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## Chapter 4 ENVIRONMENTAL ANALYSIS

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### ■ Introduction to the Analysis

Sections 4.1 through 4.13 of Chapter 4 of this EIR contain a discussion of the potential environmental effects of implementation of the proposed project, including information related to existing site conditions, analyses of the type and magnitude of project-related environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts. Chapter 4 includes the following sections and subjects:

- 4.1—Land Use and Agricultural Resources
- 4.2—Population, Employment, and Housing
- 4.3—Transportation and Circulation
- 4.4—Air Quality
- 4.5—Noise
- 4.6—Geology, Soils, and Seismicity
- 4.7—Biological Resources
- 4.8—Cultural Resources
- 4.9—Hazardous Materials and Public Safety
- 4.10—Public Services
- 4.11—Public Utilities
- 4.12—Hydrology, Water Quality, and Groundwater
- 4.13—Aesthetics and Visual Resources

Cumulative impacts are presented in Chapter 5 (CEQA Considerations) of this EIR.

### ■ Format of the Environmental Analysis

#### **Environmental Setting**

According to Section 15125 of the CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the “baseline condition” against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the Notice of Preparation (NOP) is published. The NOP for the proposed

project EIR was published in August 2002. CEQA Guidelines recognize that the date for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time periods, the use of environmental baselines that differ from the date of the NOP is reasonable and appropriate when doing so results in a more accurate or conservative environmental analysis.

For analytical purposes, impacts associated with implementation of the proposed project are derived from two fundamental components of the existing baseline environmental setting—existing conditions at the time the NOP was published and conditions that exist at buildout of the Roseville General Plan. It is appropriate to evaluate project-level impacts against the conditions that exist when the NOP was published for most issue areas, including Land Use and Agricultural Resources; Population, Employment, and Housing; Geology, Soils, and Seismicity; Biological Resources; Hydrology, Water Quality, and Groundwater; Hazardous Materials and Public Safety; Public Services; Cultural Resources; and Aesthetics and Visual Resources. For issue areas either directly or indirectly related to infrastructure, project-level impacts are more conservatively analyzed against future baseline conditions that consider General Plan and approved growth, because improvements (e.g., roadway widenings, intersection improvements, wastewater distribution and conveyance, solid waste disposal, water supply, electricity and natural gas supplies) must consider and accommodate ultimate demand. In this analysis, ultimate demand is the year 2020, which is the buildout year of the City of Roseville’s General Plan. Accordingly, the year 2020 represents the future baseline conditions against which project impacts are measured. The issue areas dependent upon infrastructure improvements, and for which a year 2020 future baseline condition is used, include Transportation and Circulation, Public Utilities, Air Quality, and Noise. The assumptions inherent in the Air Quality and Noise analysis are derived from the Transportation and Circulation analysis; therefore, the baseline year is the same as the other issue areas related to infrastructure.

### **Regulatory Setting**

The Regulatory Setting provides a summary of regulations, plans, policies, and laws that are relevant to each issue area.

### **Project Impacts**

This section is further divided into the following subsections, as described below.

### **Methods of Analysis**

This subsection identifies the methodology used to analyze potential environmental impacts.

### **Standards of Significance**

The CEQA Guidelines define a significant effect on the environment 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, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance” (CEQA Guidelines Section 15382). Definitions of significance vary with the physical conditions affected and the setting in which the change occurs. The CEQA Guidelines set forth physical impacts that trigger the requirement to make “mandatory findings of significance” (CEQA Guidelines, Section 15091). For all environmental issues, this EIR identifies specific standards of significance.

Where explicit quantification of significance is identified, such as a violation of an ambient air quality standard, this quantity is used to assess the level of significance of a particular impact in this EIR. For less easily quantifiable impacts, events or occurrences that would be regarded as significant or potentially significant were identified. For example, growth-inducing impacts would be identified as significant if the project results in a level, rate, or character of growth that (among other criteria) exceeds the capacity of existing infrastructure and services. Where the “substantial” effect of an impact is not identified in the CEQA Guidelines, the criteria for evaluating the significance of potential impacts were determined and identified in this document.

This subsection describes the potential environmental impacts of the proposed project and, based upon the thresholds of significance, concludes whether the environmental impacts would be considered significant, potentially significant, or less than significant. Each impact is summarized in an “impact statement,” followed by a more detailed discussion of the potential impacts and the significance of each impact before mitigation.

Each impact is provided as a “summary block” prior to the impact discussion to allow for easy reference. The impact number consists of the section of the EIR in which that impact is identified followed by a “-” to indicate the number of the impact in that section. For example, Impact 4.1-1 is the first impact identified in Section 4.1. Each impact summary block is formatted as follows and includes a finding for each component of the project.

<b>IMPACT 4.13-1: ALTERATION OF THE VISUAL CHARACTER OF THE SITE AND VICINITY.</b>		
<b>Applicable Policies and Regulations:</b>	Roseville General Plan Roseville Community Design Guidelines	
	<b>WRSP Area</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	None Available	None Available
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Significant and Unavoidable

Following the description of applicable policies and regulations, as well as MMs, the subsection concludes with a statement regarding whether the impact, following implementation of the mitigation measure(s) or the continuation of existing policies and regulations, would remain significant, and thus be significant and unavoidable, or would be reduced to a less-than-significant level.

The analysis of environmental impacts considers both the construction and operational phases associated with implementation of the proposed project. As required by Section 15126.2(a) of the CEQA Guidelines, direct, indirect, short-term, long-term, on-site, and/or off-site impacts are addressed, as appropriate, for the environmental issue area being analyzed. In addition, this section separately analyzes the impacts of the WRSP Area on a project-level basis and the impacts of the Remainder Area on a programmatic basis. The difference between a project-level analysis and a programmatic-level analysis is provided in Section 1, Introduction, of this document.

Information regarding the SOI Amendment Area, which consists of the WRSP Area and the Remainder Area, is provided prior to the impact discussion where it provides useful background information and/or assists the reader in establishing the context within which the WRSP Area and Remainder Area impacts occur; however, no environmental analysis is provided and no significance conclusions are identified. For most issue areas, impacts resulting from the entire SOI Amendment Area would consist of the collective impacts that would occur if the WRSP Area and Remainder Area were developed separately. In the issue areas of Transportation and Circulation, Air Quality, and Noise, an environmental analysis for the SOI Amendment Area is provided because the impacts that would result from development of the entire area would be different than the collective impacts resulting from development of the WRSP Area and Remainder Area separately. A brief discussion of why the SOI Amendment Area impacts are different than the collective impacts of the WRSP Area and Remainder Area is provided in the “Methods of Analysis” portion of Section 4.3 (Transportation and Circulation), Section 4.4 (Air Quality), and Section 4.5 (Noise).

The Draft EIR uses the following terms to describe the level of significance of impacts identified during the course of the environmental analysis:

- **Significant and Unavoidable Impact (SU)**—Impact that exceeds the defined threshold(s) of significance and cannot be eliminated or reduced to a less-than-significant level through the implementation of feasible mitigation measures
- **Significant Impact (S)**—Impact that exceeds the defined threshold(s) of significance. For purposes of this document, pre-mitigation impacts that exceed the defined threshold(s) of significance are referred to as significant; however, when the impacts cannot be eliminated or reduced to a less-than-significant level through the implementation of feasible mitigation measures, these impacts are referred to as significant and unavoidable.
- **Potentially Significant Impact (PS)**—Impact that exceeds the defined threshold(s) of significance and can be eliminated or reduced to a less-than-significant level through the implementation of feasible mitigation measures
- **Less-Than-Significant Impact (LS)**—Impact that does not exceed the defined threshold(s) of significance

A “significant effect” is defined by Section 15382 of the CEQA Guidelines 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, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment...[but] may be considered in determining whether the physical change is significant.”

### **Mitigation Measures**

This subsection includes feasible mitigation measures that could reduce the severity of the impact. In addition to feasible mitigation measures (MMs), the Applicant/Developer of the proposed project would also continue to comply with all applicable local, State, and federal laws and regulations, and these laws and regulations are considered to be part of the project description. In many instances, the actions that are necessary to reduce a project impact are already required by local, State, or federal law. Similarly, established design guidelines or other requirements that the City regularly recognizes and follows for development projects are also considered part of the project description, as are the standards, guidelines, and requirements imposed by the West Roseville Specific Plan. Worth noting, the Specific Plan must be consistent with the General Plan to be approved, and the Tentative Tract Map and Final Map must be consistent with the Zoning Code in order to be approved. In this EIR, such requirements are identified and considered in the impact assessment prior to the identification of additional project-specific mitigation measures that would reduce the level of significance of impacts.

**■ Modifications to the Proposed Project since Issuance of the NOP**

Since the NOP was released on August 16, 2002, revisions to the WRSP land use plan have been made in response to NOP comments, as well as issues raised by regulatory agencies, the City of Roseville and other service providers. Some revisions to the land use plan were made by the Project Applicant to improve compatibility among land uses and to improve the overall circulation, public infrastructure, and/or phasing approach to the project.

Tables 4-1, 4-2, and 4-3 summarize the changes to proposed land use acreages and distribution of residential units between the time the NOP Land Use Plan (August 16, 2002) was prepared and the land use plan was revised (August 29, 2003). The revised land use plan is shown in Figure 2-3 (West Roseville Specific Plan Land Use Plan), which is provided in Chapter 2 (Project Description). The prior land use plan is shown in Figure 2 of the NOP, which is provided in Appendix A. No land use changes have been made to the Remainder Area.

<b>APN</b>	<b>Acreage</b>
<b>Westpark Associates</b>	
017-100-021	160
017-100-043	321
017-100-044	130
017-150-003	238
017-150-037	634
<b>Subtotal</b>	<b>1,483</b>
<b>Signature Properties</b>	
017-100-009	480
017-100-010	160
017-100-034	364
017-100-035	120
017-100-036	80
017-100-040	80
017-115-001	159
017-115-063	79
017-115-062	79
017-115-061	78
017-115-051	0.2
<b>Subtotal</b>	<b>1,679</b>
SOURCE: Placer County Assessor's Office <a href="http://www.placer.ca.gov/assessor/assessor.htm">http://www.placer.ca.gov/assessor/assessor.htm</a>	

**Table 4-2 Differences in Land Uses Between NOP and Draft EIR (WRSP Only)**

Zoning	Land Use	WRSP (NOP) August 16, 2002		WRSP September 15, 2003		Change from NOP	
		Acres	DUs	Acres	DUs	Acres	DUs
OS	Open Space	649.7		670.1		20.4	
OS/Paseo	Open Space Paseo	0		14.5		14.5	
PR	Park	246		251.0		5.0	
PR	Pocket Parks	0		19.4		19.4	
P/QP	Public/Quasi-Public	141.5		148		6.5	
LDR	Low Density Residential	1,393.9	4,915	1,354.6	4,842	-39.3	-73
LDR	Low Density Residential (Age Restricted)	149.6	745	146.9	710	-2.7	-35
MDR	Medium Density Residential	112.4	810	142.9	1,064	30.5	254
HDR	High-Density Residential	114.8	1,960	109.7	1,814	-5.1	-146
CC	Community Commercial	88.1		48.5		-39.6	
BP	Business Professional	4.7		19.6		14.9	
LI	Light Industrial	53.6		74.2		20.6	
IND	Industrial	59.4		34.3		-25.1	
R/W	Road right-of-way	147.9		128.3		-19.6	
<b>Total</b>		<b>3,162.0</b>	<b>8,430</b>	<b>3,162.0</b>	<b>8,430</b>	<b>0</b>	<b>0</b>

NOTE: Totals adjusted slightly due to rounding.  
 SOURCES: Signature Properties; Westpark Associates, 2003; EIP Associates, 2003  
 West Roseville Specific Plan, September 15, 2003

**Table 4-3 Summary of Residential Land Use Changes**

	NOP – August 2002 Land Use Plan		September 2003 Land Use Plan	
	Total Units	Percentage of Total	Total Units	Percentage of Total
Single Family Residential (0.5 to 6.9 units per acre)	5,660	67%	5,552	66%
Medium Density Residential (7.0 to 12.9 units per acre)	810	10%	1,064	13%
High-Density Residential (13.0 unit per acre and greater)	1,960	23%	1,814	21%
<b>Total Units</b>	<b>8,430</b>	<b>100%</b>	<b>8,430</b>	<b>100%</b>

NOTE: Due to rounding effects, percentage totals may be greater than 100%  
 SOURCE: Signature Properties; Westpark Associates, 2003

The following summarizes the substantive revisions to the land use plan since the release of the NOP:

- *Creation of West Side Open Space.* On the west side of the WRSP Area, the land use pattern has been modified to add a buffer between the WRSP and the open land to the west. The amount of land devoted to urban uses decreased, reducing developable acreage, adding open space, and modifying the circulation pattern to create an edge to the WRSP land use plan. This change is intended to provide a larger contiguous open space area to protect vernal pool habitat and to provide a permanent open space buffer between the development proposed by the WRSP and open land to the west.

- *Creation of 267-acre open space area.* On the NOP land use plan, approximately 151 acres of open space were shown west of Westpark Drive.<sup>7</sup> On the revised land use plan, the open space area has been increased to 267 acres and the developed area has been decreased by 116 acres. This open space area ranges from 1,200 to 3,500 feet in width.
- *Relocation of Residential Units.* West of the proposed West Side Drive, where additional open space was added, approximately 300 residential units were relocated to the Village Center, distributed among Low Density Residential (LDR) and Medium Density Residential (MDR) parcels surrounding the Village Center. The number of proposed residential units remains at 8,430.
- *Street Renamed within the WRSP Area.* Westpark Drive (on the NOP land use plan) is now shown as West Side Drive. The alignment of West Side Drive has straightened somewhat and the northern intersection with Blue Oaks Boulevard is located farther east. In addition, Dyer Road is now shown as Market Street within the WRSP Area. Outside of the WRSP Area, it remains as Dyer Road. Veterans Boulevard is now Village Green Drive, and two small streets within the Village Center are now referred to as Street A Northwest and Street B Southeast.
- *Blue Oaks Terminus at West Side Drive.* On the NOP land use plan, Blue Oaks Boulevard is extended to the northwest corner of the WRSP Area to intersect with Watt Avenue. Blue Oaks Boulevard now terminates at its intersection with West Side Drive.
- *Pleasant Grove Boulevard Arterial Terminus at West Side Drive.* On the NOP land use plan, Pleasant Grove Boulevard is extended west along the southern edge of the WRSP Area to intersect with the proposed extension of a north/south arterial. Pleasant Grove Boulevard now is planned as a four-lane arterial to its intersection with West Side Drive. On the west side of West Side Drive, Pleasant Grove Boulevard would function as a residential collector for adjacent residential land uses to the north.
- *North/South Arterial Alignment Modified.* On the NOP land use plan, Watt Avenue, a six-lane arterial, was located on the west side of the SOI Amendment Area. In the revised land use plan, the proposal for north/south arterial alignment has been modified. West Side Drive now provides north/south circulation to the west side of the WRSP Area. As shown in Figure 2-16 (Conceptual Circulation Plan for the SOI Amendment Area) in Chapter 2 (Project Description), a north/south arterial could be extended through the Remainder Area at an angle, connecting with West Side Drive. It would not preclude a northerly extension to Watt Avenue.
- *Addition of Paseos.* Throughout the WRSP Area, paseos have been added that were not included in the NOP. The paseos are landscaped corridors that link developed areas (i.e., schools, residential neighborhoods) to parks and other open space features. The paseos are linear (approximately 75 feet in width) and are located throughout the WRSP Area. Paseos provide a non-vehicular passage for pedestrians and bicyclists to access open space and park areas.

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<sup>7</sup> Westpark Drive is now shown as West Side Drive.

- *Elimination of "200-foot" Open Space Corridors.* The north side of the plan (Signature Property) originally contained 200-foot-wide open-space corridors that ran east/west and north/south. These corridors have been eliminated and the acreage has been added to other natural open space areas to provide larger open space preserve areas.
- *Refinements to the Village Center.* The basic form and concept of the Village Center has been refined since release of the NOP. This includes modification of the land use plan for the Village Center to incorporate a broad mix of uses applied over an urban grid street pattern with a central village green. The refined land use plan includes a blend of higher density residential types, commercial and service uses and public/quasi-public spaces. The resulting increase in the density/intensity of development and refined spatial relationship between uses promotes activity, pedestrian orientation, and use of alternative transportation modes. The WRSP Area includes planning principles influenced by smart growth concepts to guide implementation of the Village Center.
- *Elimination of the 10-acre Commercial Center at Pleasant Grove and Fiddymont Road.* In order to focus commercial development within the Village Center, the nearby ten-acre commercial center was removed.
- *Elementary School Moved Out of Village Center.* The elementary school site (W-75) previously located in the Village Center is still in proximity to the Village Center, although it has been moved north of Del Webb Boulevard (now Village Green Drive) on the Westpark property to give it separation from the proposed commercial uses.
- *Market Street Extended on West Side of Village Center.* Market Street has been extended south to the edge of the WRSP Area along the west side of the Village Center. Market Street will access the Village Center and provide the WRSP Area with additional north/south circulation. Eventually, Market Street may extend south through the Remainder Area, to Baseline Road (see Figure 2-16 in Chapter 2).
- *Shift in Emphasis to Medium-Density Residential Range.* Revisions to the WRSP land use plan have resulted in a slight shift in residential densities from the Low-Density (LDR) and High-Density Residential (HDR) categories to Medium-Density Residential (MDR). The shift in densities is a result of units moving from the west side of the WRSP Area to the Village Center area and an overall increase in average density of the medium-density range from 7.2 to 7.7 units per acre.
- *Shift from Industrial to Light Industrial Land Uses.* On the NOP land use plan, 53.6 and 59.4 acres were designated for Light Industrial and Industrial land uses, respectively. The land use designation for approximately 25 acres was changed from Industrial to Light Industrial. This revision was made when West Side Drive was realigned to the east.
- *Business Professional Site Relocated.* On the NOP land use plan, a business professional site was located on Westpark Drive across from light industrial land uses. The business professional site was moved south to the northeast corner of Pleasant Grove Boulevard and West Side Drive to this location to increase accessibility (adjacent to two arterials) and to allow use of the power line easement for parking.

- *Fire Station Relocated from Westpark Drive to Hayden Parkway Site.* The fire station previously located west of Westpark Drive and north of an industrial collector street was relocated to the east side of the WRSP Area to a more central location. The 3.1-acre fire station site is located south of Blue Oaks Boulevard on the west side of Hayden Parkway. The new site is more centrally located, which will result in better response times to more land uses. The fire station site would be constructed in Phase 1 of the project.
- *Electric Substation Located on Blue Oaks Boulevard.* A 1.6-acre site for an electric substation is now proposed north of Blue Oaks Boulevard west of a Community Commercial site at the northwest corner of Fiddymment Road/Blue Oaks Boulevard. The substation is identified as a Phase 1 improvement.
- *Community Commercial Site Relocated.* In the NOP, a 10-acre Community Commercial site was located in the southeast corner of the WRSP Area at the intersection of Fiddymment Road and Pleasant Grove Boulevard. Since preparation of the NOP the commercial site has been removed.
- *Addition of Phillip Road to Circulation Plan.* Abandonment of portions of Phillip Road through the WRSP Area adjacent to the Pleasant Grove Wastewater Treatment Plant (PGWWTP) was contemplated. Since preparation of the NOP, Phillip Road has been added to the plan as a future collector road extending from Bob Doyle Drive west and then north to an intersection with Blue Oaks Boulevard. Portions of Phillip Road between the PGWWTP and proposed Roseville Energy Park will be abandoned. The north/south alignment of Phillip Road will separate the PGWWTP from the regional park/sports complex and provide additional access to the regional park/sports complex. Phillip Road will function as a collector with a landscape corridor on the west side and regional park on its east side.
- *Water Storage Tanks Relocated to South of the PGWWTP.* In the NOP, the water storage tanks were located north of the PGWWTP, east of the proposed energy facility site. The water tanks have been relocated to just south of the PGWWTP on a 5.1-acre site.
- *Well Sites Added.* The revised land use plan includes four well sites: one is in the northeast portion of the WRSP Area north of Pleasant Grove Creek; the second is located southwest of the PGWWTP along the east side of West Side Drive; the third is located in the northwest portion of the WRSP Area west of West Side Drive; and the fourth is located along Hayden Parkway in southwest of Fiddymment Park.
- *Removal of the Multi-Modal Transit Center.* In the NOP, a small site was designated for a multi-modal transit center located in the northwest corner of the WRSP Area. In the revised land use plan this multi-modal transit center has been removed.

## 4.1 LAND USE AND AGRICULTURAL RESOURCES

### 4.1.1 Introduction

This section addresses existing and planned land uses for the SOI Amendment Area and vicinity, including a description of the existing land uses within the SOI Amendment Area and in adjacent areas; an analysis of projected and potential changes in the type, intensity, or pattern of land uses, including agricultural lands; and compatibility between existing and planned uses within the SOI Amendment Area and in adjacent areas. Although not considered a CEQA issue, it should be noted that one of the proposed alignments of Blue Oaks Boulevard (refer to Chapter 2, Project Description, for more detail) could result in the need to acquire parcels just east of the West Side Drive/Blue Oaks Boulevard intersection. This issue is discussed in detail later in this section (refer to Impact 4.1-2). Potential conflicts with provisions of the City of Roseville General Plan, Placer County General Plan, Placer County Local Agency Formation Commission (LAFCO) Guidelines, and other relevant planning documents are discussed in Chapter 7 (Planning Considerations). Information provided in this section was gathered from site visits and a review of the following documents:

- *City of Roseville General Plan* (1992), and as amended January 2003
- *California Department of Conservation Placer County Important Farmland Map*
- *City of Roseville Zoning Ordinance*
- *Placer County General Plan*
- *West Roseville Specific Plan* (2003)
- *Reason Farms Regional Detention EIR*, January 2003

All of these documents are available for review at the City of Roseville Permit Center, 311 Vernon Street, Roseville, California.

Physical impacts resulting from the change in land uses (e.g., biological resources, transportation, public services) are addressed in Sections 4.2 through 4.13 of this EIR.

Comment letters received in response to the Notice of Preparation (refer to Appendix B) raised concerns associated with the proximity of residential areas to active agricultural uses, compatibility due to an increase in traffic noise and emissions on adjacent areas (specifically, Del Webb Specific Plan), and loss of privacy. These issues are addressed in the Impacts analysis of this section.

As discussed in Chapter 1 of this EIR, Introduction, this EIR evaluates the impacts of the West Roseville Specific Plan (WRSP), which would include a Sphere of Influence Amendment and annexation to the City, at a project-specific level. Because a Sphere Amendment is the only action proposed for the Remainder Area, a program-level analysis is provided for the Remainder Area SOI Amendment (refer to Chapter 1 of this EIR for a more complete description of project-specific versus program level analysis). In order to conduct the analysis, development assumptions are made for the Remainder Area (refer to Chapter 2 for details). Figure 1-1 (SOI Amendment Area) in Chapter 1, Introduction, identifies the boundaries of the WRSP Area and Remainder Area, which collectively comprise the entire SOI Amendment Area.

As discussed in the introduction to Chapter 4 of this EIR, Environmental Analysis, minor changes have been made to the proposed land uses for the WRSP since publication of the NOP. Overall, the total number of residential units has not changed. However, the number of low-density and high-density units has decreased, while the total number of medium-density units has increased. In addition, the total amount of open space increased by 34.9 acres, primarily along the western boundary of the WRSP Area, and the total amount of Community Commercial has decreased by 41 acres. Lastly, the total amount of land designated for Industrial has decreased, while Light Industrial has increased. Because the mix of uses and proximity of residential uses to commercial, industrial, and agricultural uses have not changed, the land use analysis is not substantially affected by alterations since the NOP.

## **4.1.2 Environmental Setting**

### **■ Land Uses in the Vicinity of the SOI Amendment Area**

#### **Placer County**

Adjacent and nearby unincorporated areas in Placer County to the north, south, and west of the SOI Amendment Area include undeveloped dry pasture land and rural residential uses with topography similar to the SOI Amendment Area. Lands north and west of the site are designated for agricultural use in the Placer County General Plan. Land in the western and northern sections of this rural area of the County has primarily been used for grazing or other dry farming activity. These lands are designated primarily as Farmland of Local Importance or Grazing Land.<sup>8</sup>

The area extending west of Fiddyment Road between Baseline Road and Pleasant Grove Creek to the Sutter County line (including a portion of the WRSP Area and Remainder Area) has been identified by

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<sup>8</sup> Placer County Farmland Map, 1992

the Placer County General Plan as a “Study Area” that “may be identified as being suitable for development at urban or suburban densities and intensities...” Future growth in this area may occur in the unincorporated County, or as a result of annexation to an adjacent city.<sup>9</sup> The Placer County Study Area is illustrated by Figure 4.1-1 (Placer County Study Area) in the context of the proposed project site.

Placer County has adopted the Sunset Industrial Area Plan (SIAP), which addresses land use to the north of the project site. The SIAP, adopted by the County in 1997, provides land use designations and policies to guide development within approximately 9,000 acres and designates land adjacent to the SOI Amendment Area as Industrial Reserve, which would permit agriculture, recreational and entertainment activities compatible with industrial uses, as well as activities from the Western Regional Sanitary Landfill as permitted in the Farm Zone District.<sup>10</sup>

A cogeneration facility and the Western Regional Sanitary Landfill are located to the north of the SOI Amendment Area. The landfill is located approximately one mile northeast.

Placer Vineyards, a proposed mixed-use specific plan area, would be located in unincorporated Placer County southwest of the SOI Amendment Area. The proposed Placer Vineyards project encompasses approximately 5,000 acres and could eventually include 14,132 residential units and 6.7 million square feet of nonresidential development. The County is currently preparing an EIR on the Placer Vineyards project.

Additional development proposals considered for projects within the unincorporated area of southwestern Placer County include the proposed Placer Ranch, De La Salle University and Planned Community, Bickford Ranch, Northwest Rocklin Annexation, and Roseville Energy Park. Development areas in Placer County are illustrated by Figure 4.1-2 (Development Areas in the County) and further discussed in the cumulative impacts section of Chapter 5 (CEQA Considerations).

