trees.

SOUTH SACRAMENTO HABITAT CONSERVATION PLAN

The project is not located within an area governed by an adopted habitat conservation plan. However, in partnership with other area jurisdictions, Sacramento County is participating in the preparation of the South Sacramento Habitat Conservation Plan (SSHCP). The SSHCP is a regional approach to addressing biological issues related to urban development, habitat conservation and agricultural protection. When adopted, the SSHCP would consolidate environmental efforts to protect and enhance wetlands (primarily vernal pools) and upland habitats to provide ecologically viable conservation areas. The SSHCP would cover 40 different species of plants and wildlife including 10 that are state or federally listed as threatened or endangered. The SSHCP would be an agreement between state/federal wildlife and wetland regulators and local jurisdictions, which would allow land owners to engage in the "incidental take" of species covered by the SSHCP (i.e., to destroy or degrade habitat in connection with economic activity) in return for conservation commitments from local jurisdictions. The geographic scope of the SSHCP includes the area bounded by Hwy 50 to the north, the County line to the east and south; excluding the Delta, Interstate 5 to the west, and the Sacramento City limits to the northwest. Sacramento County is partnering with the incorporated cities of Rancho Cordova, Elk Grove, and Galt, as well as the Sacramento Regional County Sanitation District and the Sacramento County Water Agency to further advance the regional planning goals of the SSHCP. As the SSHCP has not been adopted, the plan would not affect the proposed project at this time. However, future development within the project area may be subject to the SSHCP should the Plan be in effect at the time development occurs and take permits are needed.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

For the purposes of this EIR, impacts are considered potentially significant if implementation of the proposed project would do any one or more of the following:

- Substantially affect a special-status plant or animal species (as defined above), or the habitat of any such species;
- Substantially diminish or degrade habitats (including wetlands) of native fish, wildlife, or plants;
- Interfere substantially with the movement of any resident or migratory fish or wildlife species; or
- Conflict with existing local, State, or federal natural resource protection laws, policies, or guidelines.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish or result in the loss of an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important, but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of a defined important resource on a population-wide or region-wide basis (CEQA Guidelines – Article 5, Section 15065).

POTENTIAL DEVELOPMENT

The Citizens Advisory Committee (CAC Land Use Plan) and the Sacramento County Planning Department (PD Land Use Plan) drafted proposals for development within the Florin-Vineyard Gap Community Plan Area (See Plate PD-7 in Chapter 2, Project Description). The proposals cover the same area; however, the PD Land Use Plan differs in that the plan offers increased density options for six planning areas within the overall community plan area. As both plans allow development over the same surface areas, impacts to biological resources would be substantially the same. The potential exception would be within the Planning Option(s) B, C, and F areas, where the CAC Land Use Plan designates substantial areas as Agricultural Residential, with lot sizes of one to five acres depending on the parcel. The PD Land Use Plan designates these areas Residential Development, with densities ranging from one to seven units per acre depending on the parcel. Parcels over two acres in size have greater flexibility for avoiding biological resources including wetlands and special-status

species. However, assuming reduced impacts from implementation of the CAC Land Use Plan would be speculative without information about how homes would be sited on the specific parcels. In addition, without conducting site-specific biological surveys, the contribution of this particular area to biological resource impacts is not known. As both plans include development for the same parcels, their respective impact to biological resources are considered the same for the purpose of this program level EIR. Additional project-specific environmental review has been conducted for individual tentative map applications for parcels within the FVGCP, which are being processed along with the program-level FVGCP entitlements. The parcel-specific biological impacts are not addressed in the following discussion.

METHODS OF ANALYSIS

This chapter is based on the *Biological Baseline Information Report, Florin Vineyard CAP Community Plan* by Gibson & Skordal, LLC. The potential biological impacts of both the CAC Land Use Plan and the PD Land Use Plan will be analyzed for biological impacts.

PROJECT IMPACTS AND MITIGATION MEASURES

IMPACTS RELATED TO JURISDICTIONAL WATERS OF THE U.S. AND WATERS OF THE STATE.

CAC LAND USE PLAN/PD LAND USE PLAN

Land Development

Based on detailed delineation reports and aerial photo interpretation, approximately 106.1 acres of water features occur within the FVGCP. The water feature total includes 8.0 acres of channel/drainage/ditch, 1.5 acres of emergent marsh, 8.3 acres of pond, 43.7 acres of seasonal wetland, and 44.6 acres of vernal pools (See Plate BR-2(A and B)). Numerous ditches were mapped within the plan area, but the Corps has yet to make a decision on their jurisdictional status.

Consistent with the goals and policies of the General Plan, the development within the FVGCP would be required to preserve, or restore/create any marsh/riparian/vernal pool habitats affected by development, to ensure that there is no net loss of acreage, values, or function. In addition, the Army Corp of Engineers maintains a policy of avoidance for wetlands whenever possible. Setbacks along the creek banks would preserve substantial areas of channels, vernal pools, seasonal wetlands, and emergent marsh. In addition, the planned parks and parkway system (See Figure PS-3 in Chapter 5, Public Services), would locate park and open space areas on some of the major concentrations of

seasonal wetlands and vernal pools. The potential exists for additional wetlands and vernal pools to be constructed within open space areas and parkways as mitigation for the removal of existing wetland features on individual project sites. In addition, individual projects, particularly those located within the large lot Agricultural Residential areas, could be designed to avoid impacts to wetlands.

Drainage Master Plan

Implementation of the drainage improvements necessary to implement the proposed project were previously assessed in the North Vineyard Station Master Plan EIR. The project proponents are currently in the process of acquiring the necessary permits to implement the Drainage Master Plan (DMP). Regardless of whether development of the North Vineyard Station project or the FVGCP were to develop first, the drainage improvements would be carried out subject to the environmental review conducted for the North Vineyard Station. The following text is from the North Vineyard Station Master Plan Final EIR:

> Gerber Creek and Elder Creek will generally remain in their current locations. However, 12.99 acres of the creeks will be directly or indirectly impacted by the proposed deepening and widening. In addition, in order to widen and realign the creeks, additional wetland impacts will result in some locations. These impacts include 1.08 acres of vernal pool, 0.77 acre of seasonal wetland, 0.03 acre of seasonal wetland swale, and 0.84 acre of stock pond. The reconstructed creeks will consist of a low-flow channel, associated channel bottom wetlands, wetland/riparian benches and nesting islands.
>
> The DMP project will emphasize enhancement and long-term preservation of the creek corridors' functions and values. The initial design of the drainage corridor focused primarily on flood-flows and water quality treatment requirements. The preliminary design has been refined to avoid wetland features where possible, to incorporate a meandering low-flow channel with adjacent wetlands, wetland and riparian benches, and nesting islands to compensate for impacts to wetlands and their functions and values. The channel was designed to require minimal maintenance and allow for the establishment of woody vegetation without compromising flood protection.
>
> The proposed DMP design replaces and enhances the acreage, functions and values of the wetlands to be impacted during construction. The existing channelized creeks will be re-contoured, widened and deepened to accommodate anticipated storm water flood-flows and provide for public safety. The existing channel alignments will be maintained wherever practicable. In order to

preserve as much of the existing riparian habitat as possible, portions of the creeks that have significant vegetation have been avoided and incorporated into the final overall channel design.

The modified drainage corridors will result in 4.85 acres of creek (low-flow channel), 17.55 acres of channel bottom/wetlands and 3.23 acres of wetland/riparian benches. Post-project wetland/riparian habitat acreages will total 25.63 acres, a net gain of nearly 11.80 acres of habitat.

This plan has been submitted to the U.S. Army Corps of Engineers as part of an application for an individual permit. Impacts associated with the implementation of the NVSSP Drainage Master Plan are considered less-than-significant.

Consistent with the conclusions of the NVSSP Final EIR, the implementation of the same drainage improvements under the FVGCP would not result in adverse impacts to Waters of the United States or Waters of the State.

Conclusion

While the drainage plan has been designed to ensure that adverse impacts to Elder Creek and Gerber Creek do not occur, the densities proposed under both the CAC Land Use Plan and the PD Land Use Plan would make complete avoidance of wetland features during buildout of the FVGCP infeasible. Therefore, grading and construction activities in the plan area would have a significant adverse effect on other channels, seasonal wetlands, vernal pools, and ponds. The emergent marsh areas do not appear to be in developable areas; however, without site specific review, impacts to emergent marsh should also be assumed. Therefore, because grading and construction activities would eliminate wetlands and other water features a ***potentially significant*** impact would occur.

MITIGATION MEASURE(S)

The following mitigation measures would reduce adverse effects to wetlands and water features to a *less-than-significant* level.

BR-1 Development projects within the Florin-Vineyard Gap Community Plan that have the potential to impact wetland habitat shall provide a wetland delineation of the proposed development area verified by the U.S. Army Corps of Engineers, and shall provide a detailed plan that describes the specific methods that will be implemented to mitigate any project impacts upon wetlands such that no net loss in wetland habitat acreage and values is achieved.

BR-2 Development projects, including the installation of public facility infrastructure, within the Florin-Vineyard Gap Community Plan shall obtain

all necessary U.S. Army Corps of Engineers permits pursuant to Section 404 of the Clean Water Act, and all necessary Streambed Alteration Agreements from the California Department of Fish and Game, pursuant to the Fish and Game Code.

Native or Landmark Trees.

CAC LAND USE PLAN/PD LAND USE PLAN

Trees represent the minority of plant species and plant biomass within the study area, and most occur in conjunction with maintained ornamental landscaping, windbreaks, or creek corridors. However, biological surveys have identified trees throughout the FVGCP that are native to the area and/or that have attained landmark status. A landmark trees is defined by Sacramento County as "an especially prominent or stately tree on any land in Sacramento County, including privately owned land." Depending on the design of the individual project, implementation of the proposed project could require the removal of a substantial number of native and landmark trees. As a result, implementation of either land use plan would result in a ***potentially significant*** impact to protected native and landmark trees.

MITIGATION MEASURE(S)

The following mitigation measures would reduce adverse effects to native or landmark trees to a *less-than-significant* level.

BR-3 In conjunction with the submittal of tentative maps or development applications for project sites containing landmark trees or native trees, the applicant shall submit an arborist report that identifies the size, location, and condition of all on-site trees. If protected trees are not located on the project site, further mitigation is not required. If protected trees are located on the project site, building structure and yard design, along with construction activities, shall be required to retain existing protected trees (native oaks or native black walnuts six inches or greater dbh (or measuring 10 inches or greater in aggregate dbh for multi-trunked trees)), any native California sycamore trees 19 inches dbh or greater, or landmark trees (to be determined on a case-by-case basis) on the project area to the maximum extent practicable. Any trees that must be removed or are damaged during construction shall be compensated for with an in-kind species on an inch-for-inch basis.

IMPACTS TO SPECIAL-STATUS SPECIES.

CAC LAND USE PLAN/PD LAND USE PLAN

As shown in Table 12-1, special status-species are likely to exist in the FVGCP area. Implementation of either the CAC Land Use Plan or the PD Land Use Plan would result in grading, tree removal, and increased urban development in the Plan area. Urban development would replace the existing mixed riparian and dry lands which currently provide habitat for a variety of wildlife and plant species. It should be noted that the North Vineyard Station Final EIR requires specific mitigation measures for vernal pool species, nesting Swainson's hawks, giant garter snake, and western pond turtle adversely affected by work conducted within Gerber Creek and Elder Creek during implementation of the Drainage Master Plan. Mitigation Measure BR-5, below, provides a similar level of mitigation for impacts to special status species throughout the FVGCP.

SPECIAL-STATUS WILDLIFE

As discussed above, development of the Plan area has the potential to impact the over 100-acres of water features that exist within the Plan area. Many species of special-status wildlife are dependent on channels, wetlands, vernal pools, and the associated plant communities for their habitat. The *Biological Baseline Information Report* for the FVGCP indicates that white-tailed kites, red-tailed hawks, midvalley fairy shrimp, vernal pool tadpole shrimp, and California linderiella have been observed within the FVGCP. In addition, based on the presence of suitable wetland habitat additional species may be present including California tiger salamander, giant garter snake, western spadefoot toad, western pond turtle, vernal pool fairy shrimp, and valley elderberry longhorn beetle. Furthermore, stream banks and wetland plants provide nesting habitat for special-status birds, including the bank swallow and the tricolored blackbird.

Development of previously open spaces would eliminate foraging habitat for special-status raptors, including the Swainson's hawk, throughout the FVGCP. Statewide, CDFG recommends implementing the measures set forth in the *CDFG Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (November 1, 1994) for determining impacts to Swainson's hawk foraging habitat unless local jurisdictions develop an individualized methodology designed specifically for their location. Sacramento County has developed such a methodology and received confirmation from CDFG in May 2006 that the new methodology is a better fit for unincorporated Sacramento County and should replace the Statewide, generalized methodology for determining impacts to foraging habitat. The methodology recognizes that Swainson's hawk foraging habitat value is greater in large expansive open spaces and agricultural areas than in areas which have been fragmented by agricultural-residential or urban development. The concept is that impact to foraging habitat occurs as properties develop to increasingly

more intensive uses on smaller minimum parcel sizes. Therefore, foraging habitat impacts are assessed when agricultural and agricultural-residential parcels are rezoned to smaller minimum parcel sizes. The level of impact is calculated in acres and is based on the starting habitat value and ending habitat value. As a baseline, DERA assumes that properties zoned AG-40 and larger have 100% habitat value, AG-20 properties have 75% and AR-10 properties have 25% habitat value. Properties zoned AR-5 and smaller, such as AR-2, AR-1, the urban Residential Densities (RD-1 thru 40), commercial and industrial zonings, retain no habitat value. As shown in Table BR-2, based on the existing and proposed land use designations, buildout of the FVGCP would result in a loss of up to ±1,214 acres. In addition, development could eliminate nesting habitat for ground-nesting birds, including the burrowing owl. Removal of trees could eliminate nesting sites for special-status bird species and birds protected under the Migratory Bird Act.

Table BR-2: Potential Impacts to Swainson's Hawk Foraging Habitat

Land Use Designations	Existing (ac.)	Habitat Value	CAC Land Use Plan (ac.)	PD Land Use Plan (ac.)	Potential Habitat Lost (ac.)
AG-40 and larger	160	100%			160
AG-20, IR, and UR	840	75%		240	450 - 630
A-10 / AR-10 / AR-10 (F)	1698	25%			424.5
Commercial, Industrial, Residential, and AR-5 and smaller	1,068	0%	3,676.5	3,436.5	
Open Space			89.5	89.5	
Total					**1,034.5 to 1,214.5**
Note: Large open space areas could potentially preserve Swainson's hawk habitat, thereby reducing the total acres of habitat impacted; however, the dimensions and characteristics of the open space areas have not been defined. As a result, quantification of the value of the open space is not possible at this time.					

SPECIAL-STATUS PLANTS

Development of the FVGCP area could adversely affect special-status plant species whose habitat includes vernal pool, marsh, and drainage areas. The federally listed plants: legenere, Ahart's dwarf rush, Sacramento orcutt grass, and slender orcutt grass are found in vernal pools. In addition, Sanford's arrowhead is found in emergent marsh; and Bogg's Lake hedge-hyssop are found in vernal pools and on the margins of ponds. Therefore, impacts to the wetland habitats of theses plants would result in adverse impacts to special-status plant species.

CONCLUSION

Buildout of the FVGCP under either the CAC Land Use Plan or PD Land Use Plan would result in the displacement of protected species potentially including vernal pool fairy shrimp, midvalley fairy shrimp, vernal pool tadpole shrimp,

California linderiella, Valley elderberry longhorn beetle, giant garter snake, northwest pond turtle, western spadefoot toad, Swainson's hawk, burrowing owl, California tiger salamander, dwarf downingia, Bogg's Lake hedge-hyssop, northern California black walnut, Ahart's dwarf rush, legenere, slender orcutt grass, Sacramento orcutt grass, and Sanford's arrowhead through the elimination of existing habitat and foraging areas. Because development of the FVGCP area would eliminate habitat and potentially result in "take" of special status-species, implementation of the proposed project would have a ***potentially significant*** impact on special status-species.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce impacts to a *less-than-significant* level.

BR-4 Buildout of the FVGCP could result in the loss of up to 1,214.5 acres of Swainson's hawk foraging habitat. Mitigation of the loss will be the responsibility of the developers of lands identified as Swainson's hawk foraging habitat (properties currently zoned AR-10 or greater), and shall occur at the time the property is rezoned. For properties currently zoned AG-40 or larger, habitat loss is determined to be 100% of the acreage rezoned. For properties currently zoned AG-20, IR, or UR, habitat loss is determined to be 75% of the acreage rezoned. For properties zoned A-10 or AR-10, habitat loss is determined to be 25% of the acreage rezoned.

Prior to the approval of improvement plans, building permits, or recordation of the final map, whichever occurs first, or, if only a rezone is requested, prior to final adoption of the zoning agreement,, the project applicant shall implement one of the following options to mitigate for the loss of Swainson's hawk foraging habitat on the project site:

- *The project proponent shall utilize one or more of the mitigation options (land dedication and/or fee payment) established in Sacramento County's Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code); or*
- *The project proponent shall, to the satisfaction of the California Department of Fish and Game, prepare and implement a Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat.*
- *Should the County Board of Supervisors adopt a Swainson's hawk mitigation policy/program (which may include a mitigation fee payable prior to issuance of building permits) prior to the implementation of one of the measures above, the project proponent may be subject to that program instead.*

BR-5 Development projects within the FVGCP that have the potential to impact special status species (including, but not limited to: vernal pool fairy

shrimp, midvalley fairy shrimp, vernal pool tadpole shrimp, California linderiella, valley elderberry longhorn beetle, giant garter snake, northwest pond turtle, western spadefoot toad, Swainson's hawk, burrowing owl, and California tiger salamander, dwarf downingia, Bogg's Lake hedge-hyssop, northern California black walnut, Ahart's dwarf rush, legenere, slender orcutt grass, Sacramento orcutt grass, and Sanford's arrowhead) shall conduct (or update) determinate surveys for potentially occurring special status species using protocol acceptable to the regulatory agencies with authority over the species. For any special status species identified by the determinate surveys, provide a detailed plan developed in consultation with the regulatory resource agencies (U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and California Department of Fish and Game) that describes the measures that will be implemented to avoid or reduce project impacts on any identified special status species. The detailed plan shall emphasize a multi-species approach to the maximum extent possible.

Where project impacts include taking of a federally-listed species, a Section 10 Incidental Take Permit or a Biological Opinion resulting from Section 7 Consultation with another federal agency shall be obtained from the U.S. Fish and Wildlife Service and permit conditions implemented, pursuant to the federal Endangered Species Act.

Where project impacts include taking of a State-listed species, an Incidental Take Permit shall be obtained from the California Department of Fish and Game and permit conditions implemented, pursuant to the California Endangered Species Act.

Should the County Board of Supervisors adopt a special status species mitigation policy/program (which may include a mitigation fee payable prior to issuance of building permits) prior to the implementation of the measures above, the project proponent may be subject to that program instead.

Cumulative Impacts and Mitigation Measures

Impacts Related to the Cumulative loss of biological resources in Sacramento County and the effects of ongoing urbanization in the region.

The proposed project area consists of various habitat types including cropland, developed/landscaped areas, and a variety of wetland features (seasonal wetlands, marshes, open water, and riparian corridors). These biological communities provide habitat for endangered, threatened, and special concern plant and animal species. Many of the sensitive habitats and species found within

the Plan area are not only a concern in the Plan area, but also regionally throughout Sacramento County. Urban development within the next 20 years will likely be experienced regionally as well. Therefore, the cumulative impact on the environment must consider not only development within the Plan area, but also those developments occurring in the rest of Sacramento County.

Impacts likely to result from the implementation of the proposed project include disturbance of Jurisdictional Waters of the U.S., riparian habitat, habitat for listed invertebrate species, special-status plant species, aquatic amphibians, special-status reptiles, and listed bird species. Similarly, impacts may result from the implementation of other projects within Sacramento County resulting in a significant cumulative impact to biological species.

Development of any discretionary project within the FVGCP would be required to mitigate impacts to natural resources. However, while individual impacts to species would be mitigated to a less-than-significant level, the project's incremental contribution to the cumulative biological impacts would be cumulatively considerable. Future adoption of the SSHCP could provide a more regional approach to address cumulative impacts. However, the SSHCP has not been adopted. Therefore, because the project would contribute to cumulative biological impacts, a ***significant*** impact would occur.

MITIGATION MEASURE(S)

Implementation of the following mitigation measures would reduce individual impacts to a less-than-significant level; however, cumulative impacts to biological resources would remain *significant and unavoidable*.

BR-6 Implement Mitigation Measures BR-1 through BR-5.

13 GEOLOGY AND SOILS

INTRODUCTION

The Geology section of the EIR describes the geologic and soil characteristics of the plan area and evaluates the extent to which implementation of the proposed project could be affected by seismic hazards such as groundshaking and liquefaction soil characteristics. The analysis also addresses potential effects of the proposed project on erosion. Information sources for this evaluation include the *Sacramento County General Plan*, the Sacramento *General Plan Update (1993) EIR*, the draft *Sacramento County 2030 General Plan Technical Background Report*, the *Geotechnical Engineering Report for the Gardner Parke West Subdivision*, the *Geotechnical Engineering Report for Gardner Parke (Florin GAP)*, and the *Geotechnical Engineering Report for the Hedge Avenue Properties*.

ENVIRONMENTAL SETTING

The following background setting information focuses on the existing topography of the plan area, the underlying bedrock, and site seismicity, as well as the general conditions and expansiveness of the on-site soils.

REGIONAL GEOLOGY

The Florin-Vineyard Gap Community Plan (FVGCP) area is situated in the Great Valley Geomorphic Province (Central Valley of California), a relatively flat alluvial plain comprised of deep sediments. The Great Valley is bounded on the west by the California Coast Ranges and on the east by the Sierra Nevada range.

Once a large inland sea, the Great Valley Province was filled mostly by sediments eroded from the Coast Ranges and the Sierra Nevada. Sediment deposits were primarily marine-related until approximately five million years ago when the Valley's sea drained through the Carquinez Strait. Currently, the Valley is drained by the Sacramento River from the north, and the San Joaquin River from the south. The shape of the land, and the settlement patterns of the residents have been shaped by the Sacramento River and the River's tributaries.

The project area is primarily composed of the Alluvial Plain geomorphic subunit, with smaller areas of River Floodplain adjoining the primary drainages. The alluvial plain is an area of former floodplain that has been dissected by stream erosion. The uppermost fluvial sediments, overlying the sedimentary rock, are composed of the Laguna and Victor formations. The Laguna formation is comprised of approximately 200 to 300 feet of silt clay and sand deposits, with layers of gravel. The Victor formation overlies the Laguna formation and is

approximately 100 feet thick. The Victor formation is also composed of layers of channel sands, silt, clay, and gravels.

Local Geology and Seismicity

The FVGCP area is situated in Sacramento County. Major faults do not transect the County; however, several subsurface faults are located in the southwest portion of the County in the Delta region (See Plate GS-1). The nearest major faults are the Midland fault and the Bear Mountain fault.

The Midland fault extends north of Bethel Island in the Delta to the east of Lake Berryessa, and is considered inactive. However, the fault is considered to be capable of generating a near 7.0 (Richter Scale) earthquake. The Bear Mountain fault zone is east of the project area in Amador and El Dorado Counties. Geologists believe that the Bear Mountain fault zone has not been active in historic time. Based on the location of the faults, the project area is located in a low seismic risk zone (See Plate GS-2, Earthquake Intensity Zones).

Historically, very little seismic activity has originated in Sacramento County. However, faulting in nearby regions, especially the San Francisco Bay and the Sierra Nevada has caused ground shaking within the County. Therefore, future seismic activity from these regions can be expected. The San Francisco Bay area is a seismically active region southwest of Sacramento County. However, large scale earthquakes that have caused substantial damage in the Bay area, such as the 1906 San Francisco earthquake and the 1989 Loma Prieta earthquake, caused very little damage in Sacramento County. Therefore, earthquakes originating in that region would not be expected to have a substantial effect on the FVGCP area. Nor have earthquakes originating in the Sierra Nevada caused substantial damage in Sacramento County.

Generally, ground shaking is the primary geologic hazard. Secondary hazards resulting from ground shaking would include: liquefaction, seismic settlement, and landslides. The FVGCP does not lie within a Special Studies Zone as defined by the State Geologist and the likelihood for shallow ground rupture from faulting is low.

Liquefaction risk factors include near surface groundwater and soils with poor cohesion. The Geotechnical Engineering reports indicated that groundwater was located between 75 and 90 feet below the surface. In addition, soils were found to be dense, compacted, and partially cemented below the ground surface. Therefore, the liquefaction potential for the site is expected to be low should seismic shaking occur. In addition, the topography is relatively level; therefore, landslides would be unlikely.

Plate GS-1
Faults in the Environs of Sacramento County

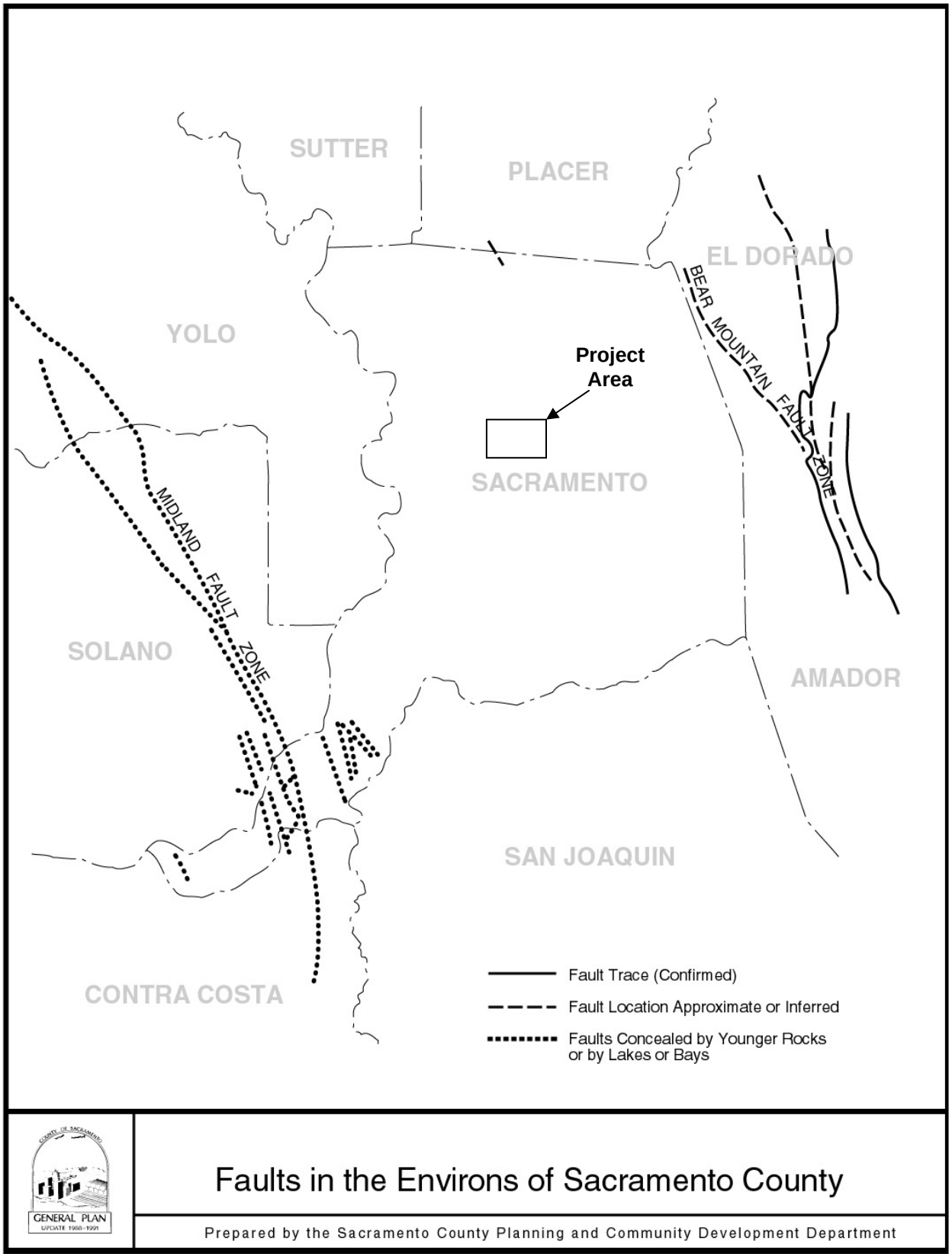
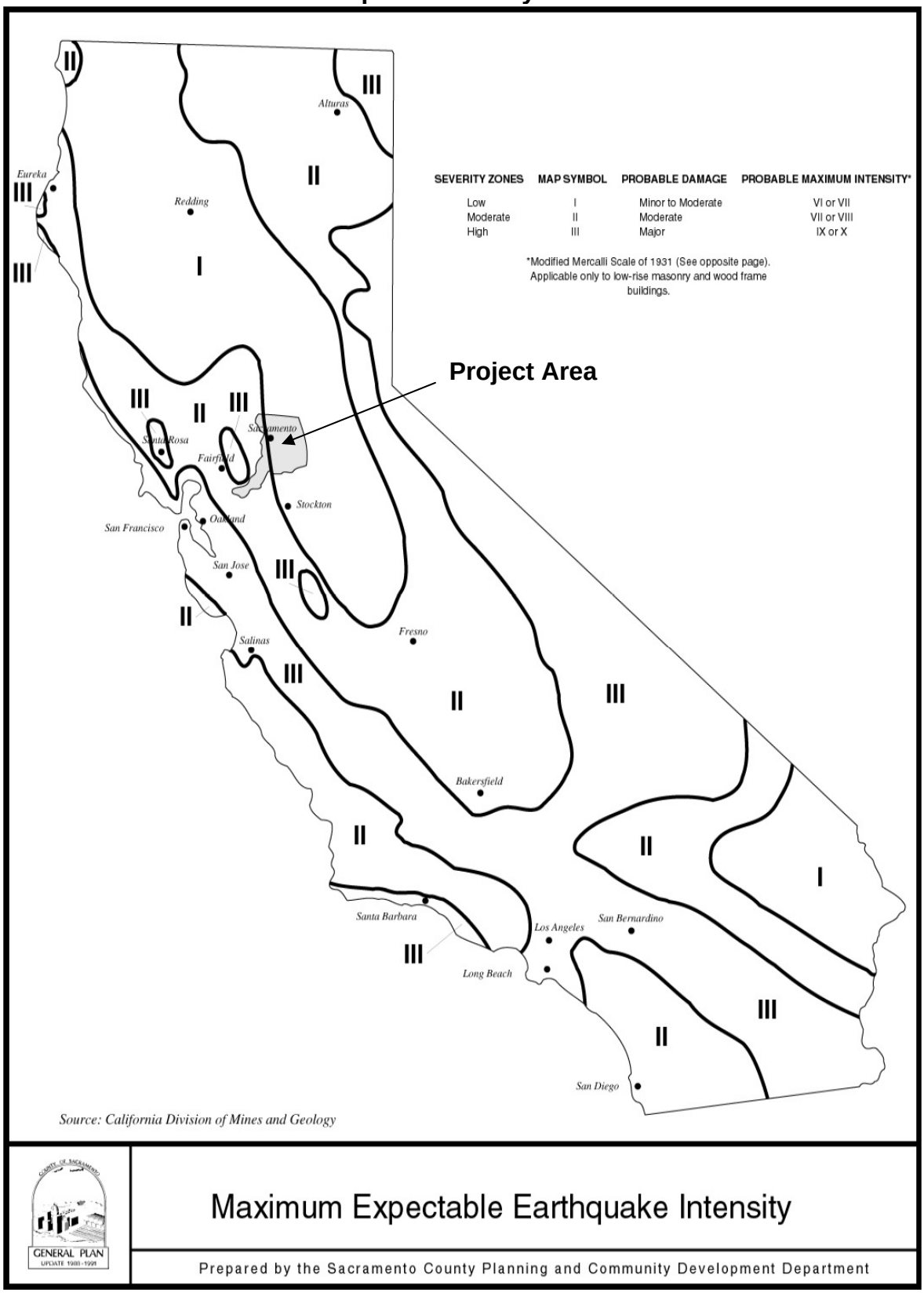


Plate GS-2
Earthquake Intensity Zones



PROJECT SITE SOIL INFORMATION

The Florin-Vineyard Gap Community Plan area consists of ± 3,766 acres, located in both the South Sacramento and Vineyard community planning areas, and generally described as follows: south of Elder Creek Road and the Sacramento City limits; west of Bradshaw Road, excluding the North Vineyard Station Specific Plan area; north of Vintage Park Drive, and the developed neighborhoods of Churchill Downs and Vintage Park; and east of the Union Pacific Railroad tracks, and those developed neighborhoods of Tiogawoods, Florin Town, and Sunrise Florin.

Soil Conditions

Based on information from the U.S. Department of Agriculture: Soil Conservation Service (SCS), Sacramento County Soil Survey, the project area is composed of the following soils. (For a more detailed description of these soils, see Chapter 18, Agricultural and Mineral Resources, of this Draft EIR.)

- Corning-Redding complex, 0 to 8% slopes
- Fiddyment fine sandy loam, 1 to 8% slopes
- Hedge Loam 0 to 2% slopes
- Kimball silt loam
- Red Bluff loam
- Red Bluff-Xerarents complex, 0 to 2% slopes
- San Joaquin silt loam
- San Joaquin-Durixeralfs complex silt loam
- San Joaquin-Galt complex silt loam
- San Joaquin-Xerarents complex silt loam
- Xerarents-San Joaquin complex silt loam

San Joaquin silt loam is the primary project area soil. The surface materials encountered during the borings conducted for the Geotechnical Engineering reports described the soils as being of variable thicknesses of dense silty fine sands, fine sandy silts, and fine sandy clays. In addition, hardpan was encountered from two to 10 feet below the existing grades. Clayey soils were encountered adjacent to drainages, such as Elder Creek. The surface soils were found to have low to moderate expansion potential, based on the clay content in the soils.

Groundwater

Free groundwater was not encountered in the borings performed for the Geotechnical Reports. A map prepared by the Sacramento County Department of Public Works entitled *Ground Water Elevations Map, Spring 2003* indicates that the regional ground water beneath the project area ranges between 50 and

20 feet below mean sea level (msl), or approximately 90 to 60 feet below the project area elevation.

REGULATORY CONTEXT

The following section is a brief summary of the regulatory context under which soils and geologic hazards are managed at the federal, state, and local levels.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

As required under the federal Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources, such as construction sites, that discharge pollutants into waters of the United States. In California, NPDES permit issues are overseen by the nine individual Regional Water Quality Control Boards. For further discussion of NPDES, please refer to Chapter 8 (Hydrology and Drainage) of this Draft EIR.

CALIFORNIA BUILDING STANDARDS CODE / UNIFORM BUILDING CODE

The State of California provides minimum standards for building design through the California Building Standards Code (California Code of Regulations (CCR), Title 24). The California Uniform Building Code (CUBC) is based on the Federal Uniform Building Code (UBC) used widely throughout the U.S. and has been modified for California conditions with numerous more detailed and/or more stringent regulations.

Geologic and soils conditions would also determine the proper installation of underground communications and utility lines.

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan is applicable to the proposed project. The General Plan sets forth various goals and policies that would apply to projects in Sacramento County. The following goals and policies are applicable to the proposed project.

Safety Element

SA-1 The County shall require geotechnical reports and impose the appropriate mitigation measures for new development located in seismic and geologically sensitive areas.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Impacts resulting from the project would be considered significant if the project would result in:

- Deformation of foundations by expansive soils (those characterized by shrink/swell potential);
- Construction on substrate that consists of material subject to liquefaction, with a depth to groundwater of less than 15 feet or other secondary seismic hazards in the event of groundshaking;
- Exposure of people or structures to geologic hazards, soil, and/or seismic conditions so unfavorable that they could not be overcome by special design using reasonable construction and/or maintenance practices; or
- A substantial increase in wind or water erosion of soils.

METHOD OF ANALYSIS

The environmental setting section and the impact discussions below are based primarily on Geotechnical Reports prepared for projects within the Florin-Vineyard Gap Community Plan area. Other documents used include the Sacramento County General Plan and General Plan EIR, and the Draft Sacramento County General Plan Update Safety Element Background Report.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

IMPACTS DUE TO DAMAGE TO FOUNDATIONS, PAVEMENT, AND OTHER STRUCTURES FROM EXPANSIVE SOILS.

CAC LAND USE PLAN/PD LAND USE PLAN

Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. These soils are typically characterized by large amounts of finer grained materials such as silts and clays within the soil matrix. Expansion is measured by shrink-swell potential, which is the relative volume change in a soil in conjunction with changes in soil moisture levels.

According to the Geotechnical Reports, the surface soils in the project area have a low to moderate expansion potential when subjected to fluctuations in moisture. All structures constructed in the FVGCP area, including building pads, would be designed in accordance with the 2007 California Building Code requirements. As the project is not located in an area prone to seismic instability compliance with the Building Code would ensure that impacts related to expansive soils are ***less-than-significant***.

MITIGATION MEASURE(S)
None required.

IMPACTS RELATED TO THE LOSS OF STRUCTURAL SUPPORT DUE TO LIQUEFACTION.

CAC LAND USE PLAN/PD LAND USE PLAN

Soil liquefaction is a phenomenon primarily associated with saturated, cohesionless soil layers located close to the ground surface. These soils lose strength during cyclic loading, such as those imposed by earthquakes. During the loss of strength, the soil acquires mobility sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface. The near surface project area soils are mostly comprised of interbedded silts, sands, and clays underlain by a cemented hardpan. This soil composition type is non-conducive to liquefaction. In addition, according to the Draft Sacramento County General Plan Update Background Report, the site is not located in an area mapped as having a likelihood of liquefaction in an earthquake. Furthermore, project construction would conform to the California Building Code, which would ensure the project would have a ***less-than-significant*** impact on structural support due to liquefaction.

MITIGATION MEASURE(S)
None required.

IMPACTS RELATED TO SEISMIC ACTIVITY.

CAC LAND USE PLAN/PD LAND USE PLAN

As previously described, the FVGCP area is not located in close proximity to an active fault system. In addition, the project site is not within a current Alquist-Priolo Special Study Zone and is located within a low severity earthquake zone. Buildings constructed in compliance with the California Building Code are subject to strict regulations designed to enhance safety. Therefore, seismic activity would have a ***less-than-significant*** impact on development in the FVGCP area.

MITIGATION MEASURE(S)
None required.

Impacts Associated with Construction-Related Increases in Soil Erosion.

CAC Land Use Plan/PD Land Use Plan

The FVGCP would guide development and construction within the plan area. Construction activities typically result in disturbance of site soils, in turn leading to increased soil erosion due to loss of soil cohesiveness. Construction activities resulting in topsoil loss and/or increased erosion include grading and soil removal with the addition of wind and water. During dry months wind can move dry soil particles into the air creating fugitive dust emissions. Water may erode the topsoil by moving across the ground and picking up soil particles. Precipitation causes additional erosion by loosening soil particles for transport. In addition, the moving of the dirt for development within the FVGCP area may result in soil erosion. Soils may also be disturbed by the clearing of organic materials, the compaction of soils, and placement of soils as engineered fill.

Sacramento County has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Regional Water Quality Control Board (RWQCB). The Municipal Stormwater Permit requires the County to reduce pollutants in stormwater discharges to the maximum extent practicable. The County complies with this permit in part by developing and enforcing ordinances and requirements to reduce the discharge of sediments and other pollutants in runoff from newly developing and redeveloping areas of the County.

Sacramento County Ordinances

Sacramento County has established a Stormwater Ordinance (Sacramento County Code 15.12). The Stormwater Ordinance prohibits the discharge of unauthorized non-stormwater to the County's stormwater conveyance system and local creeks. The Stormwater Ordinance applies to all private and public projects in the County, regardless of size or land use type. Furthermore, Sacramento County Code 16.44 (Land Grading and Erosion Control) requires private construction sites disturbing one or more acres, or moving 350 cubic yards or more of earthen material, to obtain a grading permit. To obtain a grading permit, project proponents must prepare and submit for approval an Erosion and Sediment Control (ESC) Plan describing erosion and sediment control best management practices (BMPs) that will be implemented during construction to prevent sediment from leaving the site and entering the County's storm drain system or local receiving waters. Construction projects not subject to SCC 16.44 are subject to the Stormwater Ordinance (SCC 15.12) described above.

State Permit for Construction Projects

In addition to complying with the County's ordinances and requirements, construction sites disturbing one or more acre(s) are required to comply with the

State's General Stormwater Permit for Construction Activities. The Construction General Permit is issued by the State Water Resources Control Board and is enforced by the RWQCB. Coverage is obtained by submitting a Notice of Intent (NOI) to the State Board prior to construction. The Construction General Permit requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) that must be kept on site at all times for review by the State inspector.

Applicable projects applying for a County grading permit must show proof that an NOI has been filed and must submit a copy of the SWPPP. Although the County does not have enforcement authority related to the Construction General Permit, the County is required by its Municipal Stormwater Permit to verify that SWPPPs include six minimum components.

Temporary Construction BMPs

During the wet season (October 1 – April 30), a project must include an effective combination of erosion, sediment, and other pollution control BMPs in compliance with the County ordinances and the State's Construction General Permit. During the rest of the year, erosion controls are typically not required, except in the case of predicted rain. Examples of erosion controls include stabilized construction entrances, tackified mulch, three-step hydroseeding, spray-on soil stabilizers, and anchored blankets. Sediment controls help to filter sediment out of runoff before the sediment reaches the storm drains and local waterways. Examples include rock bags to protect storm drain inlets, staked or weighted straw wattles/fiber rolls, and silt fences.

In addition to erosion and sediment controls, the project must have BMPs in place to keep other construction-related wastes and pollutants out of the storm drains. Such practices include, but are not limited to, filtering water from dewatering operations, providing proper washout areas for concrete trucks and stucco/paint contractors, containing wastes, managing portable toilets properly, and dry sweeping instead of washing down dirty pavement.

Post-Construction Stormwater Quality Control Measures

Development and urbanization can increase pollutant loads, temperature, volume, and discharge velocity of runoff over the predevelopment condition. The increased volume, increased velocity, and discharge duration of stormwater runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainage systems. Studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving waters. These impacts must be mitigated by requiring appropriate runoff reduction and pollution prevention controls to minimize runoff and keep runoff clean for the life of the project.

The County requires that projects include source and/or treatment control measures on selected new development and redevelopment projects. Source control BMPs are intended to keep pollutants from contacting site runoff. Examples include “No Dumping-Drains to Creek/River” stencils/stamps on storm drain inlets to educate the public, and providing roofs over areas likely to contain pollutants so that rainfall does not contact the pollutants. Treatment control measures are intended to remove pollutants that have already been mobilized in runoff. Examples include vegetated swales and water quality detention basins. These facilities slow water down and allow sediments and pollutants to settle out prior to discharge to receiving waters. Additionally, vegetated facilities provide filtration and pollutant uptake/adsorption. The use of “low impact development” techniques should be considered to reduce the amount of imperviousness on a project site, since this will reduce the volume of runoff and, therefore, reduce the size/cost of stormwater quality treatment required. Examples of low impact development techniques include pervious pavement and bioretention facilities.

The County requires developers to utilize the *Stormwater Quality Design Manual for the Sacramento and South Placer Regions, 2007* (Design Manual) in selecting and designing post-construction facilities to treat runoff from the project. A new post-construction design regulation was approved by the Municipal Services Agency Administrator on May 18th 2006. This regulation defines the development standards that the County is implementing and is reflected in the Design Manual. Treatment control measures are required on new development and redevelopment projects that meet or surpass the thresholds defined in Table 3-2 of the Design Manual. The final selection and design of post-construction stormwater quality control measures is subject to the approval of the County Department of Water Resources (DWR); therefore, the DWR should be contacted as early as possible in the design process for guidance.

Conclusion

Compliance with the State’s Construction General Permit, and the County’s Ordinances and NPDES requirements would reduce impacts related to increases in soil erosion to a ***less-than-significant*** level.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

The continuing buildout of the Community Plan area in conjunction with development in the greater Sacramento County Region would be expected to increase the need for surface grading and excavation, thereby increasing the potential for impacts related to soil erosion, unforeseen hazards, and exposure of people and property to earthquakes.

Long-term Geologic and Seismic Impacts From the Proposed Community Plan in Combination With Existing and Future Developments in the Sacramento County Area.

CAC Land Use Plan/PD Land Use Plan

The proposed project would guide the development of up to 13,875 dwelling units (PD Plan with 15 percent density bonus), as well as approximately 1,300 acres of commercial, industrial and office development, which would increase the number of people and structures that could be exposed to potential effects related to seismic hazards. Site preparation would also result in temporary and permanent topographic changes that could affect erosion rates or patterns.

However, potentially adverse environmental effects associated with seismic hazards, as well as those associated with geologic or soils constraints, topographic alteration are usually site-specific and generally would not combine with similar effects that could occur with other projects in the Sacramento County region. Furthermore, all projects would be required to comply with the CBC and other applicable safety regulations.

The incremental erosion that occurs on projects throughout the County does act in combination to result in adverse impacts to air and water quality. As such, the environmental impacts are addressed cumulatively though the Countywide implementation of the programs and permits, such as the NPDES, which are designed to reduce erosion. Conformance to the County's NPDES requirements would ensure that the development within the FVGCP would not result in adverse cumulative impacts related to erosion. Therefore, the impact would be considered ***less-than-significant***.

Mitigation Measure(s)
None required.

14 NOISE

INTRODUCTION

The Noise chapter of the EIR discusses the existing noise environment in the Florin-Vineyard Gap Community Plan (FVGCP) area and identifies potential noise-related impacts and mitigation measures associated with buildout of the area. Specifically, this section analyzes potential noise impacts to existing land uses due to proposed development, and the potential for adverse noise levels within the proposed development of the FVGCP relative to applicable noise criteria. This chapter is primarily based on the *Environmental Noise Assessment* prepared by Bollard Acoustical Consultants, Inc., as well as the *Sacramento County General Plan*.

ACOUSTICAL SETTING

EXISTING NOISE ENVIRONMENT IN THE COMMUNITY PLAN AREA

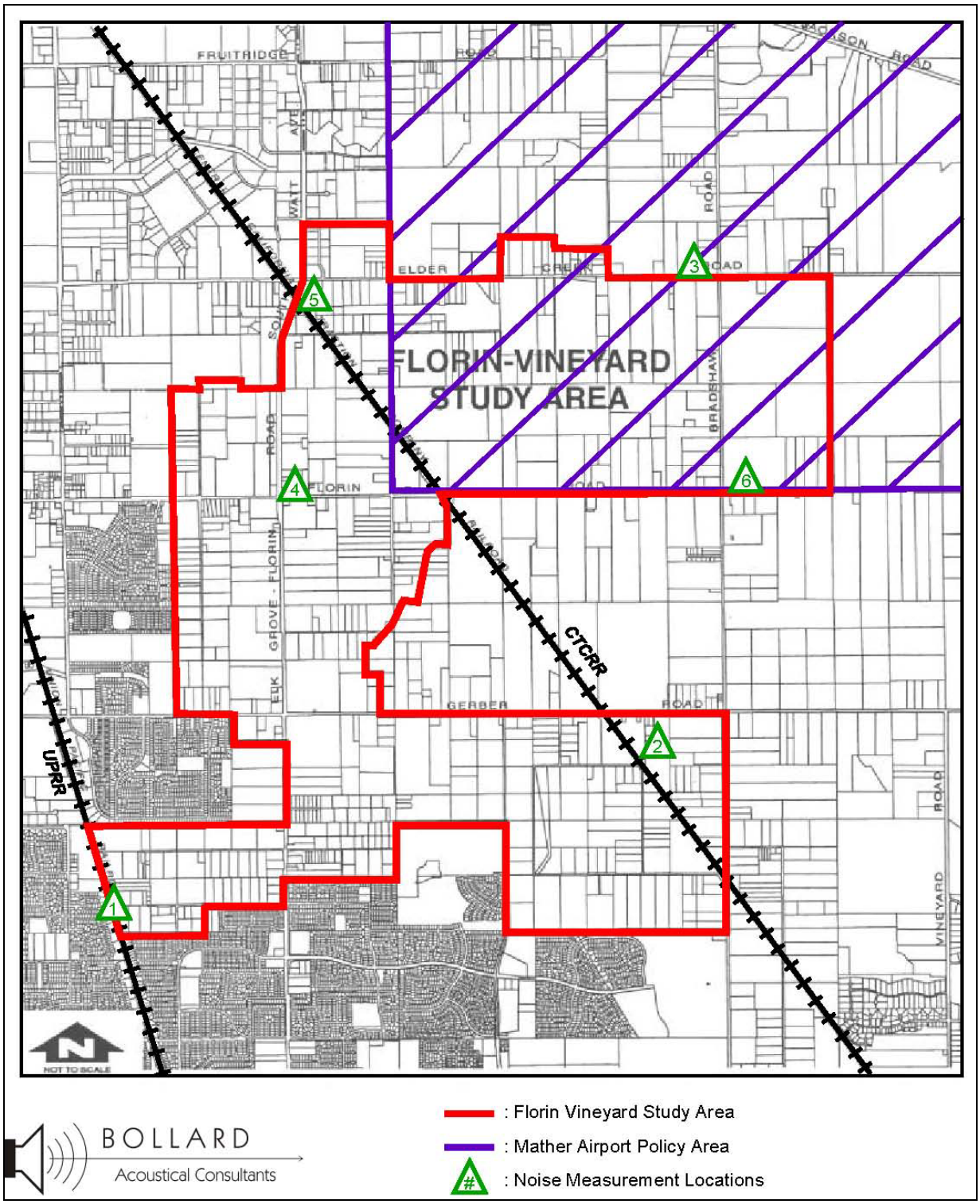
A variety of land use types are located within the FVGCP. Land uses include agriculture, residential, commercial, business and industrial. The existing ambient noise environment in the FVGCP is mostly defined by local arterial street traffic and by railroad operations on the Union Pacific Railroad (UPRR) tracks, although aircraft overflights associated with Mather Airport also contribute to the ambient conditions.

EXISTING AMBIENT NOISE ENVIRONMENT

To generally quantify background noise levels in the Plan area continuous noise monitoring was conducted at four locations in the FVGCP on September 19-22, 2005. Two additional short-term noise measurements were conducted to supplement the continuously monitored noise level data. The ambient noise measurement sites are shown on Plate N-1.

The sound level meters were programmed to record the maximum and average noise level at each site during the survey. The maximum value, denoted Lmax, represents the highest noise level measured. The average value, denoted Leq, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The ambient noise level measurement results are provided in Table N-1.

Plate N-1
Noise Measurement Locations



Source: Bollard Acoustical Consultants, Inc., 2008.

Table N-1: Ambient Noise Monitoring Results
Florin-Vineyard Gap Community Plan Area – September 19-22, 2005

Site	Location	Measured Sound Level, dBA		
		Day Night Average (Ldn)	Hourly Average (Leq)	Hourly Maximum (Lmax)
1	West end of Carlisle Ave. 180' to UPRR tracks	72-73 dB	67 dB (day)/ 66 dB (night)	58-104 dB (day)/ 51-93 dB (night)
2	9558 Gerber Road, Sacramento Pet Cemetery, (rear of property)	54-56 dB	48-50 dB (day)/ 47-50 dB (night)	54-70 dB (day)/ 52-66 dB (night)
3	9651 Elder Creek Road, (front yard)	64-65 dB	55-71 dB (day)/ 46-63 dB (night)	71-88 dB (day)/ 67-81 dB (night)
4	8905 Florin Road, (front yard, adjacent to S. Watt)	69-70 dB	62-68 dB (day)/ 56-68 dB (night)	75-98 dB (day)/ 73-95 dB (night)
5	Adjacent to Tokay St., west of Hedge, minimal traffic	NA	56 dB	75 dB
6	Adjacent to Florin Rd., east of Bradshaw, minimal traffic	NA	59 dB	72 dB

Notes:
1. Noise measurement locations are shown on Plate N-1.
2. Sites 1-4 were monitored on a continuous basis, whereas sites 5-6 were monitored for a short-term 15 minute sample.
3. The continuous noise measurement results for one typical day are shown in the appendices.

Source: Bollard Acoustical Consultants, Inc., 2008.

The ambient noise survey results indicate that the measured daytime ambient noise levels within the FVGCP vary depending on proximity to the local arterial roadways and the UPRR tracks. Specifically, noise levels immediately adjacent to those areas (Sites 1, and 3-4) registered significantly elevated ambient noise levels; whereas sites more removed from those areas (Sites 2 and 5-6) registered fairly low ambient noise levels. The ambient conditions in the FVGCP area are consistent with those typically found in areas which contain major traffic or railroad corridors.

Aircraft Noise Environment

As shown in Plate N-1, above, the northeast proportion of the Florin-Vineyard Gap Community Plan Area is located within the Mather Airport Policy Area. The southern boundary of that policy area extends along Florin Road to Hedge Avenue, where the boundary heads north to Jackson Highway. Although the previous plans indicated that 60 dB CNEL contour nearly extended to Florin Road, according to the recent Master Plan (sacairports.org/mather/planning), the 60 dB CNEL noise contours for the various Master Plan Alternatives are located well outside of the Florin-Vineyard Community Plan Area. Therefore, although periodic over-flights will occur, the entire FVGCP area will be exposed to Mather Airport aircraft noise of less than 60 dB CNEL. Plate N-2 indicates the location of the current Master Plan 60 dB CNEL contours for Mather

Airport. Information pertaining to development within the Policy Area is provided in the Regulatory Setting section of this document.

Traffic Noise Environment

The Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to predict noise levels due to traffic within the FVGCP. Average Daily Traffic (ADT) volumes used in the model were obtained from the traffic study conducted for the Florin-Vineyard Gap Community Plan by the project transportation consultant (Fehr & Peers, 2008). Truck usage and vehicle speeds on the local area roadways were estimated from published Caltrans traffic counts and Bollard Acoustical, Inc. field observations.

Table N-2 shows the predicted existing traffic noise levels in terms of the Day/Night Average Level descriptor (Ldn) at a standardized distance of 100 feet from the centerlines of the existing FVGCP roadways for existing conditions, as well as distances to existing traffic noise contours. The extent by which existing land uses in the project vicinity are affected by existing traffic noise depends on their respective proximity to the roadways and their individual sensitivity to noise.

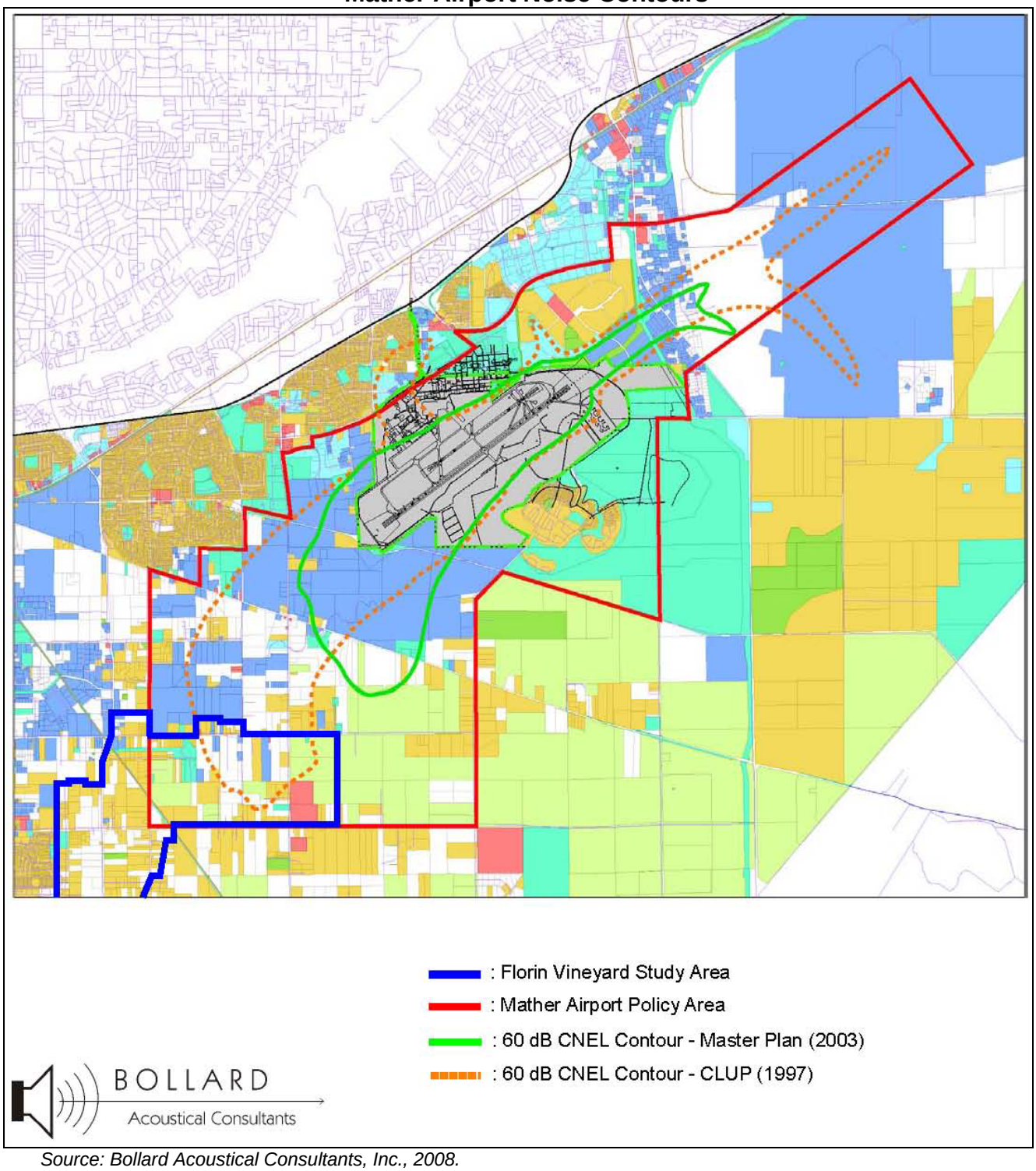
Railroad Noise Environment

The UPRR railroad tracks extend along the southwestern edge of the FVGCP area, as shown in Plate N-1. The Central California Traction Company (CCTC) railroad tracks bisect the FVGCP area; however, the CCTC tracks have not been used for years, and have effectively been abandoned. Nonetheless, due to the possibility that the CCTC tracks could conceivably be reactivated, this analysis assesses noise from both the UPRR and CCTC tracks.

UPRR Noise

To quantify UPRR noise exposure at the project site, continuous noise level measurements were conducted at Site 1, as shown on Plate N-1. The purposes of the noise level measurements were to determine the approximate number of daily railroad operations on these tracks, to quantify typical sound exposure levels (SEL) for railroad passages, and to calculate railroad noise levels in terms of day/night average levels (Ldn).

Plate N-2
Mather Airport Noise Contours



Source: Bollard Acoustical Consultants, Inc., 2008.

Table N-2: Existing Traffic Noise Levels and Distances to Contours on Florin-Vineyard Gap Community Plan Area Roadways

Segment	Roadway	Description	Ldn @ 100'	Distance to Ldn Contour (feet)		
				70	65	60
1	Folsom Blvd.	SR 16 to Watt Ave.	66	56	120	259
2	Kiefer Blvd.	Florin-Perkins Rd. to Watt Ave.	61	26	55	119
3	Kiefer Blvd.	Watt Ave. to Rosemont Dr.	66	57	123	264
4	Kiefer Blvd.	Rosemont Dr. to Bradshaw Rd.	64	39	83	179
5	SR 16	Folsom Blvd. to Watt Ave.	65	47	101	217
6	SR 16	Watt Ave. to Bradshaw Rd.	66	53	115	248
7	SR 16	Bradshaw Rd. to Sunrise Blvd.	65	46	100	215
8	Fruitridge Rd.	Power Inn Rd. to Florin-Perkins Rd.	66	54	116	251
9	Fruitridge Rd.	Florin-Perkins Rd. to South Watt Ave.	65	45	96	207
10	Fruitridge Rd.	South Watt Ave. to Hedge Ave.	61	25	54	116
11	Elder Creek Rd.	Power Inn Rd. to Florin-Perkins Rd.	65	47	101	218
12	Elder Creek Rd.	Florin-Perkins Rd. to South Watt Ave.	63	36	77	167
13	Elder Creek Rd.	South Watt Ave. to Hedge Ave.	63	34	73	157
14	Elder Creek Rd.	Hedge Ave. to Bradshaw Rd.	64	37	80	173
15	Elder Creek Rd.	Bradshaw Rd. to Excelsior Rd.	59	18	38	81
16	Florin Rd.	Stockton Blvd to Power Inn Rd.	66	57	123	265
17	Florin Rd.	Power Inn Rd. to Florin-Perkins Rd.	65	49	105	226
18	Florin Rd.	Florin-Perkins Rd. to Gardner Ave.	65	43	94	202
19	Florin Rd.	Gardner Ave. to South Watt Ave.	65	50	107	230
20	Florin Rd.	South Watt Ave. to Hedge Ave.	64	40	87	187
21	Florin Rd.	Hedge Ave. to Bradshaw Rd.	63	34	74	159
22	Florin Rd.	Bradshaw Rd. to Excelsior Rd.	62	30	64	139
23	Florin Rd.	Excelsior Rd. to Sunrise Blvd.	61	25	54	117
24	Gerber Rd.	Stockton Blvd to Power Inn Rd.	65	43	93	200
25	Gerber Rd.	Power Inn Rd. to French Rd.	66	54	116	251
26	Gerber Rd.	French Rd. to Elk Grove-Florin Rd.	65	45	96	207
27	Gerber Rd.	Elk Grove-Florin Rd. to Bradshaw Rd.	63	37	79	171
28	Gerber Rd.	Bradshaw Rd. to Vineyard Rd.	63	33	72	155
29	Gerber Rd.	Vineyard Rd. to Excelsior Rd.	59	19	41	89
30	Vintage Park Dr.	Elk Grove-Florin Rd. to Waterman Rd.	64	37	80	173
31	Vintage Park Dr.	Waterman Rd. to Bradshaw Rd.	60	22	47	102
32	Calvine Rd.	Power Inn Rd. to Elk Grove-Florin Rd.	69	90	195	419
33	Calvine Rd.	Elk Grove-Florin Rd. to Grand Cru Dr.	67	68	146	314
34	Calvine Rd.	Grand Cru Dr. to Waterman Rd.	67	68	146	314
35	Calvine Rd.	Waterman Rd. to Bradshaw Rd.	65	50	108	232
36	Calvine Rd.	Bradshaw Rd. to Vineyard Rd.	66	53	114	245
37	Calvine Rd.	Vineyard Rd. to Excelsior Rd.	63	32	70	150
38	Calvine Rd.	Excelsior Rd. to Grant Line Rd.	61	25	53	115

(Continued on next page)

Segment	Roadway	Description	Ldn @ 100'	Distance to Ldn Contour (feet)		
				70	65	60
39	Power Inn Rd.	Elder Creek Rd. to Florin Rd.	68	72	155	335
40	Power Inn Rd.	Florin Rd. to Gerber Rd.	68	70	150	324
41	Power Inn Rd.	Gerber Rd. to Calvine Rd.	66	56	120	260
42	Florin-Perkins Rd.	Folsom Blvd. to SR 16	66	52	112	241
43	Florin-Perkins Rd.	SR 16 to Fruitridge Rd.	67	68	146	315
44	Florin-Perkins Rd.	Fruitridge Rd. to Elder Creek Rd.	68	72	154	332
45	Florin-Perkins Rd.	Elder Creek Rd. to Florin Rd.	66	52	112	241
46	French Rd.	Florin Rd. to Gerber Rd.	62	31	67	145
47	Watt Ave.	Folsom Blvd. to Kiefer Blvd.	71	115	247	533
48	South Watt Ave.	Kiefer Blvd. to SR 16	69	92	197	425
49	South Watt Ave.	SR 16 to Fruitridge Rd.	69	87	188	405
50	South Watt Ave.	Fruitridge Rd. to Elder Creek Rd.	68	77	165	356
51	South Watt Ave.	Elder Creek Rd. to Florin Rd.	67	66	142	307
52	Elk Grove-Florin Rd.	Florin Rd. to Gerber Rd.	69	84	180	388
53	Elk Grove-Florin Rd.	Gerber Rd. to Carlisle Ave.	71	111	239	515
54	Elk Grove-Florin Rd.	Carlisle Ave. to Vintage Park Dr.	68	77	167	359
55	Elk Grove-Florin Rd.	Vintage Park Dr. to Calvine Rd.	68	74	160	345
56	Hedge Ave.	SR 16 to Fruitridge Rd.	59	20	43	92
57	Hedge Ave.	Fruitridge Rd. to Elder Creek Rd.	61	24	52	112
58	Hedge Ave.	Elder Creek Rd. to Florin Rd.	60	20	44	95
59	Waterman Rd.	Vintage Park Dr. to Calvine Rd.	61	25	53	115
60	Bradshaw Rd.	Kiefer Blvd. to SR 16	70	104	223	481
61	Bradshaw Rd.	SR 16 to Elder Creek Rd.	63	37	79	171
62	Bradshaw Rd.	Elder Creek Rd. to Florin Rd.	67	66	143	308
63	Bradshaw Rd.	Florin Rd. to Gerber Rd.	68	76	164	353
64	Bradshaw Rd.	Gerber Rd. to Vintage Park Dr.	67	58	126	271
65	Bradshaw Rd.	Vintage Park Dr. to Calvine Rd.	66	50	108	234
66	Vineyard Rd.	Gerber Rd. to Calvine Rd.	61	26	56	121
67	Excelsior Rd.	SR 16 to Florin Rd.	63	33	72	155
68	Excelsior Rd.	Florin Rd. to Gerber Rd.	65	45	96	207
69	Excelsior Rd.	Gerber Rd. to Calvine Rd.	63	32	69	148

Note: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.
Source: FHWA-RD-77-108 with inputs from Fehr & Peers and Bollard Acoustical Consultants, Inc.

The results of the noise measurements are shown in Table N-3. A detailed analysis of the single-event data indicated that there was an average of approximately 35 trains per day on these railroad tracks. Railroad operations were randomly distributed throughout the day and nighttime hours. Plate N-3, below, shows an enlarged area at the southwest corner of the project area which is adjacent to the railroad tracks, as well as the location of the 60 and 65 dB Ldn noise contours.

CCTC NOISE

As noted previously, the CCTC line within the FVGCP area is currently inactive. If rail service were to return, which would require substantial upgrades to the tracks, the level of noise-generated by such activities would depend on several factors. The most important factors would include the type of rail service (heavy freight service, heavy passenger service, or light rail passenger service), the number of daily operations, the time of day of those operations (i.e. daytime or nighttime), train speeds, and whether or not warning horns would be utilized.

Major freight carriers currently serve the region; therefore, heavy rail service would be unlikely to return to the CCTC line with a large number of daily operations. Nonetheless, if such service were to return, a single nighttime train would generate a noise level of 65 dB Ldn beyond the railroad right-of-way, which is 50 feet on each side of the tracks.

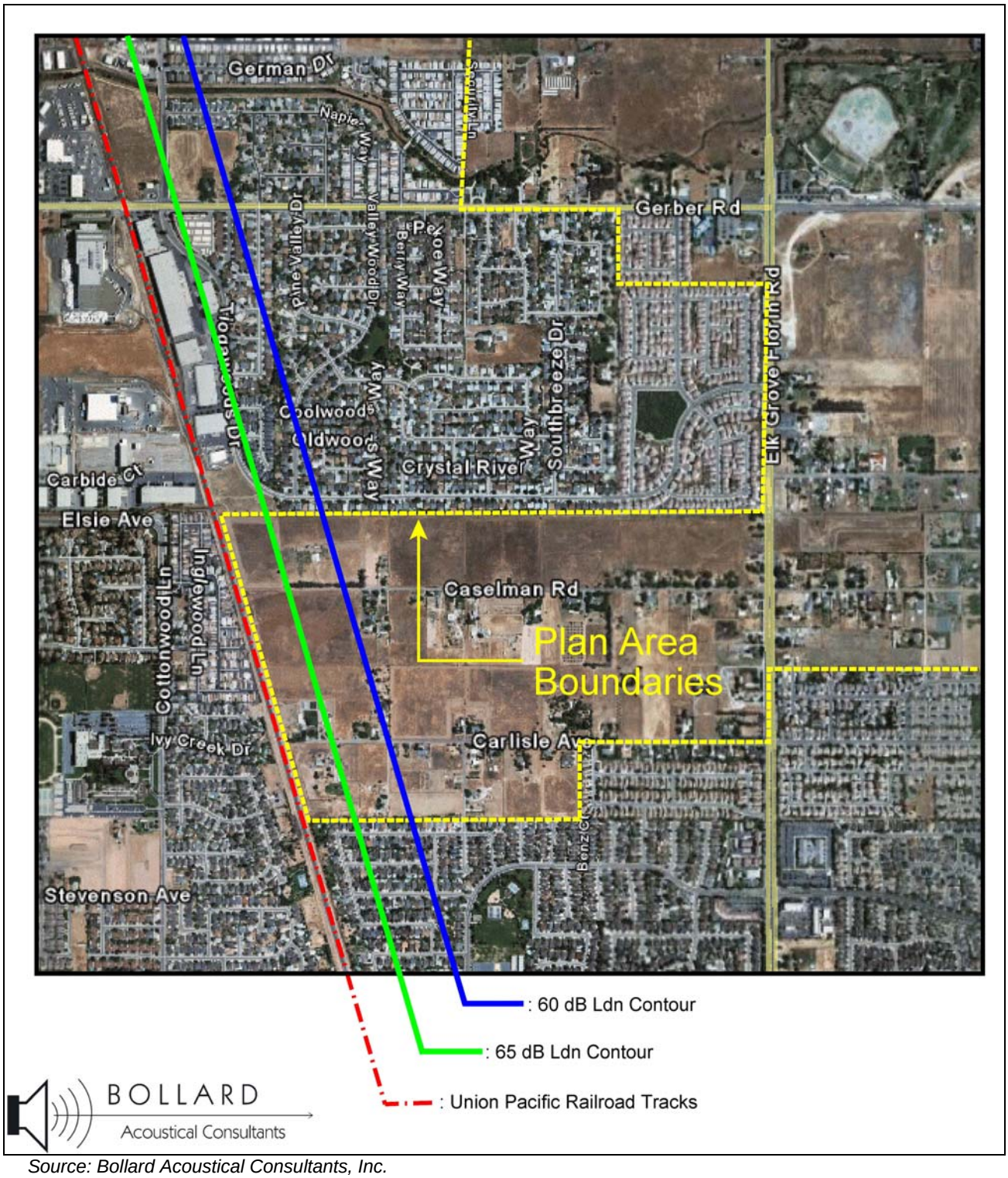
Light rail passenger operations in the Sacramento area generates far lower noise levels than heavy rail operations. As a result, a far greater number of such operations could occur prior to causing noise levels in excess of 65 dB Ldn beyond the right-of way. Specifically, approximately 100 such events would be required to achieve an exterior noise level of 65 dB Ldn at a distance of 50 feet.

Recent residential developments in the area located adjacent to these tracks have included construction of solid noise barriers at the rear of the lots which abut the CCTC right of way in the event that rail service may return to these tracks. The height of the noise barriers appears to be approximately six to eight feet.

REGULATORY CONTEXT

In order to limit population exposure to physically and/or psychologically damaging noise levels, the State of California, various county governments, and most municipalities in the State have established standards and ordinances to control noise. The Sacramento County *General Plan Noise Element* and the California Environmental Quality Act (CEQA) Guidelines provide regulations regarding noise levels for uses relevant to the proposed project. The following provides a general overview of the existing regulations established by the State and the County.

Plate N-3
UPRR Noise Contours



Source: Bollard Acoustical Consultants, Inc.

Table N-3: Union Pacific Railroad Noise Measurement Results
Florin-Vineyard Gap Community Plan Area

Date	# Trains / Day	Mean SEL, dB @ 120 ft.	Computed Ldn, dB @ 100 ft.	Distance to Existing Ldn Contours, feet	
				60 dB	65 dB
September 19-22, 2005	35	101	74	910	423

Notes: The noise level measurement site is shown on Plate N-1. The site was approximately 120 feet from the railroad tracks.

The number of apparent railroad operations was estimated from an analysis of single-event noise level data collected over the 3-day monitoring period. Events were considered to be railroad operations if they met criteria for event duration, maximum level, and SEL.

Source: Bollard Acoustical Consultants, Inc.

STATE REGULATIONS

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a project exposes persons to noise levels in excess of local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels.

PROJECT-RELATED TRAFFIC NOISE LEVEL INCREASES

California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it increases substantially the ambient noise levels for adjoining areas. In practice, significant noise impacts are usually identified in CEQA analyses if the project would result in a perceptible ambient noise level increase, commonly considered to be 3-5 dB. For the purposes of this analysis a conservative significance threshold of three dB for impacts related to an increase in noise has been used.

LOCAL REGULATIONS

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan Noise Element establishes acceptable noise level criteria for both transportation and non-transportation noise sources. The County Noise Element policies applicable to development within the Florin-Vineyard Gap Community Plan Area are as follows:

NO-1 Noise created by new transportation noise sources should be mitigated so as not to exceed 60 dB Ldn/CNEL at the outdoor activity areas of any affected residential lands or land use situated in the unincorporated areas. When a practical application of the best available noise-reduction technology cannot achieve the 60 dB Ldn / CNEL standard, then an exterior noise level of 65 dB Ldn / CNEL may be allowed in outdoor activity areas.

Discussion: This policy will provide guidance when new roadways, light or heavy rail-lines are proposed adjacent to residential areas. This policy also applies to capacity enhancing roadway improvement projects. Mitigation measures such as soundwalls, berms or other attenuation must achieve a 60dB to 65dB Ldn / CNEL in the outdoor area for the project to be consistent with this policy.

NO-2 Noise created by new nontransportation noise sources shall be mitigated so as not to exceed any of the noise level standards of Table N-4 (Noise Element Table II-1), as measured immediately within the property line of any affected residentially designated lands or residential land use situated in the unincorporated areas.

Table N-4: Noise Level Performance Standards[1] for Residential Uses Affected by Non-Transportation Noise

Statistical Descriptor	Daytime (7 am to 10pm)	Nighttime (10 pm - 7 am)
L50	50 dBA	45 dBA
Lmax	70 dBA	65 dBA

1. These standards are for planning purposes only and may vary from the standards of the County Noise Ordinance which are for enforcement purposes.
2. These standards apply to new or existing residential areas affected by new or existing nontransportation noise sources.

Source: Sacramento County General Plan.

NO-3 Where proposed nontransportation noise sources are likely to produce noise levels exceeding the performance standards of Table N-4 (Noise Element Table II-1) at existing or planned residential uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

NO-4 Where residential land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding either 60 dB Ldn / CNEL or the performance standards of Table N-4 (Noise Element Table II-1), an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

NO-5 New residential development shall not be allowed where the noise level due to nontransportation noise sources will exceed the noise level standards of Table N-4 (Noise Element Table II-1) as measured immediately within the property line of the new development.

NO-6 The compatibility of proposed nonresidential projects with existing and future noise levels due to transportation noise sources shall be evaluated through a comparison to Figure II-1 of the County Noise Element (incorporated by reference), "Land Use Compatibility for Community Noise Environments" and Table N-5 (Noise Element Table II-3), "Acceptable Noise Levels in Unoccupied Rooms", and to Figure II-4 of the Noise Element (incorporated by reference) for projects affected by aircraft noise.

Table N-5: Acceptable Noise Levels in Unoccupied Rooms Affected By Transportation Noise

Location	Leq, dBA	Location	Leq, dBA
Radio studios, recording studios	25-30	Music Rooms	30-35
Concert halls, large auditoriums	30-35	Theaters (speech)	30-35
Motion picture theaters	40-45	Churches	35-40
Conference rooms, small offices	40-45	Classrooms	35-45
Public offices, banks, stores	45-50	Hospitals	40-45
Restaurants, cafeterias	45-55	Court Rooms	40-45
Libraries	40-45		
Source: Sacramento County General Plan.			

NO-7 Proposed development of residential land uses should not be permitted:

I) In areas exposed to existing or projected levels of noise from transportation noise sources which exceed 60 dB to 65 dB Ldn / CNEL unless the project design includes effective mitigation measures to reduce noise to 60 dB to 65 dB Ldn / CNEL or less in outdoor activity areas, and 45 dB Ldn / CNEL or less in indoor areas; and

2) For 5 and 10 acre Agricultural-Residential land use the standard for exterior noise is also 60 to 65 dB Ldn / CNEL. The standard remains at 45 dB Ldn / CNEL for interior noise levels.

Mather Airport Policy Area

The Sacramento County General Plan contains the following additional information with respect to development within the Mather Airport Policy Area:

Purpose: This policy is intended to increase the awareness of residents, in any future residential communities that are approved, of their possible exposure to aircraft operations; to limit the potential for conflict between the airport and adjacent communities; and, to protect future airport development and aircraft operations flexibility beyond that obtainable solely by relying upon the noise and safety land use guidelines contained within the Comprehensive Land Use Plan.

Justification: The potential for successful public reuse of Mather Field properties is largely based on the successful operation of Mather Airport as a major economic and commerce center. The desire is for Mather Airport to become the premier air cargo center for Northern California, serving both domestic and international markets. This may best be realized if the airport can function both in an environment free of as many aircraft operational restrictions as possible, and within a positive, mutually beneficial relationship with nearby communities.

Experience has shown that the primary cause of airport operational restrictions is the encroachment of residential development within the airport environs. Encroachment in turn, has led to many airport-related complaints from the new residents living within these areas. The State of California has adopted airport noise and safety standards which are implemented through Comprehensive Land Use Plans prepared by Airport Land Use Commissions. The Mather Airport CLUP adopted by the local Airport Land Use Commission prohibits new residential development within the 65 CNEL noise contour.

Despite the standards in the CLUP legislation, airports do receive complaints from outside the 65 CNEL noise contour by residents who perceive they are impacted or potentially impacted by airport operations. These complaints, whether valid or not, can result in restrictions to airport operations. Sacramento County has an opportunity to create an additional envelope of protection for Mather Airport since much of the surrounding area is not yet urbanized.

Policy: New residential development within the 60 CNEL Mather Airport Policy Area shall be prohibited. Also, new residential development within the Mather Airport Policy Area boundaries, but outside the 60 CNEL, shall be subject to the following conditions:

1. Provide minimum noise insulation to 45 dB within new residential dwellings, including detached single family dwellings, with windows closed in any habitable room.

2. Notification in the Public Report prepared by the California Department of Real Estate disclosing the fact to prospective buyers that the parcel is located within the Mather Airport Policy Area.

3. An Avigation Easement prepared by the Sacramento County Counsel's Office granted to the County of Sacramento and recorded with the Sacramento County Recorder and file with Department of Airports. Such Avigation Easement shall acknowledge the property location within the Mather Airport Policy Area and shall grant the right of flight and unobstructed passage of all aircraft into and out of Mather Airport.

Exceptions: New accessory residential dwellings on parcels zoned Agricultural, Agricultural-Residential, Interim Agricultural, Interim General Agricultural, or Interim Limited Agricultural and between the 60 and 65 CNEL contours, shall be permitted within the Mather Airport Policy Area boundaries, but would be subject to the conditions listed above.

Sacramento County Noise Ordinance

Chapter 6.68 of the Sacramento County Code contains the County Noise Ordinance. The various sections of this chapter describe definitions, sound level measurement, exterior and interior noise level standards, exemptions, pre-existing conditions, and various specific noise sources.

Section 6.68.070 of the Sacramento County Code states that it is unlawful for any person at any location within the County to create any noise which causes the noise levels on the affected property, when measured within the designated noise area, to exceed for the duration of time set forth in the noise standards shown in Table N-6, below.

Table N-6: Sacramento County Noise Ordinance Standards Applicable at Exterior Spaces of Residential Uses

Cumulative Duration of Intrusive Sound	Noise Metric	Daytime, dB	Nighttime, dB
Cumulative period of 30 minutes per hour	L_{50}	55	50
Cumulative period of 15 minutes per hour	L_{25}	60	55
Cumulative period of 5 minutes per hour	L_{08}	65	60
Cumulative period of 1 minute per hour	L_{02}	70	65
Level not to be exceeded for any time during hour	L_{max}	75	70

Note: Daytime is defined as 7 a.m. to 10 p.m. and Nighttime is defined as 10 p.m. to 7 a.m. If the existing ambient noise levels exceed that permitted in the first four noise-limit categories, the allowable limit shall be increased in 5 dB increments to encompass the ambient.

Source: Sacramento County Zoning Code.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Implementation of the project would result in significant noise impacts if the project would result in either of the following:

- Exposure of persons to or generation of noise levels in excess of standards established in the Sacramento County General Plan. Specifically, exterior and interior noise levels of 65 and 45 dB Ldn, respectively, for traffic and railroad noise.

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, defined as 3 dB.

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, as defined by Table N-6.

- Exposure of people residing or working within an area located within an airport land use plan to excessive noise levels. The Sacramento County General Plan Noise Element contains specific noise level limits for new projects affected by aircraft noise (Noise Element Figure II-4, incorporated by reference).

METHODS OF ANALYSIS

TRAFFIC NOISE

To assess noise impacts due to project-related traffic increases on the local roadway network, traffic noise levels have been predicted at a representative distance for future, project and no-project conditions, using the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108). In addition, because the transportation study prepared for this project identified traffic mitigation measures which would affect traffic volume on FVGCP area roadways (and therefore noise levels on those segments), the analysis includes noise impacts associated with future traffic volumes on the roadway network with implementation of those traffic mitigation measures. Noise impacts are identified at existing noise-sensitive areas if the noise level increases which result from the project exceed the three dB significance threshold.

Table N-7 shows the predicted increases in future traffic noise levels on the local roadway network which would result from implementation of the proposed project. Table

N-8 shows the predicted future traffic noise levels for the same roadway segments with the density bonus applied. The tables are provided in terms of L_{dn} at a standard distance of 100 feet from the centerlines of the project-area roadways. The Table N-7 and N-8 data was used to determine the project-related increase in noise which is anticipated to result from the increase in traffic volumes on the local roadways which would occur under development of the Florin Vineyard Gap Community Plan under either the CAC Land Use Plan or the PD Land Use Plan. To assess traffic noise impacts at new proposed noise-sensitive land uses, the noise contour distances shown in Tables N-9 and N-10 for future (cumulative) plus project conditions with and without the density bonus is used.

Railroad Noise

Railroad noise impacts are identified where residential uses are proposed within the 65 dB L_{dn} railroad noise contour for the UPRR shown in Table N-3, above. As noted above, uncertainty exists with regard to the future uses of the CCTC right-of-way. However, a return to heavy rail use is considered to be unlikely, and the Regional Transit 20-Year Vision shows light rail within the alignment (See Plate TC-11 in Chapter 9, Traffic and Circulation). Therefore, noise impacts associated with use of the CCTC have been identified if light rail use would result in residential uses adjoining the CCTC being exposed to noise levels in excess of 65 dB L_{dn}.

Construction Noise

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in Table N-11, ranging from 85 to 90 dB at a distance of 50 feet. Pile driving activities would generate even higher noise levels. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would likely occur primarily during daytime hours.

Table N-7: Future (Cumulative) Conditions Predicted Traffic Noise Levels and Project-Related Traffic Noise Level Increases

			Ldn @ 100 feet								
Seg.	**Roadway Name**	**Segment Description**	**Cumulative**	**Cumulative Plus CAC**	**Change**	**Cumulative Plus PD**	**Change**	**Cumulative Plus CAC w/ Mit.**	**Change**	**Cumulative Plus PD w/ Mit.**	**Change**
1	Folsom Blvd.	SR 16 to Watt Ave.	68	68	0	68	0	68	0	68	0
2	Kiefer Blvd.	Florin-Perkins Rd. to Watt Ave.	63	63	0	63	0	62	-1	62	-1
3	Kiefer Blvd.	Watt Ave. to Rosemont Dr.	67	67	0	67	0	67	0	67	0
4	Kiefer Blvd.	Rosemont Dr. to Bradshaw Rd.	65	65	0	66	1	65	0	65	0
5	SR 16	Folsom Blvd. to Watt Ave.	67	68	1	68	1	68	1	69	2
6	SR 16	Watt Ave. to Bradshaw Rd.	68	68	0	68	0	70	2	70	2
7	SR 16	Bradshaw Rd. to Sunrise Blvd.	68	69	1	69	1	69	1	69	1
8	Fruitridge Rd.	Power Inn Rd. to Florin-Perkins Rd.	68	68	0	68	0	68	0	68	0
9	Fruitridge Rd.	Florin-Perkins Rd. to South Watt Ave.	68	68	0	68	0	67	-1	68	0
10	Fruitridge Rd.	South Watt Ave. to Hedge Ave.	64	64	0	64	0	63	-1	63	-1
11	Elder Creek Rd.	Power Inn Rd. to Florin-Perkins Rd.	67	67	0	67	0	67	0	67	0
12	Elder Creek Rd.	Florin-Perkins Rd. to South Watt Ave.	65	66	1	66	1	66	1	66	1
13	Elder Creek Rd.	South Watt Ave. to Hedge Ave.	67	68	1	68	1	68	1	69	2
14	Elder Creek Rd.	Hedge Ave. to Bradshaw Rd.	68	68	0	68	0	69	1	70	2
15	Elder Creek Rd.	Bradshaw Rd. to Excelsior Rd.	64	65	1	66	2	66	2	66	2
16	Florin Rd.	Stockton Blvd to Power Inn Rd.	68	68	0	68	0	68	0	68	0
17	Florin Rd.	Power Inn Rd. to Florin-Perkins Rd.	67	68	1	68	1	67	0	68	1
18	Florin Rd.	Florin-Perkins Rd. to Gardner Ave.	68	69	1	69	1	69	1	69	1
19	Florin Rd.	Gardner Ave. to South Watt Ave.	68	69	1	69	1	69	1	70	2
20	Florin Rd.	South Watt Ave. to Hedge Ave.	67	68	1	68	1	68	1	68	1
21	Florin Rd.	Hedge Ave. to Bradshaw Rd.	70	71	1	71	1	69	-1	69	-1
22	Florin Rd.	Bradshaw Rd. to Excelsior Rd.	67	68	1	68	1	68	1	68	1
23	Florin Rd.	Excelsior Rd. to Sunrise Blvd.	66	67	1	67	1	67	1	67	1

(Continued on next page)

			Ldn @ 100 feet								
Seg.	**Roadway Name**	**Segment Description**	**Cumulative**	**Cumulative Plus CAC**	**Change**	**Cumulative Plus PD**	**Change**	**Cumulative Plus CAC w/ Mit.**	**Change**	**Cumulative Plus PD w/ Mit.**	**Change**
24	Gerber Rd.	Stockton Blvd to Power Inn Rd.	66	66	0	66	0	66	0	66	0
25	Gerber Rd.	Power Inn Rd. to French Rd.	67	68	1	68	1	68	1	68	1
26	Gerber Rd.	French Rd. to Elk Grove-Florin Rd.	67	68	1	68	1	68	1	68	1
27	Gerber Rd.	Elk Grove-Florin Rd. to Bradshaw Rd.	68	69	1	69	1	68	0	68	0
28	Gerber Rd.	Bradshaw Rd. to Vineyard Rd.	67	68	1	68	1	67	0	67	0
29	Gerber Rd.	Vineyard Rd. to Excelsior Rd.	62	64	2	64	2	64	2	64	2
30	Vintage Park Dr.	Elk Grove-Florin Rd. to Waterman Rd.	64	65	1	65	1	65	1	65	1
31	Vintage Park Dr.	Waterman Rd. to Bradshaw Rd.	62	62	0	62	0	61	-1	61	-1
32	Calvine Rd.	Power Inn Rd. to Elk Grove-Florin Rd.	71	71	0	71	0	71	0	71	0
33	Calvine Rd.	Elk Grove-Florin Rd. to Grand Cru Dr.	69	69	0	69	0	69	0	69	0
34	Calvine Rd.	Grand Cru Dr. to Waterman Rd.	69	69	0	69	0	69	0	69	0
35	Calvine Rd.	Waterman Rd. to Bradshaw Rd.	68	68	0	68	0	68	0	68	0
36	Calvine Rd.	Bradshaw Rd. to Vineyard Rd.	68	68	0	68	0	68	0	68	0
37	Calvine Rd.	Vineyard Rd. to Excelsior Rd.	66	66	0	66	0	66	0	66	0
38	Calvine Rd.	Excelsior Rd. to Grant Line Rd.	64	64	0	64	0	64	0	64	0
39	Power Inn Rd.	Elder Creek Rd. to Florin Rd.	68	68	0	68	0	68	0	68	0
40	Power Inn Rd.	Florin Rd. to Gerber Rd.	69	69	0	69	0	69	0	68	-1
41	Power Inn Rd.	Gerber Rd. to Calvine Rd.	67	67	0	67	0	67	0	67	0
42	Florin-Perkins Rd.	Folsom Blvd. to SR 16	68	69	1	69	1	69	1	69	1
43	Florin-Perkins Rd.	SR 16 to Fruitridge Rd.	69	70	1	70	1	69	0	69	0
44	Florin-Perkins Rd.	Fruitridge Rd. to Elder Creek Rd.	69	69	0	69	0	69	0	69	0
45	Florin-Perkins Rd.	Elder Creek Rd. to Florin Rd.	68	68	0	68	0	68	0	68	0

(Continued on next page)

			Ldn @ 100 feet								
Seg.	**Roadway Name**	**Segment Description**	**Cumulative**	**Cumulative Plus CAC**	**Change**	**Cumulative Plus PD**	**Change**	**Cumulative Plus CAC w/ Mit.**	**Change**	**Cumulative Plus PD w/ Mit.**	**Change**
46	French Rd.	Florin Rd. to Gerber Rd.	64	64	0	64	0	65	1	65	1
47	Watt Ave.	Folsom Blvd. to Kiefer Blvd.	72	72	0	72	0	72	0	72	0
48	South Watt Ave.	Kiefer Blvd. to SR 16	71	71	0	71	0	71	0	71	0
49	South Watt Ave.	SR 16 to Fruitridge Rd.	72	72	0	72	0	72	0	72	0
50	South Watt Ave.	Fruitridge Rd. to Elder Creek Rd.	71	72	1	72	1	72	1	72	1
51	South Watt Ave.	Elder Creek Rd. to Florin Rd.	70	71	1	71	1	71	1	71	1
52	Elk Grove-Florin Rd.	Florin Rd. to Gerber Rd.	71	72	1	72	1	72	1	72	1
53	Elk Grove-Florin Rd.	Gerber Rd. to Carlisle Ave.	71	72	1	72	1	72	1	72	1
54	Elk Grove-Florin Rd.	Carlisle Ave. to Vintage Park Dr.	69	70	1	70	1	70	1	70	1
55	Elk Grove-Florin Rd.	Vintage Park Dr. to Calvine Rd.	69	69	0	69	0	69	0	69	0
56	Hedge Ave.	SR 16 to Fruitridge Rd.	60	60	0	60	0	60	0	60	0
57	Hedge Ave.	Fruitridge Rd. to Elder Creek Rd.	65	66	1	66	1	62	-3	63	-2
58	Hedge Ave.	Elder Creek Rd. to Florin Rd.	66	66	0	66	0	63	-3	64	-2
59	Waterman Rd.	Vintage Park Dr. to Calvine Rd.	67	67	0	67	0	67	0	67	0
60	Bradshaw Rd.	Kiefer Blvd. to SR 16	72	73	1	73	1	72	0	72	0
61	Bradshaw Rd.	SR 16 to Elder Creek Rd.	66	66	0	66	0	67	1	67	1
62	Bradshaw Rd.	Elder Creek Rd. to Florin Rd.	71	71	0	71	0	71	0	71	0
63	Bradshaw Rd.	Florin Rd. to Gerber Rd.	71	71	0	71	0	71	0	71	0
64	Bradshaw Rd.	Gerber Rd. to Vintage Park Dr.	70	70	0	70	0	70	0	70	0
65	Bradshaw Rd.	Vintage Park Dr. to Calvine Rd.	69	69	0	69	0	69	0	69	0
66	Vineyard Rd.	Gerber Rd. to Calvine Rd.	65	65	0	65	0	65	0	65	0
67	Excelsior Rd.	SR 16 to Florin Rd.	66	67	1	67	1	66	0	66	0
68	Excelsior Rd.	Florin Rd. to Gerber Rd.	66	67	1	67	1	67	1	67	1
69	Excelsior Rd.	Gerber Rd. to Calvine Rd.	65	65	0	65	0	64	-1	64	-1

(Continued on next page)

			Ldn @ 100 feet								
Seg.	**Roadway Name**	**Segment Description**	**Cumulative**	**Cumulative Plus CAC**	**Change**	**Cumulative Plus PD**	**Change**	**Cumulative Plus CAC w/ Mit.**	**Change**	**Cumulative Plus PD w/ Mit.**	**Change**
70	Waterman Rd.	Vintage Park Dr. to Gerber Rd.	66	67	1	67	1	66	0	66	0
71	Waterman Rd.	Gerber Rd. to Florin Rd.	66	66	0	66	0	66	0	66	0
72	Vineyard Rd.	Gerber Rd. to Florin Rd.	63	63	0	63	0	62	-1	62	-1
73	Waterman Rd.	Florin Rd. to Elder Creek Rd.	NA	NA	NA	NA	NA	65	NA	65	NA

Note: Shaded cells indicate significant increases in traffic noise relative to no-project conditions.

Source: FHWA-RD-77-108 with inputs from Fehr & Peers (2008) and Bollard Acoustical Consultants, Inc.

Table N-8: Future (Cumulative) Conditions Predicted Traffic Noise Levels and Project-Related Traffic Noise Level Increases with Density Bonus

Seg.	Roadway Name	Segment Description	Ldn @ 100 feet				
			Cumulative	Cumulative Plus CAC w/ Density Bonus w/mitigation	Change	Cumulative Plus PD w/ Density Bonus w/ mitigation	Change
1	Folsom Blvd.	SR 16 to Watt Ave.	68	68	0	68	0
2	Kiefer Blvd.	Florin-Perkins Rd. to Watt Ave.	63	62	-1	62	-1
3	Kiefer Blvd.	Watt Ave. to Rosemont Dr.	67	67	0	67	0
4	Kiefer Blvd.	Rosemont Dr. to Bradshaw Rd.	65	65	0	65	0
5	SR 16	Folsom Blvd. to Watt Ave.	67	68	1	69	2
6	SR 16	Watt Ave. to Bradshaw Rd.	68	70	2	70	2
7	SR 16	Bradshaw Rd. to Sunrise Blvd.	68	69	1	69	1
8	Fruitridge Rd.	Power Inn Rd. to Florin-Perkins Rd.	68	68	0	68	0
9	Fruitridge Rd.	Florin-Perkins Rd. to South Watt Ave.	68	67	-1	68	0
10	Fruitridge Rd.	South Watt Ave. to Hedge Ave.	64	63	-1	63	-1
11	Elder Creek Rd.	Power Inn Rd. to Florin-Perkins Rd.	67	67	0	67	0
12	Elder Creek Rd.	Florin-Perkins Rd. to South Watt Ave.	65	66	1	66	1
13	Elder Creek Rd.	South Watt Ave. to Hedge Ave.	67	69	2	69	2
14	Elder Creek Rd.	Hedge Ave. to Bradshaw Rd.	68	70	2	70	2

(Continued on next page)

Seg.	Roadway Name	Segment Description	Ldn @ 100 feet				
			Cumulative	Cumulative Plus CAC w/ Density Bonus w/mitigation	Change	Cumulative Plus PD w/ Density Bonus w/ mitigation	Change
15	Elder Creek Rd.	Bradshaw Rd. to Excelsior Rd.	64	66	2	66	2
16	Florin Rd.	Stockton Blvd to Power Inn Rd.	68	68	0	68	0
17	Florin Rd.	Power Inn Rd. to Florin-Perkins Rd.	67	68	1	68	1
18	Florin Rd.	Florin-Perkins Rd. to Gardner Ave.	68	69	1	69	1
19	Florin Rd.	Gardner Ave. to South Watt Ave.	68	70	2	70	2
20	Florin Rd.	South Watt Ave. to Hedge Ave.	67	68	1	68	1
21	Florin Rd.	Hedge Ave. to Bradshaw Rd.	70	69	-1	69	-1
22	Florin Rd.	Bradshaw Rd. to Excelsior Rd.	67	68	1	68	1
23	Florin Rd.	Excelsior Rd. to Sunrise Blvd.	66	67	1	67	1
24	Gerber Rd.	Stockton Blvd to Power Inn Rd.	66	66	0	66	0
25	Gerber Rd.	Power Inn Rd. to French Rd.	67	68	1	68	1
26	Gerber Rd.	French Rd. to Elk Grove-Florin Rd.	67	68	1	68	1
27	Gerber Rd.	Elk Grove-Florin Rd. to Bradshaw Rd.	68	68	0	69	1
28	Gerber Rd.	Bradshaw Rd. to Vineyard Rd.	67	67	0	67	0
29	Gerber Rd.	Vineyard Rd. to Excelsior Rd.	62	64	2	64	2
30	Vintage Park Dr.	Elk Grove-Florin Rd. to Waterman Rd.	64	65	1	65	1
31	Vintage Park Dr.	Waterman Rd. to Bradshaw Rd.	62	62	0	62	0
32	Calvine Rd.	Power Inn Rd. to Elk Grove-Florin Rd.	71	71	0	71	0
33	Calvine Rd.	Elk Grove-Florin Rd. to Grand Cru Dr.	69	69	0	69	0
34	Calvine Rd.	Grand Cru Dr. to Waterman Rd.	69	69	0	69	0
35	Calvine Rd.	Waterman Rd. to Bradshaw Rd.	68	68	0	68	0
36	Calvine Rd.	Bradshaw Rd. to Vineyard Rd.	68	68	0	68	0
37	Calvine Rd.	Vineyard Rd. to Excelsior Rd.	66	66	0	66	0
38	Calvine Rd.	Excelsior Rd. to Grant Line Rd.	64	64	0	64	0
39	Power Inn Rd.	Elder Creek Rd. to Florin Rd.	68	68	0	68	0
40	Power Inn Rd.	Florin Rd. to Gerber Rd.	69	69	0	68	-1
41	Power Inn Rd.	Gerber Rd. to Calvine Rd.	67	67	0	67	0

(Continued on next page)

Seg.	Roadway Name	Segment Description	Ldn @ 100 feet				
			Cumulative	Cumulative Plus CAC w/ Density Bonus w/mitigation	Change	Cumulative Plus PD w/ Density Bonus w/ mitigation	Change
42	Florin-Perkins Rd.	Folsom Blvd. to SR 16	68	69	1	69	1
43	Florin-Perkins Rd.	SR 16 to Fruitridge Rd.	69	69	0	69	0
44	Florin-Perkins Rd.	Fruitridge Rd. to Elder Creek Rd.	69	69	0	69	0
45	Florin-Perkins Rd.	Elder Creek Rd. to Florin Rd.	68	68	0	68	0
46	French Rd.	Florin Rd. to Gerber Rd.	64	65	1	65	1
47	Watt Ave.	Folsom Blvd. to Kiefer Blvd.	72	72	0	72	0
48	South Watt Ave.	Kiefer Blvd. to SR 16	71	71	0	71	0
49	South Watt Ave.	SR 16 to Fruitridge Rd.	72	72	0	72	0
50	South Watt Ave.	Fruitridge Rd. to Elder Creek Rd.	71	72	1	72	1
51	South Watt Ave.	Elder Creek Rd. to Florin Rd.	70	71	1	71	1
52	Elk Grove-Florin Rd.	Florin Rd. to Gerber Rd.	71	72	1	72	1
53	Elk Grove-Florin Rd.	Gerber Rd. to Carlisle Ave.	71	72	1	73	2
54	Elk Grove-Florin Rd.	Carlisle Ave. to Vintage Park Dr.	69	70	1	70	1
55	Elk Grove-Florin Rd.	Vintage Park Dr. to Calvine Rd.	69	69	0	70	1
56	Hedge Ave.	SR 16 to Fruitridge Rd.	60	60	0	60	0
57	Hedge Ave.	Fruitridge Rd. to Elder Creek Rd.	65	63	-2	63	-2
58	Hedge Ave.	Elder Creek Rd. to Florin Rd.	66	64	-2	65	-1
59	Waterman Rd.	Vintage Park Dr. to Calvine Rd.	67	67	0	67	0
60	Bradshaw Rd.	Kiefer Blvd. to SR 16	72	72	0	73	1
61	Bradshaw Rd.	SR 16 to Elder Creek Rd.	66	67	1	67	1
62	Bradshaw Rd.	Elder Creek Rd. to Florin Rd.	71	71	0	71	0
63	Bradshaw Rd.	Florin Rd. to Gerber Rd.	71	71	0	71	0
64	Bradshaw Rd.	Gerber Rd. to Vintage Park Dr.	70	70	0	70	0
65	Bradshaw Rd.	Vintage Park Dr. to Calvine Rd.	69	69	0	69	0
66	Vineyard Rd.	Gerber Rd. to Calvine Rd.	65	65	0	65	0
67	Excelsior Rd.	SR 16 to Florin Rd.	66	66	0	67	1
68	Excelsior Rd.	Florin Rd. to Gerber Rd.	66	67	1	67	1

(Continued on next page)

Seg.	Roadway Name	Segment Description	Ldn @ 100 feet				
			Cumulative	Cumulative Plus CAC w/ Density Bonus w/mitigation	Change	Cumulative Plus PD w/ Density Bonus w/ mitigation	Change
69	Excelsior Rd.	Gerber Rd. to Calvine Rd.	65	64	-1	64	-1
70	Waterman Rd.	Vintage Park Dr. to Gerber Rd.	66	66	0	66	0
71	Waterman Rd.	Gerber Rd. to Florin Rd.	66	66	0	67	1
72	Vineyard Rd.	Gerber Rd. to Florin Rd.	63	62	-1	62	-1
73	Waterman Rd.	Florin Rd. to Elder Creek Rd.	NA	65	NA	66	NA

Source: FHWA-RD-77-108 with inputs from Fehr & Peers (2008) and Bollard Acoustical Consultants, Inc.

Table N-9: Predicted Distances to Cumulative Plus Project (Without Density Bonus, With Mitigation) Noise Contours

Segment	Roadway Name	Segment Description	Distance to Ldn Contour (feet)		
			70	65	60
1	Folsom Blvd.	SR 16 to Watt Ave.	72	155	334
2	Kiefer Blvd.	Florin-Perkins Rd. to Watt Ave.	32	68	147
3	Kiefer Blvd.	Watt Ave. to Rosemont Dr.	62	133	287
4	Kiefer Blvd.	Rosemont Dr. to Bradshaw Rd.	47	100	216
5	SR 16	Folsom Blvd. to Watt Ave.	80	172	370
6	SR 16	Watt Ave. to Bradshaw Rd.	101	217	467
7	SR 16	Bradshaw Rd. to Sunrise Blvd.	84	181	389
8	Fruitridge Rd.	Power Inn Rd. to Florin-Perkins Rd.	77	166	357
9	Fruitridge Rd.	Florin-Perkins Rd. to South Watt Ave.	68	147	316
10	Fruitridge Rd.	South Watt Ave. to Hedge Ave.	36	77	165
11	Elder Creek Rd.	Power Inn Rd. to Florin-Perkins Rd.	67	144	311
12	Elder Creek Rd.	Florin-Perkins Rd. to South Watt Ave.	53	114	245
13	Elder Creek Rd.	South Watt Ave. to Hedge Ave.	80	172	370
14	Elder Creek Rd.	Hedge Ave. to Bradshaw Rd.	93	200	431
15	Elder Creek Rd.	Bradshaw Rd. to Excelsior Rd.	51	110	238
16	Florin Rd.	Stockton Blvd to Power Inn Rd.	74	160	345
17	Florin Rd.	Power Inn Rd. to Florin-Perkins Rd.	69	148	318
18	Florin Rd.	Florin-Perkins Rd. to Gardner Ave.	89	192	413
19	Florin Rd.	Gardner Ave. to South Watt Ave.	94	202	435
20	Florin Rd.	South Watt Ave. to Hedge Ave.	73	158	341
21	Florin Rd.	Hedge Ave. to Bradshaw Rd.	82	177	382
22	Florin Rd.	Bradshaw Rd. to Excelsior Rd.	74	158	341
23	Florin Rd.	Excelsior Rd. to Sunrise Blvd.	61	132	285
24	Gerber Rd.	Stockton Blvd to Power Inn Rd.	53	115	248
25	Gerber Rd.	Power Inn Rd. to French Rd.	70	152	327
26	Gerber Rd.	French Rd. to Elk Grove-Florin Rd.	73	156	337
27	Gerber Rd.	Elk Grove-Florin Rd. to Bradshaw Rd.	78	168	363
28	Gerber Rd.	Bradshaw Rd. to Vineyard Rd.	59	128	275
29	Gerber Rd.	Vineyard Rd. to Excelsior Rd.	39	85	183
30	Vintage Park Dr.	Elk Grove-Florin Rd. to Waterman Rd.	48	103	222
31	Vintage Park Dr.	Waterman Rd. to Bradshaw Rd.	27	58	124
32	Calvine Rd.	Power Inn Rd. to Elk Grove-Florin Rd.	123	265	571
33	Calvine Rd.	Elk Grove-Florin Rd. to Grand Cru Dr.	84	181	391
34	Calvine Rd.	Grand Cru Dr. to Waterman Rd.	85	183	394
35	Calvine Rd.	Waterman Rd. to Bradshaw Rd.	71	153	330
36	Calvine Rd.	Bradshaw Rd. to Vineyard Rd.	78	167	360
37	Calvine Rd.	Vineyard Rd. to Excelsior Rd.	56	122	262
38	Calvine Rd.	Excelsior Rd. to Grant Line Rd.	41	89	191
39	Power Inn Rd.	Elder Creek Rd. to Florin Rd.	73	157	338
40	Power Inn Rd.	Florin Rd. to Gerber Rd.	78	169	364
41	Power Inn Rd.	Gerber Rd. to Calvine Rd.	63	136	293
42	Florin-Perkins Rd.	Folsom Blvd. to SR 16	82	177	381
43	Florin-Perkins Rd.	SR 16 to Fruitridge Rd.	85	183	395

Segment	Roadway Name	Segment Description	Distance to Ldn Contour (feet)		
			70	65	60
44	Florin-Perkins Rd.	Fruitridge Rd. to Elder Creek Rd.	88	190	410
45	Florin-Perkins Rd.	Elder Creek Rd. to Florin Rd.	69	150	322
46	French Rd.	Florin Rd. to Gerber Rd.	44	94	204
47	Watt Ave.	Folsom Blvd. to Kiefer Blvd.	142	307	661
48	South Watt Ave.	Kiefer Blvd. to SR 16	125	269	580
49	South Watt Ave.	SR 16 to Fruitridge Rd.	130	279	601
50	South Watt Ave.	Fruitridge Rd. to Elder Creek Rd.	136	292	630
51	South Watt Ave.	Elder Creek Rd. to Florin Rd.	117	252	544
52	Elk Grove-Florin Rd.	Florin Rd. to Gerber Rd.	134	289	623
53	Elk Grove-Florin Rd.	Gerber Rd. to Carlisle Ave.	145	313	674
54	Elk Grove-Florin Rd.	Carlisle Ave. to Vintage Park Dr.	104	223	481
55	Elk Grove-Florin Rd.	Vintage Park Dr. to Calvine Rd.	91	196	422
56	Hedge Ave.	SR 16 to Fruitridge Rd.	22	47	101
57	Hedge Ave.	Fruitridge Rd. to Elder Creek Rd.	32	70	150
58	Hedge Ave.	Elder Creek Rd. to Florin Rd.	40	87	187
59	Waterman Rd.	Vintage Park Dr. to Calvine Rd.	61	131	282
60	Bradshaw Rd.	Kiefer Blvd. to SR 16	146	315	678
61	Bradshaw Rd.	SR 16 to Elder Creek Rd.	67	144	309
62	Bradshaw Rd.	Elder Creek Rd. to Florin Rd.	117	251	542
63	Bradshaw Rd.	Florin Rd. to Gerber Rd.	122	262	565
64	Bradshaw Rd.	Gerber Rd. to Vintage Park Dr.	102	219	472
65	Bradshaw Rd.	Vintage Park Dr. to Calvine Rd.	85	184	396
66	Vineyard Rd.	Gerber Rd. to Calvine Rd.	49	105	226
67	Excelsior Rd.	SR 16 to Florin Rd.	58	125	270
68	Excelsior Rd.	Florin Rd. to Gerber Rd.	62	133	287
69	Excelsior Rd.	Gerber Rd. to Calvine Rd.	42	91	196
70	Waterman Rd.	Vintage Park Dr. to Gerber Rd.	55	119	256
71	Waterman Rd.	Gerber Rd. to Florin Rd.	57	123	266
72	Vineyard Rd.	Gerber Rd. to Florin Rd.	29	63	135
73	Waterman Rd.	Florin Rd. to Elder Creek Rd.	49	106	229

Note: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

Source: FHWA-RD-77-108 with inputs from Fehr & Peers (2008) and Bollard Acoustical Consultants, Inc.

Table N-10: Predicted Distances to Cumulative Plus Project (With Density Bonus, With Mitigation) Noise Contours

Segment	Roadway Name	Segment Description	Distance to Ldn Contour (feet)		
			70	65	60
1	Folsom Blvd.	SR 16 to Watt Ave.	73	157	339
2	Kiefer Blvd.	Florin-Perkins Rd. to Watt Ave.	32	68	147
3	Kiefer Blvd.	Watt Ave. to Rosemont Dr.	62	134	288
4	Kiefer Blvd.	Rosemont Dr. to Bradshaw Rd.	47	100	216
5	SR 16	Folsom Blvd. to Watt Ave.	80	173	373
6	SR 16	Watt Ave. to Bradshaw Rd.	101	217	468
7	SR 16	Bradshaw Rd. to Sunrise Blvd.	84	181	390
8	Fruitridge Rd.	Power Inn Rd. to Florin-Perkins Rd.	78	167	360
9	Fruitridge Rd.	Florin-Perkins Rd. to South Watt Ave.	70	150	324
10	Fruitridge Rd.	South Watt Ave. to Hedge Ave.	36	78	168
11	Elder Creek Rd.	Power Inn Rd. to Florin-Perkins Rd.	68	146	316
12	Elder Creek Rd.	Florin-Perkins Rd. to South Watt Ave.	54	117	252
13	Elder Creek Rd.	South Watt Ave. to Hedge Ave.	83	178	385
14	Elder Creek Rd.	Hedge Ave. to Bradshaw Rd.	95	205	443
15	Elder Creek Rd.	Bradshaw Rd. to Excelsior Rd.	52	112	241
16	Florin Rd.	Stockton Blvd to Power Inn Rd.	76	163	351
17	Florin Rd.	Power Inn Rd. to Florin-Perkins Rd.	70	151	325
18	Florin Rd.	Florin-Perkins Rd. to Gardner Ave.	91	197	425
19	Florin Rd.	Gardner Ave. to South Watt Ave.	97	208	449
20	Florin Rd.	South Watt Ave. to Hedge Ave.	76	164	353
21	Florin Rd.	Hedge Ave. to Bradshaw Rd.	86	185	398
22	Florin Rd.	Bradshaw Rd. to Excelsior Rd.	74	160	345
23	Florin Rd.	Excelsior Rd. to Sunrise Blvd.	62	134	289
24	Gerber Rd.	Stockton Blvd to Power Inn Rd.	54	117	251
25	Gerber Rd.	Power Inn Rd. to French Rd.	72	155	333
26	Gerber Rd.	French Rd. to Elk Grove-Florin Rd.	75	161	346
27	Gerber Rd.	Elk Grove-Florin Rd. to Bradshaw Rd.	81	174	374
28	Gerber Rd.	Bradshaw Rd. to Vineyard Rd.	61	131	282
29	Gerber Rd.	Vineyard Rd. to Excelsior Rd.	40	87	188
30	Vintage Park Dr.	Elk Grove-Florin Rd. to Waterman Rd.	48	103	222
31	Vintage Park Dr.	Waterman Rd. to Bradshaw Rd.	27	59	128
32	Calvine Rd.	Power Inn Rd. to Elk Grove-Florin Rd.	124	267	575
33	Calvine Rd.	Elk Grove-Florin Rd. to Grand Cru Dr.	85	182	393
34	Calvine Rd.	Grand Cru Dr. to Waterman Rd.	85	184	395
35	Calvine Rd.	Waterman Rd. to Bradshaw Rd.	71	153	330
36	Calvine Rd.	Bradshaw Rd. to Vineyard Rd.	78	168	362
37	Calvine Rd.	Vineyard Rd. to Excelsior Rd.	57	122	263
38	Calvine Rd.	Excelsior Rd. to Grant Line Rd.	41	89	191
39	Power Inn Rd.	Elder Creek Rd. to Florin Rd.	73	157	339
40	Power Inn Rd.	Florin Rd. to Gerber Rd.	78	169	364
41	Power Inn Rd.	Gerber Rd. to Calvine Rd.	63	136	293
42	Florin-Perkins Rd.	Folsom Blvd. to SR 16	84	180	389
43	Florin-Perkins Rd.	SR 16 to Fruitridge Rd.	86	185	399

Segment	Roadway Name	Segment Description	Distance to Ldn Contour (feet)		
			70	65	60
44	Florin-Perkins Rd.	Fruitridge Rd. to Elder Creek Rd.	89	192	413
45	Florin-Perkins Rd.	Elder Creek Rd. to Florin Rd.	70	150	324
46	French Rd.	Florin Rd. to Gerber Rd.	45	96	208
47	Watt Ave.	Folsom Blvd. to Kiefer Blvd.	143	308	663
48	South Watt Ave.	Kiefer Blvd. to SR 16	126	271	584
49	South Watt Ave.	SR 16 to Fruitridge Rd.	131	283	610
50	South Watt Ave.	Fruitridge Rd. to Elder Creek Rd.	138	297	641
51	South Watt Ave.	Elder Creek Rd. to Florin Rd.	121	260	561
52	Elk Grove-Florin Rd.	Florin Rd. to Gerber Rd.	134	288	620
53	Elk Grove-Florin Rd.	Gerber Rd. to Carlisle Ave.	149	320	690
54	Elk Grove-Florin Rd.	Carlisle Ave. to Vintage Park Dr.	106	229	494
55	Elk Grove-Florin Rd.	Vintage Park Dr. to Calvine Rd.	93	200	431
56	Hedge Ave.	SR 16 to Fruitridge Rd.	23	49	106
57	Hedge Ave.	Fruitridge Rd. to Elder Creek Rd.	36	77	166
58	Hedge Ave.	Elder Creek Rd. to Florin Rd.	44	95	204
59	Waterman Rd.	Vintage Park Dr. to Calvine Rd.	62	134	288
60	Bradshaw Rd.	Kiefer Blvd. to SR 16	147	317	684
61	Bradshaw Rd.	SR 16 to Elder Creek Rd.	67	145	312
62	Bradshaw Rd.	Elder Creek Rd. to Florin Rd.	119	257	554
63	Bradshaw Rd.	Florin Rd. to Gerber Rd.	123	266	573
64	Bradshaw Rd.	Gerber Rd. to Vintage Park Dr.	103	222	479
65	Bradshaw Rd.	Vintage Park Dr. to Calvine Rd.	86	186	400
66	Vineyard Rd.	Gerber Rd. to Calvine Rd.	49	106	227
67	Excelsior Rd.	SR 16 to Florin Rd.	58	126	271
68	Excelsior Rd.	Florin Rd. to Gerber Rd.	63	135	291
69	Excelsior Rd.	Gerber Rd. to Calvine Rd.	42	92	197
70	Waterman Rd.	Vintage Park Dr. to Gerber Rd.	57	123	266
71	Waterman Rd.	Gerber Rd. to Florin Rd.	59	127	274
72	Vineyard Rd.	Gerber Rd. to Florin Rd.	29	63	136
73	Waterman Rd.	Florin Rd. to Elder Creek Rd.	52	111	239

Note: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

Source: FHWA-RD-77-108 with inputs from Fehr & Peers (2008) and Bollard Acoustical Consultants, Inc.

Table N-11: Construction Equipment Noise

Type of Equipment	Maximum Level, dB at 50 feet
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85
Source: Environmental Noise Pollution, Patrick R. Cunniff, 1977.	

Aircraft Noise

The 60 dB CNEL noise exposure contours for Mather Airport are located well north of the project area. However, because a portion of the Plan Area is located within the Mather Airport Policy Area, new proposals for development of noise sensitive uses within that Policy Area would require that additional precautions be taken with respect to aircraft noise. The specific measures (disclosure statements, noise easements, ensured compliance with interior noise standards, etc.), are described above in the regulatory setting.

Project Impacts and Mitigation Measures

Impacts Associated With Construction Noise

CAC Land Use Plan/PD Land Use Plan

Activities associated with construction within the FVGCP would result in elevated noise levels in the immediate area of the construction. Activities involved in construction will typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet, as indicated in Table N-11. Construction activities would be subject to the County Noise Ordinance which limits construction to the hours of 6:00 a.m. to 8:00 p.m. Monday through Friday, and from 7:00 a.m. to 8:00 p.m. on Saturday and Sunday. As construction noise is temporary in nature, construction operations that are in compliance with the Noise Ordinance are not considered to result in a significant impact. Therefore, construction operations during implementation of the proposed project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)
None required.

Impacts Associated With an Increase in Traffic Noise Levels at Existing Noise Sensitive Land Uses in the Plan Area.

CAC Land Use Plan/PD Land Use Plan

Implementation of either the CAC or PD Land Use Plans would generate increased traffic on the existing roadway network. As noted in Tables N-7 and N-8, the project-related changes in traffic noise levels are predicted to range from 0 dB to an increase of 2 dB relative to future conditions without the project. A substantial increase in traffic noise levels is defined by the County for an increase of 3 dB or more. Because the identified project-related traffic noise level increases due to the project do not exceed the 3 dB threshold, implementation of either Land Use Plan (including density bonus) would have a ***less-than-significant*** impact on existing noise sensitive land uses.

Mitigation Measure(s)
None required.

Impacts Associated With Aircraft Noise on Future Land Uses Within the FVGCP.

CAC Land Use Plan/PD Land Use Plan

The Mather Airport 60 dB CNEL noise contour does not extend into the FVGCP. As a result, adverse noise impacts are not identified for development within the FVGCP area relative to the Sacramento County General Plan Noise Standards. However, because a portion of the FVGCP area is located within the Mather Airport Planning Area, aircraft over-flights could result in negative public reaction. All projects within the Mather Airport Planning Area would be required to comply with the following policies established for the Mather Airport Planning Area in the Sacramento County General Plan:

1. Notification in the Public Report prepared by the California Department of Real Estate disclosing the fact to prospective buyers that the parcel is located within the Mather Airport Policy Area.

2. An Avigation Easement prepared by the Sacramento County Counsel's Office granted to the County of Sacramento and recorded with the Sacramento County Recorder and file with Department of Airports. Such Avigation Easement shall acknowledge the property location within the Mather Airport Policy Area and shall grant the right of flight and unobstructed passage of all aircraft into and out of Mather Airport.

Compliance with the General Plan policies would ensure that new residents are aware of the potential for overflights. Therefore, implementation of the proposed project would have a ***less-than-significant*** impact to the continued operation of Mather Airport.

MITIGATION MEASURE(S)
None required.

IMPACTS ASSOCIATED WITH TRAFFIC AND RAILROAD NOISE LEVELS AT FUTURE NOISE-SENSITIVE USES PROPOSED WITHIN THE FVGCP.

CAC LAND USE PLAN/PD LAND USE PLAN

TRAFFIC NOISE

The distance from the predicted 60, 65, and 70 dB L_{dn} contours for the FVGCP roadways following buildout of the either Land Use Plan (with and without density bonus) are provided in Tables N-9 and N-10. As shown in Table N-10, the predicted 65 dB L_{dn} noise contours for 63 of the 73 roadway segments exceed 100 feet in distance. The smallest 65 dB L_{dn} noise contour, 49 feet along Hedge Avenue, is along a two-lane roadway; therefore, the noise contour would likely extend into the private areas of any residences placed alongside the roadway. The largest 65 dB L_{dn} noise contour extends 320 feet from Elk Grove-Florin Road, even though the roadway would be four lanes wide, such a noise contour would extend well into any adjacent developments. In addition, the interior noise standards could be exceeded within noise-sensitive uses located within the 70 dB L_{dn} noise contour, assuming a 25 dB attenuation from standard construction. Interior noise level impacts would be most likely along SR 16, Calvine Road, Watt Avenue/South Watt Avenue, Elk Grove-Florin Road, and Bradshaw Road where the 70 dB L_{dn} noise contour exceeds 100 feet; however, adverse impacts along smaller roads could occur depending on the placement and orientation of buildings. Therefore, implementation of the proposed project could result in adverse impacts to outdoor activity areas of any proposed residential uses located within the 65 dB contours, and adverse impacts to interior areas of residential uses located within the 70 dB contours shown in Tables N-9 and N-10.

RAILROAD NOISE

As outlined above, the resumption of heavy rail traffic along the CCTC right-of-way is considered to be unlikely. Light rail traffic would require approximately 100 train trips per day to exceed 65 dB L_{dn} at the edge of the existing right-of-way. Such a level of traffic would require the train to run trains in both directions at less-than thirty minute intervals 24 hours a day. While peak hour intervals could be as low as 15 minutes, overall operations are unlikely to occur on a 24 hour basis, and the number of train trips would be unlikely to exceed 100. Furthermore, establishment of light-rail rail operations within the right-of-way would require project-specific environmental review. Given the uncertainty regarding uses of the right-of-way, the unlikelihood of light rail traffic exceeding 100 trips per day, and the future environmental review, noise generated by the CCTC would be unlikely to result in adverse impacts to noise-sensitive development within the FVGCP.

As shown in Table N-3 and Plate N-3, the 65 dB L_{dn} noise contour would extend 423 feet from the UPRR tracks. Therefore, any residential or noise sensitive development within 423 feet of the tracks would have exterior noise levels that exceed County standards. Measurements indicate that the noise level at 100 feet is approximately 74 dB L_{dn}; therefore, interior noise standards, assuming a 25 dB attenuation from standard construction, would be exceeded within any residences constructed within 100 feet of the UPRR tracks. Therefore, the development of private exterior spaces within 423 feet of the tracks, or the construction or residential uses within 100 feet of the tracks could result in the exceedance of County interior and exterior noise standards.

CONCLUSION

As outlined above, traffic along roadways and railroad tracks within the FVGCP would result in noise levels that exceed the acceptable residential standards. In addition, commercial, office, and industrial standards could be exceeded for uses directly adjacent to the UPRR tracks or major roadways. Therefore, implementation of either the CAC Land Use Plan or the PD Land Use Plan would result in ***potentially significant*** impacts related to noise.

MITIGATION MEASURE(S)

Implementation of the following mitigation measures would reduce impacts to a *less-than-significant* level.

N-1 *All residential development projects within the identified 65 dB L_{dn} noise contour (as identified in Tables N-3 and N-10 of this EIR) shall be designed and constructed to reduce noise levels to within General Plan Noise Element standards for exterior activity areas. Potential options for achieving compliance with noise standards include, but are not limited to, noise barriers, increased setbacks, and/or strategic placement of structures. Rubberized asphalt may be considered as mitigation for traffic noise where appropriate, subject to coordination with and approval by the County Department of Transportation. An acoustical analysis substantiating the required noise level reduction, prepared by a qualified acoustical consultant shall be submitted to and verified by the Department of Environmental Review and Assessment prior to the issuance of any building permits for the site.*

N-2 *All residential development projects within the identified 70 dB L_{dn} noise contour (as identified in Tables N-3 and N-10 of this EIR) shall be designed and constructed to achieve an interior noise level of 45 dB Ldn or less. An acoustical analysis substantiating the required noise level reduction, prepared by a qualified acoustical consultant, shall be submitted to and verified by the Department of Environmental Review and Assessment prior to the issuance of any building permits for the site.*

Impacts Associated With the Development of Noise-Producing Uses Within the FVGCP.

CAC Land Use Plan/PD Land Use Plan

Noise-producing aspects of certain land uses which would be developed within the FVGCP such as industry, commercial loading docks, aggregate mining etc., developed within the appropriately zoned land use areas could generate elevated noise levels in the vicinity of existing or proposed noise-sensitive land uses. If noise-producing uses were to elevate noise levels on adjacent sites to levels above the County General Plan noise standards a ***potentially significant*** impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce impacts to a *less-than-significant* level.

N-3 All industrial or commercial development projects located adjacent to residentially designated properties shall be designed and constructed to ensure that noise levels generated by the uses do not result in General Plan Noise Element standards being exceeded on adjacent properties. An acoustical analysis substantiating the required noise level reduction, prepared by a qualified acoustical consultant shall be submitted to and verified by the Department of Environmental Review and Assessment prior to the issuance of any building permits for the site. The acoustical analysis shall include, but not be limited to, consideration of potential noise conflicts due to operation of the following items:

- *Mechanical building equipment, including HVAC systems;*
- *Loading docks and associated truck routes;*
- *Refuse pick up locations; and*
- *Refuse or recycling compactor units.*

Specific designs for proposed facilities will be submitted to Sacramento County for approval prior to issuance of building permits to ensure compliance with noise standards.

Cumulative Impacts and Mitigation Measures

Cumulative development includes the FVGCP area in conjunction with the development of the surrounding communities.

Impacts Associated with Increases in Traffic Noise Levels at Existing Sensitive Land Uses Due to Cumulative Development.

CAC Land Use Plan/PD Land Use Plan

In conjunction with cumulative development of Sacramento County, including the nearby communities of Elk Grove and Rancho Cordova, the project would generate increased traffic on the existing roadway network. As shown in Tables N-8 and N-9, the increased traffic levels would result in an increase in traffic related noise levels. However, compared to the Cumulative No-Project traffic noise levels, the project related traffic volumes would only result in a 0 to 2 dB increase in traffic noise levels. Because the predicted noise increases are below the 3 dB threshold of significance, implementation of either the CAC or PD Land Use Plans (with or without density bonuses) would result in a ***less-than-significant*** cumulative impact.

Mitigation Measure(s)
None required.

15 CULTURAL RESOURCES

INTRODUCTION

The Cultural Resources section of the EIR describes existing and potentially occurring cultural resources within the Florin-Vineyard Gap Community Plan (FVGCP) area. The section discusses potential impacts to cultural resources that could result from buildout of the FVGCP area.
Information in this section is based upon the Sacramento County *General Plan* and the cultural resources analysis conducted Peak & Associates.

CULTURAL RESOURCES SETTING

The Florin Vineyard Gap Community Plan project area is located in south central Sacramento County, California, and contains approximately 3,766 acres. The northern boundary of the area is roughly along Elder Creek Road and South Watt/Elk Grove Florin Road forms a partial western boundary; Florin Road and Gerber Road also form partial project boundaries. The Community Plan area lies within portions of section 36, Township 8 North, Range 5 East; sections 31, 32, and 33, Township 8 North, Range 6 East; sections 1 and 12, Township 7 North, Range 5 East; and sections 6, 7 and 8, Township 7 North, Range 6 East, mapped on the Sacramento East, Carmichael, Florin and Elk Grove USGS topographic quadrangles.

PREHISTORIC BACKGROUND

The Sacramento Valley region was populated by indigenous people for thousands of years prior to the influx of Euro-American settlers in the mid-1800s. In fact, occupation in the Sacramento Valley during the Prehistoric Period is estimated to have occurred as early as 12,000 years ago, but only a few archaeological sites have been identified that predate 5,000 years ago. Essentially this is based on the possibility that Holocene alluvial deposits buried many prehistoric sites in Sacramento County. For example, Moratto (1984) has estimated that as much as 10 meters of sediment accumulated along the lower stretch of the Sacramento drainage system during the last 5,000 -6,000 years. Prehistoric material culture in central California (including the Sacramento Valley) subsequent to the Paleoindian Period has been categorized according to “horizons” or “patterns” that define broad technological, economic, social, and ideological elements over long periods of time and large areas. A three-part cultural chronological sequence, the Central California Taxonomic System (CCTS) was developed by researchers to explain local and regional cultural change in prehistoric central California from about 4,500 years ago to the time of European contact, and was further developed after the advent of radiocarbon dating (Fredrickson 1973, Ragir 1972).

Today, a series of generalized periods associated with regionally based "patterns" are typically used as part of the CCTS for the Sacramento Delta area, San Francisco Bay area, and North Coast ranges (Fredrickson 1973). Smaller units of patterns are referred to as "aspects" and "phases." Revisions of the widely accepted CCTS are found in a recent volume edited by Hughes (1994). Fredrickson (1973) defined several regionally based patterns, of which three are specific to Central Valley prehistory and the current project area, namely the Windmiller Pattern, Berkeley Pattern, and Augustine Pattern. Each of these patterns represents a general pattern of resource exploitation, as identified between 2500 B.C. and the beginning of Euro-American contact (A.D. 1769). These patterns are present within the following horizon sequences: Early Horizon/Windmiller Pattern, Middle Horizon/Berkeley Pattern, and Late Horizon/Augustine Pattern. These patterns are illustrated below in Table CR-1 and are discussed in more detail below (based on the CCTS classification scheme and Fredrickson).

Table CR-1
General Archaeological Patterns Documented in Sacramento County

Period	Archaeological Unit	Patterns
Archaic 6,000 B.C.–A.D. 1,000	**Windmiller** 2,500 B.C.–500 B.C.	Social stratification inferred from burials; distant trade; flaked stone, bone, ground stone, baked clay, and shell items.
	Berkeley 500 B.C.– A.D. 500	Reliance on acorns; groundstone; mortar and pestle; extensive bone tool kit; unique knapping techniques; shell beads and pendants
	Augustine A.D. 500–A.D. 1800	Increased reliance on hunting, gathering, and fishing. Bow and arrow; extensive trade.

Windmiller Pattern (2500–500 B.C.)

Clearly documented evidence for human occupation in the general area is found at sites characteristic of the Windmiller Pattern, or Early Horizon. These sites date to as early as 4,500 years ago and as late as 2,500 years ago (2500–500 B.C.). The Windmiller Pattern (Early Horizon), as defined by Fredrickson (1973), was first identified at Windmiller site (CA-SAC-107). Sites in this pattern are characterized by extended burials oriented toward the west and often contain grave goods, including baked clay balls, charmstones, and exotic minerals. Fishing and gathering of acorns are apparently emphasized. Elk, deer, pronghorn antelope, rabbits, and waterfowl were hunted in quantity. Villages appear to have been occupied year round and were situated along drainages. Radiocarbon dating of Windmiller Pattern deposits points to an occupation

beginning around 4,350 years ago (prior to 2,400 B.C.) and continuing until around 500 B.C. (Heizer 1949, Johnson 1982, Moratto 1984, Ragir 1972).
Most of what is known about the Early Horizon in the Central Valley comes from cemetery and habitation sites along the Cosumnes and Mokelumne Rivers. The typical site is stratified with later period components located above the basal Windmiller Pattern deposits. Johnson (1982) notes that virtually all Early Horizon sites have some detectable midden, and every Windmiller Pattern site in the lower Sacramento Valley and the Sacramento-San Joaquin Delta (Delta) known to date contains human remains. Meighan argues that the evidence for residential occupation or the presence of midden at the classic Early Horizon sites is very limited and that the sites actually represent specialized mortuary mounds (Meighan 1987).

Berkeley Pattern (500 B.C.–A.D. 500)

Over a 1,000-year period, the Windmiller Pattern began to shift to the more specialized, adaptive Berkeley Pattern, or Middle Horizon (500 B.C.–A.D. 500). A refinement in subsistence strategies and eastward population movement related to Miwok occupation is suggested by this pattern (Moratto 1984). A distinct focus on acorns as a dietary staple is evident in the archaeological record of this period. Technologically, the Berkeley Pattern is distinguished from the Windmiller Pattern by evidence of more frequent use of mortars and pestles; a well-developed bone industry; distinctive diagonal flaking of large, concave-based projectile points; and certain forms of Olivella and Haliotis shell beads and ornaments (Fredrickson 1973, Moratto 1984).

Augustine Pattern (A.D. 500–1800)

The third pattern defined by Fredrickson is the Augustine (Late Horizon), which appears to represent large, dense populations, each with a major tribelet center surrounded by smaller villages. Subsistence practices within this pattern include the development of an intensive fishing industry, along with the hunting of fame and the continued use of acorns (Fredrickson 1973); all these practices are seen in the archaeological record after about A.D. 500 (Moratto 1984). Native American populations appear to have been highly socialized and hierarchically stratified during this time. Both cremations and flexed burials were used. Cook (1955a) estimates that at least 50,000 individuals lived in the Sacramento Valley at one time, with dense population concentrations in the region. Complex exchange systems and elaborate ritual ceremonies became integral components of the Native American culture in the Central Valley during this time (Fredrickson 1973). Radiocarbon analysis has dated sites in the valley, such as the Blodgett site (CA-SAC-267) and CA-YOL-13 at Knights Landing, from A.D. 580 to A.D. 1605 (Elsasser 1978, Johnson 1982, Johnson et al. 1976, Kielusiak 1982, Moratto 1984).
Moratto (1984) postulates that the Augustine Pattern represents the southward incursion of Wintu populations and the introduction of many of the cultural

materials found in archaeological contexts, including shaped mortars and pestles, bone awls, the bow and arrow, and shell and steatite beads. Pottery-making technology is also found in some parts of the Central Valley during the last prehistoric period (Moratto 1984).

CULTURAL HISTORY

ETHNOGRAPHY

Ethnography is the written record of a culture. Archaeology can be combined with ethnography to identify groups more specifically. Ethnographic records (from missions and other documents) show that the groups that inhabited Sacramento County are the Nisenan, or Southern Maidu, and the Plains Miwok, a subgroup of the Eastern Miwok. The proposed project is located at the boundary of two different groups who occupied the Sacramento region at the time of historic contact, the Nisenan to the north and the Plains Miwok to the south. Brief summaries of the lifeways of the groups are presented below.

Nisenan

The project area lies in the territory attributed to the Nisenan, a branch of the Maidu group of the Penutian language family. Tribes of this language family dominated the Central Valley, San Francisco Bay areas, and western Sierra Nevada foothills at time of European settlement. The Nisenan controlled the drainages of the Yuba, Bear, and American rivers, along with the lower portion of the Feather River. The tribes of this whole region referred to themselves as Nisenan, meaning "people," in contrast to the surrounding tribes, in spite of close linguistic and cultural similarities. However, the local main village was of more importance to the people than the tribal designation, and groups identified themselves by the name of the central village.

The northern territorial boundary of the Nisenan has not been clearly established due to similarity in language to neighboring groups. The eastern boundary was the crest of the Sierra Nevada mountains. The confluence of the American and Sacramento rivers on the valley floor was likely their southern boundary. The western boundary extended from the confluence of the American and Sacramento rivers upstream to the mouth of the Feather River.

The Valley Maidu settlement pattern was basically oriented to major river drainages, with ancillary villages located on tributary streams and sloughs. Major villages often supported a population exceeding five hundred people (Wilson and Towne 1978:389). The flat grasslands between watercourses were used for collecting vegetable foods and hunting; however, these activities leave little, if any, archeological evidence.

Both the valley and foothill Nisenan lived by hunting and gathering, with the latter being more important. Acorns in the forms of meal, soup or bread provided the staple diet, augmented by a wide variety of seeds and tubers. Hunting and fishing were regularly practiced, but provided less of the diet than vegetable foods. The bedrock mortar and pestle were employed to process the acorn meats into flour, and the mortar cups are frequently found throughout the range of oak trees. Both salmon and eel were caught at Salmon Falls near Folsom. Religion was in the form of the "Kuksu Cult," a widespread pattern among the California Indians. Ceremonies congregated in the semi-subterranean dancehouse located at the central village and "cry sites" where the annual mourning ceremony for the dead took place. Later, the religious revival of the ghost dance also affected this area.

In 1833, the great epidemic swept through the Sacramento Valley. The epidemic has been attributed to malaria (Cook 1955:308), and is estimated to have killed seventy-five percent of the native population, leaving only a shadow of the original Maidu to face the intruding miners and settlers. The Nisenan of the mountain areas felt little of the impact of European settlement in California as compared to the Valley Nisenan, some of which were coerced into living and working in the Spanish missions. While the remote location of the Mountain Nisenan separated them from the early impacts of European settlement, the Mountain Nisenan were overwhelmed by the settlers involved in the gold rush. Native ways of life were almost totally abandoned, and today only a few families in Placer, Nevada, Yuba, and El Dorado counties identify themselves as Nisenan and can speak the language (Wilson and Towne 1978).

Plains Miwok

The Eastern Miwok represent one of the two main divisions of the Miwokan subgroup of the Utian language family (Levy 1978:398). The Plains Miwok, one of five separate cultural and linguistic groups of the Eastern Miwok, occupied the lower reaches of the Mokelumne, Cosumnes and Sacramento rivers including the area of south Sacramento County surrounding the project area. Linguistic studies and the application of a lexicostatistic model for language divergence suggest that Plains Miwok was a distinct linguistic entity for the last 2,000 years (Levy 1970). The lengthy period of linguistic distinction has led researchers such as Richard Levy (1978:398) to conclude that the Plains Miwok inhabited the Sacramento Delta for a considerable period of time.

The political organization of the Plains Miwok centered on the tribelet. Tribelets were comprised of 300 to 500 individuals (Levy 1978:410). Each tribelet was thought to control a specific area of resources and usually consisted of several villages or hamlets. Each tribelet also was divided along lineages. The lineages were apparently localized to a specific geographic setting and most likely represented a village site and their associated satellite sites where the seasonal collection of resources occurred (Levy 1978:398-399). Each settlement

apparently contained roughly 21 individuals according to data collected by Gifford (Cook 1955:35).

The diet of the Plains Miwok emphasized the collection of floral resources such as acorns, buckeye, gray pine nuts, seeds from the native grasses and various fresh greens. Faunal resources such as tule elk, pronghorn antelope, deer, jackrabbits, cottontails, beaver, gray squirrels, woodrats, quail and waterfowl were hunted. Fishing, particularly salmon and sturgeon, contributed significantly to the Plains Miwok diet (Levy 1978:402-403). The primary method of collecting fish was by nets, but the use of bone hooks, harpoons and obsidian-tipped spears is also known ethnographically (Levy 1978:404).

Both twined and coiled basketry were manufactured by the Eastern Miwok. The uses of baskets included the collection and storage of seeds, basketry cradles and gaming (Levy 1978:406). Tule mats were also known to have been used by the Plains Miwok primarily as a floor covering. Other uses of tule included the manufacture of the tule balsa, a water craft in which native people navigated and exploited adjacent delta and major river systems.

Four main types of structures were known among the Eastern Miwok, depending on the environmental setting. In the mountains, the primary structure was a conical structure of bark slabs. At lower elevations the structures consisted of thatched structures, semi-subterranean earth-covered dwellings and two types of assembly houses used for ceremonial purposes (Levy 1978:408-409). Bennyhoff (1977:11) characterized the Plains Miwok as intensive hunter-gatherers, with an emphasis upon gathering. The seasonal availability of floral resources defined the limits of the group's economic pursuits. Hunting and fishing subsistence pursuits apparently accommodated the given distribution of resources. The Plains Miwok territory covered six seasonally productive biotic communities and as such native people could apparently afford to pick and choose the resources they ranked highest from each of these zones. The subsequent storage of floral resources (such as acorns in granaries) allowed for a more stable use of the resource base (Bennyhoff 1977:10). The acorn was apparently the subsistence base needed to provide an unusually productive environment as earlier non-acorn using peoples who resided in the same geographic setting apparently suffered some seasonal deprivation (Schulz 1981). Such an emphasis upon the gathering of acorns is consistent with the population increase evident during the Upper Emergent Period in California (Doran 1980).

The study of piscine (fish) remains from both CA-SAC-65 (Schulz et al. 1979) and CA-SAC-145 (Schulz n.d.; Schulz and Simons 1973) indicates that small villages away from the major rivers appear to concentrate on the collection of piscine species (particularly the Sacramento perch) that inhabited slow-moving waters. As major rivers are not located in the project area, this would likely have been true of any village located within or near the project area, if there was a village in the immediate area.

The project area vicinity is not known to be controlled by any particular tribelet of the Plains Miwok, but appears to lie in an unoccupied boundary zone between the Plains Miwok and the antagonistic Nisenan to the north (Bennyhoff 1977:58).

HISTORY

In 1844, the Mexican governor awarded a grant of over 35,500 acres of land on the south side of the American River to William A. Leidesdorff, born in the Virgin Islands to a Danish planter father and a woman of African descent. He came to California in 1841, settling in the village of Yerba Buena (later San Francisco), and became a prominent and wealthy citizen. Leidesdorff built an adobe house on his rancho in 1846, near the site of Routier. He died in 1848, and Joseph Folsom purchased the entire land grant from Leidesdorff's heirs.

The lands of this portion of Sacramento County are primarily dry plains, cut by occasional drainages. Elder Creek crosses the project area, with Morrison Creek just north of the project area. The lands along the major drainages were the first to be occupied with settlement occurring in the dry plains and on the lesser drainages such as Elder Creek in the late 1850s and early 1860s.

The lands of this portion of Sacramento County were used for dry land farming for crops such as grain and hay. With a permanent water source, some of the lands could be used for grapes and orchards, or for dairies.

The four townships involved were mapped in various years from 1855 to 1866 by the General Land Office. The two townships mapped in the earlier period in Township 7 North do not show any residences or developments other than several roadways. In the northern townships, Township 8 North Range 5 East did not have any buildings in the project area, but Township 8 North Range 6 East had three homes and a schoolhouse mapped in 1866. Elder Creek is shown as an "arroyo" suggesting that the creek was a fairly minor drainage. The lands of the project area were owned in parcels ranging in size from 40 to 640 acres (Official County Map 1885).

As with elsewhere in this portion of the County, parcels tended to become smaller over time. By 1903, an agricultural colony had been established in section 12 (T8NR5E), with some parcels subdivided as small as ten acres in size. The colony was known as the W & K No. 6 (Official County Map 1903). By 1911, the greater portion of the project area had been subdivided as agricultural colonies. The exception to the trend to subdivide is the holding of all of section 8 (T7NR6E) by the Gerber family (Official County Map 1911). By 1923, even this tract had been split into ten and twenty acre parcels as part of "Wolf Heights" (Official County Map 1923).

The early years of the twentieth century were an era of rapid development of a large number of interurban electrified railways. Technological advances related to the production and long-distance transmission of hydroelectric generated power in the late nineteenth century made this a popular form of transportation for passenger service and freight service throughout the virtually flat terrain of the Central Valley. One of the systems to be organized and built in this era was the Central California Traction Railroad. The corporation was organized in 1905 with three goals in mind: to compete with the Southern Pacific and Western Pacific railroads for transporting agricultural products from farms on the east side of the San Joaquin and Sacramento valleys; to develop farmland along the railroad right-of-way; and to provide a major customer for the power company owned by several of the corporate directors.

The 53-mile Central California Traction Railroad main line connected Sacramento with Stockton, with a branch from the main line to Lodi. The section from Sheldon to Sacramento including the section near the project area was completed in 1910. Almost from the beginning, the railroad built up a substantial freight business, and was a financial success. In the 1920s, Southern Pacific, Santa Fe and Western Pacific purchased the railway jointly. Eventually, the increasing use of personal automobiles and bus lines brought a reduction in the number of passengers for the Central California Traction Railroad, and passenger service was eliminated in 1933. In 1946, the use of electricity was discontinued in favor of diesel service (Hilton and Due 1960: 401; Fickewirth 1992:27).

REGULATORY CONTEXT

FEDERAL GOVERNMENT

Federal policies, laws, and regulations that apply to the proposed project include the National Historic Preservation Act, the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act (AIRFA) of 1978, the Archaeological Resources Protection Act (ARPA) of 1979, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1989, among others. The National Historic Preservation Act is summarized below.

NATIONAL HISTORIC PRESERVATION ACT

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementation regulations, "Protection of Historic Properties," are found in 36 Code of Federal Regulations Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites that are listed on or have been determined eligible for listing on

the National Register of Historic Places. The criteria for determining National Register eligibility found in 36 Code of Federal Regulations Part 60 is included in the Standards of Significance section below.

Amendments to the Act (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provision for Native American consultation and participation in the Section 106 review process. Although federal agencies must follow federal regulations, most projects of private developers and landowners do not require this level of compliance. Federal regulations only apply in the private sector if a project requires a federal permit or if the project uses federal money.

Under National Historic Preservation Act, the quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, material, handiwork, feeling, and association. Additionally, the National Register of Historic Places requires consideration of significance of any structure over 45 years old.

STATE OF CALIFORNIA

CALIFORNIA ENVIRONMENTAL QUALITY ACT

State historic preservation regulations affecting this project include the statutes and guidelines contained in the California Environmental Quality Act (Public Resources Code sections 21083.2 and 21084.1 and sections 15064.5 and 15126.4 (b) of the California Environmental Quality Act Guidelines). The California Environmental Quality Act requires lead agencies to carefully consider the potential effects of a project on historical resources. An “historical resource” includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript that is historically or archaeologically significant (Public Resources Code Section 5020.1).

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor’s Office of Planning and Research. The technical advice series produced by the Governor’s Office of Planning and Research strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associations and societies be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of the antiquity and provides for the sensitive treatment and disposition of those remains.

California Register of Historical Resources

The State Historic Resources Commission oversees the administration of the California Register of Historical Resources (Public Resources Code Section 5020.3[a][8]). Properties that are formally determined eligible for, or those that are listed on the National Register of Historic Places are automatically listed on the California Register of Historical Resources, along with State Historical Landmarks and Points of Historical Interest [Public Resources Code Section 5024.1(d)(1)]. The California Register of Historical Resources can also include properties designated under certain local ordinances or identified through local historical resource surveys under certain circumstances [Public Resources Code Section 5024.1(d)(2-3)]. The criteria for determining California Register eligibility found in PRC Section 5024.1(c)(1-4) is included in the Standards of Significance section below.

Senate Bill 18

Senate Bill 18, signed into law by Governor Schwarzenegger in September 2004, requires cities and counties to notify and consult with California Native American Tribes about proposed adoption of, or changes to, general plans and specific plans for the purpose of protecting Traditional Tribal Cultural Places ("cultural places"). Interim tribal consultation guidelines were published by the Governor's Office of Planning and Research on March 1, 2005. The proposed project falls under the SB 18 requirements as defined by OPR, and as outlined above, the County has contacted the tribes included on the list supplied by the Native American Heritage Commission.

Sacramento County General Plan

The following are applicable General Plan policies related to cultural resources:

Conservation Element

The Sacramento County General Plan Conservation Element, states under Section VI, Cultural Resources, the following goal:

Goal — Promote the inventory, protection, and interpretation of the cultural heritage of Sacramento County, including historical and archaeological settings, sites, buildings, features, artifacts, and/or areas of ethnic historical, religious, or socio-economical importance.

In addition, the Conservation Element has specific objectives related to (and among others) the protection of archaeological sites during development, historic structure preservation, and destruction of cultural resources sites. Following are

the applicable General Plan Conservation Element cultural resources objectives that would be applicable to the FVGCP and associated projects:

Objective Attention and care during project review and construction to ensure that cultural resources sites, either previously known or discovered on the project site, are properly protected with sensitivity to cultural and ethnic values of all affected.

Objective Structures such as buildings, bridges, or other permanent structures with architectural or historical importance preserved to maintain exterior design elements.

Objective Protect any known cultural resources from vandalism, unauthorized excavation, or accidental destruction.

The following policies may apply to the project:

CO-157 Significant archaeological, prehistoric, or historic sites shall be protected as open space for potential future excavation.

CO-158 Native American burial sites encountered during pre-approved survey or during construction shall, whenever possible, remain in situ. Excavation and reburial shall occur when in situ preservation is not possible or when the archaeological significance of the site merits excavation and recording procedure. On-site re-internment shall have priority. The project developer shall provide the burden of proof that off-site re-interment is the only feasible alternative. Re-interment shall be the responsibility of the local tribal representatives.

CO-159 The cost of all excavation conducted prior to completion of the project shall be the responsibility of the project developer.

CO-160 Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.

CO-161 As a condition of approval of discretionary permits, a procedure shall be included to cover the potential discovery of archaeological resources during development or construction.

CO-162 As a condition of approval for discretionary projects which are in areas of cultural resource sensitivity, the following procedure shall be included to cover the potential discovery of archeological resources during development or construction:

Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914. At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

CO-163 Conduct surveys and designate structures with architectural or historical importance on community plan maps. Where appropriate, plans shall designate significant historical architectural districts.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

In order for a cultural resource to be considered a “historic property” under NRHP criteria (i.e., eligible for inclusion on the NRHP), it must be demonstrated that the resource possesses *integrity* of location, design, setting, materials, workmanship, feeling and association, and must meet at least one of the following four criteria delineated by Section 106 (Advisory Council on Historic Preservation 2000), as listed in 36 CFR 60.4:

(a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
(b) That are associated with the lives of persons significant in our past; or
(c) That embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
(d) That have yielded, or may be likely to yield, information important in prehistory or history.

The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP, enumerated above, and require similar protection to what NHPA Section 106 mandates for historic properties. According to PRC Section 5024.1(c)(1-4), a

resource is considered *historically significant* if it meets at least one of the following criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
(2) Is associated with the lives of persons important in our past;
(3) Embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values; or
(4) Has yielded, or may be likely to yield, information important in prehistory or history.

Under CEQA, if an archeological site is not a significant “historical resource” but meets the definition of a “unique archeological resource” as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined as follows:

> An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
> (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
> (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Resources that neither meet any of these criteria for listing on the NRHP or CRHR nor qualify as a “unique archaeological resource” under CEQA PRC Section 21083.2 are viewed as not significant. Under CEQA, “A nonunique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects” (PRC Section 21083.2(h)).

Impacts to *significant* cultural resources (“historic properties” under NHPA and “historical resources” under CEQA) that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed on or eligible for listing on the CRHR are considered a significant effect on the environment. Impacts to *significant* cultural resources from the proposed project are thus considered significant if the project physically destroys or damages all or part of a resource, changes the character of the use of the resource or physical feature within the setting of the resource which contribute to its significance or introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

METHOD OF ANALYSIS

Archival research, Native American consultation, and fieldwork were conducted to establish what cultural resources may be present within the plan area and, furthermore, may be impacted as a result of implementation of the FVGCP. Archival research and Native American consultation was conducted for the entire plan area, while fieldwork occurred only on participating properties.

ARCHIVAL RESEARCH

The following information sources were considered relevant to evaluating the FVGCP area, and the types of cultural resources sites and site distribution which might be encountered within the area: (1) Data maintained by the North Central Information Center of the California Historical Resources Information System (CSU-Sacramento) including State and federal listings and data bases, (2) input from Native American representatives and the Native American Heritage Commission (NAHC), and (3) available published and unpublished documents relevant to regional prehistory, ethnography, and early historic developments. It should be noted that information obtained as a result of consultation with the NAHC and Native American representatives is discussed in the “Native American Consultation” section, below.

The Department of Environmental Review and Assessment requested a record search to be conducted at the NCIC, by NCIC staff (S. Torpy) for the project area. These records document the following conditions for the project area:

> Twenty cultural resources studies have been undertaken within a quarter-mile radius of the project area. No prehistoric sites have been formally recorded or otherwise identified within the project area. However, twenty-five historic resources had been recorded within the general quarter-mile search radius. Previously recorded resources include numerous structures and residential complexes and California Central Traction Railroad (CA-SAC-506H) and Elk Grove-Florin Road (CA-SAC-545H). It should be noted that at the time of the record search some of the previously recorded resources and prior studies noted were the result of cultural resources studies that had been conducted on participating properties as part of the FVGCP project.

In addition to examining records maintained by the North Central Information Center, the following sources were also consulted:

- The California Inventory of Historic Resources (State of California 1976);
- The California Historical Landmarks (State of California 1996);
- California Department of Transportation Bridge Inventory;
- California State Points of Historical Interest (1992);

- OHP Historic Property Directory;
- Historic Spots in California (1990); and
- Historic County Maps and GLO Plats.

The NCIC record search indicated that due to known land use patterns there is a low potential for identifying prehistoric cultural resources within the overall plan area with a moderate potential along Morrison, Elder and Beacon creeks and their tributaries. Additionally, the NCIC considered the plan area to have a moderate sensitivity for historic period resources.

Native American Consultation

A letter was sent to the Native American Heritage Commission (NAHC) requesting a check of the Sacred Lands files. The check failed to reveal any properties listed as Sacred Lands. The NAHC did provide a list of individuals and groups to contact regarding the property. Letters were sent to Leland Daniels; Frank Navarrette, Glen Villa Jr., and Matthew Franklin of the Ione Band of Miwok Indians; Mary Daniels-Tarango of the Miwok Indian Community of the Wilton Rancheria; and Dwight Dutschke, Sierra Native American Council. To date, responses have not been received. The project area was discussed with Mr. Daniels on March 18, 2006. He had participated in a survey in 2004 on a portion of the project area (the proposed site, at the time, of Elk Grove Seventh School) and he said he did not believe there were any prehistoric resources present in the area.

Fieldwork

All of the properties participating in the FVGCP process have been surveyed by a team of archeologists, primarily between January 14, 2006 and March 26, 2006. The team utilized complete coverage methods, with transects varying from 5 to 10 meters in width. Where necessary, small holes were dug by hand to check the sediments. The survey team covered portions of the project area on various dates, as access contacts and weather permitted. Therefore, small crews examined some parcels after the March 26 date, extending as late as January 2007.

Resources that were discovered on the participating properties were recorded and photographed during the site visit. State of California Department of Parks and Recreation (DPR) Primary and Building/Structure/Object (523) forms were completed for all resources.

It should be noted that there are parcels within the FVGCP area that were participating properties at one point during the application/review process that have since dropped out of the process. Therefore, a substantially larger amount of the FVGCP area has been subjected to an intensive survey and cultural resources review over what is currently considered the “participating properties.”

See Plate CR-1 for an exhibit of all properties/parcels that have been subjected to a cultural resources survey within the Plan area.

PROJECT IMPACTS AND MITIGATION MEASURES

The field survey did not yield any evidence of prehistoric occupation or use. However, as a result of the survey several historic era structures were recorded and evaluated for significance on participating properties. None of the resources recorded were considered significant cultural resources. These resources are discussed in Volume II, within each of the individual project chapters.

IMPACTS TO IMPORTANT HISTORICAL RESOURCES.

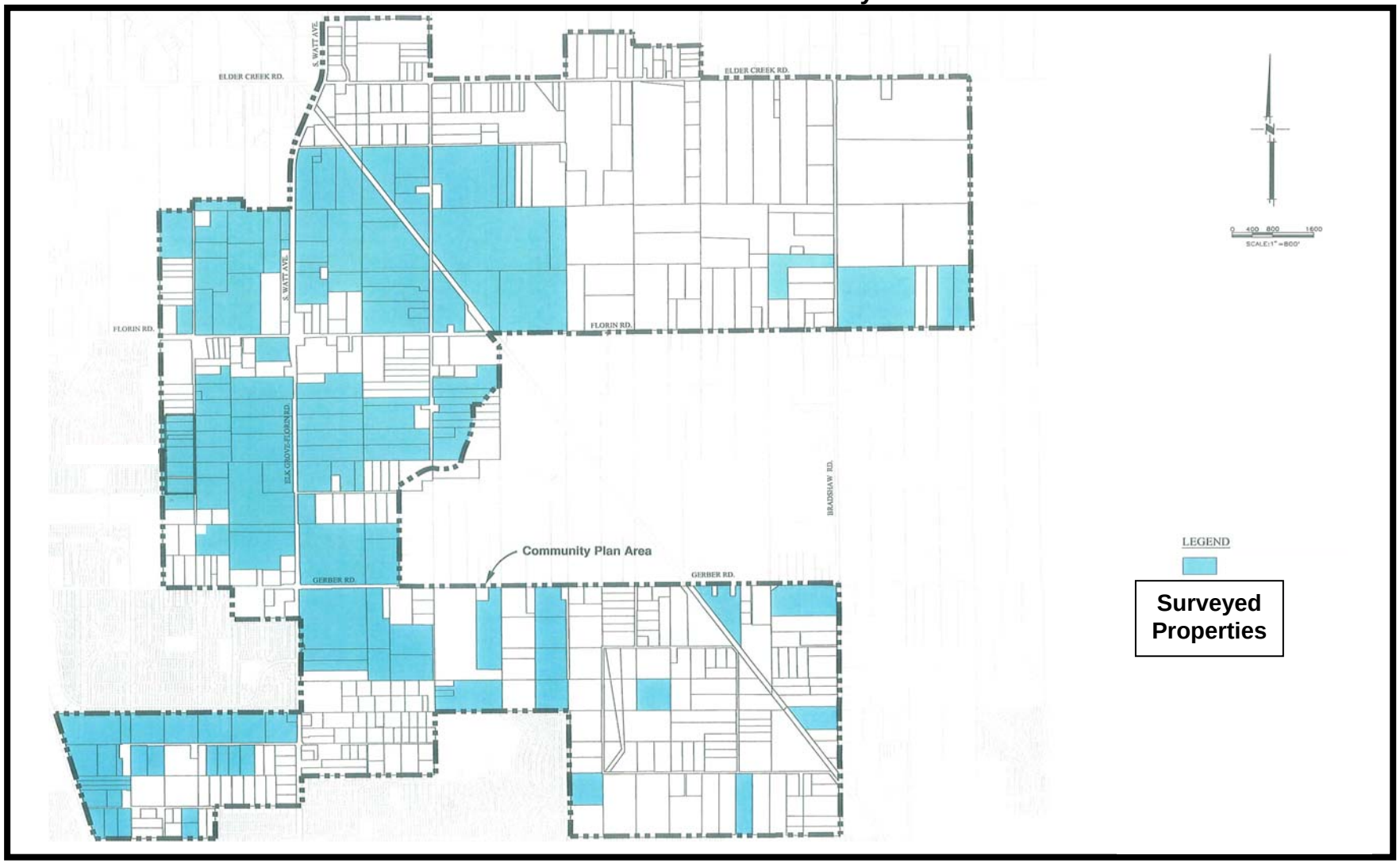
CAC LAND USE PLAN/PD LAND USE PLAN

The recorded resources within the project area can be grouped into two categories: extant residences and residential complexes, and foundations of former residential complexes. The extant residences belong to the period of time following 1900 when large landholdings were subdivided into smaller family farms. Earlier residences relating to the period of ownership by larger landowners do not exist in the area surveyed. Residences of large landowners are more likely to qualify as historical resources, as they are more likely to have distinctive architectural characteristics and/or be related to historically significant persons and events.

While the era of the agricultural colonies brought a number of new residents to the region, the land is not of the highest quality for production of row crops or for orchards. Therefore, while the farms may have allowed self-sufficiency, they did not produce great wealth for the vast majority of the landowners. As a result, residences were fairly modest in size and nature, and lacked ornamentation. Residences of this type were constructed from available materials and incorporated a mixture of architectural styles. Therefore, the residences do not exhibit a continuity of design; nor does the placement of buildings appear to exhibit a plan with regard to the setting or location of the structures. In the later period, many houses appear to have been occupied by individuals who commuted to jobs in the City of Sacramento, rather than attempting to farm to make a living. A few of the residences have been occupied by newer residents seeking a more rural lifestyle, and building their residences on the larger parcels of land in the area.

With development pressures encroaching on this part of Sacramento County, many of the landowners appear to have chosen to allow older residences from the 1910s to the 1950s to be removed, leaving only the slabs and foundations to be recorded.

Plate CR-1 : FVGCP Cultural Survey Area



None of the residential complexes or former residential complexes are associated with important events in local or State history [National Register of Historic Properties criterion a; California Register of Historical Resources criterion B (1)]. While small scale farming was important to the history of Sacramento County, the FVGCP area is one of many areas in Sacramento County supported by small farms. In addition, a community or other social-defining mechanism for the region does not exist in the project area. Residents would have had to travel to obtain goods and services for the most part as commercial enterprises are not located in the vicinity.

Land ownership maps through 1923 for the County were reviewed, and names on building records checked. None of the properties are associated with people important in State or local history [National Register of Historic Properties criterion b; California Register of Historical Resources criterion B (2)].
The buildings surveyed are not particularly good examples of any architectural style. The surveyed buildings represent the nature of the farms, utilitarian in nature, lacking detail and generally small. A number of the buildings in the participant properties have been moved to the project area, and others have been extensively remodeled, obscuring original design features and even to a degree, the original form and size of the buildings. Most complexes contain buildings of different dates, with added outbuildings. As a result, none of the extant buildings “embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values” [National Register of Historic Properties criterion c; California Register of Historical Resources criterion B (3)].
In consideration of the ability of any of the building sites or former building sites now represented only by foundations to yield information important in history, it should be noted that farm practices limit the possibilities of finding subsurface materials. The farms were more or less subsistence farms in the earlier period, and were at a great distance from any commercial establishment. Manufactured items would have been costly and time-consuming to acquire. As a result, most farms tended to reuse manufactured items such as glass containers, fabric, metal implements, and milled lumber. Other waste was burned on site, resulting in a lack of subsurface features that might be useful in defining early lifeways. In addition, the historic record contains much of what was occurring in the area economically, and the ownership of each lot is present in the Sacramento County archival records. Because the great majority of the residences date to the 1920s or later, there is little to be learned from archeological excavations of essentially modern era properties, even in the unlikely event that such deposits exist. As a result, the identified sites are not significant for their archeological values [National Register of Historic Properties criterion d; California Register of Historical Resources criterion B (4)].

As a result, it can be concluded that none of the sites are significant resources under the criteria of the National Register of Historic Places or under the criteria of the California Register of Historical Resources. However, not all structures and

properties within the FVGCP were surveyed. While the surveyed properties are representative of the resources that are located in the area, the potential exists that other properties within the FVGCP could contain properties that meet the criteria for listing in the California Register of Historical Resources. Development of properties containing eligible resources would result in adverse impacts to historic resources. As a result, implementation of the proposed project could have a ***potentially significant*** impact on historic resources.

In addition to the recorded extant residential complexes and remnant residential uses, as discussed above two previously recorded historic resources, CA-SAC-506H (the route of the California Central Traction Railroad (CCTR)) and CA-SAC-545H (Elk Grove-Florin Road) are located within the FVGCP area. As outlined in Chapter 9, Traffic and Circulation, Elk Grove-Florin Road would be expanded to six lanes throughout the FVGCP. As shown in Plate PS-2 in Chapter 5, Public Services, the Southgate Recreation and Parks District has draft plans indicating trails along the California Central Traction Railroad alignment. In addition, the Regional Transit 20-Year Vision shows a light rail line along the alignment (See Plate TC-1 in Chapter 9, Traffic and Circulation). According to Peak and Associates, Elk-Grove Florin Road has already been impacted by modern subdivisions and the additions proposed under the FVGCP would not degrade the resource over existing conditions. In terms of the CCTR, there are no direct impacts associated with the proposed project; however impacts could occur with future implementation of other long range plans, such as those postulated by Southgate Recreation and Parks District and Regional Transit, discussed above. At the time of implementation of these possible plans, review of impacts to these resources will occur. Peak and Associates determined that the proposed FVGCP would have a ***less-than-significant*** impact on the CCTR and Elk Grove-Florin Road resources.

MITIGATION MEASURE(S)

See Mitigation Measures under the "*Impacts to Important Archaeological Resources"* subheading below. These measures apply to historic and archaeological cultural resources alike.

IMPACTS TO IMPORTANT ARCHAEOLOGICAL RESOURCES.

CAC LAND USE PLAN/PD LAND USE PLAN

Based on the historical understanding of Native American settlement patterns in the project area, and communication with the Native American Heritage Commission, the project area is considered unlikely to contain significant archaeological resources. In addition, farming practices in the project area would have disturbed most near surface deposits.

However, as outlined above, the project area has a history of Native American habitation. Native peoples would have hunted and gathered in the project area,

and may have established temporary camps along project drainages. As a result, the potential exists for grading and excavation associated with buildout of the FVGCP area to unearth subsurface resources. Therefore, because construction activities associated with the proposed project may uncover previously unknown significant resources or human remains, a ***potentially significant*** impact would result.

MITIGATION MEASURE(S)

Adoption of the proposed project could result in future disturbance of known and unknown prehistoric and/or historic resources. These impacts are considered ***potentially-significant***. The County of Sacramento has an environmental review process for projects involving discretionary permits that requires cultural resources analyses to be prepared in situations where development is proposed in areas known to be sensitive for cultural (archaeological and historical) resources. Some future development within the Plan area will not require any discretionary review, while other development may require additional entitlements. In either case, to ensure impacts to cultural resources are minimized and addressed the following mitigation measures should be applied to projects in the FVGCP. Implementation of the following mitigation measures would reduce impacts to historical and archaeological cultural resources to a ***less-than-significant*** level.

CR-1 Cultural resources surveys will be required in areas not previously subject to intensive investigation (see Plate CR-1*). If ground disturbing activities are planned within or adjacent to the boundaries of any identified archeological site, the following shall be required:*

1. *The site area will be inspected by a qualified, professional archaeologist to assess the condition of the property and determine the current status of the deposit.*

2. *Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine if the property meets criteria to be listed on the California Register of Historic Resources or the National Register of Historical Places. The course of the testing program should be clearly delineated in a research design which outlines prehistory of the area; research domains, questions, and data requirements; research methods inclusive of field and laboratory studies; report preparation; and significance criteria.*

3. *Following field investigations, a technical report describing the evaluation program should be prepared. At a minimum this report shall include the elements discussed in the research design, as well as a description of the recovered site assemblage and a significance evaluation. If, based on the*

results of the testing program, a site is not determined to be an important archaeological resource, than effects to it would have been reduced to less than significant.

4. *If, based on the results of the field investigations, resources were identified as being significant the following mitigation would apply:*

    a. *Total Avoidance: Redesign the proposed project as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels.*

    <u>OR</u>, if a redesign is determined infeasible by the Department of Environmental Review and Assessment, then,

    b. *Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of the Department of Environmental Review and Assessment.*

CR-2 An historic architectural study shall be performed by a qualified, professional architectural historian if historic structures or buildings are present on the project site subject to development. The resulting report should include results of a background literature search and field survey, an historic context statement, and analysis of the potential significance of the noted resource, ad recommendations for their preservation and/or mitigation.

CR-3 Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914.
At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative development includes the FVGCP area in conjunction with the development of the surrounding communities.

CUMULATIVE IMPACTS TO CULTURAL RESOURCES RELATED TO THE BUILDOUT OF THE FLORIN VINEYARD GAP COMMUNITY PLAN.

CAC LAND USE PLAN/PD LAND USE PLAN

Impacts associated with cultural resources are site-specific and generally do not affect or are not affected by cumulative development. Project-specific impacts were found to be less-than-significant with the implementation of the recommended mitigation measures. In addition, regional development would be subject to the same federal, State, and local hazardous materials management requirements required for development within the FVGCP, which would minimize potential impacts to cultural resources. Therefore, implementation of the FVGCP would have a ***less-than-significant*** cumulative impact on cultural resources.

MITIGATION MEASURE(S)
None required.

16 HAZARDOUS MATERIALS

INTRODUCTION

The Hazardous Materials section of the EIR describes existing and potentially occurring hazards and hazardous materials on the Florin-Vineyard Gap Community Plan (FVGCP) area. The section discusses potential impacts posed by these hazards to the environment, as well as to potential workers, visitors, and residents within the FVGCP area.

Information in this section is based upon the Sacramento County *General Plan* and a review of Phase 1 Environmental Site Assessment(s) conducted for individual projects within the FVGCP.

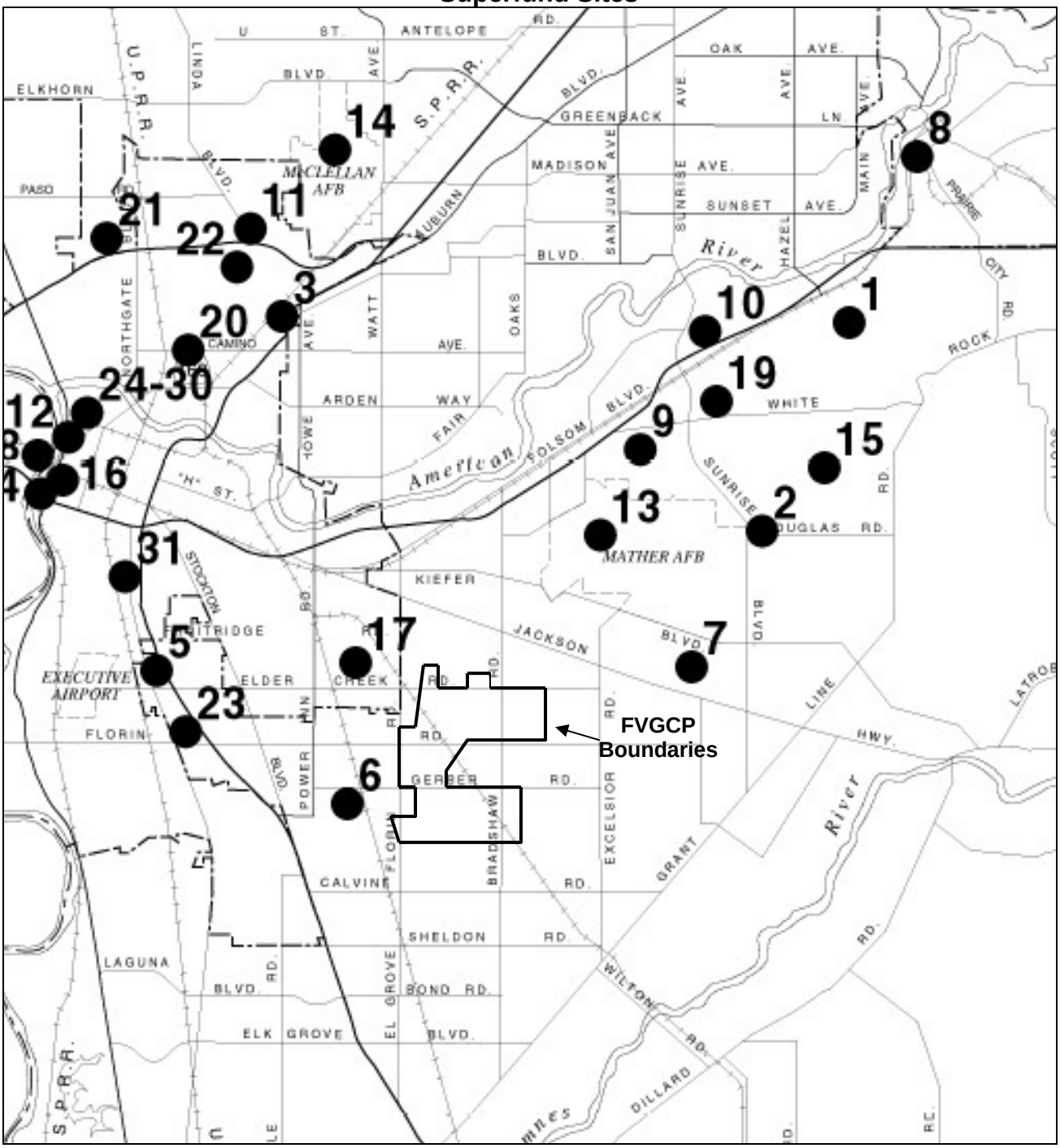
ENVIRONMENTAL SETTING

The proposed FVGCP area consists of ± 3,766 acres, located in both the South Sacramento and Vineyard community planning areas (See Plate 3-1, in the Project Description Chapter of this EIR) in Sacramento County. The project area is located south of Elder Creek Road and the Sacramento City limits; west of Bradshaw Road, excluding the North Vineyard Station Specific Plan area; north of Vintage Park Drive, and the developed neighborhoods of Churchill Downs and Vintage Park; and east of the Union Pacific Railroad tracks, and those developed neighborhoods of Tiogawoods, Florin Town, and Sunrise Florin.

The FVGCP area has historically been used for agriculture and rural residential homesites. In addition, some properties have been used as work yards for landscaping and/or construction related businesses. Two railroads extend through or adjacent to the FVGCP: the active Southern Pacific Railroad, and the inactive Central California Traction Company Railroad. The nearest Superfund sites are: Chromalloy/General Radiator (6) and the Sacramento Army Depot (17) (See Plate HM-1). Both sites are located in the South Sacramento Community Plan Area. In addition, the project area is approximately two miles southwest of the Mather Field airpark.

Currently, relatively few sensitive receptors exist within the project area. In addition, schools are not currently located within the project area. Florin High School is located to the west, Sierra Enterprise Elementary School is located to the north, and Florin Elementary School and Mary Tsukamato Elementary School are located to the south.

Plate HM-1
Superfund Sites



Source: Sacramento County General Plan: Hazardous Materials Element Background Report.

Potential Hazards

Aboveground and Underground Storage Tanks (ASTs/USTs)

The historic land uses associated with properties in the FVGCP, including, farming, light industry, and small business storage yards, are likely to have resulted in the presence of ASTs and USTs. The tanks are typically associated with the storage of a wide range of liquids, including: water, diesel and other petroleum products, pesticides, and fertilizers. Stained soil or disturbed vegetation surrounding a tank may indicate that leakage or spillage has contaminated the soil.

Animal Wastes

The FVGCP has historically contained dairy and grazing operations. Concentrated animal wastes associated with animal husbandry can pose an environmental hazard. Operations such as feedlots or dairies often have associated waste lagoons. Nitrates associated with the wastes can contaminate groundwater.

Asbestos

Asbestos is a known carcinogenic material. Asbestos was included in construction materials to reduce their flammability. In the late 1970s, the federal government banned the use of asbestos in building materials. For buildings constructed prior to 1980, the Code of Federal Regulations (29 CFR 1926.1101) states that all thermal system insulation (boiler insulation, pipe lagging, and related materials) and surface materials must be designated as “presumed asbestos-containing material” (PACM) unless proven otherwise through sampling in accordance with the standards of the Asbestos Hazard Emergency Response Act.

Hazardous Substance and Petroleum Product Containers

Phase 1 Environmental Site Assessments conducted for some of the project sites indicate the extensive presence of 55-gallon drums, many of which are unlabeled. Drums are often not stored in centralized locations, and do not have secondary containment. 55-gallon drums are used for storing a wide range of materials, including petroleum products, paint, and pesticides. Improper storage can lead to leaks resulting in soil contamination. Stained soil or disturbed vegetation surrounding drums may indicate that leakage or spillage has contaminated the soil.

Lead Paint

In 1978, the Consumer Product Safety Commission banned the use of lead as an additive to paint. Currently, the U.S. EPA and the U.S. Department of Housing and Urban Development are proposing additional lead-based paint regulations. Based on the age of the buildings on the FVGCP area, lead-based paint may be present.

Pesticides

Many of the properties located within the FVGCP area have historically been used for agricultural purposes. Modern pesticides are regulated by the State of California, and generally break down quickly in the environment (i.e., are “non-persistent”). However, many pesticides typically used prior to the last two or three decades were persistent in the environment. For instance, the California Department of Toxic Substances Control has concluded that DDT and its degradation compounds are ubiquitous in agricultural soils throughout California, due to the extensive historical use of this pesticide. DDT or other persistent pesticides may have been historically applied within the FVGCP area.

Petroleum Product Pipelines

Petroleum product pipelines are located within the FVGCP. Typically, a pipeline is located within a recognized right-of-way where construction is restricted.

Railroad Tracks

Railroad tracks extend through and adjacent to the FVGCP. As a result of weed control activities formerly conducted by railroad operations, railroad tracks are associated with the presence of oil containing polychlorinated biphenyls (PCBs). Railroads continue to control weeds; however, approved herbicides are used.

Solid Waste Disposal/Dumping Grounds

Abandoned home sites and vacant areas are located within the FVGCP. Concrete foundation material, abandoned vehicles, and “midnight dumps” are often associated with vacant or abandoned areas. In addition, businesses with poor “housekeeping” procedures accumulate rubbish (tires, broken down vehicles, barrels, wood piles, pipes, and other metal objects). Toxic substances such as pesticides and petroleum products may be included in or disguised by the rubbish.

Transformers

Numerous pole-mounted and pad-mounted electrical transformers are located within the FVGCP area. Electrical transformers are devices used to transfer electricity from one circuit to another, usually through a change in voltage, current, phase, or other electric characteristic. Typically, transformers are a health concern if they were installed prior to the late 1970s because they utilized Polychlorinated Biphenyls (PCBs). PCBs were used in electrical transformers because of their useful quality as a fire retardant. Transformers that contain 50 to 500 parts per million (ppm) PCBs are classified as PCB contaminated. The management of potential PCB-containing transformers is the responsibility of the local utility or the transformer owner. Actual material samples need to be collected to determine if transformers are PCB-containing.

Water Supply Wells

Numerous potable water and agricultural water supply wells are located within the FVGCP. Historically, the FVGCP has not been served by municipal water services. Concurrent with development, water services would be provided to FVGCP properties. To avoid contamination of the groundwater and eliminate a physical hazard, water wells should be properly abandoned. In addition, properties may contain wells that have been abandoned improperly.

Hazardous Materials Records

The Cortese List provided by the California Environmental Protection Agency, Department of Toxic Substances Control includes all hazardous material sites compiled pursuant to Government Code Section 65962.5.

Hazardous material sites were not identified within the FVGCP area. Nearby sites included the Chromalloy/General Radiator site, Metalloy Steel Foundary site, McClellan Air Force Base Area D site, and the Sacramento Army Depot site. These sites are located north and west of the FVGCP.

Regulatory Context

The term hazardous substance refers to both hazardous materials and hazardous wastes. A material is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state or local regulatory agency or if it has characteristics defined as hazardous by such an agency.

The California Environmental Protection Agency, Department of Toxic Substances Control (Cal-EPA, DTSC), defines hazardous waste, as the term is found in the California Health and Safety Code Section 25141(b), in the following manner:

> […] its quantity, concentration, or physical, chemical, or infections characteristics: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

Many agencies regulate hazardous substances. The following discussion contains a summary review of regulatory controls pertaining to hazardous substances, including federal, State, and local laws and ordinances.

FEDERAL

Federal agencies that regulate hazardous materials include the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the United States Department of Transportation (DOT), and the National Institute of Health (NIH). The following federal laws and guidelines govern hazardous materials.

- Federal Water Pollution Control;
- Clean Air Act;
- Occupational Safety and Health Act;
- Federal Insecticide, Fungicide, and Rodenticide Act;
- Comprehensive Environmental Response, Compensation, and Liability Act;
- Guidelines for Carcinogens and Biohazards;
- Superfund Amendments and Reauthorization Act Title III;
- Resource Conservation and Recovery Act;
- Safe Drinking Water Act; and
- Toxic Substances Control Act.