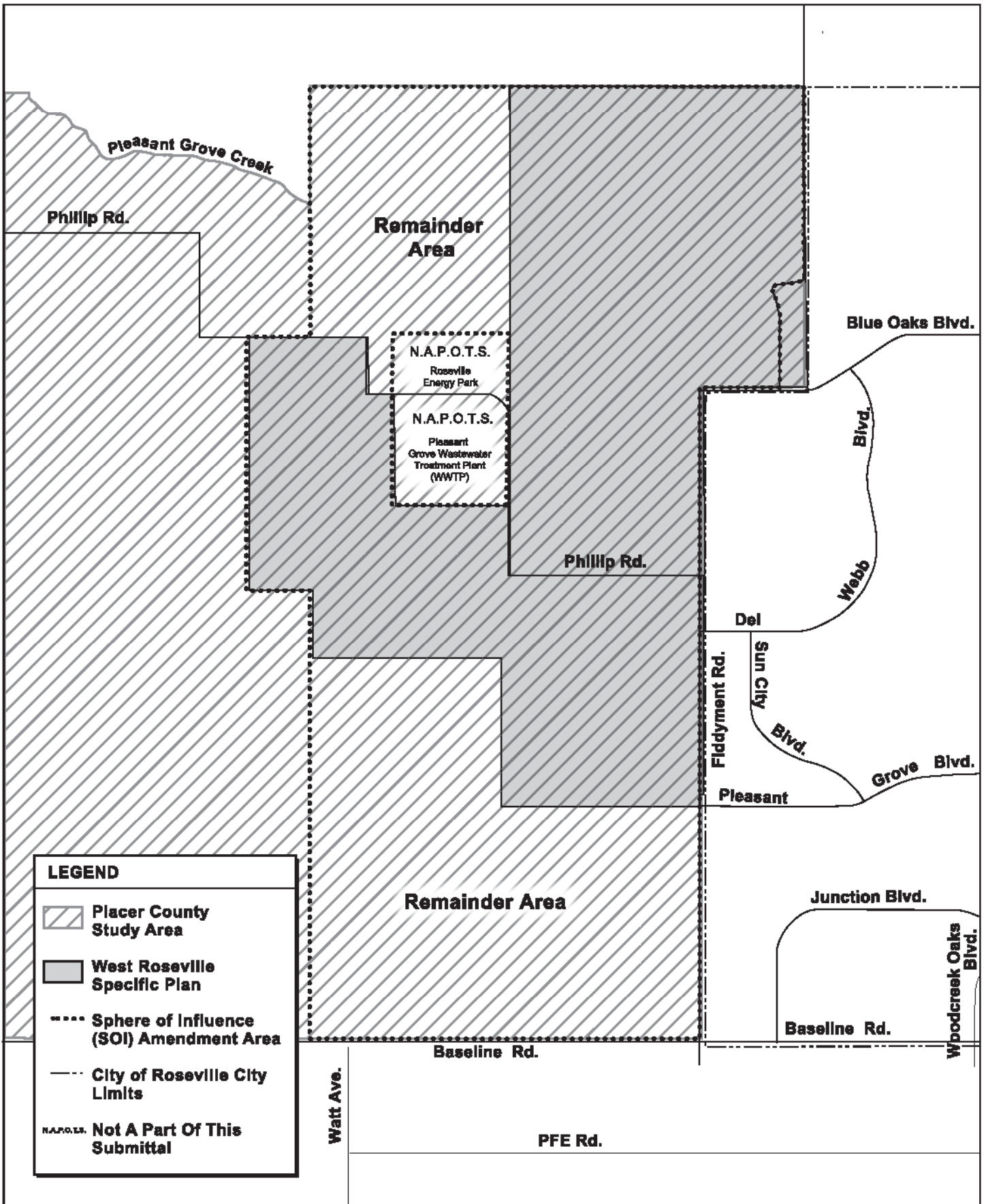
The proposed Placer Ranch project in Western Placer County is a mixed-use development project that was recently proposed for the western portion of the Sunset Industrial Area in unincorporated Placer County north of the City of Roseville. The preliminary Placer Ranch plans call for a 262-acre college campus plus 3,095 residential dwelling units and about 1,046 acres of retail, office, and industrial uses. At this time no formal application has been submitted to the County; however, an informal proposal has been submitted to the County, with a formal application anticipated in late 2003.<sup>11</sup>

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<sup>9</sup> Placer County, Placer County General Plan, August 1994, p. 146

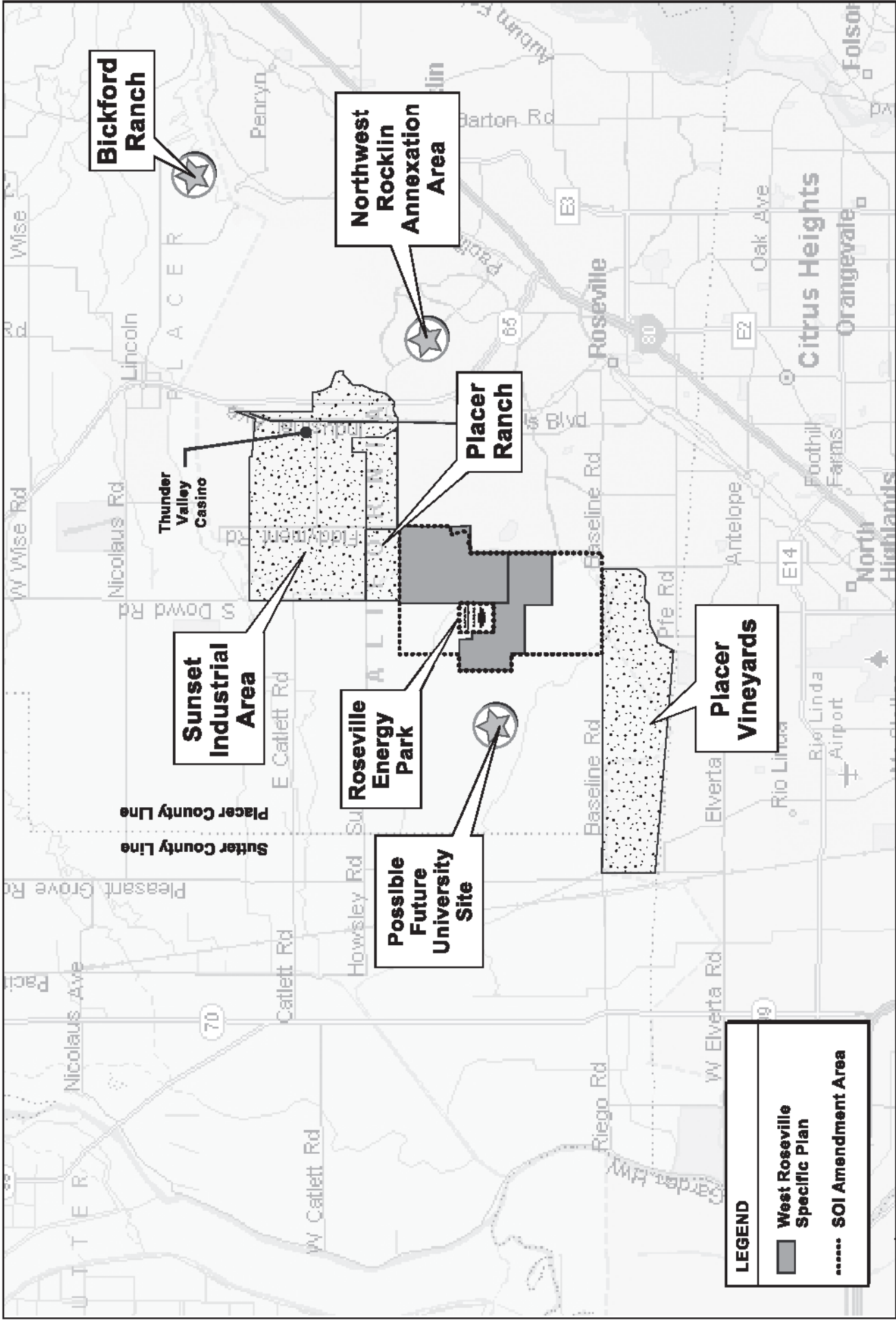
<sup>10</sup> Sunset Industrial Area Plan, Placer County, Figure 1-1 and pp. 1-4 through 1-5, 1997

<sup>11</sup> Fred Yeager, Placer County Planning Director, personal communication, April 23, 2003



**FIGURE 4.1-1**  
**Placer County Study Area**

Not to Scale



**LEGEND**

- West Roseville Specific Plan
- SOI Amendment Area

**FIGURE 4.1-2**  
**Development Areas in the County**

Source: Microsoft Street & Trips 2002, EIP Associates, 2003



The De La Salle University project is proposed for an approximately 1,100-acre site immediately west of the WRSP site, in unincorporated Placer County. The initial project application for the De La Salle University and community indicates that the campus will consist of 600 acres, and the adjoining 500 acres will comprise the planned community portion. The project will include 365 acres of low, medium, and high-density residential, 73 acres of commercial, and 62 acres of parks, schools, and open space.

The Bickford Ranch project, approved by the County is located four miles west of I-80 and along the southern portion of Highway 193. It is proposed as a large scale, mixed use planned development. The project proposes 1,880 residential units, an 18-hole golf course, 9.7 acres of retail/office uses, and several public service buildings.

The Northwest Rocklin Annexation, or Sunset Ranch Development, is a proposed 1,871-acre multi-use project that would involve the addition of 3,009 houses, 1,150 apartments, and approximately 500,000 square feet of retail and office space on 12 acres to an area east of Highway 65.

The proposed Roseville Energy Park involves the construction of a 150 MW electrical generation facility north of the PGWWTP site.

The United Auburn Indian Community's 200,000-square-foot casino (Thunder Valley Casino), located in an area of Placer County designated for industrial use at Athens and Industrial Avenue, approximately two miles north of the SOI Amendment Area, opened in June 2003.

### **City of Roseville**

The SOI Amendment Area is located within unincorporated Placer County adjacent to the western boundary of the City of Roseville. Historically, the Roseville region has been dominated by agricultural activities, most notably ranching. Large ranches, such as the Kaseberg Ranch, and the Spring Valley Ranch, have had active operations since the mid 1800s. Grazing continues throughout the region on a limited basis, primarily in areas outside of the City (no agricultural uses have occurred within the City in recent years). Other agricultural activities in the region have included production of poultry, wheat, raisins, grapes, oranges, and nuts. Over the years, agricultural production and economic viability of agricultural operations in the area have changed dramatically due to poor soils, cost of utilities (i.e., water costs), and costs associated with labor and equipment.

The City of Roseville has experienced sizeable growth during the past two decades. The City has evolved into an urban center with a mix of residential, service, and employment uses. Land designated and zoned for residential development within the existing City of Roseville boundaries is fully entitled for future

development and, according to development projections prepared by Muni Financial, is anticipated to be built out between 2005 and 2007 (copies of this information are available during normal business hours at the City's Permit Center, 311 Vernon Street, Roseville, California). Potential development west of the City of Roseville has been contemplated for some time.

In the early 1990s, the City received an application to develop an area located that is with northeast portion of the WRSP Area. The project, called the Villages at Blue Oaks, Phase 1, assumed development of 1,079 acres with 3,568 residential units, 27 acres of retail/commercial uses, and 90 acres of parks and recreation. The project was evaluated in the Comprehensive Land Use Element Update Project (CLUE) EIR (February 1995). Neither the CLUE EIR nor the Village at Blue Oaks was advanced for approvals by the City.

Since the 1980s the City has adopted eight specific plans, shown on Figure 4.1-3 (Specific Plan Areas in the Vicinity of the Project Site). These plans address growth issues and the unique constraints and opportunities found within each area, and provide a context within which implementation of the land use plan and associated public facilities can be successfully accomplished. The three specific plan areas that are either adjacent to or near the project site are the Del Webb Specific Plan (DWSP), North Roseville Specific Plan (NRSP), and the Northwest Roseville Specific Plan (NWRSP) described below.

### ***Del Webb Specific Plan***

The DWSP, adopted in December 1993 and almost completely built out, is an age-restricted community encompassing 1,200 acres on the northwest side of the City, situated south of Blue Oaks Boulevard and east of Fiddymment Road, abutting the WRSP Area. The DWSP consists of primarily single-family homes focused around recreational facilities and a golf course and provides for 3,179 dwelling units and 27.3 acres of commercial property.<sup>12</sup>

### ***North Roseville Specific Plan***



The NRSP (Phases 2 and 3) is located along the northern and western boundaries of the City of Roseville, adjacent to the WRSP Area and is scheduled to be built out by 2007. The NRSP was adopted by the City in 1997. The entire NRSP includes 1,361 acres, a portion of which is located adjacent to Fiddymment Road in the western portion of the City. At buildout, the NRSP is projected to have a total of 5,381 dwelling units along with a mix of commercial uses.<sup>13</sup> Within the NRSP, 3,061 of the units have been built; 668 units are under construction.

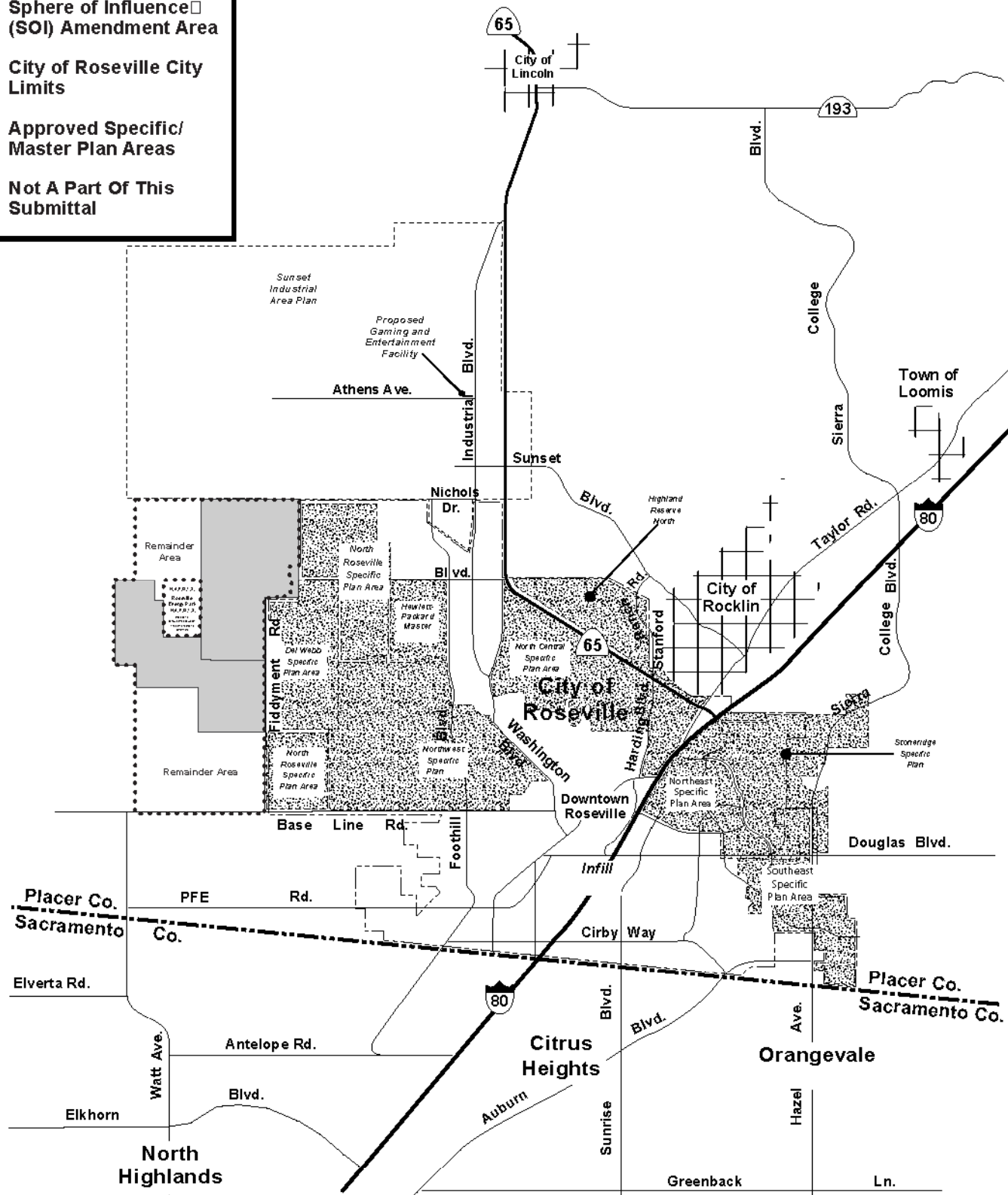
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<sup>12</sup> City of Roseville Quarterly Development Activity Report, Second Quarter 2002, p. 17

<sup>13</sup> City of Roseville Quarterly Development Activity Report, Second Quarter 2002, p. 22

**LEGEND**

-  West Roseville Specific Plan
-  Sphere of Influence (SOI) Amendment Area
-  City of Roseville City Limits
-  Approved Specific/Master Plan Areas
- N.A.P.O.T.S. **Not A Part Of This Submittal**



**FIGURE 4.1-3**  
**Specific Plan Areas in the Vicinity of the Project Site**

Not to Scale



### **Northwest Roseville Specific Plan**

The NWRSP was adopted by the City in May 1989. This specific plan includes 2,754 gross acres and is located approximately one mile east of the SOI Amendment Area. Single- and multi-family residences are the dominant land use, with associated commercial, office, and service uses. The NWRSP also incorporates a significant amount of parkland and open space, the City's Woodcreek Golf Club, and several school sites, including the Woodcreek Oaks High School. The NWRSP is close to buildout and is expected to include 9,082 dwelling units.

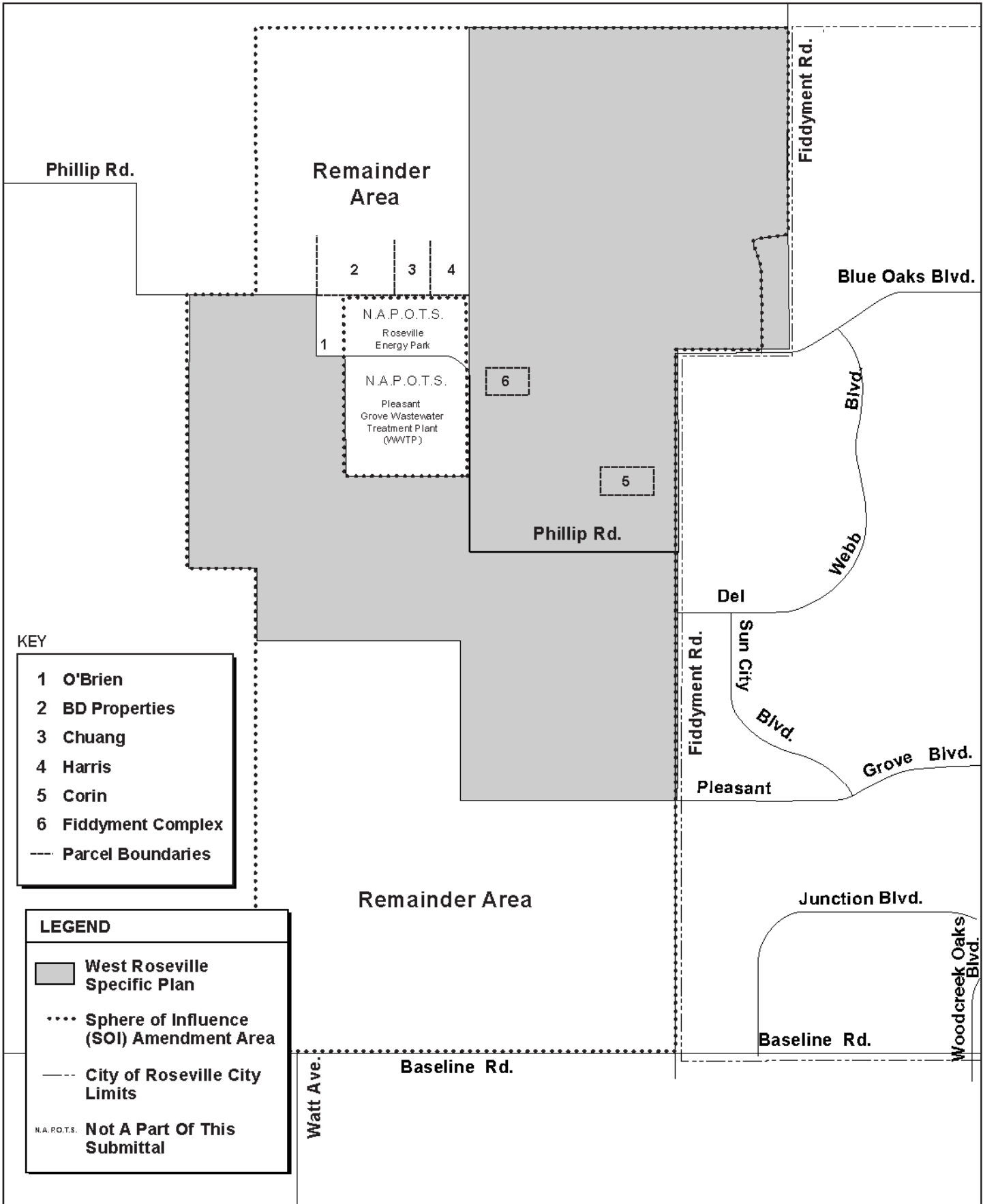
### **City-Owned Facilities**

As shown in Figure 2-2 (Land Ownership) in Chapter 2 (Project Description) of this document, the City owns approximately 180 acres adjacent to the WRSP Area. City-owned land includes the Pleasant Grove Wastewater Treatment Plant (PGWWTP) (approximately 110 acres), which is currently under construction, as well as approximately 70 acres north of the PGWWTP and south of Blue Oaks Boulevard to buffer the plant from adjacent uses. Approximately 40 of the 70-acre area are a part of an area the City is analyzing as part of the proposed Roseville Energy Park, a 150 MW energy facility, as shown on Figure 4.1-4 (Adjacent Parcels). As discussed in Chapter 1 of this EIR, the 180 acres owned by the City are not located within the SOI Amendment Area, but are included in the City/County MOU Transition Area. Refer to Chapter 1 for more detail. The City property is surrounded by the WRSP Area to the south, east, and west with the Remainder Area to the north. There are also high-voltage electric transmission lines that traverse the Remainder Area (60 and 230 kV transmission lines), which are discussed in more detail in Section 4.9 (Hazardous Materials and Public Safety) and Section 4.11 (Public Utilities).

## **■ Land Uses within the SOI Amendment Area**

### **WRSP**

The majority of the WRSP Area is undeveloped and contains nonnative, annual grasslands. The topography of the site is relatively flat with areas of rolling terrain. Pleasant Grove Creek and Kaseberg Creek traverse a portion of the WRSP Area. Several residences are present in the WRSP Area including the Fiddymment Ranch complex and the Corin residence located off Fiddymment Road in the Fiddymment Ranch portion of the WRSP Area (refer to Figure 4.1-4 and Section 4.13 [Aesthetics and Visual Resources] for more detail on these residences). The current predominant land use is seasonal livestock grazing. In the past, portions of the site have been used for grazing, limited dry farming, and poultry operations. A portion of an active pistachio orchard is located in the Fiddymment Ranch property, west of Fiddymment Road.



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**FIGURE 4.1-4**  
**Adjacent Parcels**

Source: EIP Associates, 2003

Not to Scale



City of Roseville

The WRSP Area is located in an unincorporated area of Placer County. The Placer County General Plan currently designates the site for Agriculture/Timberland, 80-acre minimum. The WRSP Area is designated in the Placer County Zoning Ordinance as Farm Combining Building Site, 80-acre (FB-X-80). The following uses are permitted in the FB-X-80 zone, either by right or with the issuance of a conditional use permit:

- Single-family dwelling; keeping of poultry, rabbits or similar livestock; farming, dairies, animal husbandry; crop and tree farming; apiaries; aviaries; stands exclusively for the sale of products produced on the premises; stables and riding academies; communications equipment building, distribution substation; small livestock farming; greenhouse; residential care homes for six or less persons; large and small family day care homes.
- Buildings or structures, including housing for agricultural workers, garages and implement shelters, customarily associated with an accessory use to the uses listed above; storage of petroleum products for use of the premises, but not for resale; home occupation; commercial breeding, feeding and managing, and sale on the premises of fish; guest houses; commercial vehicle storage (one vehicle, 2.3 acre minimum).
- Duplexes; tract offices; golf courses; public or quasi-public uses including fire houses, schools accredited to the State school system; excavation and quarrying; animal hospital; veterinarian; museum; country club; hospital; convalescent hospital and skilled nursing facilities sanitarium; public parks; playground; community center; grange halls; public dumps; rest homes; public utility service yards; residential care homes for more than six persons; child nurseries for more than fourteen persons; bed and breakfast; second residential units; performing arts studio; mobile home to house agricultural workers.
- Airports; industrial plants which process agricultural products; frog farms; commercial hog and turkey raising; fertilizer plants; kennels; cattle feed yards; animal sales yard; public utility transmission substation; farm equipment sales and service; labor supply camps; sales of agricultural products.
- Commercial explosives storage and manufacture.
- Churches.
- Commercial vehicle storage: 2.3 acres or less.

The California Department of Conservation (CDC) classifies the WRSP Area as Farmland of Local Importance and a small portion of the area encompassing a portion of the existing pistachio orchard as Prime Farmland. A description of the farmland classifications is included under the Regulatory Setting section.

### **Existing Land Uses on the Westpark Property**

The Westpark property currently has no structures on site (refer to Figure 4.1-4). The land is covered with grasslands and scattered seasonal wetlands, with one mature oak tree present. Phillip Road separates the Westpark property's northern border (and portions of the eastern border) from the Fiddymont Ranch property to the north and west. The road continues north until it turns west again north of the PGWWTP.

### **Existing Land Uses on the Fiddymment Ranch Property**

The Fiddymment Ranch property contains gently rolling terrain in the northern portion of the site. A number of structures are present on site, including three existing homes, a number of outbuildings associated with the agricultural uses, the original Fiddymment homestead, an abandoned poultry farm, a pistachio sales storefront, a small abandoned airstrip, a cell tower, and a pump station (refer to Section 4.13, Aesthetics and Visual Resources, for more detail on the location of these residences). One of the existing homes, the Corin residence, is located west of Fiddymment Road, south of the proposed extension of Blue Oaks Boulevard. This residence was built in 1949 and is a four bedroom, two-and-a-half bathroom, single-family residence that will remain in the WRSP Area in an area designated for low density residential (refer to Figure 4.1-4 and Figure 2-3 [West Roseville Specific Plan Land Use Plan]). Pleasant Grove Creek and Kaseberg Creek traverse the Fiddymment Ranch property. Native oaks and other riparian vegetation are present along the creeks. In addition, a mature grove of native oak trees is located in the southern portion of the property adjacent to Fiddymment Road. As mentioned above, a portion of the southern and western boundaries of the Fiddymment Ranch property is bordered by Phillip Road.

### **History of Farming and Agricultural Uses on Property**

Site history research dating back to the late 1800s indicates that the Westpark property was a portion of a larger, undeveloped grassland and dry-farmed area of southwestern Placer County. The land has been used for cattle grazing with no agricultural operation over the last ten to fifteen years.<sup>14</sup>

On the Fiddymment Ranch property, the Fiddymment family has experimented with a number of agricultural operations over the last 150 years. Most predominantly, the Fiddymments raised sheep, cattle, chickens, and turkeys and grew rice. Historical records indicate that the property was occupied as early as 1855, when government surveyors recorded farming activity there including fences and a field. When soil and natural irrigation provide poor for farming, the Fiddymment family turned to raising horses and mules, which proved unprofitable.<sup>15</sup>

At the turn of the century, land north of Pleasant Grove Creek was used for rangeland.<sup>16</sup> Grazing periods were limited due to the unproductive grasslands and consequently, herds were moved to mountain pastures early in the season. During the 1950s and 1960s there was an effort to grow rice irrigated a ditch

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<sup>14</sup> Cultural Resources Investigation of the Westpark/Fiddymment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California, PAR Environmental Services, Inc. (May 2001), pp. 7-8

<sup>15</sup> Cultural Resources Investigation of the Westpark/Fiddymment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California, PAR Environmental Services, Inc. (May 2001), pp. 7-8

<sup>16</sup> David Fiddymment, personal communication, September 2003

and well. After this proved unsuccessful, that area was used as irrigated pasture until it was eventually allowed to return to a natural state.<sup>17</sup>

The most successful agricultural operation on the ranch was poultry and turkey farming. Chickens were raised on the property from 1941 to 1955 and turkeys from the early 1930s to approximately 1992. Turkey farming was the longest running operation and most successful on the site in part because it was not dependent on soil and grazing quality. In the late 1980s and early 1990s, the Fiddymment family shifted operations to breeding turkeys for other turkey producers as statewide turkey production diminished state-wide when major turkey processing operations moved out of state.<sup>18</sup>

Before his father purchased the property in 1941 until approximately 1960, David Fiddymment utilized a portion of the Fiddymment property as a vineyard. Yields were low and the vineyard was diseased.<sup>19</sup>

A pistachio orchard was planted in two plantings in 1969 and the second in the early 1970s. The pistachio trees were somewhat stunted in growth compared to similar-aged trees located in higher quality soils and yields were below average. Other than the pistachio orchard and some small produce gardening, the property is used today for cattle grazing.<sup>20</sup>

### **Remainder Area**

The physical characteristics of the Remainder Area are similar to the WRSP Area, consisting of undeveloped areas of nonnative, annual grasslands. As shown on Figure 2-2 (Land Ownership) in Chapter 2 (Project Description) of this EIR, the 2,365-acre Remainder Area includes an area to the north of the Westpark property and to the west of the Fiddymment Ranch property, and a larger area to the south of the Westpark property. The topography of the Remainder Area is relatively flat with areas of rolling terrain. Pleasant Grove Creek traverses the northern portion of the Remainder Area.