Prior to August 1992, the principal agency at the federal level regulating the generation, transport, and disposal of hazardous waste was the EPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, however, the DTSC was authorized to implement the State's hazardous waste management program for the EPA. The federal EPA continues to regulate hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

STATE

The Cal-EPA and the State Water Resources Control Board establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable State and local laws include the following:

- Public Safety/Fire Regulations/Building Codes;

- Hazardous Waste Control Law;
- Hazardous Substances Information and Training Act;
- Air Toxics Hot Spots and Emissions Inventory Law;
- Underground Storage of Hazardous Substances Act; and
- Porter-Cologne Water Quality Control Act.

Within Cal-EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL).

SACRAMENTO COUNTY GENERAL PLAN POLICIES

The following are applicable General Plan policies related to hazardous materials:

HAZARDOUS MATERIALS ELEMENT

HM-4 The handling, storage, and transport of hazardous materials shall be conducted in a manner so as not to compromise public health and safety standards.

HM-7 Encourage the implementation of workplace safety programs and to the best extent possible ensure that residents who live adjacent to industrial or commercial facilities are protected from accidents and the mishandling of hazardous materials.

HM-8 Continue the effort to prevent ground water and soil contamination.

HM-9 Continue the effort to prevent surface water contamination.

HM-10 Reduce the occurrences of hazardous material accidents and the subsequent need for incident response by developing and implementing effective prevention strategies.

HM-11 Protect residents and sensitive facilities from incidents which may occur during the transport of hazardous materials in the County.

SACRAMENTO COUNTY DEPARTMENTS

The Sacramento County Environmental Management Department (EMD) is responsible for enforcing state regulations governing hazardous waste generators, hazardous waste storage, hazardous waste disposal, and underground storage tanks. The Sacramento County Department of Waste

Management and Recycling is responsible for implementing the County's solid waste management and recycling programs.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

In accordance with CEQA, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer potentially feasible mitigation measures to reduce or avoid any significant impacts that are identified. The criteria, or standards, used to determine the significance of impacts may vary depending on the nature of the project. For the purposes of this EIR, an impact is considered potentially significant if the proposed project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment;
- Include a stationary source that would involve hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment; or
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

METHOD OF ANALYSIS

Site conditions and impact assessments for this chapter are based on the Phase I *Environmental Site Assessment* prepared for proposed projects within the FVGCP area by Raney Geotechnical, Inc., ADR Environmental Inc., Wallace and Kuhl Associates, Inc., and Neil O. Anderson and Associates.

PROJECT IMPACTS AND MITIGATION MEASURES

IMPACTS DUE TO PAST CHEMICAL USAGE IN THE PROJECT AREA.

CAC LAND USE PLAN/PD LAND USE PLAN

Railroad tracks extend through and adjacent to the FVGCP area, including the active Southern Pacific Railroad and the inactive Central California Traction Company Railroad. Oils containing polychlorinated biphenyls (PCBs) and herbicides are typically associated with weed-control activities for railroad tracks. However, construction within railroad right-of-ways is not anticipated.

In addition, agricultural use of parcels within the FVGCP may have involved the use of pesticides. Typical farming uses within the FVGCP area have not involved intensive row cropping or other agricultural uses that would have involved extensive pesticide use. However, past uses varied from parcel to parcel; therefore, some individual sites may pose greater pesticide risks than others.

Agricultural and related businesses often stockpile pesticides, petroleum products, fertilizers, paints, and other chemicals. The Phase 1 reports indicated the extensive presence of 55-gallon drums, petroleum tanks, abandoned vehicles, and vehicle work areas within the FVGCP area. Some of the surrounding areas exhibited what may have been chemical related ground staining.

The combination of uses that have historically occurred within the FVGCP has a significant likelihood to have resulted in chemicals being intentionally applied or accidentally spilled on the ground. Therefore, a ***potentially significant*** impact related to chemical residues on individual parcels within the FVGCP would result.

MITIGATION MEASURE(S)

Implementation of the following mitigation measures would reduce potential impacts due to the presence of chemical residues to a *less-than-significant* level.

HM-1 *All future development proposals on portions of the Florin-Vineyard Gap Community Plan area that are known to have supported livestock (cattle, hogs, poultry, etc.) holding areas prior to the 1970's, shall implement a soil sampling and analysis program for organochlorine pesticides. Prior to implementation, the soil sampling and analysis program shall be approved by the Sacramento County Environmental Management Department (EMD). The soil sampling results shall be submitted to EMD for determination of whether detected concentrations of the sampled substances fall within acceptable health risk guidelines and, if they do not, the remedial measures that must be implemented to ensure the protection of human health. Prior to construction activities, individual project proponents shall provide*

documentation demonstrating implementation of any measures required by EMD for the remediation of contaminated soils to protect human health.

HM-2 *Prior to future development on individual parcels within the Florin Vineyard Gap Community Plan area, any/all active and inactive storage tanks and storage drums, both below and above ground, shall be removed from the property by a licensed contractor and all contents disposed of in accordance with local, state, and federal regulations. If any stained soil related to storage tanks is identified, a soil sampling and analysis program shall be implemented to identify the substance(s) and the potential environmental effects. Prior to implementation, the soil sampling and analysis program shall be approved by the Sacramento County Environmental Management Department (EMD). The soil sampling results shall be submitted to EMD for determination of whether detected concentrations of the sampled substance(s) fall within acceptable health risk guidelines and, if they do not, the remedial measures that must be implemented to ensure the protection of human health. Prior to grading or construction activities, individual project proponents shall implement any measures required by EMD for the remediation of contaminated soils to protect human health.*

Impacts Due to the Presence of Petroleum Pipelines Within the FVGCP.

CAC Land Use Plan/PD Land Use Plan

The Phase 1 Environmental Report for the Hedge Avenue Parcels by Wallace Kuhl Associates identified a buried Kinder Morgan liquid petroleum pipeline within the street easement beneath the west shoulder of Bradshaw Road. Records do not indicate leaks or other problems associated with this pipeline or other pipelines that may be located within the FVGCP. In addition, PG&E owns and operates natural gas distribution facilities and pipelines within the FVGCP.

All pipelines are located within known roadway easements; while projects within the FVGCP may need to conduct work within the easement during project development, such work would be subject to the safety requirements of PG&E. Therefore, development within the FVGCP would have a ***less-than-significant*** impact on pipelines.

Mitigation Measure(s)
None required.

IMPACTS ASSOCIATED WITH WATER SUPPLY WELLS.

CAC LAND USE PLAN/PD LAND USE PLAN

In the past, the primary source of potable and agricultural water within the FVGCP was groundwater wells. As a result, numerous wells are located within the FVGCP. Municipal water supplies would be extended to all parcels within the area as part of future development. All water supply wells within the individual parcels would need to be properly destroyed in conjunction with the development of the parcel. In addition, wells that have been improperly abandoned should be assessed and abandoned in conformance with County guidelines. Well abandonment requires a permit from the Sacramento County Environmental Management Department, Environmental Health Division.

Old, hand-dug wells also exist in the FVGCP. The large diameter of hand-dug wells requires additional care, and should be backfilled in accordance with the recommendations of a geotechnical engineer. In addition, cisterns may be associated with the water supply systems. If wells or cisterns are not properly abandoned a ***potentially significant*** impact would result.

MITIGATION MEASURE(S)
Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

HM-3 *Prior to future development on individual parcels within the Florin Vineyard Gap Community Plan area, including preliminary grading and trenching for infrastructure, any on-site groundwater wells that are not intended for the use of the proposed development shall be abandoned in accordance with State and County regulations; this procedure requires a well abandonment permit (issued on a per-well basis) from the Sacramento County Environmental Management Department, Environmental Health Division. Any large-diameter (old hand excavated) wells and/or cisterns shall be removed and the holes backfilled in accordance with the recommendations of a geotechnical engineer.*

IMPACTS ASSOCIATED WITH SEPTIC SYSTEMS.

CAC LAND USE PLAN/PD LAND USE PLAN

As a primarily rural community, the FVGCP area has not been served by municipal sewer service. Therefore, existing residences are served by septic systems. The systems would likely include septic tanks and leach lines. Future development within the FVGCP would be required to connect to the municipal sewage system. Septic systems should be removed in accordance with the standards of the Sacramento County Environmental Management Department.

Failure to remove septic systems, or improper removal of septic systems would result in a ***potentially significant*** impact to individual parcels.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

HM-4 *Prior to future development on individual parcels within the Florin Vineyard Gap Community Plan area, any on-site septic system(s and associated leach fields that are not intended for the use of the proposed development shall be abandoned in compliance with the standards of the Environmental Management Department.*

IMPACTS ASSOCIATED WITH ASBESTOS AND LEAD.

CAC LAND USE PLAN/PD LAND USE PLAN

The FVGCP area contains in excess of 500 residences, as well as numerous outbuildings. Development within the area would result in the demolition of some of the structures. Many of the structures would have been constructed prior to the ban on the use of asbestos and lead in construction materials that occurred in 1978. The Sacramento County Environmental Management Department and the Sacramento Air Quality Management District have regulations in place to ensure the abatement and proper disposal of lead paint and asbestos during demolition. Therefore, compliance with the existing regulations would ensure that demolition of existing structures containing asbestos and/or lead paint would have a ***less-than-significant*** impact on the health of construction workers, future residents and the environment.

MITIGATION MEASURE(S)
None required.

IMPACTS RELATED TO THE ROUTINE USE, TRANSPORT, OR DISPOSAL OF HAZARDOUS MATERIALS.

CAC LAND USE PLAN/PD LAND USE PLAN

Development of the FVGCP area would primarily be composed of residential and commercial uses. Any hazardous materials for use on residential areas (e.g. gasoline for lawnmowers, pesticides and weed killers, lawn fertilizers) would be for household use and would be purchased in small quantities at retail locations. The routine transport, use, or disposal of hazardous materials is not typically associated with a commercial development. In addition, any commercial tenants transporting, using, or disposing of hazardous materials would be required to comply with federal, state, or local regulations governing the use of hazardous materials.

Areas north of Florin Road would include parcels designated M-1, Light Industrial. Some portion of the M-1 parcels would be designated for surface mining of aggregates, which would not include transport of hazardous materials. The Zoning Code states the M-1 zone is intended for:

> Development of industrial uses which include fabrication, manufacturing, assembly, or processing of materials that for the most part are already in processed form and which do not in their maintenance, assembly, manufacture, or plant operation create smoke, gas, odor, dust, sound, or other objectionable influences which might be obnoxious to persons conducting business or residing in this or any other zone.

The designated uses do not preclude the use of hazardous materials. However, any industrial tenants transporting, using, or disposing of hazardous materials would be required to comply with federal, state, or local regulations governing the use of hazardous materials. Therefore, the proposed project would have a ***less-than-significant*** impact related to hazardous materials.

MITIGATION MEASURE(S)
None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative development includes the FVGCP area in conjunction with the development of the surrounding communities.

LONG-TERM HAZARD-RELATED IMPACTS FROM THE PROPOSED PROJECT IN COMBINATION WITH EXISTING AND FUTURE DEVELOPMENTS IN SACRAMENTO COUNTY.

CAC LAND USE PLAN/PD LAND USE PLAN

Impacts associated with hazardous materials are site-specific and generally do not affect or are not affected by cumulative development. Project-specific impacts were found to be less-than-significant with the implementation of the recommended mitigation measures. In addition, regional development would be subject to the same federal, State, and local hazardous materials management requirements required for development within the FVGCP, which would minimize potential risks associated with increased hazardous materials use in the community, including potential effects, if any, on the FVGCP area. Therefore, implementation of the FVGCP would have a ***less-than-significant*** impact associated with cumulative hazardous materials use.

MITIGATION MEASURE(S)
None required.

17 POPULATION AND HOUSING

INTRODUCTION

The purpose of the Population and Housing section is to examine the proposed project's impact related to the existing and proposed populations and the housing stock in the area. Consistency with applicable General Plan goals and policies is also evaluated. Documents referenced to prepare this section include the *Sacramento County General Plan*, *Sacramento County Zoning Code*, *Sacramento County Housing Element*, *South Sacramento Area Community Plan*, *Vineyard Community Plan*, the Sacramento Area Council of Governments *2006 to 2013 Regional Housing Needs Plan*, the Sacramento Area Council of Governments *Preferred Blueprint Scenario*, the and the United States Census Bureau.

ENVIRONMENTAL SETTING

Section 15125 of the CEQA Guidelines states that "an EIR must include a description of the physical environmental conditions in the vicinity of the project […] and shall discuss any inconsistencies between the proposed project and applicable general plans and regional plans." The following provides the existing population and housing stock within the Florin Vineyard Gap Community Plan (FVGCP) area, as well as the existing plans and policies that guide growth in population and housing within the area.

PROJECT LOCATION

The FVGCP project site consists of approximately 3,766 ± acres, located in both the South Sacramento and Vineyard community planning areas, and generally described as follows: south of Elder Creek Road and the Sacramento City limits; west of Bradshaw Road, excluding the North Vineyard Station Specific Plan area; north of Vintage Park Drive, and the developed neighborhoods of Churchill Downs and Vintage Park; and east of the Union Pacific Railroad tracks, and those developed neighborhoods of Tiogawoods, Florin Town, and Sunrise Florin.

EXISTING POPULATION

The FVGCP area currently contains approximately 556 residences. The US Census Bureau uses a figure of 2.64 persons per household in Sacramento County, therefore, the current population of the project area is approximately 1,468 persons. The community is largely rural, with houses primarily situated on large lots, or agricultural-residential parcels. Surrounding areas are developing at urban densities, and the community character is changing from rural to urban/suburban.

PROPOSED PROJECT

The Citizens Advisory Committee (CAC) developed a plan for the FVGCP (CAC Land Use Plan) based on maintaining the rural feel while guiding the urban development of the FVGCP. The Sacramento County Planning Department has proposed options (PD Land Use Plan) to the CAC Land Use Plan that would develop the FVGCP at higher densities, particularly along transit corridors.

REGULATORY CONTEXT

SACRAMENTO COUNTY GENERAL PLAN GOALS, POLICIES, AND PROGRAMS

The following are applicable General Plan goals and policies related to population and housing:

HOUSING ELEMENT

GOAL — Provide an adequate supply of suitable sites for development of a range of housing that varies sufficiently in terms of cost, design, size, location, and tenure to meet the housing needs of all segments of the County's population.

HE-1 — The County shall maintain an adequate supply of land for housing affordable to all income groups with public services and facilities needed to facilitate the development of housing to accommodate projected housing needs based on the SACOG Regional Housing Needs Plan.

HE-4 — Support development proposals that seek to locate new market rate multi-family uses at strategic locations along transportation corridors and at transit stops and stations, or at other strategically located reuse and underdeveloped sites.

HE-5 — Promote and facilitate the build-out of vacant and underutilized urban land through infill, reuse, and redevelopment activities, as appropriate, for housing including:

- Support for a variety of housing types on vacant sites suitable for urban infill, in both residential only and mixed-use developments; and
- Reuse of older commercial and retail properties, industrial and business office parks, and access surface parking areas of regional malls, to allow additional residential development within the existing urban area.

HE-8 — Discourage development standards and fee increases that would act to constrain the production of affordable housing.

HE-31 Promote the construction of affordable housing that meets the needs of female heads of households.

HE-32 Support the development of housing to meet the needs of large households.

HE-36 Distribute affordable housing equitably throughout the County in accordance with general economic conditions, such that each community would contain a range of housing types for all economic classes.

HE-39 When feasible, integrate housing with compatible non-residential uses in an effort to locate affordable housing near employment opportunities and take maximum advantage of infill development opportunities.

HE-42 Support alternative housing types that provide for a variety of ownership opportunities through regulatory and financial incentives.

HE-45 The County will adopt an affordable housing program within 6 months of adoption of the Housing Element that will require 15 percent of new residential development to be affordable to extremely low-, very low-, and low-income households.

Human Service Element

HS-3 The County's housing policies shall recognize the need for safe and accessible, affordable housing units for single parents, young families, multi-generational families, and other family patterns.

HS-36 The County shall promote self-sufficiency within communities rather than urban sprawl that hinders a sense of community and reliance on neighbors.

Land Use Element

LU-3 Each community planning area containing an existing urban use shall provide within the urbanized portion (excluding urban growth areas) additional residential holding capacity sufficient to meet that community's fair share of a County-wide target of 4,500 units increased holding capacity.

South Sacramento Community Plan Goals and Objectives

Goal 5 To encourage quality residential planning policies for a healthful living environment through a variety of attractive design, styles, types, and price ranges.

Objective 9.1 Requires a reasonable "mix" of low to low-medium and medium population densities in appropriate locations at ultimate development

VINEYARD COMMUNITY PLAN GOALS AND POLICIES

Goal 3 To provide a wide range of housing types and living environments for present and future residents of the Vineyard community.

Policy 2 Urban residential development will only be considered in those areas contiguous to approved urban uses and designated for future urban growth, and only when negative impacts upon the Vineyard community are mitigated to the greatest extent possible.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

For the purposes of this Draft EIR, impacts are considered significant if implementation of the proposed project would:

- Induce significant population growth beyond what is anticipated for the project area; or
- Result in a housing balance that does not conform to County plans and policies regarding housing balance.

METHOD OF ANALYSIS

The population and housing impact evaluation qualitatively assess the increase in housing and population resulting from implementation of the project in order to determine if proposed development is compatible with existing or proposed population and housing projections. The evaluation also assesses the consistency of the proposed project with the goals and policies of the Sacramento County General Plan Housing Element, and the Sacramento Area Council of Governments (SACOG) projections. An increase in population is not a physical environmental effect, the specific environmental effects resulting from the increase in population and development related to the proposed community plan are evaluated in the technical sections, such as traffic, biology, and air quality of the DEIR.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

INDUCE SIGNIFICANT GROWTH BEYOND WHAT IS ANTICIPATED.

CAC LAND USE PLAN/PD LAND USE PLAN

As stated previously, the proposed project area is sparsely populated at rural densities. Currently, approximately 556 residences, and a population of 1,468 residents exist within the project area. The project area is largely designated an Urban Development Area, which is indicative of the planned future development of the area at urban densities.

The proposed CAC Land Use Plan would include a mix of uses and residential densities. Approximately 2,401 acres of the overall 3,766 acres would be designated for residential use. The overall land use pattern would remain low-density residential, including a number of agricultural-residential areas to maintain the rural setting. The CAC Land Use Plan was designed to accommodate approximately 8,950 dwelling units. Under the County's Affordable Housing Ordinance a 15 percent density bonus is available to encourage the construction of affordable housing. If every project were to implement the measures necessary to receive the density bonus an additional 1,342 residential units could be constructed under the CAC Land Use Plan for a total of 10,292 units. Such a scenario is unlikely; however, to be conservative the analysis will evaluate buildout with full implementation of the density bonus. Therefore, based on the US Census figure of 2.64 residents per household in Sacramento County, the plan would accommodate between 23,628 persons (2.64 * 8,950 = 23,628) under the CAC Land Use Plan, and 27,171 persons (2.64 * 10,292 = 27,171) under the CAC Land Use Plan with density bonus. The approximate average density would be 9.8 to 11.3 persons per residential acre.

The proposed PD Land Use Plan options would increase the amount of land devoted to residential use, and increase overall residential density of the project area. Approximately 2,411 acres of the overall 3,766 acres would be designated for residential use. Adoption of the options would increase the acreage devoted to multi-family, and incrementally increase the densities of several areas. The plan does contain some areas of agricultural-residential land, however, the designation would make up a smaller proportion of the total in the PD Land Use Plan. With acceptance of the PD Land Use Plan options, the Community Plan would accommodate approximately 12,066 dwelling units. Application of the density bonus would result in an additional 1,809 residential units for a total of 13,876 residential units. The resulting population would range from 31,854 (2.64 * 12,066 = 31,854) under the PD Land Use Plan to 36,333 (2.64 * 13,876 = 36,333) under the PD Land Use Plan with density bonus. The approximate average residential density would be 13.2 to 15.1 persons per residential acre. Therefore, either project would result in a substantial increase in both population size and density over what currently occurs in the project area.

SACOG projects that between 2005 and 2025 the number of households in Sacramento County will increase from 502,142 to 691,548; a change of 189,406 households. The County wide total includes an increase of 53,893 households in the unincorporated County. The total County population is projected to increase from 1,361,637 to 1,725,710; an increase of 364,073 persons. 82,043 of these persons will live in the unincorporated County. The Sacramento County General Plan has designated the majority of the site for urban development or urban reserve. The Vineyard Community Plan recognized that the FVGCP area was largely designated for urban growth, as did the South Sacramento Community Plan. The FVGCP is one of several planning efforts underway that are guiding the County's efforts to accommodate the projected increase in population. In addition, the SACOG projections include development of the Plan area. Both the CAC Land Use Plan and the PD Land Use Plan would result in an increase in population, however, urban development of the Plan area has been anticipated in the applicable planning documents. Therefore, implementation of either the CAC Land Use Plan or the PD Land Use Plan would have a ***less-than-significant*** impact related to unanticipated growth.

MITIGATION MEASURE(S)
None required.

CONSISTENCY WITH POLICIES RELATING TO HOUSING BALANCE.

CAC LAND USE PLAN/PD LAND USE PLAN

The Housing Element, South Sacramento Community Plan, and Vineyard Community Plan all call for a diversity of housing options. The proposed plans include a range of residential land uses, including agricultural-residential parcels of up to five acres, and multi-family housing of up to twenty dwelling units per acre. As can be seen in Table PH-1, below, both plans provide a variety of density ranges for the residential parcels.

Table PH-1: Proposed Housing Densities

Density	CAC Land Use Plan	PD Land Use Plan
AR 1-2	549.5 ac.	271 ac.
AR 2-5	207 ac.	129 ac.
RD-10 (MHP)	13.7ac.	13.7 ac.
RD 2-3	151.5 ac.	140.5 ac.
RD 3-5	1172.3 ac.	1084.5 ac.
RD 5-7	213 ac.	572.5 ac.
RD 7-12	30.5 ac.	69 ac.
RD-20	63.5 ac.	130.5 ac.
Totals	**2,401 ac.**	**2,411 ac.**

The Regional Housing Needs Plan (RHNP) developed by SACOG, identified the total demand for the unincorporated County as 19,465 residential units. Subsequent analysis determined that a total of 20,679 units were projected to be available at 85 percent of the zoned maximums. In addition, 9,621 dwelling units were constructed between January 2000 and September 2003. As a result, SACOG has determined that an

oversupply of 10,835 market-rate units exists as compared to the RHNP distribution. However, a shortfall of 1,120 dwelling units exists for very low- and low-income households.

The majority of affordable housing is multi-family rental housing. To accommodate the needed affordable housing, the Housing Element Policy HE-1(f) requires the County to designate a minimum of 132 additional acres at a density of 20 du/ac or higher to accommodate the development of at least 2,244 multi-family units. Table 3-1 on page 3-7 of the Housing Element indicates that the County anticipates that the proposed FVGCP can accommodate between 103.1 and 163.4 acres of multi-family housing, enough to accommodate between 1,752 and 2,777 units of housing based on the land being developed at 85 percent of the maximum density.

The CAC Land Use Plan includes 63.5-acres zoned at RD-20, which would be enough land to accommodate approximately 1,080 multi-family dwelling units at 85 percent of the maximum density. Adoption of the PD Land Use Plan would increase the RD-20 acreage to 130.5-acres. At 85-percent of the maximum density, the PD Land Use Plan would accommodate 2,219 multi-family dwelling units. The PD Land Use Plan would provide sufficient multi-family housing land to fall within the range projected in the Housing Element. However, the CAC Land Use Plan would fall at least 39.6 acres, and 672 dwelling units short of the lower end of the Housing Element projections.

In addition to the residentially designated lands, the possibility exists that mixed-use communities that incorporate multi-family housing could be developed on lands designated under the Shopping Center (SC) and Limited Commercial (LC) land uses. The Housing Element established the objective that 25-percent of vacant LC and SC land be used for multi-family or mixed-use projects. If 25 percent of the SC and LC land use areas in the CAC Land Use Plan and PD Land Use Plan are used for multi-family or mixed-use development, the additional acreage would be approximately 40-acres and 33-acres respectively.

Table PH-2: Multi-Family Housing

	Housing Element Projections	CAC Land Use Plan	SCPD Land Use Plan
Multi-Family Acres	103.1 to 163.4 acres	63.5 acres	130.5 acres
Potential Units	1,752 to 2,777 units	1,080 units	2,219 units
Potential SC and LC Acres (25 Percent of total)		40 acres	33 acres
Potential Units		680 units	561 units
Total Acres	103.1 to 163.4 acres	103.5 acres	163.5 acres
Total Units	1,752 to 2,777 units	1,760 units	2,780 units

Note: Dwelling unit yields are based on buildout occurring at 85-percent of maximum density.

Source: Sacramento County Housing Element and proposed Community Plan land use designations.

As can be seen in Table PH-2, with the inclusion of potential housing units on SC and LC designated lands the CAC Land Use Plan would be consistent with the low end of the Housing Element projections for multi-family units. With the inclusion of potential housing on the SC and LC designated lands the PD Land Use Plan would slightly exceed of the number of multi-family units projected in the Housing Element. Therefore, adoption of either plan, or a combination of the two, would achieve the number of multi-family housing units specified in the Housing Element. Therefore, implementation of either the CAC Land Use Plan or the PD Land Use Plan would have a ***less-than-significant*** impact on the housing balance within the FVGCP area.

MITIGATION MEASURE(S)
None required.

CONSISTENCY WITH THE AFFORDABLE HOUSING REQUIREMENTS

CAC LAND USE PLAN/PD LAND USE PLAN

The Sacramento County Affordable Housing Ordinance (Chapter 22.35) requires that 15 percent of a project's dwelling units be rented or sold at an affordable rate to low, very low and extremely low income households.

The fifteen percent is divided into three categories:

- Six percent of the units must be affordable to low income households;
- Six percent must be affordable to very low income households; and
- Three percent must be affordable to extremely low income households.

The CAC Land Use Plan would require approximately 1,343 affordable dwelling units, based on a buildout total of 8,950 dwelling units. The PD Land Use Plan would require provisions for approximately 1,810 affordable dwelling units, based on a buildout total of 12,066 dwelling units. Individual projects would be required to comply with the code requirements through the dedication of land for affordable housing, construction of affordable housing units, payment of in-lieu fees, or a combination of the three options. As compliance with County ordinances would be a requirement for the individual development projects, the proposed project would have a ***less-than-significant*** impact on the provisions of affordable housing.

MITIGATION MEASURE(S)
None required.

CUMULATIVE IMPACTS

CUMULATIVE POPULATION GROWTH BEYOND WHAT IS ANTICIPATED.

CAC LAND USE PLAN/PD LAND USE PLAN

The proposed community plan is one of many planning efforts underway in the Sacramento region intended to accommodate the growing population. The FVGCP is largely intended for urbanization, and is surrounded by urban or urbanizing areas. SACOG has projected that the unincorporated areas of Sacramento County will grow by over 80,000 residents between 2005 and 2025. The proposed plans would accommodate between 23,628 (CAC Land Use Plan without density bonus) and 36,333 (PD Land Use Plan with density bonus) residents in the FVGCP area. In December 2004, the SACOG Board of Directors adopted the Preferred Blueprint Scenario to help guide regional growth through 2050. Buildout of the entire FVGCP area is included in the Preferred Blueprint Scenario for Sacramento County. The proposed plans would slightly expand the Sacramento County Urban Planning Area to accommodate growth north of Florin Road and East of Bradshaw Road. However, the proposed change is included in the Preferred Blueprint Scenario, and the project's incremental contribution to the cumulative population growth in the County would not be greater than what has been anticipated in applicable planning documents. Therefore, implementation of either community plan option would result in a ***less-than-significant*** cumulative impact related to population growth.

MITIGATION MEASURE(S)
None required.

CUMULATIVE IMPACTS TO HOUSING BALANCE.

CAC LAND USE PLAN/PD LAND USE PLAN

Both the CAC Land Use Plan and the PD Land Use Plan would provide sufficient land for multi-family development to meet the Sacramento County General Plan Housing Element policies. In addition, both plans provide a wide range of residential densities to serve the varied housing needs of the County as the urban areas are built out. All new growth areas throughout the County would also be required to comply with the policies governing housing balance. Therefore, cumulative development in the County is not anticipated to result in adverse impacts to housing balance. As a result, implementation of either plan would have a ***less-than-significant*** cumulative impact on the provision of housing balance.

MITIGATION MEASURE(S)
None required.

CUMULATIVE IMPACTS TO THE PROVISION OF AFFORDABLE HOUSING.

CAC LAND USE PLAN/PD LAND USE PLAN

Projects conducted under both planning options would be required to comply with the County's Affordable Housing Ordinance. Therefore, implementation of either plan would have a ***less-than-significant*** cumulative impact on the provision of affordable housing.

MITIGATION MEASURE(S)
None required.

18 AGRICULTURAL AND MINERAL RESOURCES

INTRODUCTION

The Agricultural and Mineral Resources chapter of the EIR examines the proposed project's effect on agricultural and mineral resources and operations. Specifically, the chapter evaluates the conversion of farmland to other uses, potential conflicts with nearby agricultural uses and land under Williamson Act contract, and potential impacts on mineral resource recovery operations. Information in this chapter is based on the *Sacramento County General Plan,* the *Sacramento County General Plan EIR*, and various other resources as noted in the text.

ENVIRONMENTAL SETTING

AGRICULTURAL RESOURCES

EXISTING AGRICULTURAL USES

Historically the project area has been used primarily for agricultural uses. In Sacramento County, agricultural usage has declined as residential development has increased; however, extensive agricultural operations still exist. The primary agricultural usage in the FVGCP area is livestock grazing on rangeland. Additional agricultural uses include: a dairy operation, oat/hay production, irrigated pasture for horses; as well as fruit, nut, and bamboo orchards. Approximately 320 acres of the Community Plan area are zoned for agricultural use, and an additional 2,090 acres are zoned for agricultural-residential use.

Agricultural Land

FARMLAND CLASSIFICATIONS

Two systems are used by the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) to determine a soil's agricultural productivity: the Soil Capability Classification and the Storie Index Rating System. The "prime" soil classifications of both systems indicate the absence of soil limitations, which if present, would require the application of management techniques (e.g., drainage, leveling, special fertilizing practices) to enhance production.

SOIL CAPABILITY CLASSIFICATION

The Soil Capability Classification System takes into consideration soil limitations, the risk of damage when the soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils, which are unsuitable for agriculture. Generally, as the ratings of the capability classification system increase, the yields and profits are more difficult to obtain.

A general description of soil classification, as defined by the NRCS, is provided in Table AG-1, Soil Capability Classification.

Table AG-1: Soil Capability Classification

Class	Definition
I	Soils have few limitations that restrict their use.
II	Soils have moderate limitations that reduce the choice of plants, or that require special conservation practices.
III	Soils have severe limitations that reduce the choice of plants, require conservation practices, or both.
IV	Soils have very severe limitations that reduce the choice of plants, require very careful management, or both.
V	Soils are not likely to erode but have other limitations; impractical to remove that limit their use largely to pasture or range, woodland, or wildlife habitat.
VI	Soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture, or range, woodland, or wildlife habitat.
VII	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat.
VIII	Soils and landforms have limitation that preclude their use for commercial plant production and restrict their use to recreation, wildlife habitat, or water supply, or to aesthetic purposes.
Source: USDA Soil Conservation Service, Soil Survey of Sacramento County, April 1993.	

STORIE INDEX RATING SYSTEM

The Storie Index Rating system ranks soil characteristics according to their suitability for agriculture from Grade 1 soils (80 to 100 rating), which have few or no limitations for agricultural production to Grade 6 soils (less than 10), which are not suitable for agriculture. Under this system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided below in Table AG-2, Storie Index Rating System.

Table AG-2: Storie Index Rating System

Grade	Index Rating	Definition
1 Excellent	80 through 100	Soils are well suited to intensive use for growing irrigated crops that are climatically suited to the region.
2 Good	60 through 79	Soils are good agricultural soils, although they may not be so desirable as Grade 1 because of moderately coarse, coarse, or gravelly surface soil texture; somewhat less permeable subsoil; lower plant available water holding capacity, fair fertility; less well drained conditions, or slight to moderate flood hazards, all acting separately or in combination.
3 Fair	40 through 59	Soils are only fairly well suited to general agricultural use and are limited in their use because of moderate slopes; moderate soil depths; less permeable subsoil; fine, moderately fine or gravelly surface soil textures; poor drainage; moderate flood hazards; or fair to poor fertility levels, all acting alone or in combination.
4 Poor	20 through 39	Soils are poorly suited. They are severely limited in their agricultural potential because of shallow soil depths; less permeable subsoil; steeper slope; or more clayey or gravelly surface soil textures than Grade 3 soils, as well as poor drainage; greater flood hazards; hummocky micro-relief; salinity; or fair to poor fertility levels, all acting alone or in combination.
5 Very Poor	10 through 19	Soils are very poorly suited for agriculture, are seldom cultivated and are more commonly used for range, pasture, or woodland.
6 Non-Agricultural	Less than 10	Soils are not suited for agriculture at all due to very severe to extreme physical limitations, or because of urbanization.

Source: USDA Soil Conservation Service, Soil Survey of Sacramento County, April 1993.

FARMLAND MAPPING AND MONITORING PROGRAM

The Farmland Mapping and Monitoring Program (FMMP) was established in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the U.S. Department of Agriculture, Soil Conservation Service (USDA-SCS). The intent of the USDA-SCS was to produce agricultural resource maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA-SCS developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland Maps are derived from the USDA-SCS soil survey maps using the LIM criteria.

Since 1980, the State of California has assisted the USDA-SCS with mapping the farmland soils of the state. The FMMP was created within the State Department of Conservation (DOC) to carry on the mapping activity on a continuing basis and with a greater level of detail. The DOC applied a greater level of detail by modifying the LIM criteria for use in California. The LIM criteria in California utilize the SCS and Storie Index Rating systems, but also consider physical conditions such as a dependable water supply for agricultural production, soil temperature range, depth of the ground water table, flooding potential, rock fragment content, and rooting depth.

Important Farmland Maps for California are compiled using the modified LIM criteria (as described above) and current land use information. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into the surrounding classification. The acreage of Important Farmland in Sacramento County is shown in Table AG-3 below. The Important Farmland Maps identify four agriculture-related categories: prime farmland, farmland of statewide importance, unique farmland, and grazing land. Each is summarized below, based on *A Guide to the Farmland Mapping and Monitoring Program (1998*), prepared by the California Department of Conservation.

Table AG-3: Acres of Important Farmlands - Sacramento County (2002)

Acres Present by Type	Acreage
Prime Farmland	111,984
Farmland of Statewide Importance	60,773
Unique Farmland	15,834
Grazing Land	165,048
Urban and Built-Up Land	159,903
Other Land	66,403
Water	18,253
Total Acres	**636,083**
Source: California Department of Conservation, http://www.consrv.ca.gov.	

PRIME FARMLAND

Prime farmland, as defined by the California Department of Conservation, is land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. Prime farmland has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have also been used for the production of irrigated crops at some time during the two update cycles (a cycle is equivalent to 2 years) prior to the FMMP mapping of Sacramento County in 1998.

FARMLAND OF STATEWIDE IMPORTANCE

Farmland of statewide importance, as defined by the California Department of Conservation, is land similar to prime farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land

must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date (or since 1994).

Unique Farmland

Unique farmland, as defined by the California Department of Conservation, is land of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles prior to the mapping date (or since 1994).

Grazing Land

Grazing land, as defined by the California Department of Conservation, is land on which the existing vegetation, whether grown naturally or through management, is suited to the grazing of livestock. The minimum mapping unit for this category is 40 acres.

Urban and Built-Up Land

Urban and built-up land, as defined by the California Department of Conservation, is occupied with structures with a building density of at least one unit to one-half acre. Uses may include, but are not limited to, residential, industrial, commercial, construction, institutional, public administration purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as part of this unit, if they are part of a surrounding urban area.

Other Land

Other land, as defined by the California Department of Conservation, is land that is not included in any other mapping categories. The following uses are generally included: rural development, brush, timber, government land, strip mines, borrow pits, and a variety of other rural land uses.

Sacramento County Farmland Conversion

One of the basic underlying premises of agricultural conversion is that the proximity of agricultural land to urban uses increases the value of the agricultural land. The increase in value may happen either directly through formal purchase offers, or indirectly through recent sales in the vicinity. In addition, the extension of utilities and other urban infrastructure into productive agricultural areas can also result in speculative increase in agricultural land values. This premise is evidenced by the fact that property values, as measured by the County Assessor's office, are higher adjacent to the urban fringe.

According to the Sacramento County Agricultural Commissioner's Crop and Livestock Reports, the total amount of agricultural land within the County decreased from 193,877 acres in the year 2000 to 157,843 acres in 2007, a decrease of 36,034 acres. A substantial portion of this farmland was lost due to economic incentives to convert land to developed uses.

Florin Vineyard GAP Community Planning Area Soil Conditions

According to the Soil Capability Classification System Class II through Class IV soils are found within the Florin Vineyard GAP Community Planning Area. The Soil Classification of each soil found in the Planning Area is shown in Table AG-4.

Table AG-4: FVGCP Area Soil Capability Classification

Soil Type	Soil Classification	
	Irrigated	Non-Irrigated
Corning – Redding complex, 0 to 8 percent slopes	VIe	N/A
Fiddyment fine sandy loam	IVe-3	IVe-3
Hedge Loam	IIIs-8	IIIs-8
Kimball silt loam	IIIs-3	IIIs-3
Red Bluff loam	IIs-9	IIIs-9
Red Bluff – Xerarents complex, 0 to 2 % slopes	IIIs	IIs
Redding gravelly loam, 0 to 8 % slopes	IVe	IVe
San Joaquin silt loam 0 to 1 % slope	IIIs-3	IIIs-3
San Joaquin silt loam 0 to 3 % slope	IIIs-3	IIIs-3
San Joaquin silt loam 3 to 8 % slope	IIIe-3	IIIe-3
San Joaquin-Durixeralfs complex silt loam	IVs-5	IVs-5
San Joaquin-Galt complex silt loam 0 to 1 % slope	IIIs-3	IIIs-3
San Joaquin-Galt complex silt loam 0 to 3 % slope	IIIs-5	IIIs-5
San Joaquin-Xerarents complex silt loam	IIIs-3	IIIs-3
Xerarents- San Joaquin complex silt loam	IIIs-3	IIIs-3
Source: United States Department of Agriculture: Soil Survey of Sacramento County.		

The U.S. Department of Agriculture: Soil Conservation Service (SCS), Sacramento County Soil Survey identified and mapped soils in Sacramento County. Each identified soil complex has characteristics that affect soil behavior. Soil characteristics may or may not make the soils suitable for accommodating uses such as shallow excavations, levees, and berms, and local roads and streets. Soil limitations can include slow or very slow permeability, limited ability to support a load, high shrink-swell potential, moderate depth to hardpan, low depth to rock, and frequent flooding. Each soil has characteristics that affect soil behavior.

The predominant soil types identified throughout the Florin Vineyard GAP Community Planning Area are the San Joaquin silt loam (0 to 1 percent slopes

and 0 to 3 percent slopes), which composed approximately 80 percent of the project area. The two soil types are described as follows:

- **San Joaquin silt loam, 0 to 1 percent slopes**: moderately well drained soils that are moderately deep over a cemented hardpan.
- **San Joaquin, silt loam, 0 to 3 percent slopes**: moderately well drained soils that are moderately deep over a cemented hardpan.

In addition, to the soil compatibility classification provided in Table AG-4, the Storie Index rating of the complete range of soil types found throughout the Planning Area, through a review of the Sacramento County Soil Survey, are described in Table AG-5.

Table AG-5: FVGCP Area Soil Index

Soil Map Units		Storie Index Rating	Grade
126	Corning – Redding complex, 0 to 8 percent slopes	22	4 - Poor
145	Fiddyment fine sandy loam, 1 to 8 % slope	25	4 - Poor
157	Hedge Loam 0 to 2 % slope	30	4 - Poor
164	Kimball silt loam 0 to 2 % slope	55	3 - Fair
191	Red Bluff loam 0 to 2 % slope	54	3 - Fair
195	Red Bluff – Xerarents complex, 0 to 2 % slopes	48	3 – Fair
198	Redding gravelly loam, 0 to 8 % slopes	16	5 - Very Poor
213	San Joaquin silt loam 0 to 1 % slope	28	4 - Poor
214	San Joaquin silt loam 0 to 3 % slope	28	4 - Poor
215	San Joaquin silt loam 3 to 8 % slope	26	4 - Poor
216	San Joaquin-Durixeralfs complex silt loam 0 to 1 % slope	21*	4 - Poor
217	San Joaquin-Galt complex silt loam 0 to 1 % slope	23*	4 - Poor
218	San Joaquin-Galt complex silt loam 0 to 3 % slope	22*	4 - Poor
221	San Joaquin-Xerarents complex silt loam 0 to 1 % slope	31*	4 - Poor
238	Xerarents- San Joaquin complex silt loam 0 to 1 % slope	36*	4 - Poor

** Value is a weighted average of the component part rating.*
*** Rated nonagricultural because of urban land use.*

Source: United States Department of Agriculture: Soil Survey of Sacramento County, October 2005.

As indicated in Table(s) AG-4 and AG-5, the predominant soil complexes in the project area are not well suited for agricultural purposes. However, Red Bluff loam is considered a Prime Farmland soil. Plate AG-1 maps the soils within the project site. Plate AG-2 shows the soil classifications of the project site soils.

WILLIAMSON ACT

The California Land Conservation Act, also known as the Williamson Act, was adopted in 1965 in order to encourage the preservation of the state's agricultural lands and to prevent their premature conversion to urban uses. In order to preserve these uses, the Act established an agricultural preserve contract procedure by which any county or city within the state taxes landowners at a lower rate, using a scale based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. In return, the owners guarantee that these properties will remain under agricultural production for ten-year period. The contract is renewed automatically on an annual basis unless the owner files a notice of non-renewal. In this manner, each agricultural preserve contract (at any given date) is always operable at least nine years into the future. Currently, approximately 70 percent of the state's prime agricultural land is protected under this Act. A small area in the northwestern portion of the Community Plan area contains Red Bluff loam, which is considered a Prime soil. However, the parcels containing Red Bluff soils are not under Williamson Act contract, nor are any other parcels within the FVGCP under Williamson Act contract.

MINERAL RESOURCES

Existing Mineral Resource Conditions

Mineral resources in Sacramento County include natural gas, petroleum, sand, gravel, clay, gold, silver, peat, topsoil and lignite. The principal resources which are in production are aggregate (sand and gravel) and natural gas. Maintaining access to aggregate resources is a primary area of concern with respect to mineral resources. Aggregate is used primarily for construction purposes. The demand for aggregate products (including Portland cement and road building materials) has increased with the region's population growth, and the related building of structures and roads. Development over, or adjacent to, aggregate resources lands can deny, or severely limit, access to mineral resource deposits.

The California Division of Mines and Geology has classified lands according to the potential presence of mineral resources. Areas with potential subsurface minerals are delineated into Mineral Resource Zones to indicate the presence of minerals. MRZ-2 zones are areas for which adequate information indicates that significant mineral deposits are present, or there is a high likelihood for their presence and development should be controlled. The proposed community plan area includes four MRZ-2 areas (Sectors I-1 to 4) and portions of one MRZ-2 area (Sector I-5) (See Plate AG-3).

Plate AG-1
Project Area Soils

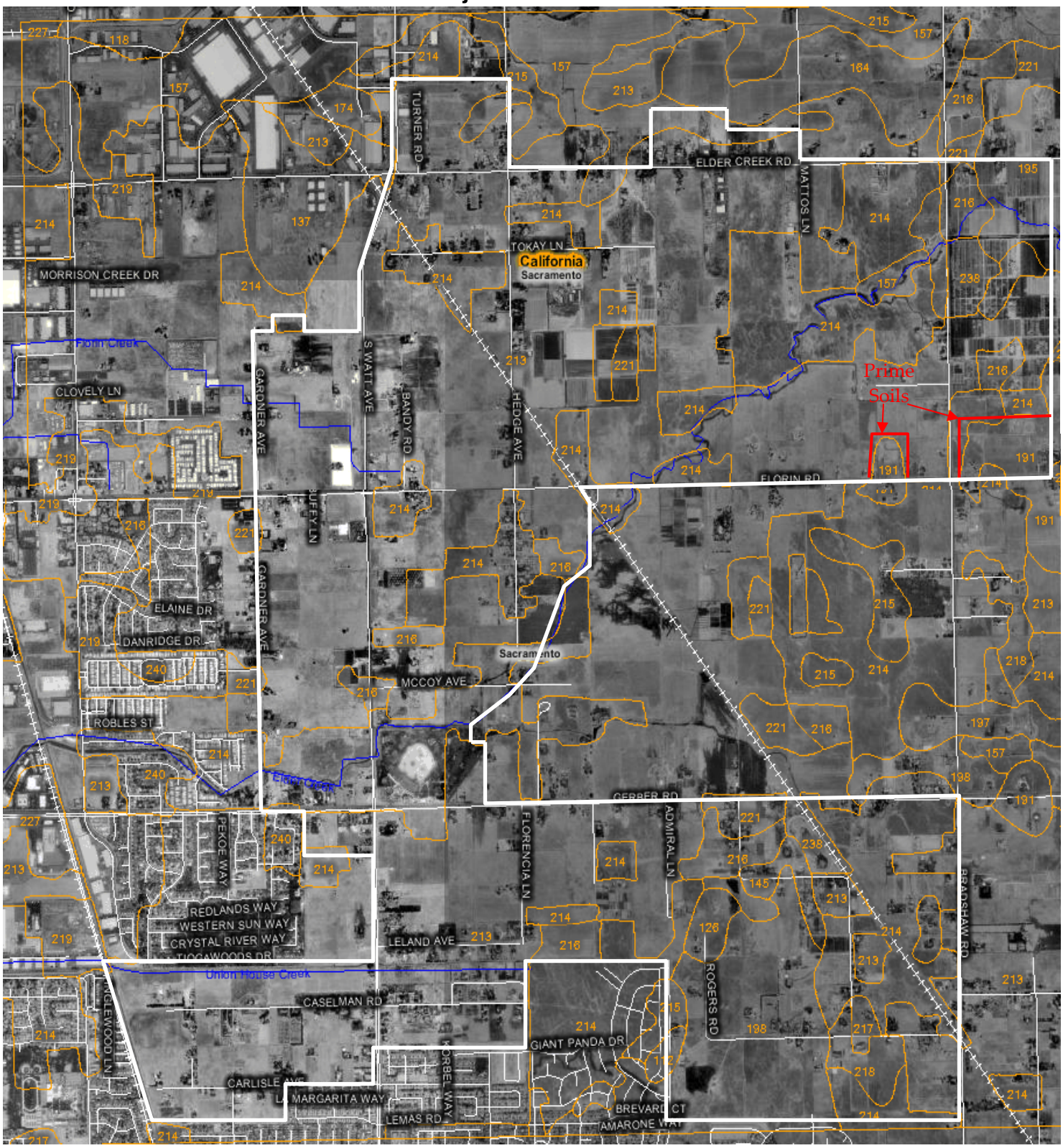
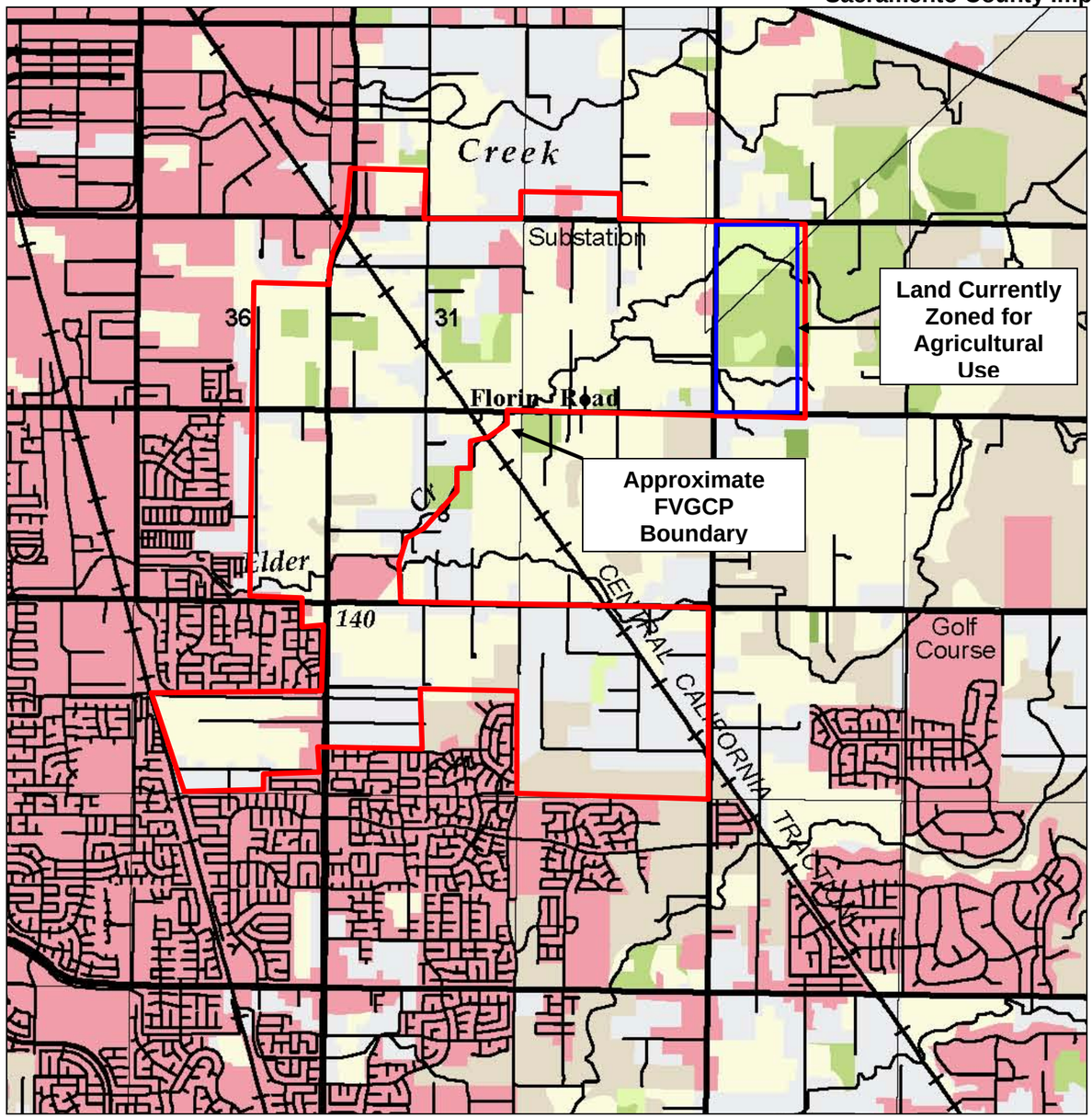


Plate AG-2
Sacramento County Important Farmland



PRIME FARMLAND

PRIME FARMLAND HAS THE BEST COMBINATION OF PHYSICAL AND CHEMICAL FEATURES ABLE TO SUSTAIN LONG-TERM AGRICULTURAL PRODUCTION. THIS LAND HAS THE SOIL QUALITY, GROWING SEASON, AND MOISTURE SUPPLY NEEDED TO PRODUCE SUSTAINED HIGH YIELDS. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF STATEWIDE IMPORTANCE

FARMLAND OF STATEWIDE IMPORTANCE IS SIMILAR TO PRIME FARMLAND BUT WITH MINOR SHORTCOMINGS, SUCH AS GREATER SLOPES OR LESS ABILITY TO STORE SOIL MOISTURE. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

UNIQUE FARMLAND

UNIQUE FARMLAND CONSISTS OF LESSER QUALITY SOILS USED FOR THE PRODUCTION OF THE STATE'S LEADING AGRICULTURAL CROPS. THIS LAND IS USUALLY IRRIGATED, BUT MAY INCLUDE NONIRRIGATED ORCHARDS OR VINEYARDS AS FOUND IN SOME CLIMATIC ZONES IN CALIFORNIA. LAND MUST HAVE BEEN CROPPED AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF LOCAL IMPORTANCE

LANDS WHICH DO NOT QUALIFY AS PRIME, STATEWIDE, OR UNIQUE DESIGNATION BUT ARE CURRENTLY IRRIGATED CROPS OR PASTURE OR NONIRRIGATED CROPS; LANDS THAT WOULD BE PRIME OR STATEWIDE DESIGNATION AND HAVE BEEN IMPROVED FOR IRRIGATION BUT ARE NOW IDLE; AND LANDS WHICH CURRENTLY SUPPORT CONFINED LIVESTOCK, POULTRY OPERATIONS, AND AQUACULTURE.

GRAZING LAND

GRAZING LAND IS LAND ON WHICH THE EXISTING VEGETATION IS SUITED TO THE GRAZING OF LIVESTOCK.

URBAN AND BUILT-UP LAND

URBAN AND BUILT-UP LAND IS OCCUPIED BY STRUCTURES WITH A BUILDING DENSITY OF AT LEAST 1 UNIT TO 1.5 ACRES, OR APPROXIMATELY 6 STRUCTURES TO A 10-ACRE PARCEL. COMMON EXAMPLES INCLUDE RESIDENTIAL, INDUSTRIAL, COMMERCIAL, INSTITUTIONAL FACILITIES, CEMETERIES, AIRPORTS, GOLF COURSES, SANITARY LANDFILLS, SEWAGE TREATMENT, AND WATER CONTROL STRUCTURES.

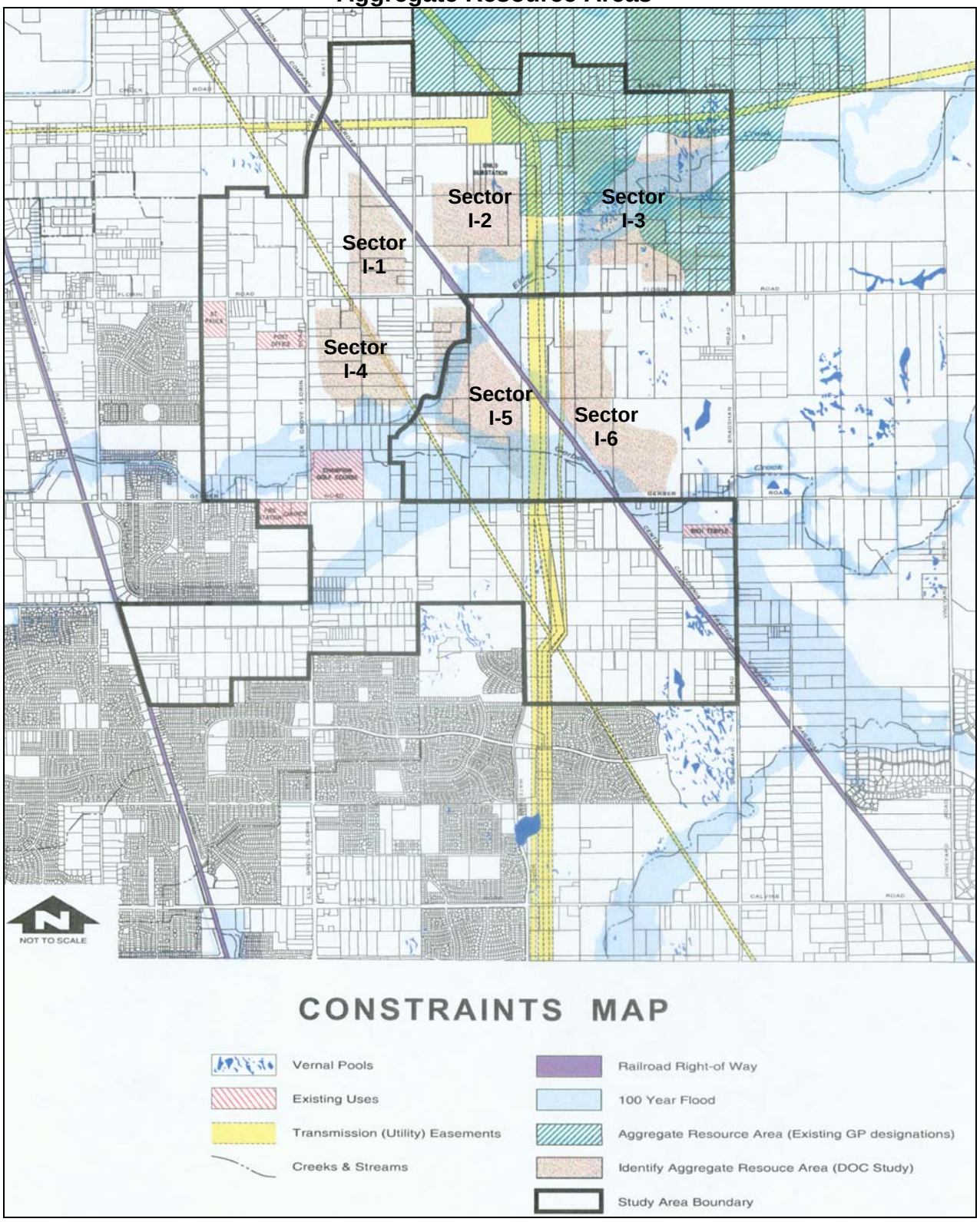
OTHER LAND

OTHER LAND IS LAND NOT INCLUDED IN ANY OTHER MAPPING CATEGORY. COMMON EXAMPLES INCLUDE LOW DENSITY RURAL DEVELOPMENTS, BRUSH, TIMBER, WETLAND, AND RIPARIAN AREAS NOT SUITABLE FOR LIVESTOCK GRAZING, CONFINED LIVESTOCK, POULTRY, OR AQUACULTURE FACILITIES, STRIP MINES, BORROW PITS, AND WATER BODIES SMALLER THAN 40 ACRES. VACANT AND NONAGRICULTURAL LAND SURROUNDED ON ALL SIDES BY URBAN DEVELOPMENT AND GREATER THAN 40 ACRES IS MAPPED AS OTHER LAND.

WATER

PERENNIAL WATER BODIES WITH AN EXTENT OF AT LEAST 40 ACRES.

Plate AG-3
Aggregate Resource Areas



REGULATORY CONTEXT

STATE OF CALIFORNIA

WILLIAMSON ACT

The California Land Conservation Act of 1965 – commonly referred to as the Williamson Act – enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971.

SACRAMENTO COUNTY GENERAL PLAN

The following are applicable General Plan policies related to agricultural and mineral resources.

AGRICULTURAL ELEMENT

AG-1 The County shall protect prime farmlands and lands with intensive agricultural investments from urban encroachments.

AG-2 The County shall not accept applications for General Plan amendments redesignating prime farmland or lands with intensive agricultural investments to agricultural/residential or urban use (i.e., residential, commercial, industrial) unless proposed development is contiguous to agricultural/residential or urban uses, and unless the applicant demonstrates no feasible alternative sites are available other than prime farmlands or lands with intensive agricultural investment.

AG-3 The County shall permit agricultural uses on buffers, provided such uses are conducted in a manner compatible with urban uses. Buffers shall be used to separate farming practices incompatible with adjacent urban uses. Any homeowners' association or similar entity within the development shall assist in determining compatible use. Buffers shall not adversely conflict with agricultural uses on adjoining property.

AG-4 Prospective buyers of agricultural land or property adjacent to agricultural land shall be notified through the title report that they could be subject to inconvenience or discomfort resulting from accepted farming activities as per provisions of the county right-to-farm ordinance.

AG-5 Mitigate loss of prime farmlands or lands with intensive agricultural investments through CEQA requirements to provide in-kind protection of nearby farmland.

AG-22 The County shall actively encourage enrollments of agricultural lands in its Williamson Act program.

AG-23 Discourage property owners from filing notices of nonrenewal.

AG-24 Support and promote the recision of notices of nonrenewal and replacement of Williamson Act contracts, pursuant to the provisions of Government Code Section 51254, in areas outside the Urban Services Boundary for which notices of nonrenewal have been filed.

Conservation Element

CO-41 Apply the aggregate resources combining land use category to additional areas as subsequent studies determine them to contain mineral resources which are feasible and appropriate for mining. The aggregate resources combining land use category shall not be a prerequisite to (SM) surface mining combining zoning in conjunction with proposed surface mining.

CO-42 Sewer and interceptor and trunk alignments shall be routed to avoid areas planned for aggregate resource mining to the extent practical. Where such alignments are impractical, they shall be designed to minimize aggregate resources which would be precluded from mining, and make reasonable attempt to preserve the future use of mined areas for flood control or recharge purposes.

CO-48 Sector I-3 south of Elder Creek Road shall be a high priority area for mining to allow for its future urban use.

CO-54 Direct development away from prime or statewide importance soils or otherwise provide for mitigation that slows the loss of additional farmland conversion to other uses.

CO-55 Projects resulting in the conversion of more than fifty (50) acres of prime or statewide in importance farmland shall be deemed to have a significant environmental effect, as defined by CEQA.

Vineyard Community Plan

AG-1 Support agriculturally compatible development proposals.

AG-2 Provide adequate buffering between agricultural lands and potentially incompatible land use proposals by requiring twenty acres as the minimum parcel size for new parcels adjacent to active agricultural endeavors protected by the Williamson Act.

AG-3 Maintain conformance with the County General Plan minimum parcel size requirements in all agricultural areas.

NER-7 Continue to utilize the Surface Mining Combining Zone for the preservation of aggregate resources and for the protection of area residents through mitigation provisions contained within the zone.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

An agricultural impact may be considered significant if any of the following conditions, or potential thereof, would result if the proposed project's implementation would:

- Convert more than 50 acres of Prime Farmland or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with a Williamson Act contract;
- Involve other changes in the existing environment which, due to their location or nature, could result in indirect conversion of substantial amounts of active farmland to non-agricultural use;
- Obstruct access to, and extraction of, important mineral resources. In particular for aggregate resources, removal or disruption of mineral resources classified as MRZ-2.

METHOD OF ANALYSIS

Determination of agricultural and mineral resources impacts were based on information from the Sacramento County General Plan, Sacramento County General Plan EIR, and the Sacramento County Soil Survey.

PROJECT IMPACTS AND MITIGATION MEASURES

CONVERSION OF PRIME FARMLAND AND FARMLAND OF STATEWIDE IMPORTANCE TO NON-AGRICULTURAL USE.

CAC LAND USE PLAN/PD LAND USE PLAN

The soils maps produced by the United States Department of Agriculture indicate that approximately 80 percent of the site is composed of San Joaquin silt loam (0 to 1 percent slopes and 0 to 3 percent slopes). Under cultivation and irrigation San Joaquin silt loam soils are considered to be a soil of Statewide Importance. Although the *Hedge Loam, Kimball silt loam, San Joaquin silt loam soils, San Joaquin-Galt complex silt loam soils, San Joaquin-Xerarents complex silt loam,* and the *Xerarents- San Joaquin complex silt loam* soils are candidates that meet the criteria for listing as Farmland of Statewide Importance, the soils are considered to be fair to poorly suited for agricultural uses by the USDA. The soils are severely limited in their agricultural potential because they have a combination of the following: shallow soil depth; less permeable subsoil; a steeper slope; a more clayey or gravelly surface soil texture than Grade 3 soils; poor drainage; greater flood hazards; hummocky micro-relief; salinity; or fair to poor fertility levels. In addition, the *Fiddyment fine sandy loam, San Joaquin-Durixeralfs complex silt loam,* and *San Joaquin-Urban complex silt loam* soils are also very poorly suited for agriculture, are seldom cultivated, and are more commonly used for range, pasture, or woodland. One project area soil, *Red Bluff loam,* meets the criteria for a Prime Farmland soil, which is well suited to intensive uses for growing irrigated crops.

The majority of the lands within the FVGCP are not under cultivation, nor are the lands designated for agricultural use. As shown in Plate AG-3, the farmland map for Sacramento County prepared pursuant to the Farmland Mapping and Monitoring Program indicates that the vast majority of land within the FVGCP is considered to be Farmland of Local Importance, Unique Farmland, Grazing Land, or Urban Land. In addition, with the exception of approximately 320 acres, all of the FVGCP is designated under non-agricultural zoning designations, and as such is effectively not planned for agricultural uses. Although agricultural uses are still possible on Agricultural – Residential properties, the main function of this zone is the creation of large lot homeownership opportunities.

However, 320 acres located north of Florin Road and east of Bradshaw Road are designated as agricultural land (AG-20 and AG-80). Approximately one-third of this area is designated as either Prime Farmland or Farmland of Statewide Importance per the 2006 Sacramento County Important Farmland map produced by the Farmland Mapping and Monitoring Program. The proposed project would expand the Urban Policy Area to include these agricultural lands, creating impacts not anticipated in the County General Plan. Therefore, because the proposed project would convert over 50 acres of agriculturally zoned lands that

are designated as Prime Farmland and Farmland of Statewide Importance to non-agricultural uses, a ***potentially significant*** impact would occur.

MITIGATION MEASURE(S)

The following mitigation measures would reduce impacts to agricultural resources; however not to a *less-than-significant* level. The impacts related to agricultural resources would therefore remain *significant and unavoidable*.

AG-1 *The applicants for all future development proposals shall compensate for the loss of Prime Farmland and Farmland of Statewide Importance by preserving permanent agricultural land through land dedication at a 1:1 ratio. The land dedication shall be provided by an in-perpetuity conservation easement or in fee title to be provided to the County or third party conservation organization acceptable to the County. The land dedication shall be located in eastern Sacramento County, outside of the Urban Planning Area and shall include at a minimum the following provisions:*

- *A statement of purpose, including that the land is to remain in productive agricultural and open space use;*
- *A list of prohibited uses, including but not limited to, mining, resort facilities, golf courses, public airstrips, or other structures and improvements that do not contribute to the agricultural production on the property;*
- *Annual monitoring program;*
- *Enforcement procedures; and*
- *A statement of perpetual duration.*

The land dedication shall be accompanied with an applicant provided monetary endowment to cover the operations and maintenance of the dedicated land in-perpetuity. The endowment shall be calculated using an industry standard, attribute based system for calculating financial endowments such as the Property Analysis Record (PAR).

Should the County Board of Supervisors adopt an agricultural lands mitigation policy/program (which may include a mitigation fee) prior to the implementation of the above measure, the project proponent may be subject to that program instead.

Conflict With the Williamson Act.

CAC Land Use Plan/PD Land Use Plan

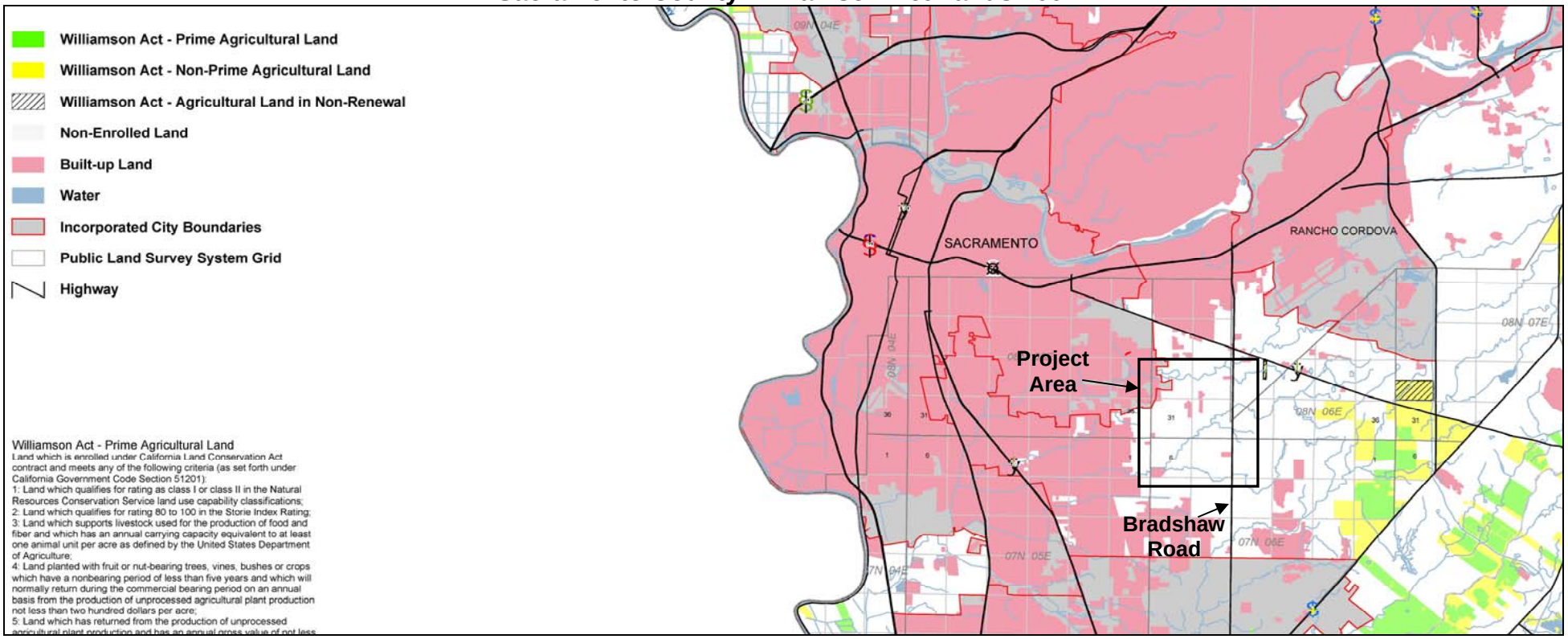
The California Land Conservation Act of 1965, commonly called the Williamson Act, has long been the mainstay of Sacramento County's agricultural land preservation program. The purpose of the Williamson Act is to secure a long-term landowner commitment to maintain farmland in agricultural uses. In exchange for tax assessment of the land being based upon use rather than market value, farmers commit to long-term preservation of the land for agricultural use.

By 1989, twenty years after the program's initiation, 253,240 acres (representing 38 percent of the County) had been placed under contract. Because of the County's growing demands for urban development, maintenance of a strong agricultural sector requires stable land use patterns in the County's important farming areas. General Plan policies encourage the use of the Williamson Act incentives to protect farmland (Policies AG-22 to 24), and require development to mitigate the loss of prime farmland and intensive agricultural operations with in-kind protection of nearby farmland (Policy AG-5). The General Plan policy structure is largely supported by a boundary demarking the difference between urban and rural land use. Maintenance and expansion of contracted land outside the urban service boundary strengthens the County's planning objectives of concentrating growth so as to be efficiently serviced and to preserve agricultural lands. The boundary clearly delineates lands that are to remain in open space or agricultural uses and should essentially eliminate much of the development pressure to convert agricultural lands to urban uses.

The proposed project would lead to the conversion of agricultural land to non-agricultural uses. As shown in Plate AG-4, the FVGCP does not contain any lands protected by the Williamson Act, nor do Williamson Act properties border the FVGCP. Therefore, the proposed project would have a ***less-than-significant*** impact related to the conversion of Williamson Act protected lands to non-agricultural uses.

Mitigation Measure(s)
None required.

Plate AG-4
Sacramento County Williamson Act Lands 2007



Involve Other Changes in the Existing Environment That Could Result in Conversion of Farmland to Non-Agricultural Use.

CAC Land Use Plan/PD Land Use Plan

Sacramento County's agricultural surroundings play a central role in its history and character of the community. The continued growth of the County would inevitably convert agricultural land to urban uses. One of the basic underlying premises of agricultural conversion is that the proximity of agricultural land to urban uses increases the value of the agricultural land. The increase in value can result either directly through formal purchase offers, or indirectly through recent sales in the vicinity. In addition, the extension of utilities and other urban infrastructure into productive agricultural areas can result in speculative increases in land values.

The conversion of farmland to developed uses provides economic incentives, which contribute to the increase of development throughout the County area. The proposed project would extend the UPA boundary, and plan for development of urban uses adjacent to the revised UPA. Extension of the UPA and construction of urban uses adjacent to the UPA boundary could result in increased pressure to develop farmlands that are currently not located adjacent to the UPA. However, the General Plan contains policies and guidelines that restrict the extension of the UPA and conversion of farmland outside the UPA (Policies AG-1 and AG-2) which serve to protect farmland from encroachment. In addition, the County right-to-farm ordinance serves to protect agricultural uses from conflicts with new urban uses. Therefore, General Plan policies and County ordinances would ensure that extension of the UPA would have a ***less-than-significant*** impact to farmlands that are currently not located adjacent to the UPA, but which would be placed adjacent to the UPA as a result of the proposed project.

Mitigation Measure(s)
None required.

Result in the Loss of Availability of Known Mineral Resources.

CAC Land Use Plan

The proposed project would change the land use designations for areas covering MRZ-2 Sectors I-1, -2, -3, and -4, and portions of I-5. Development prior to resource extraction from the previously mentioned MRZ-2 sectors could result in adverse impacts to the availability of aggregate resources, as the urban development of land would preclude the future mining of the aggregate resources. In addition, most residential and commercial uses are considered to be incompatible with ongoing aggregate mining for reasons of dust and noise.

The CAC Land Use Plan would designate the majority of Sector I-3 as M-1 (Light Industrial). Industrial uses are compatible with aggregate mining on adjacent properties. In addition, the CAC Land Use Plan would apply the SM combining designation to the northwest corner of the proposed Community Plan area to protect mineral resources in that area.

Should development occur prior to the extraction of aggregate resources, the proposed project would result in the loss of access to known mineral resources in Sectors I-1, -2, -3, -4, and -5. The 1993 General Plan designated the land composing those sectors for urban growth, and found the resulting impact to be less-than-significant. However, the General Plan EIR required the application of a Surface Mining Combining Land Use Zone (SM) to the area containing Sector I-3 as part of the mitigation for impacts to mineral resources. While the General Plan is over 15 years old, and Sacramento County is currently in the process of updating the General Plan, the analysis of impacts to mineral resources contained in the General Plan EIR remains valid. Therefore, the removal of the SM designation from substantial areas of Sector I-3 under the CAC Land Use Plan would result in a ***significant*** impact to mineral resources.

MITIGATION MEASURE(S)

Feasible mitigation does not exist to reduce impacts to mineral resources; therefore, the implementation of the CAC Land Use Plan would have a *significant and unavoidable* impact on mineral resources.

PD LAND USE PLAN

The proposed project would change the land use designations for areas covering MRZ-2 Sectors I-1, -2, -3, and -4, and portions of I-5. Development prior to resource extraction from the previously mentioned MRZ-2 sectors could result in adverse impacts to the availability of aggregate resources, as the urban development of land would preclude the future mining of the aggregate resources.

The PD Land Use Plan would, in conformance with CO-41, include a Surface Mining (Combining Land Use) Overlay for a large area which would include Sector I-3. The Surface Mining (Combining Land Use) Overlay would protect the mineral resource area from preclusive and incompatible land uses. In addition, the overlay would allow for better control of the environmental impacts related to surface mining, and provision could be made for the reclamation of the mined lands.

Should development occur prior to the extraction of aggregate resources, the proposed project would result in the loss of access to known mineral resources in Sectors I-1, -2, -4, and portions of -5. The 1993 General Plan designated the land composing those sectors for urban growth, and found the resulting impact to be less-than-significant. However, the General Plan EIR required the application of a

Surface Mining Combining Land Use Zone (SM) to the area containing Sector I-3 as part of the mitigation for impacts to mineral resources. While the County General Plan is over 15 years old, and Sacramento County is currently in the process of updating the General Plan, the analysis of impacts to mineral resources contained in the General Plan EIR remains valid.

Implementation of the PD Land Use Plan would retain the SM designation on Sector I-3, consistent with the mitigation previously applied to the General Plan for aggregate resource areas. Therefore, implementation of the PD Land Use Plan would have a ***less-than-significant*** impact on mineral resources.

MITIGATION MEASURE(S)
None required.

CUMULATIVE CONDITIONS

CUMULATIVE CONVERSION OF PRIME FARMLAND AND FARMLAND OF STATEWIDE IMPORTANCE ON A REGIONAL BASIS.

CAC LAND USE PLAN/PD LAND USE PLAN

As noted above, implementation of the proposed project would result in the conversion of over 50 acres of agriculturally designated lands composed of Prime Farmland and Farmland of Statewide Importance to urban uses. Therefore, implementation of the proposed project would convert a substantial acreage of farmland soils to non-agricultural uses. In addition, the proposed project would expand the Urban Policy Area to include areas that are currently designated for agricultural use. Furthermore, both the County and cities throughout the County are continuing to expand on to lands formerly used for agricultural production. As outlined above, the total land area in agricultural production has been reduced by 36,034 acres over the last seven years, a decline of over 5,000 acres per year. While the proposed project is part of a comprehensive planning process, the project would convert Prime Farmland, Farmland of Statewide Importance, and land that is currently in agricultural use. Therefore, the project would contribute to the ***significant*** impact that would result from the cumulative development of farmland.

MITIGATION MEASURE(S)
Feasible mitigation does not exist to reduce cumulative impacts to farmland; therefore, the implementation of the proposed project would have a *significant and unavoidable* impact on cumulative loss of farmland.

Cumulative Loss of Access to Mineral Resources.

CAC Land Use Plan

Implementation of the CAC Land Use Plan would result in the loss of access to aggregate resources. As shown in Plate AG-3, the proposed project in combination with buildout of the adjacent North Vineyard Station Specific Plan would potentially remove access to MRZ Sectors I-1, -2, -4, -5, -6, and most of I-3. The protection of Sector I-3 with a Surface Mining Overlay was included in the General Plan EIR as mitigation for the loss of access to mineral resources. Therefore, removal of the designation would result in a cumulatively considerable contribution to the ***significant*** cumulative impact.

Mitigation Measure(s)

Feasible mitigation does not exist to reduce cumulative impacts to mineral resources, therefore, the implementation of the CAC Land Use Plan would have a *significant and unavoidable* impact on cumulative loss of mineral resources.

PD Land Use Plan

Implementation of the PD Land Use Plan would result in the loss of access to aggregate resources. However, the Plan would continue to preserve access to Sector I-3 through the use of a Surface Mining Overlay in conformance with the mitigation included in the General Plan EIR. Therefore, implementation of the PD Land Use Plan would not result in a cumulatively considerable contribution to the cumulative loss of access to mineral resources. As a result, the PD Land Use Plan would have a ***less-than-significant*** cumulative impact on mineral resources.

Mitigation Measure(s)

None required.

19 AESTHETICS

INTRODUCTION

This section of the EIR describes existing visual and aesthetic resources for the project area and the region, and evaluates potential impacts of the project. In addition, the Sacramento County General Plan goals and policies pertaining to aesthetics are described. The California Environmental Quality Act (CEQA) describes the concept of aesthetic resources in terms of scenic vistas, scenic resources (such as trees, rock outcroppings, and historic buildings within a state scenic highway), the existing visual character or quality of the project area, and light and glare impacts. The following impact analysis is based on information drawn from the *Sacramento County General Plan* and the *Sacramento County General Plan EIR.*

ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing condition of visual resources in the project area, which is located in Sacramento County.

PROJECT AREA VISUAL SETTING

The Florin-Vineyard Gap Community Plan (FVGCP) area is located in central Sacramento County, on the broad, relatively smooth Sacramento valley plain south of the American River. The plain profile in the area is characterized by very gentle topographical undulation. The Plan area is predominantly undeveloped, with natural and disturbed vegetation. The trees found in the FVGCP area are typically large and located in isolated clusters. Although the surrounding vista is generally open, the view also includes utility towers and service buildings, and industrial facilities.

The project consists of the adoption of a General Plan Amendment and Community Plan Amendment to create the FVGCP area and guide the development of approximately 3,766 ± acres currently located in both the South Sacramento and Vineyard community planning areas in a comprehensive and coordinated manner.

Historical land uses within the FVGCP area include grazing and low-intensity farming. Current land uses include: undeveloped lands, agricultural areas, residential, commercial, industrial facilities, and light manufacturing. Adjacent land uses in the surrounding communities include residential, commercial, and planned development areas to the west and south sides of the project area. Undeveloped and agricultural uses to the north and east are designated primarily for future residential use/planned development. Some of the land to the east is

outside of the Urban Planning Area, and is intended to remain in agricultural production and other rural land uses.

REGULATORY CONTEXT

Specific federal or State regulations do not directly pertain to the visual quality of an area, nor is a State Scenic Highway located in the FVGCP. However, existing policies and regulations established in the Sacramento County General Plan are listed below, as applicable:

SACRAMENTO COUNTY GENERAL PLAN

The following are applicable General Plan policies related to aesthetics:

LAND USE ELEMENT

LU-20 Neighborhood identity should be maintained in existing and developing areas.

LU-21 Support the efforts of individual neighborhoods to maintain their identities though strategies such as Neighborhood Preservation Areas (NPAs) or neighborhood associations. Nothing in this plan is intended to supersede the objectives of these efforts.

LU-22 Exterior building materials on nonresidential structures shall be composed of a minimum of 50 percent low-reflectance, non-polished finishes.

LU-23 Bare metallic surfaces such as pipes, flashing, vents, and light standards on new construction shall be painted so as to minimize reflectance.

LU-24 Require overhead light fixtures to be shaded and directed away from adjacent residential areas.

LU-25 Require exterior lighting to be low-intensity and only used where necessary for safety and security purposes.

OPEN SPACE ELEMENT

OS-1 Permanently protect, as open space, areas of natural resource value, including wetlands preserves, riparian corridors, woodlands, and floodplains.

OS-10 Permit development clustering in urban areas where grouping of units at a higher density would facilitate on-site protection of woodlands, wetlands, steep slopes, urban stream corridors, scenic areas, or other appropriate natural features as open space, provided that:

a. Urban infrastructure capacity is available for urban use.
b. On-site resource protection is appropriate and consistent with other General Plan Policies. County of Sacramento General Plan 14 Open Space Element (Adopted)
c. General Plan policies pertaining to floodplain fill or natural preserves would not preclude development of the proposed use in the area to be protected as open space.
d. The architecture and scale of development is appropriate for the area.
e. Development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by either a public agency, private homeowners association, or other appropriate entity.

IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

An impact to the aesthetic values of the FVGCP area would be considered significant if any of the following conditions would potentially result from implementation of the proposed project:

- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area;
- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or
- Substantially degrade the existing visual character or quality of the site and its surroundings.

METHOD OF ANALYSIS

This section gives full consideration to the development of the FVGCP area, and acknowledges the physical changes to the existing setting. Impacts to the existing environment in the plan area are to be determined by the contrast between the site's visual setting before and after proposed development. In this analysis, emphasis has been placed on the transformation of the existing predominant rural setting into a landscape characterized by urban buildout. Although few standards exist to singularly define the various individual perceptions of aesthetic value from person to person, the degree of visual

change can be measured and described in a reasonably objective manner in terms of visibility and visual contrast, dominance, and magnitude. Current residents are considered to be sensitive to the visual and aesthetic transformations in the FVGCP area attributed to future development.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

IMPACTS RELATED TO LIGHT AND GLARE.

CAC LAND USE PLAN/PD LAND USE PLAN

Glare off highly reflective building surfaces from the sun or electric lights can adversely affect nearby pedestrian and vehicular traffic by momentarily reducing a person's field of vision causing unsafe walking and driving conditions. Excessive or poorly directed illumination around buildings can be intrusive to nearby property owners and disruptive to legitimate evening activities. Although security lights are an important tool for protecting property, excessive lighting can reduce privacy and adversely affect visual quality for nearby neighbors.

The development associated with the proposed plan would create new sources of light and glare. The proposed Florin-Vineyard Gap Community Plan allows for development in areas that are currently sparsely populated, open space, or agricultural land. The introduction of street lighting throughout the area from newly developed areas would alter the currently unlit conditions in the area. Night lighting associated with commercial, residential, and industrial developments would be easily evident to neighboring properties that are not accustomed to nearby development; however, the types of lighting would be typical of residential, commercial, and industrial uses.

Implementation of the proposed project would introduce additional light and glare to the FVGCP. Glare from surface building materials and exterior lighting may be considered disruptive to neighborhood character and impair vehicular safety along roadways. However, compliance with General Plan policies LU-22 through LU-24, and the regulations governing light and glare in the Title III, Use Regulations and Development Standards, of the Sacramento County Zoning Code would ensure that project impacts would be ***less-than-significant***.

MITIGATION MEASURE(S)
None required.

IMPACTS RELATED TO SCENIC VISTAS AND SCENIC RESOURCES.

CAC LAND USE PLAN/PD LAND USE PLAN

The proposed project area does not contain a State Scenic Corridor, nor is the area part of a protected viewshed. While the General Plan does not identify

specific scenic resources in the project area, the largely rural project setting contains extensive open space and agricultural views. Scenic resources can include important natural features, such as rock outcroppings, ponds and marshes, riparian zones, and significant trees or groups of trees. To the extent that these resources occur within the project area, implementation of the proposed project could have adverse effects on scenic resources.

Individual developments within the FVGCP would be required to preserve, or mitigate impacts to, water bodies and significant trees. The General Plan EIR found the loss of scenic views within the Urban Planning Area to be significant and unavoidable. While the proposed project would result in urban development similar to what was anticipated in the General Plan, the project would expand the Urban Planning Area, and thus expanding the area to be developed beyond what was analyzed in the General Plan. However, the area of Urban Planning Area expansion is composed of agricultural land that does not contain scenic resources. Furthermore, the General Plan did not identify scenic vistas or scenic resources in the FVGCP area. In addition, mitigation in the biological resources chapter addresses impacts to natural scenic resources, such as trees and water bodies. Waterways would be protected under the proposed project, and trees would be protected or mitigation would be required. Therefore, the proposed project would have a ***less-than-significant*** impact on scenic vistas and scenic resources.

MITIGATION MEASURE(S)
None required.

IMPACTS RELATED TO THE DEGRADATION OF THE EXISTING VISUAL CHARACTER OR QUALITY OF THE PROJECT AREA.

CAC LAND USE PLAN/PD LAND USE PLAN

Community and neighborhood identity are heavily influenced by the visual character of their surroundings. Topography, activity centers, landscaping, architecture, open space buffers, signs, building heights, and road layout all help to provide definition. Maintaining a sense of scale and coherence becomes more important as an urban area fills in and the intensity of development increases. Care should be exercised when evaluating new projects to assure that they are compatible with nearby development by transitioning building heights and including buffers, while maintaining linkages between different land uses. The Community Plan allows the creation of Neighborhood Preservation Areas as tools individual neighborhoods can use to nurture their own identities.

The existing character of the area is that of a rural low-density residential community. The proposed plan includes significant amounts of planned residential communities, and large parcels of regional commercial, business, and employment development, which includes light industrial. The proposed level of

development would substantially alter the existing visual character of the area. In addition, buildout of the Community Plan area would reduce the amount of open space which is currently a principal component of the visual character of the FVGCP.

Compliance with the land use guidelines contained in the General Plan would serve to guide development. As previously discussed, the project area has been planned for urban development. While implementation of the proposed project would substantially alter the existing visual character of the FVGCP area, compliance with the General Plan goals and policies as well as the Sacramento County Zoning Code would ensure that the alteration would not be considered degradation. Therefore, implementation of the proposed project would have a ***less-than-significant*** impact on the visual character of the plan area.

MITIGATION MEASURE(S)
None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to the Aesthetic Character of the Area.

Sacramento County and the greater Sacramento region are in the midst of a significant increase in development. Implementation of either the CAC Land Use Plan or the PD Land Use Plan would significantly increase the intensity of development within the project area. However, development of the project area has been comprehensively planned, and application of General Plan goals and policies would ensure that cumulative development would not result in the degradation of the aesthetic character. Therefore, the proposed project would have a ***less-than-significant*** cumulative impact on aesthetics.

MITIGATION MEASURE(S)
None required.

20 SUMMARY OF IMPACTS DISPOSITION

SIGNIFICANT IMPACTS THAT CANNOT BE AVOIDED

TRAFFIC AND CIRCULATION – EXISTING PLUS PROJECT IMPACTS

Implementation of the proposed project would result in a substantial increase in traffic throughout the Florin-Vineyard Gap Community Plan (FVGCP) area. Implementation of the required traffic mitigation would reduce impacts; however, feasible mitigation is not available to reduce project impacts to all roadway segments, intersections, and to State Route 99 and U.S. 50.

Road Segments: Implementation of the proposed project would result in the addition of substantial traffic to the FVGCP area. As such, the Traffic Impact Analysis identified the necessary roadway network required to accommodate the increase in traffic. A total of 27 and 29 roadway segments would operate unacceptably with the addition of project traffic under the CAC and PD Land Use Plans, respectively. It is important to note that six additional traffic impacts, referred to as “secondary impacts,” would occur to roadways as a result of implementation of the 27 recommended system-wide roadway mitigation measures. Overall, implementation of either the CAC Land Use Plan or the PD Land Use Plan would result in 32 and 36 potentially significant primary and secondary impacts, respectively, to the study roadway segments. Implementation of the required mitigation measures would reduce impacts to many of the adversely impacted roadway segments. However, four of the roadway improvements proposed as mitigation for impacts under the CAC Land Use Plan wound not reduce the impact to a less-than-significant level, and five (consisting of four CAC improvements and one additional roadway improvement) of the roadway improvements proposed as mitigation under the PD Land Use Plan would not reduce impacts to a less-than-significant level. In addition, several of the proposed improvements are not located within the jurisdiction of Sacramento County, and mitigation of impacts outside of County jurisdictions may not be feasible. Therefore, impacts to roadway segments under both the CAC Land Use Plan and the PD Land Use Plan would remain significant and unavoidable.