The current predominant land use is seasonal livestock grazing. There are three existing residences within the northern portion of the Remainder Area: the O'Brien residence, the Harris residence, and the Chang residence. The O'Brien property includes a dog kennel business and is located west of Phillip Road south of Blue Oaks Boulevard immediately west of the City-owned land (refer to Figure 4.1-4).

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<sup>17</sup> Cultural Resources Investigation of the Westpark/Fiddymment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California, PAR Environmental Services, Inc. (May 2001), pp. 7-8

<sup>18</sup> David Fiddymment, personal communication, September 2003

<sup>19</sup> David Fiddymment, personal communication, September 2003

<sup>20</sup> David Fiddymment, personal communication, September 2003

**Land Ownership within the SOI Amendment Area**

The WRSP Area consists of properties under the ownership and/or control of two development entities. A portion of the WRSP Area is owned by 1600 Placer Investors, Inc. and managed by Westpark Associates (1,483-acre Westpark property) and Signature Properties controls the 1,679-acre Fiddymment Ranch property, which is held under multiple ownerships. The total WRSP Area includes 3,162 acres (refer to Table 4.1-1).

APN	Acreage	APN	Acreage
<b>Westpark Associates</b>		<b>Signature Properties</b>	
017-100-021	160	017-100-009	480
017-100-043	321	017-100-010	160
017-100-044	130	017-100-034	364
017-150-003	238	017-100-035	120
017-150-037	634	017-100-036	80
Subtotal	1,483	<b>017-100-040</b>	<b>80</b>
		017-115-001	159
		017-115-063	79
		017-115-062	79
		017-115-061	78
		017-115-051	0.2
		Subtotal	<b>1,679.2</b>

NOTE:  
 Acreages vary from land use total slightly due to unsurveyed information from assessor's office.  
 SOURCE: Placer County Assessor's Office <http://www.placer.ca.gov/assessor/assessor.htm>

The remaining 2,365 acres within the Remainder Area are owned by numerous different landowners, shown in Table 4.1-2. The WRSP Area is under two ownerships with the following assessor's parcel numbers (APN):

**Table 4.1-2 Remainder Area Ownerships/Acreage**

APN	Acreage	Owner
<b>Remainder Area (North)</b>		
017-100-004 (portion)	80	Reason Farms
017-100-007	40	Amoruso, Peter
017-100-032	40	Harris, William
017-100-033	40	Chuang, Chau Hsiung
017-100-037	20	Wagne, Malcome E. / Doris
017-100-038	80	BD Properties
017-100-039	100	CHI Partnership
017-100-041	80	Friedman, Kenneth J.
017-100-042	158	n/a
<b>Subtotal</b>	<b>638</b>	
<b>Remainder Area (South)</b>		
017-150-002	n/a	Richland
017-150-008 (portion)	315	Baseline P/R LLC
017-150-012	120	Federico Tyler Family Limited Partnership
017-150-019	224	Richland
017-150-020	64	Federico Tyler Family Limited Partnership
017-150-024	32	Federico Tyler Family Limited Partnership
017-150-025	48	Richland
017-150-026	80	Fanelli Dominica
017-150-027	79	n/a
017-150-029	79	Wealth Properties
017-150-030	122	Bagley / Associates
017-150-031	81	Computer Deductions, Inc
017-150-032	19	Conley, Earl C.
017-150-033	13	Federico Tyler Family Limited Partnership
017-150-035	275	Federico Tyler Family Limited Partnership
017-150-036 (portion)	50	Coley, Earl C.
017-150-039	71	n/a
<b>Subtotal</b>	<b>1,672</b>	

SOURCE: Placer County Assessor's Office 2003

## ■ Agricultural Status

The California Department of Conservation (CDC) Farmland Mapping and Monitoring Program classifies the SOI Amendment Area as Farmland of Local Importance and Prime Farmland. The location of these classifications within the project site are illustrated by Figure 4.1-5 (Farmland Classification). The soil type classifications are described below.

### **Prime Farmland**

Prime Farmland generally consists of Class I and II soils, farmland with the best combination of physical and chemical features able to sustain long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods.

### **Farmland of Local Importance**

Land of importance to the local agricultural economy, as determined by each County's board of supervisors and a local advisory committee, is classified as Farmland of Local Importance.

Most of the soils in the SOI Amendment Area are Class III and IV, which severely limit agricultural production. The Ramona soils (soil units 174 and 175) and Xerofluvents (193) are Class I and II,<sup>21</sup> but these soils are limited in extent and are generally in the vicinity of proposed open space areas along Pleasant Grove Creek and Kaseberg Creek. Refer to additional discussion on soils in Section 4.6 (Geology, Soils, and Seismicity).

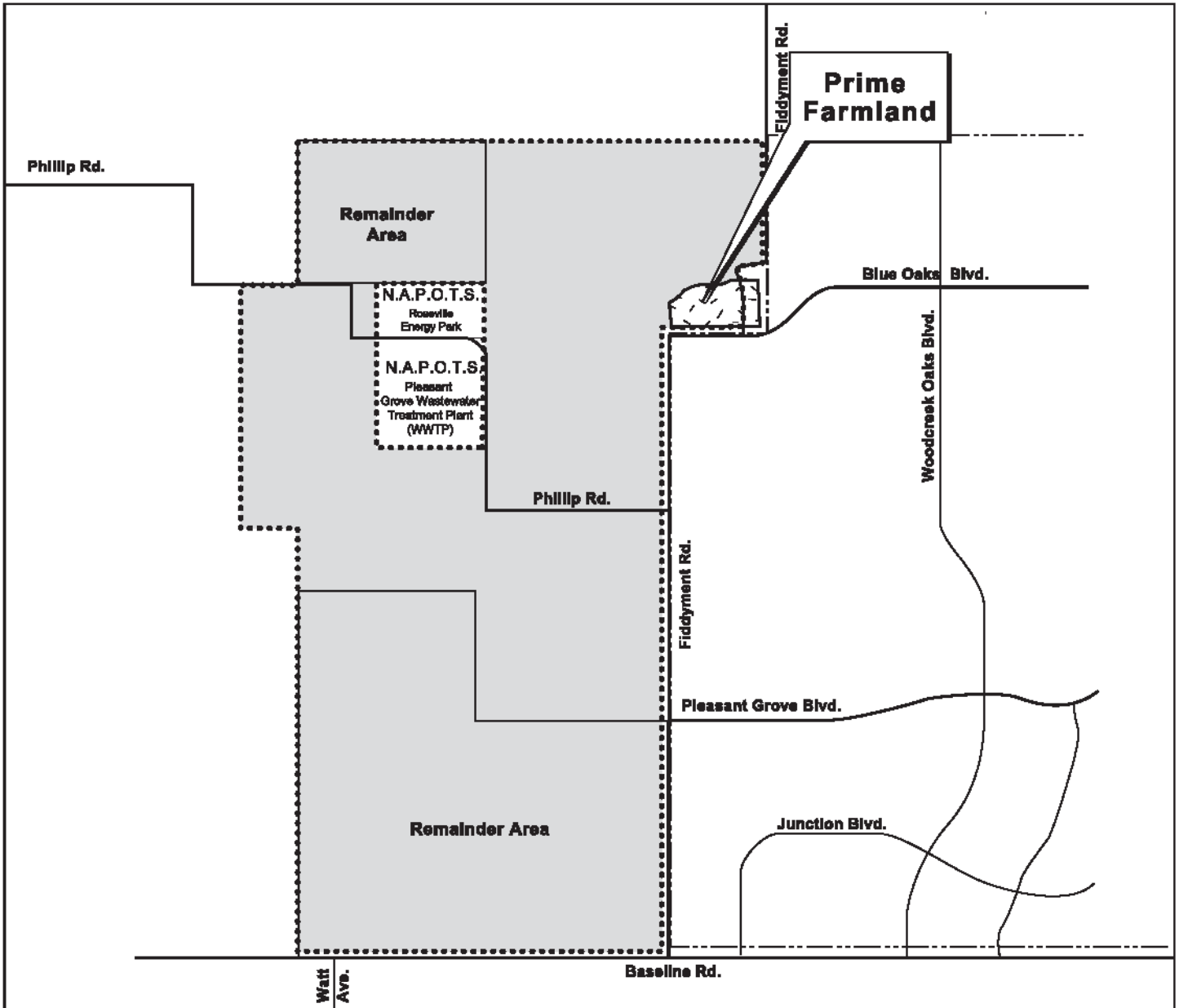
None of the SOI Amendment Area is restricted to agricultural uses under the Williamson Act, which provides for a preferential assessment of agricultural and open space lands that meet local size and use criteria.

## ■ Storie Index

The NRCS has also rated suitability of soils in Placer County for agriculture using the Storie Index. This index, which consists of six grades ranging from excellent (1) to unsuitable (6), expresses numerically the relative degree of suitability of a soil for general intensive agriculture as it exists at the time of evaluation. The rating is based on soil characteristics only and is obtained by evaluating such factors as soil depth, surface texture, subsoil characteristics, drainage, salts and alkali, and relief. Most of the SOI Amendment

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<sup>21</sup> USDA Natural Resources Conservation Service, *Soil Survey Placer County, California, Western Part*, 1980, pp. 11 through 74



**LEGEND**

- Farmland of Local Important
- Prime Farmland
- West Roseville Specific Plan
- Sphere of Influence (SOI) Amendment Area
- City of Roseville City Limits
- N.A.P.O.T.S.** Not A Part Of This Submittal



**FIGURE 4.1-5  
Farmland Classification**

Not to Scale

Area consists of Storie Index 4 and 5 soils, which are poorly suited for agriculture. There are no Grade 1 soils in the SOI Amendment Area.<sup>22</sup>

### **4.1.3 Regulatory Setting**

#### **■ State**

The California Department of Conservation (CDC) Farmland Mapping and Monitoring Program classifies the site as listed below:

- Farmland of Local Importance

This classification applies to a majority of the project site. As defined by Placer County,<sup>23</sup> these are farmlands not covered by the Prime, Statewide, or Unique categories, and include lands zoned for agriculture by County Ordinance and the California Land Conservation Act, dry farmed lands, irrigated pasture lands, other agricultural lands of significant economic importance to the County, and lands that have a potential for irrigation from Placer County water supplies.

- Prime Farmland

The California Department of Conservation (CDC) classifies 40.2 acres of the WRSP Area encompassing a portion of the existing pistachio orchard as Prime Farmland.

#### **■ Local**

##### **City of Roseville**

The City of Roseville General Plan includes goals and policies for growth management. Refer to Appendix C for a complete list of all applicable City goals and policies. Consistency with the City's General Plan, Guiding Principles, applicable Placer County General Plan goals and policies, as well as the MOUs with Placer County and the USFWS, are addressed in Chapter 7 of this EIR, Planning Considerations. It should be noted that the City, through a separate process, is reviewing its level of service standards for a variety of public services. This may result in changes to service levels within the existing City and would also establish new service levels within the Project area. The WRSP will be required to meet or exceed the City's standards, but will not be held to a higher standard than the rest of the City should service standards be lowered in the future.

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<sup>22</sup>USDA Natural Resources Conservation Service, *Soil Survey Placer County, California, Western Part*, 1980, pp. 11 through 76

<sup>23</sup>Placer County Important Farmland Map 1990, California Department of Conservation, March 1992

Implementation of the City of Roseville Zoning Ordinance, which specifies building setbacks, building heights, building density and site coverage would ensure the public's health, welfare and safety would be protected and that development occurs in planned, logical fashion.

Implementation of the City's Community Design Guidelines, which specify site layout and design, architectural treatments and specific exterior building materials, and lighting guidelines, would help to reduce land use incompatibilities. In addition, the WRSP Design Guidelines include specific requirements for fencing, landscaping, and building setbacks.

The WRSP Design Guidelines require soundwalls and landscape setbacks in a number of locations. These features, detailed below, would reduce noise levels in residential areas adjacent to roadways. However, acoustical studies would be needed once more detailed design information is available in order to determine whether additional noise attenuation measures would be required to meet City standards.

The WRSP Design Guidelines state 6-foot masonry walls or wood fencing would be provided at the following locations:

- Between the kennel on Blue Oaks Boulevard and the industrial uses to the west and south
- Adjacent to low-density and medium density residential uses along Fiddymont Road, Blue Oaks Boulevard, Pleasant Grove Boulevard, Phillip Road, and West Side Drive
- Where residential lots back up to schools or parks
- Around the PGWWTP and expansion site and water storage tanks
- Along Hayden Parkway

The WRSP Design Guidelines also call for 35-foot landscape setbacks along major roadways.

## **Placer County**

The SOI Amendment Area is currently within Placer County and subject to the Placer County General Plan. As stated in Chapter 2, the proposed SOI Amendment includes amending the City's Sphere of Influence boundaries to include the entire SOI Amendment Area and annexation of the WRSP to the City of Roseville. It is anticipated that in the future, when and if the City receives applications to develop projects within the Remainder Area, this area would also be annexed to the City. If annexed, these areas would be subject to the City General Plan, not the County General Plan. Nonetheless, for the reader's information, this EIR does consider aspects of the WRSP and the SOI Amendment that could be considered in conflict with the County General Plan, or that would have less severe impacts on the environment if subject to County rather than City General Plan policies (i.e., where County policies are more protective of a resource than City policies). Therefore, a complete list of all the County's General

Plan policies is included in Appendix D. If a potential conflict or more restrictive County policy is identified, it is discussed in Chapter 7 (Planning Considerations).

The Placer County General Plan includes policies that address agricultural issues that the City does not have. All of the County's policies are included in Appendix D of this EIR. However, the two policies that specifically relate to development adjacent to agricultural land are shown below:

- 1.H.5 The County shall require development within or adjacent to designated agricultural areas to incorporate design, construction, and maintenance techniques that protect agriculture and minimize conflicts with adjacent agricultural uses.
- 1.H.6 The County shall require new nonagricultural development immediately adjacent to agricultural lands to be designed to provide a buffer in the form of a setback or sufficient distance to avoid land use conflicts between the agricultural uses and the nonagricultural uses. Such setback or buffer areas shall be established by recorded easement or other instrument, subject to the approval of County Counsel. A method and mechanism (e.g., a homeowners association, or easement dedication to a nonprofit organization or public entity) for guaranteeing the maintenance of this land in a safe and orderly manner shall also be established at the time of development approval.

#### **4.1.4 Impacts and Mitigation Measures**

##### **■ Methods of Analysis**

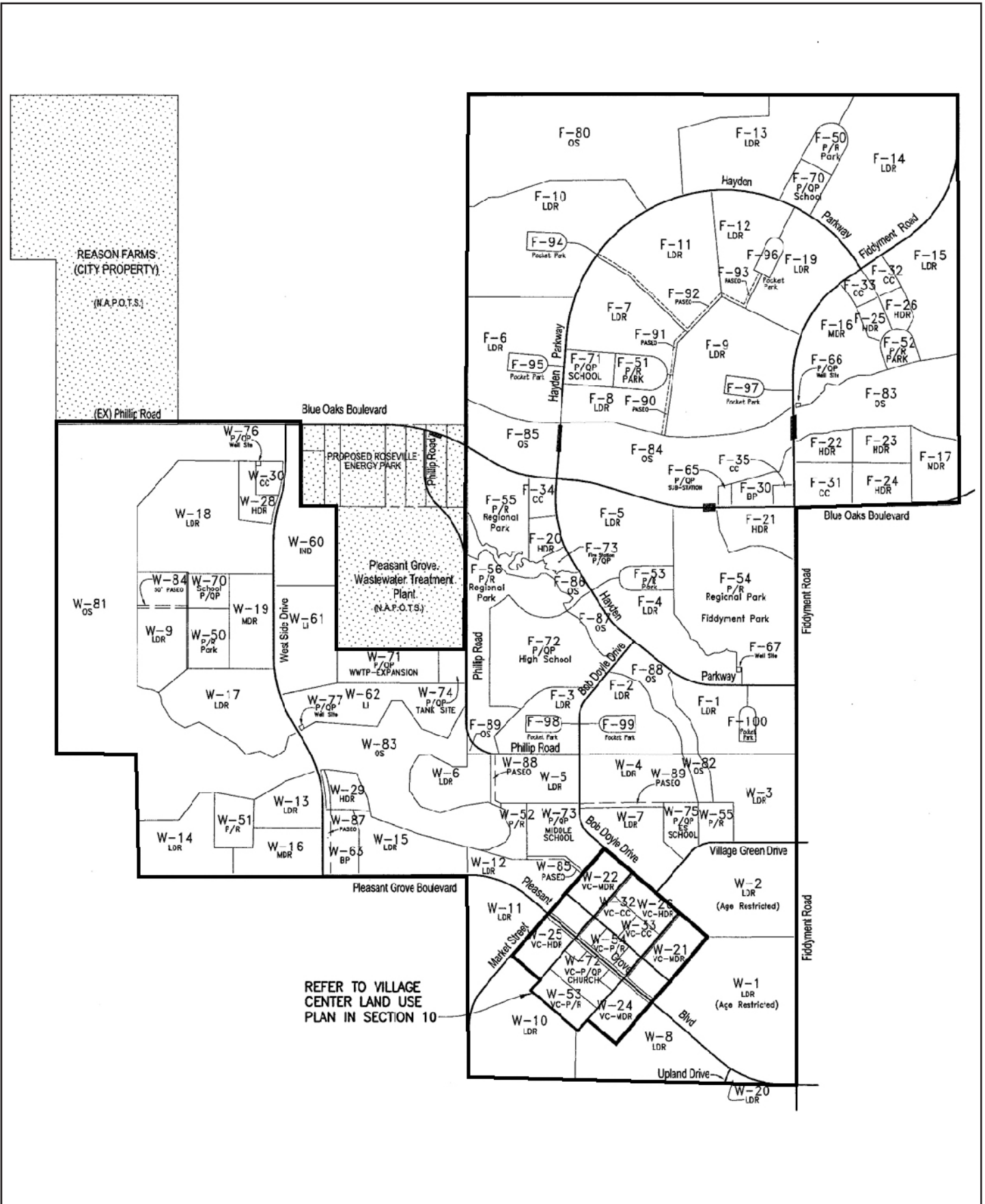
This section addresses land use impacts based on existing conditions. For a discussion of cumulative impacts on Land Use and Agricultural Resources, refer to Chapter 5 (CEQA Considerations).

##### **Land Use Compatibility**

Existing and planned land uses for the WRSP Area and the Remainder Area have been identified based on a site visit by EIP Associates staff, information provided by the City of Roseville Planning Department, the project applicants, and their consultant team. The land use evaluation is based on a qualitative comparison of existing and proposed uses on the site and their compatibility with existing and planned land uses as defined in the City's General Plan and/or relevant Specific Plans, as well as other applicable local and/or regional environmental and planning documents.

##### **West Roseville Specific Plan**

Uses that would be allowed within each land use category in the WRSP Area are compared to adjacent existing and proposed uses to determine their compatibility. Proposed land uses are illustrated by Figure 4.1-6 (West Roseville Specific Plan Land Use Plan). Table 4.1-3 provides a breakdown of the land uses



**FIGURE 4.1-6**  
**West Roseville Specific Plan Land Use Plan**

Scale: 1" = 2000'



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Source: West Roseville Specific Plan 2003

City of Roseville



and acreage amounts in the proposed WRSP Area. The types of uses allowed under the WRSP are those that are permitted or conditionally permitted in the Zoning Ordinance. Due to the nature of this project and its proximity to the PGWWTP, the City has narrowed the uses that would be allowed within the proposed industrial zones, as illustrated in Table 4.1-4. Table 4.1-5 contains a list of permitted uses within the residential areas of the WRSP Area. Tables 4.1-6 and 4.1-7 contain permitted uses within the public/quasi-public and commercial areas, which include business professional, general commercial, neighborhood commercial, and community commercial.

**Table 4.1-3 Proposed West Roseville Specific Plan Land Uses**

Specific Plan Designation	Land Use	Total	
		Acres	DUs
LDR	Low-Density Residential	1,355	4,842
LDR (Age Restricted)	Low-Density Residential	147	710
MDR	Medium-Density Residential	143	1,064
HDR	High-Density Residential	110	1,774
OS	Open Space	670	
OS	Paseo	15	
P/R	Park	251	
P/R	Pocket Parks	19	
P/QP	Public/Quasi-Public	148	
CC	Community Commercial	49	40
BP	Business Professional	20	
LI	Light Industrial	74	
IND	Industrial	34	
R/W	Road Right-of-Way	128	
<b>Total</b>		<b>3,162</b>	<b>8,430</b>

**NOTES:**

DUs = dwelling units

Minor adjustments to total due to rounding

SOURCE: West Roseville Specific Plan, September 15, 2003

**Table 4.1-4 Industrial Zone Districts Permitted and Conditionally Permitted Uses**

	Light Industrial (M1)	Industrial (M2)
<b>Agricultural and Open Space Use Types</b>		
Agricultural	P	P
Resource Protection and Restoration	P	P
<b>Civic Use Types</b>		
Community Assembly	CUP	CUP
Community Services	P	P
Essential Services	P	P
Intensive Public Services	—	CUP
Public Parking Services	P	P
Social Services Food Distribution	A/CUP	A/CUP
Food Service	A/CUP	A/CUP

**Table 4.1-4 Industrial Zone Districts Permitted and Conditionally Permitted Uses**

	Light Industrial (M1)	Industrial (M2)
<b>Commercial Use Types</b>		
Adult Business Establishments	CUP	CUP
Animal Sales and Service		
▪ Kennels	P	P
▪ Veterinary Clinic	P	P
▪ Veterinary Hospital	P	P
Automotive and Equipment		
▪ Automotive Rental	CUP	—
▪ Automotive Repairs	P	CUP
▪ Car Wash and Detailing	P	CUP
▪ Commercial Parking	P	P
▪ Heavy Equipment Rental, Repair and Sales	P	P
▪ Gasoline Sales	P	P
▪ Impound Yards	CUP	P
Broadcasting and Recording Studios	P	P
Building Material Stores	P	P
Business Support Services	P	CUP
Commercial Recreation		
▪ Indoor Sports and Recreation	P	P
▪ Outdoor Entertainment	CUP	CUP
▪ Outdoor Sports and Recreation	P	P
▪ Large Amusement Complexes	CUP	CUP
Eating and Drinking Establishments, Convenience	CUP	CUP
Maintenance and Repair	CUP	CUP
Substance Abuse Treatment Clinic	CUP	CUP
Neighborhood Commercial	CUP	CUP
Nightclubs	CUP	CUP
Nursery, Retail	P	P
Offices, Professional	CUP	CUP
Personal Services	CUP	CUP
Retail Sales and Services	—	—
Specialized Education and Training		
▪ Vocational Schools	CUP	CUP
▪ Specialty Schools	CUP	CUP
Storage, Personal Storage Facility	P	P
<b>Industrial Use Types</b>		
Day Care Center, Secondary (employees only)	CUP	—
Equipment and Materials Storage Yards	CUP	P
General Industrial	CUP	P
Hazardous Materials Handling	CUP	P
Laundries, Commercial	P	P
Light Manufacturing	P	P
Printing and Publishing	P	P
<b>Recycling, Scrap and Dismantling</b>		
Enclosed	P	P
Unenclosed	CUP	P
Research Services	CUP	CUP
Specialized Industrial	CUP	CUP

**Table 4.1-4 Industrial Zone Districts Permitted and Conditionally Permitted Uses**

	Light Industrial (M1)	Industrial (M2)
<b>Wholesale and Distribution</b>		
▪ Light	P	P
▪ Heavy	CUP	P
<b>Transportation and Communication Use Types</b>		
Antennas and Communications Facilities		
▪ Developed Lot	P	P
▪ Undeveloped Lot	CUP	CUP
Heliport	CUP	CUP
Intermodal Facilities	P	P
NOTES:		
A = Permitted uses and structures shall comply with the City's adopted Design Guidelines, applicable specific plans, and any other applicable requirements of this Title.		
P = Permitted Use		
CUP = Conditional Use Permit		
SOURCE: Roseville Municipal Code – Title 19 Zoning, West Roseville Specific Plan, September 2003		

**Table 4.1-5 Residential Zone District Permitted and Conditionally Permitted Uses**

	R1	RS	R2	R3	RMU
<b>Agriculture and Open Space Uses</b>					
Animal keeping	P	P	P	P	P
Resource Protection and Restoration	P	P	P	P	P
Resource Related Recreation	P	P	P	P	P
<b>Civic Use Types</b>					
Community Assembly	CUP	CUP	CUP	P	P
Community Services	CUP	CUPO	CUP	CUP	P
Essential Services	P	P	P	P	P
Schools, Elementary and Secondary	P	P	P	P	P
Schools, Private Elementary and Secondary	CUP	CUPO	CUP	CUP	P
<b>Residential Use Types</b>					
Community Care Facilities, small	P	P	P	P	P
Community Care Facilities, large	CUP	CUPO	CUP	P	P
<b>Commercial Use Types</b>					
Commercial Recreation, Residential Recreation Facilities	CUP	CUP	CUP	CUP	P
Community Care Facility	—	—	—	P	P
Day Care Center	CUP	CUPO	CUP	CUP	P
Long Term Care Facility	—	—	—	CUP	P
Neighborhood Commercial	—	—	—	CUP	P
NOTES:					
CUP = Conditional Use Permit required.					
P = Principally Permitted use.					
— = Use not permitted in that zone district.					
SOURCE: City of Roseville Zoning Ordinance Section 19.10.020, West Roseville Specific Plan, September 2003.					

**Table 4.1-6 Civic and Resource Protection Zone District Permitted Uses**

	PR	OS	P/QP
<b>Agricultural and Open Space Use Types</b>			
Agricultural	—	P	—
Animal Keeping	—	—	—
Resource Protection and Restoration	P	P	P
Resource Related Recreation	P	P	P
<b>Civic Use Types</b>			
Community Assembly	P	CUP	P
Community Services	P	P	P
Essential Services	P	P	P
Hospital Services			
▪ General	—	—	P
▪ Psychiatric	—	—	P
Intensive Public Facilities	—	—	P
Libraries and Museums, Private	P	CUP	P
Public Parking Services	—	—	P
Schools			
▪ College and University	—	—	P
▪ Elementary and Secondary	P	—	P
▪ Private Elementary and Secondary	—	—	CUP
<b>Residential Use Types</b>			
Caretaker/Employee Housing	A	—	A
Dwelling, Single-Family	CUP	—	CUP
<b>Commercial Recreation</b>			
Indoor Sports and recreation	P	—	P
Outdoor Entertainment	CUP	—	CUP
Outdoor Sports and Recreation	CUP	—	CUP
Large Amusement Complex	CUP	—	—
Day Care Center	P	—	P

## NOTES:

CUP = Conditional Use Permit required.

P = Principally Permitted use.

— = Use not permitted in that zone district.

A = Administratively Permitted use.

SOURCE: City of Roseville Zoning Ordinance Section 19.10.020, West Roseville Specific Plan, September 2003.