Intersections: Implementation of the CAC Land Use Plan or PD Land Use Plan would cause traffic volumes to increase, which would result in potentially significant impacts to intersection service levels. Thirty-two (32) of the 45 intersections (21 signalized and 11 unsignalized) would operate unacceptably with the addition of the CAC Land Use Plan. Thirty-four (34) of the 45 intersections (23 signalized and 11 unsignalized) would operate unacceptably with the addition of the PD Land Use Plan. It should be noted that a secondary impact would occur for both the CAC and PD Land Use Plans as a result of the recommended system-wide mitigation for the Vintage Park Drive / Elk Grove-

Florin Road intersection impacts. Therefore, in total, the CAC Land Use Plan would result in 33 potentially significant impacts to intersections and the PD Land Use Plan would result in 35 potentially significant impacts to intersections. The proposed mitigation would reduce the impacts to 28 of the 33 intersections adversely affected by implementation of the CAC Land Use Plan and 29 of the 35 intersections adversely affected by the PD Land Use Plan to a less-than-significant level. However, the required improvements for five intersections under the CAC Land Use Plan and six of the intersections under the PD Land Use Plan would not reduce impacts to a less-than-significant level. Therefore, impacts to intersections would remain significant and unavoidable.

TRAFFIC AND CIRCULATION – CUMULATIVE PLUS PROJECT IMPACTS

Roadway Segments: Implementation of the CAC Land Use Plan would result in potential impacts to 34 study roadway segments. In addition, the PD Land Use Plan would result potential impacts to 35 roadway segments. The proposed mitigation measures would reduce the significance of 26 of the 34 project impacts under the CAC Land Use Plan and 27 of the 35 project impacts under the PD Land Use Plan to a less-than-significant level. However, the required improvements for seven of the roadway segments would not reduce the impacts to a less-than-significant level, and one improvement would exacerbate conditions at another intersection; therefore, cumulative impacts to roadway segments would remain significant and unavoidable.

Intersections: Implementation of the cumulative plus CAC Land Use Plan would result in adverse impacts to 34 intersections, and the PD Land Use Plan would result in adverse impacts to 35 intersections. Therefore, implementation of either land use plan would cause potentially significant impacts to intersections. The proposed mitigation would reduce the impacts to the majority of the adversely affected intersections; however, the mitigation for four intersections would not reduce impacts to a less-than-significant level under either Land Use Plan. In addition, right-of-way constraints render the mitigation proposed for two intersections infeasible for both the CAC and PD Land Use Plans. As a result, impacts to intersections under the cumulative scenario would remain significant and unavoidable.

Freeway Impacts: The addition of the proposed project will increase demand for travel on SR 99 and U.S. 50, which will exacerbate LOS F conditions, which is considered a significant impact. Implementation of the proposed mitigation would contribute to improvements to both SR 99 and U.S. 50; however, both routes would continue to operate at LOS F conditions during peak hours. Furthermore, the proposed project's incremental contribution to traffic levels would be cumulatively considerable. Therefore, the impact would remain significant and unavoidable.

Density Bonus Impacts: The addition of traffic resulting from the density bonus would result in an additional impact beyond what is anticipated for the cumulative without density bonus scenario at one intersection. The additional adverse impact would occur with implementation of the PD Land Use Plan (with density bonus). All other impacts would be substantially similar to the impacts identified for the cumulative (without density bonus) scenarios. Implementation of the mitigation measure required for the PD Land Use Plan (with density bonus) would require expanding roadways beyond their General Plan designated widths. Such mitigation measures are considered to be infeasible. Therefore, implementation of the PD Land Use Plan (with density bonus) would result in an additional significant and unavoidable impact to intersections.

AIR QUALITY

Development of the proposed FVGCP would result in significant and unavoidable impacts to air quality. Buildout of the Plan area would significantly increase both short-term construction-related fugitive dust emissions and operational emissions of ozone precursors. In addition, the project's contribution to cumulative air quality impacts would be significant and unavoidable.

Construction activities would temporarily affect local air quality, causing a temporary increase in particulate matter and dust emissions. Short-term construction activity could be reduced below SMAQMD's particulate matter (PM_{10}) standards with strict adherence to dust control measures and the active disturbance of no more than 15 acres at any given time. Although the future amount of construction activity on any given day is unknown, it is unlikely that active grading would be limited to 15 acres or less on a Plan-wide basis at all times. Therefore, construction-related dust/PM_{10} impacts are expected to be significant and unavoidable.

Operational emissions of ozone precursors far exceed significance thresholds. Compliance with the Sacramento Metropolitan Air Quality Management District approved Air Quality Mitigation Program (AQ-15 Plan) would reduce emissions, but feasible mitigation is not available to reduce emissions to less-than-significant levels. Operational emissions would contribute to the significant cumulative impact to air quality; as mitigation is not available to reduce operational emissions to a less-than-significant level, cumulative impacts would also be significant and unavoidable.

CLIMATE CHANGE

Construction Emissions: Construction of the project would result in short-term CO_2 emissions from construction equipment exhaust and haul truck exhaust throughout buildout of the FVGCP. The project applicants would be required to comply with the greenhouse gas reduction plan prepared for the FVGCP throughout the design, construction, and operation of projects within the FVGCP.

The plan includes FVGCP-wide measures and project-specific measures that award points for various actions and design elements. Even in the case that all applicants select the construction-related GHG reduction measures, construction impacts to climate change would remain significant and unavoidable because construction related CO_2 emissions would still be substantial compared with existing conditions.

Operational Emissions: Implementation of the proposed project would result in the emission of substantial amounts of greenhouse gases. The Sacramento Metropolitan Air Quality Management District approved AQ-15 plan in combination with FVGCP-wide design elements, project-specific design features selected by the applicant, and participation in programs to offset carbon emissions, as required by mitigation measures would offset approximately 52 percent of the project emissions. However, this project's cumulative climate change impacts are considered significant and unavoidable.

BIOLOGICAL RESOURCES

The proposed project area consists of various habitat types including cropland, developed/landscaped areas, and a variety of wetland features (seasonal wetlands, marshes, open water, and riparian corridors). Impacts likely to result from the implementation of the proposed project include disturbance of Jurisdictional Waters of the U.S., riparian habitat, habitat for listed invertebrate species, special-status plant species, aquatic amphibians, special-status reptiles, and listed bird species. Similarly, the project impacts would combine with related impacts resulting from the implementation of other projects within Sacramento County, thereby creating a significant cumulative impact to biological species.

Development of any discretionary project within the FVGCP would be required to mitigate impacts to natural resources. However, while individual impacts to species would be mitigated to a less-than-significant level, the project's incremental contribution to the cumulative biological impacts would be cumulatively considerable. Cumulative impacts to biological resources are therefore considered significant and unavoidable.

AGRICULTURAL AND MINERAL RESOURCES

Impacts to Agricultural Resources: 320 acres located north of Florin Road and east of Bradshaw Road are designated as agricultural land (AG-20 and AG-80). Approximately one-third of this area is designated as either Prime Farmland or Farmland of Statewide Importance. The proposed project would expand the Urban Policy Area to include these agricultural lands, creating impacts not anticipated in the County General Plan. Therefore, as the proposed project would convert over 50 acres of agriculturally zoned lands that are designated as Prime Farmland and Farmland of Statewide Importance to non-agricultural uses, a significant and unavoidable impact to agricultural resources would occur.

Furthermore, both the County and cities throughout the County are continuing to expand on to lands formerly used for agricultural production. While the proposed project is part of a comprehensive planning process, the project would convert Prime Farmland, Farmland of Statewide Importance, and land that is currently in agricultural use to non-agricultural uses. Therefore, the project would contribute to the significant and unavoidable cumulative impact to farmland.

Impacts to Mineral Resources: Implementation of the CAC Land Use Plan would change the land use designations for areas covering MRZ-2 Sectors I-1, -2, -3, and -4, and portions of I-5. Development prior to resource extraction from the previously mentioned MRZ-2 sectors could result in adverse impacts to the availability of aggregate resources, as the urban development of land would preclude the future mining of the aggregate resources. In addition, most residential and commercial uses are considered to be incompatible with ongoing aggregate mining for reasons of dust and noise. The CAC Land Use Plan would remove the SM designation from substantial areas of Sector I-3, thereby eliminating existing protection of the mineral resource; this is considered a significant and unavoidable impact to mineral resources, both singularly and cumulatively.

POTENTIALLY SIGNIFICANT EFFECTS THAT CAN BE MITIGATED

HYDROLOGY AND DRAINAGE

IMPACTS RELATED TO FLOODING.

A Drainage Master Plan was developed to provide flood protection within the FVGCP, and in the adjacent Vineyard Springs and Vineyard Station areas. The proposed Drainage Master Plan would include the use of trunk lines connected to regional detention basins to arrest stormwater flow; however, each development would be responsible for constructing onsite drainage facilities that would connect to the trunk lines, as well as drainage facilities that are intended to improve water quality, such as vegetated swales.

Following implementation of the Drainage Master Plan post-project flows at the FVGCP boundary would be less than the existing conditions. While completion of all facilities included in the Drainage Master Plan would provide detention of floodwaters, should development occur within a drainage basin prior to the completion of the drainage infrastructure or implementation of required flood-protection measures for commercial development a potentially significant impact to drainage would occur. Recommended mitigation measures would reduce impacts to a less-than-significant level.

BIOLOGICAL RESOURCES

IMPACTS RELATED TO JURISDICTIONAL WATERS OF THE U.S. AND WATERS OF THE STATE.

Based on detailed delineation reports and aerial photo interpretation, approximately 106.1 acres of water features occur within the FVGCP. The water feature total includes 8.0 acres of channel/drainage/ditch, 1.5 acres of emergent marsh, 8.3 acres of pond, 43.7 acres of seasonal wetland, and 44.6 acres of vernal pools. Grading and construction activities in the plan area would have a significant adverse effect on channels, seasonal wetlands, vernal pools, and ponds. The emergent marsh areas do not appear to be in developable areas; however, without site specific review, impacts to emergent marsh should also be assumed. Therefore, because grading and construction activities would eliminate wetlands and other water features a potentially significant impact would occur. Implementation of recommended mitigation measures would reduce impacts to a less-than-significant level.

Native or Landmark Trees.

Biological surveys have identified trees throughout the FVGCP that are native to the area and/or that have attained landmark status. Depending on the design of individual projects, implementation could require the removal of substantial numbers of native and landmark trees. As a result, implementation of either land use plan would result in a potentially significant impact to protected native or landmark trees. Implementation of the recommended mitigation would reduce impacts to trees to a less-than-significant level.

IMPACTS TO SPECIAL-STATUS SPECIES.

Implementation of either the CAC Land Use Plan or the PD Land Use Plan would result in grading, tree removal, and increased urban development in the Plan area. Development of the Plan area has the potential to impact the over 100-acres of water features that exist within the Plan area. Many species of special-status wildlife are dependent on channels, wetlands, vernal pools, and the associated plant communities for their habitat.

As a result, buildout of the FVGCP under either the CAC Land Use Plan or PD Land Use Plan would result in the displacement of protected species potentially including vernal pool fairy shrimp, midvalley fairy shrimp, vernal pool tadpole shrimp, California linderiella, Valley elderberry longhorn beetle, giant garter snake, northwest pond turtle, western spadefoot toad, Swainson’s hawk, burrowing owl, California tiger salamander, dwarf downingia, Bogg’s Lake hedge-hyssop, northern California black walnut, Ahart’s dwarf rush, legenere, slender orcutt grass, Sacramento orcutt grass, and Sanford’s arrowhead through the

elimination of existing habitat and foraging areas. Because development of the FVGCP area would eliminate habitat and potentially result in “take” of special status-species, implementation of the proposed project would have a potentially significant impact on special status-species. Implementation of recommended mitigation measures would reduce impacts to a less-than-significant level.

NOISE

IMPACTS ASSOCIATED WITH TRAFFIC AND RAILROAD NOISE LEVELS AT FUTURE NOISE-SENSITIVE USES PROPOSED WITHIN THE FVGCP.

Traffic along roadways and railroad tracks within the FVGCP would result in noise levels that exceed the acceptable residential standards. In addition, commercial, office, and industrial standards could be exceeded for uses directly adjacent to the UPRR tracks or major roadways.

The predicted 65 dB L_{dn} noise contours for the FVGCP roadways following buildout of the either Land Use Plan (with and without density bonus) for 63 of the 73 roadway segments exceed 100 feet in distance. The smallest 65 dB L_{dn} noise contour, 49 feet along Hedge Avenue, is along a two-lane roadway; therefore, the noise contour would likely extend into the private areas of any residences placed alongside the roadway. The largest 65 dB L_{dn} noise contour extends 320 feet from Elk Grove-Florin Road, even though the roadway would be four lanes wide, such a noise contour would extend well into any adjacent developments. In addition, the interior noise standards could be exceeded within noise-sensitive uses located within the 70 dB L_{dn} noise contour, assuming a 25 dB attenuation from standard construction. Interior noise level impacts would be most likely along SR 16, Calvine Road, Watt Avenue/South Watt Avenue, Elk Grove-Florin Road, and Bradshaw Road where the 70 dB L_{dn} noise contour exceeds 100 feet; however, adverse impacts along smaller roads could occur depending on the placement and orientation of buildings.

In addition, the 65 dB L_{dn} noise contour would extend 423 feet from the UPRR tracks. Therefore, any residential or noise sensitive development within 423 feet of the tracks would have exterior noise levels that exceed County standards. Measurements indicate that the noise level at 100 feet is approximately 74 dB L_{dn}; therefore, interior noise standards, assuming a 25 dB attenuation from standard construction, would be exceeded within any residences constructed within 100 feet of the UPRR tracks. Therefore, the development of private exterior spaces within 423 feet of the tracks, or the construction or residential uses within 100 feet of the tracks could result in the exceedance of County interior and exterior noise standards.

Therefore, implementation of either the CAC Land Use Plan or the PD Land Use Plan would result in potentially significant impacts related to noise.

Implementation of recommended mitigation measures would reduce impacts to a less-than-significant level.

Impacts Associated With the Development of Noise-Producing Uses Within the FVGCP.

Noise-producing aspects of certain land uses which would be developed within the FVGCP such as industry, commercial loading docks, aggregate mining etc., developed within the appropriately zoned land use areas could generate elevated noise levels in the vicinity of existing or proposed noise-sensitive land uses which could result in potentially significant noise impacts. Implementation of recommended mitigation would ensure that impacts are less-than-significant.

Cultural Resources

Impacts to Important Historical Resources.

None of the residential complexes or former residential complexes surveyed for the project are significant resources under the criteria of the National Register of Historic Places or under the criteria of the California Register of Historical Resources. However, not all structures and properties within the FVGCP were surveyed. While the surveyed properties are representative of the resources that are located in the area, the potential exists that other properties within the FVGCP could contain properties that meet the criteria for listing in the California Register of Historical Resources and that development of properties containing eligible resources would result in adverse impacts to historic resources. As a result, implementation of the proposed project could have a potentially significant impact on historic resources. Implementation of recommended mitigation measures would ensure that impacts are reduced to a less-than-significant level.

Impacts to Important Archaeological Resources.

Based on the historical understanding of Native American settlement patterns in the project area, and communication with the Native American Heritage Commission, the project area is considered unlikely to contain significant archaeological resources. However, the project area has a history of Native American habitation. Native peoples would have hunted and gathered in the project area, and may have established temporary camps along project drainages. As a result, the potential exists for grading and excavation associated with buildout of the FVGCP area to unearth subsurface resources. Therefore, because construction activities associated with the proposed project may uncover previously unknown significant resources or human remains, a potentially significant impact would result. Implementation of recommended mitigation measures would ensure that impacts are reduced to a less-than-significant level.

HAZARDOUS MATERIALS

IMPACTS DUE TO PAST CHEMICAL USAGE IN THE PROJECT AREA.

Agricultural use of parcels within the FVGCP may have involved the use of pesticides. Agricultural and related businesses often stockpile pesticides, petroleum products, fertilizers, paints, and other chemicals. The Phase 1 reports conducted on the participating properties indicated the extensive presence of 55-gallon drums, petroleum tanks, abandoned vehicles, and vehicle work areas within the FVGCP area. Some of the surrounding areas exhibited what may have been chemical-related ground staining.

The combination of uses that have historically occurred within the FVGCP has a substantial likelihood to have resulted in chemicals being intentionally applied or accidentally spilled on the ground. Therefore, a potentially significant impact related to chemical residues on individual parcels within the FVGCP would result. Implementation of the recommended mitigation measures would reduce potential impacts due to the presence of chemical residues to a less-than-significant level.

IMPACTS ASSOCIATED WITH WATER SUPPLY WELLS.

In the past, the primary source of potable and agricultural water within the FVGCP was groundwater wells. As a result, numerous wells are located within the FVGCP. Old, hand-dug wells also exist in the FVGCP. The large diameter of hand-dug wells requires additional care, and should be backfilled in accordance with the recommendations of a geotechnical engineer. In addition, cisterns may be associated with the water supply systems. If wells or cisterns are not properly abandoned a potentially significant impact would result. Implementation of recommended mitigation would ensure that impacts related to wells and cisterns are less-than-significant.

IMPACTS ASSOCIATED WITH SEPTIC SYSTEMS.

The FVGCP area has not been served by municipal sewer service in the past. Therefore, existing residences are served by septic systems. Future development within the FVGCP would be required to connect to the municipal sewage system. Failure to remove septic systems, or improper removal of septic systems would result in a potentially significant impact to individual parcels. Implementation of recommended mitigation would ensure that septic systems would have a less-than-significant impact on the proposed project.

LESS THAN SIGNIFICANT IMPACTS

LAND USE

Potential land use impacts related to compatibility with surrounding uses, consistency with the General Plan, consistency with the Community Plans, and consistency with other land uses in the region are considered to be less-than-significant.

PUBLIC SERVICES

Potential impacts related to the provision of fire protection, law enforcement personnel, school resources, library services, solid waste disposal/recycling services, parks and recreation facilities, gas and electric facilities, and cumulative impacts to public services and facilities are considered to be less-than-significant.

SEWER SERVICE

Potential impacts related to the provision of wastewater treatment facilities, wastewater conveyance, and long term impacts to sewer service in conjunction with cumulative development are considered to be less-than-significant.

WATER SUPPLY

Potential impacts related to water quality, water supply, water supply infrastructure, groundwater, and water supply in the cumulative scenario are considered to be less-than-significant.

HYDROLOGY AND DRAINAGE

Potential long-term impacts to drainage and water quality in combination with cumulative development is considered to be less-than-significant.

TRAFFIC AND CIRCULATION

Potential impact to transit systems, bicycle systems, and pedestrian systems are considered to be less-than-significant for both the existing plus project and cumulative plus project scenarios.

AIR QUALITY

Potential impacts related to carbon monoxide emissions and toxic air contaminants are considered to be less-than-significant.

GEOLOGY AND SOILS

Potential impacts related to the presence of expansive soils, liquefaction, seismic activity, construction-related soil erosion, and cumulative geologic and seismic activity are considered to be less-than-significant.

NOISE

Potential impacts associated with construction noise, traffic noise increases at existing noise sensitive uses, aircraft noise, and cumulative noise increases are considered to be less-than-significant.

CULTURAL RESOURCES

Potential cumulative impacts to cultural resources are considered to be less-than-significant.

HAZARDOUS MATERIALS

Potential impacts related to the presence of petroleum pipelines, exposure to asbestos and lead, routine use and transport of hazardous materials, and long-term hazards impacts in the cumulative scenario are considered to be less-than-significant.

POPULATION AND HOUSING

Potential impacts related to inducement of significant growth, consistency with housing balance policies, affordable housing requirements, cumulative growth, cumulative housing balance, and cumulative provision of affordable housing are considered to be less-than-significant.

AGRICULTURAL AND MINERAL RESOURCES

Potential impacts related to Williamson Act conflicts are considered to be less-than-significant. In addition project-related and cumulative impacts to mineral resources from implementation of the PD Land Use Plan are considered to be less-than-significant.

AESTHETICS

Potential impacts related to light and glare, scenic vistas, degradation of the existing visual character and quality of the project area, and cumulative aesthetics impacts are considered to be less-than-significant.

IRREVERSIBLE ENVIRONMENTAL CHANGES

The CEQA Guidelines, Section 15126.2(c), require that this EIR consider significant irreversible environmental changes which would be caused by the proposed project should it be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Development of any of the project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development would generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project would result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed project would likely result in or contribute to the following irreversible environmental changes:

- Irreversible consumption of energy and natural resources to build the infrastructure and buildings associated with buildout of the Florin-Vineyard Gap area;
- Irreversible consumption of energy, goods and services associated with the future residents, employees, and shoppers; and
- Irreversible changes to the existing character of the project area from a largely open area to an urban/suburban community.

CUMULATIVE IMPACTS

An EIR must discuss the “cumulative impacts” of a project when its incremental effect will be cumulatively considerable. This means that the incremental effects of the individual project would be considerable when viewed in connection with the effects of other current projects, and the effects of probable future projects (Section 15065(c)).

CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” This Section further states that “Individual effects may be changes resulting from a single project or a number of separate projects.” Additionally, “The cumulative impact from several projects is [defined as] the change in the environment which results form the incremental impact of the project when added to other closely related past,

present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

Section 15130(a)(3) states also that an EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

Finally, Section 15130(b) indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, that it should reflect the severity of the impacts and their likelihood of occurrence, and that it should be focused, practical, and reasonable.

To be adequate, a discussion of cumulative effects must include the following elements:

(1) Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency's control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified EIR, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provide that such documents are reference and made available for public inspection at a specified location;

For some projects, the only feasible mitigation measures will involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis (Section 15130(c)).

As used above, the phrase "past, present and probable future projects" includes existing approved, planned, or budgeted projects; projects which are currently under construction; and projects requiring an agency approval for an application which has been received at the time of NOP release. (Section 15130(b)(1)(B)(2)).

The cumulative analysis for this EIR is based on the anticipated development in Rancho Cordova, Elk Grove, the City of Sacramento, unincorporated Sacramento County, and the Sacramento Area Council of Governments Blueprint projections. Cumulative impacts are analyzed in each subject chapter and summarized above.

GROWTH INDUCING IMPACTS

An EIR must discuss the ways in which a proposed project could foster economic or population growth or the construction of additional housing in the vicinity of the project, and how that growth will, in turn, affect the surrounding environment (see

CEQA Guidelines Section 15126.2(d)). Growth can be induced in a number of ways, including through the elimination of obstacles to growth, or through the stimulation of economic activity within the region. The discussion of the removal of obstacles to growth relates directly to the removal of infrastructure limitations or regulatory constraints that could result in growth unforeseen at the time of project approval.

A number of issues must be considered when assessing the growth-inducing effects of development plans such as the proposed project. These include the following:

> **Elimination of Obstacles to Growth:** The extent to which infrastructure capacity provided to accommodate the proposed project would allow additional development in surrounding areas; and
>
> **Economic Effects**: The extent to which development of the proposed project could cause increased activity in the local or regional economy.

The project would include the development of up to 13,875 residential units (PD Land Use Plan with density bonus) with an estimated population of up to 36,333 persons and office/commercial land uses. The project would directly induce growth within the County. Project residents would generate the need for goods and services within the County and the project vicinity, and would therefore indirectly induce employment opportunities. This indirect increase in employment opportunities would be expected to substantially increase the population within the County. The project would therefore substantially induce population growth generated by new employment opportunities and the provision of housing.

21 REFERENCES

Babaluk, J.A., Reist, J.D., Johnson, J.D., and Johnson, L. "First records of sockeye (*Oncorhynchus nerka*) and pink salmon (*O. gorbuscha*) from Banks Island and other records of Pacific salmon in Northwest Territories, Canada". Arctic 53(2):161-164. (2000).

Ballanti, Don. *Air Quality Impact Analysis for the Florin-Vineyard Gap Community Plan Project, County of Sacramento*, December 2008.

Gibson and Skordal, LLC. *Biological Baseline Information Report*, August, 2007.

Bollard Acoustical Consultants, Inc. *Environmental Noise Assessment: Florin Vineyard Gap Project EIR*, December 8, 2008.

California Climate Change Center at U.C. Berkeley (CCCC). "Managing Greenhouse Gas Emissions in California", 2006.

California Energy Commission (CEC). "Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2002 Update", 2005.

California, Governor's Office of Planning and Research, *CEQA and Archaeological Resources,* 1994.

California Health and Safety Code Section 7050.5, California Public Resources Code Sections 5097.98 *et seq.*

California Integrated Waste Management Board, WWW.ciwmb.ca.gov.

Cayan, D.C, Bromirski, P., Hayhoe, K., Tyree, M., Dettinger, M. and Flick, R. "Projecting Future Sea Level: Climate Action Team Reports to the Governor and Legislature", publication # CEC-500-2005-202-SF (March 2006b).

Cayan, D.C, Maurer, E., Dettinger, M., Tyree, M., Hayhoe, K. Bonfils, C., Duffy, P., and Santer, B., "Climate Scenarios for California: Climate Action Team Reports to the Governor and Legislature", publication # CEC-500-2005-203-SF (March 2006a).

Civil Engineering Solutions, Inc. *Florin Vineyard Gap Community Plan, Sacramento County, CA, Preliminary Drainage Study*, October 12, 2007.

Department of Water Resources (DWR). Progress of Incorporating Climate Change into Management of California's Water Resources, Technical Memorandum Report. State of California, July 2006.

Dettinger, M.D., Cayan, D.R., Meyer, M.K., and Jeton, A.E., "Simulated hydrologic responses to climate variations and change in the Merced, Carson, and American River basins, Sierra Nevada, California, 1900-2099: Climatic Change", 62 (2004): 283-317.

Economic & Planning Systems, *Florin Vineyard Community Plan Public Facilities Financing Plan*. October 30, 2008.

Fehr & Peers Transportation Consultants, *Traffic Impact Analysis Report for the Florin-Vineyard Community Plan*, September 19, 2008.

Gallaugher, P. and L. Wood. *In:* The World Summit on Salmon, June 10-13, 2003, Proceedings, pgs 53 – 59. Vancouver, British Columbia.

Intergovernmental Panel on Climate Change, United Nations (IPCC). "Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the IPCC", 2007b.

Intergovernmental Panel on Climate Change, United Nations (IPCC). "Climate Change 2007: Mitigation of Climate Change. Contribution of Working Group III to the Fourth Assessment Report of the IPCC", 2007c.

Intergovernmental Panel on Climate Change, United Nations (IPCC). "Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC", 2007a.

Kamler, E. "Ontogeny of yolk-feeding fish: An ecological perspective." Reviews in Fish Biology and Fisheries, 12, 79-103. (2002).

Kiparsky, M. and P.H. Gleick. "Climate Change and California Resources: A Survey and Summary of the Literature". Oakland, CA: Pacific Institute for Studies in Development, Environment, and Security, July 2003.

MacKay & Somps, Civil Engineers, Inc. *Sanitary Sewer Master Plan for the Florin-Vineyard GAP Community Plan*, June 8, 2006.

Miller, N.L., Jin, J., Hayhoe, K., and Aufhammer, M. "Climate Change, Extreme Heat, and Electricity Demand in California", publication number CEC-500-2007-023 (August 2007).

MWH, Inc. *Zone 41 Urban Water Management Plan*, December 2005.

MWH, Inc. *Zone 40 Water System Infrastructure Plan,* April 2006.

MWH, Inc. *Master Water Study for the Florin-Vineyard Community Plan*, December, 2006.

O'Neal, K. "Effects of Global Warming on Trout and Salmon in U.S. Streams", Defenders of Wildlife and National Resources Defense Council, Washington, DC, 2002.

Peak & Associates, Inc. *Determination of Eligibility and Effect for Participating Properties Within the Florin Vineyard GAP Community Plan Project Area County of Sacramento, California*, October 2007.

Peterson, Brustad, Pivetti, Inc. *California American Water – Water Supply Assessment, Parkway Water System and Florin-Vineyard GAP Community Plan*, August 2007.

Sacramento Area Council of Governments, http://www.sacregionblueprint.org/sacregionblueprint/home.cfm.

Sacramento Area Council of Governments, *2006 to 2013 Regional Housing Needs Plan*, adopted February 21, 2008.

Sacramento County. 1992. *Sacramento County General Plan EIR.*

Sacramento County, *Housing Element 2003 Update*, adopted December 2005.

Sacramento County, *Sacramento County General Plan*, adopted 1993, as amended.

Sacramento County, *South Sacramento Area Community Plan*, December 6, 1978.

Sacramento County, *Vineyard Community Plan*, April 1985.

Sacramento County Water Agency. *Revised Water Supply Assessment for Florin-Vineyard Community Plan*.

Sacramento County, *County Code* http://municipalcodes.lexisnexis.com/codes/sacramento_co/

Sacramento County, *Zoning Code*, http://www.planning.saccounty.net/zc

Sacramento Metropolitan Fire District Website http://www.smfd.ca.gov/
Personal Communication with Jeff Rodrigues, Sacramento County Sheriff's Department, December 1, 2006.

Sacramento Regional County Sanitation District (SRCSD). *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan: Final Executive Summary Report,* May 2008.

The Weather Channel. 12 September 2007. Local Weather, Monthly Averages for Sacramento, CA. 12 September 2007. <http://www.weather.com/weather/wxclimatology/monthly/graph/USCA0967?from=search.>

United States Census Bureau. http://quickfacts.census.gov/qfd/states/06/06067.html.

United States Environmental Protection Agency (EPA). 19 September 2007. Climate Change website. 19 September 2007. <http://www.epa.gov/climatechange/>

United States Environmental Protection Agency (EPA). "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2004", 2006.

World Meteorological Organization (WMO). 2005: Statement on the Status of the Global Climate in 2005: Geneva, 15 December 2005.

22 RESPONSE TO COMMENTS

The Draft Environmental Impact Report (EIR) was released on April 1, 2009. The written comment period ended on May 26, 2009, and 30 written comment letters were received. A public hearing before the Sacramento County Planning Commission was held on January 21, 2010 and 1 additional written comment letter was submitted at that time.

The text that follows introduces each Draft EIR reviewer and presents their comments as stated or in paraphrased form. Responses to those comments immediately follow. Changes from the Draft EIR text resulting from comments are shown with **bold underline** for text added and ~~strikethrough~~ for text deleted. Written comments received in full letter format are found at the end of this chapter.

Pursuant to Section 15088 of the CEQA Guidelines, no written responses are provided for those letters or comments that did not address the adequacy of the DEIR. Comments in that category were forwarded to the Planning Department for consideration, and copies of the letters are included in this chapter for consideration by the Board of Supervisors. A "comment noted" response indicates that the comment was a statement that did not require an answer. While no further response to the comment is provided, the comment letters are forwarded to the Board of Supervisors via this EIR.

Comment letters were received from the following individuals and/or agencies:

Letter 1 Central Valley Flood Protection Board, Division of Flood Management, James Herota (April 8, 2009).

Letter 2 California Regional Water Quality Control Board, Central Valley Region, Storm Water Unit, Kim A. Schwab (April 28, 2009)

Letter 3 Sacramento Area Sewer District, Development Services, Salam Khan (April 29, 2009)

Letter 4 Sacramento Regional County Sanitation District, Policy and Planning, Sarenna Deeble (May 4, 2009)

Letter 5 Sacramento-Yolo Mosquito & Vector Control District, Kevin Combo (May 7, 2009)

Letter 6: City of Elk Grove, Dorothy Kam (May 18, 2009)

Letter 7: Alex Laiewski (May 19, 2009)

Letter 8: Carson Development, Judy Jacobs (May 19, 2009)

Letter 9: Southgate Recreation and Park District, Maureen Casey (May 20, 2009)

Letter 10: Sacramento Regional Transit District, Don Smith (May 21, 2009)

Letter 11: Sacramento Metropolitan Air Quality Management District, Land Use and Transportation Section, Larry Robinson (May 21, 2009)

Letter 12: Lennar Communities, Bob Shattuck (May 22, 2009)

Letter 13: Petrovich Development, Jim Migliore (May 22, 2009)

Letter 14: Brewer Lofgren LLP, Roy Brewer May 26, 2009)

Letter 15: Sacramento County Department of Water Resources, Water Supply – Zone 40 Planning and Development, Bob Gardner (May 26, 2009)

Letter 16: Sacramento County Department of Water Resources, Water Supply – Zone 40 Planning and Development, Bob Gardner (May 26, 2009)

Letter 17: James P. Pachl on behalf of Friends of Swainson's Hawk (May 26, 2009)

Letter 18: MacKay & Somps on behalf of Village Capitol Group LLC, Bruce Walters (dated February 2, 2009; received May 26, 2009)

Letter 19: MacKay & Somps on behalf of Jack Liebau, Bruce Walters (May 26, 2009)

Letter 20: MacKay & Somps on behalf of Stumbos & Company, Bruce Walters (May 26, 2009)

Letter 21: MacKay & Somps on behalf of Shehadeh Family Trust, Bruce Walters (May 26, 2009)

Letter 22: MacKay & Somps on behalf of LK Dev One LLC, Bruce Walters (May 26, 2009)

Letter 23: North Vineyard Greens, Peter Daru (May 26, 2009)

Letter 24: Public Utilities Commission, Consumer Protection and Safety Division, Rail Transit and Crossings Branch, Moses Stites (May 26, 2009)

Letter 25: Sacramento Area Bicycle Advocates (SABA), Jordan Lang (May 26, 2009)

Letter 26: City of Sacramento, Development Services Department, Environmental Planning Services, Ron Bess (dated May 16, 2008; received May 27, 2009)

- City of Sacramento, Department of Utilities, Engineering Services

Division, Robert Armijo (May 26, 2009)

- Sacramento Fire Department, King Tunson and Leo Baustian (May 26, 2009)

Letter 27: Elk Grove Unified School District, Kim Williams (June 4, 2009)

Letter 28: Governor's Office of Planning and Research, State Clearinghouse and Planning Unit, Terry Roberts (May 19 and June 12, 2009)

Written comments were presented at the January 21, 2010 Planning Commission hearing by the following individual:

Letter 29: Keith Roberts (email dated January 19, 2010)

LETTER 1: CENTRAL VALLEY FLOOD PROTECTION BOARD

James Herota, Central Valley Flood Protection Board, Division of Flood Management (April 8, 2009).

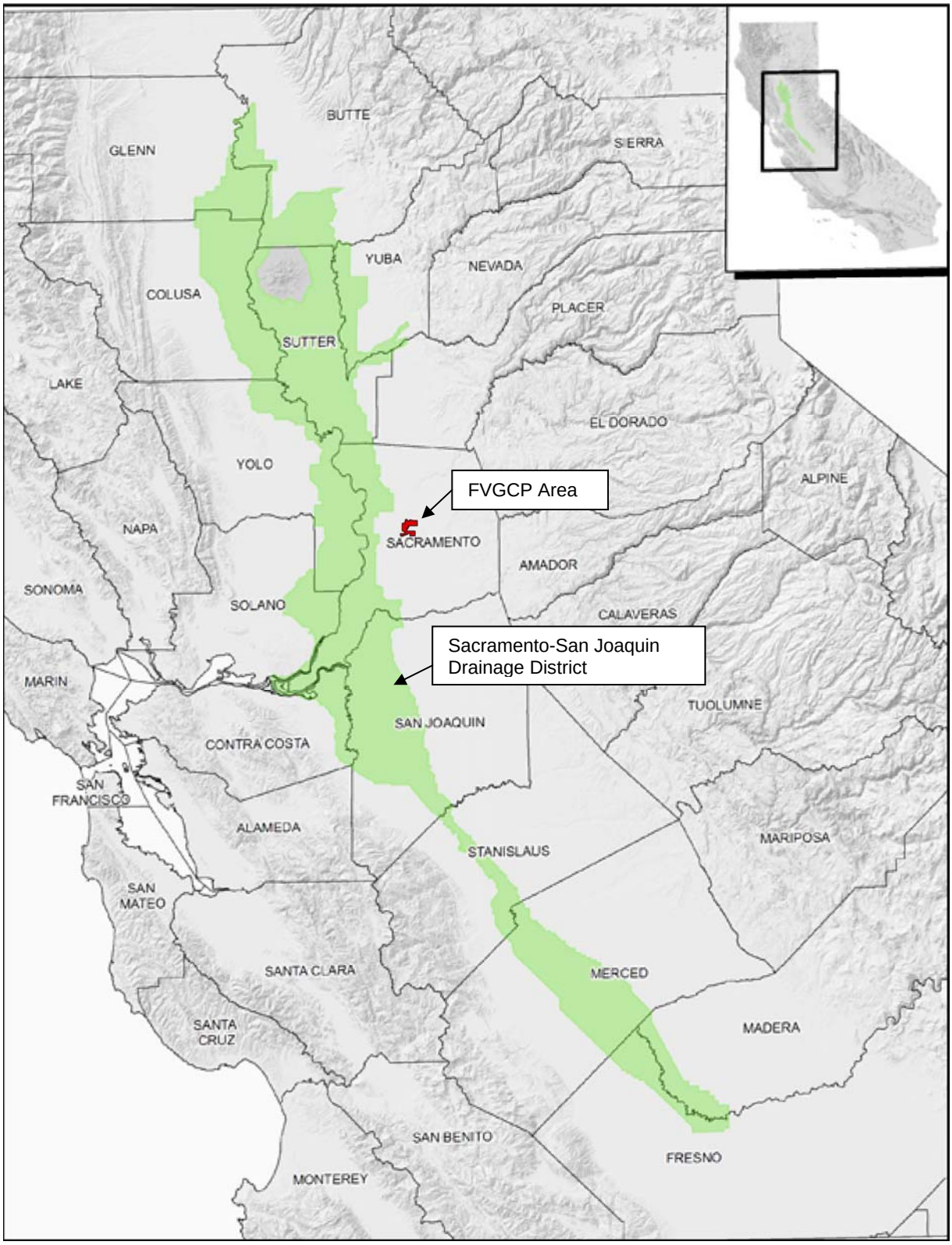
COMMENT 1.1 (PARAPHRASED):

The proposed project is located within the jurisdiction of the Central Valley Flood Protection Board. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River, and the San Joaquin River, and designated floodways. A Board permit is required prior to starting work within the Board's jurisdiction. In addition, a vegetation plan is required.

RESPONSE 1.1:

Comment noted. However, based on the map that is currently posted on the www.cvfpb.ca.gov website it appears that the Florin Vineyard Gap Community may actually be outside of the jurisdiction of the Central Valley Flood Protection Board (CVFPB) (see Plate RC-1). Regulations already in place by other state and federal agencies (FEMA, EPA, Fish and Wildlife Service, Corps of Engineers, California Department of Fish and Game), combined with County ordinances and standards and engineering practices should suffice to assure public safety and to meet any expectations of the CVFPB even if no Board permits are required.

Plate RC-1
Central Valley Flood Protection Board Jurisdictional Boundaries



LETTER 2: CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

Kim A. Schwab, California Regional Water Quality Control Board, Central Valley Region, Storm Water Unit (April 28, 2009).

COMMENT 2.1:

Our comments focus on Chapter 8. Hydrology and Drainage. This section addresses drainage facilities on Plates HY-6, -7, -8, and -9, described as Water Quality or Detention Basins. These plates also show the storm drainage piping system.

RESPONSE 2.1:

Comment noted.

COMMENT 2.2 (PARAPHRASED):

On page 8-34 of Volume I, it states, in part: "The project proponent **should** consider the use of "low impact development" techniques to reduce the amount of imperviousness on the site, since this will reduce the volume of runoff and therefore will reduce the size/cost of stormwater quality treatment required…The **County requires** developers to utilize the Stormwater Quality Design Manual for the Sacramento and South Placer Regions, 2007 (Design Manual) in selecting and designing post construction facilities to treat runoff from the project…" **[emphasis supplied]**

In this regard the Sacramento MS4 permit requires the County to comply with specific requirements.

We are concerned that the project will only include Detention Basins for flood management and secondarily treat storm water for urban pollutants. As per the permit requirements, the project proponent must consider a combination of LID and hydromodification strategies rather than strictly using Detention Basins.

RESPONSE 2.2:

The following response was prepared by the County Water Resources Department (K. Schmitz and G. Booth):

Provision D15c of the Sacramento Areawide NPDES Municipal Stormwater Permit re-issued September 11, 2008 (2008 stormwater permit) directs the County and its permittees to require hydromodification management plan (HMP) controls *to manage the increases in the magnitude, frequency, volume and duration of runoff from development projects to protect receiving waters from increased potential for erosion and other adverse impacts* (e.g. habitat impairment). But the same permit provision also provides a period of time where such requirements can be developed and established using a phased process which allows for locally-tailored scientific analyses by qualified hydrogeomorphologists and comments from the development community and other interested parties to be solicited and considered. The HMP work plan was

submitted April 30, 2009 and will be available for public review in the near future. This will be followed by an HMP, due within one year following Regional Water Board approval of the work plan. This, in turn, will be followed by amended development standards within six months of the Regional Water Board approval of the HMP.

In terms of low impact development (LID), Provision D15b of the 2008 stormwater permit specifies that the County and its co-permittees must require LID controls for priority new and redevelopment projects (currently LID is optional). But the same permit provision (D15bi) also provides time for the permittees to *amend, revise or adopt quantitative and qualitative development standards …to require implementation of LID strategies …no later than six months after approval of the HMP by the Regional Water Board.*

Development projects permitted by the regulatory agencies (Army Corps, Fish and Wildlife, Regional Water Board, etc.) and approved by the County before the HMP and LID standards are officially established would not be subject to such standards. Should plans/conditions change for the approved projects, the County and its co-permittees would require the projects to comply with the standards in place at the time of re-application. Regulatory permitting for the area covered by the DEIR pre-dated the HMP and LID requirements contained in the 2008 stormwater permit. Specifically, a 401 Water Quality Certification was issued by the Regional Water Board on August 8, 2007 (WDID 5A34CR00353) and a USACE 404 Permit (2003-0245) was obtained on May 28, 2009.

COMMENT 2.3:

In order to reduce pollutants and runoff flows from new development and redevelopment to the maximum extent practicable (MEP), the project proponent is required to ensure that all feasible BMPs are considered. The MEP standard involves applying BMPs that are effective in reducing the discharge of pollutants in storm water runoff. In discussing the MEP standard, the State Water Board has said the following: “There must be a serious attempt to comply, and practical solutions may not be lightly rejected. If, from the list of BMPs, a developer chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a developer employs all applicable BMPs accept [sic] those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the standard. MEP requires developers to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive.” (Order No. WQ 2000-11, at p. 20.). MEP is the result of the cumulative effect of implementing, continuously evaluating, and making corresponding changes to a variety of technically and economically feasible BMPs that ensure the most appropriate controls are implemented in the most effective manner. This process of implementing, evaluating, revising, or adding new BMPs is commonly referred to as the iterative approach.

RESPONSE 2.3:

The following response was prepared by the County Water Resources Department (K. Schmitz):

The project is subject to the requirements shown in the "Stormwater Quality Design Manual for the Sacramento and South Placer Regions (2007)" or Design Manual. By meeting these requirements (or those identified in a subsequent update) the project is considered by the County to have met the MEP standard.

LETTER 3: SACRAMENTO AREA SEWER DISTRICT

Salam Khan, Sacramento Area Sewer District, Development Services (April 29, 2009).

COMMENT 3.1:

The north and northeastern portions of this project are outside the boundaries of the Sacramento Area Sewer District (District) and the Sacramento Regional County Sanitation District (SRCSD), but within the Urban Services Boundary shown in the Sacramento County General Plan and cannot be served without annexation into both the District and SRCSD.

RESPONSE 3.1:

Page 2-14 of the DEIR identified that a portion of the FVGCP area would need to be annexed to both districts prior to development. However, the boundaries of the area outside the sewer district boundaries was incorrectly identified. The Final EIR has been revised to more accurately reflect the portion of the FVGCP plan area that will require annexation. In addition, an exhibit has been added to the Sewer Services chapter of the Final EIR that shows the area located outside of sewer district boundaries (Plate SS-1a in Chapter 6 of the Final EIR).

COMMENT 3.2:

Page 2-16: last line of 3rd paragraph is inconsistent and not related to water purveyors mentioned.

RESPONSE 3.2:

The paragraph cited simply identifies the water and sewer purveyors for the project area. No relationship between the sewer districts and the water purveyors was intended.

COMMENT 3.3:

In Chapter 6, entitled “Sewer Service,” on page 6-1, under the Introduction – The 2006 CSD-1 Sewerage Facilities Expansion Master Plan needs to be referenced.

RESPONSE 3.3:

This information has been added into the Sewer Service chapter of the Final EIR.

COMMENT 3.4:

Page 6-2: The page number is actually 6-2, not 7-2 as mentioned. The header is "6 Sewer Service" not 7.

RESPONSE 3.4:

The numbering has been corrected in the Final EIR.

COMMENT 3.5:

Page 6-6: CAC Land Use Plan/PD Land Use Plan – need to add reference to 2006 Master Plan.

RESPONSE 3.5:

This information has been added into the Sewer Service chapter of the Final EIR.

COMMENT 3.6:

Page 6-7: Please clarify what is the fair share fee as mentioned in this page as well as in Page 1-6.

RESPONSE 3.6:

The cited reference states that fair share fees are outlined in the Public Facilities Financing Plan. The Public Facilities Financing Plan provides the following discussion:

> ***Existing Fee Programs***
>
> *Sewer Fees (SASD and SRCSD)*
>
> *The FVCP is located within the boundaries of SRCSD and SASD. Development in the FVCP will be required to pay the SASD trunk fee and the "SRCSD capital investment equalization" fee.*
>
> *Fee revenue generated from the SASD fee is meant to fund construction of trunk sewer improvements. All of the fee revenue collected is applicable toward the FVCP sewer CIP trunk improvements listed in **Appendix C**. As shown in **Table 23**, the FVCP is expected to generate approximately $29.1 million in SASD fee revenue at buildout, resulting in a surplus of $18.0 million over estimated costs shown here. Any surplus in actual fees collected over the actual cost of facilities needed to serve the FVCP, including some constructed by NVS development (not costed here), will be applicable to other areas benefiting from the regional facilities of the SASD system.*

Fee revenue generated from the SRCSD fee is meant to fund contributions to regional sewer interceptor and treatment facilities. The FVCP sanitary sewer CIP does not include any sewer facilities that are reimbursable under the SRCSD fee program. Total SRCSD fees paid by the FVCP are estimated to be $76.6 million, as shown in ***Table 8****.*

Bond-Funding Mechanisms and Other Funding Sources

The Financing Plan anticipates that developer advances or bond financing will be used to advance fund any infrastructure improvements needed in the initial phase of the FVCP and before the collection of fees or other revenue sources. The Financing Plan assumes that fee credits or reimbursements for facilities otherwise funded by fee programs may be available if developers fund and construct fee-funded facilities. It is not anticipated that there will be a funding difference in the initial phase of sewer development in the FVCP. If there are any revenue differences, they will have to be funded by alternative financing such as Mello-Roos or developer funding.

COMMENT 3.7:

We expect that if the project is subject to currently established policies, ordinances, fees, and to conditions of approval that we will propose after review of entitlement application documents, then mitigation measures within the EIR will adequately address the sewage aspects of the project and anticipate a less than significant impact to the sewage facilities.

RESPONSE 3.7:

Comment noted.

LETTER 4: SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT

Sarenna Deeble, Sacramento Regional County Sanitation District, Policy and Planning (May 4, 2009).

COMMENT 4.1 (PARAPHRASED):

In general, both the SRCSD and SASD Spheres of Influence correspond to the Sacramento County USB. A northeast side of the project area is located outside the SRCSD and SASD Service Areas and will need to be annexed through LAFCo in order to receive sewer service. This process is to be initiated by the project proponent, not SASD or SRCSD.

RESPONSE 4.1:

Comment noted. See Response 3.1, above.

COMMENT 4.2:

The major interceptors and some of the major trunks are already constructed to serve Florin-Vineyard Gap Area as well as the North Vineyard Station Community Plan Area. Gerber Trunk is partially constructed and currently ends 1200 feet west of Bradshaw Road. The construction of the Florin trunk will be required to completely serve the project area.

RESPONSE 4.2:

Comment noted. No response required.

COMMENT 4.3:

Page 2-16: The last line of 3rd paragraph is inconsistent and not related to water purveyors mentioned.

RESPONSE 4.3:

See Response 3.2, above.

COMMENT 4.4:

In Chapter 6, entitled "Sewer Service," on page 6-1, under the Introduction – The 2006 CSD-1 Sewerage Facilities Expansion Master Plan needs to be referenced.

RESPONSE 4.4:

See Response 3.3, above.

COMMENT 4.5:

Page 6-2: The page number is actually 6-2, not 7-2 as mentioned. The header is '6 Sewer Service' not 7.

RESPONSE 4.5:

See Response 3.4, above.

COMMENT 4.6:

Page 6-4: Remove the reference "Elk Grove-Florin Road Interceptor".

RESPONSE 4.6:

The reference to "Elk Grove-Florin Road Interceptor (Central Interceptor)" has been changed to "Central Interceptor" in the Final EIR.

COMMENT 4.7:

Page 6-6: CAC Land Use Plan/PD Land Use Plan – reference to 2006 Plan should be added.

RESPONSE 4.7:

See Response 3.5, above.

COMMENT 4.8:

Page 6-7: Please clarify what is the fair share fee as mentioned in this page as well as in Page 1-6. All references to the WWTP should be revised to SRWTP. Remove "… current dry weather flows are approximately 154 MGD".

RESPONSE 4.8:

See Response 3.6, above regarding fair share fees.

References to WWTP have been revised to SRWTP in the Final EIR.

Following consultation with SRCSD staff (Liz Obon), the statement regarding current dry weather flows was revised to reflect the average dry weather flow value of 127 MGD shown on the SRCSD's website (http://www.srcsd.com/fastfacts.php).

COMMENT 4.9:

Page 6-7, 6-8: The Average Dry Weather Flow (ADWF) of 21.99 MGD stated is incorrect. The linear sum of the ADWF and Peak Wet Weather Flow (PWWF) values for each shed does not give the correct amount of total anticipated flow from the project area as the peaking factors vary for each trunk shed. Please remove the total ADWF (21.99 MGD) and PWWF (40.05 MGD) values in Table SS-2, and any other references to these values in the DEIR as they are inaccurate.

RESPONSE 4.9:

These values have been recalculated by MacKay and Somps, the engineering firm that prepared the *Sanitary Sewer Master Plan for the Florin-Vineyard GAP Community Plan.* It was determined that the total ADWF of 21.99 MGD is correct, but that the PWWF should be 43.82 MGD. The corrected PWWF value has been included in Table SS-2 of the Final EIR.

LETTER 5: SACRAMENTO-YOLO MOSQUITO & VECTOR CONTROL DISTRICT

Kevin Combo, Sacramento-Yolo Mosquito & Vector Control District (May 7, 2009).

COMMENT 5.1:

The Sacramento-Yolo Mosquito and Vector Control District recommends that you review and apply the District's BMP (Best Management Practices) regarding drainage, storm water run off structures, catch basins or other possible mosquito habitats such as seasonal and permanent wetlands. The District's BMP manual is posted at: http://www.fightthebite.net/download/SYMVCD_BMP_Manual.pdf

RESPONSE 5.1:

This is a comment on the Project, not on the adequacy of the EIR. This comment has been forwarded to the hearing body and the Planning Department for consideration.

LETTER 6: CITY OF ELK GROVE

Dorothy Kam, City of Elk Grove (May 18, 2009).

COMMENT 6.1:

Due to the size of Community Plan and the possible impacts to roadways within the City of Elk Grove the analysis shall be expanded to include appropriate roadways within the City of Elk Grove. This comment was made on the July 27, 2007 letter to the County regarding the traffic impact study as specifically identified the segments of roadway south [of] Calvine Road, such as Elk Grove-Florin Road, Waterman Road, Bradshaw Road and Excelsior Road.

RESPONSE 6.1:

The following response was prepared by Fehr and Peers Transportation Consultants (Dave Robinson) and reviewed for technical adequacy by Sacramento County Department of Transportation (M. Darrow):

The City of Elk Grove requested the analysis of the following roadway segments south of Calvine Road in the City:

- Elk Grove-Florin Road
- Waterman Road
- Bradshaw Road
- Excelsior Road

The Draft EIR included the analysis of AM and PM peak hour intersection operations at these roadways intersections with Clavine Road. Intersection operations were analyzed since intersections (and not roadway segments) are the locations where drivers experience delay while traveling in an urban environment.

Consistent with the analysis methodology documented in Draft EIR, the requested roadway segments were analyzed. The City of Elk Grove significance criteria for roadways are documented on Page 9-9 of the Transportation and Circulation Chapter.

Table 1 summarizes daily roadway segment traffic operations for all of the analysis scenarios documented in the Draft EIR, which include the following:

- Existing Conditions
- Existing Plus CAC Plan
- Existing Plus PD Plan
- Cumulative No Project
- Cumulative Plus CAC Plan
- Cumulative Plus PD Plan
- Cumulative Plus CAC Plan Plus Density Bonus
- Cumulative Plus PD Plan Plus Density Bonus

As shown in Table 1, most of the study roadways south of Calvine Road would operate acceptably at LOS D or better except for Elk Grove-Florin Road. Under existing condition, the addition of the CAC and PD plans would cause the LOS on Elk Grove-Florin Road to worsen from LOS D to LOS F. Under cumulative conditions, the addition of the CAC Plan with Density Bonus would cause the volume-to-capacity ratio to increase by 0.05 or more. Therefore, the addition of the Florin Vineyard Gap Community Plan would impact Elk Grove-Florin Road. However, this impact was identified based on the intersection analysis documented in the Draft EIR for the Calvine Road/Elk Grove-Florin Road intersection under existing and cumulative conditions. As noted above, intersections and not roadways segments are the locations where drivers experience delay. Mitigation measures TC-2(y) and TC-4(gg) identified improvements to the intersection, including widening of Elk Grove-Florin Road to six lanes to mitigate the project impact.

TABLE 1
CITY OF ELK GROVE ROADWAY FACILITY ANALYSIS - SEGMENT SOUTH OF CALVINE ROAD

Segment	Number of Lanes (Capacity)	Existing			Existing Plus CAC			Existing Plus PD			Cumulative			Cumulative Plus CAC			Cumulative Plus PD			Cumulative Plus CAC Density Bonus			Cumulative Plus PD Density Bonus		
		Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
Bradshaw Road	2 (18,000)	8,100	0.45	A	13,900	0.77	C	14,100	0.78	C	14,600	0.81	D	15,700	0.87	D	15,200	0.84	D	15,900	0.88	D	15,400	0.86	D
Elk Grove-Florin Road	4 (36,000)	30,700	0.85	D	36,500	1.01	F	36,700	1.02	F	39,600	1.10	F	40,400	1.12	F	39,900	1.11	F	41,600	1.16	F	41,100	1.14	F
Excelsior Road	2 (18,000)	5,400	0.30	A	10,200	0.57	A	10,000	0.56	A	9,800	0.54	A	10,000	0.56	A	10,000	0.56	A	10,000	0.56	A	10,000	0.56	A
Waterman Road	2 (18,000)	8,500	0.47	A	10,400	0.58	A	10,800	0.60	A	14,600	0.81	D	15,800	0.88	D	15,500	0.86	D	16,100	0.89	D	15,800	0.88	D

Source: Fehr & Peers, 2010

Note: Shading indicates unacceptable operations based on City of Elk Grove significance criteria.

COMMENT 6.2 (PARAPHRASED):

The report does not address the potential downstream impacts on Laguna Creek with[in] the City of Elk Grove. The City requests additional information regarding impacts, including pre- and post-development flows in Laguna Creek, and mitigation measures.

RESPONSE 6.2:

The following response was prepared by the County Department of Water Resources (G. Booth):

The subject community plan area does not drain toward Laguna Creek. There is a very small area, about 25 acres, that drains to Strawberry Creek into the City, having no measurable impact.

The proposed community plan has no adverse impact on floodplains, hydrology or stormwater quality in the City of Elk Grove.

LETTER 7: ALEX LAIEWSKI

Alex Laiewski (May 19, 2009)

COMMENT 7.1 (PARAPHRASED):

Page 1-4, Public Services and Utilities, Impacts to Fire Protection Services: The DEIR concludes that impacts to fire protection services are less than significant; however, at community meetings references are made to the inadequate funding for fire services within communities.

RESPONSE 7.1:

CEQA considers only direct physical changes in the environment caused by the project and reasonably foreseeable indirect physical changes in the environment caused by a project as environmental effects (CEQA Guidelines Section 15064(d)). Consistent with this criterion, the significance threshold used for evaluation of fire service related impacts in the FVGCP DEIR was as follows:

> *An impact to the public services and utilities of the proposed project area would be considered potentially significant if the proposed project would result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities for the following public service providers, the construction of which could cause significant environmental impacts:*
>
> - *Fire protection;*
> - *Police protection;*
> - *Schools;*
> - *Parks; or*

- *Other public facilities*

It is acknowledged that the FVGCP project and other new development within Sacramento County will increase demands on fire protection resources that are currently limited. Without commensurate increases in resources, service levels will diminish. However, the project's impact on fire protection service would not be considered a significant environmental effect under CEQA.

COMMENT 7.2 (PARAPHRASED):

Page 1-4, Impacts to the Adequate Provision of Law Enforcement Personnel: In community meetings, references are made to the inadequate funding for law enforcement services. In the south area in 10 years response times have more than doubled. Adding more homes will only increase response times. Once again the EIR gives this a less then significant mitigation and "no mitigation measure is required".

RESPONSE 7.2:

See Response 7.1, above. The same significance threshold applies to police protection. As with fire protection, it is acknowledged that the project and other new development in the County will increase demands on limited police protection resources, but the project's impact is considered less than significant under CEQA.

COMMENT 7.3 (PARAPHRASED):

Page 1-5, Cumulative Impacts to Public Services and Facilities Resulting from Buildout of the FVGCP in Combination with Existing and Future Developments Within the Project Area: If the EIR's definition of Public Services includes social services provided by the Department of Human Assistance and/or services provided by the Sacramento Housing and Redevelopment Agency (including Section 8 housing), then my comment is the same as in the prior two comments – the DEIR concludes that impacts are less than significant despite existing inadequate funding.

RESPONSE 7.3:

CEQA Guidelines Section 15064(e) states: "Economic and social changes resulting from a project shall not be treated as significant environmental effects on the environment."

COMMENT 7.4:

Page 1-6, Impacts Related to Adequate Water Supply: California has limited water and as population grows in the state there will be less and less water to go around. Building more homes and depending on a limited water supply is not good business and not good for local communities, yet the Draft EIR considered the project's impact to water supply less than significant.

RESPONSE 7.4:

An in-depth analysis of water availability to serve the project was included in Chapter 7, Water Supply, of the EIR. That analysis concluded that both water purveyors, Cal-Am and the SCWA, have identified sufficient water supplies to provide potable water to their respective potential customers within the FVGCP area. As such, impacts are considered less than significant.

COMMENT 7.5:

Page 1-7, Impacts to the Groundwater Aquifer: Same comment as above. The County is already drilling deeper wells for some residents in the South Area due to County and city(ies) development and the development effects on local residential wells.

RESPONSE 7.5:

Future water supplies to serve the project will rely on additional groundwater pumping as part of a conjunctive use program. The Water Forum has established an estimated long term average annual sustainable yield for the groundwater basin, and future plans for both Cal-Am and SCWA are based on staying within their respective portions of the average annual sustainable yield. As such, impacts to the groundwater aquifer are considered less than significant**.**

COMMENT 7.6:

Page 1-7, Impacts Related to Flooding: I heard that the County said there would be no more development in the Vineyard area until a Drainage Master Plan was developed and the drainage plan was implemented. This has not been the case for the Vineyard area. How will the FVGCP differ?

RESPONSE 7.6:

The Drainage Master Plan for the FVGCP area is included as Appendix F of Volume 3 of the EIR, and is discussed in detail in Chapter 8, Hydrology and Drainage. Implementation of the DMP is expected to occur concurrent with development.

Additionally, the following update on existing drainage master plans in the area was provided by Department of Water Resources (DWR) staff (G. Booth):

The drainage master plan for Elder Creek (downstream of Florin Road) and Gerber Creek (downstream of Bradshaw Road) has finally been permitted by the Corps of Engineers. DWR is working on finance plans and phased construction plans for the construction of the drainage project. There is much work to be done and the development firms are taking a pause awaiting recovery of the real estate market. Meanwhile, any map applications are being conditioned to acquire rights of way, participate in the finance and construction of the drainage project.

COMMENT 7.7:

Pages 1-9 through 1-21, Transportation and Circulation: None of the Transportation and Circulation Impacts covers traffic calming measures. All of the listed mitigation measures detail making roads wider, straighter and more convenient for cars, trucks, motorcycles, etc. Ten years from now Sacramento County will be dealing with how to calm traffic. Let's plan traffic calming now.

RESPONSE 7.7:

The following response was prepared by the County Department of Transportation (A. Raygani):

The DEIR mainly analyzes the impacts of the project on the major thoroughfares and arterials in the study area. Thoroughfares and arterials provide for mobility within the County, carrying through traffic and providing transportation links between major residential, employment, commercial, and retail areas. Whereas, on local streets, low speeds is desirable, high and constant speed, with few interruptions are desirable for mobility on arterials and thoroughfares.

To provide for a balanced roadway system, the County's draft Improvement Standards, slated for approval later this year, include new design standards for County roadways. For thoroughfares and arterials, the draft Improvement Standards include separated sidewalks and landscape strips between the curb and the sidewalk. This new standard is intended to separate the pedestrians from the traffic flow, provide shade on the sidewalk, and calm traffic by providing a tree canopy over the traffic lanes. For local streets, the new standards include traffic calming features such as curb extensions that increase pedestrian comfort and safety at the intersections. Curb extensions narrow the travel lane at intersections to shorten the crossing distance for pedestrians, and also decrease the curb radii, thus reducing turning vehicle speeds.

The County has also adopted the Neighborhood Traffic Management Program (NTMP). The NTMP is a comprehensive program with a variety of tools to address traffic concerns on neighborhood streets. The goal of the NTMP is to improve safety and the quality of life for residents by reducing the impacts from speeding vehicles and careless drivers on residential streets.

COMMENT 7.8:

Page 1-21, Impacts to Transit System Operations: The impact statement seems like a clever way of saying that the development does not need transit systems and therefore will have no adverse [e]ffect on future transit systems even though the transit systems are needed now? This should be Highly Significant and a transit plan should be put in place and implemented with each development before we build another dwelling in any area of Sacramento County.

RESPONSE 7.8:

The intent of the impact statement is not that the development does not require transit systems, but rather that the development has been designed to be supportive of transit systems. All major arterial and collector streets within the project would be designed to accommodate transit facilities such as turnouts, bus stops, and shelters. The *Florin Vineyard Community Plan* text, released as a Revised Public Review Draft on March 20, 2010, provides the following summary:

> *Transit facilities within the Plan area will include bus stops and shelters located at intersections of major roadways. These major intersections correspond with community focus areas described in the Design Guidelines section of this Plan. Increased densities of commercial and residential land uses will promote transit use to and from these areas. Intersections of major roadways and neighborhood entries should also include bus stops. The exact location and design of transit facilities is to be determined with review of individual development applications. The Land Use Plan includes increased densities within ¼ mile of Elk Grove-Florin Road which will encourage transit us.*

Additional specific transit-supportive measures are included in the *Air Quality and Emissions Reduction Plan* (Volume 3, Appendix A2), the *FVGCP Climate Change Plan* (Volume 3, Appendix C), and the *Florin Vineyard Community Plan Public Facilities Financing Plan* (Volume 3, Appendix G). It should be noted that the Climate Change Plan and Public Facilities Financing Plan include a transit fee to cover the cost of transit-related facilities and infrastructure within the Plan area. It is estimated that the Plan area will generate approximately $11,907,500 in transit fees.

COMMENT 7.9:

Page 1-22. <u>Impacts to Bicycle and Pedestrian Operations</u>: What are the bicycle and pedestrian facilities/plans included in the FVGCP? Bicycling and walking is an alternative means of transportation. This should be a “high significant impact” mitigation. With all new development the County should develop and implement a plan for safe and meaningful pedestrian and bicycling thoroughfares that connect residential communities of commerce. A comprehensive plan for pedestrians and cyclists should be included as a mitigation measure before any new development is approved.

RESPONSE 7.9:

The *Florin-Vineyard Community Plan* text document, released as a Revised Public Review Draft on March 20, 2010, includes a comprehensive pedestrian and bicycle trail plan. As identified in that plan, Class II bicycle path and a separated 8-foot pedestrian path will be constructed for all major thoroughfares and arterial streets while Class II bicycle path and separated 10-foot join use path will be constructed for Parkway I streets (Hedge and Gardner Avenues). Parkway II streets will provide bicycle and pedestrian paths in the form of Class III bicycle paths. Off street trails are proposed along the Gerber Creek and Elder Creek open space corridors. A trail is also planned along the power line corridor east of Waterman Road and south of Gerber Road. The

Pedestrian and Bicycle Trail Plan is included below as Plate RC-2 and has also been added as Plate TC-7a in the Transportation and Circulation chapter of the Final EIR.

Additionally, it should be noted that Sacramento County is updating the bicycle master plan, which has not been adopted. The following link can be used to access the County's Bicycle Master Plan website to get current information on the status of the project.

http://saccountybikeplan.webexone.com/login.asp?loc=&link=

The implementation of completed bicycle and pedestrian networks would provide existing and future residents with options to making trips by automobile. In the Sacramento region today about six percent of daily trips are bicycle and pedestrian trips. SACOG estimated that its Preferred Blueprint Alternative for 2050, which includes land use policies that support improved connectivity as a way to increase land use accessibility, would result in about 13 percent of daily trips being by bicycle and walking (SACOG, Sacramento Region MTP 2035, Non-Motorized Issue Brief, October 2006).

No additional mitigation is warranted for the FVGCP project.

COMMENT 7.10:

Page 1-42, Impacts to Roadway Segments Under Cumulative Plus Project With Density Bonus Conditions: I am unclear what the EIR statement really means. Does it mean development projects with density bonuses will create more traffic and therefore it is ok to impact intersections because of the bonuses? If this is the case, why do we want to plan for traffic problems?

RESPONSE 7.10:

No, this statement does not mean that it is "ok" to impact the intersection. Rather, it identifies that if the project is approved with the density bonus, additional significant unavoidable impacts will occur.

Under the PD Land Use Plan, the addition of traffic resulting from the density bonus would result in an additional impact beyond what is anticipated for the cumulative without density bonus scenario at one roadway segment (Elk Grove-Florin Road – Carlisle Avenue to Vintage Park Drive). All other impacts would be substantially similar to the impacts identified for the cumulative (without density bonus) scenarios. Mitigation of this additional impact would require the widening of Elk Grove-Florin Road between Carlisle Avenue and Vintage Park Drive from a six-lane arterial to an eight-lane arterial. An eight-lane arterial is beyond the General Plan designated width for this roadway, and is therefore considered infeasible mitigation. As a result, the additional impact on roadway segments from implementation of the density bonus under the PD Land Use Plan scenario is considered significant and unavoidable and no mitigation is proposed.

Plate RC -2
Pedestrian and Bicycle Trail Plan

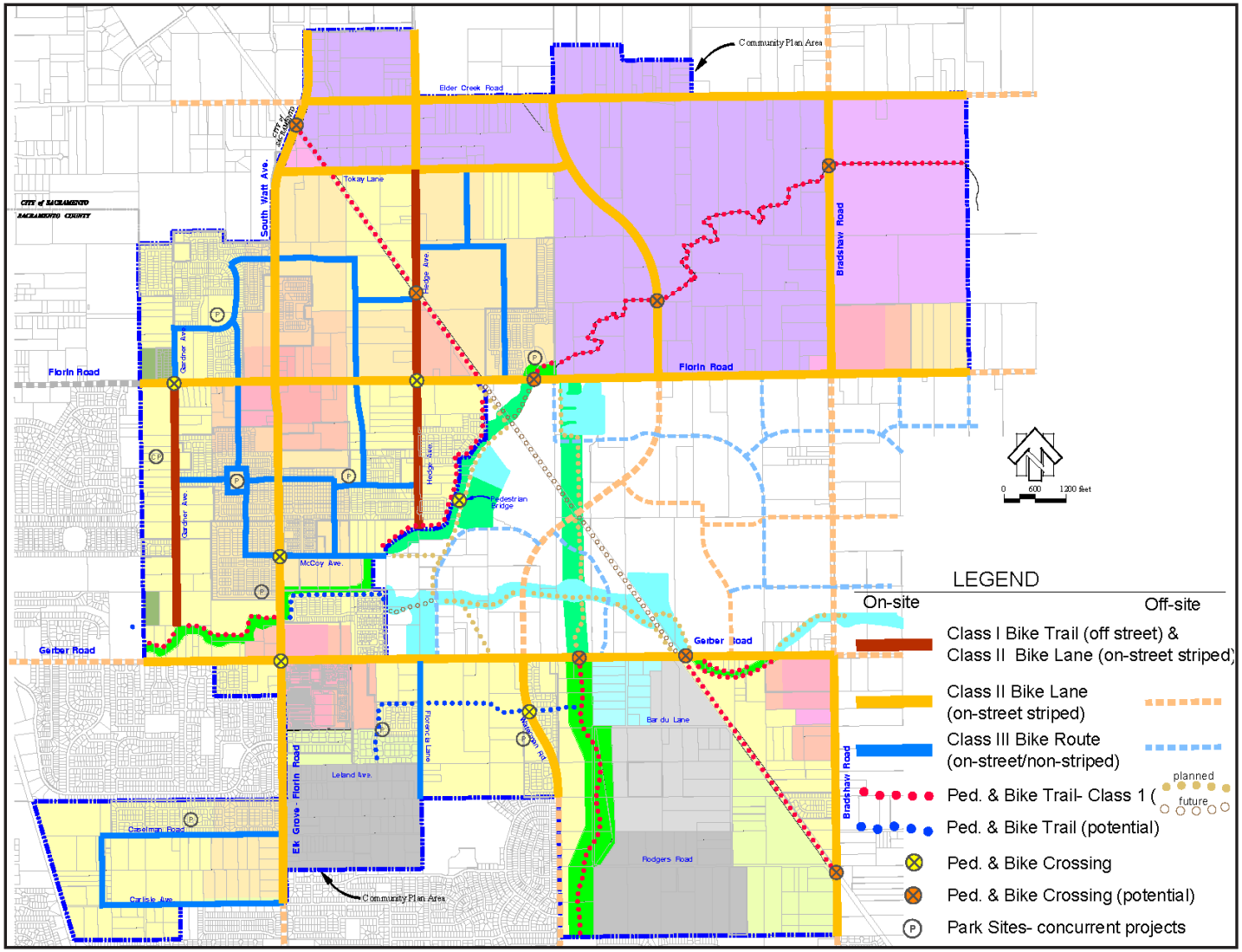


Figure 9.8 Pedestrian and Bicycle Trail Plan

CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable" and the project may be approved. The agency must state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. (CEQA Guidelines Section 15093).

COMMENT 7.11:

Page 1-45, Impacts Resulting from the Elevated Carbon Monoxide Levels Along Roads and Near Intersections Resulting from Operational Vehicle Emissions: Was the emissions study done with the project bonuses in mind? If it's okay for density bonuses to create traffic problems at intersections then is it okay for the project bonuses to exceed the carbon monoxide levels at intersections?

RESPONSE 7.11:

Yes, the emissions analysis considered the density bonus; as discussed on page 10-17 of the Draft EIR, predicted CO concentrations would remain below the State/federal standards with the addition of traffic from either the CAC Land Use Plan or the PD Land Use Plan (**with and without application of the density bonus**)(emphasis added).

See also response 7.10, above, regarding whether it is "ok" to impact intersections.

COMMENT 7.12 (PARAPHRASED):

Page 1-52, Noise: Are any of the noise impacts based on density bonuses? Do any of the noise impact studies take into consideration the developments proposed by cities within Sacramento County? Up until 8 years ago, I could sleep with a bedroom window open; now because of the increased noise level on Bradshaw it is impossible to keep a window open at night.

RESPONSE 7.12:

As discussed in Chapter 14, the noise analysis considered future traffic noise levels assuming cumulative case traffic volumes with and without the proposed project (both CAC and PD alternatives), with and without the recommended traffic mitigation, and with and without the density bonus. The cumulative case traffic volumes assume post-2025 development throughout the County, including within incorporated cities. The analysis found that traffic noise were potentially significant, but mitigable to a level of less than significant (65 dB L_{dn} exterior and 45 dB L_{dn} interior) through the use of setbacks and/or noise attenuating construction techniques.

COMMENT 7.13 (PARAPHRASED):

The same is true regarding air traffic from Mather and Sacramento Executive Airports. The number of overflights has increased substantially since 1998. To simply state in the EIR that the noise impacts will be mitigated by ensuring new residents are aware of increased noise levels is somewhat disingenuous.

RESPONSE 7.13:

Aircraft noise levels within the FVGCP project area are below 60 dB CNEL, and thus are within acceptable levels as established in the General Plan and the Mather Comprehensive Land Use Plan. As such, no mitigation is required.

It is acknowledged, however, that noise from aircraft overflights may be noticeable and/or objectionable to residents; for this reason, the County has adopted the Mather Airport Policy Area which is intended to increase the awareness of residents, in any future residential communities that are approved, of their possible exposure to aircraft operations; to limit the potential for conflict between the airport and adjacent communities; and, to protect future airport development and aircraft operations flexibility beyond that obtainable solely by relying upon the noise and safety land use guidelines contained within the Comprehensive Land Use Plan.

LETTER 8: CARSON DEVELOPMENT

Judy Jacobs, Carson Development (May 19, 2009).

COMMENT 8.1:

Volume 2, page 15-1: still shows the owner as being Satvros and Eleni Vathis. *Casselman Properties, LP* are the legal owners of this project and *Carson Development Company, Inc.* is the developer in addition to being the managing partner of the LP.

RESPONSE 8.1:

This information has been updated in the Final EIR.

COMMENT 8.2:

Sacramento Metropolitan Fire District's comments (see Volume 2, Page 15-21, Traffic and Circulation) about installing a loop street at the western end of Caselman Road to connect to Carlisle Road for emergency access virtually renders this project impossible. Discussions are beginning with SMFD for alternative means to achieve satisfactory emergency routes which could involve redesigning our current layout for our lots, adding another entry from the subdivision to Elk Grove-Florin Road, and/or installing a temporary cul-de-sac with an emergency break-out until the neighboring parcels are developed to include the loop street. Additionally, it is most probable that the project will

be phased and we request reasonable consideration when final conditions of approval are set forth for a logical alternative to the one currently set forth in the DEIR.

RESPONSE 8.2:

A revised site plan was submitted subsequent to release of the Draft EIR. Under the revised site plan, the number of access roads connecting to Caselman Drive has been increased from three to five, while the total number of residences has decreased from 281 to 261. Additionally, County Department of Transportation is recommending a condition of approval that would require an additional access point be provided directly to Elk Grove-Florin Road at the location of Lot 6 in Village A. Fire District staff (Stewart) has indicated that these revisions meet the Fire District's needs for emergency access. As a result, Mitigation Measure CSR-2 has been deleted from the Final EIR.

COMMENT 8.3:

We still contend the 12.5' IOD along the east property line for a future BRT lane is not feasible due to the existing developments (ie Tamarindo) already in the area and the very limited run between our property and remaining undeveloped land to the south boundary of the FVCP (Page 2-15-22).

RESPONSE 8.3:

Comment noted. This is not a comment on the adequacy of the Draft EIR analysis, but on a condition of approval recommended by an outside agency.

COMMENT 8.4:

After the master drainage plan was completed and the locations of detention basins were established, the developer of the property containing Basin UHDET2 withdrew his application. The back westerly portion of Caselman Ranch was supposed to drain into Basin UHDET2. On Page 15-40 of Volume 2, SCDWR is recommending we purchase a portion of APN #115-0091-057 to construct Basin UHDET2 which we think is unreasonable given the fact there is no proposed plan in place for the remainder of that area. We believe a more logical approach to satisfy the drainage needs for this site would be to relocate and/or resize our current basin #WQSCK and are asking this alternative be inserted in the final set of conditions of approval.

RESPONSE 8.4:

It is acknowledged that the improvements required to support an individual project under the proposed drainage master plan may be extensive, particularly if other projects in the vicinity do not move forward at the same time. However, as noted in the discussion of drainage impacts in the individual project chapters, the use of site-specific interim improvements in lieu of the Master Plan improvements could have potentially significant environmental consequences. The County Department of Water Resources has indicated that, although interim drainage solutions are discouraged, that such improvements may be approved provided that: 1) the project submits drainage studies

which show that the County Standards are met, and 2) prior to the issuance of grading plans, the project pays all drainage fees required including a fair share contribution for drainage improvements. It is beyond the scope of this EIR to explore the many possible alternatives to the established master plan.

COMMENT 8.5:

Volume 4 of the Draft EIR does not contain the technical studies for Caselman Ranch. Per discussions with you on Tuesday, May 11, 2009 you indicated that you have our technical studies and they will be added to the Final EIR. These reports should include: Arborist report, Jurisdictional Delineation and Special Status Species Report, Phase I Environmental Report, and Delineation letter form Corps of Engineers.

RESPONSE 8.5:

The technical studies have been included in Volume 4 of the Final EIR.

LETTER 9: SOUTHGATE RECREATION AND PARK DISTRICT

Maureen Casey, Southgate Recreation and Park District (May 20, 2009).

COMMENT 9.1:

Chapter 2 – Project Description: Please revise the "Parks" section of the FVGCP Project Description as follows:

> *The Southgate Recreation and Park District (SRPD) is an independent special district that is responsible for the planning of parkland, open space and recreational facilities and the ownership and maintenance of existing and planned facilities within the District boundaries. Southgate's adopted park acreage standard is 5 acres of parkland for every 1,000 people.*
>
> *According to the Preliminary Draft of the Park and Recreation Capital Improvement Plan for the Florin Vineyard Community Plan Public Facilities Financing Plan prepared by SRPD in May 2007, at buildout the FVGCP is estimated to include 17.9 acres of mini-parks (1-3 acres), 54.1 acres of small neighborhood parks (3-6 acres), 41.1 acres of large neighborhood parks (6-11 acres), 24.6 acres of community parks (11+ acres), and 13.6 acres of parkways. The park sites and parkways totaling approximately 151 acres will include sports fields, picnic shelters, playground facilities, two community centers and an extensive trail and parkway system along the Gerber and Elder Creek corridors, utility corridors, Gardner and Hedge Avenues.*

Please also include the first paragraph of this revision in Chapter 5 Public Services and Utilities, "Parks and Recreation" section and the second paragraph of this revision in the "Impacts Related to the Increased Demand for Park and Recreation Facilities" section.

RESPONSE 9.1:

The requested changes have been made in the Final EIR.

COMMENT 9.2:

Chapter 3 – Alternatives Analysis: The DEIR's analysis of Wetland Avoidance and Smart Growth Alternative assumes that the substantial increase in open space of this alternative would reduce parks and recreation impacts as compared to the CAC and PD land use plans. However, the District does not give Quimby credit for property with encumbrances or other restrictions, including open space with delineated wetlands or other sensitive habitat, or located within the 100 year floodplain. The open space as described in the DEIR alternative analysis would address flooding and designate wetland and vernal pool resources and would thus be encumbered. Therefore, park and recreation impacts would remain similar to the PD Land Use plan. The District requests DERA to edit the DEIR's Alternatives Analysis to reflect this comment.

RESPONSE 9.2:

The Alternatives Analysis has been amended in the Final EIR.

COMMENT 9.3:

Chapter 4 – Land Use: The District requests DERA to evaluate the FVGCP's consistency with the draft South Sacramento Habitat Conservation Plan's (SSHCP) conservation strategy. If it is determined that the SSHCP will potentially impact the District's planned facilities or its opportunities to acquire parkland and open space within the FVGCP area, the District requests DERA to address these potential impacts.

RESPONSE 9.3:

The anticipated SSHCP is a regional approach to conserving species and addressing issues related to urban development, habitat conservation, open space preservation, and agricultural protection. It is envisioned that habitat preserves inside the UDA (such as within the FVGCP, if any) would be small, linked by corridors, and would eventually be a component of the urban/suburban landscape. Specific location of preserves has not been determined, but it is anticipated that this would occur over time during plan implementation. It is anticipated that habitat preserves purchased or conservation easements acquired would be from willing sellers and would be selected based on a number of important biological criteria, which may include:

- Protect habitat areas that are considered core elements of the SSHCP.
- Add parcels onto existing preserves to increase their size and reduce habitat fragmentation and edge effect.
- Provide connections to existing preserves and/or preserve areas that are currently isolated from each other.

Although the above basic strategy can be outlined, the SSHCP is currently in development and there is no scheduled date for release of a public review draft at the time of this writing. Given that the SSHCP project description has not been finalized or published, it is not possible to provide the requested consistency analysis.

COMMENT 9.4:

Chapter 5 – Public Services and Utilities: The District has estimated that the CAC Land Use Plan and PD Land Use Plan would require approximately 136 – 182 acres of parkland. Both land use plans will include a community center, sports field, picnic shelters, playground facilities and an extensive trail and parkway system along Gerber and Elder Creek corridors, utility corridors, and Gardner and Hedge Avenues. The District requests that the final EIR and final FVGCP land use plan identify these parks and facilities and incorporate any findings, impacts and mitigation into the final EIR (refer to Plate PS-3 of the Draft EIR).

RESPONSE 9.4:

The Draft EIR analyzes the impacts of developing the entire FVGCP area, which would include any parks and other facilities. However, to include a detailed analysis of specific park facility impacts, similar to that provided for the individual projects within the FVGCP, would require specific proposals for those facilities that identify the exact footprint, square-footage, access proposals, and other details. This project-level detail is not available, and thus a detailed and facility-specific impact analysis is not possible.

COMMENT 9.5:

The District has been working with the County and the Florin-Vineyard Property Owners Group to determine conceptual and specific park site locations and sizes which will mitigate for planned and future developments. Currently, there are 8 tentative subdivision maps submitted with proposed park sites, totaling approximately 29 acres of planned parkland. The District has requested an additional 10-11 acres of parkland dedication on 4 tentative subdivision maps, in order to better meet the park acreage standard.

RESPONSE 9.5:

Comment noted.

COMMENT 9.6:

The Final EIR should note that Southgate Recreation and Park District shall participate in the park and recreation component of the Florin-Vineyard GAP Public Facilities Financing Plan. This plan shall identify all related park, recreation, open space and trail facilities necessary to support the proposed land uses and design standards for the FVGCP. All projects shall also be required to annex into Southgate's Landscape and Lighting Assessment District and proposed Community Facilities District for purposes of funding maintenance and operation; additional park and recreation capital

improvements; community center maintenance and operation; and park and recreation programs.

RESPONSE 9.6:

Page 5-16 of the Draft EIR notes that park fees are included in the Public Facilities Financing Plan. The Public Facilities Financing Plan does identify the types of facilities that will be necessary, and the estimated total cost of those facilities, based on information provided by Southgate Recreation and Park District. Southgate Recreation and Park District has provided comments on the individual projects recommending conditions that include annexation into Southgate's Landscape and Lighting Assessment District and proposed Community Facilities District. Comment noted.

COMMENT 9.7:

Chapter 8—Hydrology and Drainage; *Elder – Gerber Creeks*: The FVGCP land use plans identify the Elder-Gerber Creeks as public open space corridors. The District plans to provide a recreational bicycle and pedestrian trail system along these open space corridors connecting the residents of the FVGCP to shopping centers, schools, parks, and other parkway and trail facilities. The District requests the inclusion of transition zones adjacent to the Elder-Gerber Creek corridors, in accordance with the Sacramento County General Plan's Conservation Element policy CO-117, in order to provide sufficient width for the planned recreational trail system.

RESPONSE 9.7:

Comment noted. This request is herewith forwarded to the hearing body.

COMMENT 9.8:

Detention Basins: The District desires to work with the County Department of Water Resources (DWR) and project applicants in identifying potential recreational joint-uses for any planned detention basins. The District is willing to consider accepting ownership or an easement for all or part of the detention basin areas depending on the identified joint-use functions of the lot. The District will not however, take responsibility for operation or maintenance of the basin's drainage and detention functions.

Potential joint-use possibilities include active sports fields, trails and/or landscape easements. In order to accommodate recreational uses, advance planning needs to occur to address design issues including but not limited to side slopes, access points, and improvements. Potential detention basin lot area improvements include sports field landscaping, perimeter landscaping, walking paths, benches, and security lighting.

The District requests the final EIR consider potential recreational joint-uses for detention basins in the FVGCP area.

RESPONSE 9.8:

The project as proposed encourages recreational joint-uses for detention basins. The *Florin-Vineyard Community Plan* text document, released as a Public Review Draft on October 27, 2009, includes the following design guideline relating to joint use detention basins:

- *Detention basins should be located adjacent to active park facilities where possible to create a larger total open space area for the neighborhood. Pathis within adjacent parks should connect into the detention basin area. Design of joint use facilities is encouraged to combine the needs of stormwater detention and active recreational areas. Joint use detention/park areas can include active sports fields but is limited to open turf or landscape areas with minimal hardscape or park improvements. Sacramento County Water Resources Division's [sic] guidancemanual for detention/park joint use facilities provides more information.*

COMMENT 9.9:

Drainage Fees: Please note in the final EIR that project applicants shall pay all drainage fees related to the development of a park site and that fees shall be paid by the developer prior to issuance of grading permits or improvement plan approval for the subdivision, whichever comes first.

RESPONSE 9.9:

Southgate Recreation and Park District has submitted recommended Condtions of Approval for each of the individual projects, one of which states that park sites to be dedicated must be graded and improved pursuant to current County standards, and that all fees pertinent to the site (including stormwater) shall be paid before the District will accept the property. This recommended Condition was already included in the Draft EIR.

COMMENT 9.10:

<u>Chapter 9 – Transportation and Circulation</u>; *Bicycle and Pedestrian Facilities*: Please provide a more recent map of proposed bicycle and pedestrian facilities for the FVGCP area. Plate TC-6 shows proposed bicycle facilities based on Exhibit 4-1b of the Sacramento City/County 2010 Bikeway Master Plan which was adopted by the County in 1993. Plate PS-3 shows the District's planned parks, trails and parkways as of March 2008 for the FVGCP area and would better represent proposed bicycle and pedestrian facilities.

RESPONSE 9.10:

Chapter 9 of the final EIR has been amended to include reference to the District's planned trails and parkways. See also Response 7-9, above.

COMMENT 9.11:

The District has worked with the County and Florin-Vineyard Property Owners Group to develop a "Parkway" concept for the FVGCP area. In May 2005, Southgate Recreation and Park District Board approved a new Parkway policy (Attachment D). The vision for these "Parkways" is to provide a pedestrian oriented streetscape for improved aesthetics, comfort, and safety for pedestrians as well as bicyclists. Please include a discussion and exhibits of the "Parkway" and "Greenstreets" concepts in the final EIR. The District has recommended these concepts to the County for inclusion in the design guidelines and standards of the FVGCP and has requested the inclusion of "Parkways" along Gardner, Hedge, and Florencia Avenues on several project applications.

RESPONSE 9.11:

The *Florin-Vineyard Community Plan* text document, released as a Public Review Draft on October 27, 2009, includes a discussion of the "Greenstreets Framework Plan" for the FVGCP area, as well as both a "Circulation Framework Plan" exhibit identifying the major "Parkway" streets and street section exhibits illustrating the "Parkway" design guidelines.

Discussions of the "Parkway" concepts are included in the individual project chapters (Volume 2 of the EIR) that front onto proposed "Parkway" streets, as determined based on Southgate Recreation and Park District comments. These individual project chapters include exhibits showing the conceptual "Parkway" street layouts. Plate PS-3 of the main Public Services and Utilities chapter also shows the locations of the proposed "Parkway" streets.

COMMENT 9.12:

Please note in the final EIR that the district is planning an extensive bicycle and pedestrian trail and parkway system along the Gerber and Elder Creek corridors, utility corridors, and Gardner and Hedge Avenues. These trails will serve as alternate transportation routes and will provide linkages to public transit, parks, schools, offices and shopping centers. As roadways become more congested, bicycle and pedestrian facilities may aid in decreasing the number of personal vehicle trips for residents.

RESPONSE 9.12:

Comment noted. See Response 7-9, above.

COMMENT 9.13:

The final EIR should also include discussion of these proposed bicycle and pedestrian facilities and the positive impacts the implementation of these facilities would have on the transportation and circulation of the FVGCP in the Air Quality and Climate Change chapters.

RESPONSE 9.13:

This information has been added into the Climate Change chapter and the Air Quality chapters of the Final EIR.

COMMENT 9.14:

Chapter 12 – Biological Resources: The District requests DERA to analyze the proposed bicycle and pedestrian trail alignment along Gerber and Elder Creek (Plate PS-3) and determine whether the implementation of the trail improvements would result in adverse impacts to Waters of the United States or Waters of the State.

RESPONSE 9.14:

As noted on page 12-32 of the Draft EIR, "the planned parks and parkway system (See Figure PS-3 in Chapter 5, Public Services), would locate park and open space areas on some of the major concentrations of seasonal wetlands and vernal pools." It is therefore likely that total avoidance would not be possible and that trail construction would directly or indirectly impact some of the delineated wetlands. However, without detailed trail plans, it is impossible to quantify the extent of wetland impacts at this time.

COMMENT 9.15:

The District will be accepting open space dedications throughout the FVGCP and in most cases will become the preserve manager of sensitive wetland and vernal pool habitats. The District requests that the final EIR include the following conditions as mitigation measures for all projects dedicating open space to the District:

> Open Space Dedication – Open space lots shall be dedicated to the District as a gift with a clear title report and be fully developed and improved by the Developer with plans and specifications to be approved by the District. The District requests review of all Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Game and all other permitting agency submissions, comments and requirements as well as the final permit, conditions, and wetland delineations as they pertain to the open space property. The District will accept the completed open space areas only after it has been improved to the District requirements, have passed County inspections, and the conditions required are accepted by the Army Corps of Engineers (if applicable).
>
> Maintenance and Monitoring of Open Space – Prior to open space dedication, the District requests that adequate funding be available to pay for all costs associated with the repair, maintenance and monitoring in perpetuity of the identified open space through the provision of an endowment (if required by permitting agencies) and/or the designation of funds for this purpose in the financing districts.