**Table 4.1-7 Commercial Zone District Permitted and Conditionally Permitted Uses**

	<b>BP</b>	<b>NC</b>	<b>CC</b>	<b>GC</b>
<b>Agriculture and Open Space Use Types</b>				
Resource Protection and Restoration	CUP	CUP	CUP	CUP
Resources Related Recreation	P	P	P	P
<b>Civic Use Types</b>				
Community Assembly	CUP	P	P	P
Community Services	P	CUP	P	P
Essential Services	P	P	P	P
Hospital Services				
▪ General Hospital Services	—	—	CUP	CUP
▪ Psychiatric Hospital Services	—	—	CUP	CUP
Libraries and Museums, Private	—	CUP	P	P
Public Parking Services	P	P	P	P
Schools				
▪ College and University	A	—	P	P
▪ Elementary and Secondary	P	P	P	P
▪ Private Elementary and Secondary	—	CUP	CUP	CUP
Social Services				
▪ Food Distribution	—	—	—	A/CUP
▪ Food Service	—	—	—	A/CUP
▪ Temporary Resident Shelter	—	—	—	A/CUP
<b>Residential Use Types</b>				
Caretaker/Employee Housing	—	CUP	CUP	CUP
Dwelling				
▪ Multi-Family	—	CUP	CUP	—
▪ Single-Family	—	CUP	CUP	CUP
▪ Two-Family	—	CUP	CUP	CUP
Family Day Care Home, Small	P	P	P	P
Family Day Care Home, Large	CUP	CUP	CUP	CUP
Single Room Occupant	—	—	—	—
<b>Commercial Use Types</b>				
Adult Oriented Businesses	—	—	—	P
Animal Sales and Service				
▪ Grooming and Pet Stores	—	P	P	P
▪ Kennels	—	—	—	—
▪ Veterinary Clinic	—	CUP	P	P
▪ Veterinary Hospital	—	—	CUP	CUP
Automotive and Equipment				
▪ Automotive Rentals	—	—	—	P
▪ Automotive Repairs	—	—	CUP	P
▪ Automotive Sales	—	—	CUP	P
▪ Car Wash and Detailing	—	—	CUP	P
▪ Commercial Parking	P	—	—	P
▪ Heavy Equipment Rental and Sales	—	—	—	P
▪ Equipment Repair	—	—	—	CUP
▪ Gasoline Sales	CUP	P	P	P
Banks and Financial Services	P	P	P	P
Bars and Drinking Places	—	—	P	P
Broadcasting and Recording Studios	P	—	—	P
Building Material stores	—	—	CUP	P

**Table 4.1-7 Commercial Zone District Permitted and Conditionally Permitted Uses**

	BP	NC	CC	GC
Business Support Services	P	—	P	P
Commercial Recreation				
▪ Amusement Center	—	CUP	P	P
▪ Indoor Entertainment	—	—	P	P
▪ Indoor Sports and Recreation	—	—	P	P
▪ Outdoor Entertainment	—	—	—	CUP
▪ Outdoor Sports and Recreation	—	—	—	P
▪ Large Amusement Complexes	—	—	—	CUP
<b>Commercial Use Types</b>				
Community Care Facility	P	P	P	P
Day Care Center	P	P	P	P
Eating and Drinking Establishments				
▪ Fast Food with Drive Through	—	—	P	P
▪ Convenience	P	P	P	P
▪ Full Service	P	P	P	P
Food and Beverage Retail Sales	—	—	P	P
Funeral and Internment Services	—	—	P	P
Lodging Services	—	—	P	P
Long Term Care Facility	CUP	CUP	P	P
Maintenance and Repair	—	P	P	P
Medical Service				
▪ General	P	P	P	P
▪ Substance Abuse Treatment Clinics	—	—	—	CUP
Neighborhood Commercial	P	P	—	—
Nightclubs	—	—	CUP	CUP
Nursery, Retail	—	—	—	P
Offices, Professional	P	P	P	P
Personal Services	P	P	P	P
Retail Sales and Services	—	—	P	P
Specialized Education and Training				
▪ Vocational Schools	—	—	P	P
▪ Specialty Schools	—	CUP	P	P
Storage, Personal Storage Facility	—	—	CUP	P
<b>Industrial Use Types</b>				
Laundries, Commercial	—	—	CUP	CUP
Printing & Publishing	—	—	—	CUP
Research Services	—	—	—	P
Wholesaling and Distribution, Light	—	—	—	P
<b>Transportation and Communication Use Types</b>				
Antennas and Communications Facilities				
▪ Developed Lot	P	P	P	P
▪ Undeveloped Lot	CUP	CUP	CUP	CUP
Heliport	CUP	CUP	CUP	CUP
Intermodal Facilities	CUP	CUP	CUP	CUP

NOTES:

CUP = Conditional Use Permit required

A = Administratively Permitted use

CC = Community Commercial

P = Principally Permitted use

BP = Business Professional

GC = General Commercial

— = Use not permitted in that zone district.

NC = Neighborhood Commercial

SOURCE: City of Roseville Zoning Ordinance Section 19.10.020, West Roseville Specific Plan, September 2003

### **Remainder Area**

As discussed in Chapter 1 of this EIR, no specific development or plan is proposed in the Remainder Area. However, development assumptions are made to provide a basis for the EIR analysis (shown in Table 2-3 in Chapter 2). Because there is no site plan, this analysis assumes that any proposed land uses could occur anywhere in the Remainder Area except in the 100-year floodplain or within one-quarter mile of the western border, as both of these areas are assumed to remain as open space. For this analysis, any of the assumed land uses could occur adjacent to each other.

### **Agricultural Impacts**

The CDC has developed a Farmland Mapping and Monitoring Program that classifies the different agricultural soil types related to their ability to sustain agricultural crops and for lands on which existing vegetation is suited to the grazing of livestock. The analysis of both the WRSP and the Remainder Area uses these maps to determine the potential loss of Prime Farmland, Farmland of Statewide Importance, or Unique Farmlands.

#### **■ Standards of Significance**

Significant impacts are identified in cases where the proposed changes in type and intensity of land uses are incompatible with uses on or adjacent to the site. This analysis assumes implementation of existing applicable General Plan policies, Improvement Standards, and design standards prior to determining significance, so these requirements do not appear as mitigation measures.

For purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area would do any of the following:

#### **Agriculture**

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use
- Conflict with existing zoning for agricultural use or a Williamson Act contract
- Involve other changes in the existing environment, which, due to their location or nature, could result in the conversion of Farmland to nonagricultural uses (i.e., sensitive uses such as residential uses adjacent to agricultural, which could result in a restriction on agricultural activities)

#### **Land Use**

- Be incompatible with existing and/or proposed adjacent land uses

Land use conflicts can arise when (1) a new development or land use could cause impacts on persons or the physical environment in the vicinity of the project site or elsewhere or (2) conditions on or near the project site could have impacts on the persons or development introduced onto the site by the new project. Both of these circumstances must be considered when evaluating land use compatibility. Incompatibility can arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project design or scope. Depending on the nature of the impact and its severity, land use compatibility conflicts can range from minor irritations and nuisances to significant effects on human health or safety.<sup>24</sup>

Long-term incompatibilities arise when adjacent land uses result in activities that could conflict with each other. For example, in general, land uses that produce excessive noise, light, dust, odors, traffic, or hazardous emissions are undesirable when they intrude on places where people sleep and recreate (residences and parks). Therefore, some industrial or agricultural uses or busy roadways (which can produce noise, dust, odor, and so on) are not considered compatible with residential uses unless buffers, landscaping, or screening can be used to protect residents from health hazards or nuisances.

**Impacts**

<b>IMPACT 4.1-1: POTENTIAL INCOMPATIBILITY OF INTERNAL LAND USES.</b>		
<b>Applicable Policies and Regulations:</b>	City of Roseville Community Design Guidelines City of Roseville Zoning Ordinance	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.1-1 (Deed disclosure); MM 4.5-1 (Construction noise reduction); MM 4.5-3 (Commercial noise control); MM 4.5-5 (Industrial facilities noise controls); MM 4.5-6 (Attenuate stadium and other school noise); MM 4.5-8 (Attenuate park noise); MM 4.13-1(a)(Restrict lighting and hours); MM 4.13-1(b) (Placement of lights)	MM 4.1-2 (Policies to minimize agricultural impacts); MM 4.5-2 (Construction noise policies); MM 4.5-4 (Commercial noise policies); MM 4.5-7 (School noise policies); MM 4.5-9 (Park noise policies); MM 4.13-2 (Light and glare policies)
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Significant and Unavoidable

<sup>24</sup>As used in this report, “nuisance” is defined to mean “annoying, unpleasant, or obnoxious” and is not limited to the legal sense of the word.

## Internal Compatibility

### **West Roseville Specific Plan**

Development of the WRSP Area would change the character of the WRSP Area, replacing seasonal grazing land and open space with urban, developed uses. In general, activities and traffic within the WRSP Area would increase. The construction phase of the WRSP would also involve significant noise, activity, and dust over a period of several years. Such activities could affect uses in the surrounding area outside of the WRSP Area, in particular in portions of the Del Webb Specific Plan neighborhood and portions of the North Roseville Specific Plan, as well as those residences that will remain in the WRSP Area (i.e., Corin residence), or in the Remainder Area (e.g., residences north of the City-owned land).

Residential uses are most sensitive to land use incompatibility because outdoor use is common and residential uses are often occupied 24 hours a day by people of all ages, including the very young and elderly, who are more sensitive to disturbance and health risk factors. The WRSP Area is being developed with a variety of nonresidential uses, including public/quasi-public uses, schools, open space, parks, commercial, business professional, light industrial, and industrial. As shown in Figure 4.1-6, these uses would be adjacent to residential areas throughout the WRSP Area, which could lead to incompatibility issues such as noise from equipment and traffic, activity associated with parks and parking areas, and overflow night lighting. Therefore, the impact would be **significant and unavoidable**.

### **Remainder Area**

As discussed in Chapter 2, general land use and infrastructure assumptions have been made for the Remainder Area to assist in evaluating potential impacts associated with expansion of the Sphere of Influence boundary. As shown in Table 2-3 in Chapter 2, the land use assumptions for this area include residential development of a density and type similar to the WRSP Area, along with commercial and business professional uses. As discussed in the WRSP Internal Land Use Compatibility section above, the placement of sensitive land uses such as residences adjacent to schools, parks, fire stations, commercial, and business professional uses could lead to incompatibility issues such as noise from equipment, activity associated with parks users and parking areas, and overflow night lighting. Residential uses are most sensitive to land use incompatibility because outdoor use is common and residential uses are often occupied 24 hours a day by people of all ages, including the very young and elderly, who are more sensitive to disturbance and health risk factors. At this time, because it is not known where specific land uses would be located within the Remainder Area, this analysis assumes that residential areas could be located adjacent to parks, schools, industrial, commercial, and business professional uses. Therefore, the impact would be **significant and unavoidable**.

## School and Park Uses

### West Roseville Specific Plan

As shown in Figure 4.1-6, the WRSP includes a total of four elementary schools, one middle school, one high school, ten neighborhood parks, seven pocket parks, and two large Citywide parks (Fiddymment Park and the Regional Sports Park). The proposed schools and parks would be in proximity to residential areas. Table 4.1-4 includes a list of all uses permitted within a residential zone. The placement of residential uses in close proximity to neighborhood parks and elementary schools would not be considered incompatible, because elementary schools and neighborhood parks generally do not include any activities or uses that would be considered a nuisance or hazard to residents. The City encourages locating parks and schools adjacent to each other to promote a shared use (General Plan policy FA-2). According to Table 4.1-5, schools are permitted uses within residential areas, indicating that they are compatible uses. Additionally any noise from children playing during the daytime hours would be consistent with the character of a residential neighborhood and therefore compatible. In addition, school activities generally occur during the day, when noise and traffic associated with school activities would normally not be considered a nuisance (addressed in greater detail in Section 4.5, Noise).

The WRSP includes one high school located on the Fiddymment Ranch property east of the PGWWTP. The high school is located immediately adjacent to low-density residential uses to the south, open space to the east, and park uses to the north and west. One middle school is located in the southern portion of the site, on the Westpark property, adjacent to low-density residential to the north, east, and southwest, medium-density residential to the southeast within the Village Center, and a park to the west. Similar to the elementary schools, the proposed middle and high schools would be considered important components of the residential neighborhoods. However, the high school includes parking lots and an outdoor stadium to be used for a variety of school and community events. The high school would introduce elements that could be considered incompatible with residential areas, including stadium lights, school-related traffic, spillover parking, and the associated traffic and pedestrian noise.

To address lighting issues associated with the high school stadium (and other schools), MM 4.13-1(a) in Section 4.13, Aesthetics and Visual Resources, requires that to the extent feasible high-powered floodlights will be discouraged within the WRSP Area for any recreation or other activities and, further, that lights shall be turned off no later than 11:00 P.M. if located within 300 feet of residential uses. MM 4.13-1(b) requires siting of light-producing uses to minimize impacts on adjacent uses and the use of shielded fixtures, which would reduce lighting impacts on adjacent properties. Implementation of MM 4.13-1(a) and MM 4.13-1(b) would reduce the potential lighting impacts of the proposed high school and middle school and parks to a less-than-significant level. However, the City cannot compel the school

district to adopt these mitigation measures because the City does not have jurisdiction over school projects. Therefore, the lighting impact associated with school uses would be considered **significant and unavoidable**.

The WRSP includes two large Citywide parks adjacent to residential areas. Most park activities are generally considered compatible with residential uses. The proposed Fiddymment Park, located west of Fiddymment Road, may potentially contain a variety of active and passive recreational opportunities, with residential areas located adjacent to the western boundary of the park. Fiddymment Park would include bike and pedestrian paths, an outdoor bandstand area, activity greens, a disc golf course and a small multi-purpose center. For the most part, these uses would not require nighttime lighting for recreational activities. Areas to include lighting would be the parking lots, outdoor festival area, and some walkways. Lighting in these areas would not be obtrusive. In contrast, the Regional Sports Park, located north of the proposed high school and west of Hayden Parkway, does include numerous lighted outdoor soccer fields that would require nighttime lighting. Similar to the high school, the types of uses proposed in the Regional Sports Park could generate noise and/or light at levels that could be considered an annoyance to the residences located southeast of the Regional Sports Park. WRSP Design Guidelines call for a wood fence between the high school and the low density residential to the south. Recreation fields in the northern portion of the sports park, west of the area designated for high-density residential, would not include any lights for nighttime activities. In addition, as discussed above, nighttime activities would be required to end no later than 11:00 P.M. School noise is exempt from the City's Noise Ordinance. The noise and lighting issues are addressed in greater detail in Sections 4.5 (Noise) and 4.13 (Aesthetics and Visual Resources).

MM 4.13-1(a) requires that high-powered floodlights will be discouraged within the WRSP Area for any recreation or other activities and that lights be turned off no later than 11:00 P.M. if located within 300 feet of residential uses. MM 4.13-1(b) requires siting of light-producing uses to minimize impacts on adjacent uses and the use of shielded fixtures, which would reduce lighting impacts on adjacent properties. Compliance with these mitigation measures would be considered adequate to reduce light impacts associated with the proposed Fiddymment Park and the Regional Sports Park to a **less-than-significant** level.

### **Remainder Area**

The placement of elementary schools and neighborhood parks within residential areas is considered compatible with City Zoning (refer to Table 4.1-5). However, if residential areas are located adjacent to high schools or large regional parks, there could be a potential incompatibility associated with the increase in traffic, spillover parking, and lighted facilities, as discussed above under the WRSP. However,

the City cannot compel the school district to adopt any mitigation measures because the City does not have jurisdiction over the development and approval of schools. Therefore, the impacts associated with lights from schools within the Remainder Area would be considered **significant and unavoidable**.

## **Open Space and Residential Uses**

### ***West Roseville Specific Plan***

Generally, residential areas would be considered compatible with adjacent open space areas (as shown in Table 4.1-3). The close proximity to open space areas and easy access to trails is often considered an amenity for residents. However, there is the potential for an incompatibility to occur between residential uses and open space areas if the activities in the developed areas would result in noise or activities that could conflict with the ability to enjoy the quiet solitude of the open space areas or conflict with the maintenance of these areas.

Human activities also affect the wildlife and habitat that is preserved in open space areas. Section 4.7, Biological Resources, discusses the management measures included in the Section 404 permit and Streambed Alteration Agreements designed to minimize impacts to the open space areas and to protect the resources present.

The WRSP includes bicycle trails, pedestrian paths, and other multi-use trails throughout the parks, paseos, and open space areas on the site. Numerous trails are located either in open space areas adjacent to the backyards of residences or across the street in open space areas that abut roadways. The WRSP Design Guidelines require that all backyards or sideyards adjacent to open space areas be enclosed with either an open fence or a wood fence. Backyards adjacent to parks would include masonry fencing. Residential areas adjacent to open space would include either an open view fence of ornamental metal or tubular steel or a wood fence. This would ensure a separation for the residents as well as minimize any potential incompatibilities with the adjacent bike trail or users of the open space areas. It is not anticipated that users of the bike trail would create substantial noise, present a safety hazard, or result in any activities that would be considered incompatible with residential areas.

As the WRSP Area is located in a rural area of the County, there could be an increased nuisance to residents from the presence of insects and wildlife that live in this part of the foothills. The Placer County Mosquito Control District was established in 1996, and in spring 2000 Measure M was passed to provide funding for implementation of mosquito control in western Placer County, which includes the area from Newcastle to the Sacramento County line. Mosquito abatement activities began in the County, on a limited basis, in spring 2002. It is anticipated more active vector control will occur in the future as more

staff is hired by the District.<sup>25</sup> Currently, the City of Roseville provides mosquito abatement services to residents. The Placer County Animal Control responds to complaints associated with other wildlife creating a nuisance or presenting a danger to residents within the County, including the City of Roseville. For the above reasons, potential conflicts between residences and open space would be considered **less than significant**.

### **Remainder Area**

Residential areas would be considered compatible with adjacent open space areas (as shown in Table 4.1-3); the close proximity of residences to open space areas and trails is often considered an amenity for residents.

Any potential incompatibility between residential uses and open space areas that could result from noise or activities that would conflict with the ability to enjoy the quiet solitude of the open space or maintenance of these areas are addressed in Section 4.7 (Biological Resources). This section discusses the management measures included in the Section 404 permit and Streambed Alteration Agreements designed to minimize any impacts to the open space areas and to protect the resources present.

It is anticipated that, similar to the WRSP Area, development within the Remainder Area would include bicycle trails, pedestrian paths, and other multi-use trails within the parks and open space areas throughout the site. As with the WRSP Area, it is not anticipated that location of residences in close proximity to trails and open space areas would result in a land use incompatibility. The impact would be considered **less than significant**. The same is true for the potential nuisance caused by placing residences in areas where there are insects and wildlife because these potential nuisances are considered part of the natural environment and cannot be completely eliminated. As discussed previously, the City of Roseville provides vector control, as does the Placer County Mosquito Control District.

### **Fire Stations**

#### **West Roseville Specific Plan**

Because fire stations respond to emergencies at all times of the day or night, residents could be disturbed by sirens. As shown in Figure 4.1-6, a proposed fire station would be located off Hayden Parkway north of a proposed high-density residential site and open space to the south and west. Nearby low-density residential areas would be located across Hayden Parkway to the east and to the north and south of the station. As discussed on page 4.5-27 in Section 4.5 (Noise), although noise levels associated with

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<sup>25</sup> [www.placermosquito.org/site](http://www.placermosquito.org/site) accessed December 11, 2002

emergency vehicles could be annoying to residential uses, these types of noise sources are exempt under the City's Noise Ordinance (Section 9.24.020(c)). Therefore, the impact is **less than significant**.

### **Remainder Area**

The City's fire department has indicated there is a potential that a second fire station would be required in the Remainder Area, although the location of a second fire station is not known. If a fire station is located near residential areas, the noise associated with sirens and alarms may be annoying to any nearby residential areas. However, these types of noises are exempt under the City's Noise Ordinance (Section 9.24.020(c)). Therefore, the impact is **less than significant**.

### **Commercial and Office Uses**

#### **West Roseville Specific Plan**

Approximately 67 acres of community commercial and business professional uses are proposed within the WRSP Area. Although generally situated near arterial roads, some of the community commercial and business professional uses in the WRSP Area would be adjacent to residential uses. The City of Roseville Community Design Guidelines (1995) include specific requirements for commercial development. Commercial development adjacent to residential areas must include side and rear setbacks with a sufficient planter area to screen any undesirable views or for the placement of sound barriers or fencing.<sup>26</sup> In addition, the City's Design Guidelines require that "lighting sources include cut-off lenses to avoid light spillage and glare on adjacent properties."<sup>27</sup> In addition to the City's Community Design Guidelines, the Design Guidelines prepared for the WRSP Area includes specific requirements to ensure that landscaping, building setbacks, and berming would be appropriate to screen noise and other visual intrusions from commercial and office uses on nearby residential areas. The WRSP Design Guidelines state that most of the community commercial and business professional uses have been located adjacent to high-density residential areas to facilitate easy access between the uses. The Design Guidelines also state that all service and delivery areas will be screened by walls required along the rear of the buildings. Furthermore, the WRSP would be required to comply with the Roseville Zoning Ordinance, which mandates proper screening, building set backs, landscaping requirements, and light intensities, which would promote compatibility between residential and adjacent business professional or commercial uses. Section 4.5, Noise, also includes MM 4.5-3, which requires that any commercial development demonstrate that it meets City's noise standards. It is anticipated this impact would be **less than significant**.

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<sup>26</sup> Community Design Guidelines, City of Roseville, December 6, 1995, p. 15

<sup>27</sup> Community Design Guidelines, City of Roseville, December 6, 1995, p. 29

### **Remainder Area**

The location of residential areas adjacent to commercial or business professional uses could result in incompatibilities due to noise or visual intrusions. Compliance with the City's Community Design Guidelines, which mandate proper screening, building setbacks and height, and landscaping, would ensure that commercial and business professional uses are compatible with residential uses. In addition, MM 4.5-4 from Section 4.5, Noise, requires that any commercial development proposed within 150 feet of residences conduct an acoustical analysis to demonstrate compliance with City standards. This impact would therefore be reduced to a **less-than-significant** level.

### **Village Center**

#### **West Roseville Specific Plan**

The WRSP Area includes approximately 121 acres designated in the Village Center with a Village Center General Plan designation. The Village Center is intended to create a unique village environment. Uses within the Village Commercial designation include residential, commercial, park, and quasi-public uses (refer to Figure 4.1-6). The Village Commercial area is designed in a grid pattern to emulate the design of either smaller villages or dense urban areas residential uses are adjacent to commercial uses and residential is above retail. The Village Center would include Special Area (SA) overlay zones to allow customized development standards and/or permitted uses. Within the Village Center would be a range of housing including higher-density single-family attached and detached units with an average density of 12 units per acre. The WRSP includes a list of permitted uses within the different land use categories (refer to the WRSP for more detail). The types of uses, as described in the Specific Plan, would be designed to minimize any internal land use conflicts associated with noise and lighting. Therefore, this impact would be considered **less than significant**.

### **Industrial**

#### **West Roseville Specific Plan**

Approximately 108.5 acres are designated for Light Industrial and General Industrial land uses in the western portion of the WRSP Area, south and west of the PGWWTP, and within a 1,000-foot buffer surrounding the PGWWTP. The buffer which excludes residential land uses, pertains only to the PGWWTP. Table 4.1-4 details the numerous types of light industrial and commercial uses that would be permitted in this area. As shown on Figure 4.1-6, the proposed industrial and light industrial uses are located adjacent to roads and areas designated for open space uses, parks, or community commercial. No industrial uses are located immediately adjacent to any residential area. The nearest residential area would be located approximately 200 feet from the industrial area. The closest residential area on the west

side of the WRSP Area would be separated by West Side Drive, a six-lane arterial. These uses surrounding the proposed industrial uses would act as a buffer between the PGWWTP and the residential areas to the west and south. In addition, the WRSP Area would be subject to both the City's Community Design Guidelines and the WRSP Design Guidelines. The City's Community Design Guidelines require that industrial development include sufficient side and rear setbacks to include areas for landscaping and sound barriers to screen undesirable views and provide a noise buffer.<sup>28</sup> The City's Design Guidelines also include specific requirements for site layout, landscaping, and fencing to ensure all potential incompatibilities with adjacent uses are minimized. In addition, industrial uses would be subject to the WRSP Design Guidelines, which provide standards for setbacks, landscaping, lighting, and other design elements. These measures would minimize potential visual incompatibility with surrounding uses. The WRSP Design Guidelines require a six-foot masonry wall between the light industrial uses and the PGWWTP, the west and south edges of the PGWWTP, and the southern edge of the proposed tank sites. Light industrial and industrial uses are also subject to extensive State and federal regulations governing hazardous materials. In addition, MM 4.5-5 in Section 4.5, Noise, requires that any industrial or light industrial development demonstrate that they meet the City's noise standards. For these reasons, the impact would be considered **less than significant**.

## **Agricultural**

### **West Roseville Specific Plan**

During buildout of the WRSP Area, agricultural uses could continue on land within the WRSP Area as well as the adjacent Remainder Area for an unknown period of time. Agricultural operations can produce dust, noise, and odor at levels that are considered a nuisance when close to residential areas. Active agricultural activities within the WRSP Area include a pistachio orchard and seasonal grazing. Grazing of cattle could create some noise, odors, and dust but would not significantly affect future residents within the WRSP Area, because it is likely grazing activities would be phased out as the WRSP is developed.

An active 33.5-acre pistachio orchard is located just north of Blue Oaks Boulevard, east of Fiddyment Road. Approximately 20 acres of the orchard would be developed, with the remaining 40 acres of Prime Farmland left in undeveloped open space. Approximately two acres would be used as a community garden located in the open space area just north of the high-density residential area in the northern portion of the WRSP Area (north of Blue Oaks Boulevard). A community garden is an allowable use in

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<sup>28</sup> Community Design Guidelines, City of Roseville, December 6, 1995, p. 49-50

open space areas, and would not include aerial pesticide spraying or other agricultural activities that could conflict with residential uses.

Because there is the potential for new development to be exposed to agricultural activities within the WRSP Area as the area is developing, compliance with MM 4.1-1, which requires all residents to sign a disclosure at the time of purchase/rental, would reduce any potential incompatibilities to a **less-than-significant** level.

## **Temporary Disturbances during Construction**

### **West Roseville Specific Plan**

As discussed in Chapter 2, the WRSP Area would be constructed in phases. Development would take place near the existing residence within the WRSP Area (Corin residence) as well as around the WRSP Area (O'Brien and other residences located near the project site) and the Del Webb Specific Plan and the NRSP area. Residents in these areas could be subject to short-term increases in air pollution associated with dust and vehicle emissions as well as construction noise. In addition, noise from well drilling, which may require short periods of 24-hour work, could occur through buildout of the WRSP, creating a potential disturbance to residents of the WRSP Area and adjacent developed areas. Potential short-term disturbances associated with WRSP construction, including well drilling, are addressed in Section 4.4 (Air Quality) and Section 4.5 (Noise). MM 4.5-1 would reduce construction noise to a **less-than-significant** level by placing loud equipment away from residences and blocking noise from well-drilling equipment.

## **Summary**

### **West Roseville Specific Plan**

In summary, with implementation of applicable plans, regulations, ordinances, and/or guidelines and mitigation measures identified above, impacts related to land use compatibility associated with commercial/office uses, industrial, and agricultural uses would be less than significant. Impacts associated with temporary disturbances during construction and well drilling could be reduced to less-than-significant levels with mitigation. However, light associated with school uses would be the responsibility of the school district, and the City cannot compel the district to meet City standards. Therefore, the impact with regard to land use compatibility between the proposed high school and adjacent residential uses is considered **significant and unavoidable**.

**Remainder Area**

To summarize, potential internal land use incompatibilities could result if residential areas were located adjacent to high schools, regional parks, or commercial uses in the Remainder Area. Implementation of MM 4.1-2, MM 4.5-2, MM 4.5-4, MM 4.5-7, MM 4.5-9, and MM 4.13-2 would ensure that potential incompatibilities would be less than significant. However, because light impacts associated with any future school development within the Remainder Area cannot be fully mitigated, and the City cannot compel the school district to comply with their standards, the impact would be **significant and unavoidable**.

IMPACT 4.1-2: POTENTIAL INCOMPATIBILITY WITH EXISTING AGRICULTURAL AND OTHER LAND USES IN THE REMAINDER AREA, THE COUNTY, AND THE CITY OF ROSEVILLE		
<b>Applicable Policies and Regulations:</b>	None Applicable	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.1-1 (Deed disclosure); MM 4.1-3 (Fifty-foot setback)	MM 4.1-2 (Policies to minimize agricultural conflicts)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**West Roseville Specific Plan**

**Compatibility With Surrounding Uses**

As stated in the Setting section, the WRSP is bordered by the DWSP and the NRSP to the east and agricultural uses in the Remainder Area to the north, south, and west. Fiddymment Road, a two-lane roadway to be expanded to four lanes adjacent to the WRSP area, runs along the western boundary of the City adjacent to the western boundaries of the DWSP and NRSP. The DWSP is an age-restricted residential development that consists primarily of single-family homes focused around recreational facilities and a golf course. It includes up to 3,179 dwelling units and 27 acres of commercial property. The NRSP is also a mixed-use residential development with limited office and commercial development, particularly along Fiddymment Road.