RESPONSE 9.15:

As the conditions do not mitigate an environmental impact identified in the EIR, they are not appropriate as mitigation measures within the Final EIR. However the District's conditions have been incorporated into the *Planning Staff Reports* as recommended conditions of approval for the individual projects.

COMMENT 9.16:

Chapter 17 – Population and Housing; *Affordable Housing Ordinance*: Full implementation of the density bonus for the CAC and PD Land Use Plans would result in 1,342 and 1,809 additional residential units respectively and would require an additional 17-24 acres of parkland. Please note in the final EIR that full implementation of the density bonus will increase the parkland dedication requirements for each project. Project applicants should be aware that accepting density bonuses will affect the project's parkland dedication requirements.

RESPONSE 9.16:

This information has been added to the "Impacts Related to the Increased Demand for Park and Recreation Services and Facilities" discussion in Chapter 5 of the Final EIR.

COMMENT 9.17:

Multi-family Residential Sites: The parkland dedication requirements for Multi-family and/or Affordable Housing lots will be based on the number of dwelling units calculated from the maximum density permitted in the proposed zoning of the multi-family lot as identified on the tentative subdivision map or tentative parcel map (including any density bonus), unless the subdivider can demonstrate that the development will contain a lesser number of dwelling units. Final map recordation or development plan review shall not become final until the required land or improvements are dedicated or fees in lieu thereof are paid by the subdivider to the satisfaction of the District.

The District does not accept parkland dedication that is part of private or gated developments and does not typically award Quimby credit toward the development of such park sites or recreational amenities.

RESPONSE 9.17:

Comment noted.

COMMENT 9.18 (PARAPHRASED):

The District has submitted DEIR comments and/or edits for the following 12 of the 26 individual project applications contained in Volume 2 of the Draft EIR:

1. Legends Meadows
2. Gerber Creek
3. Portico Acres

4. Florin Vineyards
5. Villaged of Elder Creek
6. Gardner Park
7. Taylor Properties at Gerber and Bradshaw Roads
8. Caselman Ranch
9. Gardner Country Estates
10. Phan Court
11. Gasnakis & Kumar
12. Champion Oaks

The projects may also have requests (i.e., parkland dedication requirements or parkway inclusion) that will require project revisions and should be noted in the final EIR.

RESPONSE 9.18:

The District's most recent comments and recommendations have been incorporated into the *Planning Staff Reports* for the individual projects and the original recommendations have been deleted from the Final EIR in order to avoid confusion. Only those agency comments that indicate unique circumstances associated with the project that could be expected to result in environmental impacts related to public services are discussed in the Final EIR.

COMMENT 9.19 (PARAPHRASED):

The District currently has no outstanding issues or additional DEIR comments for the following projects:

1. Lelani Village
2. Vineyard Market Square
3. Dakuzaku
4. Shehadeh
5. Rancho Siesta
6. Vintage Ranch
7. Village at Stonebourne

RESPONSE 9.19:

Comment noted.

COMMENT 9.20 (PARAPHRASED):

Please note that the Southgate Board of Directors will review and submit comments on the following commercial and agricultural-residential rezone and tentative parcel map applications. The District's comments on these maps should not require project revisions or significantly impact the District's parkland dedication requirements. However, these projects shall be required to annex into Southgate's Landscaping and Lighting Assessment District and proposed Community Facilities District:

1. Champion Oaks (EGR)

2. Florin Vineyard Retail Center
3. Florin/Bradshaw NE
4. Taylor Properties at Gerber and Bradshaw Roads
5. Millers Family Trust
6. Martin
7. 7415 Gardner Avenue
8. Black

RESPONSE 9.18:

Comment noted.

LETTER 10: SACRAMENTO REGIONAL TRANSIT DISTRICT

Don Smith, Sacramento Regional Transit District (May 21, 2009)

COMMENT 10.1:

[This comment is preceded by a brief summarization of the project description, a statement that Regional Transit service is currently unavailable in the area, and a description of Regional Transit planning in the area.] RT notes that the date of the baseline for the DEIR is more than five years old. While the length of time that has been taken to complete the document is understood, it still places the DEIR at considerable risk of contest by the public. Many circumstances have changed since the baseline was developed, not least of which is the state of the economy, the departure of several developers, and a sharply reduced potential development plan (less than 500 net acres). In addition, the County's land use plans have evolved beyond LU-14 to now draft LU-34 (see comment below).

RESPONSE 10.1:

The changes noted that have taken place since the Notice of Preparation (NOP) was issued are important considerations for the applicants and for the decision makers, but are not germane to a CEQA analysis. As to the more generalized statement of concern over the age of the baseline, in most cases the data used for the baseline analysis was collected much more recently – not five or more years ago. CEQA establishes that the baseline is "normally" the environmental setting at the time the NOP is issued (CEQA Guidelines Section 15125(a)); that is not always the case. The purpose of establishing the NOP release as the baseline is simply to provide a level of certainty, so that EIR preparers need not constantly revise a setting in response to inevitable changes in the physical surroundings. That said, EIR preparers are not precluded from updating the setting if warranted; in most cases, the settings in this DEIR were updated with more recent information. For instance, Fehr and Peers Transportation Engineers determined that circumstances warranted the updating of the 2004 traffic counts conducted for the project with 2007 traffic counts at over half of the studied roadways and intersections. As another example, DERA staff conducted new site visits for most of the individual

project applications during 2007 and 2008, to ensure that site descriptions were more current.

It is true that there is currently a draft update to the Sacramento County General Plan that is in the midst of public adoption hearings, but the EIR must compare the Florin Vineyard GAP project impacts to policies in effect at the time of analysis. It would be improper to compare the project to policies that have not been adopted.

COMMENT 10.2:

[Under the heading Transit – pages 9-43 and 9-44] The Transit section needs to be expanded and improved to evaluate transit and land use options that will assist in reducing environmental impacts. For example, the DEIR finds that the proposed project will result in significant unavoidable traffic and air quality impacts. These impacts may be further reduced by strengthening transit through a more transit supportive land use plan for the area.

The environmental document also identifies significant cumulative impacts to Highways 99 and 50. These impacts may also be reduced with a stronger transit alternative.

The revised section would include an evaluation of a Hi-Bus system that links the project to major transit facilities such as the Watt/Manlove Light Rail Station to the north, and the Florin Road Light Rail Station to the west, and communities in between. Traffic Signal Priority and queue jumps that reduce headways should be considered along Florin Road and Elk Grove – Florin/South Watt Avenue.

RESPONSE 10.2:

It is acknowledged that quality transit systems result in fewer vehicle trips and/or vehicle miles traveled, which has benefits to both traffic and air quality. However, it is difficult for Sacramento County to include mitigation directed at transit. Whereas roadway system planning is carried out by Sacramento County, the County does not have control over the operation or implementation of transit systems, so it is problematic to ensure enforcement of such measures on a project-by-project basis. The issue is best resolved at a regional level.

The Sacramento County Draft General Plan 2030 identifies transit facilities within the Plan area. Bus Rapid Transit (BRT) routes are planned with mixed use lanes on Elk Grove-Florin Road and Florin Road. BRT with exclusive lanes is planned along Bradshaw Road. Additionally, the General Plan Update EIR includes transit mitigation policies that would apply countywide.

COMMENT 10.3:

[Under the heading Greenhouse Gas Reduction Measures – pages 11-32 to 11-35] Many of the measures provided in the DEIR are unclear. For example one measure states: “Bus Service providing headways of 15 minutes or less for stops within ¼ mile: the Plan provides essential bus stop improvements.” Another example: “Have at least

three of the following on site and/or off site within ¼ mile: Residential Development, Retail Development, Park, Open Space, or Office." These sentences are fragmented and do not clearly state what is intended. This section needs to be edited to provide Greenhouse Gas Reduction Measures that are clear, understandable, implementable with viable benefits.

In addition, as interpreted, the stated measures (albeit a bit confusing) may, or may not be implementable. For example, the stated measures appear to include:

- Bus service within 15-minute headways, with stops ¼ mile apart;
- High density residential, mixed or retail/commercial uses within ¼ mile of planned transit,
- Linked activity centers and other planned infrastructure; and
- An average residential densities of 7 dwelling units per acre or greater.

When comparing these stated measures to the proposed land use plans, the proposed plans are not in compliance with the described measures.

RESPONSE 10.3:

The FVGCP GHG Reduction Plan was modified subsequent to release of the DEIR to address SMAQMD concerns. The revised Plan was prepared in consultation with and endorsed by the SMAQMD. As a result of this change, the referenced Draft EIR section has been revised for the Final EIR and the referenced measures of concern are no longer applicable.

COMMENT 10.4:

[Under the heading General Plan Land Use Policy LU-14 – page 4-41] The Table of Contents and the map on page 4-41 are listed as LU-14. One would expect a consistency assessment of the project to General Plan policy LU-14 to be in the section. Instead there is a general discussion on the SACOG Blueprint plan.

This section needs to have an assessment of General Plan LU-14 and the proposed LU-34 policies. These policies require transit-oriented land uses to be provided within ½ mile of the transit stops. Presuming the major transit stops would be at the significant intersections of Florin/Gerber and Elk Grove-Florin Roads, neither of the proposed land use plans include densities high enough to be consistent with either the existing LU-14, or with the draft LU-34 policy.

If the project is inconsistent with LU-14, the Board of Supervisors is required to make a determination to override the provisions of the existing transit supportive policy LU-14. It may also require some consideration of the proposed LU-34 and its implications as it is considered for adoption in the General Plan update.

RESPONSE 10.4:

Page 4-41 does not contain any reference to General Plan Policy LU-14. The LU-14 on this page is an exhibit reference – the Blueprint map on this page is Land Use Chapter Plate 14 (LU-14). This exhibit is within the section entitled "Increases in the Intensity of Land Uses in the Region Due to the Proposed Project and All Other Projects in Sacramento County" and the exhibit itself is entitled "Blueprint Scenario for Eastern Sacramento County". Perhaps there was some confusion because it appears that the word Plate was inadvertently omitted. This omission has been corrected in the Final EIR.

Planning and Community Development staff analyzed the project's consistency with the General Plan in the *Planning Staff Report* prepared for the project, and found neither plan to be inconsistent with Policy LU-14. The following discussion was included:

> *Both Plans meet several key growth principles of the General Plan but it is the opinion of Planning staff that the PD alternative is better suited to meet the objectives of General Plan Policy LU-14. This policy requires the placement of intensive land uses in close proximity to public transit, not only to support ridership and operational costs associated with the transit system, but also to help reduce vehicle trips and air pollution and to encourage pedestrian linkages and enhance community identity. The PD Plan shows a much higher density for the Elk Grove Florin corridor where there is the greatest potential for transit service in the near future (see Figure 2 for land uses within ¼ mile of future bus stops). The Plan also provides a much greater potential for mixed use development due to the designation of such uses along key transportation corridor. The CAC Plan shows a relatively low density form along this corridor – this Plan has been designed to meet the strong community desire to preserve and protect the existing rural lifestyles in the study area. Additionally, area residents have repeatedly expressed frustration regarding the lack of public transit and are reluctant to accept higher density uses if transit service is not enhanced to their community.*

COMMENT 10.5:

[Under the heading Blueprint Plan – page 4-41] The discussion on page 4-41 provides a land use map per the SACOG Blueprint plan. The map and the proposed project are clearly inconsistent. For example, the Blueprint plan map clearly shows a large portion (approximately 1/3 of the project area) as High Density Mixed Residential in the upper section of the planning area. The proposed plan identifies the High Density Residential Mixed Residential area as Industrial and possibly Open Space. The DEIR needs to include a comprehensive analysis that discusses the expectations of the Blueprint Plan, and how the proposed community plan compares. The analysis should include quantitative information for land uses, e.g. housing units, square footage of retail, commercial, office and industrial land uses. It should also include a comparison of floor area ratios (between the project and LU-14), and estimated employees per acre. The

decision makers need to be able to compare the proposed project with what is prescribed in the Blueprint.

RESPONSE 10.5:

The Blueprint is not intended to be used to determine the appropriate land use patterns on a parcel-specific basis. The purpose of the Blueprint was to identify a regional pattern of development, or as the SACOG Blueprint website states "to provide a framework to guide local government in growth and transportation planning". The Blueprint did not include a detailed analysis of environmental constraints, and as a result has identified areas for development types that may not be suitable. The Industrial and Open Space area noted by this comment is encumbered by a large floodplain area. It is also within an Aggregate Resource Area, as depicted on the existing Sacramento County General Plan Land Use Diagram, which is why both the proposed and existing General Plan land use designations include the SM, or Surface Mining, designation. Designation of this area as residential would have significant environmental consequences, and for this reason the proposal is to designate it for Industrial uses. Furthermore, details such as floor-area ratios, square-footage of various non-residential types, and other quantitative information is only available at the project-level, not the plan-level stage of development. As a result, the individual projects included for analysis do have this kind of detailed information, but these details are not available for the entire Plan area. The EIR does include an analysis of the project compared to the Blueprint (see page 4-40 of the DEIR), but it cannot include the level of detail requested.

COMMENT 10.6:

Appendix H of Appendix G of Volume III of the Florin Vineyard Gap Community Plan identifies expectations for the transit system. The Transit section states that "the provision of transit services will depend on communitywide land-use patterns, densities/intensities, street configurations, and the availability of capital and operating funds." It also indicates that RT had designated a conceptual 5-acre transit site to provide 500 spaces for carpools and buses. Further, it states: "The FVCP, however, currently does not designate a location for such a site." RT recommends that the 5-acre transit site (or equivalent) be identified within the community plan area so that it can best serve this community.

RESPONSE 10.6:

This recommendation has been forwarded to the Sacramento County Community Planning and Development Department and to the hearing body via this Final EIR. Comment noted.

COMMENT 10.7 (PARAPHRASED):

Regional Transit staff has reviewed the proposed project and recommends the following conditions of approval:

- Provide bus shelter pads as appropriate.
- The community shall form or join a Transportation Management Association (TMA).
- Each developer shall work with the TMA to create a transit pass subsidy program.
- Transit information shall be made available through the TMA and homeowner's and business associations.
- Parking should not exceed the required standards for the County.
- A 5-acre transit site (or equivalent) for a maximum of 500 parking spaces shall be identified on the Community Plan map.
- Retail/Commercial centers adjacent to existing or proposed transit stops shall include park and ride spaces.
- Provide bicycle parking facilities in accordance with the County requirements.
- Physical barriers that restrict unimpeded bicycle and pedestrian access between land uses and transit stops shall be eliminated.
- Provide Traffic Signal Priority and queue jumps for enhances bus service.

RESPONSE 10.7:

This recommendation has been forwarded to the Sacramento County Community Planning and Development Department and to the hearing body via this Final EIR. Comment noted.

LETTER 11: SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Larry Robinson, Sacramento Metropolitan Air Quality Management District, Land Use and Transportation Section (May 21, 2009)

COMMENT 11.1:

Based upon discussions with Regional Transit staff, the District has concerns about the densities of the plan area being sufficient to successfully support the implementation of the transit related mitigation measures for both criteria and greenhouse gas emissions. In addition, more specifics regarding the transit facilities and amenities proposed for the Plan area should be described and included in design guidelines. These efforts can be facilitated by ongoing coordination with Regional Transit staff.

RESPONSE 11.1:

Comment noted. This request has been forwarded to the Sacramento County Community Planning and Development Department. Also refer to responses to the Regional Transit comments.

COMMENT 11.2:

On page 10-14, Mitigation Measure AQ-1 includes mitigation that the District recommends DERA staff consider replacing, either specifically or by reference, with our newly drafted *Basic Construction Emission Control Practices* (all projects) or *Enhanced Fugitive Dust Control Practices* (significant projects) can be found on our website at http://www.airquality.org/ceqa/ceqaguideupdate.shtml and will be forwarded to Department of Review and Assessment (DERA) staff via separate email.

RESPONSE 11.2:

The SMAQMD (K. Huss and C. McGee) has subsequently opined that the dust abatement practices listed in the SMAQMD Guide do not need to be included as mitigation measures. These measures are required pursuant to SMAQMD Rule 403 and California Code of Regulations, Title 13, sections 2449(d)(3) and 2485, the SMAQMD Guide simply lays out the basic practices needed to comply. Since these are already required by existing rules and regulations, it is not necessary to include them as mitigation. The Final EIR has been revised to reflect this change.

The SMAQMD requested, however, that the Basic and Enhanced (where appropriate) Dust Control Practices should be included as conditions of approval for the individual projects. This request is hereby forwarded to the Planning Department and hearing body for their consideration.

COMMENT 11.3:

On page 10-15, Mitigation Measure AQ-2 correctly foretells of a possible change to District screening standards (Table AQ-3). Consideration should be given to using the new construction screening table, to replace Table AQ-3, which is available on our website as part of the CEQA Guide Update found at http://www.airquality.org/ceqa/ceqaguideupdate/Ch3ConstructionNOxScreeningLevelsFINAL.pdf and will be provided to DERA staff via separate email.

RESPONSE 11.3:

The Final EIR has been revised to include the updated table. Mitigation Measure AQ-2 properly notes that compliance should be determined based on the screening levels adopted at the time of project application. This language will ensure that the measure does not become outdated if another updated table is adopted.

COMMENT 11.4:

On page 10-15, in order to adequately address future changes to construction mitigation the District recommends the inclusion of our new Enhanced Exhaust Control Practices (f.k.a. Standard Construction Mitigation) which includes new language addressing the development of a regulation to address construction emissions. This language is available on our website at http://www.airquality.org/ceqa/ceqaguideupdate/Ch3EnhancedExhaustControlPracticesFINAL.pdf and will be forwarded to DERA via separate email.

RESPONSE 11.4:

The additional language addressing the development of a regulation has been added to Mitigation Measure AQ-2 in the Final EIR.

COMMENT 11.5:

On page 10-19, the first sentence reads "The SMAQMD already approved the FVGCP area's AQ-15 Plan . . .;" however, the District does not have approval authority and recommends that "approved" be replaced with "endorsed".

RESPONSE 11.5:

The requested change has been incorporated into the FEIR.

COMMENT 11.6:

On page 10-19, Mitigation Measure AQ-3 incorrectly notes the date of the Florin Vineyard GAP Community Plan Air Quality Mitigation Program (March 26, 2008, the date should read March 26, 2007.

RESPONSE 11.6:

The requested change has been incorporated into the FEIR.

COMMENT 11.7:

The general discussion of the effects of climate change on the Sacramento region is fairly exhaustive and detailed. Understandably, it is difficult, at this time, to look in the future and foresee the exact impact of climate change on the project. The DEIR determines these impacts are "potentially significant" and no mitigation is required. The District believes it would be more prudent to call for mitigation which monitors the effects of climate change on the project over the build out of the project.

RESPONSE 11.7:

Though the expressed concern is understandable, it is unclear what benefits could be obtained from monitoring the effects of climate change on this specific project. Monitoring, as a stand-alone measure, would not result in any benefits unless it were

paired with actions associated with the results of such monitoring; this comment does not mention any actions. Even if paired with actions – such as revising the location and density of land uses in response to water supply or flooding changes – these actions would need to occur prior to the construction of the land uses. Based on the research cited in the Climate Change chapter, the significant effects of climate change won't be felt until after 2030, which is also after the time when full buildout of the project is expected. Therefore, it is unlikely that sufficient data could be collected in time to implement reasonable changes to the project, making any project-level mitigation infeasible. Under these circumstances, it is the view of DERA that the impacts of climate change should be addressed on a County-wide and State-wide basis, not on a project-level basis. To this end, the County has published a Draft Climate Action Plan, and the various departments of the State of California are likewise forming plans and adaptive management programs.

COMMENT 11.8:

The DEIR does not model the construction-related GHG emissions of the project, but determines they are a **significant and unavoidable impact** on climate change. The District recommends that these emissions be modeled using the same estimated construction information that was used for the NOx analysis. Those results should be included in the FEIR.

RESPONSE 11.8:

The construction NOx analysis in the EIR for the project did not include modeled emissions results, and for the same reasons that the greenhouse gas emissions were not modeled: on a Plan-wide basis, the future amount of construction activity on any given day is unknown, as are the construction years and other information vital to conducting such modeling. As a result, the analysis is more qualitative.

COMMENT 11.9:

The DEIR cites two construction-related GHG mitigation measures for this project (page 11-29):

1. Reduction of construction waste and building materials recycling

2. Use of zero-emission construction equipment

The reduction of construction waste measure (#1 above) is listed as a project-specific measure indicating that proponents may choose to implement the measure or not. However, the District recommends both of these measures be applied Plan-wide and; further, that a performance standard be included similar to the ARB December, 2008 draft performance based thresholds. Those measures were:

- <u>Recycle and or salvage at least 75%</u> of non-hazardous construction and demolition debris by weight (residential) or by weight and volume (commercial).

- Use recycled materials for at least 20% of construction materials, based on costs for building materials; based on volume for roadway, parking lot, sidewalk, and curb materials. Recycled materials may include salvaged, reused, and recycled content materials.

RESPONSE 11.9:

Following consultation with SMAQMD staff, the referenced measure was amended as follows:

- Reuse and recycle 50% of construction and demolition waste (including, but not limited to, soil, vegetation, and concrete, lumber, metal, and cardboard).

The amended GHG mitigation plan was endorsed by the SMAQMD on February 5, 2010.

COMMENT 11.10:

The DEIR states there will be a **"Substantial Increase"** in operational emissions when compared with the existing conditions. Table CC-3 indicates the two versions of the project would generate 303,306 MT CO2/year or 355,432 MT CO2/year. The actual supporting analysis, however, is not referenced. We suggest there be a reference to the analysis in Appendix B so that readers will know where to find supporting details. Since the threshold of significance is 100% mitigation, the District recommends that a discussion of the feasibility of using an offset mitigation program be included in this section.

RESPONSE 11.10:

A reference to Appendix B has been added to the FEIR, as has a discussion indicating why an off-site (or offset) mitigation program was not included.

COMMENT 11.11 (PARAPHRASED):

The mitigation measure for the significant and unavoidable GHG emissions requires compliance with the FVGCP Climate Change Plan. This measure needs to be much more specific to be enforceable. For example, it does not state a trigger at which time compliance to the Plan needs to be determined. Would compliance be determined when tentative maps come through or when a construction permit is pulled or some other time? The measure states that DERA would receive some "written documentation". In order to assist DERA, the District recommends that the individual GHG Reduction Plans be required to have District endorsement. It may be that new measures and/or new ways of assessing them become available over time and the District would be an excellent source for that information and judgment. In addition, the measure should speak to some consequence if an individual GHG Reduction Plan is not approved. Consequences could be that the tentative map cannot be approved or the construction permit cannot be pulled if endorsement by the District and approval by the County is not received.

Finally, we suggest that DERA seek District endorsement of the overall GHG Reduction Plan much in the same way is seeks endorsement of the overall Air Quality Mitigation Plan for criteria pollutant reduction.

RESPONSE 11.11:

DERA assumes that the newness of Climate Change Plans (or Greenhouse Gas Reduction Plans) has generated many of these concerns – not having seen many such plans, there are questions about how the plans function. The FVGCP Climate Change Plan will be enforced and monitored in the same manner an Air Quality Mitigation Plan for criteria pollutants (a.k.a. AQ-15 Plan). As SMAQMD does not express any concerns about the enforceability of the AQ-15 Plan for the project in this letter, it is assumed that this resolves the expressed concerns. The Mitigation Monitoring and Reporting Program adopted for all projects includes standard language about penalties for non-compliance.

The overall GHG Reduction Plan has been modified subsequent to release of the DEIR to address SMAQMD concerns. The revised Plan has been prepared in consultation with and endorsed by the SMAQMD.

Mitigation Measure CC-1 has been revised to require SMAQMD consultation at the time that project-specific GHG reduction measures are selected for individual development projects.

COMMENT 11.12:

The District appreciates the fact that the DEIR contains a separate GHG Reduction Plan and that efforts have been made to identify appropriate mitigation. However, we recommend that the Plan be revised, strengthened, and endorsed by the District. Specifically:

Section I-A: Measures #1 – 9 of the GHG Reduction Plan rely on version 1.1 of the District "Recommended Guidance for Land Use Emission Reductions" for criteria pollutants, a document which was updated in August 2007. This resulted in a number of measures being discarded or revised and point values updated. These changes were discussed with the proponent and the County at the meeting on May 4, 2009. Copies of the current Guidance were provided. To the extent the GHG Reduction Plan relies on the District guidance, the Plan should use the current District measures and point values. The use of the new measures and associated point values may result in a different emission reduction point value than 12.5.

Section I-B: The GHG Reduction Plan then uses a measure in the District's current Guidance which is appropriate.

Section II: This section contains mitigation measures from the Attorney General's list of recommended measures. Points have been assigned to all measures. However, it is not clear how the points were derived. The District recommends that there should be a clear demonstration of the nexus between the chosen measures and the points given.

There is no appendix with an analysis that demonstrates that these measures actually will reduce the GHG project emissions by the amounts claimed. For example, why did the measure about developing an underused property receive 15%? That implies a reduction of .15*320,000 MT/year or 48,000 MT CO2. Using the "Recommended Guidance for Land Use Emission Reductions" point values at the beginning of the GHG Reduction Plan sets the expectation that the points claimed actually correspond to a percentage of reduction of the GHG impact. If there is no analysis of the points awarded for the measures in Section II, the District recommends it be clearly stated that the points in the plan are not related to percentages of actual emission reductions. The District cannot endorse a Plan that claims quantifiable emission reductions but does not provide an analysis of those conclusions.

RESPONSE 11.12:

The GHG Reduction Plan has been updated with the latest "Recommended Guidance for Land Use Emission Reductions" for the FEIR. Additionally, the point system used in the GHG Reduction Plan has been modified to address the Air District's concerns.

As correctly identified in this comment, the points allotted in the SMAQMD Guidance document are based on research performed by a consulting firm, and are therefore more "hard" numbers, whereas the points allotted in the original GHG Reduction Plan to the measures from the Attorney General's list of measures are not. With one set of measures following the other, is it acknowledged that this distinction was not clear in the DEIR. The research conducted for the SMAQMD Guidance document took significant resources in time and money to generate, which was not reasonable to do for the Attorney General's list specifically for this project. It is an expectation widely shared that over time, many of the measures will become quantified based on research, but that information is not yet available. To better acknowledge that actual emission reductions have not been documented for the measures from the Attorney General's list, the amended GHG Reduction Plan has eliminated the point values from those measures that have plan-wide application. Point values were retained for the measures that have project-level application so that individual projects could choose strategies from the Project Level Application list that have a collective value of at least 10 points. However, the amended GHG Reduction Plan clarifies that the assigned points roughly correspond to the relative significance of each measure and may or may not have a representative correlation to the estimated percentage of CO_2 emissions reduction.

The Air District endorsed the amended GHG Reduction Plan on February 5, 2010.

COMMENT 11.13 (PARAPHRASED):

Measures in the GHG Reduction Plan are identified as either Plan-wide measures or Project-specific measures, ones which a proponent could pick or abandon. The current Plan-wide measures seem appropriate; however, many other measures could conceivably be included as Plan-wide measures, particularly if incorporated into design guidelines. We recommend the proponents reconsider all the measures, including the following as Plan-wide measures:

- The two construction material recycling measures referenced above
- Energy efficiency measures #1, 2, 5, 6
- Water conservation and efficiency measures #13, 14, 15, 18, 21
- Solid waste measures #24
- Transportation measures #34, 35, 36, 37, 38, 41
- Public outreach #49

RESPONSE 11.13:

The project proponents have consulted with the air district on this issue. Following consultation, some of the above measures have been incorporated as plan-wide measures in the amended GHG Reduction Plan.

COMMENT 11.14:

The URBEMIS results for Florin Vineyard Retail 04-0143 and for Florin Vineyards 04-0207, were mistakenly confused and placed in the wrong order in Volume 4. In addition, URBEMIS runs for Taylor Properties at Gerber and Bradshaw Roads 04-0226; Caselman Ranch 04-0233; and Gasnakis & Kumar 04-0247 were inadvertently left out. As of this writing, District staff has obtained all missing URBEMIS runs from DERA staff for review.

Florin Vineyards 04-0207, beginning on page Vol.2 8-25, this reference (and all others) to $14,300/ton for the off site construction mitigation fee should be replaced with language referring to " . . . the current rate of $16,000/ton of NOx or the prevailing rate in effect at the time of construction." Also Appendix FV-2, the Construction Emissions Mitigation Fee Calculation spreadsheet, should be replaced with the more current version which uses the $16,000/ton rate.

In addition, all development projects are subject to any applicable District Rules that may be in affect at the time of construction. An attachment outlining some of those rules is attached for your information.

RESPONSE 11.14:

Comment noted. All of the necessary corrections and updates have been made in the FEIR. It should be noted that subsequent to receipt of this comment, the SMAQMD's construction mitigation fees increased from $16,000/ton to $16,400/ton, effective July 1, 2010; the updated amount has been included in the FEIR.

LETTER 12: LENNAR COMMUNITIES

Bob Shattuck, Lennar Communities (May 22, 2009)

COMMENT 12.1 (PARAPHRASED):

Lennar is an owner of properties located in the North Vineyard Station Specific Plan (NVSSP) which is adjacent and surrounded on three sides by the Florin Vineyard Gap Community Plan (FVGCP) area. The FVGCP DEIR identifies potentially significant environmental impacts which may also affect the NVSSP. The two planning areas consequently share many infrastructure requirements, including offsite roadway and drainage improvements. The NVSSP, because it preceded the FVGCP, was required to fully fund these improvements. Now it appears as though the FVGCP financing plan, even though some NVSSP improvements will benefit the FVGCP area, does not require either full or even proportionate funding towards those improvements. This raises issues of equity and calls into question whether the required mitigation will occur when needed to address the impacts.

RESPONSE 12.1:

This comment summarizes the more specific concerns relayed by the next two comments. Refer to those comments and responses.

COMMENT 12.2 (PARAPHRASED):

TC-1 requires that all development projects within the FVGCP participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. The project Financing Plan proposes a roadway fee component that funds some of the costs associated with the roadway and intersection improvements identified in the EIR as mitigation. There are roadway projects that benefit both the NVSSP and FVGCP, but some of these overlapping roadway improvements are not funded through the FVGCP – the FVGCP relies on NVSSP mitigation.

The NVSSP mitigation also identified specific development triggers to address the timing of necessary infrastructure that applied to development within the plan area. The FVGCP does not appear to include the same triggers, which raises both equity issues and questions about the timing of improvements. The FVGCP identifies both these timing and financing issues for each improvement, stating that conflicts will be fully resolved following approval of the FVGCP. However, there do not appear to be any specific mitigation measures or conditions that require the FVGCP to either fully mitigate for these common impacts, like the NVSSP has, or fund its proportionate share of the common improvements, or that will resolve the timing issues. We believe that such mitigation or conditions should be included. Otherwise, NVSSP developers will continue to be held up for roadway improvements while FVGCP developers can move forward despite impacting the same roadway sections. At a minimum we request that a Mitigation Measure and Zoning Condition be placed on the project that requires resolution of the financing and timing issues.

RESPONSE 12.2:

The County's Infrastructure Financing Division is recommending the following condition of approval for projects within the FVCP to address this concern:

- No residential final maps, with the exception of large lot final maps, shall be recorded and no residential building permits shall be issued thereon, nor any building permits issued for any other use until approval of an "Implementation Plan" that implements the financing mechanisms recommended in the approved Florin Vineyard Community Plan Public Facilities Financing Plan (FVCP Financing Plan). In addition to the financing mechanisms recommended in the FVCP Financing Plan, the "Implementation Plan" shall integrate to the extent feasible all the required roadway facilities identified in the FVCP Financing Plan and North Vineyard Station Specific Plan Financing Plan~~.~~ In doing so it shall fairly and equitably distribute the costs, funding, construction triggers and construction obligations between the two Financing Plan areas. The property owners shall comply with the implementation of financing mechanisms included in the approved FVCP Financing "Implementation Plan", including any future amendments and revisions adopted by the Board of Supervisors.

  For non-residential development projects, the County and Developer may enter into an interim fee agreement to satisfy the project's fair share funding obligation prior to the adoption of an "Implementation Plan". For residential projects, the County and Developer may enter into an interim fee agreement that requires full participation in the "Implementation Plan", only if funding has been advanced to the County to prepare such an "Implementation Plan" and an analysis of the facilities requirements, cost estimates and associated phasing required for the preparation of the "Implementation Plan" has been prepared by the developer and approved by the County ***(Infrastructure Financing Division).***

Additionally, a phasing plan has been prepared for the FVGCP area, and incorporated into the Community Plan as Section 9.7 and Appendix D; the phasing plan identifies specific development triggers to address the timing of roadway improvements. A copy of the phasing plan is included as Appendix O in Volume 3 of this Final EIR. Individual development projects are being conditioned to comply with the phasing plan.

COMMENT 12.3 (PARAPHRASED):

The DEIR correctly notes that a large portion of the project is within the Elder-Gerber Creeks watershed and is dependent on channel improvements identified in the NVSSP Drainage Master Plan and Public Facilities Financing Plan. However, neither the DEIR nor the project itself include requirements or mechanisms to fund a proportionate share of these common drainage improvements beyond the payment of SCWA Zone 11A fees. The Zone 11A fees do not cover the costs associated with the implementation and construction of the improvements required by the NVSSP Drainage Master Plan,

and the associated wetland permit for improvements to Gerber and Elder Creek necessary to allow development within both plan areas. We believe that development in the FVGCP that is served by common improvements to Elder and Gerber Creek should be required to fund a proportionate share of the full cost of these improvements, including associated environmental mitigation.

Although the DEIR identifies a "Stand Alone" option which would not require completion of the NVSSP drainage improvements, this "Stand Alone" option requires that the area south of Gerber Road and west of Bradshaw Road remain undeveloped. This is not a likely option, or consistent with the Project Purpose. The EIR should assume development of this area and, accordingly, that the project will rely heavily on completion of the NVSSP drainage improvements. Failure of the FVGCP to pay its fair share of the NVSSP drainage improvements which are clearly required to mitigate FVGCP drainage impacts could cause a delay in the construction of NVSSP drainage improvements and accordingly, potential unmitigated drainage impacts due to development of the FVGCP could ensue. At a minimum, we request that a Mitigation Measure and Zoning Condition be require for the FVGCP properties requiring payment of the NVSSP Supplemental Drainage Fee. In addition, the NVSSP Drainage Master Plan divides the improvements into logical segments, and requires NVSSP development that drainages into a segment to construct the entire segment prior to development. We believe that the same requirement should be imposed on development within the FVGCP.

RESPONSE 12.3:

In consultation with the Department of Water Resources, Mitigation Measure HY-3 has been modified to address the financing concerns noted above. The revised mitigation measures, applied to projects within the Elder and Gerber Creek watersheds by project type, are listed below and in the Hydrology chapter of the Final EIR:

- *Residential Projects*

  No residential final maps shall be recorded, no residential improvement plans shall be approved, and no residential building permits shall be issued until supplemental drainage fees are paid pursuant to an approved "Implementation Plan" that implements the financing mechanisms recommended in the approved Florin Vineyard Gap Community Plan Public Facilities Financing Plan (FVGCP Financing Plan). In addition to those financing mechanisms, the "Implementation Plan" shall specifically include the blending of the FVGCP Financing Plan and the North Vineyard Station Specific Plan Finance Plan (NVSSP). This blended plan shall include fair share funding and construction obligations by the FVGCP for those NVSSP Finance Plan drainage improvements and rights-of-way which are of shared benefit to developments in the Elder and Gerber Creek watersheds of the FVCGP.

- *Commercial Projects*

For commercial development, all drainage fees required by the FVGCP PFFP and a fair share contribution, for NVSSP drainage improvements and rights-of-way which are of shared benefit to developments in the Elder and Gerber Creek watersheds of the FVGCP, shall be paid prior to approval of any commercial improvement plans for projects in the Elder and Gerber Creek watersheds of the FVGCP.

For projects within the Unionhouse and Florin Creek watersheds, the original HY-3 mitigation measure would continue to apply.

The "Stand Alone" condition of the Draft EIR does not require that the area in question remain undeveloped. As this comment has noted, there are a number of NVSSP improvements that support development within the FVGCP. It was decided that the drainage analysis should not simply assume that the NVSSP would be complete by the time FVGCP areas moved forward for development. The purpose of the Stand Alone condition was not to model the drainage improvements that would be necessary if NVSSP never developed, but what would be necessary if development did not occur *before* FVGCP development. The analysis showed that without the NVSSP improvements being in place, affected development areas within the FVGCP would need more robust drainage improvements that would otherwise be needed. If the FVGCP were improved pursuant to the Stand Alone condition, no significant impacts would result, but as NVSSP improvements were subsequently completed, some of the FVGCP improvements would become redundant.

Though the Drainage Master Plan does not identify segments in the same way as the NVSSP plan, development within the FVGCP will be required to demonstrate that the Drainage Master Plan improvements necessary to support each project has been completed. In fact, mitigation has been placed on all of the proposed FVGCP individual projects stating this, and the discussion of drainage impacts notes that in some cases the improvements required to support an individual project are extensive. The discussion of drainage impacts in these individual project chapters also notes that developers have requested permission to devise site-specific interim improvements in lieu of the Master Plan improvements, but this request has not been granted at this time, and the discussion concludes that if it were permitted it could have potentially significant environmental consequences.

COMMENT 12.4:

[This portion of the comment letter is an attached agenda from a meeting with the Sacramento County Planning and Community Development Department. This agenda raises the same issues described in the comments above, so is not repeated here.]

RESPONSE 12.4:

Refer to the responses to the previous comments.

LETTER 13: PETROVICH DEVELOPMENT COMPANY

Jim Migliore, Petrovich Development Company (May 22, 2009)

COMMENT 13.1:

Petrovich Development Company is owner and developer of Vineyard Market Square (APN 121-0010-051, control number 04-RZB-PMR-AHS-0209). We have reviewed the DEIR and request that the document be modified to evaluate a rezone of the 37-acre Vineyard Market Square project from AR-10 agricultural-residential to 37 acre SC Shopping Center. This request removes the 10-acre RD-20 residential component from the project.

It is our intention to develop this property as 100% commercial. This will provide a stronger jobs-housing balance, community commercial uses conveniently located to the residents so they do not have to travel great distances (the plan currently consists of neighborhood retail-sized parcels), we strongly believe this is the highest and best use for this property and will provide the County of Sacramento with a greater sales tax revenue base. The General Plan also mandates that properties at major intersections are required to be as intensely developed as possible and 100% commercial is the most intense use of the property. There should be approximately 40 sf of commercial space for every 1 person in the trade area. This trade area is significantly underserved. [The applicant attached a revised site plan].

RESPONSE 13.1:

Chapter 10 in the Final EIR has been revised to address the revised Vineyard Market Square project.

LETTER 14: BREWER LOFGREN LLP

Comments from Ed Gillum, transmitted by Roy Brewer, Brewer Lofgren LLP (May 26, 2009)

COMMENT 14.1 (PARAPHRASED):

There are numerous roadway segments and intersections identified as requiring mitigation that are either wholly or partially within the City limits of the City of Sacramento and therefore under their jurisdiction. Not all of these improvements are consistent with the City of Sacramento General Plan, and in any case, improvements within the City are outside of the control of the County and of the applicant group. To our knowledge, the City has neither a program for the funding of these identified improvements, nor a funding program to assist with roadway projects within the adjacent County for development impacts from City projects. Though when the implementation financing plan for the FVGCP is adopted, there will be adjustments to the fees to eliminate double funding currently mandated as a result of the Sacramento

County Transportation Development Fee Program, the fact remains that Sacramento County landowners are funding improvements within the City without reciprocal programs in the City for improvements in the County. According to Table A-1 in the FVGCP Financing Plan, the GAP's share of these improvements cost approximately $37,355,000.

Because improvements in the City are outside either County or applicant group control to implement, and because there is no reciprocal funding program in the City for funding County improvements, we request that the Board override the associated mitigation measures and not require that they be included in the GAP financing plan. A more logical funding mechanism for these required improvements may be the new Measure A program which collects funds from both the city and the county on an equal basis.

RESPONSE 14.1:

Comment noted. This is not a comment on the adequacy of the analysis in the DEIR. Nonetheless, through this FEIR the request has been forwarded to the hearing body for consideration.

It should be noted that the EIR stated the following regarding roadway improvements located outside of Sacramento County's jurisdiction:

> *Several of the adversely affected intersections are not located within the jurisdiction of Sacramento County. While the Traffic Impact Analysis identified mitigation for areas outside of the County jurisdiction, Sacramento County does not have the land use authority to ensure that the improvements are implemented. As such, the impact to intersections outside of County jurisdiction is considered* significant and unavoidable.

COMMENT 14.2 (PARAPHRASED):

The financing plan prepared for the Florin Vineyard GAP Community Plan includes the construction of two segments of State Highway 16 (Jackson Road) and five major intersections along these segments. The GAP's share of these improvements is identified as approximately $23,500,000 in Table A-1 of the project's draft financing plan. There is likely some duplication of funding between this financing plan and the District 4 improvements on Highway 16 encapsulated by the Sacramento County Transportation Development Fee Program, but again this will be resolved as part of the adoption of a Final Financing Plan for the GAP. Mitigation Measures TC-1 through -4 include the Highway 16 projects, and TC-5 requires fair share contributions toward improvements on SR 99 and U.S. 50.

While it is acknowledged that the project does contribute significant traffic to particularly SR 16, there is no adopted fee or policy to deal with the impacts to that roadway or to SR 99 and U.S. 50. Though we are aware of CalTrans' requests for funding to their facilities, there should be a uniform policy developed for these roadways that have historically been a state funding responsibility, along with a fair share cost and funding source. Furthermore, the County and the applicant group has no control over

implementation of these improvements. We therefore request that the impacts to SR 16, SR 99, and U.S. 50 be overridden and a uniform program be developed to address these broader ranging issues. These costs should be deleted from the GAP draft financing plan.

RESPONSE 14.2:

In July 2009, Caltrans staff (A. Begley) reviewed the proposed mitigation for impacts to SR 99 and US 50 (Mitigation Measure TC-5), and recommended that only three improvements be carried forward as mitigation in the FEIR: fair share funding for SR 99 southbound ramp metering, US 50/Watt Avenue interchange improvements, and US 50 Bus/Carpool lane projects. Caltrans stated at that time that these three improvements address the project impacts, and provided the following explanation for why the other improvements were no longer being considered:

SR 99

--Completion of ITS communication infrastructure (like fiber optic lines).In light of the mitigation for the southbound ramp meters, Caltrans chose not to carry this improvement forward because it is maintaining its current Traffic Control elements.

--Upgrade of the Florin Road, 47th Street, and Fruitridge Road interchanges from full cloverleaf to partial cloverleaf configurations. Caltrans chose not to carry this improvement forward because operations at each interchange are unique and timing for any future improvements at these interchanges is currently uncertain.

--Construction of auxiliary lanes. Caltrans chose not to carry this improvement forward because a project on SR 99 from Mack Road to Bruceville Road is fully funded.

--Traffic signal coordination at freeway interchanges to minimize impact of vehicle queue spillback onto SR 99. Caltrans chose not to carry this improvement forward.

US 50

--Traffic signal coordination at freeway interchanges to minimize impact of vehicle queue spillback onto US 50. Caltrans chose not to carry this improvement forward.

--HOV enhancements to existing interchanges such as bypass lanes at existing metered onramps. Caltrans chose not to carry this improvement forward since timing of the remaining work is uncertain.

--Completion of Intelligent Transportation Systems improvements on US 50 like the installation of a changeable message sign (CMS) east of the Mayhew Road overcrossing. Caltrans chose not to carry this improvement forward.

Subsequently, in September 2010, Caltrans provided the following update regarding the need for these 3 mitigation measures:

SR 99

- Southbound ramp metering from downtown Sacramento to Calvine

  This remains as viable mitigation. Ramp meters range in cost from $70 to $150 thousand dollars per meter. Please use this cost estimate for estimating future fair share mitigation.

US 50

- Watt Avenue interchange improvements

  Based on the discussion at the meeting Caltrans is satisfied that the County will find the necessary funding for this project. Caltrans approves removing it from the mitigation list.

- Bus/Carpool Lane project from Sunrise to downtown Sacramento
  - -- Sunrise to Watt -- This project is fully funded and can be removed from the mitigation list.
  - -- Watt to Downtown -- This is a viable mitigation. Caltrans is currently working on a PID for this project. The project cost is estimated at $112,953,000. Please use this amount to calculate future fair share cost.

Mitigation Measure TC-5 has been modified in the FEIR to reflect Caltrans current recommendations.

The request to override impacts and delete the costs from the GAP draft financing plan is noted, but is not a comment on the adequacy of the DEIR. Through this FEIR, this request has been forwarded to the hearing body for consideration.

COMMENT 14.3:

Calvine Road is a shared facility with the City of Elk Grove (the centerline of Old Calvine Road is the northerly Elk Grove city limit). Therefore should the city of Elk Grove have an equal funding responsibility with Sacramento County? Given the various funding mechanisms available to be applied is the GAP responsible for almost $3,000,000 worth of improvements to that somewhat distant offsite roadway? It is difficult to determine how and/or if fair share funding is being accomplished in Table A-1 of the GAP financing plan. We request that the GAP contribution to Calvine Road and associated intersections be evaluated and if appropriate the funding provided in a more regional mechanism such as Measure A or the Sacramento County Transportation Development Fee Program.

RESPONSE 14.3:

This comment was forwarded to the Sacramento County Department of Transportation and the Sacramento County Infrastructure Finance Department. It is not a comment on the adequacy of the impact analysis in the EIR.

LETTER 15: SACRAMENTO COUNTY DEPARTMENT OF WATER RESOURCES

Bob Gardner, Sacramento County Department of Water Resources – Water Supply (May 26, 2009)

COMMENT 15.1 (PARAPHRASED):

Water Supply has submitted recommended Conditions of Approval for the following individual project applications contained in Volume 2 of the Draft EIR: 04-0139, 04-0143, 04-0204, 04-0209, and 04-0226.

RESPONSE 15.1:

Comment noted. Agency recommendations have changed substantially on many of the individual projects due to changes in the project design and/or changes in circumstance. The most current recommendations/requirements of various agencies have been included as conditions of approval in the *Planning Staff Report* and/or the *Planning Commission's Transmittal to the Board of Supervisors* for each project. The "Agency-Recommended Conditions of Approval" sections have been deleted from the individual project chapters in Volume 2 of Final EIR in order to avoid confusion.

LETTER 16: SACRAMENTO COUNTY DEPARTMENT OF WATER RESOURCES

Bob Gardner, Sacramento County Department of Water Resources – Water Supply (May 26, 2009)

COMMENT 16.1:

Water Supply has submitted recommended Conditions of Approval for the following individual project applications contained in Volume 2 of the Draft EIR: 04-0177, 04-0187, 04-0205, 04-0206, 04-0207, 04-0208, 04-0217, 04-0218, 04-0219, 04-0234, 04-0241, 04-0247, 04-0412, 04-0423, 04-0449, 04-0450, 04-0457, 04-0471, 06-0709, and 07-0604.

RESPONSE 16.1:

Comment noted. See Response 15.1, above.

LETTER 17: FRIENDS OF THE SWAINSON'S HAWK

James P. Pachl, Friends of the Swainson's Hawk (May 26, 2009)

COMMENT 17.1:

This letter is submitted on behalf of my client Friends of the Swainson's Hawk, Inc. The Swainson's Hawk is listed as threatened under the California Endangered Species Act. My client supports infill development and does not oppose urban development of the proposed Community Plan area. However, my client must oppose the Community Plan as presented due to serious deficiencies in the DEIR's analysis of impacts of Swainson's Hawk and consequent inadequacy of measures to mitigate for project impacts upon Swainson's Hawk foraging habitat. The findings that the Community Plan and the specific projects discussed within the DEIR will mitigate impacts to less than significant are not supported by substantial evidence.

RESPONSE 17.1:

This comment summarizes the more specific concerns relayed by the remaining comments presented by this reviewer. Refer to those comments and responses.

COMMENT 17.2 (PARAPHRASED):

Aerial photographs in the DEIR show that most of the land presently zoned AR-20, A-20, AR-10, A-10, and AR-5 is presently undeveloped fields, much of which is not interrupted by structures. The DEIR correctly states that the open space is foraging habitat for nesting Swainson's Hawks.

RESPONSE 17.2:

Comment noted.

COMMENT 17.2 (PARAPHRASED):

As a means to comply with CEQA, Sacramento County enacted its Ordinance 16.130 et seq., "Swainson's Hawk Impact Mitigation Fees". The Ordinance applies to any request for change of land use designation from an agricultural designation to a designation of AR-2 or AR-5 (or more intense/urban designation), or to subdivide five acres or more contiguous acres zoned as an urban designation to less than five acres. If such land is determined to provide suitable habitat and it is determined through the CEQA process that the request will result in a significant impact, then to reduce impacts from a significant to a less than significant level, the applicant must preserve foraging habitat on a 1:1 ratio either through a conservation easement or through payment of impact fees. This must occur either prior to site disturbance, prior to recordation of a Final Map, or upon the adoption of a zoning ordinance. This mitigation has generally been acceptable to the California Department of Fish and Game.

RESPONSE 17.2:

Comment noted.

COMMENT 17.3:

Where the Swainson's Hawk foraging value of a parcel has been reduced by the presence of a pre-existing rural residential home and outbuildings, the biologically-sound solution would be a site-specific determination by a qualified raptor biologist of the foraging value remaining on the property. This could be done, for instance, by determining that several acres adjacent to the rural residential home is of minimal SWH foraging value due to human presence and activity, and that the remainder of the parcel be mitigated at the full one-to-one mitigation ratio. Such a determination would be consistent with CEQA.

RESPONSE 17.3:

While the methodology noted above may be consistent with CEQA, it is not the only means of complying with CEQA, nor is it necessarily the best. The example above ignores that under standard DFG methodology, distance to the nearest nest tree is used to determine the mitigation ratio and therefore a ratio less than 1:1 may be the starting point from which to mitigate even the undisturbed foraging habitat on a property. Additionally, the example relies on the opinion of a single biologist, and therefore is subject to challenge as a result of disagreement amongst experts. Finally, evaluation of individual properties on a case-by-case basis, as cited in the example, can incentivize property owners to reduce the forage value of their land through legal agricultural and residential practices prior to requesting a development entitlement. Examples would be planting vineyards, creating a pond, paving over a substantial portion of the property, or overgrazing the parcel so that primarily bare dirt remains. The County's methodology eliminates these concerns while providing an unbiased and systematic means for accessing impact.

COMMENT 17.4:

Unfortunately, in this DEIR the County chose to rely on the mis-use of a County policy intended for rural-residential parcel splits for continuing rural-residential use.

RESPONSE 17.4:

The reviewer mischaracterizes the intent of the County's methodology. The primary reason for developing the new methodology was to more accurately assess impacts caused by loss of the large, open, agricultural landscapes used by Swainson's hawks for foraging. The methodology therefore focuses on the systematic loss of foraging habitat that occurs as large open agricultural lands are converted to progressively smaller agricultural uses and, eventually, to non-agricultural uses. Thus under the methodology, impact is assessed incrementally as properties change from large scale open space and agricultural to smaller scale agricultural and finally to agricultural residential or urban uses. As a result, mitigation occurs at the time a property is

rezoned and has already taken place by the time a rural-residential parcel split occurs. The "policy", therefore, does not even apply to rural-residential parcel splits.

COMMENT 17.5:

In 2005 and 2006, there was concern that the one-to-one SWH mitigation ratio was too expensive for "mom and pop" landowners seeking to split a rural-residential parcel of 20 acre or less into smaller parcels (usually 5 or 10 acres), each of which would be allowed only one rural-residential dwelling plus an accessory dwelling for farmworkers per County zoning code. There was also concern that the presence of a rural residential dwelling and outbuildings on parcels of less than 40 acres would reduce the SWH foraging value of the parcel due to human presence and activity.

RESPONSE 17.5:

The reviewer incorrectly states the "mom and pop" concern that the County was facing prior to adoption of the new methodology. The concern at that time was for parcel splits on 5+ acre properties zoned AR-1 or AR-2, which were required to mitigate at 100% for a parcel split, while properties that retained a minimum parcel size of 5 acres or more (such as the reviewer's example of a 20-acre parcel split into 5- or 10-acre parcels) would require no mitigation at all. This "all or nothing" approach unfairly penalized the small rural-residential property owners, while completing ignoring the habitat loss that occurred through the break-up and development of large agricultural landscapes.

The reviewer is correct in noting that the County was also concerned regarding the effect on Swainson's hawk foraging caused by human presence and activity on parcels of up to 40 acres in size.

COMMENT 17.6 (PARAPHRASED):

DERA adopted a "methodology" – not an Ordinance – memorialized as "Swainson's Hawk: Environmental Impacts and Issues, a Guide for the Unincorporated Areas of Sacramento County" which is summaries in the DEIR pp. 12-35 and -36, and is used in this DEIR to calculate mitigation for project impacts to foraging habitat. The Methodology is based on zoning: AG-40 and larger has 100% habitat value; AG-20, IR and UR has 75% habitat value; A-10, AR-10, and AR-10(F) have 25% value; and commercial, industrial, residential, and AR-5 and smaller have no habitat value. This can arguably be biologically valid <u>ONLY IF</u> the land has been parcelized as permitted under the applicable Zone <u>and</u> has been developed to the extent allowed by the applicable Zone. This method is obviously biologically <u>INVALID</u> where there is an area of contiguous vacant property, 40 acres or greater, which is zoned, or zoned and parcelized, as AR-20, AR-10, or less, but is undeveloped.

RESPONSE 17.6:

When applied on a case-by-case basis, the reviewer's argument would appear to be logical and have some validity. However, in arguing this approach, the reviewer focuses only on the immediate biological value of the land, while ignoring long term biological

value. Under the scenario described above, there is no consideration of a property owner's inherent right to develop his property. It looks only at whether a property has already been developed, not at whether it could be developed with no additional discretionary entitlements. Thus, mitigation is required of the property owner who splits his property before building his house, but not of the owner who builds his house before splitting his property, even if both properties are split and developed over an identical timeframe. It also penalizes the property owner who voluntarily maintains his property in a natural state suitable for Swainson's hawk foraging (requiring 100% mitigation at the time of impact assessment), while rewarding the owner of a similar property who deliberately destroys the habitat by putting in non-compatible uses (requiring no mitigation).

Additionally, utilizing the reviewer's logic, mitigation for habitat loss for major urban development would only occur for the first stages of development, before surrounding properties develop. The County's methodology captures all properties as they convert from agricultural to urban uses, even where nearby development has already occurred. Similarly, the County's methodology captures habitat loss associated with conversion of agricultural lands even though they may be temporarily growing a non Swainson's hawk-compatible crop (e.g., under the County's methodology, conversion of a 1,000 acre AG-40 zoned vineyard to urban use would result in 1:1 mitigation based on the land's long-term potential, rather than no mitigation based on its current temporary use).

The County's methodology, by focusing on the underlying zoning, considers the long term potential of the property to be maintained as Swainson's hawk foraging habitat and mitigates appropriately for habitat loss. This has been confirmed by the Department of Fish and Game, the responsible agency in regards to Swainson's hawk impacts, who stated that the County's methodology "is based on a better understanding of how Swainson's hawks use their habitat" and, further, that "the DFG agrees with the approach described above and believes that the proposal correctly identifies the loss of Swainson's hawk foraging habitat as a process that starts with a change in land use designations from large parcel agriculture to small parcel agricultural-residential zonings. We also concur that finding no significant impact associated with small parcels embedded in urban and rural residential areas is appropriate because these parcels no longer function as viable habitat".

For these reasons, the EIR preparers believe that the methodology is biologically valid.

COMMENT 17.7 (PARAPHRASED):

This issue was raised by the Friends of the Swainson's Hawk during development of the Methodology, and County staff advised that Rancho Murieta and the Elverta Specific Plan area would be excepted from the methodology because they were the only areas containing a number of contiguous small but undeveloped parcels.

The DEIR states that the California Department of Fish and Game approved the methodology, but the California Department of Fish and Game expressed the same concern as Friends of the Swainson's Hawk in a March 9, 2009 letter.

RESPONSE 17.7:

Comment noted; however, the comment does not accurately represent the issues involved with Rancho Murieta and the Elverta Specific Plan. The actual issue was that both the Elverta Specific Plan Area and Rancho Murieta Area contained large parcels that were zoned AR-5 and AR-2. Under the proposed methodology these areas would have required no mitigation. The expressed concern was resolved with the Department of Fish and Game by creating an exception to the methodology for the Rancho Murieta and Elverta Specific Plan areas so that mitigation would be required upon development. This is confirmed by the DFG's statement, also contained in their March 9, 2009 letter: "We believe that the final staff report effectively addresses these concerns, and we support this report."

COMMENT 17.8:

The situation in the proposed Florin-Vineyard Community Plan is similar to that which concerned CDFG as to Elverta Specific Plan and Rancho Murieta, except to the extent that much of the Community Plan area is AG-10 or AR-10, which would require 25% mitigation.

RESPONSE 17.8:

Rancho Murieta and the Elverta Specific Plan area were specifically excluded from the methodology because it was recognized that although these areas were zoned for AR-5 and smaller parcel sizes, the majority of both areas maintained large lot sizes that provided valuable foraging habitat. In other words, both Rancho Murieta's and Elverta Specific Plan's existing zoning did not accurately reflect the existing habitat value of the areas.

The following excerpt from the *Elverta Specific Plan Final EIR* (Control Number: 99-SFB-GPB-CZB-AHS-0351 and 00-RZB-SDP-0442*)* describes this issue in greater detail for the Elverta Specific Plan area:

> *Although currently zoned for agricultural-residential uses that would allow lot sizes of 5 acres or smaller, only about 10% (172± acres) of the 1,744± acre Plan area is currently comprised of lots that are 5± acres or smaller in size. Approximately 14% of the Plan area contains lots 5-20 acres in size; another 17% of the Plan area contains lots 20-40 acres in size; and the remaining 59% of the Plan area contains lots that are 40 acres and larger in size. As such, approximately 90% (1,572± acres) of the 1,744 acre Plan area is comprised of large, contiguous open areas that essentially function similar to agricultural areas with zoning of AG-40 and above in terms of foraging habitat value. Discussions with CDFG staff (Gifford, April 16, 2007) indicate that it is reasonable and appropriate to assume that existing Plan area parcels that are 5± acres in size and smaller (most of which are developed) would provide minimal, if any, Swainson's foraging habitat value, and therefore no mitigation would be required for their development.*

Within Rancho Murieta, the areas zoned for agricultural-residential uses that would allow lots sizes of 5 acres or smaller are primarily the buffer areas, open space areas, golf courses, water bodies and other quasi-public lands within and on the perimeter of the community. Most of these parcels far exceed the minimum defined by their zoning. The exception from the methodology for Rancho Murieta was appropriate because the unique nature of the community and parcelization pattern associated with the area.

In contrast, the Florin Vineyard Gap Community Plan area has agricultural-residential parcels that are generally sized consistent with their existing zoning. Within the 125± acres that would allow lot sizes of 5 acres or smaller, the average lot size is 6± acres with the largest parcel 13± acres. Within the 1,165± acres zoned for 10-acre minimum parcel size, the average lot size is 11± acres, with the largest parcel 39± acres. Further, the agricultural-residential parcels within the FVGCP area form a mixed mosaic of developed and undeveloped properties, not vast expanses of undeveloped land as was the case in Rancho Murieta and Elverta. Additionally, the majority of the agricultural-residential land within the FVGCP area is zoned for 10-acre minimum lot sizes, and as such is subject to partial mitigation under the County's methodology rather than no mitigation as would have been the case for both Elverta and Rancho Murieta.

The situation within the Florin Vineyard Gap Community Plan area differs substantially from the circumstances which resulted in the exclusion of the Elverta and Rancho Murieta areas from the County's impact assessment methodology. As such, the area does not warrant a similar exclusion.

COMMENT 17.9:

The Methodology underwent no CEQA review, and thus does not presumptively establish full mitigation for any discretionary project. See *Calif. Native Plant Society, et al v County of El Dorado* (3rd District, January 28, 2009) page 32, which pertained to the validity of a mitigation fee ordinance. The Methodology is not even an Ordinance.

RESPONSE 17.9:

There is no requirement in CEQA to conduct environmental review of the methodologies used for determining environmental significance. The methodology is not a "project" as defined by the CEQA Statute (Section 21065), and thus is not subject to CEQA review.

Further the case citation above is not related to the determination of impact, but to the efficacy of fee payments to mitigate the impact, once identified. In the case of Sacramento County's Swainson Hawk Mitigation Fees, the fees were adopted by Resolution of the Sacramento County Board of Supervisors, and are applied pursuant to the requirements of Chapter 16.130 of the Sacramento County Code (Swainson's Hawk Mitigation Fee Program). The Ordinance has been amended several times, including increases to the mitigation fees. In 2003 the Board approved increasing the fee and added a $333/acre endowment (SSC: 1249). In 2005 the Board amended the ordinance to allow fees to be set by resolution, limited the fee option to projects less than 40 acres,

and again raised the fees. The history of the fee amendment amounts are summarized in the table below.

Fee Component			
Year	**Acquisition per Acre**	**Operations & Mgmt. per Acre**	**Total Per Acre**
1997	$750	--	$750
2003	$2,500	$333	$1,088
2005	$16,000	$2,375	$18,375
2009	$10,550	$2,375	$12,927

In all but the most recent case, the mitigation fees have been increased, in part reflecting increasing acquisition cost of mitigation lands. In recent years, however, the prices for mitigation lands have fallen significantly, resulting in the fee reduction undertaken in 2009. The December 2009 *Planning Staff Report* explained the rationale for adoption of the current fee amounts as follows:

> The current fee amount was based on information prepared by a consultant, ENTRIX Inc., as part of the draft South Sacramento Habitat Conservation Plan. This was determined to be appropriate because the SSHCP covers much of the same area as covered by this Ordinance; therefore the land value analysis is directly applicable to this fee amount. ENTRIX collected sales transaction data for agricultural land throughout the SSHCP Plan Area for the years 2002 to 2006 and estimated average per-acre agricultural land values throughout the County based on a statistical model. These land values were reviewed and validated by an agricultural land appraiser with experience in the study area. Based on changing conditions in the real estate market, land value estimates were subsequently adjusted to reflect 2008 prices by applying a land value index based on real estate trends within the SSHCP Plan Area. The average agricultural land value per acre was calculated by dividing the total estimated cost of all land for full SSHCP agricultural mitigation ($137,548,396) by the total number of acres (13,035 ac) to get $10,550/acre. This provides a broad average across all types of agricultural land in all areas.
>
> This proposed fee reflects a significant decrease in the price of agricultural land, as adjusted for 2008. The current adjustment is based on both the current and projected easement and land costs for habitat mitigation over the foreseeable future. Planning staff does not recommended a value based on the lowest mitigation comparables in order to avoid a fee that will quickly become inadequate when land prices begin to rise.

This information has been added to the Biological Resources chapter of the Final EIR.

COMMENT 17.10:

When it adopted the Methodology discussed above, County staff were apparently unaware that the area of the proposed Florin-Vineyard Community Plan included large areas of contiguous vacant land zoned at less than AG-40. Specifically, the DEIR shows 160 acres as AG-40 and larger, 840 acres at AG-20, IR, and UR, 1,698 acres zoned as A-10, AR-10, AR-10(F), and 1,068 acres zoned as commercial, industrial, residential, and AR-5 and smaller.

RESPONSE 17.10:

County staff considered the zoning and parcel sizes throughout the County, including the FVGCP area, when determining which areas should be exempt from the methodology. Rancho Murieta and Elverta were exempted because these areas would have received no mitigation under the methodology despite the fact that habitat was present. This is not the case with the FVGCP area. See Response 17.9, above, which further explains the rationale used in making this determination.

COMMENT 17.11 (PARAPHRASED):

The amount of land requiring mitigation, as stated in Mitigation Measure BR-4 of the DEIR, is inadequate because it is based on an inappropriate methodology. The owner of a property zoned AG-40 or greater must mitigate for a 100% loss of foraging habitat, but the owner of an identical land area zoned AR-10 must mitigate for only 25% of foraging habitat. This assumption, that the zoning can be used to determine habitat value, is factually ridiculous and not supported by substantial evidence. In determining impacts, the determination must consider the presence of adjacent vacant land, separated from the “subject” parcel only by the presence of a property line which has no biological effect. Application of the Methodology is clearly inappropriate for the Community Plan area, and fails to comply with CEQA. The obvious solution is to retain a raptor biologist experienced with Swainson’s Hawk in the local area to review the Community Plan as a whole and the individual projects, both by aerial photographs and on the site, to make a determination of impacts and necessary mitigation. This would comply with CEQA.

RESPONSE 17.1:

The EIR preparers disagree with this conclusion. See responses 17.3 through 17.10, above.

LETTER 18: MACKAY AND SOMPS

Bruce Walters, MacKay and Somps, on behalf of Village Capitol Group LLC (February 2, 2009)

COMMENT 18.1:

[Letter titled RE: Florin Vineyards Tentative Map – DEIR Comments – (Control #04-0207)]

Drainage; (p. 8-21) Last paragraph states that the project is inconsistent with the Drainage Master Plan, yet text on page 8-18 states that the project is potentially inconsistent (emphasis added). Text on page 8-21 should be revised to be consistent with the "potentially inconsistent text on page 8-18.

RESPONSE 18.1:

The requested change has been included in the FEIR.

COMMENT 18.2:

Drainage mitigation; FVN-1 (p. 8-51); This mitigation measure should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

RESPONSE 18.2:

The reason that the text provides a discussion of interim facilities is because some individual applicants have expressed an interest in pursuing such a proposal. The discussion concludes that if this were allowed, it could have potentially significant impacts. Nonetheless, phasing of the Drainage Master Plan improvements can occur without significant effect if adequate precautions are in place. The "Drainage and Hydrology" chapter of Volume 1 of the Final EIR contains mitigation measures that address phasing of the Drainage Master Plan improvements while ensuring that any phased, or interim, drainage solutions do not significantly affect area drainage. As these measures apply to all individual development projects within the FVGCP area, there is no need to modify the mitigation measure contained in the project specific chapter.

COMMENT 18.3:

Drainage mitigation; FVN-2 (p. 8-51); this mitigation measure states that specified lots shall not be recorded until a detention basin location is determined and the area "reserved for said basin". However the applicant proposes to obtain tentative map approval for the specified lots to allow development should the off-site basin be constructed. For the purpose of the Subdivision Map Act, the term "reserve" is problematic. Suggest FVN-2 state that, " . . . the area shall be designated for said basin . . ." (emphasis added).

RESPONSE 18.3:

The purpose of the referenced mitigation measure is to provide some assurance that the necessary improvement will be constructed. The designation of an area for a

detention basin does not provide this assurance – only the actual reservation of land (through purchase, easement, or other method) will assure that the necessary improvement can be constructed.

LETTER 19: MACKAY AND SOMPS

Bruce Walters, MacKay and Somps, on behalf of Jack Liebau (May 26, 2009)

COMMENT 19.1:

[Letter titled RE: Gerber Creek Tentative Map – DEIR Comments – (Control #04-0187)]

Drainage mitigation; GC-1 (p. 4-55); This mitigation measure should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

RESPONSE 19.1:

See Response 18.2.

COMMENT 19.2:

Agency Comments; There are several items of concern with agency comments and conditions of approval. The DEIR should note that changes to agency comments or conditions of approval may occur as part of the entitlement process, and are not restricted by the fact that they are included in the DEIR.

RESPONSE 19.2:

It is acknowledged that applicants do not agree with all of the conditions that have been recommended by various agencies. It is not deemed to be necessary to explicitly state that the recommended condition may change, or may be eliminated altogether. The section listing the conditions in the Draft EIR was entitled "Agency-**Recommended** Conditions of Approval" (emphasis added). It is well understood that the inclusion within the EIR of the measures that are current as of publication does not preclude the agency from modifying its recommendation, or the hearing body from choosing to modify or not adopt the recommendations prior to actual project approval. Nonetheless, to avoid confusion given the many changes that have occurred since publication of the Draft EIR, this section has been deleted from the Final EIR.

LETTER 20: MACKAY AND SOMPS

Bruce Walters, MacKay and Somps, on behalf of Stumbos & Company (May 26, 2009)

COMMENT 20.1:

[Letter titled RE: Lelani Village – DEIR Comments – (Control #04-0206)]

Public Transit (p. 7-18); The document includes comment from Regional Transit for a 12.5-foot area adjacent to Elk Grove-Florin Road as a Bus Rapid Transit (BRT) corridor. The document should note that neither the current nor draft General Plan Transportation Plan show a BRT corridor on Elk Grove-Florin Road.

RESPONSE 20.1:

The FEIR has been amended to include your comment.

COMMENT 20.2:

Drainage mitigation; LV-4 (p. 7-34); This MM should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

RESPONSE 20.2:

See Response 18.2.

COMMENT 20.3:

Agency Comments; There are several items of concern with agency comments and conditions of approval. The DEIR should note that changes to agency comments or conditions of approval may occur as part of the entitlement process, and are not restricted by the fact that they are included in the DEIR.

RESPONSE 20.3:

See Response 19.2.

LETTER 21: MACKAY AND SOMPS

Bruce Walters, MacKay and Somps, on behalf of Shehadeh Family Trust (May 26, 2009)

COMMENT 21.1:

[Letter titled RE: Shehadeh Ranch – DEIR Comments – (Control #04-0219)]

Drainage mitigation, SH-2 (p. 13-76); We recognize the need to coordinate with SRCSD and Water Resources to resolve issues on the detention basin design.

However SH-2 should be treated as an agency comment or condition of approval, not as a mitigation measure.

RESPONSE 21.1:

The analysis identifies inconsistency with the Drainage Master Plan as a potentially significant impact. Mitigation Measure SH-2 would ensure that consistency is achieved.

However, the point is moot, as the Shehadeh Family Trust project is one of several projects that was not ready for hearing at the Planning Commission and the project chapter has therefore been deleted from the Final EIR.

COMMENT 21.2:

Drainage mitigation; SH-3 (p. 13-77); This mitigation measure should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

RESPONSE 21.2:

See Response 18.2 and 21.1.

COMMENT 21.3:

Reservation for Future Applicant Input, Including response to Agency Comments; There are several items of concern with agency comments and conditions of approval. We will work with the agencies and changes to these conditions will likely result. The DEIR should note that changes to agency comments or conditions of approval may occur as part of the entitlement process, and are not restricted by the fact that they are included in the DEIR.

RESPONSE 21.3:

See Response 19.2 and 21.1.

LETTER 22: MACKAY AND SOMPS

Bruce Walters, MacKay and Somps, on behalf of LK Dev One LLC (May 26, 2009)

COMMENT 22.1:

[Letter titled RE: Villages at Elder Creek Estates – DEIR Comments – (Control #04-0208)]

Project Description: (p. 9-3); The DEIR adequately includes the latest project description and wetlands information. Thank you.

RESPONSE 22.1:

Comment noted.

COMMENT 22.2:

Drainage mitigation; ECE-1 (p. 9-54); This mitigation measure should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

RESPONSE 22.2:

See Response 18.2.

COMMENT 22.3:

Tree Preservation; ECE-13 (p. 9-60); The two trees listed for preservation are adjacent to a proposed water quality treatment basin. Compatibility of the trees and basin should allow successful preservation. However, some of the preservation measures may need to be adjusted to allow design of the treatment basin adjacent to the trees. The ECE-13 should include language allowing flexibility to the preservation measures subject to approval of DERA.

RESPONSE 22.3:

Changes have been made to the FEIR to allow some flexibility should detention basin construction require dripline encroachment.

COMMENT 22.4:

Agency Comments; There are several items of concern with agency comments and conditions of approval. The DEIR should note that changes to agency comments or conditions of approval may occur as part of the entitlement process, and are not restricted by the fact that they are included in the DEIR.

RESPONSE 22.4:

See Response 19.2.

LETTER 23: NORTH VINEYARD GREENS

Peter Daru, North Vineyard Greens (May 26, 2009)

COMMENT 23.1:

I am writing as a property owner and developer of North Vineyard Greens. The North Vineyard Station Specific Plan and Vineyard Springs Master Plan developers were

required to participate in implementation of both the onsite and offsite drainage improvements to Gerber Creek and Elder Creek.

The north-south boundary of the subject project area is formed by Elder Creek. Watersheds from the Florin-Vineyard Gap area contribute a significant amount of runoff into Elder and Gerber Creeks.

Elder Creek flows through the northern portion of the plan area where is converges with Gerber Creek and then re-enters and meanders through the majority of the southern end of the plan area.

The County recognized the need for onsite and offsite channel improvements from pending development of the NVSSP and VSMP areas. It is only logical and prudent to anticipate that the development of other neighboring lands would also generate significant runoff to those existing channels. Therefore, improvements have to be made by the neighboring areas that are also slated for development.

FVGCP should be responsible for their proportional share of the cost of improvements and right of way necessary to upgrade the existing channels. Conditions and/or mitigation measures similar to those placed on the North Vineyard Specific Plan and Vineyard Springs Master Plan associated with improvements within the existing Gerber creek and Elder Creek channels must be incorporated into this project. In keeping with previous approvals, the development of this plan area must require equitable contributions to the improvements associated with their fair share of impacts to the affected channels both onsite and offsite.

The County has a responsibility to ensure that mitigation measures and conditions of approval similar to those placed on neighboring projects are implemented to ensure that the development of this project will provide for a fair share contribution toward necessary drainage facilities.

RESPONSE 23.1:

See Response 12.3.

LETTER 24: STATE OF CALIFORNIA PUBLIC UTILITIES COMMISSION

Moses Stites, State of California Public Utilities Commission (May 26, 2009)

COMMENT 24.1:

As the state agency responsible for rail safety within California, the California Public Utilities Commission (CPUC or Commission) recommends that development projects proposed near rail corridors be planned with the safety of these corridors in mind. New developments and improvements to existing facilities may increase vehicular traffic volumes, not only on streets and at intersections, but also at at-grade highway-rail crossings. In addition, projects may increase pedestrian traffic at crossings, and

elsewhere along rail corridor rights-of-way. Working with CPUC staff early in project planning will help project proponents, agency staff, and other reviewers to identify potential project impacts and appropriate mitigation measures, and thereby improve the safety of motorists, pedestrians, railroad personnel, and railroad passengers.

RESPONSE 24.1:

Comment noted.

COMMENT 24.2:

The DEIR appears to have excluded specific traffic analysis of the following at-grade rail crossings; Watt Avenue (CPUC #001AH-97.36), Bradshaw (CPUC #001AH-99.80), Gerber Road (CPUC #0010-128.20), and Florin Road (CPUC #001D-129.10). Although the traffic study included certain roadway segment and intersection analysis, the at-grade rail crossings were not included. Since this project is of regional significance, the rail crossings should have been addressed in the DEIR.

RESPONSE 24.2:

As noted in the comment, the Central California Traction Company (CCTC) railway corridor includes at-grade crossings on South Watt Avenue, Florin, Road, Gerber Road, and Bradshaw Road in the study area. However, the CCTC railway corridor is inactive and the use of the corridor in terms of train activity (i.e., number, type, and frequency) is unknown at this time. Consequently, analysis of the corridor would be speculative.

COMMENT 24.3:

The project is proposing 8,950 residential units which will have significant impacts to the at-grade rail crossings. The Commission recommends that your agency include potential project-related safety impacts, and measures to reduce adverse impacts to these crossings in the DEIR. In general, the major types of impacts to consider are collisions between trains and vehicles, and between trains and pedestrians. General categories of measures to reduce potential adverse impacts on rail safety include:

- Installation of grade separations at crossings, i.e. physically separating the roads and railroad track by constructing overpasses or underpasses
- Improvements to warning devices at existing highway-rail crossings
- Installation of additional warning signage
- Improvements to traffic signaling at intersections adjacent to crossings, e.g., traffic preemption
- Installation of median separation to prevent vehicles from driving around railroad crossing gates

- Where soundwalls, landscaping, buildings, etc. would be installed near crossings, maintaining the visibility of warning devices and approaching trains
- Prohibition of parking within 100 feet of crossings to improve the visibility of warning devices and approaching trains
- Installation of pedestrian-specific warning devices and channelization
- Construction of pull-out lanes for buses and vehicles transporting hazardous materials
- Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way
- Elimination of driveways near crossings
- Increased enforcement of traffic laws at crossings
- Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings

RESPONSE 24.3:

See Response 24.2, above. Since the rail line is currently out of service, these types of measures are not warranted at this time. It is assumed that, prior to reactivating the line, appropriate safety devices would be installed.

Additionally, any roadway improvements to at-grade crossing following reactivation of the railroad line would require coordinate with the PUC to ensure that all crossings of the CCTC meet appropriate design standards.

COMMENT 24.4:

Commission approval is required to modify an existing highway-rail crossing or to construct a new crossing. Please forward any additional information that addresses our concerns so we may complete our review of the DEIR traffic/circulation section. The mitigation monitoring section will need to be amended to include any mitigation measures based on project impacts for opening day and buildout scenarios to the at-grade rail crossings.

RESPONSE 24.4:

Comment noted. See Responses 24.2 and 24.3, above.

LETTER 25: SACRAMENTO AREA BICYCLE ADVOCATES

Jordan Lang, Sacramento Area Bicycle Advocates (May 26, 2009)

COMMENT 25.1:

The Gap Community Plan encompasses development projects proposing up to nearly 14,000 residential units plus commercial and industrial land uses on approximately 3,766 acres in eastern Sacramento County; most of the acreage will be developed in low-density residential subdivisions. The DEIR describes significant unavoidable adverse impacts on transportation and circulation, even after mitigation measures, on a multitude of roadway segments and intersections throughout the plan area. Impacts on bicycle and pedestrian facilities are described as less than significant because bicycle and pedestrian facilities (not described in the DEIR) would be constructed on all improved roadway segments and intersections.

We believe that much more effort needs to be invested by project planners and county staff to create opportunities and incentives for a much greater proportion of total trips generated by the plan to be shifted from private vehicles to alternative transportation modes (i.e. pedestrian, bicycle, and mass transit). Such transportation mode shifts will not only reduce the transportation impacts, but other environmental impacts as well, and will have auxiliary benefits in the quality of living environments in the plan area for the long term future as vehicle travel becomes more and more infeasible for many daily trips.

<u>Because the DEIR's impact analysis for bicycle facilities was based on old Bikeway Master Plan and old street standards, its conclusions are incomplete and inadequate</u>. The impact analysis on Bicycle Facilities in Chapter 9 was based on the County's 2010 Bikeway Master Plan dated July 1993. the 2010 Master Plan is sorely out of date and a new, updated Bikeway Master Plan is currently in preparation. Standards for bicycle facilities have evolved considerably in recent years as our communities realize the severe adverse effects of traditional transportation systems heavily biased toward automobile transportation.

The current state of the art for bicycle facilities in urban/suburban residential and commercial areas is represented by CA Assembly Bill 1358, the California Complete Streets Act of 2008. This act requires local governments "to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan."

Sacramento County is currently updating its street standards. The County needs to ensure that those new standards fully represent "complete streets" as envisioned by AB 1358, including provisions for vehicle lane widths, curb radii, numbers of vehicle lanes, design speeds, and freeway interchanges. The DEIR's transportation mitigation

measures for adversely effected roadway segments recommend constructing up to 5 – 6 vehicle lanes in each direction on many of the areas arterial streets. Such wide streets and large numbers of vehicle lanes (up to 12 total) function as severe obstacles to bicycle use. Therefore, the DEIR should have concluded that the Gap Community Plan's street system will significantly and adversely affect bicycle transportation in the plan area.

The layout of land uses in the community plan area is dominated by low-density residential subdivisions (64 percent of plan area) and traditionally designed suburban commercial spaces. We urge project planners and county staff to redesign the land use plans to focus more on high-density residential and commercial concentrations at nodes in Regional Transit's (RT) 20-year vision for mass transit in the project area. Specifically, such Transit-Oriented Development should be located along RT's planned Central California Traction Railroad light-rail line and its planned Elk Grove – Florin Road Bus Rapid Transit line. Such a configuration of land uses would support a much more progressive pattern of transportation and therefore more sustainable type of development in the plan area for the long-term future.

SABA is an award-winning nonprofit organization with more than 1400 members. We represent bicyclists. Our aim is more and safer trips by bike. We are working for a future in which bicycling for everyday transportation is common because its safe, convenient, and desirable. Bicycling is the healthiest, cleanest, cheapest, quietest, most energy efficient, and least congesting form of transportation.

RESPONSE 25.1:

The proposed project must be compared to the existing conditions, which includes existing regulatory or policy documents. Although an update to the Bikeway Master Plan is in progress, this analysis cannot rely on that document, because it is not adopted. Therefore, it is appropriate for the analysis to have compared the project to the existing Bikeway Master Plan. Likewise, the project was compared to the existing street standards currently in effect.

The reviewer is also directed to Responses 7.9 and 9.10, above, for updated information on planned bicycle facilities in the FVGCP area.

Proposed mitigation does not recommend widening streets up to 5 – 6 lanes in each direction, for a total of up to 12 lanes. Multiple mitigation measures recommend widening streets up to 3 lanes in each direction, for a total of 6 lanes. Only one measure recommends a larger widening, of 4 lanes in each direction for a total of 8, but the measure notes that this is not consistent with the Sacramento County General Plan.

The recommendation to amend the land use plans to focus on high-density residential and commercial concentrations at nodes is noted. Via this Final EIR, this recommendation has been forwarded to the hearing body and to the Sacramento County Planning and Community Development Department for consideration.

LETTER 26: CITY OF SACRAMENTO

Ron Bess, City of Sacramento Environmental Planning Services (May 16, 2009)

[This letter is a compilation of comments received from various departments within the City of Sacramento, and forwarded by a cover letter from Mr. Bess.]

COMMENT 26.1:

[The three comments that follow are from Robert Armijo, Department of Utilities]

The EIR acknowledges encroachment into the 100-year flood plain, but dismisses impacts due to low rise in the flood level (0.02 ft). The City requests in accordance with discussion in previous meetings to have new development mitigate flows so that there is no increase.

RESPONSE 26.1:

This response was prepared by the County Department of Water Resources (H. Huber and G. Booth):

The primary focus of the FVGCP *Preliminary Drainage Study* was the Ultimate Condition where there is no increase in stage. The identified increase in stage [Elder Creek] is for the stand alone condition, where Florin Vineyard Gap is developed but none of North Vineyard Station is developed. In the ultimate condition model, both Florin Vineyard Gap and North Vineyard Station are developed and their corresponding improvements constructed. Construction/development of the FVG stand alone condition is unlikely to occur, since portions of North Vineyard Station are already in the improvement process. Additionally, any interim condition (i.e. partial development/ construction of FVG) that includes channel improvements or reclamation of the flood plain would be required to obtain a conditional letter of FEMA flood insurance rate map revision (CLOMR) from FEMA. This requirement is true for both North Vineyard Station and Florin Vineyard Gap. As part of the CLOMR process, any interim condition would have to be shown to not cause any downstream impacts.

COMMENT 26.2:

The design level consideration of this EIR (i.e. 100-yr) is less conservative than current downstream improvements along Morrison Creek (i.e. 200-yr).

RESPONSE 26.2:

This response was prepared by the County Department of Water Resources (H. Huber and G. Booth):

From meetings with the City hydrologic engineering and floodplain management staff, with the US Army Corps of Engineers and the Sacramento County Flood Control Agency, it has been made clear that the South Sacramento Stream (floodwall) Project is

being designed for the 100-year event with risk and uncertainty consideration of hydrologic variable and the mean 200-year flood event. The Florin Vineyard Gap drainage study was prepared in agreement with the Sacramento County hydrology standards and floodplain management ordinance as well as FEMA national policies which do not require mitigation for impacts to events greater than the 100-year. Consequently, the County has never imposed requirements to study impacts or mitigate for impacts to the 0.5% annual recurrence (200-year) storm. Analysis of the 500-year event is required for a CLOMR and/or LOMR. Thus the 500-year event will eventually be studied as part of this process. Further, the County Water Resources staff is in close communication with the South Sacramento Streams floodwall project proponents.

COMMENT 26.3:

Flood volume impacts have not been addressed in the EIR.

RESPONSE 26.3:

This response was prepared by the County Department of Water Resources (H. Huber and G. Booth):

Florin, Elder and Unionhouse Creeks are existing trapezoidal channels designed to carry peak flood flows quickly away from the urban areas that drain to them, without detention storage. Thus a flood volume impact study is not specifically relevant to improvements along the project channels. Instead, it is important for the US Army Corps of Engineers' design team for the proposed south Sacramento streams floodwall project to develop existing condition and ultimate condition hydrology at the upper end of the project and to run the hydraulic model dynamically. This will help to determine if there are any volume sensitivities that should be further mitigated. Florin, Elder and Unionhouse Creeks, as part of the Morrison Creek Stream Group, ultimately drain to Beach Lake. Impacts due to development of the Morrison Creek Stream Group as a whole have previously been studied in the *Beach-Stone Lakes Flood Control Alternatives Evaluation Task Report, August 18, 1995* prepared by Ensign & Buckley. The Corps' South Sacramento County Streams Project used the ultimate build-out condition for the basis of their design. The ultimate build-out condition reflects development of the entire Morrison Creek Stream Group and thus included anticipated development of the Florin Vineyard Gap area. Consequently, flood volume impacts due to development of the Florin Vineyard Gap area have already been accounted for in this previous study, and therefore are not included in the Florin Vineyard Gap DEIR. Further, there is a volume mitigation fee collected for future flood mitigation projects being considered in the Beach Stone Lake floodplain.

COMMENT 26.4:

[From King Tunson, Planning and Land Use, Sacramento Fire Department]

The proposed project would increase demand for fire protection and emergency medical services. In its proposed Master Plan, the fire department has determined a ratio for one fire station per 16,000 residents.

In 1979, the SFD opened Fire Station #9, located at 5801 Florin Perkins Road, to serve the growing Florin Fruitridge Industrial Park which is located due west and north of the proposed project. Fire Station 9 was closed in 1995 due to budgetary cuts in the fire department budget 1995. The station has remained closed since 1995 but currently houses SFD reserve units. The SFD has automatic aid agreements with all fire departments and fire protection districts within Sacramento County. While a majority of the proposed project lies within the initial response area of some Sacramento Metropolitan Fire District stations, SFD Engine and Truck companies would provide secondary and tertiary response to any commercial fire alarms or significant fire events in the area.

Based on the standard of 1 station per 16,000 residents, the impact of the proposed project would require the reopening of SFD Station #9.

RESPONSE 26.4:

The Final EIR has been amended to reflect this information.

LETTER 27: ELK GROVE UNIFIED SCHOOL DISTRICT

Kim Williams, Elk Grove Unified School District (June 4, 2009)

COMMENT 27.1 (PARAPHRASED):

Buildout of the FVGCP area would result in the development of 10,292 to 13,875 residential units (including density bonuses) depending on the final land use plan. As stated in the DEIR, buildout of the FVGCP could result in nearly 9,000 additional students residing within the boundaries of EGUSD. The 5,249 single family homes and 1,233 multi-family homes that are proposed in the 26 tentative subdivision map entitlement applications included in Phase I of the project will yield approximately 2,275 elementary school students, 700 middle school students, and 1,250 high school students.

EDUSD has been working with the Sacramento County Planning Department, the Florin-Vineyard Property Owners Group, and Southgate Recreation and Park District to identify specific elementary school sites (ideally adjacent to neighborhood parks) to mitigate for planned and future development. At one point, three of the four needed elementary school sites had been located within proposed tentative subdivision maps, but unfortunately, those three projects are no longer participating in the plan. As a result, at this time, there are no school sites identified in the FVGCP.

EDUSD does not believe that the school impact has been adequately addressed in the DEIR. It is true that the payment of required school impact fees will help address the financial impacts of this development, but the identification and acquisition of suitable school sites (the more challenging issue) has not been addressed. The California Department of Education school siting criteria limit where schools can be placed.

Without careful planning, locating elementary schools within neighborhoods may not be possible, causing the need to bus or drive students to school. This would result in negative impacts to traffic and air quality, which have not been addressed in the DEIR.

California law and the County of Sacramento's General Plan policies require that school sites be identified in community plans. According to Public Resources Code Section 21083.3 and California Government Code Section 65302, school sites are among the elements that must be included in community land use plans. The County's General Plan Public Facilities Element policies PF-26, PF-30, PF-36, and PF-37 also speak to identification of school sites. ***Therefore, the EGUSD requests that the Final EIR and the final FVGCP land use plan identify four elementary school sites and incorporate any findings, impacts, and mitigation into the Final EIR.***

Of the four needed elementary school sites, a minimum of two sites (three would be preferable) should be specifically identified on the plan. The two elementary school sites to be specifically identified on the plan are needed to accommodate students from the proposed tentative subdivision map entitlement applications within the FVGCP and should be located within those neighborhoods. EGUSD requests that school sites be located as follows:

- **South** – Identified conceptual location south of Gerber Road in the general area where an elementary school site is identified on FVGCP Land Use Plan.

- **North** – A specific elementary school site identified within the Florin Vineyards project (ideally in conjunction with the subdivision's proposed park site) or an identified conceptual location in the same general area that is consistent with California Department of Education School Site Criteria.

- **West** – An elementary school site to be identified within the Gardner Parke project (ideally in conjunction with the subdivision's proposed park site). Alternatively, the school site could be located in a location that encompasses portions of Gardner Parke, Gerber Creek, and/or Lelani Village (ideally in conjunction with a proposed park site).