**Agricultural Uses**

Both the Westpark and Signature properties would be adjacent to undeveloped land to the north, south, and west within the County, including the Remainder Area. As discussed under Impact 4.1-1, adjacent land within the Remainder Area (to the west and north of the Fiddymment Ranch property and to the

south and west of the Westpark property) is currently undeveloped and used for seasonal grazing activities. It is assumed that this land would be urbanized sometime in the future; therefore, in the long term, no incompatibilities with agricultural land are anticipated. Land in the County to the west of the Westpark property is currently used for agricultural activities. Any residential uses would be buffered by the large area of open space included in most of the western portion of the WRSP Area. WRSP residential land uses would also be adjacent to agricultural land in the County to the north and west of the Fiddymment Ranch property. According to the County General Plan and Sunset Industrial Area Plan,<sup>29</sup> this land north of the Fiddymment Property will remain in agricultural use. Seasonal grazing is expected to continue as the primary agricultural activity. Seasonal grazing activities can produce dust, noise, and odor at levels that are considered a nuisance when close to residential areas. The SIAP includes a requirement that agricultural buffers be included to minimize conflicts. The buffers range from 100 feet to 400 feet depending on the crop.<sup>30</sup> This could be a significant impact. MM 4.1-1 specifies that any residential unit located within 500 feet of any active agricultural area carry a deed disclosure informing potential buyers or renters of this agricultural activity. In addition, MM 4.1-3 requires a 50-foot setback along the northern portion of the Fiddymment Ranch property to buffer residential uses in this area from agricultural activities. Compliance with MM 4.1-1 and MM 4.1-3 would reduce the impact to a **less-than-significant level**, by ensuring that prospective buyers or renters be informed about and accept the level of agricultural activity to which they would be exposed and by providing a setback to minimize any potential incompatibilities with adjacent agricultural land in the County.

It should be noted that Placer County is more restrictive of residential uses near agriculture than is the City. The County General Plan requires buffers between agricultural and nonagricultural uses to minimize incompatibilities (refer to County policies 1.H.5, 1.H.6, 17.B.1, and 7.B.3 in Appendix D). These policies would not apply to development in the WRSP Area because it would be under City jurisdiction which, because of its urban nature, does not have such policies. However, MM 4.1-3 includes a 50-foot buffer north of the Fiddymment Ranch property (refer to discussion under Impact 4.1-3), which is equivalent to the County's minimum buffer for grazing land.

### ***Del Webb and North Roseville Specific Plan Areas***

Adjacent to the eastern boundary of the WRSP Area are the DWSP and the NRSP areas. Fiddymment Road and Blue Oaks Boulevard provide a buffer between the WRSP Area and the two specific plan areas. Fiddymment Road is currently a two-lane roadway between Pleasant Grove Boulevard and the City limits. This road will be expanded to four lanes, with an ultimate right-of-way of approximately 76 feet. Blue

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<sup>29</sup> Sunset Industrial Area Plan, Placer County, Figure 1-1 and p. 1-4, 1997

Oaks Boulevard is currently a two-lane roadway from Crocker Ranch Road, east of Fiddymment Road, to where the road currently ends at the junction with Phillip Road. Blue Oaks Boulevard is slated to be widened to four lanes west of Fiddymment Road through the WRSP Area. The northern portion of the WRSP Area, north of Pleasant Grove Creek, proposes a mix of low-density residential, medium-density residential, and open space uses similar to the type of residential development in Phase 2 and 3 of the NRSP. The portion of the NRSP east of this area includes primarily residential development. The residential development within the NRSP is buffered from Fiddymment Road through an approximately 35-foot landscaped setback (from the edge of the curb to the soundwall) and a 6-foot soundwall. The central portion of the WRSP Area west of the DWSP also includes a mix of residential and park uses that would be similar to the type of residential development within the DWSP. It is anticipated that the WRSP would be a continuation of the type of mixed-use development that characterizes the City today. Uses that would differ, such as the sports complex, and industrial uses are separated from the DWSP and NRSP by low density residential and commercial uses.

The WRSP Area includes a 35-foot landscaped setback along Fiddymment Road and a six-foot high masonry wall, the same as that included in the NRSP. The only area of Fiddymment Road where a soundwall would not be included is along the perimeter of Fiddymment Park. Because residential uses are not considered nuisance generating uses, it is anticipated that the WRSP development of residential uses in these areas would be considered compatible with the residential areas in the adjacent NRSP and the DWSP so that the impact would be considered **less than significant**.

Traffic noise associated with the increase in traffic on area roadways is discussed in Section 4.5, Noise.

The uses proposed in the WRSP Area across from the DWSP include high- and medium-density residential and community commercial at the intersection of Blue Oaks Boulevard and Fiddymment Road. Park, low-density residential, including an age-restricted low-density component, and a small area of community commercial in the area north of Blue Oaks Boulevard are among these proposed uses. Residential densities in this area would range from 0.5 to 6.9 dwelling units per acre for low-density residential, 7 to 12.9 for medium-density, and 13 and higher for high-density uses. Similar to the NRSP, the DWSP is buffered from Fiddymment Road through a 35-foot landscaped setback and a six-foot sound wall. The proposed residential, park, and community commercial uses within the WRSP Area are not anticipated to generate excessive noise, light, dust, odors, or hazardous emissions. As discussed above, development within the WRSP would be subject to the City's Community Design Guidelines as well as the project-specific WRSP Design Guidelines. Because the WRSP proposes uses similar to those within

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<sup>30</sup> Sunset Industrial Area Plan, Placer County, p. 1-42, 1997

the DWSP, development along the Fiddymont Road section of the WRSP would require a 35-foot landscaped setback and a minimum of a six-foot masonry wall (except along the perimeter of Fiddymont Park). It is not anticipated that there would be any land use incompatibilities. Therefore, the impact is considered **less than significant**. In addition, due to the distance between the uses proposed in the WRSP Area and the residences in the DWSP, as well as the walls separating these uses, the WRSP would not intrude on the privacy enjoyed by the residences of the DWSP.

### **O'Brien Property**

Adjacent to land designated in the WRSP Area for future industrial use is a commercial dog kennel and residence (O'Brien) located west of the existing Phillip Road and just east of the WRSP Area boundary (refer to Figure 4.1-6). The kennel is not currently located within the City limits, but is within the Remainder Area. The City considers a kennel an allowable use in an industrial area, so it would be considered compatible within the WRSP Area and future development within the Remainder Area. The WRSP Area includes a 10-foot-wide landscaped buffer adjacent to the perimeter of the O'Brien property. The landscaping is designed to serve as a visual screen between these two uses. Because kennels can be noisy, the WRSP Design Guidelines also include a 6-foot masonry sound wall between the O'Brien property and the WRSP Area. If a commercial development is located adjacent to the kennel, potential incompatibility could result due to the noise. However, kennels are allowable uses in commercial as well as light industrial zones. Therefore, the impact is considered **less than significant**.

As noted in Chapter 2, there is the potential that if Blue Oaks Boulevard is aligned further to the south, the City would be required to purchase parcel 017-100-028 (refer to Figure 2-13 [West Roseville Specific Plan Blue Oaks Alignment (Alternative 1)] in the Project Description). This alternative would require the removal of an existing dog kennel structure. This would impact the kennel business and would potentially require the business to be relocated off site, or construction of a new kennel on the O'Brien site. If this alignment is selected, the City would be required to comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, and California Government Code, Chapter 16, Section 7260, *et seq.*, that require compensation or other forms of assistance be provided to those whose real property is displaced and/or acquired for a public project such as a roadway widening. The City is currently working with the O'Briens to determine their preferences. Compliance with applicable legal requirements are expected to mitigate any impacts to a **less-than-significant** level.

If the northern alignment to Blue Oaks is chosen, it would not impact the O'Brien Kennel. Land use impacts of the northern alignment include acquisition of property and biological impacts to off-site locations. Biological impacts for off-site improvements are considered in Section 4.7.

**Remainder Area**

As shown in Table 2-3 in Chapter 2, the land use assumptions for the Remainder Area include residential of a density and type similar to the WRSP, along with commercial and business professional uses. Land designated for agricultural uses within the County is located to the north, west, and south of the Remainder Area. However, the western boundary of the northern and southern portion of the Remainder Area will likely include a one-quarter-mile buffer of undeveloped open space similar to the WRSP. Therefore, it is not anticipated that there would be any potential land use incompatibilities between proposed residential and agricultural uses in the County. County land to the south of the Remainder Area is anticipated to be urbanized due to its proximity to Sacramento County and the proposed Placer Vineyards project. However, land to the north is anticipated to remain in agricultural use. The potential incompatibility between residential and permanent agricultural uses is considered a significant impact. MM 4.1-2 would ensure that when a specific plan is developed for this portion of the Remainder Area, specific policies such as 50-foot buffers are included to address potential incompatibilities at this interface. This measure would reduce the impact to a **less-than-significant** level.

<b>IMPACT 4.1-3: POTENTIAL INCOMPATIBILITY WITH THE PLEASANT GROVE WASTEWATER TREATMENT PLANT.</b>		
<b>Applicable Policies and Regulations:</b>	None Applicable	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	No Impact
<b>Mitigation Measures:</b>	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	No Impact

**Water Treatment Plant**

Wastewater treatment plants can produce odor and noise at levels considered incompatible with residential uses. The PGWWTP includes a 1,000-foot buffer area that excludes residential development. The uses allowed by the WRSP within this 1,000-foot buffer are more restrictive than uses allowed by City Code. The buffer was established in a separate EIR prepared specifically for the PGWWTP and will expand in proportion to any PGWWTP expansion.

This buffer will ensure there are no land use incompatibilities with residential uses by providing a large separation between the PGWWTP and homes. In addition, because the PGWWTP would not create any significant odor, noise, or health hazard impacts, it is anticipated that there would be no incompatibilities with any residential or non-residential uses within the WRSP Area. The Remainder Area is buffered from the PGWWTP by the City-owned land to the north of the plant.

### **West Roseville Specific Plan**

As shown on Figure 4.1-6, the City's PGWWTP is located just south of City-owned land and adjacent to land designated for light industrial and park uses by the WRSP. In accordance with MM 3-3 in the Wastewater Master Plan EIR (1996), a 1,000-foot buffer was established around the PGWWTP that restricts land use in this buffer to nonresidential development to minimize risks to off-site land uses.<sup>31</sup> Although the buffer was originally intended to mitigate hazards associated with the use of chlorine gas, less hazardous sodium hypochlorite will be used instead upon completion of the plant, which presents only nominal hazards. Nonetheless, the proposed WRSP designates land within the 1,000-foot buffer for industrial, light-industrial, parks, and open space land uses. These uses would be considered compatible with the adjacent PGWWTP because they would not be inhabited 24 hours a day and, with the exception of parks, would include primarily indoor activity. The closest residential areas and the buildings associated with the proposed high school would be located over 1,000 feet from the PGWWTP. Fields and the proposed stadium would be located within the 1,000-foot buffer area; however, because the PGWWTP would not create substantial odors, noise, or health hazards, the buffer would be more than adequate to protect the high school and residential areas from plant operations. In addition, the City of Roseville Fire Marshal reviewed the anticipated chemical use and plant operational design in August 2002 for potential off-site consequences at the WRSP and concluded off-site consequences were not likely to occur. Therefore, this is considered a **less-than-significant impact**.

This analysis also evaluated the 15- to 20-acre plant expansion area located south of the PGWWTP. The uses that would be adjacent to this expansion area within the WRSP Area include light industrial. These uses would be compatible with any future expansion activities.

### **Remainder Area**

The Remainder Area is located over 1,500 feet from the PGWWTP; therefore, no land use incompatibilities and **no impact** would occur.

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<sup>31</sup> City of Roseville, *Roseville Regional Wastewater Treatment Service Area Master Plan Draft Environmental Impact Report* (SCH #93092079) May 1996, Chapter 10.0

<b>IMPACT 4.1-4: CONVERSION OF AGRICULTURAL LAND TO DEVELOPED USES.</b>		
<b>Applicable Policies and Regulations:</b>	None Applicable	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Less Than Significant
<b>Mitigation Measures:</b>	MM 4.1-4 (Provide conservation easement)	None required
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Less Than Significant

### Conversion of Agricultural Land

Soils are categorized by their potential use as agricultural land. “Prime Farmland” is defined by the State Department of Conservation as land that has the best combination of physical and chemical characteristics for the production of crops. These lands generally consist of Class I and II soils. They have the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Most of the soils at the SOI Amendment Area are Class III and IV, which have severe limitations for agricultural production. The Ramona soils (soil units 174 and 175) and Xerofluvents (193) are Class I and II;<sup>32</sup> however, these soils are limited in extent and are generally in the vicinity of proposed open space areas along Pleasant Grove Creek and Kaseberg Creek.

The NRCS has also rated suitability of soils in Placer County for agriculture using the Storie Index. This index, which consists of six grades ranging from excellent (1) to unsuitable (6), expresses numerically the relative degree of suitability of a soil for general intensive agriculture as it exists at the time of evaluation. The rating is based on soil characteristics only and is obtained by evaluating such factors as soil depth, surface texture, subsoil characteristics, drainage, salts and alkali, and relief. Most of the SOI Amendment Area consists of Storie Index 4 and 5 soils, which are poorly suited for agriculture. There are no Grade 1 soils in the SOI Amendment Area.<sup>33</sup>

Within the Project Area, a total of 4,498 acres of agricultural land, primarily grazing land, would be developed with residential, commercial, light industrial, schools, and other public uses. A total of 1,050 acres would be left in undeveloped open space. Within the WRSP Area there is a total of 40.2 acres of land designated as Prime Farmland. A total of 22.4 acres of Prime Farmland would be developed with

<sup>32</sup> USDA Natural Resources Conservation Service, *Soil Survey Placer County, California, Western Part*, 1980, pp. 11 through 74

<sup>33</sup> USDA Natural Resources Conservation Service, *Soil Survey Placer County, California, Western Part*, 1980, pp. 11 through 76

residential and community garden uses. Up to 1,000 acres off site could also be retired at Reason Farms. Although the farmland will not be lost, it will be converted to fallow land, which will take it out of production. Impacts associated with the conversion of land classified as Prime Farmland and the loss of agricultural productivity of this land is discussed below. However, it should be noted that the retirement of approximately 1,700 acres of Reason Farms was already assumed as part of the City's regional retention facility. The loss of agricultural productivity on this portion of Reason Farms was addressed in the EIR for the City of Roseville Retention Basin Project (Reason Farms), and no future analysis is required.

### **West Roseville Specific Plan**

As stated in the Setting section, the WRSP Area is not under a Williamson Act contract, is not irrigated, and has historically been used for seasonal grazing or dry farming. The CDC Farmland Mapping and Monitoring Program classifies a majority of the site as "Farmland of Local Importance,"<sup>34</sup> with a total of 40.2 acres of land classified as Prime Farmland. Approximately 30 acres of this prime farmland is currently in agricultural production as a pistachio orchard. A total of approximately 22.4 acres of Prime Farmland would be developed with residential uses and a community garden (2.0 acres), leaving the remaining 16.8 acres in undeveloped open space.

In addition, as previously mentioned, the City is acquiring and has set aside funds for the 1,500-acre Reason Farms property located north and west of the SOI Amendment Area for a regional stormwater retention facility. Approximately 560 acres of Reason Farms will be taken out of production to accommodate this facility. The City could choose to take all or a portion of the remaining irrigated acreage (up to 940 acres) out of production as well and retire that land on either an annual or permanent basis. The groundwater that would have been extracted for irrigation purposes would be banked for future use ("in-lieu groundwater banking"). Up to 3,851 AF/yr, which was estimated conservatively, could be banked from this source, assuming 1,080 acres are retired. At a minimum, 500 to 850 acres would need to be retired to mitigate for the extraction of 2,848 AF/yr of groundwater to meet WRSP estimated dry-year demand.<sup>35</sup> Reduced groundwater extraction during dry years at the Reason Farms property would fully offset the anticipated groundwater extraction under the City's proposed water supply strategy for meeting WRSP dry-year water demands.<sup>36</sup> Although the farmland will not be lost, it will be converted, which will take it out of production. The conversion of land classified as Prime Farmland and the loss of agricultural productivity of this land is considered a significant and

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<sup>34</sup> California Department of Conservation, Farmland Mapping and Monitoring Program, *Placer County Important Farmland, 1998, 1999*

<sup>35</sup> MWH, *Groundwater Impact Analysis for Proposed Reason Farms Land Retirement Plan*, Draft June 2003, pp. 5-7

<sup>36</sup> MWH, *Groundwater Impact Analysis for Proposed Reason Farms Land Retirement Plan*, Draft June 2003, pp. 6-1

unavoidable impact. It should be noted that the retirement of approximately 1,500 acres of Reason Farms was already assumed as part of the City's regional retention facility. The loss of agricultural productivity on this portion of Reason Farms was addressed in the EIR for the City of Roseville Retention Basin Project (Reason Farms) January 2003. (Refer to Impact 4.12-6 in Section 4.12 [Hydrology, Water Quality and Ground Water] for a detailed discussion of potential environmental impacts of groundwater use and land retirement.)

The majority of the WRSP Area is currently anticipated to be developed with residential, commercial, business, and industrial uses, which would contribute to the loss of agricultural production. Although the proposed land use designations would preclude any agricultural use of the land, the loss of grazing land would not be significant. As the area is developed, the area would lose its value for grazing due to the loss of large, uninterrupted areas. The majority of soils within the WRSP Area are unsuitable for many agricultural uses beyond grazing. Conversion of Farmland of Local Importance is not considered significant because of (1) the relatively low value of the property for agricultural purposes as defined by the Farmland Mapping and Monitoring Program, (2) its historically poor ability to produce agricultural crops, (3) its abundance in the region, and (4) it does not exceed a CEQA standard of significance (Appendix G).

However, the project will develop approximately 22.4 acres of land designated Prime Farmland. MM 4.1-4 provides that off-site conservation easements shall be implemented to offset the loss of agricultural land. Purchase of conservation easements, while not likely to result in a 1:1 replacement of in-kind farmlands, would assist in minimizing the impact of loss of Prime Farmland, although not to a less-than-significant level. The loss of 22.4 acres of Prime Farmland within the WRSP Area, is considered a **significant and unavoidable** impact.

### **Remainder Area**

All of the land within the Remainder Area is classified as Farmland of Local Importance. Assuming development would occur similar to the WRSP, it is anticipated that development in this area could convert approximately 1,798 acres to developed uses. Approximately 365 acres could be set aside in open space and 196 acres could be used for parks and other recreation. The loss of Farmland of Local Importance is considered a **less-than-significant** impact for the same reasons set forth above under the discussion of "Conversion of Agricultural Land—West Roseville Specific Plan."

IMPACT 4.1-5: INTERIM ACCESS TO CITY-OWNED PROPERTY.		
<b>Applicable Policies and Regulations:</b>	None Applicable	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

## Vehicle Access

### West Roseville Specific Plan

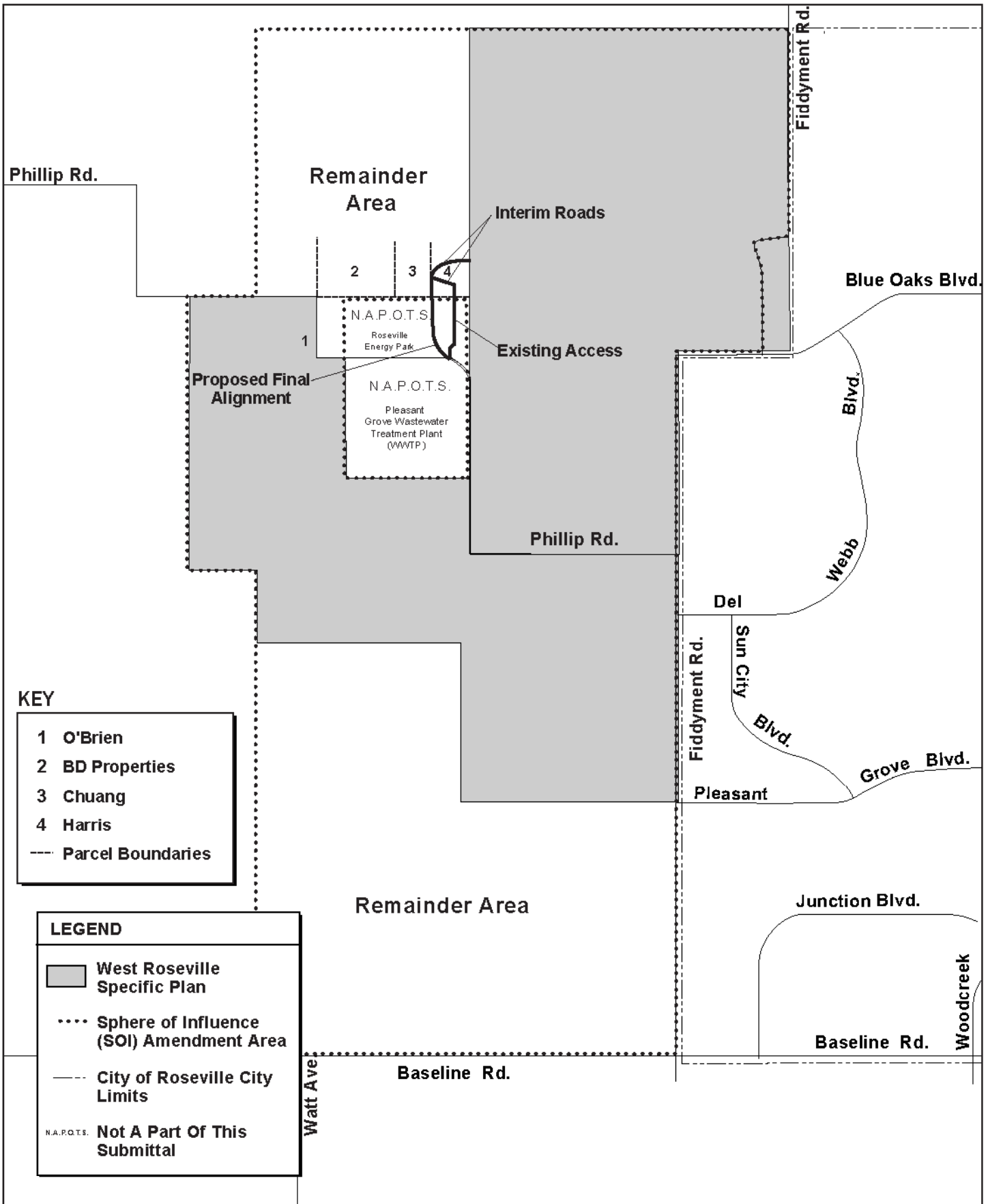
Vehicle access will be maintained throughout development of the WRSP. In Phase 1, the on-site portion of Phillip Road between Fiddymont Park and the PGWWTP would be constructed. In Phase 3, Blue Oaks Boulevard would be extended to Phillip Road and the remainder of Phillip Road (off site) connecting with Blue Oaks Boulevard would be constructed. The remaining section of Blue Oaks Boulevard from Phillip Road to West Side Drive would be constructed in Phase 4.

As illustrated by Figure 4.1-7 (Access to Parcels North of Blue Oaks Boulevard), access to residences located north of the City-owned property (in the Remainder Area), is currently provided via Phillip Road, which runs adjacent to and parallel to the PGWWTP. The WRSP proposes to abandon the portion of Phillip Road across the City-owned property and realign this section to intersect with the extension of Blue Oaks Boulevard (refer to Figure 4.1-7). During construction of this new roadway, a temporary road would be constructed off the existing Phillip Road to allow access to the properties north of the City-owned property (refer to Figure 4.1-7). Portions of Phillip Road will be abandoned in Phases 1 and 2 as it is realigned and constructed. The formal abandonment of the original section of Phillip Road is anticipated to occur in Phase 4. Ultimately this road would connect to future development within the northern Remainder Area and the internal roadway system within the Fiddymont Ranch property.

Because access would be provided to residences through development of the WRSP this is considered a **less-than-significant** impact.

### Remainder Area

Prior to development of the northern portion of the Remainder Area, an interim roadway will be provided to allow access to residences in this area. Once development occurs in this portion of the Remainder Area, a permanent roadway connection will be constructed. Because access will be provided to residences of the Remainder Area, this is considered a **less-than-significant** impact.



**FIGURE 4.1-7**  
**Access to Parcels North of Blue Oaks Boulevard**

Not to Scale



10659-00

Source: EIP Associates, 2003

City of Roseville



IMPACT 4.1-6: POTENTIAL INCOMPATIBILITY WITH CITY'S GENERAL PLAN AND ZONING CODE.		
Applicable Policies and Regulations:	None Applicable	
	<b>WRSP</b>	<b>Remainder Area</b>
Significance with Policies and Regulations:	Less Than Significant	Less Than Significant
Mitigation Measures:	None required	None required
Significance after Mitigation:	Less Than Significant	Less Than Significant

### Consistency with City’s General Plan and Zoning Code

#### West Roseville Specific Plan

As discussed above, as part of the WRSP, the applicant is proposing to create a new Village Commercial land use designation and associated zone. The Village Center within the WRSP Area would include a mix of residential, commercial, park and public/quasi-public uses. The Village Center Land Use designation is intended to allow for a mix and density of land uses common to a traditional downtown, urban setting. It would allow for flexibility and deviation from the standards and permitted uses included in the primary land use designations from which it is combined. The use of the combining designation requires comprehensive land use planning through the approval of a Specific Plan area. The permitted uses, standards, and extent of deviation are defined in the WRSP. Land uses within the Village Center would be implemented through application of zone districts as specified by the City of Roseville Zoning Ordinance. In recognition of its distinctive form, the Development Standards (DS) or Special Area (SA) overlay zones have been applied to some Village Center uses. The overlay zones customize development standards and/or permitted uses of general zone districts to reflect the unique nature of the Village Center. Because the Village Center includes an SA overlay zone, no separate zoning designation is required.

The WRSP lays out the permitted uses and standards within the Village Center and demonstrates that these uses will be compatible. As discussed in Sections 4.2 through 4.13 of this EIR, the Village Center would not result in any uses that would be incompatible. Therefore, the impact is considered less than significant. Currently, the City’s General Plan and Zoning Ordinance does not include a land use designation for Village Center; however, as part of the WRSP, the City would amend its General Plan to include a new land use designation, Village Center (VC). It could also be applied to land uses that currently exist in the City (e.g., residential and commercial), although in different configurations. This is considered a **less-than-significant** impact.

### **Remainder Area**

At this time the land use assumptions for the Remainder Area do not include any amendments to the City's General Plan (except for an amendment to the Land Use Map to indicate it would be in the City's SOI) or Zoning Ordinance. However, in the future, the City may receive a development application that proposes a new land use designation that is not included in the General Plan. A separate environmental review would be required for any development applications within the Remainder Area; therefore, consistency with the City's General Plan and Zoning Ordinance will be addressed at that time. The impact is considered **less than significant**.

### ■ **Mitigation Measures**

*MM 4.1-1: Deed Disclosure (Impact 4.1-1 and Impact 4.1-2 – WRSP)*

In order to reduce conflicting issues between sensitive receptors and agricultural uses, residential units within 500 feet of the orchard or any other active agricultural use shall be provided with a deed disclosure or similar notice approved by the City Attorney regarding the proximity and nature of neighboring agricultural uses. This disclosure shall be applied at the tentative map stage to the affected properties. A written disclosure shall be supplied to the property purchaser or renter by the vendor prior to the completion of the purchase or rental agreement. The text of the disclosure language shall be approved by the City Attorney.

To ensure that residents are made aware of other land uses in proximity to their respective neighborhoods, the developers shall also provide through deed disclosure or other similar notice approved by the City Attorney; the temporary truck route to the PGWWTP and Roseville Energy Park, use of recycled water, proximity to the PGWWTP, proximity to the potential Roseville Energy Park, proximity to parks and schools that may generate noise and light, and proximity to overhead power lines.