- **East** – An elementary school site to be identified within the Villages of Elder Creek Estates project (ideally in conjunction with the subdivision's proposed park site) or an identified conceptual location in the same general area that is consistent with California Department of Education School Site Criteria. *Note: The FVGCP Land Use Plan identifies a conceptual ES site location within the Villages of Elder Creek Estates project area.*

The west elementary school site and either the north or east proposed elementary sites should be identified on the tentative subdivision map entitlement applications.

RESPONSE 27.1:

Subsequent to the EGUSD's comment, the Sacramento County Planning and Community Development Department released the *Florin-Vineyard Community Plan* text document (Revised Public Review Draft, March 20, 2010), which was subsequently modified by the Sacramento County Planning Commission at the request of the EGUSD on August 23, 2010; the Plan text identifies four 'quadrant' areas for logical elementary school sites, defined as:

1. Quadrant 1 – West of Elk Grove-Florin Road/South Watt Avenue

2. Quadrant 2 – South of Gerber Road and east of Elk Grove-Florin Road

3. Quadrant 3 – East of Elk Grove-Florin Road, north of Gerber Road, and south of Florin Road

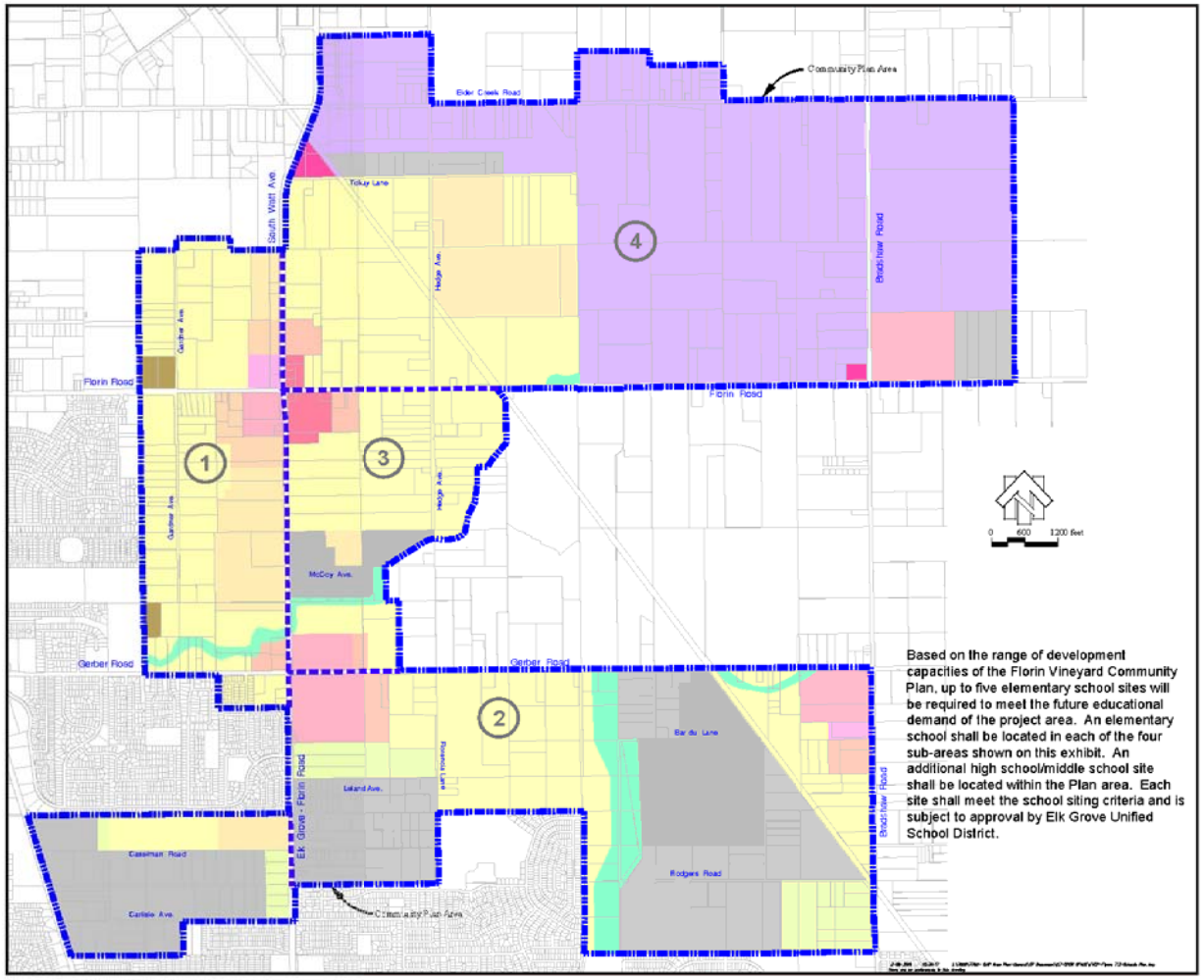
4. Quadrant 4 – North of Florin Road and east of South Watt Avenue

The four quadrants are shown on Plate RC -3 below, which is also included as Plate PS-2a in the Public Services chapter of this Final EIR. The *Community Plan* does not show specific elementary school sites that apply to particular properties within the Plan area, and explains the rationale for this approach as follows:

> This is to allow flexibility in school site location as development occurs within the Plan, and not predispose a school land use on particular properties. However identification of school sites should be addressed via the subdivision map process for individual projects. Elementary school siting should be resolved prior to recordation of final maps for projects generating a demand for school facilities.

Plate RC -3 School Plan

Figure 7.3 School Plan



To ensure that school siting occurs in a timely fashion, relative to residential development of the area, the project applicant, Planning Department, and EGUSD have developed the following condition of approval to be placed on each residential development project in the area:

> Prior to recordation of a final map for any residential subdivision map in the Florin Vineyard Gap Community Plan area, the applicant shall obtain written confirmation from the Superintendent of Elk Grove Unified School District ("EGUSD") or his/her designee that school enrollment impacts have been or will be adequately mitigated through the reservation (per California Government Code Section 66479 and 66480) of a school site or sites or through other measures. The reserved site or sites must be in a location and configuration acceptable to the EGUSD, consistent with the conceptual school site locations identified on Exhibit 7.3 of the Florin Vineyard Gap Community Plan text, and, to the extent practicable, consistent with the school siting policies set forth in Section 7.4 of the Plan text.

COMMENT 27.2:

In the "*Schools*" section, please change the number of schools to **63**.

RESPONSE 27.2:

This change has been made in the Final EIR.

COMMENT 27.3:

Please see attached "marked up" page (Attachment B) and make corrections as shown. EGUSD requests that on Table PS-2 the "School Average Class Size" and "District Average Class Size" columns be deleted as they are not accurate, and they are not relevant to the study. Additionally, we have provided data for the 2008 – 09 school year, as it is now available.

RESPONSE 27.3:

The requested changes have been made in the Final EIR.

COMMENT 27.4:

[Under the heading "Chapter 4 – Gerber Creek (04-RZB-SDP-SPP-0187)"]

EGUSD, Southgate Recreation and Park District, and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school siting locations in the FVGCP. Those guiding principles proposed that an elementary school site be located in Gardner Parke or in a location that encompasses Gardner Parke, Gerber Creek, and Lelani Village (ideally in conjunction with a proposed park site). A conceptual diagram is attached. (See attachments A and C)

RESPONSE 27.4:

This comment has been incorporated into the Final EIR. See also Response 27.1, above.

COMMENT 27.5:

[Under the heading "Chapter 7 – Lelani Village (04-RZB-SDP-AHS-0206)"]

EGUSD, Southgate Recreation and Park District, and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school siting locations in the FVGCP. Those guiding principles proposed that an elementary school site be located in Gardner Parke or in a location that encompasses Gardner Parke, Gerber Creek, and Lelani Village (ideally in conjunction with a proposed park site). A conceptual diagram is attached. (See attachments A and D)

RESPONSE 27.5:

This comment has been incorporated into the Final EIR. See also Response 27.1, above.

COMMENT 27.7:

[Under the heading "Chapter 8 – Florin Vineyards (04-RZB-SDP-SPP-0207)"]

EGUSD, Southgate Recreation and Park District, and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school siting locations in the FVGCP. Those guiding principles propose that an elementary school site be located in Florin Vineyards (ideally in conjunction with a proposed park site). A conceptual diagram is attached. (See attachments A and E)

Correction to Page 8-13 – On September 24, 2007, EGUSD submitted comments to the Sacramento County Planning Department. A copy of those comments is attached. (Please see attachment F)

RESPONSE 27.7:

This comment has been incorporated into the Final EIR. See also Response 27.1, above.

COMMENT 27.8:

[Under the heading "Chapter 9 – Villages at Elder Creek Estates (04-RZB-SDP-SPP-UPP-ABE-AHS-0208)"]

EGUSD, Southgate Recreation and Park District, and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school siting locations in the FVGCP. Those guiding principles propose that an elementary school

site be located in Villages at Elder Creek Estates (ideally in conjunction with a proposed park site). A conceptual diagram is attached. (See attachments A and G)

RESPONSE 27.8:

This comment has been incorporated into the Final EIR. See also Response 27.1, above.

COMMENT 27.9:

[Under the heading "Chapter 12 – Gardner Parke (04-RZB-SDP-SPP-EXP-AHS-0218)"]

EGUSD, Southgate Recreation and Park District, and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school siting locations in the FVGCP. Those guiding principles propose that an elementary school site be located in Gardner Parke or in a location that encompasses portions of Gardner Parke, Gerber Creek, and Lelani Village (ideally in conjunction with a proposed park site). A conceptual diagram is attached. (See attachments A and H)

RESPONSE 27.9:

This comment has been incorporated into the Final EIR. See also Response 27.1, above.

LETTER 28: STATE CLEARINGHOUSE

Terry Roberts, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (May 19 and June 12, 2009)

COMMENT 28.1 (PARAPHRASED):

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on May 18, 2009, and the comments from the responding agencies are enclosed. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents pursuant to the California Environmental Quality Act.

RESPONSE 28.1:

Comment noted. The attached letters were also received under separate cover, and are found above as Letter 1 (Central Valley Flood Protection Board) and Letter 2 (California Regional Water Quality Control Board).

COMMENT 28.2 (PARAPHRASED):

The enclosed comment(s) on your Draft EIR was (were) received by the State Clearinghouse after the end of the state review period. We are forwarding these

comments to you because they provide information or raise issues that should be addressed in your final environmental document.

RESPONSE 28.1:

Comment noted. The attached letter was also received under separate cover, and is found above as Letter 24 (Public Utilities Commission).

LETTER 29: KEITH ROBERTS

Keith Roberts, email dated January 19, 2010, submitted to the County Planning Commission (January 21, 2010)

COMMENT 29.1 (PARAPHRASED):

I am very impressed with how climate change has been incorporated into the programmatic and 26 project EIR's. I also applaud the County's effort to address sprawl and to try and better coordinate many divers projects as is evidenced by the 26 project level EIR's.

RESPONSE 29.1:

Comment noted.

COMMENT 29.2 (PARAPHRASED):

The programmatic EIR uses the best available (but still rudimentary in 2009) analysis to estimate the GHG emissions for the CAC recommended option at 303,000 tons per year of CO_2 and 355,000 tons for the PD recommended option. As GHG analysis tools become more accurate, will the programmatic and project level GHG estimates be updated?

RESPONSE 29.2:

The GHG estimates have not been updated for the Final EIR. However, as development projects undergo subsequent environmental review, updated estimates may be generated.

COMMENT 29.3:

Will any or all of the 26 projects require the use of LEED for Neighborhood Development?

RESPONSE 29.3:

There is currently no requirement for LEED certification for the subject development projects. However, a LEED (or similar) requirement could be in effect at the time of actual construction if, in the interim, the County were to adopt a Green Building Code that

contained such a provision. The County and City of Sacramento are jointly preparing a Green Building Ordinance that is expected to be completed by late 2010.

COMMENT 29.4 (PARAPHRASED):

The No Project option is truly of little value, however it would be reasonable to analyze the Wetland Avoidance and Smart Growth Alternative (WASGA) as the state-of-the-art option for suburban design for this Community Plan and then compare this option with the CAC and PD options as a benchmark of what is reasonable.

RESPONSE 29.4:

Comment noted. The WASGA has not been developed to a level of detail that would allow quantification of GHG emissions consistent with the analyses done for the CAC and PD options in the Draft EIR. The Alternatives chapter of the Draft EIR did, however, contain the following qualitative comparison of GHG emissions:

> *As outlined above, construction emissions would be reduced by the Wetland Avoidance and Smart Growth Alternative by reducing the total developable area. As a result, construction emissions of greenhouse gases would also be reduced by the Alternative as compared to either the CAC or PD Land Use Plans. Given the larger population, this Alternative's operational emissions of greenhouse gases would increase as compared to the CAC Land Use Plan, and be reduced as compared to the PD Land Use Plan.*

COMMENT 29.5 (PARAPHRASED):

Volume 2 of the EIR (26 project level EIR's) indicates that off-site mitigation will consist of paying a fee to SMAQMD or CCX for off-site mitigation. These 2 programs are not equivalent; the CCX program may not meet the rigor requirements of the ARB Cap and Trade program, while the SMAQMD program is complementary to the ARB Cap and Trade program.

RESPONSE 29.5:

The statement in Volume 2 was in error and has been removed from the Final EIR. The proposed GHG plan does not include off-site mitigation. Though additional off-site mitigation was considered, it was rejected as unreasonable for this project, at this time. Off-site mitigation programs have not been well established yet, and even information about what level of mitigation is required is in flux state-wide. Under these circumstances, it was determined that using the list of measures published by the Attorney General's office, SMAQMD, and others constituted all reasonable and feasible mitigation.

COMMENT 29.6 (PARAPHRASED):

Since the SB375 Sustainable Communities Strategy (SCS) is taking form at this time, it is not yet clear how the 2 analyzed project options and the unanalyzed Wetland Avoidance and Smart Growth Alternative would fare under SCS. However, it is clear that some type of guidelines and/or metrics will eventually have to be provided by ARB/SACOG so that project developers (and the County) know up-front how transportation funding incentives and CEQA streamlining will positively (or negatively) impact the County. Even though this project is in mid-stream, I would encourage the County to work with SACOG to objectively determine how these 3 options would fare under an SCS. Ideally, any metrics that are used should be standardized and approved by ARB/MPO's so that similar projects throughout the State can be compared on a level playing field.

The comment included a list of sample metrics intended to help qualitatively measure a project's GHG reduction effectiveness.

RESPONSE 29.6:

It is outside the scope of this EIR to conduct the recommended analyses. However, the submitted metrics may be of use in preparing Phase 2 of the County's Climate Action Plan (CAP), which will include measures to reduce greenhouse gas emissions that will be applicable to development within the FVGCP area. A copy of the metrics has been forwarded to the preparers of the CAP.

COMMENT 29.7 (PARAPHRASED):

1.5 points is identified in the SMAQMD checklist if average residential densities are greater than 7 per acre. There are approximately 2,485 residential acres identified in Table PD-1 of EIR Volume 1 yielding a required 17,300 living units. Neither the PD or CAC options meet this level of density. It doesn't appear that this credit is achievable.

RESPONSE 29.7:

The GHG Reduction Plan has been modified subsequent to release of the DEIR to address various SMAQMD concerns, including updating the Plan for consistency with the SMAQMD's latest "Recommended Guidance for Land Use Emission Reductions". The amended Plan, endorsed by the SMAQMD, no longer includes the measure which required an average residential density greater than 7 per acre.

Letter 1

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. LL40
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682

RECEIVED
APR 10 2009
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

April 8, 2009

Joyce Horizumi
Sacramento County
827 Seventh Street, Room 220
Sacramento, CA 95814

Dear Ms. Horizumi:

State Clearinghouse (SCH) Number: 2005082045 - Florin-Vineyard Gap Community Plan

Staff for the Department of Water Resources has reviewed the subject document and provides the following comments:

The proposed project is located within the jurisdiction of the Central Valley Flood Protection Board (Formerly known as The Reclamation Board). The Board is required to enforce standards for the construction, maintenance and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River and the San Joaquin River, and designated floodways (California Code of Regulations (CCR) Title 23, Section 2).

A Board permit is required prior to starting the work within the Board's jurisdiction for the following:

- The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee;

- Existing structures that predate permitting or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR, Title 23, Section 6).

The permit application and CCR Title 23 regulations can be found on the Central Valley Flood Protection Board's website at http://www.cvfpb.ca.gov/. In addition, vegetation is required to be in accordance with Section 131. Submit a vegetation plan including, but not limited to the sites, vegetation type (i.e. common and scientific name), number, planting spacing and irrigation method that will be within the project area.

If you have any questions please contact me at (916) 574-0651 or jherota@water.ca.gov.

Sincerely,

James Herota
Staff Environmental Scientist
Division of Flood Management

cc:
Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

Letter 2

California Regional Water Quality Control Board
Central Valley Region

Karl E. Longley, ScD, P.E., Chair

Linda S. Adams
Secretary for Environmental Protection

Sacramento Main Office
11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Phone (916) 464-3291 • FAX (916) 464-4645
http://www.waterboards.ca.gov/centralvalley

Arnold Schwarzenegger
Governor

28 April 2009

RECEIVED
APR 29 2009
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

Joyce Horizumi
Department of Environmental
Review and Assessment
County of Sacramento
827 7th Street, Room 220
Sacramento, CA 95814

DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE FLORIN-VINEYARD GAP COMMUNITY PLAN PROJECT, SCH#2005082045, SACRAMENTO COUNTY

As a Responsible Agency, as defined by CEQA, we have reviewed the Notice of Completion of a Revised Draft Environmental Impact Report for the Florin-Vineyard Gap Community Plan (FVGCP), Sacramento County. The proposed project is within the regulated area covered by the *Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Sacramento and County of Sacramento Storm Water Discharges from Municipal Separate Storm Sewer System* (MS4), *NPDES Order No. R5-2008-0142* (Sacramento MS4 Permit). The Storm Water Quality Improvement Plan (SQIP) is an integral and enforceable component of the Sacramento MS4 Permit. The Regional Water Board is a responsible agency for this project, as defined by CEQA.

The Sacramento County Board of Supervisors has initiated a community planning program for the 3,766 ± acre Florin-Vineyard area, also known as the "Gap" area. The term "Gap" has been used to refer to this area because it is located between the existing urban area to the west of Elk Grove-Florin Road and a comprehensively planned urban area to the east (i.e., the North Vineyard Station Specific Plan and Vineyard Springs Comprehensive Plan areas). Because the Florin-Vineyard Gap project area is already included within the boundaries of the South Sacramento and Vineyard Community Plans, the proposed Florin-Vineyard Gap Community Plan project will involve amendments to those existing community plans (rather than adoption of a new, separate community plan).

Buildout of the FVGCP area would result in the development of 8,950 to 13,875 residential units depending on the final land use plan. Commercial, industrial, open space and public areas would also be developed. Public facilities including schools, parks, sewers, potable water, and roadways would also be developed during buildout of the Plan area.

The topography of the ± 3,766 acre FVGCP area is flat to gently undulating, with elevations ranging from a high of approximately 70 feet near the northeast to a low of approximately 40 feet in the west. The area is roughly bounded by Elder Creek.

Historical drainage patterns reflective of area topography generally flow from the higher elevations in the northeast to the lower-lying areas in the southwest. The majority of the FVGCP area is tributary to three drainage sheds: Florin Creek, Elder and Gerber Creeks, and Union House Creek. A very small portion of the northern Plan area drains to Morrison Creek and a minor portion of the southern Plan area drains to Strawberry Creek. Historical land uses within the FVGCP area include grazing and low-intensity farming. The planning area consists primarily of non-native annual grasslands, as well as agricultural lands, irrigated pastures, vernal pool/swales, seasonal wetlands, emergent marshes, ponds, channels, trees/shrubs, and urban areas.

The 3,876-acre FVGCP is primarily located within the watershed boundaries of Florin Creek, Elder-Gerber Creeks, and Unionhouse Creek. These creeks are tributary to the Morrison Creek Stream Group which drains to the Cosumnes River. 154 acres of the project area drain north into Morrison Creek proper, 824 acres drain to Florin Creek, 1,987 acres drain to the Elder Creek/Gerber Creek system, 816 acres drain to Unionhouse Creek, 88 acres drain into Strawberry Creek, and seven acres drain to Laguna Creek. Elder and Gerber Creeks are affected during large storm events by an inter-basin transfer of flood waters from Laguna Creek into their watershed area.

Comments

Our comments focus on **Chapter 8. Hydrology and Drainage.** This section addresses drainage facilities on plates HY-6, -7, -8, and -9, described as Water Quality or Detention Basins. These plates also show the storm drainage piping system.

On page 8-34 of Volume I, it states, in part: "The project proponent **should** consider the use of "low impact development" techniques to reduce the amount of imperviousness on the site, since this will reduce the volume of runoff and therefore will reduce the size/cost of stormwater quality treatment required. Examples of low impact development techniques include pervious pavement and bioretention facilities. The **County requires** developers to utilize the *Stormwater Quality Design Manual for the Sacramento and South Placer Regions, 2007* (Design Manual) in selecting and designing post-construction facilities to treat runoff from the project. A new post construction design regulation was approved by the Municipal Services Agency Administrator (C. Creson) on May 18, 2006. This regulation defines the development standards that the County is implementing and is reflected in the Design Manual. Treatment control measures are required on new development and redevelopment projects that meet or surpass the thresholds defined in Table 3-2 of the Design Manual." **[emphasis supplied]**

In this regard, the Sacramento MS4 permit requires the County to comply with the following:

"Provision D. 15. Water Quality Planning and Design Principles - In order to reduce pollutants and runoff flows from new development and redevelopment to the MEP, each Permittee shall address the following concepts:

a. Each Permittee shall incorporate water quality and watershed protection principles into planning procedures and policies or requirements to direct land-use decisions and require implementation of consistent water quality protection measures for priority development

projects. These principles and policies shall be designed to protect natural water bodies and shall consider, at a minimum, the following:

i. Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment to maximize on-site infiltration of runoff (low impact development practices).

ii. Implement pollution prevention methods supplemented by pollutant source controls and treatment. Use strategies that control the sources of pollutants or constituents (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into MS4s.

iii. Preserve and create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones (e.g., levees).

iv. Minimize disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

v. Require incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads from future development.

vi. Identify and avoid development in areas that are susceptible to erosion and sediment loss; and establish and implement development standards that protects areas from erosion and sediment loss.

vii. Coordinate with local traffic management programs to minimize pollutants associated with vehicles and increased traffic resulting from development.

viii. Implement source and/or treatment controls to protect downstream receiving water quality from increased pollutant loads in runoff flows from new development and significant redevelopment.

ix. Control the post-development peak storm water run-off discharge rates and velocities to prevent or reduce downstream erosion and to protect stream habitat (hydromodification concepts).

b. **Low Impact Development Strategies:** Priority new development and redevelopment projects shall integrate Low Impact Development (LID) principles early in the project planning and design process. LID is a storm water management and land development strategy that emphasizes conservation and the use of existing natural site features integrated with engineered, small-scale hydrologic controls to more closely reflect predevelopment hydrologic functions in residential, commercial, and industrial settings. When developing the LID Program the Permittees shall consider and incorporate all appropriate and applicable LID components and measures that have been successfully and effectively implemented in other municipal areas. Other programs include, but are not limited to, USEPA's "Managing Wet Weather with Green Infrastructure, Action Strategy, 2008" and LID program elements specified in the permits or Storm Water Management Plans of other MS4s throughout the state.

The Stormwater Quality Design Manual for Sacramento and South Placer Regions currently promotes LID principles such as conservation and use of natural site features; site specific, lot scale source and treatment control measures that keep pollutants from contacting run-off and leaving the site; and run-off reduction control measures integrated into site design.

c. **Hydromodification Management Plan (HMP)**

The Permittees shall submit a HMP Work Plan as part of their SQIPs for approval by the Regional Water Board One year after Regional Board approval of the SQIP/HMP Work Plan, the HMP shall be submitted for approval. The Permittees shall amend their development standards to implement the HMP **no later than six months** after Regional Water Board approval of the HMP.

i. The HMP shall require controls to manage the increases in the magnitude (e.g., flow control), frequency, volume and duration of runoff from development projects in order to protect receiving waters from increased potential for erosion and other adverse impacts with consideration towards maintaining (or reproducing) the pre-development hydrology. The HMP shall address, but not be limited to, the following:

(a) Requires incorporation of controls, including structural and non-structural BMPs, to mitigate the projected increases in flows;

(a) Controls post-development runoff rates and velocities from a site to avoid adverse impact on downstream erosion, flooding and stream habitat;

(b) Minimizes the quantity of storm water directed to impermeable surfaces and the MS4s (municipal storm drain);

(c) Maximizes the percentage of permeable surfaces to allow more percolation of storm water into the ground;

(d) Considers the full range of BMPs in the *Stormwater Quality Design Manual*; and

(f) Considers various assessment methodologies designed to evaluate the existing geomorphic condition of receiving waters, along with the expected susceptibility of these receiving waters to erosion/change as a result of hydromodification from land development and other land uses.

Maintenance Agreement and Transfer

Each Permittee shall require that all developments subject to Development Standards and site specific plan requirements provide verification of maintenance provisions for Structural Treatment Control BMPs, including but not limited to legal agreements, covenants, California Environmental Quality Act (CEQA) mitigation requirements, and or conditional use permits. Verification at a minimum shall include:

a. The developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; or

b. Written conditions in the sales or lease agreement, which requires the recipient to assume responsibility for maintenance; or

c. Written text in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to the Home Owners Association for maintenance of the Structural Treatment Control BMPs; or

d. Any other legally enforceable agreement that assigns responsibility for the maintenance of post-construction Structural Treatment Control BMPs.

Entitlement Process

a. Private Development: Each Permittee shall incorporate into its entitlement process standard procedures in order to consider potential storm water quality impacts early in the planning process of any new development and redevelopment project. The Permittees' shall clearly demonstrate the developer and Permittee considered storm water quality site issues before the facilities/projects are final designed. The Permittees must demonstrate involvement in the conceptual storm water quality design in either two different points in project planning and permitting process:

   i. During Discretionary action approval process (land use permit) of a proposed project, when the Permittee must exercise judgment or deliberation in order to approve or disapprove a development or significant redevelopment project, or

   ii. During Ministerial action approval process of issuing a grading, building, demolition, or similar "construction" permits in which only fixed standards or objective measures are applied."

We are concerned that the project will only include Detention Basins for flood management and secondarily treat storm water for urban pollutants. As above, the project proponent must consider a combination of LID and hydromodification strategies rather than strictly using Detention Basins.

In order to reduce pollutants and runoff flows from new development and redevelopment to the maximum extent practicable (MEP), the project proponent is required to ensure that all feasible BMPs are considered. The MEP standard involves applying BMPs that are effective in reducing

the discharge of pollutants in storm water runoff. In discussing the MEP standard, the State Water Board has said the following: "There must be a serious attempt to comply, and practical solutions may not be lightly rejected. If, from the list of BMPs, a developer chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a developer employs all applicable BMPs accept those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the standard. MEP requires developers to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive." (Order No. WQ 2000-11, at p.20.). MEP is the result of the cumulative effect of implementing, continuously evaluating, and making corresponding changes to a variety of technically and economically feasible BMPs that ensure the most appropriate controls are implemented in the most effective manner. This process of implementing, evaluating, revising, or adding new BMPs is commonly referred to as the iterative approach.

If you have any questions regarding these comments or any other issues regarding storm water for the County of Sacramento, please contact me at 916.464.4606 or by email at kschwab@waterboards.ca.gov.

KIM A. SCHWAB, P.G.
Engineering Geologist
Storm Water Unit

cc: State Clearinghouse, Sacramento
Kerry Schmitz, County of Sacramento

Letter 3

SACRAMENTO AREA
SEWER DISTRICT
SERVING YOU **24/7**

April 29, 2009
E225.000

Joyce Horizumi
County of Sacramento
Department of Environmental Review and Assessment
827 7th Street, Suite 220
Sacramento, CA 95814

Subject: Draft Environmental Impact Report for Florin-Vineyard Gap Community Plan Project
Control No: 04-GPB-CPB-0096

Board of Directors
Representing:

County of Sacramento
City of Citrus Heights
City of Elk Grove
City of Folsom
City of Rancho Cordova
City of Sacramento

Mary K. Snyder
District Engineer

Christoph Dobson
Collection System Manager

Wendell H. Kido
District Manager

Marcia Maurer
Chief Financial Officer

10545 Armstrong Avenue
Mather, California 95655
Tel 916.876.6000
Fax 916.876.6160
www.sacsewer.com

Formerly County Sanitation District 1

Dear Ms. Horizumi:

The Sacramento Area Sewer District (District) reviewed the subject documents and has the following comments. The Sacramento Regional County Sanitation District (SRCSD) will comment in a separate letter.

The project consists of the adoption of the Florin Vineyard Gap Community Plan (FVGCP), General Plan Amendment, and Community Plan Amendment that will guide the development of approximately 3,766 acres located in both the South Sacramento and Vineyard community planning areas in a comprehensive and coordinated matter.

We have revised our comments since our last response to the Notice of Preparation of a Draft Environmental Impact Report, which were sent on September 15, 2005.

The north and northeastern portions of this project are outside the boundaries of the District and SRCSD, but within the Urban Services Boundary shown in the Sacramento County General Plan and cannot be served without annexation into both the District and SRCSD. Please review following comments and incorporate your responses into the Draft EIR.

- Page 2-16: last line of 3rd paragraph is inconsistent and not related to water purveyors mentioned.
- In Chapter 6, entitled "Sewer Service," on page 6-1, under the Introduction- The 2006 CSD-1 Sewerage Facilities Expansion Master Plan needs to be referenced.
- Page 6-2: The page number is actually 6.-2, not 7-2 as mentioned. The header is '6 Sewer Service' not 7.
- Page 6-6: CAC Land Use Plan / PD Land Use Plan- need to add reference to 2006 Master Plan
- Page 6-7: Please clarify what is the fair share fee as mentioned in this page as well as in Page 1-6.

Letter 3

Joyce Horizumi
Page 2
April 29, 2009

We expect that if the project is subject to currently established policies, ordinances, fees, and to conditions of approval that we will propose after review of entitlement application documents, then mitigation measures within the EIR will adequately address the sewage aspects of the project and we anticipate a less than significant impact to the sewage facilities.

If you have any questions regarding these comments, please call Amandeep Singh at (916) 876-6296 or myself at (916) 876-6094.

Sincerely,

Salam Khan, P.E.
Sacramento Area Sewer District
Development Services

SK/CJ: ms

cc: File

horizumi.042909.ltr.doc

SRCSD

10545 Armstrong Avenue
Mather, CA 95655
Tele: [916] 876-6000
Fax: [916] 876-6160
Website: www.srcsd.com

Board of Directors
Representing:

County of Sacramento
County of Yolo
City of Citrus Heights
City of Elk Grove
City of Folsom
City of Rancho Cordova
City of Sacramento
City of West Sacramento

Mary K. Snyder
District Engineer

Stan R. Dean
Plant Manager

Wendell H. Kido
District Manager

Marcia Maurer
Chief Financial Officer

Letter 4

RECEIVED
MAY 11 2009
DEPARTMENT OF ENVIRONMENTAL
REVIEW AND ASSESSMENT

May 4, 2009

Cathy Hack
DERA Analyst
Department of Environmental Review and Assessment
827 7th Street
Sacramento, CA, 95814

Subject: Florin-Vineyard "Gap" Community Plan Draft Environmental Impact Report, Control Number: 04-GPB-CPB-0096

Dear Ms. Hack:

The Sacramento Regional County Sanitation District (SRCSD) and Sacramento Area Sewer District (SASD)(formerly known as CSD-1) have reviewed the Florin Vineyard Gap Community Plan Draft Environmental Impact Report and have the following comments:

In general, both the SRCSD and SASD Spheres of Influence (the service area officially defined for future planning) correspond to the Sacramento County Urban Services Boundary (USB). A northeast side of the project area is located outside the SRCSD and SASD Service Areas will need to be annexed through LAFCo in order to receive sewer service. This process is to be initiated by the project proponent, not SASD or SRCSD.

The major interceptors and some of the major trunks are already constructed to serve Florin-Vineyard Gap Area as well as the North Vineyard Station Community Plan Area. Gerber trunk is partially constructed and currently ends 1200 feet west of Bradshaw Rd. The construction of the Florin trunk will be required to completely serve the project area.

Page 2-16: The last line of 3rd paragraph is inconsistent and not related to water purveyors mentioned.

In **Chapter 6**, entitled "Sewer Service," on page 6-1, under the Introduction- The 2006 CSD-1 Sewerage Facilities Expansion Master Plan needs to be referenced.

Page 6-2: The page number is actually 6-2, not 7-2 as mentioned. The header is '6 Sewer Service' not 7.

Page 6-4: Remove the reference "Elk Grove-Florin Road Interceptor"

Page 6-6: CAC Land Use Plan / PD Land Use Plan - reference to 2006 Master Plan should be added.

Technology in balance with nature

Letter 4

Page 6-7: Please clarify what is the fair share fee as mentioned in this page as well as in Page 1-6. All references to the WWTP should be revised to SRWTP. Remove "…current dry weather flows are approximately 154 MGD"

Page 6-7, 6-8: The Average Dry Weather Flow (ADWF) of 21.99 MGD stated is incorrect. The linear sum of the ADWF and Peak Wet Weather Flow (PWWF) values for each shed does not give the correct amount of total anticipated flow from the project area as the peaking factors vary for each trunk shed. Please remove the total ADWF (21.99 MGD) and PWWF (45.05 MGD) values in Table SS-2, and any other references to these values in the DEIR as they are inaccurate.

If you have any questions regarding these comments, please contact me at (916) 876-9994.

Sincerely,

Sarenna Deeble

Sarenna Deeble
SRCSD/SASD
Policy and Planning

cc: Ruben Robles
Michael Meyer
SRCSD Development Services
SASD Development Services

Letter 5

SACRAMENTO-YOLO
MOSQUITO
& VECTOR
CONTROL
DISTRICT

MAILING ADDRESS
SACRAMENTO COUNTY
8631 BOND ROAD
ELK GROVE, CA 95624

YOLO COUNTY
1234 FORTNA AVENUE
WOODLAND, CA 95695

1.800.429.1022
FIGHTtheBITE.net

RECEIVED
MAY 12 2009
DEPARTMENT OF ENVIRONMENTAL
REVIEW AND ASSESSMENT

May 7, 2009

Department of Environmental Review
827 7th Street Suite 220
Sacramento, CA. 95814
Attn: Joyce Horizumi

Re: Errata Draft Environmental Impact Report
Florin Vineyard Gap Project
Control Number: (04-GPB-CPB-0096
Appendix G.

In review of the draft EIR for the Errata Draft Environmental Impact Report; the Sacramento-Yolo Mosquito and Vector Control District recommends that you review and apply the District's BMP (Best Management Practices) regarding drainage, storm water run off structures, catch basins or other possible mosquito habitats such as seasonal and permanent wetlands as listed on Pg. G-78 of Appendix G. The District's Bmp manual is posted for your convenience at: http://www.fightthebite.net/download/SYMVCD_BMP_Manual.pdf

The District also asks that any revisions to this project or any new draft EIR projects be routed for review to mscholl@fightthebite.net or ecoman@fightthebite.net. Thank you for your cooperation.

Sincerely,

Kevin Combo
Ecological Management Technician
Sacramento Yolo Mosquito
And Vector Control District
kcombo@fightthebite.net

PROVIDING SAFE, EFFECTIVE AND ECONOMICAL MOSQUITO AND VECTOR CONTROL

Letter 6

Phone: 916.683.7111
Fax: 916.691.3168

Web: www.elkgrovecity.org

8401 Laguna Palms Way
Elk Grove, California 95758

CITY OF ELK GROVE
PROUD HERITAGE. BRIGHT FUTURE.

May 18, 2009

Joyce Horizumi
Environmental Coordinator
County of Sacramento
Department of Environmental Review and Assessment
827 7th Street, Suite 220
Sacramento, CA 95814

Re: Comments for Draft EIR for Florin-Vineyard Gap Community Plan Project

Dear Ms Horizumi,

City of Elk Grove has reviewed the draft EIR for Florin-Vineyard Gap Community Plan project and below is the comments.

Traffic and Circulation Section

1. Due to the size of Community Plan and the possible impacts to roadways within the City of Elk Grove the analysis shall be expanded to include appropriate roadways within the City of Elk Grove. This comment was made on the July 27, 2007 letter to the County regarding the traffic impact study as specifically identified the segments of roadway south Calvine Road, such as Elk Grove-Florin Road, Waterman Road, Bradshaw Road and Excelsior Road.

Hydrology and Drainage Section

1. The report does not address the potential downstream impacts on Laguna Creek with the City of Elk Grove.
2. The City of Elk Grove opposes any upstream development that will increase or modify the flows in Laguna Creek as measured at Calvine Road.
3. This document has not addressed if and how the mitigation measures will be phased.
4. For the City of Elk Grove to appropriately comment on the proposed development the City must be provided with a table summarizing the pre and post development flows for 2, 10 and 100 year at the City / County line for Laguna Creek.
5. The City of Elk Grove has two pending FEMA applications to modify the 100 year flood plain limits. These modifications are based on flows obtained from the County; therefore it is imperative that the City of Elk Grove to be informed of any upstream development.

If you have any questions, please do not hesitate to call me at (916) 478-3604.

Sincerely,

Dorothy Kam
Design Engineer

Letter 7

Hack. Catherine

From: Alex Laiewski [alaiewski@comcast.net]
Sent: Tuesday, May 19, 2009 7:30 AM
To: DERA (Web Page); Nottoli. Don; 'Jon Bennett'; Stuart Helfand; Tammy Trujillo
Subject: 04-GPB-CPB-0096 - Florin-Vineyard
Attachments: Response to RFP.doc

Attached is my response to the Florin-Vineyard Gap Community Plan Project. I want to thank you for the opportunity to respond and hope that my comments are helpful to the County in developing future quality communities.

Thanks Alex

5/20/2009

Letter 7

Response to Florin-Vineyard Gap Community Plan Project EIR

My response focuses on Table ES-1, Executive Summary of Project Impacts and Mitigation.

Page 1-4 under Public Services and Utilities:

- Impacts to Fire Protection Services: The last portion of the impact paragraph reads "payment of the required Capital Fire Facilities Fee would ensure that significant adverse impacts to fire protection services would not occur. In the Level of Significance prior to Mitigation this Impact is given Less than Significant (LS). However, at most community meetings that I attend where fire personnel are present references are made to the inadequate funding for fire services within communities. At least at the local level I am receiving different information about adequate fire protection than what county personnel seem to be receiving on a County wide basis.

- Impacts to the Adequate Provision of Law Enforcement Personnel: My response to this section is the same as my response to fire protection services. The community meetings that I attend ,where law enforcement personal are present, references are made to the inadequate funding for law enforcement services. In the south area in 10 years response times have more than doubled. Adding more homes will only increase response times. Once again the EIR gives this a less than significant mitigation and "no mitigation measure is required".

Page 1-5

- Cumulative Impacts to Public Services and Facilities Resulting from Buildout of the FVGCP in Combination with Existing and Future Developments Within the Project Area: I must admit I do not know the EIR's definition of Public Services so my response may miss the mark. If one of the Public Services defined by this EIR is Social Services provided by the Department of Human Assistance then my response is the same as listed in my first two responses. I have yet to hear any Department of Human Assistance personnel say they have adequate funds to cover the human assistance needs of individuals and families living in Sacramento County. If Sacramento Housing and Redevelopment Agency is one of the Public Services defined by this EIR, and SHRA is responsible for Sec 8 housing, I was told that there is only one Sec 8 monitor for our area and the monitor cannot keep up with Sec 8 housing complaints of the community. In the EIR this is given less than significant mitigation and "no mitigation measure is required".

Water Supply Page 1-6

- Impacts Related to Adequate Water Supply: I don't like to be cynical. However, we live in California. This State has limited water and as population grows in the State there will be less and less water to go around. This past weekend (May 16, 2009) I cycled to Folsom Lake. I was told it is about 75% full. Last year in mid June one could almost walk across the bottom of Folsom Lake without getting wet. I would suggest County staff visit Folsom Lake in June 2009 and see how little water there is left from the winter rains and snow. Building more homes and depending on a limited water supply is not good business and not good for local communities. This has received a less than significant mitigation and "no mitigation measure is required".

Page 1-7

- Impacts to the Groundwater Aquifer: Same response as above. The County is already drilling deeper wells for some residents in the South Area due to County and city(ies) development and the development effects on local residential wells.

Hydrology and Drainage Page 1-7

- Impacts Related to Flooding: I believe I heard a few years back the County said there would be no more development in the Vineyard area until a Drainage Master Plan was developed and the drainage plan was implemented. This has not been the case for the Vineyard area. How will the FVGCP differ?

Transportation and Circulation Pages 1-9 1-21

- None of the Transportation and Circulation Impacts covers traffic calming measures. All the listed mitigation measures detail making roads wider, straighter and more speed convenient for cars, trucks, motor cycles etc.. Ten years from now Sacramento County will be dealing with how to calm traffic. Let's plan traffic calming now.

Page 1-21

- Impacts to Transit System Operations: The impact statement seems like a clever way of saying that the development does not need transit systems and therefore will have no adverse affect on future transit systems even though the transit systems are needed now? This should be Highly Significant and a transit plan should be put in place and implemented with each development before we build another dwelling in any area of Sacramento County.

Letter 7

Page 1-22

- Impacts to Bicycle and Pedestrian System Operations: What are the bicycle and pedestrian facilities/plans included in the FVGCP? Bicycling and walking is an alternative means of Transportation. This should be a high significant impact mitigation. With all new development the County should development and implement a plan for **safe and meaningful** pedestrian and bicycling thoroughfares that connect residential communities with communities of commerce. A comprehensive plan for pedestrians and cyclist should be included as a mitigation measure before any new development is approved.

Page 1-42

- Impacts to Roadway Segments Under Cumulative Plus Project With Density Bonus Conditions: I am unclear what the EIR statement really means? Does it mean development projects with density bonuses will create more traffic and therefore it is ok to impact intersections because of the bonuses? If this is the case, why do we want to plan for traffic problems?

Air Quality Page 1-45

- Impacts Resulting from the Elevated Carbon Monoxide Levels Along Roads and Near Intersections Resulting from Operational Vehicle Emissions: Was the emissions study done with the project bonuses in mind. If it's ok for density bonuses to create traffic problems at intersections then is it ok for the project bonuses to exceed the carbon monoxide levels at intersections?

Noise Page 1-52

- Are any of the Noise impacts based on density bonuses? Do any of the Noise impact studies take into consideration the developments proposed by cities within Sacramento County? My wife and I moved to our present Vineyard area home 18 years ago. We live two and half miles East of Bradshaw. Up until 8 years ago I could sleep with a bedroom window open. Now because of the increased noise level on Bradshaw it is impossible to keep a window open at night and sleep well. The same is true regarding air traffic from Mather and Sacramento Executive Airport. The numbers of over-flights have increased substantially since 1998. To simply state in the EIR the Noise Impacts will be mitigated by ensuring new residents are aware of increased noise levels is somewhat disingenuous. If the EIR consultants were to talk to residents of Anatolia on Sunrise they would discover that most residents, even though they may have signed a paper, are unaware of the rendering plant, the County land fill, or the contaminated water.

Letter 8

May 19, 2009

Cathy Hack, Senior Environmental Analyst
Department of Environmental Review and Assessment
Mitigation Monitoring Division
827 7th Street, 2nd floor
Sacramento, CA 95811

RE: Caselman Ranch – Project #04-0233

Dear Cathy:

We have reviewed the DEIR for the Florin-Vineyard Gap Community Plan dated April, 2009 and have the following concerns and comments:

1. **Volume 2 Page 15-1** – still shows the owner as being Satvros and Eleni Vathis. *Caselman Properties, LP* are the legal owners of this project and *Carson Development Company, Inc.* is the developer in addition to being the managing partner of the LP.

2. Sacramento Metropolitan Fire District's comments (**see Page 2-15-21 - Traffic & Circulation)** about installing a loop street at the western end of Caselman Road to connect to Carlisle Road for emergency access virtually renders this project impossible. Discussions are beginning with SMFD for alternative means to achieve satisfactory emergency routes which could involve redesigning our current layout for our lots, adding another entry from the subdivision to Elk Grove-Florin Road, and/or installing a temporary cul-de-sac with a emergency break-out until the neighboring parcels are developed to include the loop street. Additionally it is most probable that the project will be phased and we request reasonable consideration when final conditions of approval are set forth for a logical alternative to the one currently set forth in the DEIR.

3. We still contend the 12.5' IOD along the east property line for a future BRT lane is not feasible due to the existing developments (ie Tamarindo) already in the area and the very limited run between our property and remaining undeveloped land to the south boundary of the FVCP. **(Page 2-15-22).**

4. After the master drainage plan was completed and the locations of detention basins were established, the developer of the property containing Basin

UHDET2 withdrew his application. The back westerly portion of Caselman Ranch was supposed to drain into Basin UHDET2. On **Page 2 15-40** SCDWR is recommending we purchase a portion of APN #115-0091-057 to construct Basin UHDET2 which we think is unreasonable given the fact there is no proposed plan in place for the remainder of that area. We believe a more logical approach to satisfy the drainage needs for this site would be to relocate and/or resize our current basin #WQSCK and are asking this alternative be inserted in the final set of conditions of approval.

5. **Volume 4 of the Draft EIR** does not contain the technical studies for Caselman Ranch. Per discussions with you on Tuesday, May 11, 2009 you indicated that you have our technical studies and they will be added to the Final EIR. These reports should include: Arborist report, Jurisdictional Delineation and Special Status Species Report, Phase I Environmental Report, and Delineation letter from Corps of Engineers. If you do not have all of these reports in your possession please advise and I will get them to you.

Please get back to me with any questions or comments you have regarding the foregoing comments and changes. I can be reached at (916) 443-3797 ext. 5.

Sincerely,

JJ Jacobs
Vice-President

Letter 9

RECEIVED
MAY 26 2009
DEPARTMENT OF ENVIRONMENTAL
REVIEW AND ASSESSMENT

May 20, 2009

Ms. Joyce Horizumi, Environmental Coordinator
Department of Environmental Review and Assessment
827 – 7th Street, Room 220
Sacramento, CA 95814

SOUTHGATE
RECREATION & PARK DISTRICT

Sheldon
Administrative Headquarters
6000 Orange Avenue
Sacramento, CA 95823-3225
Phone 916-428-1171
Facsimile 916-428-7334
www.southgaterecandpark.net

Board of Directors
Rolfe P. Appel
John E. Cockerham
Edwin A. Smith
Christine Thompson
Shirley J. Wirth

General Manager
Ward Winchell

Assistant General Manager
Maureen Casey

SUBJECT: Comments on the Draft Environmental Impact Report for Florin-Vineyard GAP Community Plan Project (Control Number 04-GPB-CPB-0096; State Clearinghouse Number: 2005082045)

Dear Ms. Horizumi;

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the Florin-Vineyard GAP Community Plan Project (FVGCP). The project consists of the adoption of the Florin-Vineyard GAP Community Plan and Public Facilities Financing Plan, General Plan Amendment, and Community Plan Amendment that will guide the development of approximately 3,766 acres located in both the South Sacramento and Vineyard communities. The proposed project would change the existing agricultural development patterns to a predominately residential community with industrial and commercial areas. The DEIR includes equal-level analysis of two land use plans, the Citizen's Advisory Committee (CAC) Land Use Plan and the Sacramento County Planning Department (PD) Land Use Plan. Buildout of the FVGCP area would result in the development of 10,292 to 13,875 residential units (including density bonuses) depending on the final land use plan.

The FVGCP area is entirely within Southgate Recreation and Park District boundaries. The District is responsible for the planning of parkland, open space and recreational facilities and the ownership and maintenance of existing and planned facilities within District boundaries. It may be helpful for you to review the District map and the respective facilities, which would potentially be impacted by the Florin-Vineyard GAP Community Plan (Attachment A).

The District has been working with County Planning Staff and the Florin-Vineyard Property Owners Group to identify conceptual and specific park locations for the entire FVGCP. The District also has been submitting comments on the individual project applications filed within the FVGCP area. A summary of outstanding project-level issues will be provided as part of this comment letter.

The District requests that the following comments, which were approved by the Southgate Board of Directors at their May 19, 2009 meeting, be considered and included in the Final Environmental Impact Report, where applicable.

FVGCP PROGRAM-LEVEL DEIR COMMENTS (VOLUME 1)

Chapter 2 – Project Description:

Please revise the "Parks" section of the FVGCP Project Description as follows:

"The Southgate Recreation and Park District (SRPD) is an independent special district that is responsible for the planning of parkland, open space and recreational facilities and the ownership and maintenance of existing and planned facilities within the District boundaries. Southgate's adopted park acreage standard is 5 acres of parkland for every 1,000 people.

According to the Preliminary Draft of the Park and Recreation Capital Improvement Plan for the Florin Vineyard Community Plan Public Facilities Financing Plan prepared by SRPD in May 2007, at buildout the FVGCP is estimated to include 17.9 acres of mini-parks (1-3 acres), 54.1 acres of small neighborhood parks (3-6 acres), 41.1 acres of large neighborhood parks (6-11 acres), 24.6 acres of community parks (11+ acres), and 13.6 acres of parkways. The park sites and parkways totaling approximately 151 acres will include sports fields, picnic shelters, playground facilities, two community centers and an extensive trail and parkway system along the Gerber and Elder Creek corridors, utility corridors, and Gardner and Hedge Avenues."

Please also include the first paragraph of this revision in Chapter 5 *Public Services and Utilities*, "Parks and Recreation" section and the second paragraph of this revision in the "Impacts Related to the Increase Demand for Park and Recreation Facilities" section.

Chapter 3 – Alternatives Analysis

Wetland Avoidance and Smart Growth Alternative

The Wetland Avoidance and Smart Growth Alternative would expand the open space area along Elder Creek and would designate as open space substantial areas of the industrial lands located in the Planning D option of the FVGCP.

The DEIR's analysis of this alternative assumes that the substantial increase in open space of this alternative would reduce parks and recreation impacts as compared to the CAC and PD land use plans. However, the District does not give Quimby credit for property with encumbrances or other restrictions, including open space with delineated wetlands or other sensitive habitat, or located within the 100 year floodplain. The open space as described in the DEIR alternative analysis would address flooding and designate wetland and vernal pool resources and would thus be encumbered. Therefore, park and recreation impacts would remain similar to the PD Land Use plan. The District requests DERA to edit the DEIR's Alternatives Analysis to reflect this comment.

Chapter 4 – Land Use:

The County has been developing the South Sacramento Habitat Conservation Plan (SSHCP) which completely encompasses the FVGCP area. The SSHCP will provide for the conservation of 40 covered species and their associated habitat types and is planned for adoption in early 2010. The District has reviewed and commented on the draft SSHCP in a letter to the Department of Environmental Review and Assessment (DERA) dated August 8, 2008 (Attachment B).

Although the SSHCP has not been adopted and would not affect the proposed project at this time, future developments within the project area may be subject to the SSHCP. The District requests DERA to evaluate the FVGCP's consistency with the draft SSHCP's conservation strategy. If it is determined that the SSHCP will potentially impact the District's planned facilities or its opportunities to acquire parkland and open space within the FVGCP area, the District requests DERA to address these potential impacts and determine mitigation measures. The District is willing to work with the County and the Florin-Vineyard Property Owners Group to resolve any differences and to jointly plan any preserves that will be adjacent to the District's future park and recreation facilities.

Chapter 5 – Public Services and Utilities:

Parks and Recreation

The District has an adopted park acreage standard of 5 acres of parkland for every 1,000 people. Based on DERA's analysis of the FVGCP land use plans, the District has estimated that the CAC Land Use Plan and PD Land Use Plan would require approximately 136-182 acres of parkland. Both land use plans will include a community center, sports fields, picnic shelters, playground facilities and an extensive trail and parkway system along the Gerber and Elder Creek corridors, utility corridors, and Gardner and Hedge Avenues. The District requests that the final EIR and final FVGCP land use plan identify these parks and facilities and incorporate any findings, impacts and mitigation into the final EIR (Attachment C).

The District has been working with the County and the Florin-Vineyard Property Owners Group to determined conceptual and specific park site locations and sizes which will mitigate for planned and future developments. Currently, there are 8 tentative subdivision maps submitted with proposed park sites, totaling approximately 29 acres of planned parkland. The District has requested an additional 10-11 acres of parkland dedication on 4 tentative subdivision maps, in order to better meet the park acreage standard. Further details of individual project's parkland dedication requirements are provided in the FVGCP Project-Level DEIR Comments section of this letter.

The final EIR should note that Southgate Recreation and Park District shall participate in the park and recreation component of the Florin-Vineyard GAP Public Facilities Financing Plan. This plan shall identify all related park, recreation, open space and trail facilities necessary to support the proposed land uses and design standards for the FVGCP. All projects shall also be required to annex into Southgate's Landscaping and

Lighting Assessment District and proposed Community Facilities District for purposes of funding maintenance and operations; additional park and recreation capital improvements; community center maintenance and operations; and park and recreation programs.

Please include revisions as mentioned in Chapter 2 – Project Description comments.

Chapter 8 – Hydrology and Drainage

Elder – Gerber Creeks

The FVGCP is primarily located within the watershed boundaries of Florin Creek, Elder-Gerber Creeks, and Unionhouse Creek. The FVGCP land use plans identify the Elder-Gerber Creeks as public open space corridors. The District plans to provide a recreational bicycle and pedestrian trail system along these open space corridors connecting the residents of the FVGCP to shopping centers, schools, parks, and other parkway and trail facilities. The District requests the inclusion of transition zones adjacent to the Elder-Gerber Creek corridors, in accordance with the Sacramento County General Plan's Conservation Element policy CO-117, in order to provide sufficient width for the planned recreational trail system.

Detention Basins

The FVGCP developments shall implement the proposed *FVGCP Drainage Master Plan* (DMP) as amended and accepted by the County Department of Water Resources (DWR) on May 19, 2008.

The District desires to work with the DWR and project applicants in identifying potential recreational joint-uses for any planned detention basins. The District is willing to consider accepting ownership or an easement for all or part of the detention basin areas depending on the identified joint-use functions of the lot. The District will not however, take responsibility for operation or maintenance of the basin's drainage and detention functions.

Potential joint-use possibilities include active sports fields, trails and/or landscape easements. In order to accommodate recreational uses, advance planning needs to occur to address design issues including but not limited to side slopes, access points, and improvements. Potential detention basin lot area improvements include sports field landscaping, perimeter landscaping, walking paths, benches, and security lighting.

The District requests the final EIR consider potential recreational joint-uses for detention basins in the FVGCP area.

Drainage Fees

Please note in the final EIR that project applicants shall pay all drainage fees related to the development of a park site and that fees shall be paid by the developer prior to issuance of grading permits or improvement plan approval for the subdivision, whichever comes first.

Chapter 9 – Transportation and Circulation

Bicycle and Pedestrian Facilities

Please provide a more recent map of proposed bicycle and pedestrian facilities for the FVGCP area. Plate TC-6 shows proposed bicycle facilities based on Exhibit 4-1b of the Sacramento City/County 2010 Bikeway Master Plan which was adopted by the County in 1993. Plate PS-3 shows the District's planned parks, trails and parkways as of March 2008 for the FVGCP area and would better represent proposed bicycle and pedestrian facilities (Attachment C).

The District has worked with the County and Florin-Vineyard Property Owners Group to develop a "Parkway" concept for the FVGCP area. In May 2005, Southgate Recreation and Park District Board approved a new Parkway policy (Attachment D). The vision for these "Parkways" is to provide a pedestrian oriented streetscape for improved aesthetics, comfort, and safety for pedestrians as well as bicyclists. Please include a discussion and exhibits (to be provided upon request) of the "Parkway" and "Greenstreets" concepts in the final EIR. The District has recommended these concepts to the County for inclusion in the design guidelines and standards of the FVGCP and has requested the inclusion of "Parkways" along Gardner, Hedge, and Florencia Avenues on several project applications.

Please note in the final EIR that the District is planning an extensive bicycle and pedestrian trail and parkway system along the Gerber and Elder Creek corridors, utility corridors, and Gardner and Hedge Avenues. These trails will serve as alternate transportation routes and will provide linkages to public transit, parks, schools, offices and shopping centers. As roadways become more congested, bicycle and pedestrian facilities may aid in decreasing the number of personal vehicle trips for residents.

The final EIR should also include discussion of these proposed bicycle and pedestrian facilities and the positive impacts the implementation of these facilities would have on the transportation and circulation of the FVGCP in the Air Quality and Climate Change chapters.

Chapter 12 – Biological Resources

The District has reviewed and commented on the draft South Sacramento Habitat Conservation Plan as mentioned above in the Chapter 4-Land Use comments. The District requests DERA to evaluate the FVGCP's consistency with the draft SSHCP's conservation strategy.

The District requests DERA to analyze the proposed bicycle and pedestrian trail alignment along Gerber and Elder Creek (Plate PS 3) and determine whether the implementation of the trail improvements would result in adverse impacts to Waters of the United States or Waters of the State.

The District will be accepting open space dedications throughout the FVGCP and in most cases will become the preserve manager of sensitive wetland and vernal pool

habitats. The District requests that the final EIR include the following conditions as mitigation measures for all projects dedicating open space to the District:

Open Space Dedication – Open space lots shall be dedicated to the District as a gift with a clear title report and be fully developed and improved by the Developer with plans and specifications to be approved by the District. The District requests review of all Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Game and all other permitting agency submissions, comments and requirements as well as the final permit, conditions, and wetland delineations as they pertain to the open space property. The District will accept the completed open space areas only after it has been improved to the District requirements, have passed County inspections, and the conditions required are accepted by the Army Corps of Engineers (if applicable).

Maintenance and Monitoring of Open Space - Prior to open space dedication, the District requests that adequate funding be available to pay for all costs associated with the repair, maintenance and monitoring in perpetuity of the identified open space through the provision of an endowment (if required by permitting agencies) and/or the designation of funds for this purpose in the financing districts.

Chapter 17 – Population and Housing

Affordable Housing Ordinance

The proposed CAC and PD Land Use Plans would designate 2,401 and 2,411 acres for residential use respectively. The overall land use pattern for the CAC Land Use Plan would remain low-density residential, whereas, the PD Land Use Plan would increase the overall residential density of the project area. Under the County's Affordable Housing Ordinance, a 15 percent density bonus is available to encourage the construction of affordable housing. Full implementation of the density bonus for both the CAC and PD Land Use Plans would result in 1,342 and 1,809 additional residential units respectively and would require an additional 17 – 24 acres of parkland.

Please note in the final EIR that full implementation of the density bonus will increase the parkland dedication requirements for each project. Project applicants should be aware that accepting density bonuses will affect the project's parkland dedication requirements.

Multi-family Residential Sites

The parkland dedication requirements for Multi-family and/or Affordable Housing lots will be based on the number of dwelling units calculated from the maximum density permitted in the proposed zoning of the multi-family lot as identified on the tentative subdivision map or tentative parcel map (including any density bonus), unless the subdivider can demonstrate that the development will contain a lesser number of dwelling units. Final map recordation or development plan review shall not become final until the required land or improvements are dedicated or fees in lieu thereof are paid by the subdivider to the satisfaction of the District.

The District does not accept parkland dedication that is part of private or gated developments and does not typically award Quimby credit toward the development of such park sites or recreational amenities.

The District requests that the final EIR include these parkland dedication requirements related to Multi-family residential developments where applicable.

FVGCP PROJECT-LEVEL DEIR COMMENTS (VOLUME 2)

The FVGCP DEIR includes 26 individual project applications that are concurrently proposed with the Land Use Plan and contains project-specific analyses of environmental impacts associated with each of the developments. The District has been working with County Planning Staff and the Florin-Vineyard Property Owners Group to identify conceptual and specific park locations for the entire FVGCP.

- The District has reviewed and submitted comments on 18 tentative subdivision maps (TSM) project applications; 4 of these projects have submitted map revisions that the District's Board of Directors has not yet had the opportunity to review and submit updated comments on. The District shall submit updated comments on these map revisions as soon as possible.

- The District has not reviewed or commented on 8 project applications, which mainly consist of commercial and agricultural-residential rezones and tentative parcel map applications and should not significantly impact the District's parkland dedication requirements for the FVGCP. The District shall submit comments on these project applications as soon as possible.

The District's DEIR comments and individual project application requests are summarized below.

A. The following projects have DEIR comments and/or edits. The projects may also have requests (i.e. parkland dedication requirements or parkway inclusion) that will require project revisions and should be noted in the final EIR:

Chapter 3 – Legends Meadows (04-RZB-SDP-UPP-AHS-0177)

1. **The District has made the following requests in a comment letter dated November 22, 2006 on revised TSM dated August 2006 which will require project revisions:**

   a. Parkland Dedication Requirement – Approximate 2-acre park site, preferably near the proposed multi-family development and with street frontage. Land encumbered by drainage or wetland conditions will not be accepted toward this parkland dedication requirement.

   b. Florencia Lane Parkway – Lots backing and siding-on to the east side of Florencia Lane, opposite the proposed 35 foot wide parkway corridor, will need

to be reoriented to face the street with a tree lined boulevard and separated sidewalk.

2. **The District requests the following edit to be included in the final EIR:**

   a. Please note that the District Board of Directors has not had the opportunity to review and submit comments on the revised map dated February 5, 2007 analyzed in the DEIR.

Chapter 4 – Gerber Creek (04-RZB-SDP-SPP-0187)

1. **The District has made the following requests in a comment letter dated October 22, 2008 on revised TSM dated July 15, 2008, which will require project revisions:**

   a. Parkland Dedication Requirement – Approximate 3-acre park site along the north project boundary adjoining the Gardner Parke Subdivision to the north.

Chapter 6 – Portico Acres (04-RZB-SDP-AHS-0205)

1. **The District requests that the following comment be considered for the final EIR, this request will require a minor project revision. The District will submit a comment amendment to the comment letter dated June 22, 2005 on the revised map dated March 2004:**

   a. Central California Traction Railroad Access – In the event that at sometime in the future the Central California Traction Railroad Corridor is abandoned and the County of Sacramento determines that these tracks shall become part of a bicycle/pedestrian trail system, the District desires that the developer provide a landscaped access point for the proposed subdivision to ensure a neighborhood connection to this potential future trail system. This access should be a minimum of 30 feet in width and be dedicated to the District. No Quimby parkland dedication credits however, will be given to the developer for this property. The District is suggesting that this pedestrian access point be provided between lots 16 and 17 and that an open tubular steel fence section be provided.

Chapter 8 – Florin Vineyards (04-RZB-SDP-SPP-AHS-0207)

1. **The District has made the following requests in a comment letter dated October 17, 2007 on revised TSM dated August 24, 2007 which will require project revisions:**

   a. Parkland Dedication Requirement – Remove residential Lots 363-375 along the north side of the 8.3 acre park site Lot A to provide street frontage on all four sides of the park site. The District is not willing to accept 1.1 acre parcel identified as Lot B under power lines as parkland dedication. However, the District is willing to discuss with the Developer the possibility of accepting Lot B as open space.

b. Gardner Avenue Parkway – Include a 35-foot-wide parkway corridor along west side of Gardner Avenue. Lots 572-582 facing onto Gardner Avenue, will need to be reconfigured, in order to accommodate the parkway corridor. Lots 505, 528, 549 and 568, siding-on to the east side of Gardner Avenue, opposite the 35 foot wide parkway corridor, will need to be reoriented to face the street with a tree lined boulevard and separated sidewalk.

c. Access – Extend 'M' Way to the eastern boundary of the subdivision (through lots 171 and 172) for future connection to South Watt Avenue. This connection would provide easier access to the park site identified as Lot A for the residents of the single family lots (Lots 1-102) and the affordable housing site (Lot 661) on the east side of South Watt Avenue.

2. The District requests the following edits to be included in the final EIR:

a. Include the District's comments submitted October 17, 2007 (Attachment E) under the "Agency - Recommended Conditions of Approval" section of this chapter in the Final EIR.

b. Edit the acreage of the proposed park site Lot A to read 8.3 acres not 9.4 acres (Florin Vineyards Chapter, Parks Section, Paragraph 3)

Chapter 9 – Villages of Elder Creek (04-RZB-SDP-SPP-AHS-0208)

1. The District has made the following requests in a comment letter dated July 3, 2007 on revised TSM dated May 4, 2007 which will require project revisions:

a. Parkland Dedication Requirement – Reconfiguration and relocation of the 5.4 acre park site Lot B to meet the full Quimby dedication requirement of approximately 9.77 acres. The District is not willing to accept the 0.6 acre park site identified as Lot A. The District does not generally accept park sites of less than 2 acres and will not accept the park site with residential lots facing and adjoining the park site.

b. Hedge Avenue Parkway – Lots 244, 270, 306 and 371 siding-on to the east side of Hedge Avenue, opposite the 35-foot-wide parkway corridor, will need to be reoriented to face the street with a tree lined boulevard and separated sidewalk.

2. The District requests the following edit to be included in the final EIR:

a. Please update and include the District's comments submitted July 3, 2007 in the Final EIR. (Attachment F).

Chapter 12 - Gardner Park (04-RZB-SDP-SPP-EXP-AHS-0218)

1. The District has made the following requests in comment letter dated March 7, 2007 on revised TSM dated August 30, 2006 which will require project revisions:

a. Parkland Dedication Requirement – Reconfiguration and relocation of the 2.2-acre park site Lot A. Relocate park site to the south project boundary adjoining the Gerber Creek Subdivision, and increase the park site to meet the full Quimby parkland dedication requirement of approximately 6 acres.

b. Gardner Avenue Parkway – Lots 338, 339 and 395, siding-on to the east side of Gardner Avenue, opposite the 35 foot wide parkway corridor, will need to be reoriented to face the street with a tree lined boulevard and separated sidewalk.

2. The District requests the following edits to be included in the final EIR:

a. Update and include the District's comment amendment submitted August 9, 2007 in the Final EIR (Attachment G).

b. Rewrite or remove the paragraph discussing the correct size of the proposed park site. According to the map dated August 30, 2006 (the map analyzed in this DEIR), the park site identified as Lot A is 2.2 net acres (3.2 gross acres). Net acreage of the park site lot is calculated toward Quimby not the gross acreage.

Chapter 14 – Taylor Properties at Gerber and Bradshaw Roads (04-RZB-PMR-ABE-0226)

1. The District requests the following edit to be included in the final EIR:

a. Please note that the Southgate District Board of Directors has not had the opportunity to review and submit comments on the tentative parcel map July 11, 2006 analyzed in the DEIR.

b. District comments will include a request for construction of a bicycle and pedestrian trail along the section of Gerber Creek open space corridor located within the northwestern portion of the project area. This request should not require a project revision but should be included for evaluation in the final EIR. Please include this request under the Parks and Traffic and Circulation sections of this chapter.

Chapter 15 - Caselman Ranch (04-RZB-SDP-AHS-0233)

1. The District requests the following edits to be included in the final EIR:

a. Please note that the Southgate District Board of Directors has not had the opportunity to review and submit comments on the revised map dated November, 2007 analyzed in the DEIR. The District submitted a comment letter dated March 22, 2006 on TSM dated March, 2006.

b. Due to the withdrawals of previous applications in this area of the FVGCP, the District may reconsider parkland dedication requirements for this project. Please note that the District will consider requesting a parkland dedication

requirement of 2-3 acres adjacent to the southern boundary of the proposed 1.4 acre detention basin identified in the revised map dated November, 2007.

Chapter 16 - Gardner Country Estates (04-RZB-SDP-0234)

1. **The District has made the following requests in a comment letter dated June 8, 2005 on revised TSM dated June 2004 which will require project revisions:**

   a. Gardner Avenue Parkway – Inclusion of a 35-foot-wide parkway corridor along west side of Gardner Avenue. Lots 1 and 24-26 facing onto Gardner Avenue will need to be reconfigured, in order to accommodate the parkway corridor.

2. **The District requests the following edits to be included in the final EIR:**

   a. Please note that the Southgate District Board of Directors has not had the opportunity to review and submit comments on the revised map dated December, 2006 analyzed in the DEIR.

   b. Include the District's comments submitted June 8, 2005 (Attachment H) under the "Agency - Recommended Conditions of Approval" section of this chapter in the Final EIR.

Chapter 17 - Phan Court (04-RZB-SDP-AHS-0241)

1. **The District requests the following edit to be included in the final EIR:**

   a. Please note that the District has made the following request to the Developer which will require project revisions. The District will issue a comment amendment to the comment letter dated June 16, 2004 on TSM dated April 6, 2004 and submit it to the County Planning Department:

      Gardner Avenue Parkway – Inclusion of a 35-foot-wide parkway corridor along west side of Gardner Avenue. Lots 1-11 along Gardner Avenue will need to be reconfigured, in order to accommodate the parkway corridor.

Chapter 18 - Gasnakis & Kumar (04-RZB-SDP-0247)

1. **The District requests the following edit to be included in the final EIR:**

   a. Please note that the Southgate District Board of Directors has not had the opportunity to review and submit comments on the revised tentative subdivision map dated December 14, 2004 analyzed in the DEIR. The District submitted a comment letter dated July 25, 2006 on map dated December 14, 2004.

   b. Please also note that District comments will most likely include a request for a 25-foot-wide landscape corridor along Elk Grove-Florin Road. This request may require a project revision.

Chapter 25 - Champion Oaks (06-RZB-SDP-SPP-AHS-0709)

1. **The District has made the following requests in a comment letter dated February 21, 2007 on revised TSM dated October 31, 2006 which will require project revisions:**

   a. Parkland Dedication Requirement – Increase in size and reconfiguration of the 1.7-acre park site Lot D, to include the residential Lots 39-45. This reconfiguration will increase the park site frontage adjacent to the open space to the north and would provide street frontage on the other 3 sides of the park site.

2. **The District requests the following edits to be included in the final EIR:**

   a. Please edit paragraph 5 of the *Southgate Recreation and Park District* section to read as follows:
   "… Due to the narrow width of this open space corridor trail in this area along the creek, it may not be practical to construct **both trail and sidewalk facilities** in this area…."

   b. Please note the District's plans and request to provide a pedestrian/bicycle trail within the Gerber Creek open space corridor in the *Traffic and Circulation* sections of this project's analyses.

B. The District currently has no outstanding issues or additional DEIR comments for the following projects:

1. Lelani Village - Control No. 04-RZB-SDP-AHS-0206 (Comment letter dated October 18, 2006)
2. Vineyard Market Square – Control No. 04-RZB-PMR-AHS-0209 (Comment letter dated August 1, 2006)
3. Dakuzaku - Control No. 04-RZB-SDP-AHS-0217 (Comment letter dated November 22, 2006)
4. Shehadeh – Control No. 04-RZB-SDP-SPP-AHS-0219 (Comment letter dated October 22, 2008)
5. Rancho Siesta – Control No. 04-RZB-SDP-AHS-0457 (Comment letter dated June 8, 2005)
6. Vintage Ranch – Control No. 04-RZB-SDP-SPP-AHS-0471 (Comment letter dated January 16, 2008)
7. Village at Stonebourne – Control No. 07-RZB-SDP-UPB-SPB-AHS-0604 (Comment letter dated December 5, 2007)

C. Please note in the Final EIR that the Southgate District Board of Directors will review and submit comments on the following Commercial and Agricultural-Residential Rezone and Tentative Parcel Map project applications. The District's comments on these maps should not require project revisions or significantly impact the Districts parkland dedication requirements. However, these projects shall be required to annex into Southgate's Landscaping and Lighting Assessment District and proposed Community Facilities District:

1. Champion Oaks (EGR) – Control No. 04-RZB-PMR-0139
2. Florin Vineyard Retail Center – Control No. 04-RZB-0143
3. Florin/Bradshaw NE – Control No. 04-RZB-PMR-0204
4. Taylor Properties at Gerber and Bradshaw Roads – Control No. 04-RZB-PMR-ABE-0226
5. Millers Family Trust – Control No. 04-RZB-PMR-0412
6. Martin – Control No. 04-CZB-PMR-0423
7. 7415 Gardner Avenue – Control No. 04-RZB-AHS-0449
8. Black – Control No. 04-RZB-PMR-0450

Once again, the District would like to thank the County of Sacramento Department of Environmental Review and Assessment for the opportunity to comment on the Draft Environmental Impact Report for Florin-Vineyard GAP Community Plan Project. The District appreciates the County's consideration of the comments and requests in this letter. The District shall coordinate with the County and all related agencies to minimize the effects of significant impacts and maximize the availability of parkland, open space and recreational facilities throughout the project area for the Florin-Vineyard GAP Community.

Please continue to forward documentation related to this project to the District. If you require additional information or assistance please do not hesitate to contact me at (916) 428-1171, ext. 29, or via e-mail at mcasey@southgaterecandpark.net.

Sincerely,

Maureen Casey

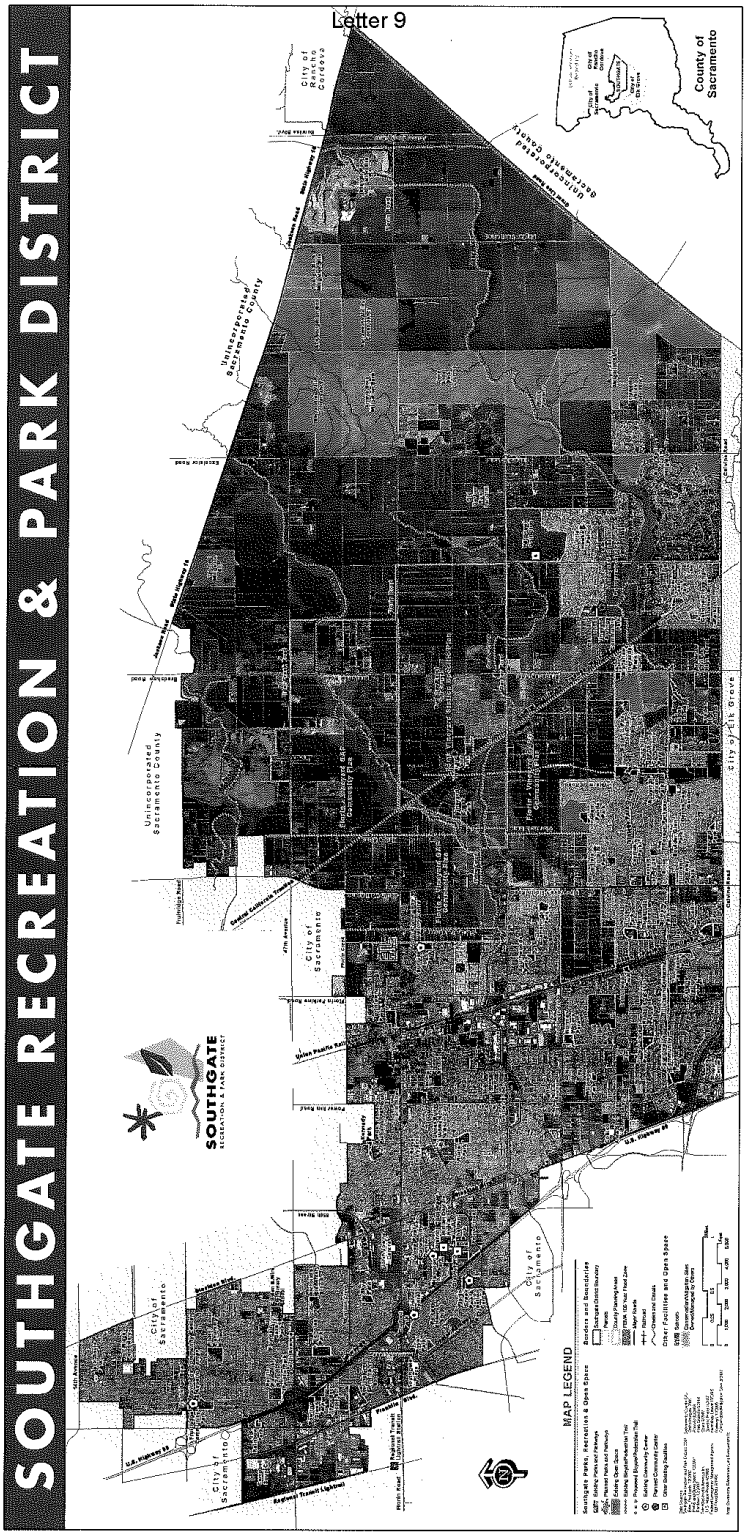
Maureen Casey
Assistant General Manager

Attachments:
A. Southgate District Map
B. District Comment Letter on the Notice of Preparation for the South Sacramento Habitat Conservation Plan
C. Plate PS-3 Planned Parks and Parkways System
D. Design Guidelines and Quimby Credit for Parkways and Greenstreets Memo
E. Florin Vineyards Comment Letter dated October 17, 2007
F. Villages at Elder Creek Estates Comment Letter dated July 3, 2007
G. Gardner Parke Comment Amendment Letter dated August 9, 2007
H. Gardner Country Estates Comment Letter dated June 8, 2005

cc. Jeff Gamel, Planning and Community Development Department

Letter 9

Attachment A



Letter 9

Attachment B

August 20, 2008

Ms. Joyce Horizumi, Environmental Coordinator
Department of Environmental Review and Assessment
827 – 7th Street, Room 220
Sacramento, CA 95814

SOUTHGATE
RECREATION & PARK DISTRICT

Sheldon
Administrative Headquarters
6000 Orange Avenue
Sacramento, CA 95823-3225
Phone 916-428-1171
Facsimile 916-428-7334
www.southgaterecandpark.net

Board of Directors
Rolfe P. Appel
John E. Cockerham
Edwin A. Smith
Christine Thompson
Shirley J. Wirth

General Manager
Ward Winchell

Assistant General Manager
Maureen Casey

SUBJECT: Comments on the Notice of Preparation of a Joint Draft Environmental Impact Report and Environmental Impact Statement for the South Sacramento Habitat Conservation Plan (Control Number 03-PLE-0637)

Dear Ms. Horizumi;

Thank you for the opportunity to review and comment on the Joint Draft Environmental Impact Report (DEIR) and Environmental Impact Statement (DEIS) for the South Sacramento Habitat Conservation Plan (SSHCP). The SSHCP will provide for the conservation of 40 covered species and their associated habitat types. The plan identifies 18 different habitat types including vernal pool aquatic and upland habitat, other wetland habitats, oak woodland, and rural agricultural crops. The SSHCP project area is approximately 341,000 acres within south Sacramento County (unincorporated area) and includes the cities of Rancho Cordova, Elk Grove, and Galt. Southgate Recreation and Park District lies entirely within the SSHCP project area and is included within the following SSHCP Conservation Zones: 1e, 3a, 3b, and 4 (Attachment A).

The District is responsible for the planning of parkland, open space and recreational facilities and the ownership and maintenance of existing and planned facilities within the District boundaries. The District is committed to providing recreational opportunities, and safe and attractive parks and open spaces that make a positive contribution to the quality of life in the South Sacramento area. It may be helpful for you to review the District map of the District boundaries and the respective facilities, which would potentially be impacted by the South Sacramento Habitat Conservation Plan (Attachment B).

The District requests that the following comments, which were approved by the Southgate Board of Directors at their August 19, 2008 meeting, be considered and included in the DEIR/DEIS where applicable.

LAND USE

The proposed SSHCP conservation strategy will protect approximately 8,000 acres of habitat inside the Urban Development Area (UDA). The UDA corresponds to land within the County's Urban Services Boundary (USB), and to land within the city limits of Rancho Cordova, Elk Grove, Galt, and Galt's adopted sphere of influence.

Of the 8,000 acres of habitat to be preserved within the UDA, a measure to establish a core preserve of at least 3,000 acres has been identified within the District's Boundaries as part of Conservation Zone 3b.

The District requests that the DEIR/DEIS assess how the establishment of habitat preserves and mitigation measures proposed for Zones 3a and 3b will affect the land use plans for the following County Planning Areas: Florin-Vineyard "GAP", North Vineyard Station, and Vineyard Springs. The District has cooperated with Developers and the County to identify park sites and open space, using smart-growth principles, within these adopted land use plans.

In addition, the SSHCP has measures to preserve a 600 foot wide habitat corridor along Laguna Creek and a 300 foot wide habitat corridor with variances along Morrison, Elder and Gerber Creeks. These creeks are within the District's boundaries and are part of multiple planning efforts for open space corridors including a recreational trail system.

The District requests that the DEIR/DEIS also assess how the establishment of habitat preserves and mitigation measures proposed for these creekways will affect the District's planning efforts. The District is an active participant in the Upper Laguna Creek Collaborative (ULCC) and is planning to provide a recreational trail through the Laguna Creek Open Space Corridor. The District is also working with the County to provide recreational trails within the Gerber/Elder Creek Open Space Corridors and the Morrison Creek Open Space Corridor.

The District wants to ensure that the SSHCP is not in conflict with the District's Master Plan. If it is determined that the SSHCP will impact the District's existing facilities or its opportunities to acquire parkland and open space, the District requests to work with the County to resolve any differences and to jointly plan any preserves that will be adjacent to the District's existing and/or future facilities.

PUBLIC FACILITIES

State laws authorize recreation and park districts to provide recreation programs, local parks, and open spaces. (Public Resources Code Section 5780) The District's Level of Service goal is to provide 5 acres of parkland per 1,000 people and to maintain a balance of open space and recreation facility development. The District accepts, through its planning process, the responsibility of stewardship and habitat conservation of these open space areas in cooperation with the County and other regulatory agencies.

The District is concerned that the SSHCP's Conservation Strategy and Plan Implementation may affect the District's opportunities to own and manage open space properties with established habitat preserves and requests that the DEIR/DEIS evaluate the organizational structure and criteria of the SSHCP and the restrictions that it may place on local recreation and park district's authority to own and manage such properties.

As mentioned in the previous section, the District is also concerned about the effects that the SSHCP's may have on parkland and open space acquisition by the District. The SSHCP may affect the placement of future park sites, recreational trails and public facilities, thereby limiting the District's ability to provide recreational opportunities to the residents of the community.

TRANSPORTATION/CIRCULATION

As roadways become more congested the need for alternative transportation options increases; bicycle and pedestrian recreational trails can serve as commuter routes and provide community linkages that may decrease the number of personal vehicle trips for residents. The District is planning recreational trails within the Laguna Creek and Gerber/Elder Creek Corridors that will serve the residents of the Vineyard Springs, Florin-Vineyard GAP, and North Vineyard Station communities. These trails will serve as alternate transportation routes and will provide linkages to parks, schools, offices and shopping centers.

The District requests that the DEIR/DEIS assess the impacts on the Districts ability to provide these recreational trails and evaluate the possible loss of alternate transportation routes in these communities.

BIOLOGICAL RESOURCES

The District currently manages approximately 195 acres of open space which includes the Laguna Creek Parkway, Dunmore Preserve, and Kingsbridge Open Space Preserve (Attachment B). The District is also expected to acquire an additional 210 acres of open space within the North Vineyard Station Specific Plan Area and will be the designated Preserve Manager for the Gerber/Elder Creek Preserve. These open space areas include habitats and biological resources that are identified within the SSHCP for preservation.

Currently, the Laguna Creek Parkway offers a recreational trail within the creek's open space corridor and the Kingsbridge Open Space Preserve is adjacent to the Tillotson Parkway and Churchill Downs Community Park. The District successfully manages these open spaces and minimizes the impacts and edge effects of the active and passive recreational activities that occur within or adjacent to these properties.

Providing passive recreational opportunities such as bicycle and pedestrian trails, interpretative signage and nature viewing areas can offer environmental education experiences, promote stewardship and increase public awareness and support for natural preserve areas.

The District requests that the DEIR/DEIS consider passive recreational land-uses compatible with the conservation goals of the SSHCP. The District also encourages the establishment of preserve buffers and requests the DEIR/DEIS evaluate the benefits of allowing passive recreational activities within established preserve buffers.

RECREATIONAL ACCESS

The District offers passive recreational access to open space areas by creating bicycle and pedestrian trails with minimal landscaping around the perimeter of open space preserves or within open space creek corridors. Public access to open space areas with sensitive habitat is limited by post and cable fencing and signage. The District also minimizes the edge effects of active and passive recreational land use by managing and maintaining open space preserves in accordance with Operations and Management Plans developed by regulatory agencies.

The SSHCP considers passive recreational activities such as hiking, bicycling, equestrian, and bird watching generally compatible with conservation goals. The District supports this consideration and requests that the DEIR/DEIS assess the potential to allow limited active and passive recreational activities within or adjacent to habitat preserves.

Once again the District would like to thank the County of Sacramento Department of Environmental Review and Assessment for the opportunity to comment on the Notice of Preparation of a Joint Draft Environmental Impact Report and Environmental Impact Statement for the South Sacramento Habitat Conservation Plan. The District appreciates the County's consideration of the comments and requests in this letter. The District shall coordinate with the County and all related agencies to minimize the effects of significant impacts and maximize the availability of parkland, open space and recreational facilities throughout the project area for the community.

Please continue to forward documentation related to this project to the District. If you require additional information or assistance please do not hesitate to contact me at (916) 428-1171, ext. 29, or via e-mail at mcasey@southgaterecandpark.net.

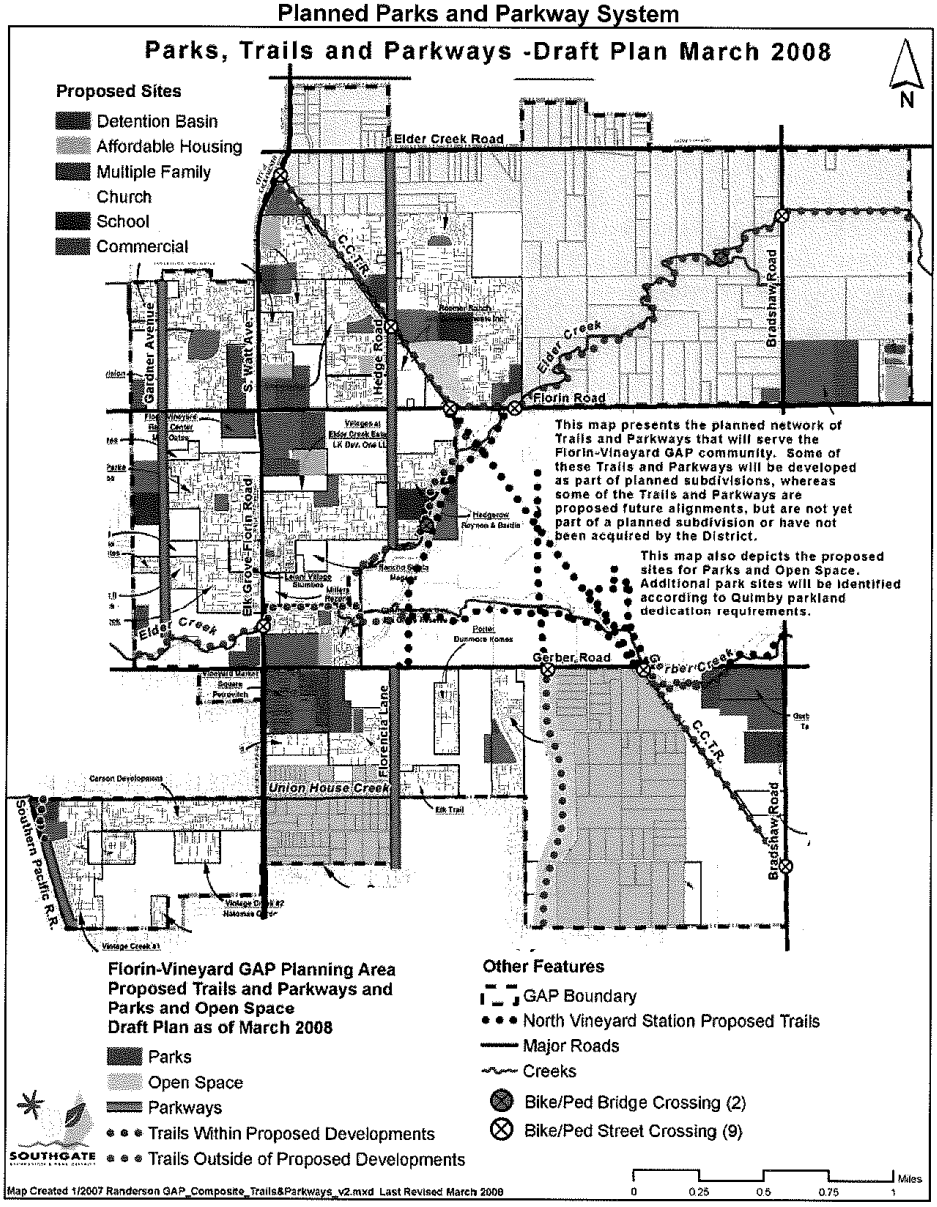
Sincerely,

Maureen Casey

Maureen Casey
Assistant General Manager

Attachment:
A. District Boundary & South Sacramento Habitat Conservation Plan Boundaries
B. District Map and Facilities

Plate PS-3
Planned Parks and Parkway System



Letter 9

Attachment D

SOUTHGATE
RECREATION & PARK DISTRICT

MEMORANDUM

6000 Orange Avenue
Sacramento, CA 95823
PH (916) 428-1171, ext. 29
FAX (916) 428-7334
E-MAIL:mcasey@southgaterecandpark.net

To: Southgate Board of Directors
From: Maureen Casey, Assistant General Manager
Date: October 10, 2006
In Re: Design Guidelines and Quimby Credit for GAP Parkways and Greenstreets

In May 2005, the Southgate Recreation and Park District Board approved a new Parkway policy. The vision for these Parkways was to provide a pedestrian oriented streetscape for improved aesthetics, comfort, and safety for pedestrians as well as bicyclists.