To further mitigate noise and lighting impacts MM 4.5-1, MM 4.5-2, MM 4.5-3, MM 4.5-4, MM 4.5-5, MM 4.5-6, MM 4.5-7, MM 4.5-8, MM 4.5-9, MM 4.13-1 and MM 4.13-2 from Section 4.5 (Noise) and Section 4.13 (Aesthetics and Visual Quality) would be required to mitigate Impact 4.1-1. Refer to Sections 4.5 and 4.13 for a discussion of those mitigation measures.

*MM 4.1-2: Policies to Minimize Agricultural Impacts (Impact 4.1-1 and Impact 4.1-2 – Remainder Area)*

Specific Plans and/or other development proposals for the Remainder Area shall minimize conflicts between residential and agricultural uses. Measures to ensure compatibility could include (1) deed disclosure regarding the proximity and nature of neighboring agricultural uses for future residential units within

500 feet of any active agricultural use, (2) minimum 50-foot setbacks from residential structures and agricultural uses, (3) negative easements, and/or (4) other equally effective measures.

*MM 4.1-3: Provide 50-foot Setback (Impact 4.1-2 – WRSP)*

Agricultural land is located north of the WRSP (Fiddymment Ranch property). Residential uses shall be separated by a minimum 50-foot buffer from living structures on Parcels F-13 and F-14 abutting existing agricultural lands in the northeast corner of the Fiddymment property. The buffer could include roads, landscape corridors, and rear yard setbacks.

*MM 4.1-4: Provide Conservation Easement (Impact 4.1-4 – WRSP)*

The development in the WRSP Area shall minimize loss of agricultural land. This shall be achieved through off-site acquisition of conservation easement(s) prior to approval of the 500th building permit.

## 4.2 POPULATION, EMPLOYMENT, AND HOUSING

### 4.2.1 Introduction

This section describes the anticipated changes in population, employment, and housing, including the jobs-to-housing balance and affordable housing, resulting from development of the proposed project. Impacts associated with growth inducement are discussed in Chapter 5, CEQA Considerations.

For this section, the following documents were reviewed:

- *Draft West Roseville Specific Plan*, September 2003
- *MuniFinancial 2020 Citywide Development Projections with Proposed West Roseville Specific Plan*, November 2001
- *Sacramento Area Council of Governments Final Regional Housing Needs Plan for the Sacramento Area Council of Governments (SACOG) Region*, 2001

All of these documents are available for review at the City's Permit Center, 311 Vernon Street, Roseville, California.

As stated in the NOP, the SOI Amendment Area is primarily undeveloped. However, up to six residences could be displaced by development. Two issues were raised during the NOP Scoping Session. One comment favored the inclusion of affordable housing in the WRSP Area and another expressed concern over the amount of office and employment opportunities. Both affordable housing and employment opportunities are discussed in this section. There were no NOP comment letters received regarding population, employment, and housing.

As indicated in Chapter 1, Introduction, a program-level analysis of the entire SOI Amendment Area is only required for the Air Quality, Noise, and Transportation and Circulation sections. As a Sphere Amendment is the only action proposed for the Remainder Area, this section evaluates the impacts of the WRSP relative to population, employment, and housing at a project-specific level and the Remainder Area at a program level. In order to conduct the analysis, development assumptions are made for the Remainder Area (see Chapter 2, Project Description, for details). Figure 1-1 (SOI Amendment Area) in Chapter 1 (Introduction) identifies the boundaries of the WRSP Area and Remainder Area (comprising the total SOI Amendment Area).

As discussed in Chapter 4 (Environmental Analysis), minor changes have been made to the proposed land uses for the WRSP since the NOP was published. The number of dwelling units remains the same, however, so the anticipated number of residents and amount of affordable housing were unaffected. The

acreage designated for commercial uses was reduced from 88.1 to 47 acres (a 53 percent reduction). The mix of industrial and light industrial uses also was reduced by two acres. The changes in commercial and industrial land use would reduce employment opportunities in the WRSP area compared to the project proposed in the NOP. The Remainder Area is unchanged. As discussed under Impact 4.2-1, the resulting employment level would still result in a less-than-significant impact on the City’s jobs/housing balance.

## 4.2.2 Environmental Setting

### ■ Population

#### Regional Population

Placer County, (with El Dorado, Sacramento, and Yolo counties), comprise the Sacramento-Yolo Metropolitan Statistical Area (MSA). One of the most rapidly growing in the state, the population in the MSA grew 15.5 percent in 10 years, from 1.5 million people in 1990 to 1.7 million people in 1999.<sup>37</sup> Current trends in population growth are expected to continue, with the MSA population reaching 2,583,931 persons by 2020 (see Table 4.2-1).

**Table 4.2-1 Population Projections**

Location	For July 1			Increase by Period		
	2000 (actual)	2010	2020	2000–2010	2010–2020	2000–2020
Sacramento Region <sup>1</sup>	1,801,661	2,239,307	2,583,931	437,646	344,624	782,270
Placer County <sup>1</sup>	248,399	345,046	400,298	114,991	55,252	170,243
Roseville	79,921	113,285	129,259	37,887	16,674	54,561

NOTES:

Region and County projections from SACOG. Roseville projection prepared by MuniFinancial based on dwelling unit projection, six percent vacancy rate, and 2.53 persons per household estimated by DCF for 2000, and 2.48 and 2.50 persons per household estimated by SACOG for 2010 and 2020, respectively.

1. Excludes the Tahoe basin in Placer and El Dorado counties. Estimated population in these areas in 2000 is 32,000 and 10,200 for El Dorado and Placer County, respectively.

SOURCE: MuniFinancial, 2020 Development Projections for the City of Roseville, February 7, 2001; MuniFinancial, 2020 Citywide Development Projections with Proposed West Roseville Memorandum of Understanding Area, November 9, 2001.

Placer County, in particular, has experienced a period of rapid growth. Between 1990 and 2000, Placer County grew from 172,796 to 248,399 people, an increase of 75,603 residents, or 44 percent,<sup>38</sup> with the south Placer cities of Rocklin, Roseville, and Lincoln experiencing the most substantial growth.<sup>39</sup> According to the 2000 Census, Placer County’s population increased 112 percent for the period 1980 to

<sup>37</sup> Population Estimates Program, Population Division, U.S. Census Bureau, Washington, DC 20233 as found on the U.S. Census Bureau website, <http://eire.census.gov/popest/archives/metro/ma99-01.txt>, accessed August 4, 2002

<sup>38</sup> U.S. Census Bureau website, American FactFinder, [http://factfinder.census.gov/servlet/BasicFactsServlet?\\_lang=en](http://factfinder.census.gov/servlet/BasicFactsServlet?_lang=en), accessed August 4, 2002.

<sup>39</sup> Employment Development Department Labor Market Information website, Placer County Snapshot, <http://www.calmis.ca.gov/file/COSnaps/placesnap.pdf>, accessed August 4, 2002.

2000<sup>40</sup>. Population projections estimate Placer County will be home to more than 400,000 by the year 2020, an increase of 64 percent over current figures.<sup>41</sup>

### City of Roseville Population

From 1990 to 2000, the City of Roseville's population increased from 44,685 to 79,921, an addition of 35,236 persons or 79 percent.<sup>42</sup> Roseville's share of Placer County's total population also grew, increasing from 27 to 32 percent. By 2020, the City's population (without SOI Amendment) is estimated to reach 129,259 (see Table 4.2-1). As of January 1, 2003, the City's official population was 90,739, a growth rate of 13.5 percent from 2000 to 2003.<sup>43</sup>

## ■ Employment

### Regional Employment

The Sacramento MSA economy underwent a significant expansion during the 1990s, as non-agricultural employment continued to grow throughout the region, including: educational; health and social services; retail trade; professional; scientific; management and administrative; and manufacturing.<sup>44</sup> Services, retail trade, government, and wholesale trade all increased to meet the needs of the region's expanding population base. Placer County shared in the region's economic expansion with its own rapid growth.

Placer County's economy is evolving from its traditional dependence on the railroad industry, the lumber and wood products industry, and agriculture. As noted by the State of California Employment Development Department, the County's substantial population growth has increased consumer demand and the number of jobs in retail, service, and construction.<sup>45</sup> In 2000, Placer County had a total labor force of approximately 123,875, of which 5,228, or approximately four percent, were unemployed (see Table 4.2-2).<sup>46</sup>

<sup>40</sup> U.S. Census Bureau website, American FactFinder, [http://factfinder.census.gov/servlet/BasicFactsServlet?\\_lang=en](http://factfinder.census.gov/servlet/BasicFactsServlet?_lang=en), accessed June 2, 2002.

<sup>41</sup> Employment Development Department Labor Market Information website, Placer County Snapshot, <http://www.calmis.ca.gov/file/COsnaps/placesnap.pdf>, accessed August 4, 2002.

<sup>42</sup> U.S. Census Bureau website, American FactFinder, [http://factfinder.census.gov/servlet/GCTTable?ds\\_name=DEC\\_2000\\_SF1\\_U&geo\\_id=04000US06&\\_box\\_head\\_nbr=GCT-PH1&format=ST-7](http://factfinder.census.gov/servlet/GCTTable?ds_name=DEC_2000_SF1_U&geo_id=04000US06&_box_head_nbr=GCT-PH1&format=ST-7), accessed August 4, 2002.

<sup>43</sup> Email from Julia Burrows, City of Roseville, May 13, 2003.

<sup>44</sup> U.S. Census Bureau website, American FactFinder, <http://censtats.census.gov/data/CA/05006061.pdf>, accessed August 4, 2002.

<sup>45</sup> City of Roseville, North Roseville Specific Plan Draft EIR, page 4.2-3.

<sup>46</sup> U.S. Census Bureau website, American FactFinder, <http://censtats.census.gov/data/CA/05006061.pdf>, accessed August 4, 2002.

**Table 4.2-2 Employment Placer County and City of Roseville 1990 and 2020**

Location	Labor Force			Employed			Unemployment Rate		
	1990	2000	2020 (Projected)	1990	2000	2020	1990	2000	2020
Placer County	87,450	123,875	211,468	82,920	118,647	N/A	5.2	4.2	N/A
City of Roseville	23,043	38,908	109,231	21,763	37,256	N/A	5.6	3.9	N/A
City as Percent of County	26.3	31.4	51.7	26.2	31.4	N/A	—	—	N/A

SOURCE: U.S. Census Bureau website, American FactFinder, [http://factfinder.census.gov/servlet/QTTable?\\_ts=48181557950](http://factfinder.census.gov/servlet/QTTable?_ts=48181557950), accessed August 4, 2002. U.S. Census Bureau website, American FactFinder, [http://factfinder.census.gov/servlet/QTTable?\\_ts=48181469960](http://factfinder.census.gov/servlet/QTTable?_ts=48181469960), accessed August 23, 2002. Sacramento Area Council of Governments (SACOG) website, <http://www.sacog.org/demographics/proj2001/pdf/cities/plac.pdf>, accessed March 27, 2003.

Employment levels in Placer County are estimated to reach 211,468 by 2020.<sup>47</sup>

### City of Roseville Employment

With approximately 37,000 jobs in 2000, Roseville employment represented 31.4 percent of Placer County’s total employment (118,647). Approximately 40 percent of Roseville’s employment was in the commercial sector, followed by 30 percent in the office sector and 28 percent in the industrial sector. Unemployment was approximately four percent in 2000.<sup>48</sup> As of January 1, 2003,<sup>49</sup> there were approximately 64,000 jobs in Roseville, representing an increase of 25,902 jobs in three years.

Douglas Boulevard, the I-80 corridor, and the North Industrial Area are the City’s major employment centers. With new development in portions of the North Industrial Area and commercial/retail/office development in other specific plan areas, employment opportunities have become more widely distributed within the City of Roseville. By 2020, the City employment levels are estimated to reach 98,900 jobs.<sup>50</sup> Assuming 1.26 workers per household, there would be approximately 63,605 employable residents in 2020 (based on 2020 projected dwelling units of 50,480).

<sup>47</sup> Sacramento Area Council of Governments (SACOG) website: <http://www.sacog.org/demographics/proj2001/pdf/cities/plac.pdf>, accessed March 27, 2003.

<sup>48</sup> U.S. Census Bureau website, American Fact Finder, <http://census.gov/data/CA>, accessed August 4, 2002.

<sup>49</sup> City of Roseville Quarterly Development Report, July 2003

<sup>50</sup> DKS Associates; based on an average of 500 square feet per employee for all employment-generating uses.

■ Housing

**Housing Supply**

**Region and Placer County**

In 2000, the housing supply in Placer County was 107,302 dwelling units.<sup>51</sup> This represents a 73 percent increase over the 1990 housing supply. Nearly 80 percent of the units were single-family residences.<sup>52</sup> Table 4.2-3 shows the housing types as of 2000 and Table 4.2-4 illustrates the change in housing characteristics for the years 1990 and 2000.

**Table 4.2-3 Housing Types, Placer County, and City of Roseville Year 2000**

Location	Single Family	Multiple Family	% Single Family	% Multiple Family
Placer County	85,596	21,706	79.8	20.2
City of Roseville	24,777	7,203	77.5	22.5
City as % of County	28.9	33.2	N/A	N/A

SOURCE: U.S. Department of Commerce, Bureau of the Census, 2000 Census of Population and Housing; City of Roseville, 2000.

**Table 4.2-4 Housing Characteristics, Placer County, and City of Roseville Years 1990 through 2020**

Location	Total Units, 1990	Total Units, 2000	% Change, 1990–2000	Median Value, 1990	Median Value, 2000	% Change 1990-2000	Vacancy Rate, 1990	Vacancy Rate, 2000	Total Units, 2020	% Change, 2000–2020
Placer County	77,879	107,302	37.8	\$168,500	\$213,900	26.9	17.7	13.0	167,106	55.7
City of Roseville	17,789	31,980	79.8	\$158,000	\$194,900	23.4	6.7	4.5	50,480	57.8
City as % of County	22.8	29.8	N/A	93.8	91.1	N/A	N/A	N/A	30.2	N/A

SOURCE: U.S. Department of Commerce, Bureau of the Census, 2000 Census of Population and Housing; City of Roseville, 2000. Sacramento Area Council of Governments (SACOG) website, <http://www.sacog.org/demographics/prj2001/pdf/rads/hsg.pdf>, accessed March 27, 2003, DKS Associates, 2002.

In 1990, the housing vacancy rate in all of Placer County was 17.7 percent, which declined to 13 percent in 2000.<sup>53</sup> These vacancy rates reflect the large number of vacation homes in the Lake Tahoe area. In 2000, the City of Roseville had a homeowner vacancy rate of 1.7 percent, and a rental vacancy rate of 4.5 percent.<sup>54</sup> Placer County is projected to have 167,106 housing units in 2020.<sup>55</sup>

<sup>51</sup> U.S. Census Bureau website, American FactFinder, <http://censtats.census.gov/data/CA/05006061.pdf>, accessed August 4, 2002.

<sup>52</sup> U.S. Census Bureau website, American FactFinder, <http://censtats.census.gov/data/CA/05006061.pdf>, accessed August 4, 2002.

<sup>53</sup> U.S. Census Bureau website, American FactFinder, <http://censtats.census.gov/data/CA/1600662938.pdf>, accessed August 4, 2002.

<sup>54</sup> U.S. Census Bureau website, American FactFinder, <http://censtats.census.gov/data/CA/1600662938.pdf>, accessed August 4, 2002.

**City of Roseville**

In 1996, there were 25,257 dwelling units in the City of Roseville. By 2000, the number of dwelling units increased to 31,980 units (see Table 4.2-5), an increase of almost 27 percent over four years. The General Plan land use allocation provides for a total of 47,500 dwelling units.<sup>56</sup> This includes approximately 1,000 units that are not allocated to specific geographic locations, and that have been specifically reserved for use by the City in certain housing programs, such as density bonuses and other development incentives. However, the available unbuilt housing pool is currently approximately 348 units.<sup>57</sup> Based on City growth projections, it is expected that the current residential land use allocation will be exhausted between the years 2005 and 2007.<sup>58</sup>

**Table 4.2-5 City of Roseville Dwelling Units (as of April 2000)**

Residential Type	Number of Units	Percentage of Total
Single Family	24,777	77.5
Multi-Family	6,659	20.8
Other (mobile homes, group quarters, etc.)	544	1.7
Total	31,980	100

SOURCE: U.S. Department of Commerce, Bureau of the Census, 2000 Census of Population and Housing; City of Roseville, 2000.

As of January 2000, occupancy permits had been granted for 31,205 units.<sup>59</sup> This is nearly triple the 10,267 units estimated in 1980 by the U.S. Census. According to the City of Roseville, the average household size in 2000 was 2.53 persons per household.<sup>60</sup>

More than three quarters of the dwelling units in the City are single-family residential homes (24,777 units). However, multi-family residential construction has increased substantially. Multi-family units have risen from 13 percent of the available housing stock in 1980 to 22.5 percent of the total housing stock (7,203 units) in 2000. Between 1980 and 2000, residential growth has occurred at an annual rate of 5.9 percent.

By 2020, housing levels in the City are estimated to grow to 50,480 dwelling units.<sup>61</sup>

<sup>55</sup> Sacramento Area Council of Governments (SACOG) website, <http://www.sacog.org/demographics/proj2001>

<sup>56</sup> Kathy Pease, City of Roseville, written communication, August 28, 2002.

<sup>57</sup> Kathy Pease, City of Roseville, written communication, August 28, 2002.

<sup>58</sup> Jan Shonkwiler, City of Roseville, written communication, August 28, 2002.

<sup>59</sup> Jan Shonkwiler, City of Roseville, written communication, August 28, 2002.

<sup>60</sup> Bob Spencer, MuniFinancial, written communication, August 22, 2002.

<sup>61</sup> DKS Associates, 2002.

## Housing Affordability

Housing affordability refers to the relationship between total household income and total household expenditures for housing, including mortgage, taxes, insurance, and utilities. This relationship is typically expressed as the percentage of total household income allocated to housing expenditures. Table 4.2-6 shows the City of Roseville's definitions to describe household affordability by income group.

In 2002, the median housing price for existing single-family homes in Roseville was \$235,500. This is an increase of 49 percent from \$158,000 in 1990.

<b>Income Category</b>	<b>Household Income Range</b>
Very Low Income	Below and including 50% of Median Income
Low Income	51% to 80% of Median Income
Middle Income	80% to 100% of Median Income
Moderate Income	100% to 120% of Median Income
Above Moderate	Over 120% of Median Income

SOURCE: City of Roseville General Plan, 1992.

In order to address the need for affordable housing, a Regional Housing Needs Allocation Plan (RH NAP) was developed by SACOG. This plan allocates a fair share of housing needs to each local jurisdiction for a five-year period. The current allocation is for the period 2000-2007.

SACOG has allocated the Regional Fair Share Housing Needs for the City of Roseville. Table 4.2-7 indicates the division of the allocation by income group. Roseville's share indicates the need to provide a total of 11,400 affordable housing units from 2000 through 2007,<sup>62</sup> approximately 24 percent of the City's General Plan's dwelling unit allocation. These units are further divided into 2,994 units for very low income, 2,053 for low income, 2,328 for middle income, and 4,025 for moderate and above moderate-income households.<sup>63</sup> SACOG defines household income categories slightly differently from the City of Roseville (see Table 4.2-8). In the City of Roseville, a family of four with a yearly income of \$29,900 or less is considered very low income, and a family earning \$47,850 a year is low income.<sup>64</sup>

<sup>62</sup> Sacramento Area Council of Governments, Final Regional Housing Needs Plan for the SACOG Region, September 20, 2001, SACOG website <http://www.sacog.org/rhnp/rhnp.pdf> accessed August 4, 2002.

<sup>63</sup> Sacramento Area Council of Governments, Final Regional Housing Needs Plan for the SACOG Region, September 20, 2001, SACOG website <http://www.sacog.org/rhnp/rhnp.pdf> accessed August 4, 2002.

<sup>64</sup> John Sprague, City of Roseville Economic Community Service Director, written communication, July 15, 2003.

**Table 4.2-7 City of Roseville Regional Fair Share of Affordable Housing**

Income Group	Definition	Percentage	Number of Dwelling Units
Very Low	Less than and including 50% of Median	26.26	2,994
Low	51% to and including 80% of Median	18.01	2,053
Middle	80% to 100% of Median	20.42	2,328
Moderate and Above Moderate	100% to 120+% of Median	35.31	4,025
Total		100	11,400

SOURCE: Sacramento Area Council of Governments, Final Regional Housing Needs Plan for the SACOG Region, September 20, 2001.

**Table 4.2-8 Household Income Categories Definition Equivalencies**

City of Roseville	SACOG
Very Low Income	Very Low Income
Low Income	Low or Lower Income
Middle Income	Moderate Income
Moderate Income	Moderate Income
Above Moderate Income	Above Moderate Income

Similar to most jurisdictions in California, Roseville has encountered challenges in meeting past affordable housing objectives. The General Plan Housing Element has established goals and policies designed to encourage the construction of affordable housing. These include working with the development and business communities to provide affordable rental and purchase opportunities, requiring 10 percent of new housing units to be affordable, and continuing to participate in State and federal programs.<sup>65</sup> However, the Housing Element concludes:

Unless the funding for existing federal, State, and local programs is expanded significantly and new programs are established, the City will be unable to meet its total affordable housing needs.

The City’s 10 percent affordable housing goal for new units is anticipated to be an achievable goal, but it is recognized that it may not meet the SACOG affordable housing need allocation. Although a higher goal was considered by the City, it was believed to be preferable to set a realistic goal rather than one that cannot be met.

<sup>65</sup> City of Roseville General Plan, Housing Affordable Goal; Affordable Housing Policy HB-3.

Since 1988, Roseville has had a 10 percent affordable housing requirement for all new developments, a quarter of which are for middle-income households. Of the 22,000 new residential housing units built in Roseville since 1988, 1,700 are affordable and the City has plans to build 500 more units.<sup>66</sup>

Between 1990 and 2000, the City has constructed 25 percent of the region's low-income and very low-income housing.

The intent of the 10 percent affordable housing goal is to provide a mechanism whereby the City property owners and the business community can actively work together in developing affordable housing for very low-, low-, and middle-income households. The City's affordable housing goal is not intended to be used as an inclusionary zoning program, whereby the property owners would be required to shoulder the entire responsibility of producing the affordable housing.

In the past, the 10 percent affordable housing goal has been calculated for each specific plan area based on the total residential units allocated to each area. This practice will be continued with each future specific plan area or areas receiving new residential land use entitlement. Each plan will be required to include a strategy defining how it can best meet the 10 percent goal and identifying the specific parcels are best suited for development of affordable housing.

The City and property owner are responsible for assembling the necessary subsidy packages for affordable housing, and for making a good faith effort to produce affordable units within the residential projects. The 10 percent affordable housing goal is intended to be flexible in recognition that the actual number of affordable units constructed depends on the level of government funding. As the City applies its affordable housing goal to new residential construction, the percentage and number of affordable units produced may be less than the maximum 10 percent goal, depending on subsidies which can be assembled at any given point in time.

The City Council recently adopted its 2002–2007 Housing Element, which carries forward the previous policies addressing affordable housing and includes the 10 percent Affordable Housing Goal. The State Department of Housing and Community Development found the City's Housing Element in substantial compliance with State law. However, the 2002–2007 Housing Element contains a caveat which states, "...the City will consider alternatives to achieving affordable housing within newly annexed areas should conditions or legislation require the City to alter its approach to affordable housing."

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<sup>66</sup> John Sprague, City of Roseville Economic Community Services Director, written communication, July 15, 2003.

## ■ Jobs/Housing Balance

The jobs/housing balance refers to the location of residences in relation to the location of employment-generating uses. A well-balanced ratio of jobs and housing is assumed to reduce the number of vehicle trips resulting from commuting, because employment opportunities and commercial services are near residential areas. This reduction in vehicle trips improves air quality. To fully realize the benefits of a jobs/housing balance, the occupations and wages made available by employment opportunities should correspond to the affordability and availability of nearby residences. As a result, jobs/housing balance must take into consideration both the number of units and their affordability.

The State Legislature has declared its intention to move toward the goal that every California worker has available the opportunity to reside close to his or her job site.<sup>67</sup> The City of Roseville has established its support for a jobs/housing balance through General Plan policy LE-1 which states:

The City shall strive for a land use mix and pattern of development that provides linkages between jobs and employment uses, will provide a reasonable jobs/housing balance, and maintain the fiscal viability of the City.

The City of Roseville, Placer County, and City of Rocklin all adopted similar resolutions regarding the jobs/housing balance in 1983. Roseville's Resolution 83-118 states that a satisfactory jobs/housing balance for the core industrial areas surrounding SR-65 and Washington Boulevard is for 80 percent of the workers to reside within eight miles of their employment and for 60 percent to live within six miles.<sup>68</sup>

As of June 2003, there were 39,199 dwelling units in the City of Roseville.<sup>69</sup> Assuming a worker per household ratio of 1.26, approximately 49,391 workers could be housed within the City.<sup>70</sup> Total year 2000 employment was 64,000 in Roseville.<sup>71</sup> Using the methods presented in Resolution 83-118, 80 percent of the employees in Roseville would be 39,513. The 2003 ratio of jobs to residents is 70.5 jobs per 100 Roseville residents and 129.6 jobs per worker within the City limits. The City is currently approximately 8.3 miles wide, placing at least 80 percent of the residents in the City within an eight-mile radius of a job. Therefore, the housing supply would be available for more than 80 percent of the workers and the current jobs/housing balance is considered numerically acceptable. However, due to the need to match housing costs, income levels, and other housing choice factors, the relationship of housing affordability

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<sup>67</sup> State of California, Government Code 65890.1.h.

<sup>68</sup> City of Roseville, North Roseville Specific Plan Draft EIR, page 4.2-4.

<sup>69</sup> City of Roseville Quarterly Development Report, July 2003

<sup>70</sup> Based on 2000 U.S. Census data of 38,908 people in the labor force and 30,783 households in the City of Roseville, there would be 1.26 employees per household.

<sup>71</sup> U.S. Census Bureau website, American FactFinder, [http://factfinder.census.gov/bf/-lang=en\\_vt\\_name=DEC\\_2000\\_SF3\\_U\\_DP3\\_geo\\_id=16000US0662938.html](http://factfinder.census.gov/bf/-lang=en_vt_name=DEC_2000_SF3_U_DP3_geo_id=16000US0662938.html), accessed January 27, 2003.

to housing supply is extremely complicated and difficult to accurately predict within single jurisdictions or within other sub-areas of the larger regional housing market.

By 2020, housing levels in the City are estimated to grow to 50,480 dwelling units, which would generate approximately 63,605 employees (assuming 1.26 employees per household). With 98,900 jobs in the City, there would be 1.55 jobs for every employed resident, which would exceed the City standard.

It is important to note that the City of Roseville generally imports employees from surrounding areas such as Rocklin, Auburn, and other portions of unincorporated Placer County. However, the City also exports employees to Sacramento-based employment centers, including State offices.

### 4.2.3 Regulatory Setting

#### ■ Federal

There are no federal regulations that would apply to the WRSP or Remainder Area.

#### ■ State

The California State Legislature has declared its intention to support enabling California workers the opportunity to live close to his or her job site (Government Code §65890.1.h). The California Health and Safety Code Division 13, Sections 3341.0 *et seq.* include the Community Redevelopment Law, which regulates redevelopment activities.

#### ■ Local

##### **Placer County General Plan**

Placer County is currently considering an Inclusionary Housing Ordinance to add to Chapter 15, Building and Development, of the Placer County Municipal Code. If adopted, the County would require a minimum of 15 percent of all new residential construction projects include units available for rent or sale to very low-, low- and moderate-income households.

##### **City of Roseville General Plan**

The City of Roseville General Plan includes goals and policies for adequate housing stock and employment opportunities. Policy HB-3 requires a 10 percent affordable housing goal be applied to all residential properties planned for four or more units. Please see Appendix C for a complete list of all applicable City goals and policies.

## City of Roseville Resolution 83-118

This resolution calls for 80 percent of the workers in the City to reside within 8 miles of their places of employment and for 60 percent to live within 6 miles.

### 4.2.4 Impacts and Mitigation Measures

#### ■ Methods of Analysis

The basis for the analysis in this section is existing conditions. For a discussion of cumulative impacts on population, employment, and housing, refer to Chapter 5 (CEQA Considerations).

#### Population

The increased resident population resulting from the development of the WRSP or Remainder Area is estimated by multiplying the total number of residential units by the average number of residents per dwelling unit (see Table 4.2-9). For this analysis, the average number of residents per housing unit is assumed to be 2.53. For active adult residences, the number of residents per dwelling unit is assumed to be 1.8.

**Table 4.2-9 Population**

Residential Density Designation	Proposed Acreage		Proposed Units		Population	
	WRSP	Remainder Area	WRSP <sup>1</sup>	Remainder Area	WRSP	Remainder Area
Low-density	1,354.6	1,324.4	4,842	5,296.0	12,250.3	13,398.9
Medium-density	142.9	88.6	1,064	620.0	2,691.9	1,568.6
High-density	109.7	78.2	1,774	1,487.0	4,589.4	3,762.1
Age-restricted housing (Independent Living)	146.9	0.0	710	0.0	1,278.0	0.0
Total	1,754.1	1,491.2	8,390.0	7,403.0	20,809.6	18,729.6

NOTE:

1. High density unit count includes 40 units in the Commercial Mixed-Use land use designation.

SOURCE: EIP Associates 2003

#### Employment

The additional jobs that could result from the development of the WRSP or Remainder Area are calculated based upon the types of commercial development and the estimated amount of floor area of each commercial development. The assumed floor-to-area ratio (FAR) is 0.30 for business professional/office and 0.20 for commercial/retail and industrial development. The assumed number of employees is<sup>72</sup>

<sup>72</sup>MuniFinancial, 2020 Citywide Development Projections with Proposed West Roseville Specific Plan, November 9, 2001

- Commercial: 350 square feet per employee
- Office/Business Park: 275 square feet per employee
- Industrial: 600 square feet per employee

Table 4.2-10 shows the estimated number of employees.

### Housing

The number of residential units identified in the WRSP and assumed for the Remainder Area is presented and considers the direct increase in housing supply available to the City of Roseville. The analysis discusses affordability of the City’s housing supply and compares the affordable housing provided in the WRSP and Remainder Areas. The impact discussion also includes an analysis of the percentage of workers residing within City-prescribed radii.

**Table 4.2-10 Employment Generation<sup>1</sup>**

Land Use Type	Acres	Floor-to-Area Ratio (FAR)	Total Building Area (sf)	Employment Density (sf per employee)	Employees by Land Use
Commercial					
WRSP Area	49	0.2	426,890	350	1,220
Remainder Area	67.6		588,933		1,683
Business Professional					
WRSP Area	19.6	0.3	256,134	275	931
Remainder Area	49.5		646,869		2,352
Industrial					
WRSP Area	108.5	0.2	945,256	600	1,575
Remainder Area	0		0		0
<b>WRSP Area Total</b>	<b>177.1</b>				<b>3,726</b>
<b>Remainder Area Total</b>	<b>117.1</b>				<b>4,035</b>
<b>SOI Amendment Area Total Employment</b>					<b>7,761</b>

NOTE:

1. Employment estimates contained in this table represent maximum employment at buildout of the land uses within the Plan Area.

SOURCE: EIP Associates 2003

### Standards of Significance

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area could do any of the following:

- Exacerbate an imbalance in the City’s jobs to housing ratio
- Provide less than 10 percent of affordable housing units within the plan area

- Result in the displacement of a significant number of existing housing, necessitating the construction of replacement housing elsewhere
- Induce substantial population growth in an area either directly or indirectly
- Allow development that would be inconsistent with adopted City policies

**■ Impacts**

<b>IMPACT 4.2-1: CHANGES IN JOBS/HOUSING BALANCE.</b>		
<b>Applicable Policies and Regulations:</b>	City of Roseville Resolution 83-118	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

The City of Roseville Resolution 83-118 establishes a formula for determining the jobs/housing balance. Resolution 83-118 states that a satisfactory jobs/housing balance is for 80 percent of the workers to reside within eight miles of their place of employment and for 60 percent to live within 6 miles. Since the location of each resident’s employment cannot be determined, this analysis evaluates whether the number of jobs available within eight miles (or six) of the proposed WRSP or Remainder Area is equal to or greater than 80 percent (or 60 percent) of the number of employed residents within the proposed WRSP and Remainder Areas.

In order to be consistent with City Resolution 83-118, there must be enough jobs within eight miles of the proposed WRSP and Remainder Areas to accommodate 80 percent of the workers in the area, and 60 percent within six miles. Because the City is approximately 8.3 miles wide, if there are enough jobs within the City to accommodate 80 percent of the City’s employed population, the standard would be satisfied. This approach is conservative, because there are a number of employment centers within six or eight miles of the City but outside the City limits, including the SR-65 corridor.

The number of employees living in Roseville in 2000 was 38,908 (refer to Table 4.2-11).<sup>73,74</sup> The number of jobs in Roseville in 2003 was 64,000, with a population of 90,739. Therefore, in 2003, there were approximately 71 jobs per 100 Roseville residents within the City limits for a jobs/housing ratio of 0.71.

<sup>73</sup> U.S. Census Bureau website, American FactFinder, <http://censtats.census.gov/data/CA/1600662938.pdf>, accessed August 4, 2002

<sup>74</sup> 2000 Census data was used for this analysis because it is the most current, complete information available.

Citywide, with buildout of the proposed WRSP and Remainder Areas, there would be a total of 58,858 employees and 44,761 jobs, or approximately 76 jobs per 100 resident employees.

**Table 4.2-11 Jobs/Housing Balance in the City of Roseville**

	Citywide Existing (2000)	Citywide 2020	WRSP	2020 with WRSP	Remainder Area	2020 with Project
Dwelling Units	31,925	50,480	8,430	58,910	7,403	66,313
Employees	38,908	63,605	10,622	74,227	9,328	83,555
Jobs	37,256	98,900	3,727	102,627	4,035	106,662
Percentage (Jobs/Employee) <sup>1</sup>	95.75%	155.49%	35.09%	138.26%	43.26%	127.65%

NOTE:

1. Includes the percentage of jobs per employee, with 100% meaning that there is one job for each employee within the Roseville City Limits. Existing uses 2000 Census data, which is the most current and accurate information available. While the percentages may not be equal to 80 percent, indicating that the jobs/housing goal of 80 percent of employees live within eight miles of a job, there are several employment centers outside the City of Roseville that are within eight miles of the project site.

SOURCE: U.S. Census Bureau 2000, EP Associates 2003

The proposed WRSP Area and Remainder Areas would take a number of years to build out. Therefore, the jobs/housing ratio must also be considered in the context of other development within the City. The change in the jobs/housing balance would depend on the type of developments approved and the timing of residential versus non-residential development. Short-term imbalances could occur, particularly if commercial and industrial uses do not develop as quickly as residential uses, which may be likely.

**West Roseville Specific Plan**

The WRSP includes commercial, business professional, and light industrial land use designations. The development of these uses is anticipated to increase employment within the WRSP project area. Overall, however, the WRSP Area is projected to add more housing than jobs. This absorption scenario will cause a decrease in the City’s overall jobs/housing ratio.<sup>75</sup>

At buildout of the WRSP Area, there would be 426,890 square feet of commercial space, 256,134 square feet of office, and 945,256 square feet of industrial development (refer to Table 4.2-10). Based on these square footages, a total of 3,727 jobs would be created through development of the WRSP Area, including approximately 1,220 commercial jobs, 931 office jobs, and 1,575 industrial jobs (refer to Table 4.2-10). Assuming a ratio of 1.26 employees per household in the City of Roseville,<sup>76</sup> the 8,430 units in the WRSP Area would generate approximately 10,622 employees.

<sup>75</sup> MuniFinancial, 2020 City-wide Development Projections with Proposed West Roseville Specific Plan, November 9, 2001.

<sup>76</sup> Based on 2000 U.S. Census data of 38,908 people in the labor force and 30,783 households in the City of Roseville, there would be 1.26 employees per household.

If the WRSP were to build out under existing conditions, there would be a total of 40,983 jobs<sup>77</sup> in the City, for 49,530<sup>78</sup> resident employees citywide, resulting in a ratio of at least 82.7 jobs per 100 employed City residents

With development of the WRSP Area, there would be approximately 102,627 jobs and 74,227 employees in the City of Roseville by 2020, resulting in 1.38 jobs for every employable resident in the City of Roseville. Consequently, greater than 80 percent of City residents would be within 8 miles of a job, and more than 60 percent within six miles of a job. In 2020, with development of the WRSP, the ratio of jobs to employees would improve to 1.38, compared to the “without project” ratio of 1.55.

Because over 80 percent of residents of the WRSP Area would live within eight miles of employment, and 60 percent would live within six miles, this impact is considered **less than significant**.

**Remainder Area**

If the Remainder Area were developed at levels similar to those proposed in the WRSP, at buildout there would be 588,933 square feet of commercial and 646,869 square feet of office and/or industrial development in the Remainder Area (refer to Table 4.2-10). Based on the square footages, a total of approximately 4,035 jobs would be created in the Remainder Area, including 1,683 commercial jobs, and 2,352 office jobs. Assuming a ratio of 1.26 employees per household, the 7,403 units in the Remainder Area would generate approximately 9,328 employees, resulting in 43 jobs for every 100 residents within the Remainder Area. Because the Remainder Area would not likely develop before the WRSP, no separate Citywide jobs/housing balance is evaluated. The jobs/housing balance for the proposed WRSP and Remainder Areas would comply with Resolution 83-118, so the impact is considered **less than significant**.

<b>IMPACT 4.2-2: PROVISION OF AFFORDABLE HOUSING.</b>		
<b>Applicable Policies and Regulations:</b>	City of Roseville General Plan Policy HB-3	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Significant
<b>Mitigation Measures:</b>	None required	MM 4.2-1 (Affordable housing program)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

<sup>77</sup> Based on 2000 U.S. Census data indicating there were 37,256 jobs in the City, plus 3,511 jobs created by the WRSP.

<sup>78</sup> Based on 2000 U.S. Census data indicating there were 38,908 employees in the City, plus 10,622 employees created by the WRSP.

### **West Roseville Specific Plan**

The City requires that 10 percent of all new housing built in the City be affordable housing. The SOI Amendment Area would include 15,833 dwelling units; in order to meet the City's requirement, 1,583 (10 percent) of those units would have to be affordable. The WRSP would add 8,430 dwelling units to the City. Of the total units in the WRSP plan area, 1,774 units, or 21 percent of the total inventory, are multi-family, high-density units. The City requires that 10 percent of all new housing built in the City be affordable housing. As discussed in the Setting, the Regional Housing Needs Plan (2001), however, requires that a higher percentage (34 percent) of units be set aside for affordable housing.<sup>79</sup> The City did not adopt this standard, and is not obligated by law to enforce it. Ten percent of the proposed dwelling units would be 843. The WRSP would comply with the General Plan Housing Element by designating 10 percent of the total WRSP housing stock for participation in the affordable housing program defined in this section. Twenty percent of affordable housing requirements would be met through purchase housing affordable to middle-income residents (168 units).<sup>80</sup> Eighty percent would consist of rental units for very low- and low-income households (338 low income and 337 very low income, or 40 percent each).<sup>81</sup> Affordable dwelling units would be dispersed throughout neighborhoods; as described in Table 4.2-12 and illustrated on Figure 4.2-1 (West Roseville Specific Plan Affordable Housing Distribution), in order to achieve a distribution throughout the WRSP.<sup>82</sup>

The WRSP would make 337 dwelling units, or 4 percent of the total number of residential units, available for rental by very low-income households.<sup>83</sup> In addition, the WRSP would make 338 dwelling units, or 4 percent of the total number of residential units, available as rental housing for low-income households.<sup>84</sup> To meet the median income affordable housing requirements, the WRSP would make 168 dwelling units, or 2 percent of all housing, available for purchase for middle-income households.<sup>85</sup> The total number of WRSP affordable units would be 843, or 10 percent of the total number of dwelling units. Because the number of affordable housing units would be 10 percent of the total number of housing units developed, the impact would be **less than significant**.

<sup>79</sup> Draft West Roseville Specific Plan, Housing Section, September 2003.

<sup>80</sup> Draft West Roseville Specific Plan, Housing Section, September 2003.

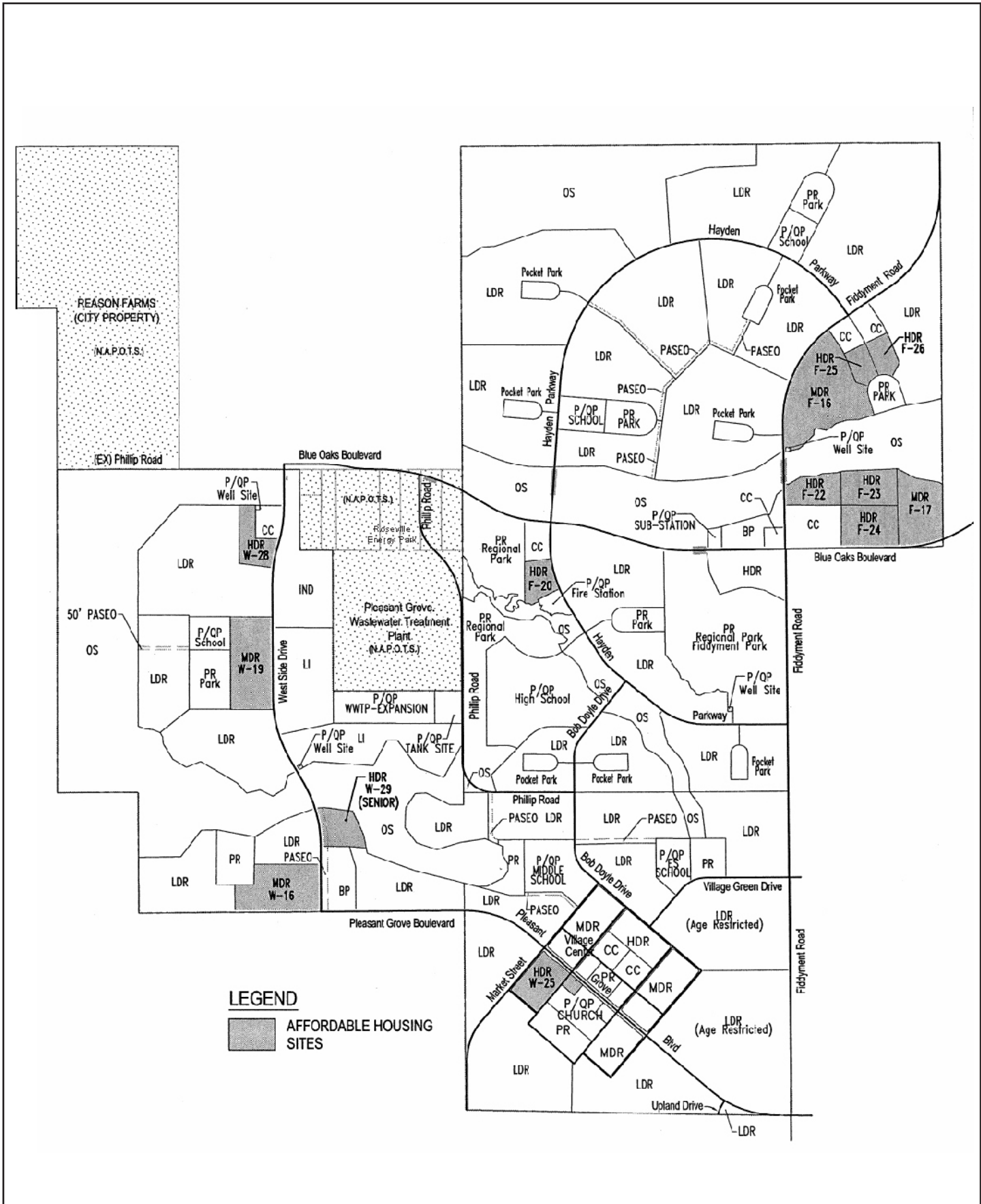
<sup>81</sup> Draft West Roseville Specific Plan, Housing Section, September 2003.

<sup>82</sup> Draft West Roseville Specific Plan, Housing Section, September 2003.

<sup>83</sup> Draft West Roseville Specific Plan, Housing Section, September 2003.

<sup>84</sup> Draft West Roseville Specific Plan, Housing Section, September 2003.

<sup>85</sup> Draft West Roseville Specific Plan, Housing Section, September 2003.



**LEGEND**  
 AFFORDABLE HOUSING SITES



10659-00

**FIGURE 4.2-1**  
**West Roseville Specific Plan Affordable Housing Distribution**

Source: West Roseville Specific Plan 2003

City of Roseville

Not to Scale



**Table 4.2-12 Affordable Housing Allocation**

Parcel	Land Use	Total Units in Parcel	Total Affordable Allocation	Very Low- income Rental	Low-Income Rental	Middle- Income Purchase
W-16	MDR	160	42	0	0	42
W-19	MDR	165	43	0	0	43
W-25	HDR	240	144	72	72	0
W-28	HDR	175	47	23	24	0
W-29 <sup>1</sup>	HDR	150	150	75	75	0
<b>Subtotal</b>			<b>426</b>	<b>170</b>	<b>171</b>	<b>85</b>
F-16	MDR	224	46	0	0	46
F-17	MDR	174	37	0	0	37
F-20	HDR	136	68	27	41	0
F-22	HDR	110	44	22	22	0
F-23	HDR	160	96	32	64	0
F-24	HDR	200	86	46	40	0
F-25	HDR	100	20	20	0	0
F-26	HDR	98	20	20	0	0
<b>Subtotal</b>			<b>417</b>	<b>167</b>	<b>167</b>	<b>83</b>
<b>Total</b>			<b>843</b>	<b>337</b>	<b>338</b>	<b>168</b>

NOTE:

1. Senior housing.

SOURCE: West Roseville Specific Plan, page 5-3, 2003

It should be noted that the County requires that 10 percent of new housing projects with over 100 units be affordable to low income households. Only eight percent of the WRSP would be affordable to low income households. In addition, the County is considering an Inclusionary Housing Ordinance to add to Chapter 15, Building and Development, of the Placer County Municipal Code. If adopted, the County would require that a minimum of fifteen percent of all new residential construction projects include units available for rent or sale to very low-, low- and moderate-income households.

### **Remainder Area**

The Remainder Area would add 7,403 housing units to the City. Ten percent of the proposed dwelling units for the Remainder Area would equal 740. No development plans have been proposed for the Remainder Area, so the number of affordable units that would be provided is not known. This could be a significant impact. MM 4.2-1 requires that development in the Remainder Area comply with the General Plan Housing Element by designating 10 percent of the total Remainder Area housing stock for participation in the affordable housing program, as defined in this section. Implementation of MM 4.2-1 would reduce the impact to a **less-than-significant** level.

<b>IMPACT 4.2-3: DISPLACEMENT OF EXISTING HOUSING.</b>		
<b>Applicable Policies and Regulations:</b>	California Health and Safety Code Sections 33410 <i>et seq.</i> (Community Redevelopment Law)	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	MM 4.2-2 (Relocation Assistance)	MM 4.2-2 (Relocation Assistance)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**West Roseville Specific Plan/Remainder Area**

A few existed residences in the WRSP and Remainder Areas would be displaced by proposed development. Health and Safety Code Sections 33410 *et seq.* provides that the applicable redevelopment agency prepare a feasible plan for relocation of families displaced from housing as a result of redevelopment activities. If the persons to be displaced are of low or moderate income, replacement housing must be provided at comparable rents. In addition, since a portion of the housing in the WRSP area would be affordable, that housing must be made available for rent or purchase to the persons of low or moderate income displaced by the redevelopment project. The number of persons who could be potentially displaced by the proposed development is extremely small. As affordable housing would be provided in the WRSP and Remainder Areas, which would be available to any displaced persons, this impact would be **less than significant**. Implementation of MM 4.2-2 would further reduce the significance of this impact through relocation assistance mechanisms for any displaced persons.

<b>IMPACT 4.2-4: INDUCEMENT OF SUBSTANTIAL POPULATION GROWTH.</b>		
<b>Applicable Policies and Regulations:</b>	None	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	None Available	None Available
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Significant and Unavoidable

**West Roseville Specific Plan/Remainder Area**

The proposed project includes 8,430 homes in the WRSP Area and 7,403 dwelling units in the Remainder Area (based on Remainder Area Assumptions set forth in Chapter 2, Project Description, which assume a similar mix of uses in the Remainder Area as the WRSP). A total of 15,833 dwelling units in the SOI

Amendment Area would generate an additional 39,539.2 persons (see Table 4.2-9). This represents a 43.6 percent increase in population due to the proposed WRSP and Remainder Area development. Based on an average growth rate of 6.02 percent per year between 1990 and 2002, an increase of 43.6 percent would be considered significant. The inclusion of commercial and industrial uses in the WRSP and Remainder Areas would result in generation of an additional 7,761 jobs. While most of these jobs would be held by City of Roseville residents, it would be anticipated some workers would be drawn from work forces outside the City of Roseville.

Regardless of whether or not workers commute to the City or whether current Roseville residents occupy the new jobs created in the SOI Amendment Area population growth would be significant. Therefore, this would be a **significant and unavoidable** impact.

<b>IMPACT 4.2-5: CONSISTENCY WITH ADOPTED CITY POLICIES.</b>		
<b>Applicable Policies and Regulations:</b>	City of Roseville General Plan Policy HB-3 City of Roseville Resolution 83-118	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**West Roseville Specific Plan/Remainder Area**

As noted previously, City of Roseville General Plan Policy HB-3 requires that 10 percent of all new housing built in the City be affordable: As the WRSP and Remainder Area would provide a total of 15,833 dwelling units, 1,583 would be required to be designated as affordable. In the WRSP Area, a total of 843 units are allocated for affordable housing, which meets the 10 percent affordable housing goal as noted in Impact 4.2-2. For the Remainder Area, MM 4.2-1 requires that development include 10 percent affordable housing in compliance with this General Plan Policy.

City Resolution 83-118 requires that 80 percent of workers reside within eight miles of their place of employment and 60 percent live within six miles, as discussed in Impact 4.2-1. It has been determined that development of the WRSP and Remainder Areas would meet this goal, and would, therefore, be consistent with the Resolution.

Development in the WRSP that would require relocation of existing residences would comply with California Health and Safety Code Sections 33410, *et seq.*, which provides for relocation assistance to

persons displaced by redevelopment activities. As development of the WRSP and Remainder Areas would be consistent with the City's General Plan Policy HB-3 and City Resolution 83-118, this impact would be **less than significant**.

■ **Mitigation Measures**

*MM 4.2-1: Affordable Housing Program (Impact 4.2-2 – Remainder Area)*

Specific Plans and/or other development proposals for the Remainder Area shall demonstrate that 10 percent of the exact dwelling unit counts would be reserved for very low-, low-, and middle-income levels.

Consistent with City policy, at the time specific development is proposed within the Remainder Area, a minimum of 10 percent of the exact dwelling unit counts shall be reserved for very low-, low,, and middle-income levels.

*MM 4.2-2: Relocation Assistance (Impact 4.2-3 – WRSP)*

The City shall provide relocation assistance and make all of the payments required by Chapter 16 (Commencing with Section 7260) of Division 7 of Title 1 of the Government Code, including the making of such payments financed by the federal government.

## 4.3 TRANSPORTATION AND CIRCULATION

### 4.3.1 Introduction

The City of Roseville's Capital Improvement Program (CIP) defines the roadway improvements that would be needed to meet its adopted level of service (LOS) policy under full build-out of all vacant land within the City (plus some potential redevelopment of properties within the City's Downtown area) and 2020 "market levels" of development in the rest of the region. This section evaluates the effects of the SOI amendment under the same "2020/build-out" conditions. The impacts of the SOI amendment under existing conditions are documented in Appendix Q.

The following documents were used in preparation of this section:

- *Supplement to the City of Roseville Capital Improvement Program EIR*, June 2002
- *City of Roseville General Plan*, November 1992, and amended in Jan 2003
- *City of Roseville Long Range Master Transit Plan*, September 1999
- *City of Roseville Short Range Transit Plan*, July 2000
- *City of Roseville Bicycle Master Plan*, July 2002
- *Placer County Capital Improvement Program*, July 2002
- *SACOG Metropolitan Transportation Plan (MTP)*, July 2002
- *Placer Vineyards Specific Plan*, March 1999
- *South Sutter County Specific Plan Transportation and Circulation Assessment*, May 2001
- *City of Rocklin General Plan*, April 2001
- *City of Rocklin Capital Improvement Program*, March 1995

An initial review of the project determined that implementation of the project would not affect air traffic patterns or result in inadequate parking capacity. Therefore, these issues are not addressed in this EIR.

This traffic analysis is based on the land uses identified in the NOP. As discussed in Chapter 4 of this EIR, Environmental Analysis, minor changes have been made to the proposed land uses for the WRSP since publication of the NOP. The change in the land use plan resulted in a modification to the backbone infrastructure network and a slight increase in the trip generation rate (less than 1 percent). This slight increase would not affect the conclusions of this analysis, because it is generally within the tolerance of the traffic model used to determine future traffic volumes.

The traffic impacts of the SOI amendment and WRSP have been evaluated under a number of different scenarios of existing and future traffic conditions. Table 4.3-1 provides a summary of those scenarios, as well as the sections of the document where the traffic analyses are discussed.

**Table 4.3-1 Description of Traffic Analysis Scenarios**

Scenario	Description of Scenario	Section Where Traffic Analysis is Discussed
<b>Existing Conditions</b>		
Existing Conditions	Reflects recent traffic count data and existing operating conditions	Appendix Q
Existing Plus SOI Amendment Area	Changes in existing traffic conditions if the full SOI Amendment Area were developed today	Appendix Q
Existing Plus WRSP	Changes in existing traffic conditions if the full WRSP were developed today	Appendix Q
<b>2020 Conditions</b>		
2020 Baseline	Projection of traffic conditions in the year 2020 with build-out of currently entitled land in the City plus 2020 market levels outside the City. Improvement projects contained in the City's Capital Improvement Program (CIP) are also included.	Section 4.3
2020 Plus SOI Amendment	Changes in 2020 Without Project traffic conditions if the full SOI Amendment Area develops	Section 4.3
2020 Plus WRSP	Changes in 2020 Without Project traffic conditions if the WRSP develops	Section 4.3
<b>Other Scenarios</b>		
2020 Baseline with Kaiser Medical Center Expansion	Same as 2020 baseline, except it includes the change in traffic conditions due to the proposed expansion of the Kaiser Medical Center.	Chapter 5
2020 with Kaiser Medical Center Expansion Plus SOI Amendment	Changes in 2020 with Kaiser Medical Center Expansion traffic conditions if the SOI Amendment Area develops	Chapter 5
2020 with Kaiser Medical Center Expansion Plus WRSP	Changes in 2020 with Kaiser Medical Center Expansion traffic conditions if the WRSP develops	Chapter 5
2020 Conditions with Placer Parkway Plus SOI Amendment	Changes in 2020 Plus SOI Amendment traffic conditions if the proposed Placer Parkway project were constructed	Chapter 5
Cumulative Conditions With Additional Development	Qualitative discussion only of 2020 with other potential projects including build-out of Placer Vineyards, Placer Ranch, De La Salle University, and South Sutter Industrial Area	Chapter 5
2020 Plus Alternative 2, SOI Amendment	Changes in 2020 traffic conditions under Alternative 2 for the full SOI Amendment Area	Chapter 6
2020 Plus Alternative 2, WRSP	Changes in 2020 traffic conditions under Alternative 2 for the WRSP only	Chapter 6
2020 Plus Alternative 4	Qualitative discussion only of 2020 under Alternative 4	Chapter 6

### 4.3.2 Environmental Setting

The evaluation of the operating characteristics of the existing circulation system in the City of Roseville is the initial task in defining impacts of the WRSP and SOI amendment on the circulation system. In order to understand existing travel patterns and conditions, all major aspects of transportation in Roseville were inventoried and analyzed.

The following sections briefly discuss roadway functions, traffic volumes, and traffic levels of service, as well as transit, truck and rail services, and bicycle routes.