The District has proposed the development of Parkways for specific sections of Gardner Avenue and Hedge Avenue (and possibly Florencia Road) through the Florin-Vineyard GAP Community Plan Area providing enhanced access to and from surrounding neighborhoods linking significant educational, recreational and natural amenities in the community. These designated Parkway streets were originally proposed to include a generously planted median and enhanced landscaped corridors. After extensive discussions with the County Transportation and Planning Departments, as well the Developers, the District is proposing the following Parkway design guidelines and Quimby requirement allowances for the GAP plan area:

Parkway Corridor Design and Improvements

The Gardner Avenue and Hedge Avenue Parkways will include a minimum 35 foot wide landscape corridor on one side of the street (the side that includes the community park and school site; this would be the west side for Gardner Avenue and the east side for Hedge Avenue) and two, 5 foot wide striped Class II Bike Lanes (one on each side). Included in the landscape corridor will be a generous tree lined boulevard, a 10 foot wide concrete sidewalk with an attached 2 foot wide decomposed granite jogging path, as well as additional landscape plantings. These corridors would also include enhanced streetscape amenities such as lighting, benches, signage and distinctive crosswalks. The other side of the Parkway streets will have houses facing the street with a tree lined boulevard and separated sidewalk.

At this time center planted medians are not being considered for the Parkway Streets. The County Department of Transportation had concerns that the medians would restrict left turn access along the roadway. In addition, roadway medians have traditionally been owned and maintained by the County.

The developers are proposing a system of "secondary" Greenstreets within the GAP plan area. This "Greenstreets" program affects the primary residential streets within the area and includes wider planting boulevards and sidewalks than required by current County standards. These streets, along with the designated Parkway streets, will provide a cohesive, connected 'hierarchy' of street patterns within the Florin-Vineyard Community Plan Area resulting in a safer, attractive system of pedestrian friendly streets.

The District would like to have the proposed Parkway and Greenstreets design guidelines included by the County in the Florin-Vineyard Community Plan Development Guidelines in order to have consistency in the corridor design and street improvements for the subdivisions along these streets as the GAP plan area develops.

Quimby Dedication Allowances

District staff is recommending to give Quimby credit for the linear Parkway Corridors in the GAP Plan Area as follows:

> 45 feet in width for Parkway Corridors along Gardner Avenue and Hedge Avenue south of Florin Road (and possibly Florencia Road). This includes a 35 foot wide planted landscape corridor on one side of the street and two-5 foot wide Class II Bike Lanes.
>
> 20 feet in width for landscape corridors along Hedge Avenue north of Florin Road. This section of Hedge Avenue is a designated Collector Street and subdivisions are required to provide a 15 foot wide landscape corridor and Class II Bike Lanes. The District is willing to give Quimby credit for the extra width of landscape corridor to reach the desired 35 foot wide Parkway Corridor.

The Quimby area dedication for each map would be calculated by multiplying the length of Parkway included in the subdivision map by the appropriate width for that section of street as described above.

The Parkway and Greenstreets design guidelines suggested above for the Florin-Vineyard GAP Community Plan area encompass the essential characteristics of the Parkway concept envisioned by the District which included: 1.) Providing a road that is greener than other roads, where the overall ratio of green space to paving is greater than the surrounding streets; 2.) Providing an enhanced transportation corridor with separated pedestrian and bicycle paths with easy access to and from surrounding neighborhoods linking significant educational, recreational and natural amenities in the community; and 3.) Providing a public place that is safe, inviting and a beautiful gem of the community.

October 17, 2007

SOUTHGATE
RECREATION & PARK DISTRICT

Sheldon
Administrative Headquarters
6000 Orange Avenue
Sacramento, CA 95823-3225
Phone 916-428-1171
Facsimile 916-428-7334
www.southgaterecandpark.net

Board of Directors
Rolfe P. Appel
John E. Cockerham
Edwin A. Smith
Christine Thompson
Shirley J. Wirth

General Manager
Ward Winchell

Assistant General Manager
Maureen Casey

Rebecca Boschee
Central Area Team
County of Sacramento
Planning & Community Development Department.
827 – 7th Street, Rm. 230
Sacramento, CA 95814

RE: Control No. 04-RZB-SDP-SPP-AHS-0207 REVISED Florin Vineyards Rezone, Tentative Subdivision Map, Special Development Permit, and Affordable Housing Plan

Dear Rebecca;

Thank you for the opportunity to respond to the revised Florin Vineyards Rezone, Tentative Subdivision Map dated August 24, 2007, Special Development Permit, and Affordable Housing Plan. This project includes the rezone of 131.7 acres zoned A-10 Agriculture and IR Industrial Reserve to RD-2, RD-4, RD-5, RD-7, RD-20, and Open Space; division into 655 single-family residential lots, 1 multi-family lot, 1 church site lot, 2 park site lots, and 7 landscape corridor lots; special development permit to allow deviations from lot size standards; an exception to allow reduced lot depths; and an Affordable Housing Plan consisting of on-site land dedication, payment of affordability fees, and a density bonus of 111 lots. The project is located at the northeast corner of Florin Road and Gardner Avenue, and also on both sides of South Watt Avenue, approximately 1,300 feet north of Florin Road in the Florin-Vineyard GAP Community Plan area.

The District previously commented on this project on July 06, 2005 in Resolution 05-01; and May 20, 2004 in Resolution 03-169. The District requests that the following comments, which were approved by the Southgate Board of Directors at their October 16, 2007 meeting, be adopted by the County of Sacramento and included in the map requirements. Our comments are as follows:

1. Quimby Requirements: Parkland Dedication/In-lieu Fees

Based on the 655 single-family lots and the proposed 4.2 acre affordable housing site identified as Lot 661 on this subdivision map, the estimated Quimby parkland dedication requirement for this project is approximately 9.89 acres. The District is willing to accept the 8.2 acre park site identified as Lot A, but requests the removal

of Lots 363-375 from the north side of Lot A, in order to provide street frontage along all sides of the park site.

The District does not give Quimby credit for property encumbered or otherwise with restrictions. Because Lot B is encumbered by a powerline corridor, the District will not accept the 1.1 acre park site as parkland dedication. However, the District is willing to discuss with the Developer the possibility of accepting Lot B as open space.

Prior to recordation, the District shall review the final subdivision map and shall jointly determine final parkland dedication requirements and/or in-lieu fees with the Developer and County pursuant to the Subdivision Map Act.

2. Park Site Infrastructure

The Developer shall assure that the parkland to be dedicated to the District is graded and improved pursuant to current County Standards. The District shall review and approve improvement plans adjoining the park site identified as Lot A. Park site improvements include: adjoining streets with street lights fronting on the park, vertical curbs that extend 10 feet beyond the park site, a 6-foot wide attached concrete sidewalk on all park frontage streets and ADA compliant street crossings on all corners. Other park site infrastructure improvements include: electric, phone, storm drainage, sewer, and water stubs, connected water meters, and reduced pressure backflow preventers. Rain Bird Maxicom controllers, with telephone line and electricity shall be connected to the District's computerized irrigation system. In addition, all permit fees for the park site need to be paid including: building, sewer, water meter, water development and drainage. The District shall accept the completed park site after it has passed County inspections and received a clear title report.

3. Access to Park Site

The District requests that V Way extend to the eastern boundary of the subdivision (through lots 2 and 3) for future connection to Street C of the Stonehedge subdivision (map dated July 31, 2007). This connection will provide easier access for residents to the park site east of this subdivision and will serve to link the neighborhoods between South Watt Avenue and Hedge Road, creating better connectivity.

The District also requests that M Way extend to the eastern boundary of the subdivision (through lots 171 and 172) for future connection to South Watt Avenue. This connection would provide easier access to the park site identified as Lot A for the residents of the single family lots (Lots 1-102) and the affordable housing site (Lot 661) on the east side of South Watt Avenue.

4. Landscape Corridors on South Watt Avenue

The District will accept the 25 foot wide landscape corridors along South Watt Avenue identified as Lots C, D, E, F, and G. The landscape corridor lots shall be dedicated to the District as a gift and shall be fully developed by the developer with plans and specifications to be approved by the District and pursuant to current County Standards. The District requires 6 foot high masonry soundwalls for all lots that back-up or side-on to the landscape corridor. All masonry soundwalls shall be treated with graffiti-resistant coating and the design approved by the District. Landscape corridors shall have a detached 6 foot wide concrete sidewalk with vertical curb and ADA compliant street crossings on all corners. A Type 3 curb is required at the back of sidewalks for landscaped areas (except turf). The irrigation system shall be installed according to specifications provided by the District. The District does not require subdivision entrance lighting but requests the installation of conduit to an electric box within the landscape corridor for future installation of lighting, should it become necessary. The District shall accept the completed landscape corridor lot after it has passed inspections and received a clear title report. The District shall maintain the landscape corridor through assessment district proceeds.

5. Landscape Corridors on Florin Road

The District will accept the 25 foot wide landscape corridors along Florin Road identified as Lots H and I. Standard landscape corridor requirements as described in Comment 4 above would also apply.

6. Landscape Corridor Lots on Affordable Housing Site and Church Site

The District recommends the delineation of a 25 foot wide landscape corridor along the affordable housing site on the east side of South Watt Avenue identified as Lot 661 and the church site on the north side of Florin Road identified as Lot 660. The District will accept ownership of these landscape corridor lots, in order to provide a well maintained and continuous pedestrian access system throughout the District. The District will require the landscape lots to include a 6 foot high masonry soundwall. Other standard landscape corridor requirements as described in Comment 4 above would also apply.

7. Gardner Avenue "Parkway"

This subdivision map shows 10 - 13 foot wide pedestrian easements along the east and west sides of Gardner Avenue. However, the District has identified Gardner Avenue as a designated "Parkway" street which will include a 35 foot wide parkway corridor along the west side of the street. These parkway corridors, or linear parks, will provide a pedestrian oriented streetscape for enhanced comfort and safety for motorists, pedestrians and bicyclists linking neighborhoods with community parks, open space trails and schools. Proposed parkway corridor improvements will

include a generous tree lined planted corridor with a 6 foot high masonry wall, 10 foot wide concrete sidewalk with an attached 2 foot wide decomposed granite jogging path, ample lighting, benches and distinctive crosswalks and Class II bike lanes. This subdivision map shows lots 572-582 facing onto Gardner Avenue, these lots will need to be reconfigured, in order to accommodate the 35 foot wide parkway corridor improvements.

The other side of the "Parkway" street, the east side of Gardner Avenue opposite the 35 foot wide parkway corridor, will have houses facing the street with a tree lined boulevard and separated sidewalk. The lots siding-on to Gardner Avenue, identified as Lots 505, 528, 549 and 568, will need to be reoriented to face the street. The District will not accept maintenance of these landscaped pedestrian easements on the east side of Gardner Avenue, they will be the responsibility of the property owner or Developer.

8. Improvement Plan Review and Approval

Prior to improvement plan approval by the County, the Developer shall submit improvement plans for this subdivision to the District. The District shall review and approve all District required improvements pertaining to the park site (Lot A), landscape corridor lots (Lots C - I), and the "Parkway" corridors along Gardner Avenue.

9. Inclusion in Financing Districts

The Developer shall consent to the inclusion of this subdivision within the Florin-Vineyard Financing District, which will be a Landscaping and Lighting Assessment District or a Mello Roos Community Facilities District, and the Southgate Landscaping and Lighting Assessment District – West Vineyard Zone. The Developer shall be responsible for notification to all subsequent purchasers of parcels of land within this subdivision of the inclusion within said financing districts. These financing districts will be established by Southgate for purposes of funding maintenance and operations, additional park and recreation capital improvements, community center maintenance and operations, and park and recreation programs.

10. Florin-Vineyard Public Facilities Financing Plan

This subdivision will be included in the Southgate Recreation & Park District component of any future Florin-Vineyard Public Facilities Financing Plan as determined by the Sacramento County Board of Supervisors. In the absence of an approved County financing plan, the District recommends that the County Board of Supervisors annex this subdivision to an existing plan which meets the current park and recreation needs of Southgate or otherwise requires an appropriate funding mechanism that will address the park land dedication, maintenance and development requirements of the Southgate District. The District reserves the right to revise parkland dedication requirements and financing mechanisms to adapt to changes

resulting from modifications to the policy or the creation of a new plan by the County of Sacramento.

Thank you for your assistance. Should you have further questions please do not hesitate to contact me at 428-1171 ext. 29.

Sincerely,

Maureen Casey
Assistant General Manager

cc: John Sinadinos, Village Capitol Group, LLC
Bruce Walters, MacKay & Somps

July 3, 2007

Dick Fraschetti
County of Sacramento
Planning & Community Development Department.
827 – 7th Street, Rm. 230
Sacramento, CA 95814

SOUTHGATE
RECREATION & PARK DISTRICT

Sheldon
Administrative Headquarters
6000 Orange Avenue
Sacramento, CA 95823-3225
Phone 916-428-1171
Facsimile 916-428-7334
www.southgaterecandpark.net

Board of Directors
Rolfe P. Appel
John E. Cockerham
Edwin A. Smith
Christine Thompson
Shirley J. Wirth

General Manager
Ward Winchell

Assistant General Manager
Maureen Casey

RE: Control No. 04-RZB-SDP-SPP-AHS-0208 REVISED Villages at Elder Creek Estates Rezone, Tentative Subdivision Map, Special Development Permit, and Affordable Housing Plan

Dear Dick;

Thank you for the opportunity to respond to the REVISED Villages at Elder Creek Estates Rezone, Tentative Subdivision Map dated May 4, 2007, Special Development Permit, and Affordable Housing Plan. This project includes the rezone of 91.3 acres from AR-10, AR-10 (Flood) and AR-2 to RD-20, RD-7, RD-5, RD-4 and O (Recreation); division into 518 single-family residential lots, 2 multiple-family lots, 2 park lots, 3 landscape lots, and 1 water quality treatment lot; special development permits and an exception to allow reduced lot area and width, public street frontage, and setback requirements; and an Affordable Housing Plan consisting of on-site dedication of land, payment of affordability fees, and a special development permit to allow a density bonus of 102 units. This project is located on the west side of Hedge Avenue, approximately 1,400 feet south of Florin Road, in the Florin-Vineyard GAP Community Plan Area.

The District previously commented on this project on May 2, 2007, January 29, 2007, June 8, 2005 in Resolution 04-180 and May 19, 2004 in Resolution 03-168. The District requests that the following comments, which were approved by the Southgate Board of Directors at their July 2, 2007 meeting, be adopted by the County of Sacramento and included in the map requirements. Our comments are as follows:

1. Quimby Requirements: Parkland Dedication/In-lieu Fees

Based on the 518 single-family residential lots and the two RD-20 lots proposed for this subdivision, the estimated Quimby parkland dedication requirement for this project is approximately 9.77 acres. This map includes two park sites identified as Lot A (5.4 acres) and Lot B (0.6 acre) for a total of 6 acres of parkland. The District is not willing to accept either park site as currently proposed on the map.

The District does not generally accept park sites less than 2 acres and requests that the 0.6 acre park site identified as Lot B be increased in size to at least 2.0 acres. In addition, the District will not accept the current configuration of park site Lot B because of concerns regarding privacy, safety and noise issues with residential lots adjoining the park site.

The District also requests that Lot A be reconfigured and/or relocated and increased in size. Due to the fact that the project in not providing adequate parkland to meet it's Quimby requirement, the District is not willing to accept the park site configuration with an off-site portion as proposed.

The District is willing to discuss park site sizes, configurations and/or alternate locations for Park Lots A and B with the Developer. Prior to recordation, the District shall review the final subdivision map and shall jointly determine final parkland dedication requirements and/or in-lieu fees with the Developer and County.

2. Park Site Infrastructure

The Developer shall assure that the parkland to be dedicated to the District is graded and improved pursuant to current County Standards. The District shall review and approve improvement plans adjoining the park sites identified as Lots A and B. Park site improvements include: adjoining streets with street lights fronting on the park, vertical curbs that extend 10 feet beyond the park site, a 6-foot wide attached concrete sidewalk on all park frontage streets and ADA compliant street crossings on all corners. Other park site infrastructure improvements include: electric, phone, storm drainage, sewer, and water stubs, connected water meters, and reduced pressure backflow preventers. Rain Bird Maxicom controllers, with telephone line and electricity shall be connected to the District's computerized irrigation system. In addition, all permit fees for the park site need to be paid including: building, sewer, water meter, water development and drainage. The District shall accept the completed park site after it has passed County inspections and we have received a current, clear title report.

3. Hedge Avenue Parkway Improvements

The District has identified Hedge Avenue as a designated Parkway Street which will include a 35 foot wide parkway corridor along the east side of the street. These parkway corridors, or linear parks, will provide a pedestrian oriented streetscape for enhanced comfort and safety for motorists, pedestrians and bicyclists linking neighborhoods with community parks, open space trails and schools. Proposed parkway corridor improvements will include a generous tree lined planted corridor with a 10 foot wide concrete sidewalk and an attached 2 foot wide decomposed granite jogging path, ample lighting, benches, distinctive crosswalks, and Class II bike lanes. The side of the Parkway Streets opposite the 35 foot wide Parkway Corridor (the west side of Hedge Avenue) is proposed to have houses facing the street with a tree lined boulevard and separated sidewalk.

The District will not accept ownership or maintenance of these landscaped lots. These lots will be the responsibility of the property owner/developer to care for and maintain.

The District requests that lots 244, 270, 306, and 371 have houses facing onto Hedge Avenue. The District shall work with the Developer and the County of Sacramento Planning and Transportation Departments in developing street and streetscape designs and construction standards for these Parkway Streets. In addition, the County should consider the need to provide continuous sidewalks across the private parcels that are not a part of this subdivision that will connect the areas with parkway improvements along the designated Parkway Street until full parkway improvements can be completed.

4. Landscape Corridors on Elk Grove - Florin Road

The District will accept the 25-foot wide landscape corridor lots along Elk Grove-Florin Road identified as Lots C, D, and E. The landscape corridor lots shall be dedicated to the District as a gift and shall be fully developed by the developer with plans and specifications to be approved by the District and pursuant to current County Standards. The District requires 6 foot high masonry soundwalls for all lots that back-up or side-on to the landscape corridor. All masonry soundwalls shall be treated with graffiti-resistant coating and the design approved by the District. Landscape corridors shall have a detached 6 foot wide concrete sidewalk with vertical curb and ADA compliant street crossings on all corners. A Type 3 curb is required at the back of sidewalks for landscaped areas (except turf). The irrigation system shall be installed according to specifications provided by the District. The District does not require subdivision entrance lighting but requests the installation of conduit to an electric box within the landscape corridor for future installation of lighting, should it become necessary. The District shall accept the completed landscape corridor lot after it has passed inspections and received a clear title report. The District shall maintain the landscape corridor through assessment district proceeds.

5. Landscape Corridor on Multi-Family Site

The District recommends the delineation of a 25 foot wide landscape corridor lot along the multi-family residential development on the east side of Elk Grove-Florin Road identified as Lot 519. The District will accept ownership of this landscape corridor lot, in order to provide a well maintained and continuous pedestrian access system throughout the District. The District will require the landscape lots to include a 6 foot high masonry soundwall. Other standard landscape corridor requirements as described in Comment 4 above would also apply.

6. Pedestrian Easements

The District does not accept ownership of the 10 and 13 foot pedestrian easements identified on the map along A, B, D, E, and G Drives and J Way It is

understood that it is the responsibility of the adjoining property owners to maintain these pedestrian easements consisting of a detached sidewalk and planter area.

7. Water Quality Treatment Lot – Landscape Corridor

The District requests the inclusion of a minimum 17 foot wide landscape corridor lot along Hedge Avenue on the eastern side of the 1.1 acre water quality treatment site identified as Lot F. This landscape corridor will maintain continuity of the Parkway street design identified for the western side of Hedge Avenue, including a 7 foot wide landscape planter and a 6 foot wide sidewalk, as well as an additional 4 foot wide landscape buffer. It will also connect to the parkway corridor lot in the adjacent Hedgerow project (control number 04-0906). The parkway corridor will eventually connect to the future Gerber–Elder Creek Bicycle/Pedestrian Trail, providing an essential bicycle/pedestrian linkage for the community.

The District also requests post and cable fencing along the back side of the 17 foot wide landscape corridor lot (at the west side of the 4 foot buffer between the detached sidewalk and the water quality treatment site) in order to provide increased safety for pedestrians. The landscape corridor improvements and fencing shall be constructed by the Developer and approved by the District. The District is willing to own and maintain this 17 foot wide landscape corridor lot and requests review of the landscape improvement plans for Hedge Avenue Parkway before final approval of improvement plans are given by the County.

8. Improvement Plan Review and Approval

Prior to improvement plan approval by the County, the Developer shall submit improvement plans for this subdivision to the District. The District shall review and approve all improvements consistent with District requirements pertaining to the park sites (Lots A and B), landscape corridors along Elk Grove – Florin Road (Lots C, D, E and Lot 519), landscaped pedestrian easements along Hedge Avenue Parkway, and the Water Quality Treatment Lot (Lot F).

9. Inclusion in Financing Districts

The Developer shall consent to the inclusion of this subdivision within the Florin-Vineyard Financing District, which will be a Landscaping and Lighting Assessment District or a Mello Roos Community Facilities District, and the Southgate Landscaping and Lighting Assessment District – Vineyard West Zone. The Developer shall be responsible for notification to all subsequent purchasers of parcels of land within this subdivision of the inclusion within said financing districts. These financing districts will be established by Southgate for purposes of funding maintenance and operations, additional park and recreation capital improvements, community center maintenance and operations, and park and recreation programs.

10. Florin-Vineyard Public Facilities Financing Plan

This subdivision will be included in the Southgate Recreation & Park District component of the future Florin-Vineyard Public Facilities Financing Plan as determined by the Sacramento County Board of Supervisors. In the absence of an approved County financing plan, the District recommends that the County Board of Supervisors annex this subdivision to an existing plan which meets the current park and recreation needs of District residents or otherwise require an appropriate funding mechanism that will address the park land dedication, maintenance and development requirements of the District. The District reserves the right to revise parkland dedication requirements and financing mechanisms to adapt to changes resulting from modifications to the plan by the County of Sacramento.

Thank you for your assistance. Should you have further questions please do not hesitate to contact me at 428-1171 ext. 29.

Sincerely,

Maureen Casey

Maureen Casey
Assistant General Manager

cc: Bruce Walters, MacKay & Somps
Daniel Lee, LK Dev One, LLC

August 9, 2007

SOUTHGATE
RECREATION & PARK DISTRICT

Sheldon
Administrative Headquarters
6000 Orange Avenue
Sacramento, CA 95823-3225
Phone 916-428-1171
Facsimile 916-428-7334
www.southgaterecandpark.net

Board of Directors
Rolfe P. Appel
John E. Cockerham
Edwin A. Smith
Christine Thompson
Shirley J. Wirth

General Manager
Ward Winchell

Assistant General Manager
Maureen Casey

Jeff Gamel
County of Sacramento
Planning & Community Development Department
827 – 7th Street, Rm. 230
Sacramento, CA 95814

RE: Comment Amendment on Control No. 04-RZB-SDP-SPP-EXP-AHS-0218 Gardner Parke Rezone, Tentative Subdivision Map, Special Development Permit, Exception, and Affordable Housing Plan

Dear Jeff;

Southgate previously submitted comments in a letter dated March 7, 2007 on Gardner Parke Rezone, Tentative Subdivision Map (dated August 30, 2006), Special Development Permit, Exception, and Affordable Housing Plan. The project is located on the east side of Gardner Avenue and on the west side of Elk Grove-Florin Road approximately 500 feet south of Florin Road, in the Florin-Vineyard "GAP" Community Plan area.

The District requests that the following amendment, which was approved by the Southgate Board of Directors at their August 8, 2007 meeting, be adopted by the County of Sacramento and included in the map requirements. Our comment amendment is as follows:

1. Quimby Requirments: Parkland Dedication/In-lieu Fees

Based on the 395 single-family residential lots and one RD-10 lot proposed for this subdivision, the estimated Quimby parkland dedication requirement for this project is approximately 5.97 acres. As stated in our March letter, the District is not willing to accept the 2.2 acre park site identified on the subdivision map as Lot A. Due to changes in the Gerber Creek Tentative Subdivision Map located immediately south of this project, the District is requesting relocation and reconfiguration of the park site for this subdivision. Ultimately, the District would like to expand the park to the south into the Gerber Creek Subdivision and achieve a neighborhood park site size 6-8 acres to better serve the

residents of both the Gardner Parke and Gerber Creek communities. The District requests full Quimby parkland dedication and for the park site to be located along the southern border of the project adjoining the Gerber Creek Subdivision.

The District is willing to discuss park site re-location and configuration with the Developer. Prior to recordation, the District shall review the final subdivision map and shall jointly determine final parkland dedication requirements and/or in-lieu fees with the Developer and County.

All other Gardner Parke Subdivision map comments and requirements from the District included in our comment letter dated March 7, 2007, remain the same. Should you have any questions please do not hesitate to contact me at 428-1171 ext. 29. Thank you for your assistance.

Sincerely,

Maureen Casey

Maureen Casey
Assistant General Manager

cc. Richard Kerr, Gerry N. Kamilos, LLC
Bruce Walters, MacKay and Somps

Letter 9

Attachment H

June 8, 2005

Jeff Gamel
County of Sacramento
Planning & Community Development Department
827 – 7th Street, Rm. 230
Sacramento, CA 95814

SOUTHGATE
RECREATION & PARK DISTRICT

Sheldon
Administrative Headquarters
6000 Orange Avenue
Sacramento, CA 95823-3225
Phone 916-428-1171
Facsimile 916-428-7334
www.southgaterecandpark.net

Board of Directors
Rolfe P. Appel
John E. Cockerham
Edwin A. Smith
Christine Thompson
Shirley J. Wirth

General Manager
Ward Winchell

RE: Control No. 04-RZB-SDP-0234 REVISED Gardner Country Estates Rezone and Tentative Subdivision Map

Dear Jeff;

Thank you for the opportunity to respond to the REVISED Rezone and Tentative Subdivision Map dated June 2004 which includes the rezone and division of 10.02 acres zoned AR-5 to RD-5 into 50 single-family residential lots. The project is located on the west side of Gardner Avenue approximately 3,000 feet south of Florin Road in the south Sacramento community.

Attached please find Resolution 04-179 adopted by our Board of Directors at their June 7, 2004 meeting. The District previously commented on this Tentative Subdivision map in June 2004, in Resolution 03-174. Since this proposed map is within the Florin-Vineyard GAP Community Plan Area, which has yet to be finalized, the District's comments are preliminary and the District reserves the right to comment in greater detail at a future date. The District requests that the comments, contained within the resolution be adopted by the County of Sacramento and included in the map requirements. Our comments are as follows:

1. Proposed Gardner Avenue "Parkway"

The Park District has identified Gardner Avenue and Hedge Avenue as designated "Parkways". They will include a generously planted median, pedestrian, bicycle and landscaped corridors. These Parkways will provide a "green" link from Florin Road south to the Elder-Gerber Creek Open Space Corridor, area schools and community park sites. These Parkways will provide a pedestrian oriented streetscape for enhanced comfort and safety for pedestrians as well as bicyclists. Improvements will include a wide planted median, boulevard trees, wide sidewalks, a separate off-road bike path, ample lighting, benches and crosswalks. The District shall work with the County of Sacramento Planning and Transportation Departments in developing street and streetscape designs and construction standards for these Parkways. Similar to landscape corridors, the District shall accept parkway land once it has been improved and passed inspections. The District agrees to own and maintain parkways through finance district funding. The District reserves the right to comment in greater detail on this map at a future date.

2. Masonry Soundwalls

The District requires six foot (6') high masonry soundwalls along landscape corridors. These masonry walls shall be treated with a graffiti-resistant coating, and the materials and design are to be approved by the District. The District requires 6' high masonry walls for all lots that back-up or side-on to the landscape corridors to provide consistency with other area landscape corridors. Soundwalls may or may not be required along the lots adjoining the proposed Parkway on Gardner Avenue (design to be determined).

3. Quimby Requirements; Parkland Dedication/In-lieu Fees

Based on the 50 single family lots proposed for this subdivision, the required Quimby parkland dedication would be approximately 0.69 acres. The District shall accept in-lieu fees for this subdivision.

4. Inclusion in Financing Districts

The Developer shall consent to the inclusion of this subdivision within the Florin-Vineyard Financing District, which will be a Landscaping and Lighting Assessment District or a Mello Roos Community Facilities District, and the Southgate District-wide Landscaping and Lighting Assessment District. The Developer shall be responsible for notification to all subsequent purchasers of parcels of land of the inclusion within said financing districts. These financing districts will be established by Southgate for purposes of funding maintenance and operations; additional park and recreation capital improvements; community center maintenance and operations; and park and recreation programs.

5. Florin-Vineyard Public Facilities Financing Plan

As determined by the Sacramento County Board of Supervisors, this subdivision will be included in the Southgate Recreation and Park District component of the Florin-Vineyard Public Facilities Financing Plan. In the absence of an approved County Plan, the District recommends that the County Board of Supervisors annex this subdivision to an existing plan which meets the current park and recreation needs of Southgate or otherwise requires an appropriate funding mechanism that will address the park land dedication, maintenance and development requirements of the Southgate District. The District reserves the right to revise parkland dedication requirements and financing mechanisms to adapt to changes resulting from modifications to the policy or the creation of a new plan by the County of Sacramento.

6. Opportunities for Future Comment

The District appreciates the opportunity to further comment on this map after additional technical studies, environmental analysis and infrastructure finance plans for this project area are completed in order to make any necessary adjustments.

Letter 9

Thank you for your assistance. Should you have further questions please do not hesitate to contact me at 428-1171 ext. 14.

Sincerely,

Judy Robinson
Planning and Facilities Manager

cc: Bob Lilly, Rose's Engineering

RESOLUTION 08-71

RESOLUTION OF THE BOARD OF DIRECTORS OF SOUTHGATE RECREATION & PARK DISTRICT APPROVING COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE FLORIN-VINEYARD GAP COMMUNITY PLAN PROJECT

SOUTHGATE
RECREATION & PARK DISTRICT

Sheldon
Administrative Headquarters
6000 Orange Avenue
Sacramento, CA 95823-3225
Phone 916-428-1171
Facsimile 916-428-7334
www.southgaterecandpark.net

Board of Directors
Rolfe P. Appel
John E. Cockerham
Edwin A. Smith
Christine Thompson
Shirley J. Wirth

General Manager
Ward Winchell

Assistant General Manager
Maureen Casey

WHEREAS, the District is in receipt of the Draft Environmental Impact Report (DEIR) for the entire Florin-Vineyard GAP Community Plan Project Area and several individual development projects currently proposed within the Florin-Vineyard GAP Community Plan Area; and

WHEREAS, the project consists of the adoption of the Florin-Vineyard GAP Community Plan and Public Facilities Financing Plan, General Plan Amendment, and Community Plan Amendment that will guide the development of the approximately 3,766 acres located in both the South Sacramento and Vineyard communities; and

WHEREAS, the DEIR includes equal-level analysis of two land use plans, the Citizen's Advisory Committee (CAC) Land Use Plan and the Sacramento County Planning Department (PD) Land Use Plan; and

WHEREAS, Southgate Recreation & Park District has prepared Community Plan program-level comments which discuss land use, public services (park and recreation facilities), hydrology and drainage (open space, trails and detention basins), transportation and circulation, biological resources, population and housing-related improvements addressed by DERA in the DEIR; and

WHEREAS, Southgate Recreation & Park District has also included a summary of project-specific comments related to Quimby parkland dedication requirements including the location of parks, open space, parkways and trails, for each individual development project currently in the DEIR.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Southgate Recreation & Park District hereby provides the comments contained in the attached letter to be considered by the Sacramento County Department of Environmental Review and Assessment and included in the Final Environmental Impact Report.

BE IT FURTHER RESOLVED that adequate response to the District's comments and incorporation of the proposed mitigation be conditioned as requirements for the certification of the Florin-Vineyard GAP Community Plan Project Environmental Impact Report.

PASSED AND ADOPTED by the Board of Directors of the Southgate Recreation and Park District this 19th day of May, 2009, by the following vote to wit:

AYES: Appel, Cockerham, Smith, Wirth

NOES:

Absent: Thompson

Rolfe Appel, Chair

Edwin Smith, Clerk

2

Regional Transit

Sacramento Regional Transit District
A Public Transit Agency
and Equal Opportunity Employer

Mailing Address:
P.O. Box 2110
Sacramento, CA 95812-2110

Administrative Office:
1400 29th Street
Sacramento, CA 95816
(916) 321-2800
(29th St. Light Rail Station/
Bus 36,38,50,67,68)

Light Rail Office:
2700 Academy Way
Sacramento, CA 95815
(916) 648-8400

Public Transit Since 1973

www.sacrt.com

Letter 10

RECEIVED
MAY 26 2009
DEPARTMENT OF ENVIRONMENTAL
REVIEW AND ASSESSMENT

May 21, 2009

Joyce Horizumi
Environmental Coordinator
County of Sacramento, DERA
827 7th Street, Room 220
Sacramento, CA 95814

NAME OF DEVELOPMENT: Florin Vineyard Gap DEIR

CONTROL NUMBER: 04-GPB-CPB-0096

TYPE OF DOCUMENT: DEIR for the Community Plan Project

The Florin Vineyard Gap Community Plan project consists of a proposal for 3,766 acres in the South County/Vineyard area. Two land use development options are being considered: 1) the Community Advisory Committee plan which would include a mix of land uses with a total of 8,950 residential units, and 2) the County Planning Department plan with a mix of land uses with a total of 12,066 units.

At this time, Regional Transit does not provide service to the area. The existing 1993 Transit Master Plan, 20-Year Vision for the area includes a proposal for **light rail** along the California Traction Railroad alignment; **enhanced bus** service on Florin Road, and along South Watt Avenue/Elk Grove – Florin Road; plus significant **local bus** service along Florin and Bradshaw Roads.

Regional Transit has scheduled the approval of the updated TransitAction Plan (Transit Master Plan) for July 27, 2009. The TransitAction Plan is a 30-year plan that proposes to remove the proposed light rail alignment from the California Traction Railroad right-of-way, and would designate Florin Road, South Watt Avenue/Elk Grove – Florin, and Bradshaw Roads as Hi-Bus service. Hi-Bus service may include Bus Rapid Transit, Enhanced Bus and Express Bus service options depending on the infrastructure and supportive land uses provided. The County's proposed General Plan Transportation Plan proposes transit service in the area similar to the TransitAction Plan service.

Regional Transit has reviewed the Draft Environmental Impact Report and offers the following comments, and recommended conditions of approval.

DEIR Comments

In General
RT notes that the date of the baseline for the DEIR is more than five years old. While the length of time that has been taken to complete this document is understood, it still places the DEIR at considerable risk of contest by the public. Many circumstances have changed since the baseline was developed, not least of which the state of the economy, the departure of several developers, and a sharply reduced potential development plan (less than 500 net acres). In addition, the County's land use plans have evolved beyond LU-14 to now draft LU-34 (see comment below).

Transit – pages 9-43 and 9-44
The Transit section needs to be expanded and improved to evaluate transit and land use options that will assist in reducing environmental impacts. For example, the DEIR finds that the proposed project will result in significant unavoidable traffic and air quality impacts. These impacts may be further reduced by strengthening transit through a more transit supportive land use plan for the area.

The environmental document also identifies significant cumulative impacts to Highways 99 and 50. These impacts may also be reduced with a stronger transit alternative.

The revised section would include an evaluation of a Hi-Bus system that links the project to major transit facilities such as the Watt/Manlove Light Rail Station to the north, and the Florin Road Light Rail station to the west, and communities in between. Traffic Signal Priority and queue jumps that reduce headways should be considered along Florin Road and ElkGrove – Florin/South Watt Avenue.

Greenhouse Gas Reduction Measures – pages 11-32 to 11-35
Many of the measures provided in the DEIR are unclear. For example one measure states: "Bus Service providing headways of 15 minutes of less for stops within ¼ mile: the Plan provides essential bus stop improvements." Another example: "Have at least three of the following on site and/or off site within ¼ mile: Residential Development, Retail Development, Park, Open Space, or Office." These sentences are fragmented and do not clearly state what is intended. This section needs to be edited to provide Greenhouse Gas Reduction Measures that are clear, understandable, implementable with viable benefits.

In addition, as interpreted, the stated measures (albeit a bit confusing) may, or may not be implementable. For example, the stated measures appear to include:
- bus service with 15 minute headways, with stops ¼ mile apart;
- high density residential, mixed or retail/commercial uses within ¼ mile of planned transit,
- linked activity centers and other planned infrastructure; and
- an average residential densities of 7 dwelling units per acre or greater.

When comparing these stated measures to the proposed land use plans, the proposed plans are not in compliance with the described measures.

C:\Temp\XPgrpwise\Florin Vineyard Gap Comments -draft 52109.doc

General Plan Land Use Policy LU-14 – page 4-41
The Table of Contents and the map on page 4-41 are listed as LU-14. One would expect a consistency assessment of the project to General Plan policy LU-14 to be in the section. Instead there is a general discussion on the SACOG Blueprint plan.

This section needs to have an assessment of General Plan LU-14 and the proposed LU-34 policies. These policies require transit-oriented land uses to be provided within ½ mile of the transit stops. Presuming the major transit stops would be at the significant intersections of Florin/Gerber and Elk Grove- Florin Roads, neither of the proposed land use plans include densities high enough to be consistent with either the existing LU-14, or with the draft LU-34 policy.

If the project is inconsistent with LU-14, the Board of Supervisors is required to make a determination to override the provisions of the existing transit supportive policy LU-14. It may also require some consideration of the proposed LU-34 and its implications as it is considered for adoption in the General Plan update.

Blueprint Plan – page 4-41
The discussion on page 4-41 provides a land use map per the SACOG Blueprint plan. The map and the proposed project are clearly inconsistent. For example, the Blueprint plan map clearly shows a large portion (approximately 1/3rd of the project area) as High Density Mixed Residential in the upper section of the planning area. The proposed plan identifies the High Density Residential Mixed Residential area as Industrial and possibly Open Space. The DEIR needs to include a comprehensive analysis that discusses the expectations of the Blueprint Plan, and how the proposed community plan compares. The analysis should include quantitative information for land uses, e.g. housing units, square footage of retail, commercial, office and industrial land uses. It should also include a comparison of floor area ratios (between the project and LU-14), and estimated employees per acre. The decision makers need to be able to compare the proposed project to what is prescribed in the Blueprint.

Appendix H of Appendix G of Volume III of the Florin Vineyard Gap Community Plan identifies expectations for the transit system. The Transit section states that "the provision of transit services will depend on communitywide land-use patterns, densities/intensities, street configurations, and the availability of capital and operating funds. It also indicates that RT had designated a conceptual 5-acre transit site to provide 500 spaces for carpools and buses." Further, it states: "The FVCP, however, currently does not designate a location for such a site. RT recommends that the 5-acre transit site (or equivalent) be identified within the community plan area so that it can best serve this community.

Recommended Conditions of Approval

Regional Transit staff has reviewed the proposed project and recommends the following conditions of approval:

C:\Temp\XPgrpwise\Florin Vineyard Gap Comments -draft 52109.doc

Conditions:

- Contact Robert Hendrix, RT Facilities (916) 649-2759 to determine where major bus shelters will be located in the project area. If determined appropriate (by RT) provide bus shelter pads as directed.

- The Greenhouse Gas Reduction Measures for the project include providing public transit incentives such as free, or low-cost monthly transit passes. The community shall form or join a Transportation Management Association (TMA). The TMA shall develop a transit pass subsidy program for residents and employers to the satisfaction of the Regional Transit's (Long Range) Planning Department prior to approval of any Final Map or approval of any building permit.

- Each developer within the community shall work with the TMA to create a transit pass subsidy program for residents and employees as appropriate to their project.

    - Employers shall provide a minimum of 50% discount off the monthly transit pass on an on-going basis.
    - Residents shall be offered transit passes at a 50% or greater discount for a period of six months or more after the initial sale of the home. The transit pass subsidy program shall be reviewed and approved by Regional Transit (Long Range) Planning Department prior to issuance of any building permit.

- Transit information shall be made available, through the TMA and homeowner's and business associations. Transit information such as route locations, service frequencies, nearby park and ride lots, bicycle routes, etc. shall be provided with real estate transactions. Transit information shall be displayed in prominent locations. These shall include places of employment, and within residential sales/rental offices. Contact Devra Selenis, Marketing Department at (916) 556-0112 for more information.

- Parking competes with transit usage. Therefore, parking should not exceed the required standards for the County. This should take LU-34 into consideration.

- A five-acre transit site (or equivalent) for a maximum of 500 parking spaces shall be identified on the Community Plan map. The site should be located near the intersection of Florin Road, and Elk Grove – Florin Road. The site shall be approved by Regional Transit (Long Range) Planning prior to approval of any Final Map, or any building permit.

- Retail/Commercial centers adjacent to existing or proposed transit stops shall include park and ride spaces to the satisfaction of Regional Transit's (Long Range) Planning Department prior to issuance of any retail/commercial building permit.

- Provide bicycle parking facilities (including bike racks/lockers, and bikeways) in accordance with the County requirements.

C:\Temp\XPgrpwise\Florin Vineyard Gap Comments -draft 52109.doc

- Physical barriers (walls, fences, berms, lot patterns, etc.) that restrict unimpeded pedestrian and bicycle access between land uses and transit stops shall be eliminated.

- Provide Traffic Signal Priority and queue jumps for enhanced bus service. Traffic Signal Priority and queue jumps shall be provided at all major intersections between Vintage Park Drive to the south and the Watt/Manlove Light Rail Station to the north; and at (a minimum) Florin Road and Florin - Perkins Road; and, Florin Road and Power Inn Road. The plans for these transit amenities shall be reviewed and approved by Regional Transit's (Long Range) Planning Department prior to the approval of any Final Map.

Thank you for the opportunity to comment. Please send any subsequent documents and hearing notices that pertain to this project as they become available. If you have further questions regarding these recommendations, please contact me at (916) 556-0506 or dsmith@sacrt.com.

Sincerely,

Don Smith,
Senior Planner

c: RoseMary Covington, AGM Planning and Transit Service Development, RT
Paul Marx, Planning Director, RT
Robert Hendrix, Facilities Supervisor, RT
Devra Selenis, Public Information Manager, RT

C:\Temp\XPgrpwise\Florin Vineyard Gap Comments -draft 52109.doc

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

Letter 11

Larry Greene
AIR POLLUTION CONTROL OFFICER

May 21, 2009

SENT VIA EMAIL

Joyce Horizumi
Environmental Coordinator
Department of Environmental Review and Assessment
827 7th Street, Room 220
Sacramento, CA 95814

RE: Florin Vineyard GAP Community Plan Project Draft EIR; 04-GPB-CPB-0096; SMAQMD# SAC200400141

Dear Ms. Horizumi:

Thank you for the opportunity for the Sacramento Metropolitan Air Quality Management District (District) to review and comment on the Draft EIR for the Florin Vineyard GAP Community Plan. Staff comments are as follows:

General:

1. Based upon discussions with Regional Transit staff, the District has concerns about the densities of the plan area being sufficient to successfully support the implementation of the transit related mitigation measures for both criteria and greenhouse gas emissions. In addition, more specifics regarding the transit facilities and amenities proposed for the Plan area should be described and included in design guidelines. These efforts can be facilitated by ongoing coordination with Regional Transit staff.

Air Quality, Chapter 10:

1. On Page 10-14, Mitigation Measure AQ-1 includes mitigation that the District recommends DERA staff consider replacing, either specifically or by reference, with our newly drafted *Basic Construction Emission Control Practices* (all projects) or *Enhanced Fugitive PM Dust Control Practices* (significant projects) can be found on our website at http://www.airquality.org/ceqa/ceqaguideupdate.shtml and will be forwarded to Department of Review and Assessment (DERA) staff via separate email.

2. On page 10-15, Mitigation Measure AQ-2 correctly foretells of a possible change to District screening standards (Table AQ-3). Consideration should be given to using the new construction screening table, to replace Table AQ-3, which is available on our website as part of the CEQA Guide Update found at http://www.airquality.org/ceqa/cequguideupdate/Ch3ConstructionNOxScreeningLevelsFINAL.pdf and will be provided to DERA staff via separate email.

3. On page 10-15, in order to adequately address future changes to construction mitigation the District recommends the inclusion of our new *Enhanced Exhaust Control Practices* (f.k.a. Standard Construction Mitigation) which includes new language addressing the development of a regulation to address construction emissions. This language is available on our website at http://www.airquality.org/ceqa/cequguideupdate/Ch3EnhancedExhaustControlPracticesFINAL.pdf and will be forwarded to DERA staff via separate email.

777 12th Street, 3rd Floor | Sacramento, CA 95814-1908
916/874-4800 | 916/874-4899 fax
www.airquality.org

4. On page 10-19, the first sentence reads "The SMAQMD has already approved the FVGCP area's AQ-15 Plan...;" however, the District does not have approval authority and recommends that "approved" be replaced with "endorsed".

5. On page 10-19, Mitigation Measure AQ-3 incorrectly notes the date of the Florin Vineyard GAP Community Plan Air Quality Mitigation Program (March 26, 2008), the date should read March 26, 2007.

Climate Change, Chapter 11:

1. **Impacts to the Project from Climate Change**
   The general discussion of the effects of climate change on the Sacramento region is fairly exhaustive and detailed. Understandably, it is difficult, at this time, to look in the future and foresee the exact impact of climate change on the project. The DEIR determines these impacts are "potentially significant" and no mitigation is required. The District believes it would be more prudent to call for mitigation which monitors the effects of climate change on the project over the build out of the project.

2. **Impact of the Project to Climate Change: Construction Emissions Discussion**
   The DEIR does not model the construction-related GHG emissions of the project, but determines they are a **significant and unavoidable impact** on climate change. The District recommends that these emissions be modeled using the same estimated construction information that was used for the NOx analysis. Those results should be included in the FEIR.

   The DEIR cites two construction-related GHG mitigation measures for this project (pg 11-29):
   1. Reduction of construction waste and building materials recycling
   2. Use of zero-emission construction equipment

   The reduction of construction waste measure (#1 above) is listed as a <u>project- specific</u> measure Indicating that proponents may choose to implement this measure or not. However, the District recommends both of these measures be applied Plan-wide and; further, that a performance standard be included similar to the ARB December, 2008 draft performance based thresholds. Those measures were:

   - <u>Recycle and or salvage at least 75%</u> of non-hazardous construction and demolition debris by weight (residential) or by weight and volume (commercial)
   - <u>Use recycled materials for at least 20% of construction materials</u>, based on costs for building materials, based on volume for roadway, parking lot, sidewalk and curb materials. Recycled materials may include salvaged, reused, and recycled content materials.

3. **Impact of the Project to Climate Change: Operational GHG emissions Discussion**
   The DEIR states there will be a **"Substantial increase"** in operational emissions when compared with existing conditions[1]. Table CC-3 indicates the two versions of the project would generate 303,306 MT CO2/year or 355.432 MT CO2/year. The actual supporting analysis, however, is not referenced. We suggest there be a reference to the analysis in Appendix B so that readers will know where to find supporting details.

[1] DEIR, Florin-Vineyard Gap, pg 11-30

Since the threshold of significance is 100% mitigation, the District recommends that a discussion of the feasibility of utilizing an offset mitigation program be included in this section.

4. **Operational Mitigation for GHG**
The mitigation measure for the significant and unavoidable GHG emissions states[2]:

MM CC1:
All development projects within the FVGCP shall comply with the requirements of the FVGCP Climate Change Plan, dated 11-06-08. Individual development projects shall provide the County of Sacramento Department of Environmental Review and Assessment with written documentation demonstrating compliance with the FVGCP-wide greenhouse gas reduction measures and incorporation of the project-specific measures that achieve a minimum of ten points from the list of approved greenhouse gas reduction measures.

This measure needs to be much more specific to be enforceable. For example, it does not state a trigger at which time compliance to the Plan needs to be determined. Would compliance be determined when tentative maps come through or when a construction permit is pulled or some other time? The measure states that DERA would receive some "written documentation". In order to assist DERA, the District recommends that the individual GHG Reduction Plans be required to have District endorsement. It may be that new measures and/or new ways of assessing them become available over time and the District would be an excellent source for that information and judgment. In addition, the measure should speak to some consequence if an individual GHG Reduction Plan is not approved. Consequences could be that the tentative map cannot be approved or the construction permit cannot be pulled if endorsement by the District and approval by the County is not received.

Finally, we suggest that DERA seek District endorsement of the overall GHG Reduction Plan much in the same way it seeks endorsement of the overall Air Quality Mitigation Plan for criteria pollutant reduction.

5. **Florin Vineyard Community Plan Area Plan Addressing Climate Change (GHG Reduction plan)**
The District appreciates the fact that the DEIR contains a separate GHG Reduction Plan and that efforts have been made to identify appropriate mitigation. However, we recommend that the Plan be revised, strengthened, and endorsed by the District. Specifically:

Section I- A: Measures #1-9 of the GHG Reduction Plan rely on version 1.1 of the District "Recommended Guidance for Land Use Emission Reductions" for criteria pollutants, a document which was updated in August 2007. This resulted in a number of measures being discarded or revised and point values updated. These changes were discussed with the proponent and the County at the meeting on May 4, 2009. Copies of the current Guidance were provided. To the extent the GHG Reduction Plan relies on the District guidance, the Plan should use the current District measures and point values. The use of the new measures and associated point values may result in a different emission reduction point value than the current 12.5.

Section I-B: The GHG Reduction Plan then uses a measure in the District's current Guidance which is appropriate.

Section II: This section contains mitigation measures from the Attorney General's list of recommended measures. Points have been assigned to all measures. However, it is not clear

[2] Ibid, pg 11-35

how the points were derived. The District recommends that there should be a clear demonstration of the nexus between the chosen measures and the percentage points given.

There is no appendix with an analysis that demonstrates that these measures actually will reduce the GHG project emissions by the amounts claimed. For example, why did the measure about developing an underused property receive 15%? That implies a reduction of .15*320,000 MT/year or 48,000 MT CO2. Using the "Recommended Guidance for Land Use Emission Reductions" point values at the beginning of the GHG Reduction Plan sets the expectation that the points claimed actually correspond to a percentage of reduction of the GHG impact. If there is no analysis of the points awarded for the measures in Section II, the District recommends it be clearly stated that the points in the plan are not related to percentages of actual emission reductions. The District cannot endorse a Plan that claims quantifiable emission reductions but does not provide an analysis of those conclusions.

6. **Plan-wide vs Project-specific measures**
   Measures in the GHG Reduction Plan are identified either as Plan-wide measures or Project-specific measures, ones which a proponent could pick or abandon.
   The Plan-wide measures in the GHG Reduction Plan are:
   1) District measures from "Recommended Guidance for Land Use Emission Reductions"
   2) installation of cool roofs (#3) 1 point
   3) maintain hydrologic character (#20) .5 points
   4) incorporate public transit into project design (#29) 8 points
   5) preservation of open space (#30) 2 points
   6) development of underused properties near existing public transportation and jobs (#31) 15 points

   The current Plan-wide measures seem appropriate; however, many other measures could conceivably be included as Plan-wide measures, particularly if incorporated into design guidelines. We recommend the proponents reconsider all the measures, including the following as Plan-wide measures:
   - The two construction material recycling measures referenced above
   - Energy efficiency measures- #1, 2, 5, 6 [3]
   - Water conservation and efficiency measures- # 13, 14, 15, 18, 21[4]
   - Solid waste measures- # 24
   - Transportation measures - # 34, 35, 36, 37, 38, 41
   - Public outreach- # 49

Project level comments, Volumes 2 and 4

1. The URBEMIS results for Florin Vineyard Retail 04-0143 and for Florin Vineyards 04-0207, were mistakenly confused and placed in the wrong order in Volume 4. In addition, URBEMIS runs for Taylor Properties at Gerber and Bradshaw Roads 04-0226; Caselman Ranch 04-0233; and Gasnakis & Kumar 04-0247 were inadvertently left out. As of this writing, District staff has obtained all missing URBEMIS runs from DERA staff for review.

2. Florin Vineyards 04-0207, beginning on Page Vol.2 8-25, this reference (and all others) to $14,300/ton for the off site construction mitigation fee should be replaced with language referring to "... the current rate of $16,000/ton of NOx or the prevailing rate in effect at time of construction." Also Appendix FV-2, the Construction Emissions Mitigation Fee Calculation spreadsheet, should be replaced with the more current version which uses the $16,000/ton rate.

[3] Florin Vineyard Community Plan Area Plan Elements Addressing Climate Change, pg. C-6
[4] Ibid, pg C-9 – C-10

In addition, all development projects are subject to any applicable District Rules that may be in affect at the time of construction. An attachment outlining some of those rules is attached for your information. For further details regarding all District rules refer to our website at www.airquality.org or contact our Compliance Assistance Hotline at (916) 874-4884.

Please contact the following members of my staff for questions: Charlene McGhee, cmcghee@airquality.org for any general questions and Jeane Berry Borkenhagen, jborkenhagen@airquality.org for questions regarding Climate Change.

Sincerely,

Larry Robinson
Program Coordinator
Land Use and Transportation Section

Attachment

c: Roy Brewer, Brewer Lofgren, LLP
Steve T. Johns, Brewer Lofgren, LLP
Cathy Hack, County of Sacramento, DERA
Charlene McGhee, Sacramento Metropolitan AQMD
Jeane Berry Borkenhagen, Sacramento Metropolitan AQMD

SMAQMD Rules & Regulations Statement (revised 1/07)

*The following statement is recommended as standard condition of approval or construction document language for **all** development projects within the Sacramento Metropolitan Air Quality Management District (SMAQMD):*

All projects are subject to SMAQMD rules and regulations in effect at the time of construction. A complete listing of current rules is available at www.airquality.org or by calling 916.874.4800. Specific rules that may relate to construction activities or building design may include, but are not limited to:

Rule 201: General Permit Requirements. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from SMAQMD prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the District early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc) with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a California Air Resources Board portable equipment registration.

Other general types of uses that require a permit include dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions.

Rule 403: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities or any other construction activity to prevent airborne dust from leaving the project site.

Rule 417: Wood Burning Appliances. Effective October 26, 2007, this rule prohibits the installation of any new, permanently installed, indoor or outdoor, uncontrolled fireplaces in new or existing developments.

Rule 442: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

Rule 902: Asbestos. The developer or contractor is required to notify SMAQMD of any regulated renovation or demolition activity. Rule 902 contains specific requirements for surveying, notification, removal, and disposal of asbestos containing material.

ENHANCED EXHAUST CONTROL PRACTICES

- The project shall provide a plan for approval by the District demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NO_X reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.

- The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and the lead agency and District shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supercede other District or state rules or regulations.

- If at the time of construction, the District has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with the District prior to construction will be necessary to make this determination.

ENHANCED FUGITIVE PM DUST CONTROL PRACTICES

SOIL DISTURBANCE AREAS

- Water exposed soil with adequate frequency for continued moist soil. However, do not overwater to the extent that sediment flows off the site.
- Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph.
- Install wind breaks (e.g., plant trees, solid fencing) on windward side(s) of construction areas.
- Plant vegetative ground cover (fast-germinating native grass seed) in disturbed areas as soon as possible. Water appropriately until vegetation is established.

UNPAVED ROADS (ENTRAINED ROAD DUST)

- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
- Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the District shall also be visible to ensure compliance.

BASIC CONSTRUCTION EMISSION CONTROL PRACTICES

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Letter 11

SMAQMD NO_X Construction Screening Levels

URBEMIS2007 Land Use Category	URBEMIS2007 Land Use	Screening Level	Units
Residential	Single family housing	180	du
Residential	Apartment low rise	980	du
Residential	Apartment mid rise	1,895	du
Residential	Apartment high rise	2,100	du
Residential	Condo/townhouse general	960	du
Residential	Condo/townhouse high rise	2,100	du
Residential	Mobile home park	360	du
Residential	Retirement community	305	du
Residential	Congregate care facility	960	du
Education	Day-care center, Elementary school, Junior high school, High school	1,307	ksf
Education	Junior college (2 yrs)	1,307	ksf
		14,205	students
Education	University/college (4 yrs)	14,205	students
Education	Library	1,307	ksf
Recreational	City park	60	acres
Recreational	Racquet club	1,307	ksf
Recreational	High turnover restaurant	1,307	ksf
Recreational	Hotel	2,614	rooms
Large Retail	Regional shopping center	1,307	ksf
Large Retail	Home improvement superstore	1,307	ksf
Retail	Strip mall	1,307	ksf
Retail	Supermarket	1,307	ksf
Retail	Convenience market with gas pumps	1,307	ksf
Commercial	General office building, Office park	1,307	ksf
Commercial	Medical office building	1,307	ksf
Commercial	Hospital	1,307	ksf
		1,590	beds
Industrial	Warehouse, Manufacturing, Industrial Park	625	ksf
Industrial	General light industry	625	ksf
		29	acres
		1,280	employees

Notes: Modeling performed using URBEMIS2007 Version 9.2.4
du = dwelling units; ksf = thousand square feet.

Modeling performed to determine construction screening levels assumed typical construction activities, including mass site grading, asphalt paving, building construction, and architectural coatings, but not demolition. These screening levels were developed assuming some overlap of construction phases (e.g., asphalt paving and mass site grading may occur simultaneously for 2 weeks).

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

LENNAR

Letter 12

May 22, 2009

RECEIVED
MAY 26 2009
DEPARTMENT OF ENVIRONMENTAL
REVIEW AND ASSESSMENT

Joyce Horizumi
County of Sacramento
Department of Environmental
Review and Assessment
827 7th Street, Suite 220
Sacramento, CA 95814

RE: DRAFT ENVIRONMENTAL IMPACT REPORT FOR FLORIN-VINEYARD GAP COMMUNITY PLAN PROJECT (Control Number: 04-GPB-CPB-0096; State Clearinghouse Number: 2005082045)

Dear Joyce:

Lennar is an owner of properties located in the North Vineyard Station Specific Plan (NVSSP) which is adjacent and surrounded on three sides by the Florin-Vineyard Gap Community Plan (FVGCP) area. The FVGCP DEIR identifies potentially significant environmental impacts to Hydrology and Drainage, and Transportation and Circulation, as well as other potentially significant environmental impacts which may also affect the NVSSP.

The North Vineyard Station Specific Plan and the Florin-Vineyard Gap Community Plan share many common roadway and drainage impacts and associated infrastructure requirements. These include a number of offsite roadway improvements as well as drainage improvements serving the Elder Creek and Gerber Creek watersheds. The NVSSP, because it preceded the FVGCP, was required to fully fund the overlapping roadway and drainage improvements. However, the FVGCP Financing Plan does not similarly provide full funding, or even proportionate funding for a number of these common improvements. In effect, the FVGCP appears to "piggy back" on some of the roadway and drainage mitigation required of the NVSSP. Since the two plan areas will likely develop concurrently, this not only raises issues of equity between the two plan areas, but also calls into question whether the required mitigation will occur when needed to address the identified impacts. Based on the interrelationship between the two plan areas, we submit the following comments to the FVGCP DEIR.

Transportation and Circulation

The Florin-Vineyard Gap EIR identifies potentially significant impacts on up to 36 roadway segments and potentially significant impacts on up to 35 intersections. The EIR identifies mitigation measures that would reduce impacts for many of the adversely impacted roadway segments and intersections. Mitigation Measure

Lennar Communities • 1075 Creekside Ridge Drive, Suite 110, Roseville, CA 95678 • Phone: 916-783-3224 • Fax: 916-783-3914
LENNAR.COM

TC-1 requires that all development projects within the FVGCP shall participate in the FVGCP Capital Improvement Program for the installation of roadway improvements. The Florin-Vineyard Gap Financing Plan (FVGFP) proposes a roadway fee component that funds some of the costs associated with the roadway and intersection improvements identified in the EIR as required mitigation.

The FVGFP correctly notes that there is considerable overlap between the roadway projects that benefit both the FVGCP and the NVSSP. The NVSSP Plan Fee Program, because it preceded the FVGCP, was required to fully fund the overlapping roadways and intersections. Many of these overlapping roadway improvements are also funded through the proposed FVGFP, but several are not. For these improvements, the FVGFP relies on the NVSSP to mitigate for the impacts of the FVGCP.

The NVSSP DEIR also identified specific triggers for each required roadway/intersection improvement. Individual projects located within NVSSP were subsequently conditioned with specific roadway/intersection improvement triggers. It does not appear that the FVGCP DEIR uses the same triggers for the common roadway improvements. This not only raises equity issues between the two plan areas, but calls into question the timing of the improvements relative to cumulative impacts.

These financing and timing issues are identified in the FVGFP which states that financing and timing conflicts will be fully resolved following approval of the FVGCP. However, there do not appear to be any specific mitigation measures or conditions that require the FVGCP to either fully mitigate for these common impacts (as required of the NVSSP) or fund its proportionate share of the common improvements required to mitigate the impacts of both plans.

As a property owner in the NVSSP, we believe there should be mitigation measures or conditions that require a proportionate contribution by the FVGCP towards the common roadway and intersection improvements between the NVSSP and FVGCP areas on a relative DUE basis. Alternatively, the FVGCP should be required to fully fund these common improvements (as was required of NVSSP) to set the stage for future reconciliation of the duplicative funding between the plan areas and to ensure that the impacts of the FVGCP will be mitigated independent of the development of the NVSSP.

It is also important to resolve the roadway improvement timing issues (triggers) since NVSSP has specific triggers for common improvements which do not appear to be applied to the FVGCP. We believe that the triggers for common improvements should apply to the FVGCP and that this requirement should be spelled out in mitigation measures or conditions of approval. We want to avoid a potential situation where development projects in the FVGCP area are allowed to proceed but development projects in the NVSSP are being held up because of

triggers even though both projects are impacting the same roadway/intersections.

At a minimum, we request that a Mitigation Measure and Zoning Condition be placed on the FVGCP that requires resolution of the financing issues related to the overlapping roadway and intersection improvements and the timing of those roadway and intersection improvements. Failure to address overlapping and potentially inconsistent transportation requirements and the timing of the construction of such improvements (e.g., triggers) could result in short term significant environmental impacts for which feasible mitigation may otherwise be available. The Mitigation Measure and Zoning Condition should require resolution of these issues prior to Final Subdivision Map approval, Improvement Plan approval for the Subdivision Improvements or Building Permits, whichever occurs first.

Hydrology and Drainage

The FVGCP DEIR and Finance Plan appear to allow the FVGCP to "piggy back" on significant common drainage improvements required to be implemented by the NVSSP for Elder and Gerber Creeks. The FVGFP correctly notes that a large portion of the FVGCP is located in the Elder-Gerber Creeks shed and is dependent on channel improvements identified in the NVSSP Drainage Master Plan and Public Facilities Financing Plan. However, neither the FVGCP DEIR nor the FVGFP include a requirement or mechanism to fund a proportionate share of these common drainage improvements beyond the payment of SCWA Zone 11A fees. Both the FVGCP and the NVSSP areas are located within the boundaries of SCWA Zone 11A. Developments located within Zone 11A are required to pay fees that are meant to fund region-wide trunk drainage, drainage channel and detention basin construction and related improvements. However, the Zone 11A fees do not cover all costs associated with the implementation and construction of the improvements required by the NVSSP Drainage Master Plan, and the associated wetland permit for improvements to Gerber and Elder Creek necessary to allow development within both plan areas. For example, Zone 11A fees do not cover the cost for environmental permitting, mitigation, and acquisition of buffers and preserve lands. Recognizing this discrepancy in funding the true costs associated with the Drainage Master Plan, Sacramento County established a Supplemental Drainage Fee for NVSSP. The NVSSP Supplemental Drainage Fee funds the costs of acquisition of the required channel and buffer land, environmental mitigation costs and other costs not reimbursed by Zone 11A. The NVSSP Supplemental Fee funds drainage improvements that are located within both plan areas and provide a direct benefit to the FVGCP.

As a property owner in the NVSSP, we believe that development in the FVGCP that is served by common improvements to Elder and Gerber Creeks should be required to fund a proportionate share (on a per acre basis) of the full cost of

these improvements, including associated environmental mitigation. While the DEIR identifies a "Stand Alone" option which would not require completion of the NVSSP drainage improvements, this "Stand Alone" option requires that the area south of Gerber Road and west of Bradshaw Road remain undeveloped. This is not a likely option, or consistent with the Project Purpose. The County, for purposes of the EIR analysis, must assume that this area will develop, and accordingly, that the Project will rely heavily on completion of the NVSSP drainage improvements. (see also the FVGFP,pg.8-30 which clearly states that the NVSSP drainage improvements will be required for development of the FVGCP.) Failure of the FVGCP to pay its fair share of the NVSSP drainage improvements which are clearly required for adequate mitigation of the FVGCP drainage impacts, could cause a delay in the construction of the NVSSP drainage improvements and accordingly, potential unmitigated significant drainage impacts due to development of the FVGCP could ensue.

At a minimum, we request that a Mitigation Measure and Zoning Condition be required for the FVGCP properties requiring payment of the NVSSP Supplemental Drainage Fee. In addition, the NVSSP Drainage Master Plan for Elder and Gerber Creeks divides the required improvements into logical segments. Any development within the NVSSP that drains into a segment, must construct the entire segment prior to development. We believe that the same requirement should be imposed on development within the FVGCP.

We appreciate this opportunity to comment on the FVGCP DEIR. We have also included an agenda from a recent meeting that we had with Staff that further outlines our concerns. We reserve the right to comment further on the FVGCP as the project proceeds through the public hearing process.

Very truly yours,

Bob Shattuck, Lennar

Letter 12

Proposed Discussion Items

FLORIN VINEYARD COMMUNITY PLAN DEIR

RE: SHARED INFRASTRUCTURE WITH NORTH VINEYARD STATION

May 13, 2009
Bob Shattuck, Lennar Communities

Roadways and Intersections

There are significant common roadway and intersection improvements required for both the FVCP and NVSSP.

1. **Issue:** How do the mitigation measures for the FVCP require a fair distribution of costs for common roadway and intersection improvements with NVS?

   Concern: We found language in the finance plan saying the cost of common improvements would be reconciled in a future update of the NVSSP roadway fee after approval of the FVCP and the Finance Plan. But, it is not clear to us who will be responsible for this work, when it will be done and what happens if it is not. We could not find any mitigation measures that directly address this issue or even require the future reconciliation.

   Recommendation: Our first choice would be to have a mitigation measure that requires the FVCP to pay a fair share of identified common roadway and intersection improvements based upon relative DUE's between the two plan areas. The proposed finance plan should include these costs. At a minimum, in order to avoid future conflicts and confusion, there should be a mitigation measure clearly stating the requirement and basis for the reconciliation and how and when it will occur (i.e. prior to approval of improvement plans, small lot final map, or building permit, whichever occurs first).

2. **Issue:** How do the mitigation measures fairly address the timing and advance funding requirements (i.e. triggers) for common roadway and intersection improvements relative to development of the plan?

   Concern: Same as #1 above.

   Recommendation: Timing (triggers) and advance funding requirements for common improvements should be addressed in the EIR and Finance Plan prior to adoption. At a minimum there should be a mitigation measure clearly stating the how and when the issue will be addressed (i.e. prior to approval of improvement plans, small lot final map, or building permit, whichever occurs first).

Drainage

Portions of the FVCP share major drainage improvements to Elder and Gerber creeks with the NVSSP.

1. **Issue:** How do the mitigation measures fairly address the cost and advance funding requirements for common drainage improvements with NVSSP (Elder and Gerber Creek)?

   Concern: While the proposed Finance Plan acknowledges that "*development located in the Elder/Gerber Creek shed is dependent on channel improvements identified in the North Vineyard Station Specific Plan Public Facilities Financing Plan*", we could find no mitigation measures in the DEIR or requirements in the financing plan to participate in the costs of these improvements, other than payment of Zone 11A fees. The cost of the improvements significantly exceeds those covered by Zone 11A.

   Recommendation #1: A mitigation measure should require that the portions of the FVCP located in the Elder/Gerber Creek shed should be subject to the NVSSP Supplemental Drainage Fee or otherwise fund a proportionate share of the costs on an acreage basis. These costs should be reflected in the Finance Plan and should include all costs not covered by Zone 11A.

   Recommendation #2: A mitigation measure should require the construction of appropriate segments of the improvements to Elder and Gerber creeks with any development that drains into an identified segment, similar to what was required in the North Vineyard Station Drainage Master Plan.

Letter 13

PETROVICH DEVELOPMENT COMPANY

May 22, 2009

Joyce Horizumi
County of Sacramento
Department of Environmental
Review and Assessment
827 Seventh Street, Room 220
Sacramento, CA 95814

RE: Florin-Vineyard GAP Community Plan DEIR Comment letter, 04-GPB-CPB-0096

Dear Ms. Horizumi,

Petrovich Development Company is owner and developer of Vineyard Market Square (APN 121-0010-051, control number 04-RZB-PMR-AHS-0209). We have reviewed the DEIR and request that the document be modified to evaluate a rezone of the 37 acre Vineyard Market Square project from AR-10 agricultural-residential to 37 acre SC Shopping Center. This request removes the 10 acre RD-20 residential component from this project.

It is our intention to develop this property as 100% commercial. This will provide a stronger jobs housing balance, community commercial uses conveniently located to the residents so they do not have to travel great distances (the plan currently consists of neighborhood retail sized parcels), we strongly believe this is the highest and best use for this property and will provide the County of Sacramento with a greater sales tax revenue base. The General Plan also mandates that properties at major intersections are required to be as intensely developed as possible and 100% commercial is the most intense use of the property. There should be approximately 40 sf of commercial space for every 1 person in the trade area. This trade area is significantly underserved.

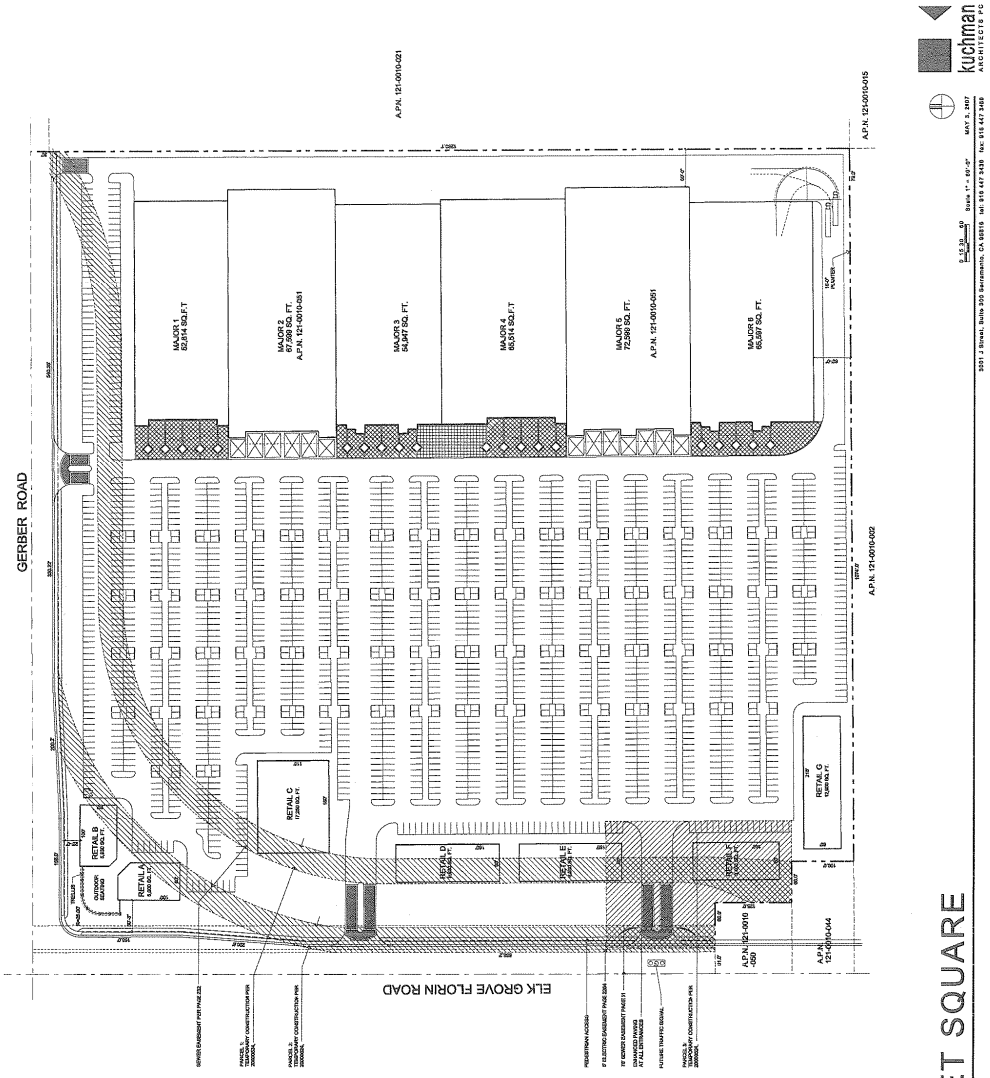
Attached is a site plan showing a conceptual layout of a 37 acre shopping center.

Sincerely,

Jim Migliore
Senior Development Manager

5046 Sunrise Blvd., Suite One • Fair Oaks, CA 95628-4945 • (916) 966-4600
Facsimile (916) 966-4005

Letter 13



PROJECT SUMMARY

MAJOR 1	47,414	SQ. FT.
MAJOR 2	97,769	SQ. FT.
MAJOR 3	54,947	SQ. FT.
MAJOR 4	65,914	SQ. FT.
MAJOR 5	72,589	SQ. FT.
MAJOR 6	65,597	SQ. FT.
RETAIL A	5,800	SQ. FT.
RETAIL B	15,000	SQ. FT.
RETAIL C	17,250	SQ. FT.
RETAIL D	9,000	SQ. FT.
RETAIL E	10,000	SQ. FT.
RETAIL F	9,400	SQ. FT.
RETAIL G	12,900	SQ. FT.
TOTAL RETAIL SQ. FT.	443,769	SQ. FT.
PARKING REQUIRED 4.5-1000 SQ. FT.	1,996	SPACES
PARKING PROVIDED	2,017	SPACES

kuchman ARCHITECTS PC

3251 J Street, Suite 300 Sacramento, CA 95816 tel: 916 447 3430 fax: 916 447 3480

Scale 1" = 60'-0" MAY 3, 2007

VINEYARD MARKET SQUARE

Sacramento, California

Letter 14

Hack. Catherine

From: Roy Brewer [rbrewer@brewerlofgren.com]
Sent: Tuesday, May 26, 2009 12:31 PM
To: Hack. Catherine
Cc: rafter@gillumco.com; Steve Johns
Subject: Fw: DEIR Comments
Attachments: Comnt Ltr to DEIR ERG 26 May 09.docx

Hi Cathy,

Here are comments on the DEIR for Florin Vineyard. I'll follow up with a hard copy in a day or so.

Thanks.

Roy

----- Original Message -----
From: Roy Brewer
To: Roy Brewer
Sent: Tue May 26 08:17:29 2009
Subject: DEIR Comments

Roy E. Brewer

Brewer Lofgren LLP
ATTORNEYS AT LAW

3727 Sutter Hill Lane
Carmichael, California 95608
916.425.4477 Mobile
916.944.8897 Facsimile
rbrewer@brewerlofgren.com <mailto:rbrewer@brewerlofgren.com>
www.brewerlofgren.com <http://www.brewerlofgren.com/>

5/27/2009

Letter 14

Comments to Florin-Vineyard GAP Community Plan (FVGCP) DEIR

I. Improvements within the City of Sacramento

There are numerous roadway segments and intersections identified as requiring mitigation that are either wholly or partially within the City limits of the City of Sacramento and therefore under their jurisdiction. Some of the improvements comport with the City of Sacramento's General Plan but several require roadway sections that are larger than those designated in that General Plan. In any case, the timing of those improvements are beyond the control of either the County of Sacramento or the applicant group. To our knowledge the City does not have a fee program or other funding mechanism to fund these improvements within their jurisdiction. In addition, it is also our belief that the City of Sacramento does not have a funding program or mechanism to assist with the funding of roadway projects within the adjacent County of Sacramento for impacts associated with development in the City. A recent example is the construction of the Fruitridge Road/South Watt Avenue intersection. Three of the four quadrants of that intersection are within the City of Sacramento but it is our understanding that the City paid considerably less than their proportionate share of that improvement. These mitigation measures are contained in MMs TC-1 through TC-4.

In addition to these improvements being at least partially included in the Florin-Vineyard GAP Community Plan Financing Plan, most are also included as roadway segments and intersections to be improved in the Sacramento County Transportation Development Fee Program (SCTDF). The developments within the Florin-Vineyard GAP Community Plan are subject to the payment of this SCTDF. When the implementation financing plan for the FVGCP is adopted, there will be adjustments to the fees to eliminate the double funding currently mandated but the fact remains that Sacramento County landowners are funding improvements within the City of Sacramento without reciprocal programs in the City for improvements within Sacramento County. According to Table A-1 in the FVGCP Financing Plan, the GAP's share of these improvements cost approximately $37,355,000.

Because the City of Sacramento improvements mentioned above are within their jurisdiction and therefore beyond the control of either the

County of Sacramento or the GAP applicant group and there is no reciprocal program to fund required county improvements, we request that the Board override the associated mitigation measures and not require that they be included in the GAP financing plan. A more logical funding mechanism for these required improvements may be the new Measure A program which collects funds from both the city and the county on an equal basis.

II. Improvements to State/Federal Highways (SRs 16 & 50 and U.S. 99)

The financing plan prepared for the Florin-Vineyard GAP Community Plan includes the construction of two segments of State highway 16 (Jackson Road) and five major intersections along these segments. The GAP's share of these improvements is identified as approximately $23,500,000 in Table A-1 of the project's draft financing plan. In addition, District 4 (where the GAP plan is located) of the SCTDF is responsible for funding more than $78,000,000 worth of improvements on Highway 16. Again there is likely some duplication of funding between the SCTDF and the GAP financing plan but that will be resolved with the adoption of a Final Financing Plan for the GAP. The mitigation measures requiring improvements to State Highway 16 are contained in the extensive list of projects detailed in MMs TC-1 through TC-4. Finally MM TC-5 requires fair share contributions to improvements for both SR 99 and U.S. 50 citing a number of projects that could be the plan area's responsibility.

While it is acknowledged that the project does contribute significant traffic to particularly SR 16, there is no adopted fee or policy to deal with the impacts to that roadway or to SR 99 and U.S. 50. Before those impacts and hence fair share costs are assigned to the GAP plan area all the funding sources for these roadways should be identified and a uniform policy developed for mitigation for those roadways that have historically been a state funding responsibility. We are aware of CalTrans's requests for funding to their facilities in various locations in Sacramento County and around the state but to our knowledge no uniform policy has been set with criteria for establishing such funding. No funding amounts have been determined for improvements to SR 99 or U.S. 50 and MM TC-5 is therefore an open check book for State Highway improvements. As with the city roadways, neither Sacramento

County nor the applicant group has control over the proposed improvements.

We therefore request that the impacts to SR 16, SR 99 and U.S.50 be overridden and a uniform program be developed (possibly within the SCTDF program) to address these broader ranging issues. These costs should be deleted from the GAP draft financing plan.

III. Improvements shared with the City of Elk Grove

Calvine Road is a shared facility with the City of Elk Grove (the centerline of Old Calvine Road is the northerly Elk Grove city limit). Therefore should the city of Elk Grove have an equal funding responsibility with Sacramento County? Given the various funding mechanisms available to be applied is the GAP responsible for almost $3,000,000 worth of improvements to that somewhat distant offsite roadway? It is difficult to determine how and/or if fair share funding is being accomplished in Table A-1 of the GAP draft financing plan.

We request that the GAP contribution to Calvine Road and associated intersections be evaluated and if appropriate the funding provided in a more regional funding mechanism such as Measure A or the SCTDF.`

Letter 15

COUNTY OF SACRAMENTO
INTER-DEPARTMENT CORRESPONDENCE
DEPARTMENT OF WATER RESOURCES

RECEIVED
MAY 26 2009
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

MEMORANDUM

Date: May 26, 2009

To: Catherine Hack
Department of Environmental Review and Assessment.

From: Bob Gardner BG
Water Supply – Zone 40 Planning and Development.

Subject: DEIR Florin-Vineyard Gap Community Plan Project.

04-RZB-PMR-0139	(Champion Oaks)
04-RZB-0143	(Florin Vineyard Retail Center)
04-RZB-PMR-0204	(Florin/Bradshaw NE)
04-RZB-PMR-AHS-0209	(Vineyard Market Square)
04-RZB-PMR-ABE-0226	(Taylor Properties at Gerber and Bradshaw Roads)

Water Supply has reviewed the Draft Environmental Impact Report for the Florin-Vineyard Gap Community Plan Project Control Number: 04-GPB-CPB-0096 Dated April 2009, and submits the following Comments to be added to the "Agency-Recommended Conditions of Approval" for each of the projects listed above:

- Water supply will be provided by the Sacramento County Water Agency, per the provisions of the Master Water Study for the Florin Vineyard Community Plan Dated December 2005.
- Provide public water service to each building.
- All water lines shall be located within a public right-of-way or within easements dedicated to SCWA. Easements shall be reviewed and approved by Sacramento County Water Agency prior to Improvement Plan approval or Final Map approval.
- Destroy all abandoned wells on the proposed project site in accordance with the requirements of the Sacramento County Environmental Health Division. Clearly show all abandoned/destroyed wells on the improvement plans for the project. Prior to abandoning any existing agricultural wells, applicant shall use water from agricultural wells for grading and construction.
- Prior to the issuance of building permits require water intensive commercial and industrial building permit applicants to conduct a water use efficiency review and submit the findings in required environmental documentation for the project.

- Prior to the issuance of building permits require efficient cooling systems, re-circulating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

- Prior to the issuance of any building permits for the project, the project developer/owner shall pay Zone 40 development fees applicable at the time of building permit issuance in accordance with Title 4 of the Sacramento County Water Agency (SCWA) Code.

- Prior to the issuance of any building permits for the project, the project shall conform to the specific provisions of the Sacramento County Landscape Water Conservation Ordinance (Chapter 14.10 of the Sacramento County Code) to the satisfaction of the County Landscape/Oak Tree Coordinator.

If you have any questions, please feel free to call me at (916) 874-8433 or email me at GardnerB@SacCounty.net

Zone 40: Yes
Zone 41: Yes

Cc: file

Letter 16

COUNTY OF SACRAMENTO
INTER-DEPARTMENT CORRESPONDENCE
DEPARTMENT OF WATER RESOURCES

MEMORANDUM

RECEIVED
MAY 26 2009
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

Date: May 26, 2009

To: Catherine Hack
Department of Environmental Review and Assessment

From: Bob Gardner 16
Water Supply – Zone 40 Planning and Development

Subject: DEIR Florin-Vineyard Gap Community Plan Project.

04-RZB-SDP-UPP-AHS-0177	(Legends Meadows)
04-RXB-SDP-SPP-AHS-0187	(Gerber Creek)
04-RZB-SDP-AHS-0205	(Portico Acres)
04-RZB-SDP-AHS-0206	(Lelani Village)
04-RZB-SDP-SPP-AHS-0207	(Florin Vineyards)
04-RZB-SDP-SPP-UPP-ABE-AHS-0208	(Villages at Elder Creek Estates)
04-RZB-SDP-AHS-0217	(Dakuaku)
04-RZB-SDP-SPP-EXP-AHS-0218	(Gardner Parke)
04-RZB-SDP-SPP-AHS-0219	(Shehadeh)
04-RZB-SDP-AHS-0234	(Gardner Country Estates)
04-RZB-SDP-AHS-0241	(Phan Court)
04-RZB-SDP-0247	(Gasnakis & Kumar)
04-RZB-PMR-0412	(Millers Family Trust)
04-CZB-PMR-0423	(Martin)
04-RZB-AHS-0449	(7415 Gardner Avenue)
04-RZB-PMR-0450	(Black)
04-RZB-SDP-AHS-0457	(Rancho Siesta)
04-RZB-SDP-SPP-AHS-0471	(Vintage Ranch)
06-RZB-SDP-SPP-AHS-0709	(Champion Oaks)
07-RZB-SDP-UPB-SPB-AHS-0604	(Village at Stonebourne)

Water Supply has reviewed the Draft Environmental Impact Report for the Florin-Vineyard Gap Community Plan Project Control Number: 04-GPB-CPB-0096 Dated April 2009, and submits the following Comments to be added to the "Agency-Recommended Conditions of Approval" for each of the projects listed above:

- Water supply will be provided by the Sacramento County Water Agency, per the provisions of the Master Water Study for the Florin Vineyard Community Plan Dated December 2005.

- Provide separate public water service to each parcel. All water lines shall be located within a public right-of-way or within easements dedicated to SCWA. Easements shall be reviewed and approved by Sacramento County Water Agency prior to Improvement Plan approval or Final Map approval.

- Destroy all abandoned wells on the proposed project site in accordance with the requirements of the Sacramento County Environmental Health Division. Clearly show all abandoned/destroyed wells on the improvement plans for the project. Prior to abandoning any existing agricultural wells, applicant shall use water from agricultural wells for grading and construction.

- Prior to the issuance of building permits pay the Surface Water Component Fee for Private Wells as outlined in Title 4, Section 4.45.005 of the Sacramento County Water Agency (SCWA) Code.

- Plumbing systems for residential units shall be stubbed to the street right-of-way to facilitate future connections in the event of future public water service.

- Test all water wells for arsenic at the time of construction.

- The property owners shall participate in future groundwater management and well protection programs adopted by the Sacramento County Water Agency that are applied uniformly throughout Zone 40.

The following requirements are project conditions not subject to tentative map approval:

Prior to the issuance of any building permits for the project, the project developer/owner shall pay Zone 40 development fees applicable at the time of building permit issuance in accordance with Title 4 of the Sacramento County Water Agency (SCWA) Code.

Prior to the issuance of any building permits for the project, the project shall conform to the specific provisions of the Sacramento County Landscape Water Conservation Ordinance (Chapter 14.10 of the Sacramento County Code) to the satisfaction of the County Landscape/Oak Tree Coordinator.

If you have any questions, please feel free to call me at (916) 874-8433 or email me at GardnerB@SacCounty.net

Zone 40: Yes
Zone 41: Yes

Cc: file

Letter 17

James P. Pachl
Attorney at Law
717 K Street, Suite 529
Sacramento, California, 95814
Tel: (916) 446-3978
Fax: (916) 244-0507
jpachl@sbcglobal.net

RECEIVED
MAY 26 2009
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

May 26, 2009

Joyce Horizumi, Environmental Coordinator
Cathy Hack, Senior Environmental Analyst
Department of Environmental Review
Sacramento County
827 7th Street, Room 220
Sacramento, CA 95814

Comments of Friends of the Swainson's Hawk regarding the DEIR of the proposed Florin-Vineyard Gap Community Plan

Dear Ms. Horizumi and Ms. Hack,

This letter is submitted on behalf of my client Friends of the Swainson's Hawk, Inc. The Swainson's Hawk ("SWH") is listed as threatened under the California Endangered Species Act. My client supports infill development and does not oppose urban development of the proposed Community Plan area. However, my client must oppose the Community Plan as presented due to serious deficiencies in the DEIR's analysis of impacts of Swainson's Hawk and consequent inadequacy of measures to mitigate for project impacts upon Swainson's Hawk foraging habitat. The findings that the Community Plan and the specific projects discussed within the DEIR will mitigate impacts to less than significant are not supported by substantial evidence.

The Community Plan area is comprised of open fields with some individual structures and small clusters of structures scattered irregularly throughout, mostly along existing roads and often separated by considerable distances. Much of the area is presently zoned AR-10 or A-10, with some AR-20, A-20, and AR-5, but aerial photographs in the DEIR show that most of the land presently zoned AR-20, A-20, AR-10, A-10, and AR-5, is presently undeveloped fields, much of which is not interrupted by structures. The DEIR correctly states that the open space is foraging habitat for nesting Swainson's Hawks, listed as threatened under the California Endangered Species Act.

1. Sacramento County "Swainson's Hawk Ordinance" ("Ordinance")

As a means to comply with CEQA, Sacramento County enacted its Ordinance 16.130 et seq., "Swainson's Hawk Impact Mitigation Fees." The Ordinance applies to any request for change of land use designation from an agricultural designation to AR-2 or AR-5 zoning or to any urban designation, to subdivide five acres or more contiguous acres zoned as an urban designation to

less than five acres. If (a) such land is determined through the CEQA process to provide suitable foraging habitat for the Swainson's Hawk and (b) it is determined through the CEQA process that the request will result in a significant impact or significant cumulative impact on Swainson's Hawk foraging habitat for which mitigation measures are necessary to reduce that impact to less than significant, then the applicant shall preserve, either through (1) direct preservation of SWH foraging habitat, by means of conservation easement or fee title, at the ratio of 1 acre for each acre impacted, or (2) for projects impacting less than 40 acres, may have the option to pay a mitigation fee determined by the County to be sufficient to acquire 1 acre of land suitable for SWH foraging habitat for each acre impacted.

The Ordinance also requires that direct preservation of SWH foraging habitat by means of preservation of SWH foraging habitat or payment of the mitigation fee per the Ordinance shall be required either (a) prior to any site disturbance such as clearing or grading, or (b) prior to recordation of a final map, whichever occurs first, or (c) upon the final adoption of a zoning ordinance if only a rezone was approved. (Section 16.130.060).

There are other provisions, but they are not relevant to this discussion.

The one-to-one mitigation ratio, accompanied by compliance with other provisions of County Ordinance 16.130 et seq., has generally been acceptable to the California Department of Fish and Game as compliance with CEQA and a means to mitigate impacts to less than significant, when applied to new development within the existing County Urban Service Boundary.

Where the SWH foraging value of a parcel has been reduced by the presence of a pre-existing rural residential home and outbuildings, the biologically-sound solution would be a site-specific determination by a qualified raptor biologist of the SWH foraging value remaining on the property. This could be done, for instance, by determining that several acres adjacent to the rural residential home is of minimal SWH foraging value due to human presence and activity, and that the remainder of the parcel be mitigated at the full one-to-one mitigation ratio. Such a site-specific biological determination would be consistent with CEQA.

Unfortunately, in this DEIR the County choose to rely on the mis-use of a County policy intended for rural-residential parcel splits for continuing rural-residential use

2. Misuse of Sacramento County Swainson's Hawk Mitigation "Methodology"

In 2005 and 2006, there was concern that the one-to-one SWH mitigation ratio was too expensive for "mom and pop" landowners seeking to split a rural-residential parcel of 20 acres or less into smaller parcels (usually 5 or 10 acres), each of which would be allowed only one rural-residential dwelling plus an accessory dwelling for farmworkers per County zoning code. There was also concern that the presence of a rural residential dwelling and outbuildings on parcels of less than 40 acres would reduce the SWH foraging value of the parcel due to human presence and activity.

The result was the adoption, by County DERA, of a "methodology" - not an Ordinance - memorialized as "Swainson's Hawk: Environmental Impacts and Issues, a Guide for the Unincorporated Areas of Sacramento County" which is summarized in the DEIR pp. 12-35, -36, and used in this DEIR to calculate mitigation for projects impacts to SWH foraging arising from

this Community Plan and individual projects included in this DEIR. A copy of the Methodology is attached as EXHIBIT A.

The Methodology says that zoning of AG-40 and larger has 100% habitat value, AG-20, IR and UR has 75% habitat value, A-10, AR-10, AR10(F) have 25% of habitat value, and commercial, industrial residential, and AR-5 and smaller have no habitat value. For example, a 20-acre property being rezoned from AG-20 to AR-10 would be assessed an impact of 50% based on a starting SWH habitat value of 75% and ending value of 25%, resulting in a mitigation requirement of 10 acres for rezoning from AG-20 to Ag-10. A 10-acre property being rezoned from AR-10 to AR-5 would be assessed an impact of 25% based on a starting value of 25% and an ending value of zero.

This can arguably be biologically valid ONLY IF the land has been parcelized as permitted under the applicable Zone and has been developed to the extent allowed by the applicable Zone.

The methodology is obviously biologically INVALID where there is an area of contiguous vacant property, 40 acres or greater, which is zoned, or zoned and parcelized, as AR-20, AR-10, or less, but is undeveloped. This issue was raised by Friends of the Swainson's Hawk during discussions during development of the Methodology, and County staff advised that the only areas containing a number of contiguous small but undeveloped parcels was the Rancho Murietta area and Elverta Specific Plan Area. For that reason, both areas were excepted from the application of the Methodology. The Methodology also excepts "some properties with unique characteristics,". presumably determined by DERA on a case-by-case basis. (See Attachment A, p. 2)

The DEIR states that CDFG approved the methodology. However, CDFG raised the concern, in its letter of March 9, 2009 (EXHIBIT B, p. 2):

> "that there were specific areas --- that are already zoned AR5 or lower, that are still generally undeveloped, and that we believe that these should not fall under the new provisions because loss of these areas would potentially have a significant impact on Swainson's Hawk. Examples include the Elverta Specific Plan and Rancho Murietta."

The situation in the proposed Florin-Vineyard Community Plan is similar to that which concerned CDFG as to Elverta Specific Plan and Rancho Murietta, except to the extent that much of the Community Plan area is AG-10 or AR-10, which would require 25% mitigation.

The Methodology underwent no CEQA review, and thus does not presumptively establish full mitigation for any discretionary project. See *Calif. Native Plant Society, et al v County of El Dorado* (3rd District, January 28, 2009) page 32, which pertained to the validity of a mitigation fee ordinance. The Methodology is not even an ordinance.

3. The DEIR fails to adequately assess project impacts on SWH foraging habitat and fails to mitigate impacts on SWH foraging to less than significant

When it adopted the Methodology discussed above, County staff were apparently unaware that the area of the proposed Florin-Vineyard Community Plan included large areas of contiguous vacant land zoned at less than AG-40. Specifically, the DEIR, Table BR-2, p. 12-36 shows 160 acres as AG-40 and larger, 840 acres zoned at AG-20, IR, and UR, **1,698 acres** zoned as A-10,

AR-10, AR-10(F), and **1,068** acres zoned as commercial, industrial, residential, and AR-5 and smaller.

MM BR-4 incorrectly claims that build-out would result in loss of 1,214 acres of SWH foraging habitat, based on the false premise that (1) for properties zoned as A-10 or AR-10, habitat loss is determined to be only 25% of the area zoned, (2) for properties zoned AG-20, IR, or UR, habitat loss is determined to be 75% of acreage zoned, and habitat loss of 100% for properties zoned AG-40 and more. For example, 1000 acres of vacant undeveloped land which may be SWH foraging which is presently zoned AR-10 is calculated as being only 250 acres of SWH foraging. A large area (40 or more acres) of vacant land which may be SWH foraging but is zoned as AR-5 or smaller, or commercial or industrial is not counted as SWH foraging habitat at all, even though it may be vacant and actually serve as SWH foraging habitat.

The owner of a property zoned AG-40 or greater must mitigate for 100% loss of SWH foraging, but the owner of an identical land area zoned AR-10 must mitigate for only 25% of SWH foraging.

The assumption that SWH foraging value of vacant upland zoned as AG-20 has only 75% of SWH foraging value and that the same land zoned as A-10 or AG-10 would have only 25% of SWH foraging value than it would have if it were zoned AG-40 or greater, is factually ridiculous and not supported by substantial evidence.

In determining the SWH foraging value of a "small" parcel (less than 40 acres), the determination must consider the presence of adjacent vacant land, separated from the "subject" parcel only by the presence of a property line which has no biological effect. For example, a 20-acre property should not be deemed to have only 75% of habitat value if it is part of a larger expanse of SWH foraging habitat which extends over more than one property ownership.

The Methodology is incorrectly used to determine project impacts on SWH foraging of each of the individual projects analyzed in this DEIR, and the extent of mitigation to be required for impacts on SWH as to each of the individual projects. For the reasons stated above, the DEIR's analysis of impacts and findings that mitigation reduces impacts to less than significant is not supported by substantial evidence and are in violation of CEQA, except for those projects where mitigation for 100% of the subject area was required. Application of the Methodology is clearly inappropriate for the Community Plan area, and fails to comply with CEQA.

4. Conclusion

The obvious solution is to retain a raptor biologist experienced with SWH in the local area to review the Community Plan as a whole and the individual projects, both by aerial photographs and on the site, to make a determination as to the project effects on SWH and to recommend the appropriate mitigation program for the Community Plan, and the specific mitigation measures for each individual projects. This would comply with CEQA.

Thank you for the opportunity to comment.

Letter 17

Respectfully submitted,

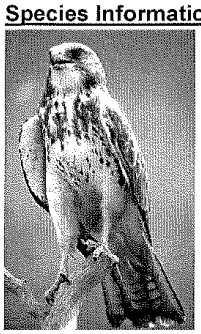
James P. Pachl

Letter 17

Swainson's Hawk: Environmental Impacts and Issues

A Guide for the Unincorporated Areas of Sacramento County

Species Information:



The Swainson's hawk (*Buteo swainsoni*) is a large bird of prey with a body length of about 21 inches. The breast and belly may be light with a characteristic dark, wide "bib" from the lower throat down to the upper breast and light colored wing linings.

A great majority of Swainson's hawks migrate from their nesting areas in northwestern Canada, the western U.S., and Mexico, to wintering grounds in South America, a round trip which can exceed 14,000 miles. Swainson's hawks nesting in Sacramento County are generally found in scattered trees or along riparian systems adjacent to agricultural fields or pastures. These open fields are the primary foraging areas. Swainson's hawks generally search for prey by soaring and several hawks may be seen foraging together following tractors or other farm equipment capturing prey escaping from farming operations.

Regulatory Background:

Under the California Environmental Quality Act (CEQA), the County as a land use authority must evaluate the environmental impacts of certain development projects. Because the Swainson's hawk is listed as a threatened species by the State of California, it is a subject of analysis when CEQA impact evaluations are required. Statewide, the California Department of Fish and Game (CDFG) is the trustee agency that oversees the protection of the Hawk.

In unincorporated Sacramento County, the Department of Environmental Review and Assessment (DERA) is responsible for completing CEQA evaluations on discretionary projects and determining if a project will impact the Swainson's hawk. There is a common misconception that an application for a building permit triggers a requirement for Swainson's hawk mitigation; it does not. However, an existing mitigation requirement from a previous discretionary act, such as parcel/subdivision maps and/or rezones may be triggered at the building permit stage. DERA evaluates two types of impacts; foraging habitat and nesting impacts.

Nesting Impacts:

To determine impacts to nesting habitat, DERA relies on guidelines provided by CDFG. These guidelines state that no intensive new disturbances, such as heavy equipment operation associated with construction, should be initiated within ¼ mile of an active Swainson's hawk nest in an urban setting or within ½ mile in a rural setting between March 1 and September 15 (the nesting season).

As mitigation, DERA may ask for nesting surveys if known nests or appropriate nesting habitat exists within the project vicinity. If surveys show there are no active nests within the distances specified above, then no additional mitigation will be required. If active nests are found and disturbances such as construction are to occur during the nesting season, then protective measures specified by CDFG will be required.

Foraging Habitat Impacts:

Sacramento County and CDFG have jointly developed a methodology for determining foraging habitat impacts in unincorporated Sacramento County. The methodology recognizes that Swainson's hawk foraging habitat value is greater in large expansive open spaces and agricultural areas than in areas which have been fragmented by agricultural-residential or urban development. The concept is that impact to foraging habitat occurs as properties develop to increasingly more intensive uses on smaller minimum parcel sizes. Therefore, foraging habitat impacts are assessed when agricultural and agricultural-residential parcels are rezoned to smaller minimum parcel sizes. The level of impact is calculated in acres and is based on the starting habitat value and ending habitat value.

As a baseline, DERA assumes that properties zoned AG-40 and larger have 100% habitat value, AG-20 properties have 75% and AR-10 properties have 25% habitat value. Properties zoned AR-5 and smaller, such as AR-2, AR-1, the urban Residential Densities (RD-1 thru 40), commercial and industrial zonings, retain no habitat value. Table 1 below illustrates the continuum of habitat values by zoning and Table 2 provides the possible impact scenarios based on different starting and ending zonings. EXHIBIT A

Letter 17

Table 1: Swainson's Hawk Foraging Habitat Value by Zoning Category

Zoning Category	Habitat Value Remaining
AG-40 and larger (e.g., AG-80, A-80, AG-160 etc.)	100%
AG-20, A-20, Some IR and UR	75%
AR-10, A-10	25%
AR-5 and A-5 and smaller (e.g., AR-2, A-2, AR-1, A-1, RE, RD, R, Commercial and Industrial Zones)	0%

Table 2: Swainson's Hawk Foraging Habitat Impacts Associated with Different Rezone Proposals

Rezone Request (From)	Rezone Request (To)	Impact
AG-40 and larger (e.g., AG-80, A-80, AG-160 etc.)	AG-20	25% of project size
AG-40 and larger (e.g., AG-80, A-80, AG-160 etc.)	AR-10	75% of project size
AG-40 and larger (e.g., AG-80, A-80, AG-160 etc.)	AR-5, AR-2, AR-1 and any RD, Commercial or Industrial Zone	100% of project size
AG-20, A-20, Some IR and UR	AR-10	50% of project size
AG-20, A-20, Some IR and UR	AR-5, AR-2, AR-1 and any RD, Commercial or Industrial Zone	75% of project size
AR-10, A-10	AR-5, AR-2, AR-1 and any RD, Commercial or Industrial Zone	25% of project size
AR-5 and A-5 and smaller (e.g., AR-2, A-2, A-1, RE, RD(1 thru 40), R, Commercial and Industrial Zones)	AR-5, AR-2, AR-1 and any RD, Commercial or Industrial Zone	0% of project size

For example, a 20-acre property being rezoned from AG-20 to AR-10 would be assessed an impact of 50% based on a starting value of 75% and ending value of 25%. This would result in a mitigation requirement of 10 acres. There are exceptions to the methodology including the Elverta Specific Plan area, Rancho Murieta area and some properties with unique characteristics.

Once DERA has determined that a project will result in a foraging habitat impact, several mitigation options are generally provided. One option is participation in the County's Swainson's Hawk Mitigation Program administered by the Sacramento County Planning and Community Development Department (Planning). Under the program, mitigation can be satisfied by: (1) providing replacement land or paying a fee if the impact is less than 40 acres; or (2) only by providing replacement land if impacts are 40 acres or more. The current fee is $18,375 per acre of impact with a $500 administrative fee per payment. Fees are subject to periodic update based on real estate market conditions. Other mitigation options usually involve working on an individual basis with CDFG. Mitigation is required prior to the approval of improvement plans, building permits, or recordation of the final map, whichever occurs first; or, if only a rezone is requested, prior to final adoption of the zoning agreement.

Contact Information:

Agency	DERA	Planning	CDFG
Topic	Impact Determinations	Swainson's Hawk Mitigation Program	Species Info.
Website	http://www.dera.saccounty.net/	http://www.saccounty.net/planning/swainsons-hawk-ordinance/index.html	http://www.dfg.ca.gov/hcpb/species/species.shtml
Phone Number	(916) 874-7914	(916) 874-6141	(916) 653-4875
Key Contacts	Catherine Hack, Bob DeMorales or John Lundgren for pending projects; Todd Smith for approved projects	Vincent King	Habitat Conservation Planning Branch

A-2

Letter 17

State of California - The Resources Agency
ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
Sacramento Valley - Central Sierra Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
916/358-2900

ATTACHMENT C

RECEIVED
MAR 1 3 2006
PLANNING DEPT.
County of Sacramento

March 9, 2006

Mr. Robert Sherry
Community Planning Director
Sacramento County Planning Department
Sacramento, CA 95814

Dear Mr. Sherry:

The Department of Fish and Game (DFG) has reviewed Sacramento County's "Small Parcel Solution" (proposal). The proposal attempts to fix a problem with the County's "all-or-nothing" approach to mitigating impacts to Swainson's hawk foraging habitat. Standard practice has been that during the subdivision map, parcel map, or other similar entitlement process, no impact was assessed until the parcel had been subdivided below five acres in size, at which time full and complete impact was determined to have occurred, and full mitigation assessed.

The new proposal is based on a better understanding of how Swainson's hawks use their habitat, and addresses the loss of foraging habitat on more of a landscape-level, assessing impacts based on the rezoning process. In the Sacramento Valley, Swainson's hawks forage over large, open, agricultural landscapes (England et al, 1997; Babcock, 1995; Estep, 1989). Typically, actions that reduce agricultural land uses result in a deterioration of foraging habitat value. The proposal suggests starting with a 25% impact assessment for an initial reduction in minimum-parcel size from 40 to 20 acres. The next level in minimum-parcel size reduction (from 20 acres to 10 acres), would trigger a 50% impact assessment, because this is where the greatest change in land use and loss in habitat value is experienced. Parcels split to this level typically change from an agricultural designation to an agricultural-residential designation. At the next level of rezoning (ten acre to five acre minimum-parcel size) the impact assessment would again be 25 % of the project acreage reflecting the diminished habitat value of these smaller parcels resulting from their lowered capacity to sustain viable agriculture. Parcels with zoning for minimum parcel sizes of five acres or less would be deemed to have little or no significant foraging habitat value remaining, and consequently would not be assessed any impacts.

The DFG agrees with the approach described above and believes that the proposal correctly identifies the loss of Swainson's hawk foraging habitat as a process that starts with a change in land use designations from large parcel agriculture to small parcel agricultural-residential zonings. We also concur that finding no significant impact associated with small parcels embedded in urban and rural residential areas is appropriate because these parcels no longer function as viable habitat. In previous

Conserving California's Wildlife Since 1870

EXHIBIT B

11

Letter 17

discussions with County staff we did raise the concern that there were specific areas within the County that are already zoned AR5 or lower, that are still generally undeveloped, and that we believe should not fall under the new provisions because loss of these areas would potentially have a significant impact on the Swainson's hawk. Examples include the Elverta Specific Plan and Rancho Murieta. We believe that the final staff report effectively addresses these concerns, and we support this report.

We commend the County for their efforts in developing a strategy that provides for the conservation of foraging habitat for the Swainson's hawk, while at the same time not unduly penalizing small parcel owners. We look forward to continuing to work with you on this important issue.

If you have any questions regarding our position on this issue, please contact Mr. Dan Gifford, Senior Wildlife Biologist at (209) 369-8851 or Mr. Kent Smith, Acting Assistant Regional Manager at (916) 358-2382.

Sincerely,

Sandra Morey
Regional Manager

cc: Mr. Kent Smith
Mr. Dan Gifford
Department of Fish and Game
Sacramento Valley-Central Sierra Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670

12

B-2

Letter 18

MacKay & Somps
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
1771 Tribute Road Suite E Sacramento, CA. 95815-4487
916-929-6092

RECEIVED
MAY 27 2009
DEPARTMENT OF ENVIRONMENTAL
REVIEW AND ASSESSMENT

February 2, 2009

Cathy Hack
Sacramento County
Dept. of Environmental Review
827 Seventh Street, Room 220
Sacramento, CA 95814

RE: Florin Vineyards Tentative Map- DEIR Comments – (Control #04-0207)

Dear Cathy:

On behalf of Village Capitol Group LLC, following comments are offered on the Florin Vineyards Tentative Map project portion of the Draft EIR.

Drainage; (p.8-21) Last paragraph states that the project is inconsistent with the Drainage Master Plan, yet text on page 8-18 states that the project is potentially inconsistent (emphasis added). Text on page 8-21 should be revised to be consistent with the "potentially inconsistent" text on page 8.18.

Drainage mitigation; FVN-1 (p.8-51); This mitigation measure should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

Drainage mitigation; FVN-2 (p.8-51); this mitigation measure states that specified lots shall not be recorded until a detention basin location is determined and the area "reserved for said basin". However the applicant proposes to obtain tentative map approval for the specified lots to allow development should the off-site basin be constructed. For purpose of the Subdivision Map Act, the tern "reserve" is problematic. Suggest FVN-2 state that, ". . . .the area shall be designated for said basin. . . ." (emphasis added).

Cordially,

Bruce Walters
MacKay & Somps

C: Larry Deane, Village Capitol Group, LLC
John Sinadinos, Village Capitol Group. LLC
Roy Brewer, Brewer Lofgren, LLF

1771 TRIBUTE ROAD, STE. E SACRAMENTO, CALIFORNIA 95815-4487 PHONE(916) 929-6092 FAX (916) 923-5625
OFFICES: PLEASANTON ROSEVILLE SACRAMENTO

Letter 19

MACKAY & SOMPS
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
1771 Tribute Road Suite E Sacramento, CA. 95815-4487
916-929-6092

27029.00

May 26, 2009

Cathy Hack
Sacramento County
Dept. of Environmental Review
827 Seventh Street, Room 220
Sacramento, CA 95814

RE: Gerber Creek Tentative Map- DEIR Comments – (Control #04-0187)

Dear Cathy:

On behalf of Jack Liebau , following comments are offered on the Gerber Creek Tentative Map project portion of the Draft EIR.

Drainage mitigation; GC-1 (p.4-55); This mitigation measure should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

Agency Comments; There are several items of concern with agency comments and conditions of approval. The DEIR should note that changes to agency comments or conditions of approval may occur as part of the entitlement process, and are not restricted by the fact that they are included in the DEIR.

Cordially,

Bruce Walters
MacKay & Somps

C: Jack Liebau
Roy Brewer, Brewer Lofgren, LLF

1771 TRIBUTE ROAD, STE. E SACRAMENTO, CALIFORNIA 95815-4487 PHONE(916) 929-6092 FAX (916) 923-5625
OFFICES: PLEASANTON ROSEVILLE SACRAMENTO

Letter 20

MACKAY & SOMPS
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
1771 Tribute Road Suite E Sacramento, CA. 95815-4487
916-929-6092

7830.00

May 26, 2009

Cathy Hack
Sacramento County
Dept. of Environmental Review
827 Seventh Street, Room 220
Sacramento, CA 95814

RE: Lelani Village- DEIR Comments –(Control #04-0206)

Dear Cathy:

On behalf of Stumbos & Company, the following comments are offered on the Lelani Village project portion of the Draft EIR.

Public Transit (p.7-18); The document includes comment from Regional Transit for a 12.5 foot area adjacent to Elk Grove-Florin Road as a Bus Rapid Transit (BRT) corridor. The document should note that neither the current nor draft General Plan Transportation Plan show a BRT corridor on Elk Grove-Florin Road.

Drainage mitigation; LV-4 (p.7-34); This MM should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

Agency Comments; There are several items of concern with agency comments and conditions of approval. The DEIR should note that changes to agency comments or conditions of approval may occur as part of the entitlement process, and are not restricted by the fact that they are included in the DEIR.

Cordially,

Bruce Walters
MacKay & Somps

C: Michael Stumbos, Stumbos & Company
Roy Brewer, Brewer Lofgren, LLF

1771 TRIBUTE ROAD, STE. E SACRAMENTO, CALIFORNIA 95815-4487 PHONE(916) 929-6092 FAX (916) 923-5625
OFFICES: PLEASANTON ROSEVILLE SACRAMENTO

Letter 21

MACKAY & SOMPS
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
1771 Tribute Road Suite E Sacramento, CA. 95815-4487
916-929-6092

7828.80

May 26, 2009

Cathy Hack
Sacramento County
Dept. of Environmental Review
827 Seventh Street, Room 220
Sacramento, CA 95814

RE: Shehadeh Ranch- DEIR Comments – (Control #04-0219)

Dear Cathy:

On behalf of Shehadeh Family Trust, the following comments are offered on the Shehadeh Ranch project portion of the Draft EIR.

Drainage mitigation, SH-2 (p.13-76); We recognize the need to coordinate with SRCSD and Water Resources to resolve issues on the detention basin design. However SH-2 should be treated as an agency comment or condition of approval, not as a mitigation measure.

Drainage mitigation; SH-3 (p.13-77); This mitigation measure should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

Reservation for Future Applicant Input, Including response to Agency Comments; There are several items of concern with agency comments and conditions of approval. We will work with the agencies and changes to these conditions will likely result. The DEIR should note that changes to agency comments or conditions of approval may occur as part of the entitlement process, and are not restricted by the fact that they are included in the DEIR.

Cordially,

Bruce Walters
MacKay & Somps

C: Bill Shehadeh
Jeff Bordelon
Roy Brewer, Brewer Lofgren, LLF

1771 TRIBUTE ROAD, STE. E SACRAMENTO, CALIFORNIA 95815-4487 PHONE(916) 929-6092 FAX (916) 923-5625
OFFICES: PLEASANTON ROSEVILLE SACRAMENTO

Letter 22

MACKAY & SOMPS
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
1771 Tribute Road Suite E Sacramento, CA. 95815-4487
916-929-6092

7827-00

May 26, 2009

Cathy Hack
Sacramento County
Dept. of Environmental Review
827 Seventh Street, Room 220
Sacramento, CA 95814

RE: Villages at Elder Creek Estates- DEIR Comments – (Control #04-0208)

Dear Cathy:

On behalf of LK Dev One LLC, following comments are offered on the Villages at Elder Creek Estates project portion of the Draft EIR.

Project Description: (p.9-3); The DEIR adequately includes the latest project description and wetlands information. Thank you.

Drainage mitigation; ECE-1 (p.9-54); This mitigation measure should be revised to include language allowing construction of interim drainage facilities to mitigate for drainage impacts, to the satisfaction of DWR, as discussed in the text portion of the document. This option is important to clarify in the MM text.

Tree Preservation; ECE-13 (p.9-60); The two trees listed for preservation are adjacent to a proposed water quality treatment basin. Compatibility of the trees and basin should allow successful preservation. However, some of the preservation measures may need to be adjusted to allow design of the treatment basin adjacent to the trees. The ECE-13 should include language allowing flexibility to the preservation measures subject to approval of DERA.

Agency Comments; There are several items of concern with agency comments and conditions of approval. The DEIR should note that changes to agency comments or conditions of approval may occur as part of the entitlement process, and are not restricted by the fact that they are included in the DEIR.

Cordially,

Bruce Walters
MacKay & Somps

C: Tim Kwan, LK Dev One, LLC
Daniel Lee, LK Dev One, LLC
Roy Brewer, Brewer Lofgren, LLF

1771 TRIBUTE ROAD, STE. E SACRAMENTO, CALIFORNIA 95815-4487 PHONE(916) 929-6092 FAX (916) 923-5625
OFFICES: PLEASANTON ROSEVILLE SACRAMENTO

Letter 23

North Vineyard Greens

RECEIVED
MAY 29 2009
DEPARTMENT OF ENVIRONMENTAL
REVIEW AND ASSESSMENT

Peter Daru
North Vineyard Greens
720 Howe Ave # 103
Sacramento, CA 95825

RE: Florin Vineyard Gap Community Plan

To: Sacramento County Planning Department
Sacramento County Department of Environmental Review (DERA)

Date: May 26, 2009

I am writing as a property owner and developer of North Vineyard Greens. The North Vineyard Station Specific Plan and Vineyard Springs Master Plan developers were required to participate in implementation of both the onsite and offsite drainage improvements to Gerber Creek and Elder Creek.

The north-south boundary of the subject project area is formed by Elder Creek. Watersheds from the Florin-Vineyard Gap area contribute a significant amount of runoff into Elder and Gerber Creeks.

Elder Creek flows through the northern portion of the plan area where it converges with Gerber Creek and then re-enters and meanders through the majority of the southern end of the plan area.

The County recognized the need for onsite and offsite channel improvements from pending development of the NVSSP and VSMP areas. It is only logical and prudent to anticipate that the development of other neighboring lands would also generate significant runoff to those existing channels. Therefore, improvements have to be made by the neighboring areas that are also slated for development.

FVGCP should be responsible for their proportional share of the cost of improvements and right of way necessary to upgrade the existing channels. Conditions and/or mitigation measures similar to those placed on the North Vineyard Specific Plan and Vineyard Springs Master Plan associated with improvements within the existing Gerber Creek and Elder Creek Channels must be incorporated into this project. In keeping with previous approvals, the development of this plan area must require equitable contributions to the improvements associated with their fair share of impacts to the affected channels both onsite and offsite.

Letter 23

The County has a responsibility to ensure that mitigation measures and conditions of approval similar to those placed on neighboring projects are implemented to ensure that the development of this project will provide for a fair share contribution toward necessary drainage facilities.

Sincerely,

Peter Daru

Letter 24

STATE OF CALIFORNIA

Arnold Schwarzenegger, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

RECEIVED
MAY 28 2009
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

May 26, 2009

Joyce Horizumi
County of Sacramento
827 7th Street, Room 220
Sacramento, CA 95814

Re: Notice of Completion, Draft Environmental Impact Report (DEIR)
Florin-Vineyard Gap Community Plan
SCH# 2005082045

Dear Ms. Horizumi:

As the state agency responsible for rail safety within California, the California Public Utilities Commission (CPUC or Commission) recommends that development projects proposed near rail corridors be planned with the safety of these corridors in mind. New developments and improvements to existing facilities may increase vehicular traffic volumes, not only on streets and at intersections, but also at at-grade highway-rail crossings. In addition, projects may increase pedestrian traffic at crossings, and elsewhere along rail corridor rights-of-way. Working with CPUC staff early in project planning will help project proponents, agency staff, and other reviewers to identify potential project impacts and appropriate mitigation measures, and thereby improve the safety of motorists, pedestrians, railroad personnel, and railroad passengers.

The DEIR appears to have excluded specific traffic analysis of the following at-grade rail crossings; Watt Avenue (CPUC # 001AH-97.36), Bradshaw (CPUC # 001AH-99.80), Gerber Road (CPUC # 0010-128.20), and Florin Road (CPUC #001D-129.10). Although the traffic study included certain roadway segment and intersection analysis, the at-grade rail crossings were not included. Since this project is of a regional significance, the rail crossings should have been addressed in the DEIR.

The project is proposing 8,950 residential units which will have significant impacts to the at-grade rail crossings. The Commission recommends that your agency include potential project-related rail safety impacts, and measures to reduce adverse impacts to these crossings in the DEIR. In general, the major types of impacts to consider are collisions between trains and vehicles, and between trains and pedestrians. General categories of measures to reduce potential adverse impacts on rail safety include:

- Installation of grade separations at crossings, i.e., physically separating roads and railroad track by constructing overpasses or underpasses
- Improvements to warning devices at existing highway-rail crossings
- Installation of additional warning signage
- Improvements to traffic signaling at intersections adjacent to crossings, e.g., traffic preemption

- Installation of median separation to prevent vehicles from driving around railroad crossing gates
- Where soundwalls, landscaping, buildings, etc. would be installed near crossings, maintaining the visibility of warning devices and approaching trains
- Prohibition of parking within 100 feet of crossings to improve the visibility of warning devices and approaching trains
- Installation of pedestrian-specific warning devices and channelization
- Construction of pull-out lanes for buses and vehicles transporting hazardous materials
- Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way
- Elimination of driveways near crossings
- Increased enforcement of traffic laws at crossings
- Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings

Commission approval is required to modify an existing highway-rail crossing or to construct a new crossing.

Please forward any additional information that addresses our concerns so we may complete our review of the DEIR traffic/circulation section. The mitigation monitoring section will need to be amended to include any mitigation measures based on project impacts for opening day and buildout scenarios to the at-grade rail crossings.

Thank you for your consideration of these comments. If you have any questions in this matter, please contact me at (415) 713-0092 or email at ms2@cpuc.ca.gov.

Sincerely,

Moses Stites
Rail Corridor Safety specialist
Consumer Protection and Safety Division
Rail Transit and Crossings Branch
515 L Street, Suite 1119
Sacramento, CA 95814

Letter 25

From: Walt Seifert [mailto:bikesaba@gmail.com]
Sent: Tuesday, May 26, 2009 3:12 PM
To: DERA (Web Page)
Cc: 'Jordan Lang'
Subject: RE: DEIR for Florin-Vineyard Gap Community Plan Project (C/N 04-GPB-CPB-0096)

Joyce Horizumi, Environmental Coordinator
Department of Environmental Review and Assessment
County of Sacramento
827 7th Street, Suite 220
Sacramento, CA 95814

RE: DEIR for Florin-Vineyard Gap Community Plan Project (C/N 04-GPB-CPB-0096)

Dear Ms. Horizumi:

Thank you for the opportunity to comment on the DEIR for the Florin-Vineyard Gap Community Plan Project.

The Gap Community Plan encompasses development projects proposing up to nearly 14,000 residential units plus commercial and industrial land uses on approximately 3,766 acres in eastern Sacramento County; most of the acreage will be developed in low-density residential subdivisions. The DEIR describes significant unavoidable adverse impacts on transportation and circulation, even after mitigation measures, on a multitude of roadway segments and intersections throughout the plan area. Impacts on bicycle and pedestrian facilities are described as less than significant because bicycle and pedestrian facilities (not described in the DEIR) would be constructed on all improved roadway segments and intersections.

We believe that much more effort needs to be invested by project planners and county staff to create opportunities and incentives for a much greater proportion of total trips generated by the plan to be shifted from private vehicles to alternative transportation modes (i.e. pedestrian, bicycle, and mass transit). Such transportation mode shifts will not only reduce the transportation impacts, but other environmental impacts as well, and will have auxiliary benefits in the quality of living environments in the plan area for the long term future as vehicle travel becomes more and more infeasible for many daily trips.

Because the DEIR's impact analysis for bicycle facilities was based on old Bikeway Master Plan and old street standards, its conclusions are incomplete and inadequate. The impact analysis on Bicycle Facilities in Chapter 9 was based on the County's 2010 Bikeway Master Plan dated July 1993. The 2010 Master Plan is sorely out of date and a new, updated Bikeway Master Plan is currently in preparation. Standards for bicycle facilities have evolved considerably in recent years as our communities realize the severe adverse effects of traditional transportation systems heavily biased toward automobile transportation.

The current state of the art for bicycle facilities in urban/suburban residential and commercial areas is represented by CA Assembly Bill 1358, the California Complete Streets Act of 2008. This act requires local governments to "to plan for a balanced, multimodal transportation network that meets the needs of

all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan."

Sacramento County is currently updating its street standards. The County needs to ensure that those new standards fully represent "complete streets" as envisioned by AB 1358, including provisions for vehicle lane widths, curb radii, numbers of vehicle lanes, design speeds, and freeway interchanges. The DEIR's transportation mitigation measures for adversely effected roadway segments recommend constructing up to 5 - 6 vehicle lanes in each direction on many of the area's arterial streets. Such wide streets and large numbers of vehicle lanes (up to 12 total) function as severe obstacles to bicycle use. Therefore, the DEIR should have concluded that the Gap Community Plan's street system will significantly and adversely affect bicycle transportation in the plan area.

The layout of land uses in the community-plan area is dominated by low-density residential subdivisions (64 per cent of plan area) and traditionally designed suburban commercial spaces. We urge project planners and county staff to redesign the land-use plans to focus more on high-density residential and commercial concentrations at nodes in Regional Transit's (RT) 20-year vision for mass transit in the project area. Specifically, such Transit-Oriented Developments should be located along RT's planned Central California Traction Railroad light-rail line and its planned Elk Grove – Florin Road Bus Rapid Transit line. Such a configuration of land uses would support a much more progressive pattern of transportation and therefore more sustainable type of development in the plan area for the long-term future.

SABA is an award-winning nonprofit organization with more than 1400 members. We represent bicyclists. Our aim is more and safer trips by bike. We are working for a future in which bicycling for everyday transportation is common because it is safe, convenient, and desirable. Bicycling is the healthiest, cleanest, cheapest, quietest, most energy efficient, and least congesting form of transportation.

Thank you for considering our comments on the DEIR.

Yours truly,

Jordan Lang
Project Assistant

Letter 26

CITY OF SACRAMENTO
CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT

ENVIRONMENTAL CLEARINGHOUSE COMMITTEE

300 RICHARDS BOULEVARD
3RD FLOOR
SACRAMENTO, CA
95811

ENVIRONMENTAL PLANNING SERVICES
916-808-8458
FAX 916-808-1077

May 16, 2008

Cathy Hack, Assigned DERA Analyst
Municipal Services Agency
Environmental Review & Assessment
County of Sacramento
Department of Environmental Review and Assessment
827 7th Street, Sacramento California 95814

SUBJECT: Florin-Vineyard "Gap" Community Plan Comments

Dear Ms Hack,

The City of Sacramento, Environmental Planning Services, has received comments on the above mentioned project. These comments are attached.

We appreciate the opportunity to provide comments on the Draft Environmental Impact Report. We are forwarding the comments received to date. If you have any questions, please do not hesitate to contact us.

Sincerely,

Ron Bess
Environmental Planning Services

Enclosures

cc: ECC 09-002

Letter 26

DEPARTMENT
OF UTILITES

ENGINEERING
SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

1395 35TH AVENUE
SACRAMENTO, CA
95822-2911

PH 916-808-1400
FAX 916-808-1497/1498

May 26, 2009
91308:RA:ra

MEMORANDUM

TO: Ron Bess, Development Services Department

FROM: Robert Armijo, Department of Utilities

SUBJECT: **Vineyard Gap D-EIR – DOU Comments**

DOU Comments:

The aforementioned environmental document considers the elements of the Florin Vineyard Gap Community Plan. Buildout of the FVGCP area would result in the development of 8,950 to 13,875 residential units depending on the final land use plan. Commercial, industrial, open space and public areas would also be developed. Public facilities including schools, parks, sewers, potable water, and roadways would also be developed during buildout of the Plan area. The DOU submits the following comments for consideration in the environmental document:

1. The EIR acknowledges encroachment into the 100-yr flood plain, but dismisses impacts due to low rise in the flood level (0.02 ft). The City requests in accordance with discussion in previous meetings to have new development mitigate flows so that there is no increase.
2. The design level consideration of this EIR (i.e. 100-yr) is less conservative than current downstream improvements along Morrison Creek (i.e. 200-yr).
3. Flood volume impacts have not been addressed in the EIR.

Page 1 of 1

Letter 26

FIRE DEPARTMENT
"An All-Risk Organization"

Ray Jones
FIRE CHIEF

CITY OF SACRAMENTO
CALIFORNIA

5770 FREEPORT BL
SUITE 200
SACRAMENTO, CA
95822-3516

PH 916-808-1300
FAX 916-808-1677

TRANSMITTAL

DATE: May 26, 2009

ATTN: Jennifer Hageman, Senior Planner
Joyce Horizumi, Environmental Coordinator

FROM: King Tunson, Planning & Land Use
Leo Baustian, Deputy Chief Administrative Services
Fire Department

SUBJECT: **Draft Environmental Impact Report for the Florin-Vineyard Gap Community Plan Project (ECC-09-002)**

The proposed project would increase demand for fire protection and emergency medical services. In its proposed Master Plan, the fire department has determined a ratio for one fire station per 16,000 residents.

In 1979, The SFD opened Fire Station #9, located at 5801 Florin Perkins Road, to serve the growing Florin Fruitridge Industrial Park which is located due west and north of the proposed project. Fire Station 9 was closed in 1995 due to budgetary cuts in the fire department budget 1995. The station has remained closed sine 1995 but currently houses SFD Fire Reserve units. The SFD has automatic aid agreements with all fire departments and fire protection districts within Sacramento County. While a majority of the proposed project lies within the initial response area of some Sacramento Metropolitan Fire District stations, SFD Engine and Truck companies would provide secondary and tertiary response to any commercial fire alarms or significant fire events in the area.

Based on the standard of 1 station per 16,000 residents, the impact of the proposed project would require the reopening of SFD Station #9.

Letter 27

Members of the Board:
Jeanette J. Amavisca
Pollyanna Cooper-LeVangie
Priscilla S. Cox
Pamela A. Irey
William H. Lugg, Jr.
Chet Madison, Sr.
Brian D. Myers

Robert Pierce
Associate Superintendent
Facilities and Planning, Room 206

Robert L. Trigg Education Center
9510 Elk Grove-Florin Road, Elk Grove, CA 95624

(916) 686-7711
FAX: (916) 686-7754

June 4, 2009

Ms. Joyce Horizumi, Environmental Coordinator
Department of Environmental Review and Assessment
827 7th Street, Room 220
Sacramento, CA 95814

SUBJECT: Comments on the Draft Environmental Impact Report for the Florin-Vineyard GAP Community Plan (Control Number: 04-GPD-CPB-0096; State Clearinghouse Number: 2005082045)

Dear Ms. Horizumi:

The Elk Grove Unified School District (EGUSD) appreciates the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the Florin-Vineyard GAP Community Plan Project (FVGCP). It is understood that the environmental impacts associated with the overall development of the FVGCP area have been analyzed at the program-level and the impacts of 26 individual development projects that are concurrently proposed with the land use plan have been analyzed at the project-level.

The FVGCP consists of the adoption of the Florin-Vineyard GAP Community Plan and Public Facilities Financing Plan, General Plan Amendment, and Community Plan Amendment that will guide the development of approximately 3,766 acres of land located in both the South Sacramento and Vineyard communities. The entire project is within the boundaries of the EGUSD.

EGUSD requests that the following comments be considered and included in the Final Environmental Impact Report (EIR).

FVGCP PROGRAM-LEVEL DEIR COMMENTS (VOLUME1)

Chapter 5 – Public Services and Utilities

General Comments

Buildout of the FVGCP area would result in the development of 10,292 to 13,875 residential units (including density bonuses) depending on the final land use plan. As stated in the DEIR, buildout of the FVGCP could result in nearly 9,000 additional students residing within the boundaries of EGUSD. The 5,249 single family homes and 1,233 multi-family homes that are proposed in the 26 tentative subdivision map entitlement applications included in Phase 1 of the

Elk Grove Unified School District—Excellence by Design

project will yield approximately 2,275 elementary school students, 700 middle school students and 1,250 high school students.

EGUSD has been working with the Sacramento County Planning Department, the Florin-Vineyard Property Owners Group and Southgate Recreation and Park District to identify specific elementary school sites (ideally adjacent to neighborhood parks) to mitigate for planned and future development. At one point, three of the four needed elementary school sites had been located within proposed tentative subdivision maps, but unfortunately, those three projects are no longer participating in the plan. ***As a result, at this time, there are no school sites identified in the FVGCP.***

EGUSD does not believe that the school impact has been adequately addressed in the DEIR. It is true that payment of required school impact fees and taxes pursuant to SB 50 help to mitigate for the financial impact of these new students to the school district; however, the identification and acquisition of suitable school sites is more challenging, and that issue has not been addressed in the document.

The California Department of Education has established strict school siting criteria that limit where schools can be located. The area encompassed by the FVGCP includes some major constraints, such as high voltage power lines, railroad tracks and commercial projects, which severely limit where schools can be located within the plan. As a result, without careful planning, locating elementary schools within neighborhoods may not be possible, causing the need to bus or drive students to school. This would result in negative impacts to traffic and air quality, which have not been addressed in the DEIR.

California law and the County of Sacramento's General Plan policies require that school sites be identified in community plans. According to California Public Resources Code Section 21083.3 and California Government Code Section 65302, school sites are among the elements that must be included in community land use plans.

The County's own General Plan Public Facilities Element includes the following applicable policies, which apply to the identification of school sites in community plans.

PF-26 Community Plans shall identify all existing and planned school sites and shall include guidelines and conceptual examples for incorporating new schools into overall neighborhood design.

PF-30 New elementary and junior high schools shall be planned adjacent to neighborhood and community parks whenever possible and designed to promote joint use of appropriate facilities.

PF-36 Land dedications or reservations for schools should meet state guidelines for school parcel size. Where more than one owner or development project is involved, there shall be appropriate assurances and conditions to assure that requisite acreage can and will be assembled to meet facility site requirements.

Elk Grove Unified School District—Excellence by Design

PF-37 Development projects shall not be approved unless the hearing body finds that provisions for reservation of school sites are adequate to meet the needs of the school district.

Therefore, EGUSD requests that the final EIR and the final FVGCP land use plan identify four elementary school sites and incorporate any findings, impacts and mitigation into the final EIR.

Of the four needed elementary school sites, a minimum of two sites (three would be preferable) should be specifically identified on the plan. The two elementary school sites to be specifically identified on the plan are needed to accommodate students from the proposed tentative subdivision map entitlement applications within the FVGCP and should be located within those neighborhoods.

After collaborating with Southgate Recreation and Park District and Sacramento County Planning Department staff, EGUSD requests that school sites be located as follows: (See Attachment A)

- **South** – Identified conceptual location south of Gerber Road in the general area where an elementary school site is identified on FVGCP Land Use Plan.
- **North** – A specific elementary school site identified within the Florin Vineyards project (ideally in conjunction with the subdivision's proposed park site) ***or*** an identified conceptual location in the same general area that is consistent with California Department of Education School Site Criteria.
- **West** – An elementary school site to be identified within the Gardner Park project (ideally in conjunction with the subdivision's proposed park site). Alternatively, the school site could be located in a location that encompasses portions of Gardner Park, Gerber Creek, and/or Lelani Village (ideally in conjunction with a proposed park site).
- **East** – An elementary school site to be identified within the Villages of Elder Creek Estates project (ideally in conjunction with the subdivision's proposed park site) ***or*** an identified conceptual location in the same general area that is consistent with California Department of Education School Site Criteria. *Note: The FVGCP Land Use Plan identifies a conceptual ES site location within the Village of Elder Creek Estates project area.*

The west elementary school site and either the north or east proposed elementary sites should be identified on the tentative subdivision map entitlement applications.

Correction to Page 5-2:

In the *"Schools"* section, please change the number of schools to **63**.

Corrections to Page 5-3:

Please see attached "marked up" page (Attachment B) and make corrections as shown. EGUSD requests that on Table PS-2 the *"School Average Class Size"* and *"District Average Class Size"* columns be deleted as they are not accurate, and they are not relevant to the study. Additionally, we have provided data for the 2008-09 school year, as it is now available.

Elk Grove Unified School District—Excellence by Design

FVGCP PROJECT-LEVEL DEIR COMMENTS (VOLUME 2)

Chapter 4 – Gerber Creek (04-RZB-SDP-SPP-0187)

EGUSD, Southgate Recreation and Park Department and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school site locations in the FVGCP. Those guiding principles propose that an elementary school site be located in Gardner Parke or in a location that encompasses portions of Gardner Parke, Gerber Creek and Lelani Village (ideally in conjunction with a proposed park site).

A conceptual diagram is attached. (See attachments A and C)

Chapter 7 – Lelani Village (04-RZP-SDP-AHS-0206)

EGUSD, Southgate Recreation and Park Department and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school site locations in the FVGCP. Those guiding principles propose that an elementary school site be located in Gardner Parke or in a location that encompasses portions of Gardner Parke, Gerber Creek and Lelani Village (ideally in conjunction with a proposed park site).

A conceptual diagram is attached. (See attachments A and D)

Chapter 8 – Florin Vineyards (04-RZP-SDP-SPP-0207)

EGUSD, Southgate Recreation and Park Department and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school site locations in the FVGCP. Those guiding principles propose that an elementary school site be located in Florin Vineyards (ideally in conjunction with a proposed park site).

A conceptual diagram is attached. (See attachments A and E)

Correction to Page 8 -13 – On September 24, 2007, EGUSD submitted comments to the Sacramento County Planning Department. A copy of those comments is attached. (Please see attachment F)

Chapter 9 – Villages at Elder Creek Estates (04-RZP-SDP-SPP-UPP-ABE-AHS-0208)

EGUSD, Southgate Recreation and Park Department and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school site locations in the FVGCP. Those guiding principles propose that an elementary school site be located in Villages at Elder Creek Estates (ideally in conjunction with a proposed park site).

A conceptual diagram is attached. (See attachments A and G)

Chapter 12 – Gardner Parke (04-RZP-SDP-SPP-EXP-AHS-0218)

EGUSD, Southgate Recreation and Park Department and Sacramento County Planning Department staff worked collaboratively to develop guiding principles for school site locations in the FVGCP. Those guiding principles propose that an elementary school site be located in

Gardner Parke or in a location that encompasses portions of Gardner Parke, Gerber Creek and Lelani Village (ideally in conjunction with a proposed park site).

Conceptual diagrams are attached. (See attachments A and H)

EGUSD appreciates the County's consideration of the comments and requests in this letter. EGUSD shall coordinate with the County and the Florin-Vineyard Property Owners Group to ensure the future residents of the FVGCP are provided with quality school facilities to meet their educational needs.

Sincerely,

Kim Williams

Kim Williams
Planning Manager

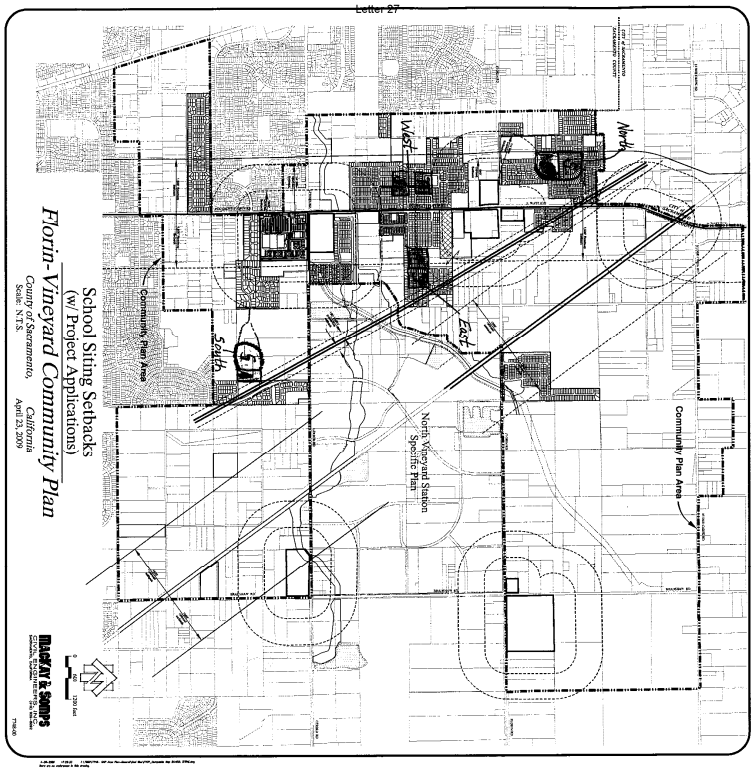
Attachments:

A. FVGCP conceptual diagram of proposed school and park sites
B. Corrected Table PS-2
C. Gerber Creek school and park site conceptual diagram
D. Lelani Village school and park site conceptual diagram
E. Florin Vineyards school and park site conceptual diagram
F. Previously submitted EGUSD comments for Florin Vineyards
G. Villages at Elder Creek school and park site conceptual diagram
H. Gardner Parke school and park site conceptual diagram

cc: Robert Pierce, EGUSD
Maureen Casey, Southgate Recreation and Park Department
Ward Winchell, Southgate Recreation and Park Department
Tricia Stevens, Sacramento County Planning and Community Development Department
Roy Brewer, Florin-Vineyard Property Owners Group

Elk Grove Unified School District—Excellence by Design

Attachment A



Pleasant Grove High School. As shown in Plate(s) PS-1 and PS-2, smaller portions of the FVGCP are located within the boundaries for Sheldon High School and T. R. Smedberg Middle School, Maeola Beitzel Elementary, Robert J. Fite Elementary, Florin Elementary, and Mary Tsukamoto Elementary.

Table PS-1 2008-2009
Elk Grove Unified School District, ~~2007-08~~

School Type	Schools	Enrollment	Full-Time Equivalent Teachers	Ratio
Elementary	~~41~~ 39	~~33,024~~ 32,522	1,681.9	19.6
Middle	~~8~~ 9	~~9,890~~ 9,796	421.6	23.5
High School	~~8~~ 9	~~17,530~~ 18,091	775.8	22.6
Alternative	1	~~263~~ 271	12.8	20.5
Special Education	1	~~168~~ 167	15.3	11.0
Continuation	~~5~~ 4	~~1,076~~ 1018	33.0	32.6
Nonpublic, Nonsectarian		~~335~~ 308	Not Available	Not Available
Total	64	~~62,294~~ 62,173	2,940.4	21.2

Source: California Department of Education, Ed-Data Website, http://www.ed-data.k12.ca.us/

As shown in Table PS-2, with the exception of Mary Tsukamoto Elementary, all of the project area schools have total enrollments below the design capacity of the school. Sierra Enterprise Elementary is operating at approximately 42 percent of capacity; however, Katherine Albiani Middle School and Pleasant Grove High School are operating at 99 percent and 93 percent of capacity, respectively.

Table PS-2 2008-09
Project Area School Enrollment and Average Class Size, ~~2007-08~~

School	Total Enrollment	Design Capacity	School Average Class Size	District Average Class Size
Sierra Enterprise Elementary	388	925	17.7	26.1
Maeola Beitzel Elementary	871	900	19.8	26.1
Robert J. Fite Elementary	670	950	21.5	26.1
Florin Elementary	518	950	19.0	26.1
Mary Tsukamoto Elementary	1,032	950	20.2	26.1
Katherine Albiani Middle School	1,317	1,323	30.0	26.1
T. R. Smedberg Middle School	1,219	1,269	32.7	26.1
Pleasant Grove High School	2,194	2,349	19.7	26.1
Sheldon High School	2,464	3,024	30.4	26.1

Tsukamoto

DELETE

Sources: Personal communication with Kim Williams and Teresa Tholen of the Elk Grove Unified School District, December 8, 2008.
California Department of Education, Ed-Data Website, http://www.ed-data.k12.ca.us/

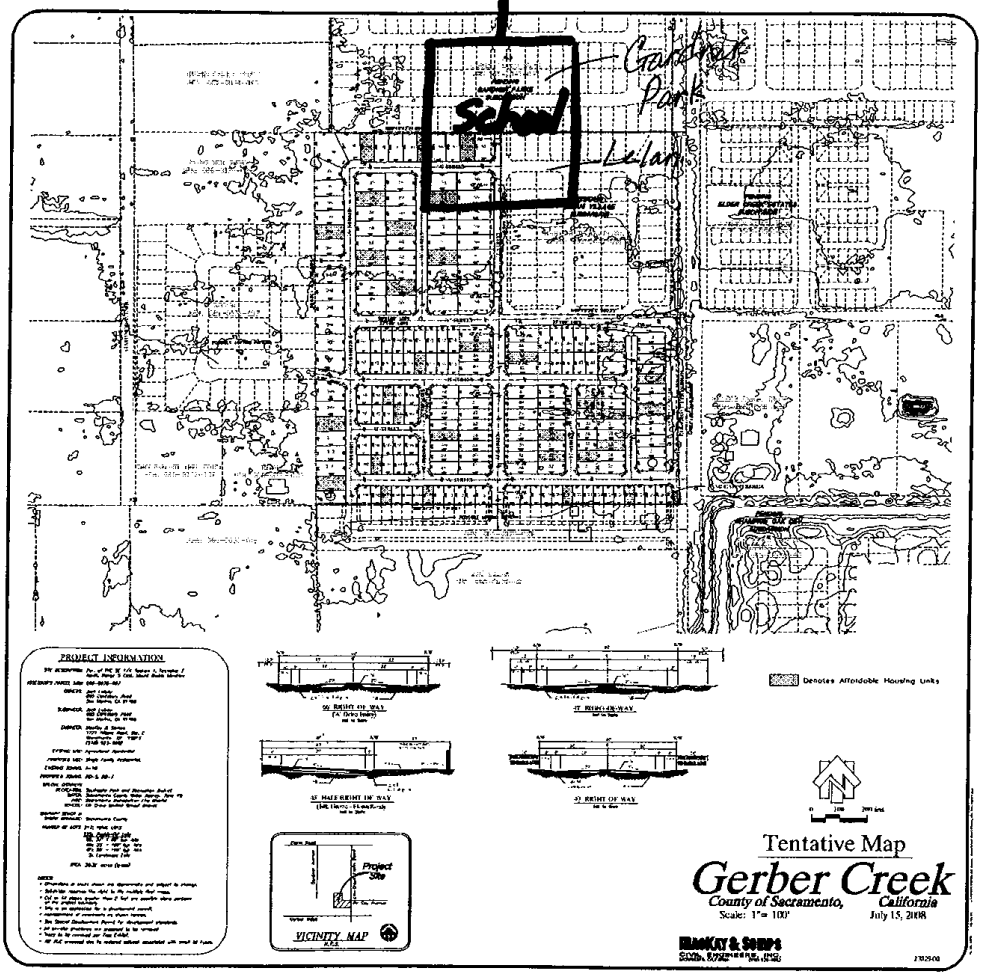
Attachment C

4 - Gerber Creek

West Site

Park

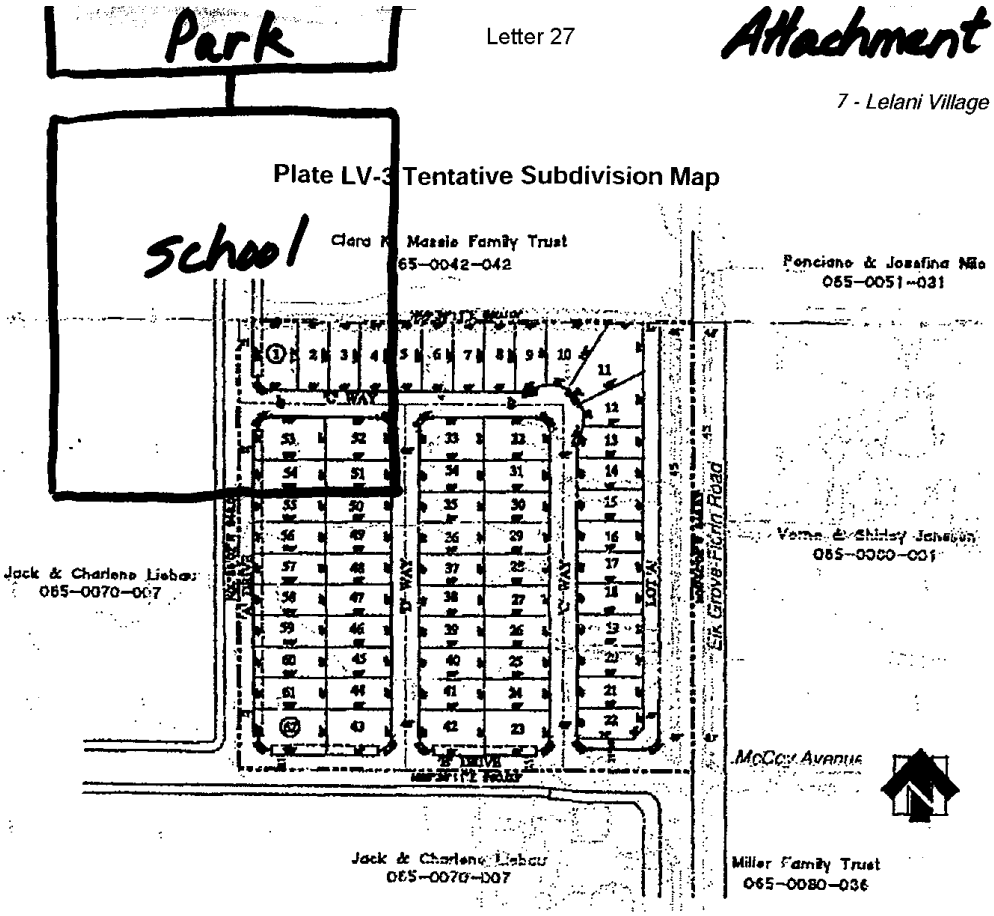
Plate GC-3 Tentative Subdivision Map



Letter 27

Attachment D

7 - Lelani Village



ENVIRONMENTAL SETTING

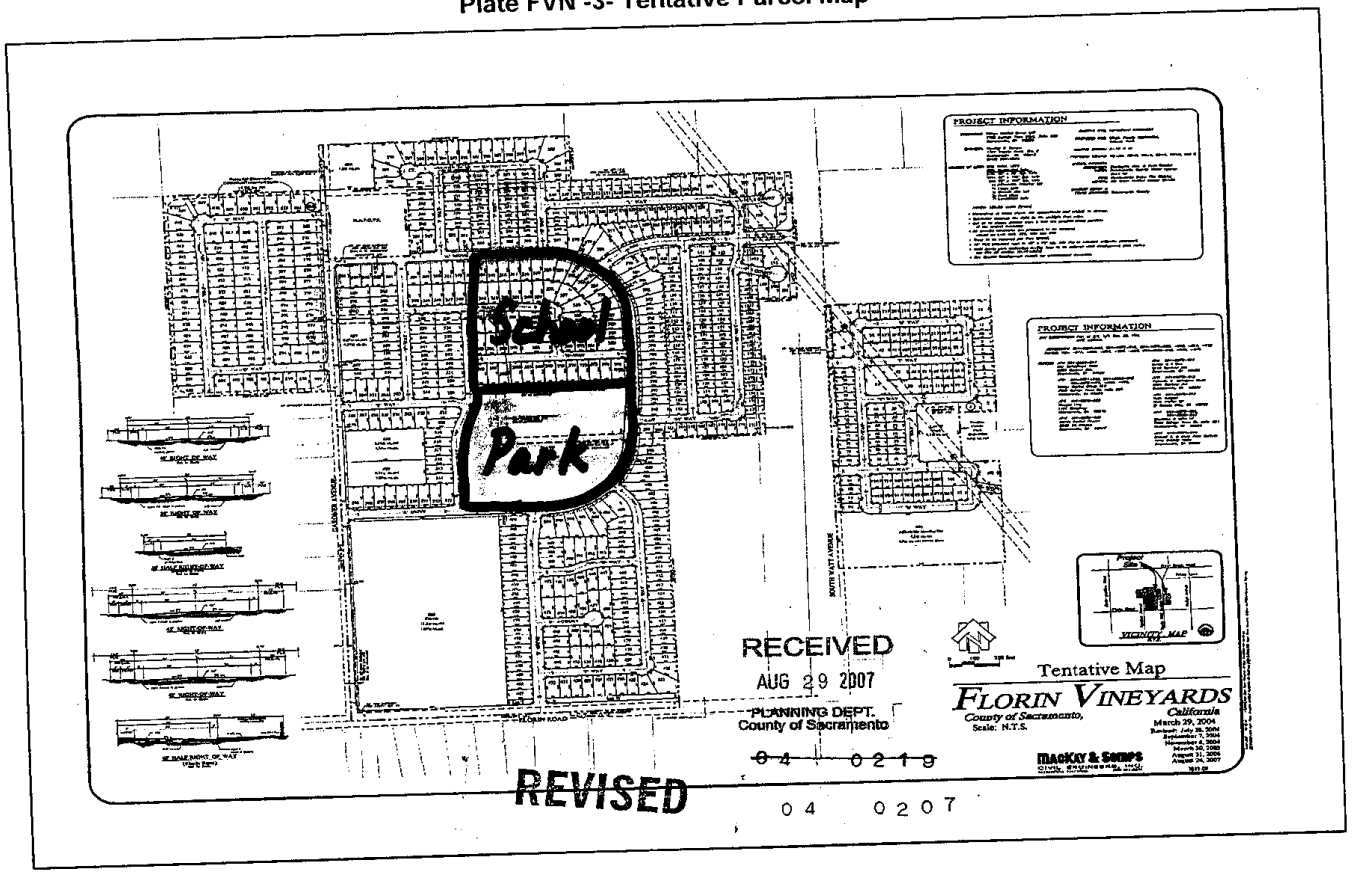
The project is located in the eastern portion of the County. It consists of a single square parcel, essentially flat, located near the central portion of the Florin-Vineyard Gap Community Plan Area. The site is in agricultural use, and at the time of the last site visit in June 2008 the crop being produced was strawberries. There is a gravel driveway into the site that leads to a small stand where the strawberries are sold, and a few other dirt roads in between some of the strawberry fields. Most of the trees on the site are along the eastern property boundary adjacent to Elk Grove-Florin Road, though there are some that line the fields. Refer to Plate LV-4 for an aerial photo of the project site.

Surrounding properties are dominated by fields, some of which are in agricultural use. There are single-family homes on some of the properties, along with appurtenant structures. There is also a commercial area on the four corners surrounding the intersection of Elk Grove-Florin Road and Gerber Road, south of the project site. The immediate environment is dominated by agricultural-residential zoning with minimum lot sizes of 2, 5, and 10 acres. Refer to Plate LV-1 for the site location and zoning.

Attachment E

8 - Florin Vineyards
North Site

Plate FVN -3- Tentative Parcel Map



Letter 27

Attachment F-1

Members of the Board:
Jeanette J. Amavisca
Pollyanna Cooper-Levangie
Priscilla S. Cox
Pamela A. Irey
William H. Lugg, Jr.
Chet Madison, Sr.
Brian D. Myers

Constantine I. Baranoff
Associate Superintendent
Facilities and Planning

Robert L. Trigg Education Center
9510 Elk Grove-Florin Road, Elk Grove, CA 95624

(916) 686-7711
FAX: (916) 686-7754

September 24, 2007

SENT VIA E-MAIL- rboschee@saccounty.net

Ms. Rebecca Boschee, Project Manager
County of Sacramento
Planning and Community Development Department
827 Seventh Street, Room 230
Sacramento, CA 95814

Subject: Florin Vineyards Revised (04-0207)
Project Location and Description: A rezone, a Tentative Subdivision Map creating 655 single-family residential lots and 94 multi-family lots, a Special Development Permit, and an Affordable Housing Plan. The property is located at the northeast corner of Florin Road and Gardner Avenue, and also on both sides of South Watt Avenue, approximately 1,300 feet north of Florin Road, in the Vineyard community planning area.

Dear Ms. Boschee:

The Elk Grove Unified School District appreciates the opportunity to review the subject application. We request the following response be made a part of the public record of the Planning Commission and/or the **Board of Supervisors** hearings.

The District is currently impacted, overcrowded and experiencing a high rate of growth. This and other development projects will have a negative impact upon the District's existing school facilities. The District does not have the financial capability to purchase school sites nor construct and furnish needed school facilities with local funds alone. Developer fees and Mello-Roos taxes collected by the District are not sufficient or timely to satisfy the need. The District relies on statewide school bonds to provide funding necessary to construct new school facilities.

Without continued state funding, the District is in a school housing crisis. The District will continue to seek additional state funds to construct needed school facilities. Until such time as adequate facilities are available for current and projected students, students may be housed on campuses that have exceeded their intended capacity.

On April 10, 2007, the Board of Education adopted a new residential development fee in accordance with Senate Bill 50. The new fee is $5.22 per square foot and became effective on April 11, 2007. The district must update the School Facilities Needs Analysis annually; therefore the residential development fee is subject to change annually. At the time a building permit is applied for, the development will be subject to the residential fee in place.

Elk Grove Unified School District – Excellence by Design

Letter 27 Attachment F-2

On March 2, 2004, voters in California passed Proposition 55, a statewide bond authorizing 12.3 billion dollars to help fund public school facility needs. Specifically, the bond funds will provide a total of 7.75 billion dollars for new K-12 school construction and 2.25 billion dollars for K-12 reconstruction/modernization needs. The remaining 2.3 billion are reserved for community college, California State University, and University of California facilities.

County Planning policies PF-39, 40, 43, 45 and 46 are stated in the Public Facilities Element of the Sacramento County General Plan adopted by the Board of Supervisors on December 15, 1993. These policies describe several alternatives for addressing overcrowded schools. We request the Planning Commission and/or the Board of Supervisors comply with these provisions on this project.

Enclosed sheets provide estimates of student generation and financial impacts resulting from the construction of the proposed project. Our office will require additional information to determine the extent of the cumulative impacts that will result from the development of this project. Please include the District on your mailing list for subsequent stages of planning and environmental review. As in the past, we are available to review the impact of this project with you. If you have any questions or comments, please contact me at (916) 686-7797, extension 7231.

Thank you again for the opportunity to comment and your continuing assistance and cooperation.

Sincerely,

Teresa Thomas

Teresa Thomas
Planner, Facilities and Planning

h:/ Florin Vineyards Rev comment letter

Enclosures – See additional attached file

Letter 27 Attachment F-3

ELK GROVE UNIFIED SCHOOL DISTRICT
PROJECT REVIEW/ENVIRONMENTAL REPLY FORM

Date: September 24, 2007 **Prepared by: Teresa Thomas**

Name of Project: Florin Vineyards (Revised) 04-0207

Project Location and Description: Rezone; Tentative Subdivision Map creating 655 single-family residential lots and 94 multi-family lots; Special Development Permit; Affordable Housing Plan. The property is located at the northeast corner of Florin Road and Gardner Avenue, and also on both sides of South Watt Avenue, approximately 1,300 feet north of Florin Road, in the Vineyard

	Current School Attendance Area		
	K - 6	7 - 8	9 - 12
Project	Sierra Ent	Albiani	Pleasant Grove
Florin Vineyards 04-0207	287	84	159

CURRENT CAPACITY/ENROLLMENT AT SERVING SCHOOLS

	K - 6	7 - 8	9 - 12
Current OPSC Determined Capacity	800	1,323	2,457
Current Year Enrollment (10/ 06) w/ special ed, w/o cont hs	464	1,190	1,566
Current Students Residing (10/06) in attendance area w/ spec ed & w/o cont hs	459	1,167	1,554
Number of students residing in attendance area who are attending other schools	59	35	595

FINANCIAL IMPACT OF PROJECT ON ELK GROVE UNIFIED SCHOOL DISTRICT

Current Student Housing Costs for Project (Land, Construction & Furnishing) **$18,530,835**

(Based upon costs of $28,528 per K-6 grade student, $39,584 per 7-8 grade student and $44,056 per 9-12 grade student)

Total School Residential Development Fee Generated by Project **$9,197,306**

(Based upon an average 2571 square foot single family home and 1127 square foot multi-family unit at $5.22 per square foot.)

Current Negative Financial Impact upon the District **$9,333,529**

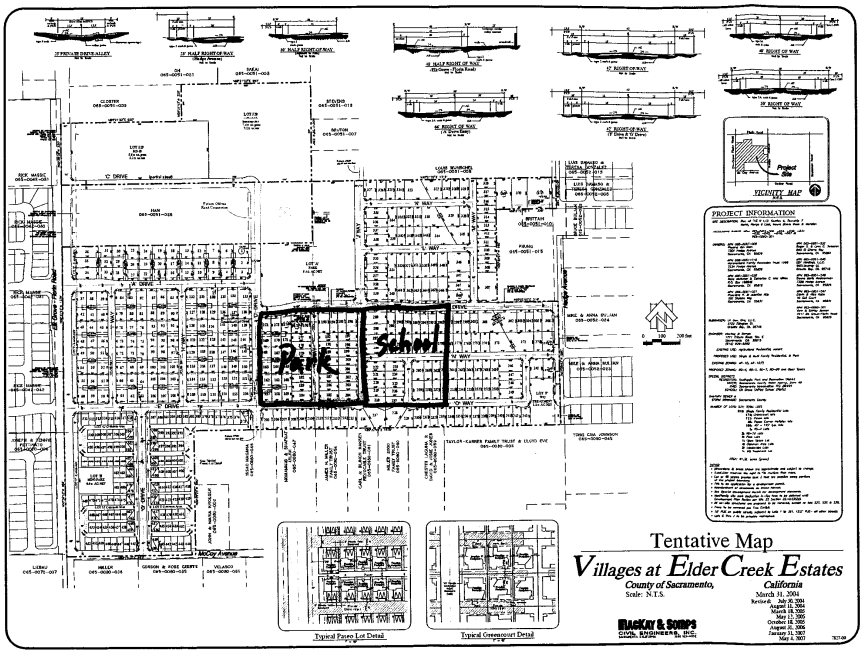
G

Attachment G

9 - Villages at Elder Creek Estates

East Site

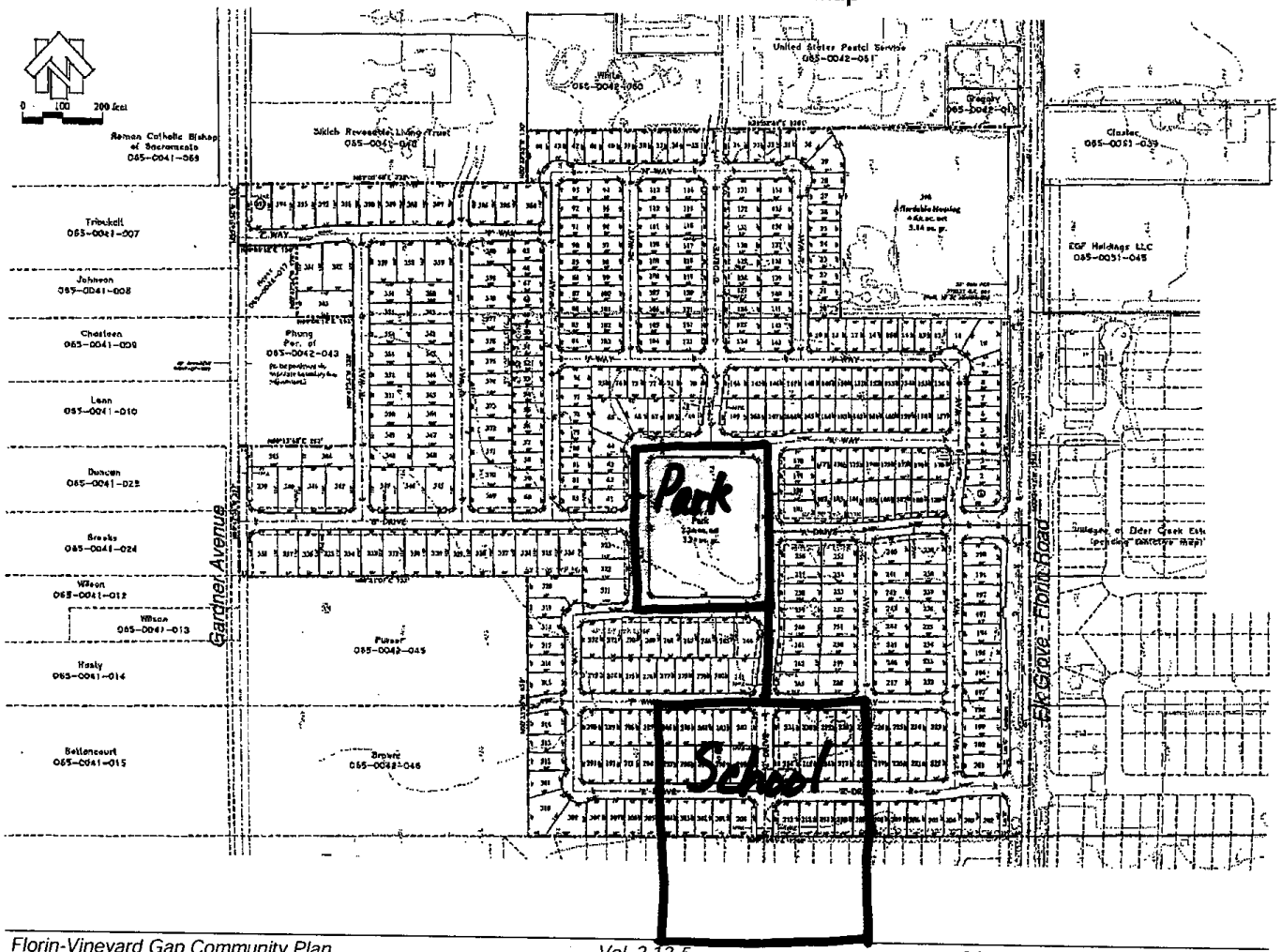
Plate ECE-3 Tentative Subdivision Map



Attachment H

12 - Gardner Parke

Plate GP-3: Tentative Subdivision Map



Letter 28

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

June 12, 2009

RECEIVED
JUN 16 2009
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

Joyce Horizumi
Sacramento County
827 Seventh Street, Room 220
Sacramento, CA 95814

Subject: Florin-Vineyard Gap Community Plan
SCH#: 2005082045

Dear Joyce Horizumi:

The enclosed comment (s) on your Draft EIR was (were) received by the State Clearinghouse after the end of the state review period, which closed on May 18, 2009. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2005082045) when contacting this office.

Sincerely,

Terry Roberts

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Letter 28

STATE OF CALIFORNIA

Arnold Schwarzenegger, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

RECEIVED
JUN 10 2009
STATE CLEARING HOUSE

Clem
5-18-09
late
e

May 26, 2009

Joyce Horizumi
County of Sacramento
827 7th Street, Room 220
Sacramento, CA 95814

Re: Notice of Completion, Draft Environmental Impact Report (DEIR)
Florin-Vineyard Gap Community Plan
SCH# 2005082045

Dear Ms. Horizumi:

As the state agency responsible for rail safety within California, the California Public Utilities Commission (CPUC or Commission) recommends that development projects proposed near rail corridors be planned with the safety of these corridors in mind. New developments and improvements to existing facilities may increase vehicular traffic volumes, not only on streets and at intersections, but also at at-grade highway-rail crossings. In addition, projects may increase pedestrian traffic at crossings, and elsewhere along rail corridor rights-of-way. Working with CPUC staff early in project planning will help project proponents, agency staff, and other reviewers to identify potential project impacts and appropriate mitigation measures, and thereby improve the safety of motorists, pedestrians, railroad personnel, and railroad passengers.

The DEIR appears to have excluded specific traffic analysis of the following at-grade rail crossings; Watt Avenue (CPUC # 001AH-97.36), Bradshaw (CPUC # 001AH-99.80), Gerber Road (CPUC # 0010-128.20), and Florin Road (CPUC #001D-129.10). Although the traffic study included certain roadway segment and intersection analysis, the at-grade rail crossings were not included. Since this project is of a regional significance, the rail crossings should have been addressed in the DEIR.

The project is proposing 8,950 residential units which will have significant impacts to the at-grade rail crossings. The Commission recommends that your agency include potential project-related rail safety impacts, and measures to reduce adverse impacts to these crossings in the DEIR. In general, the major types of impacts to consider are collisions between trains and vehicles, and between trains and pedestrians. General categories of measures to reduce potential adverse impacts on rail safety include:

- Installation of grade separations at crossings, i.e., physically separating roads and railroad track by constructing overpasses or underpasses
- Improvements to warning devices at existing highway-rail crossings
- Installation of additional warning signage
- Improvements to traffic signaling at intersections adjacent to crossings, e.g., traffic preemption

- Installation of median separation to prevent vehicles from driving around railroad crossing gates
- Where soundwalls, landscaping, buildings, etc. would be installed near crossings, maintaining the visibility of warning devices and approaching trains
- Prohibition of parking within 100 feet of crossings to improve the visibility of warning devices and approaching trains
- Installation of pedestrian-specific warning devices and channelization
- Construction of pull-out lanes for buses and vehicles transporting hazardous materials
- Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way
- Elimination of driveways near crossings
- Increased enforcement of traffic laws at crossings
- Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings

Commission approval is required to modify an existing highway-rail crossing or to construct a new crossing.

Please forward any additional information that addresses our concerns so we may complete our review of the DEIR traffic/circulation section. The mitigation monitoring section will need to be amended to include any mitigation measures based on project impacts for opening day and buildout scenarios to the at-grade rail crossings.

Thank you for your consideration of these comments. If you have any questions in this matter, please contact me at (415) 713-0092 or email at ms2@cpuc.ca.gov.

Sincerely,

RECEIVED
JUN 10 2009
STATE CLEARING HOUSE

Moses Stites
Rail Corridor Safety specialist
Consumer Protection and Safety Division
Rail Transit and Crossings Branch
515 L Street, Suite 1119
Sacramento, CA 95814

Letter 29

Unknown

From: keitheroberts@aol.com
Sent: Tuesday, January 19, 2010 1:41 PM
To: Singh. Surinder (MSA)
Cc: JBerry@airquality.org; Hack. Catherine (MSA)
Subject: Florin-Vineyard Gap project- DEIR and SB375 comments

Hi Surinder, Jeane,

Catherine Hack indicated that there will be a planning commission meeting on 1/21; could you please submit the following? If my protocol is bad, I'm sorry; I've never followed a development project/ community plan before.

Given that
- the Board of Supervisors endorsed 2 options for the Florin-Vintyard Gap Plan in 2003,
- climate change is new to EIR's,
- greenhouse gas (ghg) and SB375 analysis tools are poor in 2009 and
- ghg analysis continues to evolve over time,

I am very impressed with how climate change has been incorporated into the programmatic and 26 project EIR's.

I also applaud the County's effort to:
- address sprawl through identification of the Planning Department's option and the Wetland Avoidance and Smart Growth Alternative
- try and better coordinate many diverse projects as is evidenced by the 26 project level EIR's;
    - by developing standard metrics per below comment and providing to project developers early in the process,
        - County may be able to improve cross-project coordination
        - County may be able to identify up-front if a given project will meet SB375 Sustainable Communities Strategy
        - SMAQMD may be able to quantify the impact of it's climate change checklist

Attached are comments that may improve the Community Plan with respect to addressing climate change and meeting SB375 and AB32 goals.

1. The programmatic EIR uses the best available, (but still rudimentary in 2009), analysis to estimate the ghg emissions for the CAC recommended option at 303,000 tonnes per year of CO2 and 355,000 tonnes for the PD recommended option. As ghg analysis tools become more accurate, will the programmatic and project level ghg estimates be updated? For example:
    a. Will the positive, or negative, synergistic effects between the 26 projects be determined?; e.g. If a residential project is located next to a shops project, and if the 2 projects are well connected (by more than just an arterial road which is standard practice), the ghg emissions will likely be reduced for

Letter 29

BOTH projects

b. A metric that might be used to determine connectedness is- how many amenities are within ½ mile walking distance of each living unit (see below for other potential metrics)

2. Will any, or all, of the 26 projects, require the use of LEED for Neighborhood Development?
3. Volume 2 of the EIR (26 project level EIR's) indicates that off-site mitigation will consist of paying a fee to SMAQMD or CCX for off-site mitigation.
    a. It is not clear to me if the CCX program will meet the rigor requirements of the ARB Cap and Trade program; would recommend saying that program must meet ARB regulations
    b. It is clear to me that the SMAQMD program is complementary to the ARB Cap and Trade program; this should remain as an option
4. The No Project option is truly of little value, however it would be reasonable to analyze the Wetland Avoidance and Smart Growth Alternative (WASGA) as the state-of-the-art option for suburban design for this Community Plan and then compare this option with the CAC and PD options as a benchmark of what is reasonable.
5. Since the SB375 Sustainable Communities Strategy (SCS) is taking form at this time, it is not yet clear how the 2 analyzed project options and the unanalyzed Wetland Avoidance and Smart Growth Alternative would fare under an SCS. However it is clear that some type of guidelines and/or metrics will eventually have to be provided by ARB/SACOG so that project developers (and the County) know up-front how transportation funding incentives and CEQA streamlining will positively, (or negatively), impact the County. Even though this project is in mid-stream, I would encourage the County to work with SACOG (if they are willing given their workload) to objectively determine how these 3 options would fare under an SCS. Ideally, any metrics that are used should be standardized and approved by ARB/MPO's so that similar projects throughout the State can be compared on a level playing field. Below are some sample metrics that may help qualitatively differentiate the 3 options and perhaps allow SACOG/County to measure the projects ghg reduction effectiveness.
    a. Percent of project acreage that utilizes "brownfield", infill, underused properties beneficially
    b. Number of intersections per square mile (should be high)
    c. Number of dead-ends (e.g. cul-de-sacs) per square mile (should be low)
    d. Percent of roads that are NEV capable (<= 35 mph)
    e. Percent of utility accounts provided with Smart electric, gas and water meters and have one-site web accessible usage and comparison data by parcel and also neighborhood aggregated data
        i. If possible it would be good to include available transportation data by parcel; e.g. cars per household from DMV; miles/yr/car from smog check, and by neighborhood- e.g. percent living units within ½ mile of transit stop with service level x; MPO household surveys
        ii. More difficult than transportation- include solid waste and goods movement statistics by parcel; more likely neighborhood aggregated data might be included
        iii. If possible, convert electric, natural gas, water, transportation, solid waste, and goods movement data into ghg emissions per capita and per household by parcel and by neighborhood

3/2/2010

Letter 29

iv. Develop educational tools with the above

f. Percent of estimated burdened construction funds spent to build new roads, bicycle lanes, ped/bike amenities, NEV amenities, charging stations, transit capital improvements, transit operating costs, car sharing program start-up costs (modified metric from SB375 to suit new development)
    i. Subsidized/free bus passes would count towards transit operating costs
g. Percent of living units within ½ mile of a transit stop with a minimum service level of x (SB375 metric; and similar calc for service levels y and z)
h. Percent of commercial spaces within ½ mile of a transit stop with a minimum service level of x (SB375 metric; and similar calc for service levels y and z)
i. Percent of living units within ½ mile riding distance of a Class I bicycle lane (same calc for Class II and III)
j. Percent of living units within ½ mile walking distance of at least 1 amenity (as defined by LEED for Neighborhood Development; same calc for 3 and 5 amenities)
    i. This metric will help determine mode split
k. Percent of living units within ½ mile of first class Park, community garden or publicly accessible open space (or separated Class I bike path with minimum easement of 20 foot width?)
l. Jobs to Housing ratio with rent/wage differentiation (SB375 metric)
m. Number of trees planted per living unit
n. Number of trees planted per square foot of commercial space
o. Percent estimated tree canopy coverage after 15 years
    i. To include coordination with solar projects
p. Percent of transit stops that are covered, have benches, have at least 2 sides protected from wind, solar powered electronic schedule update board w/ GIS on buses to improve board schedule accuracy
q. Percent of living units that exceed Title 24 by 15% (same calc for 20%, 30%, 50% and 75%) to include on-site solar
r. Percent of commercial space that exceed Title 24 by 15% (same calc for 20%, 30%, 50% and 75%) to include on-site solar
s. Percent of living units that have heating and cooling systems and electric dryers controlled remotely by utility for demand response through use of Smart meters
t. Percent of electric operating power provided to project over the next 50 years that is above and beyond State Renewable Portfolio Standard requirements (to include on-site solar electric, but not energy efficiency)
    i. Need to work with SMUD, this is not an existing program
u. Percent of living units equipped with solar domestic hot water that provides minimum of 60% annual needs
v. Percent of living units equipped with solar electric that provides minimum of 25% annual needs
w. Percent of businesses (by square foot) equipped with solar electric that provides minimum of 10% annual needs
x. For living units that are provided with such, percent and number of refrigerators, washing machines, dishwashers, TV's that are Energy Star compliant
y. Percent of restaurants that have agreed to not use Styrofoam food

3/2/2010

Letter 29

containers for at least 6 months (some jurisdictions ban styrofoam)

z. Percent of shops that do not provide disposable plastic or paper bags (some jurisdictions ban or impose fees on disposable bags)

aa. Percent of shops that agree to provide educational materials for a minimum of 6 months on products that have high global warming potential (e.g. computer dusters, Styrofoam, virgin copy paper, etc.)

bb. Percent of traffic intersections that utilize LED lighting

cc. Percent of street lighting that uses dual-level LED lighting with occupancy sensor control

dd. Percent of fuel stations that offer biodiesel and E-85

ee. Percent of apartment houses that decouple room rent from car space rent

ff. Percent of apartment houses that offer car share programs to their tenants and have a minimum of 1 car per x units

gg. Percent of homes signed up for car share program

hh. Percent of homes provided with electric lawn mower

ii. Percent of living units that are pre-plumbed for solar photovoltaic

jj. Percent of homes that are pre-wired for plug-in hybrids and NEV's

kk. Percent of homes provided with neighborhood electric vehicle (NEV)

ll. Percent of living units provided with a welcome basket that includes educational material, several compact fluorescent (and LED?) light bulbs, reusable coffee mug, reusable drink mug, canvas shopping bag, rechargeable batteries and charger, BBQ chimney charcoal starter, 90 day free car share program gift certificate, 90 day free bus pass gift certificate and 2 years subsidized at 50% bus pass gift certificate, occupancy sensor controlled plug strip

mm. Percent of living units that require residential vehicle parking permit with increased fees for second and third vehicles (except NEV's, alternate fuel vehicles, high performance hybrids and plug-in hybrids would be lower fee)

nn. Percent of living units with access to natural gas in back yard for future BBQ and electric outlets for electric grounds maintenance equipment

oo. Percent of living units provided with clothes drying line

pp. Percent of apartment houses provided with first class recycling facilities

qq. Percent of commercial space provided with first class recycling facilities

rr. Percent of living units signed up to NOT receive junk mail from the post office

ss. Percent of homes provided with mulching/composting bins

tt. Percent of living units meeting State approved drought resistant landscaping standards

uu. Percent of living units utilizing recycled water for irrigation

vv. Percent of living units utilizing gray water for irrigation

ww. Percent of businesses (by acres) utilizing recycled water for irrigation

xx. Percent of project acreage that utilizes low-impact storm water management (to include retention basins?)

yy. Percent of project acreage that utilizes high-impact detention basins and conventional storm sumps

zz. Percent of living units that use no more than 80% of business as usual potable water (same calc for 70%, 60%, 50%, 25%)

aaa. Percent of construction vehicles that meet SMAQMD preferred emissions rate (should be high, but may be difficult to enforce over long period of construction?)

3/2/2010

Letter 29

6. 1.5 points is identified in SMAQMD checklist if average residential densities are > 7 per acre; there are approximately 2,485 residential acres identified in Table PD-1 of EIR, volume 1 yielding a required 17,300 living units. Neither the PD or CAC options meet this level of density. It doesn't appear that this credit is achievable; please clarify. I've suggested to AQMD that they perhaps consider sliding scale based on best available empirical data on housing density vs VMT

Thanks You
Keith Roberts
916-205-6085

3/2/2010

EIR ACKNOWLEDGMENTS

LEAD AGENCY STAFF – SACRAMENTO COUNTY DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

Joyce Horizumi	Environmental Coordinator
Antonia Barry	Assistant Environmental Coordinator
Catherine Hack	Senior Environmental Analyst
Tim Hawkins	Senior Environmental Analyst
Kate Brownfield	Associate Environmental Analyst
Lauren Hocker	Associate Environmental Analyst
Kevin Messerschmitt	Associate Environmental Analyst
Joelle Morales	Associate Environmental Analyst
Peter Morse	Associate Environmental Analyst
Michelle Overmeyer, AICP	Associate Environmental Analyst
Linda Wittkop Johnston	Administrative Services Officer III
Justin Maulit	Office Assistant II
Michelle Ponder	Office Assistant II

EIR CONSULTANT – RANEY PLANNING & MANAGEMENT, INC.

C. Timothy Raney, AICP	President
Cindy Gnos, AICP	Vice President
Nick Pappani	Division Manager
Antonio Garza	Associate
Ariel Calvert	Associate
Darlene Corbitt	Project Coordinator

TECHNICAL STUDY CONSULTANTS

Bollard Acoustical Consultants – Environmental Noise Assessment

Civil Engineering Solutions - Preliminary Drainage Study

Donald Ballanti, Certified Consulting Meteorologist – Air Quality Assessment

Economic & Planning Systems – Florin Vineyard Community Plan Public Facilities Financing Plan

Fehr and Peers – Traffic Impact Analysis

Gibson & Skordal, LLC - Biological Baseline Information Report

MacKay & Somps Civil Engineers, Inc. – Sanitary Sewer Master Plan

MWH, Inc. – Master Water Study for the Florin-Vineyard Community Plan

Peak & Associates, Inc. – Cultural Resources Study

Peterson, Brustad, Pivetti, Inc. – California American Water Supply Assessment