## ■ Street and Highway System

### Roadway Functional Classification

The existing street network in the City of Roseville is a product both of roadways that have provided access to the older portions of the City for decades and of roadways that were designed to serve newer specific plan areas. In each of the City's eight specific plan areas and the North Industrial Area, arterial and collector roadway classifications have been defined and most of these roadways have been constructed. In the older portions of the City, roadways were classified as arterial or collector roadways in the 1992 General Plan Update.

The primary function of arterial roadways is to move large volumes of traffic through the City to other sections and beyond. In the specific plan areas, the right-of-way for arterials varies from 76 feet to 100 feet and generally incorporates four to six travel lanes, bicycle lanes, and a landscaped median. On-street parking on existing arterials in the specific plan areas is prohibited, and access is limited to minimize cross traffic turning movements in order to improve traffic safety and allow more efficient traffic flow. Outside the specific plan areas, some roadways function as arterials due to the current high traffic volumes and their key linkages between one section of the City and another. For these roadways, current right-of-way widths vary, but most contain more than two traffic lanes.

Collector streets generally link local residential streets and the commercial and office parking areas to the arterials. In the specific plan areas, the right-of-way for these streets varies from 54 feet to 60 feet and contains two traffic lanes and bicycle lanes. Outside the specific plan areas, a number of roadways function as collector roadways due to moderate traffic volumes and their linkage to the arterial roadway system. The right-of-way widths for these roadways vary, but most contain two traffic lanes.

Table 4.3-2 provides a summary of the arterial and collector roadways in the eight specific plan areas as well as the Infill and North Industrial areas. Figure 4.3-1 (Existing Arterial/Collector Roadway System) illustrates the arterial/collector roadway system that currently serves the City of Roseville. A few segments of the City's planned arterial and collector roadways in the specific plan areas are not currently constructed and, therefore, are not included in Figure 4.3-1.

The existing state highway and arterial systems within the City of Roseville are described below.

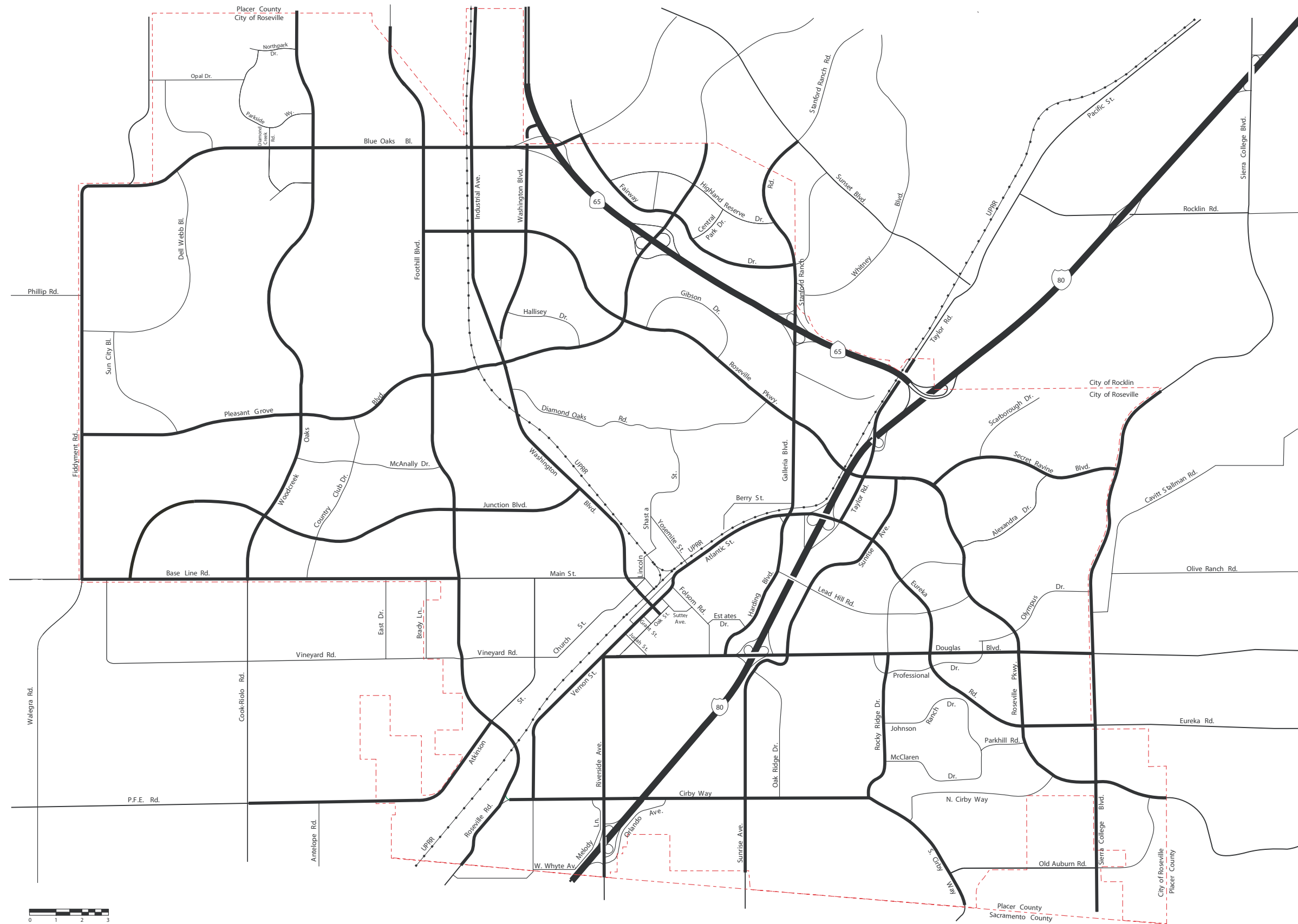
**Table 4.3-2 Arterial and Collector System in the City of Roseville**

Subarea	Arterials	Collectors
Infill	Vernon Street (north of Cirby) Atlantic Street (Vernon to I-80) Cirby Way Riverside Avenue Auburn Boulevard Roseville Road Harding Boulevard (north of Douglas) Douglas Boulevard Atkinson Street (south of Foothills) Rocky Ridge Drive Sunrise Avenue Roseville Parkway <sup>2</sup> (between Washington Boulevard and Foothill Boulevard)	Folsom Road Vineyard Road Church Street (west of Washington) Atkinson Street (Foothills to Village Green) Shasta Street (north of Yosemite) Vernon Street (south of Cirby) Sutter Avenue Lincoln Street (Sierra to Village Green and Vernon to Sutter) Oak Street (Judah to Lincoln) Grant Street Judah Street Estates Drive Melody Lane West Whyte Avenue Oak Ridge Drive Orlando Avenue Berry Street Yosemite Street Old Auburn Road (South Cirby to Sacramento County Line)
Northwest Roseville Specific Plan	Pleasant Grove Boulevard Foothills Boulevard Woodcreek Oaks Boulevard Junction Boulevard Washington Boulevard Baseline Road	Country Club Drive McAnally Drive
North Central Roseville Specific Plan	Washington Boulevard Harding Boulevard/Stanford Ranch Road Roseville Parkway Pleasant Grove Boulevard	Hallisey Drive Diamond Oaks Road Gibson Drive
Northeast Roseville Specific Plan	Sunrise Avenue Roseville Parkway Eureka Road Douglas Boulevard Sierra College Boulevard Taylor Road	Lead Hill Road Rocky Ridge Drive (north of Douglas Road) Olympus Drive
Southeast Roseville Specific Plan	Douglas Boulevard Roseville Parkway Sierra College Boulevard Eureka Road Rocky Ridge Drive (south of Douglas Boulevard)	Johnson Ranch Drive McLaren Drive Professional Drive Parkhill Road Old Auburn Road (south Cirby to Roseville Parkway) North Cirby Way
Del Webb Specific Plan	Fiddlyment Road Blue Oaks Boulevard Pleasant Grove Boulevard	Del Webb Boulevard Sun City Boulevard
Highland Reserve North Specific Plan	Stanford Ranch Road Pleasant Grove Boulevard Fairway Drive <sup>2</sup>	Highland Drive <sup>2</sup> Central Park Drive <sup>2</sup>
North Roseville Specific Plan (Phases I, II and III)	Blue Oaks Boulevard Pleasant Grove Boulevard Baseline Road Junction Boulevard Woodcreek Oaks Boulevard	Diamond Creek Boulevard Crocker Ranch Road Opal Drive
North Roseville Industrial Area	Washington Boulevard Industrial Avenue Foothills Boulevard Blue Oaks Boulevard Woodcreek Oaks Boulevard	
Stoneridge Specific Plan	Sunrise Avenue Roseville Parkway Secret Ravine Parkway	Alexandra Drive <sup>2</sup> Scarborough Drive <sup>2</sup>

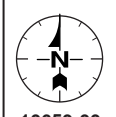
NOTES:

1. See Figure 4.3-1. Some segments of planned roadways are not constructed, and have not been reflected on Figure 4.3-1.
2. Portions of roadway have not yet been completed.

SOURCE: City of Roseville 2002; DKS Associates 2003



- Freeway**
- Arterial**
- Collector**



**FIGURE 4.3-1**  
**Existing Arterial/Collector Roadway System**

10659-00

Source: DKS Associates

City of Roseville



11x17 b&w fig p2

### State Highway System

Roseville is served by an interstate highway (I-80) and a state highway, State Route 65 (SR-65). I-80 is a transcontinental highway that links Roseville not only to Sacramento and the Bay Area, but to the rest of the United States via its crossing of the Sierra. It carries commute traffic between Placer and Sacramento counties, as well as interregional and interstate business, freight, tourist, and recreational travel. Roseville is connected to I-80 by five interchanges: Riverside Avenue, Douglas Boulevard, Eureka Road/Atlantic Street, Taylor Road, and SR-65. This freeway has eight lanes west of Riverside Avenue and six lanes through the remainder of Roseville. Existing (2001) traffic volumes range from 172,300 vehicles per day west of Riverside Avenue to 109,000 vehicles per day east of SR-65.

SR-65 is generally a north/south trending State Route that connects Roseville with the cities of Lincoln and Marysville (via Highway 70). In Roseville, this highway is a four-lane freeway with access provided by four interchanges: I-80, Galleria Boulevard/Stanford Ranch Road, Pleasant Grove Boulevard and Blue Oaks Boulevard. Existing traffic volumes range from about 68,000 vehicles per day between I-80 and Galleria to 40,000 vehicles per day north of Blue Oaks.

### Arterial Street System

The arterial network could be the most important system of roads within the overall street system. It links residential areas to both commercial and employment centers and links all of these uses to the regional freeway system. The existing arterial network in the City of Roseville is described below. The traffic volumes associated with each roadway are based on traffic counts collected by the City in April and May 2001.

*Atkinson Street* is a north/south roadway that connects PFE Road to Village Green Drive. South of Foothills Boulevard, it is a two-lane arterial that serves 15,200 vehicles per day. Between Foothills Boulevard and Vineyard Road it is a two-lane collector that carries about 8,000 vehicles per day. North of Vineyard Road, it is a local roadway that currently carries 2,600 vehicles per day.

*Atlantic Street* connects downtown Roseville to I-80 as well as to the Northeast Specific Plan Area via Eureka Road. It was recently widened to four lanes between Harding Boulevard and Vernon Street. Between Vernon Street and Harding Boulevard, Atlantic Street carries about 13,800 vehicles per day.

*Baseline Road* is an east/west arterial that links Roseville with the Dry Creek Area and SR-70/99. From the City limits east, Baseline Road is a two-lane road until it becomes Village Green Drive at Foothills

Boulevard. Daily volumes on Baseline Road east of Country Club Drive are about 16,200 vehicles per day.

*Blue Oaks Boulevard* is an east/west arterial that links the cities of Roseville and Rocklin to each other and to SR-65. Between SR-65 and Woodcreek Oaks Boulevard it has four lanes. It serves about 23,900 vehicles per day east of Foothill Boulevard. From Woodcreek Oaks Boulevard to Fiddymment Road it has two lanes and carries about 7,200 vehicles per day.

*Cirby Way* is another major east/west arterial. It is a four-lane road that extends from the Roseville Road/Foothills Boulevard intersection, passes over I-80, and terminates at Old Auburn Road. Cirby Way serves its highest daily volumes west of Riverside Avenue (37,400 vehicles per day).

*Douglas Boulevard* is a major east/west arterial that connects the central portions of Roseville to I-80 and Granite Bay. It has six lanes from Sierra College Boulevard to Sunrise Avenue, but narrows to four lanes west of Sunrise Avenue. It remains four lanes through the Douglas Boulevard/I-80 interchange until Judah Street where it further narrows to two lanes, until it ends at Vernon Street. East of Sierra College Boulevard, Douglas Boulevard is four lanes wide. Traffic volumes are heaviest on Douglas Boulevard east of Folsom Road west of Sunrise Avenue where it carries about 64,000 vehicles per day).

*Eureka Road* is a major east/west arterial that links southeast Roseville to northeast Roseville and provides access to I-80 and downtown Roseville via Atlantic Street. Eureka Road contains four lanes from Sierra College Boulevard to south of Douglas Boulevard. From there it widens to six lanes and continues roughly northwest until it intersects with I-80. Daily traffic volumes on Eureka Road are heaviest between Sunrise Avenue and I-80 where it carries about 48,900 vehicles per day.

*Fiddymment Road* is a two-lane, north/south arterial that runs along the western City limit of Roseville from Baseline Road north into Placer County. Daily traffic volumes on Fiddymment Road are heaviest north of Baseline Road where it carries about 6,000 vehicles per day

*Foothills Boulevard* is the major north/south arterial in Roseville west of I-80. It extends as far south as Cirby Way, where it becomes Roseville Road and continues south into Sacramento. North of Cirby Way it traverses portions of the City's Infill Area, Northwest Specific Plan and North Industrial Area and currently ends at Duluth Avenue at the northern City limits. This roadway (along with Washington Boulevard, Harding Boulevard and SR-65) provides one of only four grade-separated crossings of the Union Pacific railroad mainline. This four-lane arterial serves its highest daily volume south of Atkinson Street (40,000 vehicles per day).

*Harding Boulevard/Galleria Boulevard* is a major north/south arterial that runs from Douglas Boulevard to SR-65. From Douglas Boulevard to Atlantic Street, this four-lane arterial parallels I-80, serving a commercial area with daily traffic volumes that range from 20,100 vehicles per day (north of Douglas Boulevard) to 25,500 vehicles per day (south of Atlantic Street). North of its bridge over the Union Pacific mainline and Atlantic Street, it becomes Galleria Boulevard which extends past the Galleria Mall to SR-65. Galleria Boulevard is a six-lane arterial north of Roseville Parkway. Galleria Boulevard south of SR-65 carries about 38,900 vehicles per day.

*Industrial Avenue* extends from Washington Boulevard north, past the north City limit of Roseville, and into the Sunset Industrial Area. It is a two-lane arterial that runs north/south and serves 4,800 vehicles per day north of Blue Oaks Boulevard.

*Junction Boulevard* is an east/west arterial in west Roseville that has four lanes from Washington Boulevard to Baseline Road. Junction Boulevard carries about 8,400 vehicles per day east of County Club Drive.

*Pleasant Grove Boulevard* is an east/west arterial that extends from Fiddymment Road to the City of Rocklin where it becomes Park Drive and connects the Del Webb Specific Plan, the Northwest Roseville Specific Plan, the North Central Roseville Specific Plan and the Highland Reserve Specific Plan to each other and to SR-65. It is a two-lane facility between Fiddymment Road and Woodcreek Oaks Boulevard, a four-lane roadway from Woodcreek Oaks Boulevard to Foothills Boulevard and a six-lane facility between Foothills Boulevard and SR-65. Daily traffic volumes on Pleasant Grove Boulevard range from 3,700 vehicles per day east of Fiddymment Road to 23,200 east of Foothill Boulevard.

*Riverside Avenue* extends north from Auburn Boulevard (Sacramento County) as a major north/south arterial. It connects south/central Roseville to I-80 and Sacramento County. Auburn Boulevard is a four-lane arterial that extends from the Sacramento County line north to I-80, where it becomes Riverside Avenue. Riverside Avenue continues north from I-80 to Douglas Boulevard and Vernon Street. Riverside Avenue has four lanes south of 6th Street and two lanes north of 6th Street. Both Auburn Boulevard and Riverside Avenue serve heavy daily traffic volumes near the I-80 interchange.

*Rocky Ridge Drive* is a four-lane north/south arterial that begins at Cirby Way and extends north to Roseville Parkway. Daily traffic volumes on Rocky Ridge Drive range from 23,000 vehicles per day north of Cirby Way to 9,500 vehicles per day between Eureka Road and Roseville Parkway.

*Roseville Parkway* is an arterial that links the Southeast, Northeast and North Central Specific Plan areas. From Placer County east of Sierra College Boulevard to Douglas Boulevard, it is four lanes wide. It serves

an average daily traffic of 16,800 vehicles per day west of Sierra College Boulevard. North of Douglas Boulevard, until it ends at Washington Boulevard, it is six lanes wide. It was recently extended through the Stoneridge Specific Plan Area and traffic counts in this EIR do not reflect that extension. It carries a daily traffic volume of about 22,700 vehicles per day at its bridge over I-80.

*Roseville Road* is an arterial that runs parallel to I-80 from the end of Cirby Way to the southern City limit of Roseville. This two-lane arterial serves 14,600 vehicles per day.

*Sierra College Boulevard* is another major north/south arterial on the east side of Roseville. Portions of this roadway have two lanes while other portions have four lanes. This arterial carries 30,000 vehicles per day south of Old Auburn Road and 21,400 vehicles per day north of Douglas Boulevard.

*Stanford Ranch Road* extends from the SR-65/Stanford Ranch interchange north into the City of Rocklin. It is a major six-lane arterial and carries 53,400 vehicles per day north of SR-65.

*Sunrise Avenue* is a major north/south arterial in Roseville. It links central Roseville to Sacramento County and is the primary arterial linking north and south Roseville east of I-80. Sunrise Avenue has four lanes from the Sacramento County line to Lead Hill Boulevard, where it widens to six lanes until it ends at Roseville Parkway. Daily volumes on Sunrise Avenue are highest north of Cirby Way (36,700 vehicles per day).

*Taylor Road* is a north/south arterial which connects Roseville to the City of Rocklin. From Eureka Road to the Taylor Road/I-80 interchange, it is a four-lane arterial. It narrows to two lanes north of I-80 where it carries about 22,500 vehicles per day.

*Vernon Street* is an arterial that parallels the UP railroad and connects Cirby Way, Douglas Boulevard and Riverside Avenue on the south side of downtown Roseville to Atlantic Street on the north side of downtown. Most of Vernon Street has two lanes, except a four-lane segment north of Douglas Boulevard where daily volumes reach 11,400 vehicles per day.

*Washington Boulevard* is a major north/south arterial. It connects SR-65 and Blue Oaks Boulevard on the north to Oak Street in downtown Roseville. Most of Washington Boulevard has four lanes, except a two-lane segment north and south of where it crosses under the Union Pacific railroad north/south tracks. Along with Foothills Boulevard and SR-65, it provides one of three grade-separated crossings of the UP east/west mainline tracks. It serves its highest daily volume north of Village Green Drive where it carries about 21,000 vehicles per day.

*Woodcreek Oaks Boulevard* is a north/south arterial that extends from Baseline Road to Blue Oaks Boulevard. Most of this arterial currently has only two lanes, but its wide median is designed for widening to four lanes. It carries about 12,600 vehicles per day north of Junction Boulevard.

## **Local Roadway Network**

### ***West Roseville Specific Plan***

The WRSP Area is served by existing roadways discussed above, as well as other roadways outside of the existing City of Roseville (see Figure 4.3-1). No City roadways exist within the WRSP Area. Fiddymment Road currently is the western boundary for the City of Roseville and would form the eastern boundary of the WRSP Area. It runs generally north/south along the eastern edge of the WRSP Area. Blue Oaks Boulevard currently ends at Fiddymment Road and would be extended to the west through the WRSP Area to meet up with the existing Phillip Road and ultimately to West Side Drive. Phillip Road is a narrow, unimproved rural road, a portion of which is gravel, which currently runs through the WRSP Area. It is generally an east/west roadway that has numerous 90-degree turns and it meets up with Fiddymment Road between Blue Oaks Boulevard and Pleasant Grove Boulevard. Pleasant Grove Boulevard is an east/west arterial roadway that runs generally from SR-65 to Fiddymment Road.

### ***Remainder Area***

The Remainder Area is defined as the balance of the SOI Area, excluding the WRSP. The Remainder Area would be served by many of the same roadways as the WRSP Area, as well as some additional roadways (see Figure 4.3-1). Baseline Road is an east/west roadway that connects the southwest portion of Placer County with the southern portion of Sutter County, where it is known as Riego Road. Baseline Road/Riego Road provides access from the City of Roseville to SR-70/99 to the west. Baseline Road would form the southern edge of the SOI Amendment Area. Watt Avenue is a north/south arterial that provides a connection between southwest Placer County and Sacramento County. It currently begins at Baseline Road and continues south to Elk Grove in southern Sacramento County, where it is known as Elk Grove/Florin Road. The intersection of Watt Avenue and Baseline Road is near the southwest corner of the SOI Amendment Area. Walerga Road is a north/south roadway that connects Placer County and Sacramento County. Walerga Road has recently been realigned to meet Baseline Road at Fiddymment Road.

## **Traffic Volumes**

One of the key evaluation measures of a City's roadway system is a comparison of daily and peak period traffic volumes on its major roadway system. The traffic data within the City of Roseville were provided

by the City of Roseville Public Works Department. These data include both daily traffic counts at spot locations throughout the City and peak period turning movement counts at about 114 existing signalized intersections conducted in April and May 2001. Year 2001 traffic count data for many study area roadways outside the City of Roseville were also available from other jurisdictions. Some additional traffic counts were collected in September 2002 and August 2003 for some roadways and intersections within the study area.

Average daily traffic volumes (ADT) represent the total volume passing a point or segment of roadway, in both directions, on an average weekday. ADTs on a number of key roadway segments are shown on Figure 4.3-2 (Existing Daily Traffic Volumes).

When the City conducted the comprehensive set of traffic counts in April and May 2001, a few roadways that now exist were not constructed (i.e., Roseville Parkway through the Stoneridge Specific Plan, Junction Boulevard through the North Roseville Specific Plan Phase 2 area, etc.) and thus are not shown on Figure 4.3-2, which shows 2001 traffic counts.

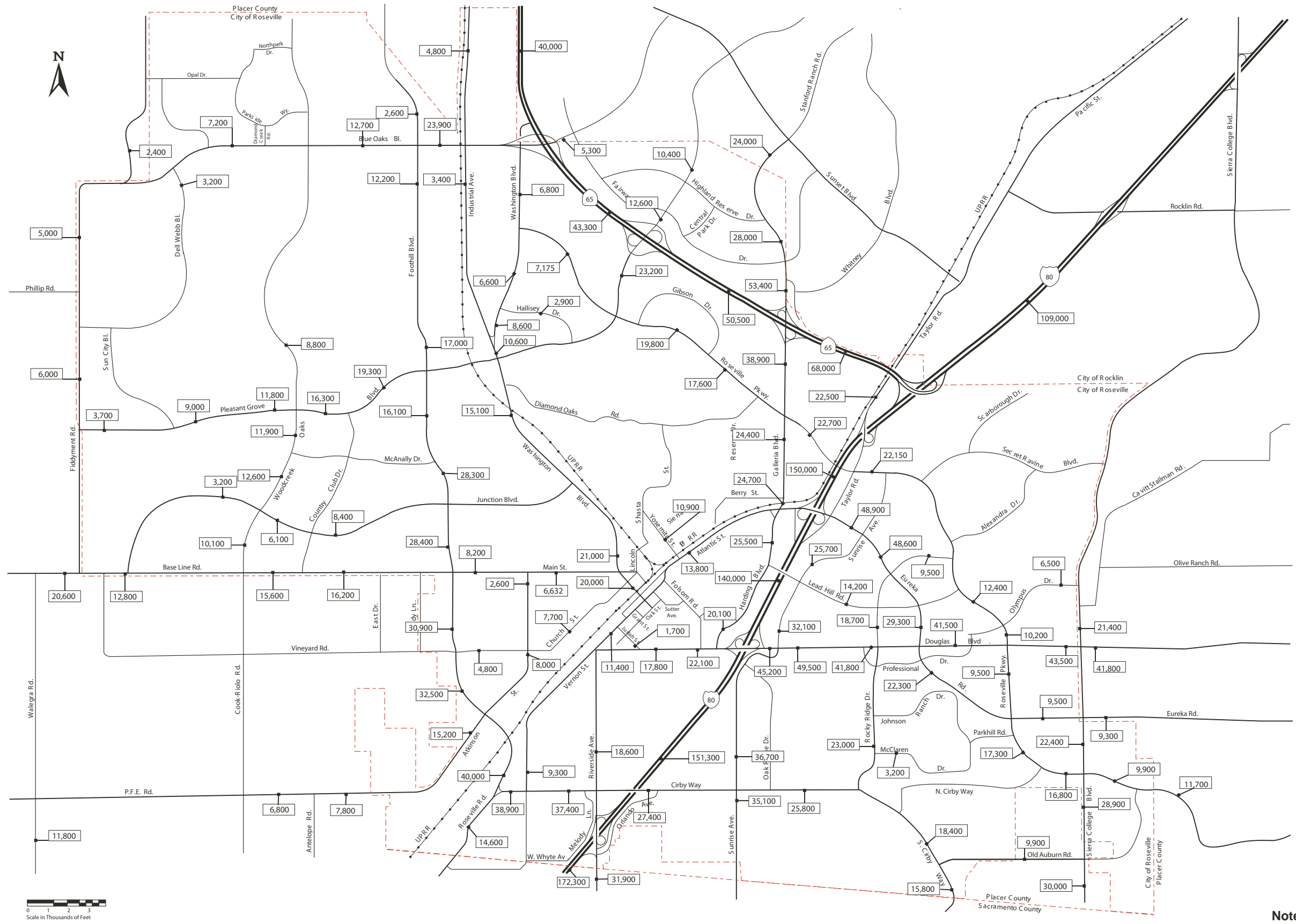
### **Traffic Levels of Service**

The evaluation of traffic volumes on the roadway network provides an understanding of the general nature of travel conditions in the City of Roseville. However, traffic volumes do not indicate the quality of service provided by the street facilities or the ability of the street network to carry additional traffic. To accomplish this, the concept of “level of service” has been developed.

“Levels of service” describe roadway-operating conditions. Level of service is a qualitative measure of the effect of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs. Levels of service are designated “A” through “F” from best to worst, which cover the entire range of traffic operations that might occur. Level of service (LOS) A through E generally represent traffic volumes at less than roadway capacity, while LOS F represents over capacity and/or forced conditions.

The City revised its level of service policy with the update of the Capital Improvement Program (CIP), which was adopted in September 2002. The new level of service policy calls for the City to maintain a LOS C standard at 70 percent of all signalized intersections in the City during the P.M. peak hour. Compliance with this policy is determined assuming build-out of currently entitled land within the City and 2020 market rate development outside of the City.

The traffic flow and capacity of Roseville’s arterial/collector system is principally controlled by the capacity of its signalized intersections. Intersection operations were evaluated using a modified version



Note: April/May 2001 Counts



FIGURE 4.3-2  
Existing Daily Traffic Volumes

10659-00

Source: DKS Associates

City of Roseville



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**Table 4.3-3 Level of Service Definitions at Signalized Intersections**

Level of Service (LOS)	Volume to Capacity Ratio <sup>1</sup>	Description
A	0.00–0.60	Free Flow/Insignificant Delays: No approach phase is fully utilized by traffic and no vehicle waits longer than one red signal indication.
B	0.61–0.70	Stable Operation/Minimal Delays: An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles.
C <sup>2</sup>	0.71–0.81	Stable Operation/Acceptable Delays: Major approach phases fully utilized. Most drivers feel somewhat restricted.
D	0.82–0.90	Approaching Unstable/Tolerable Delays: Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays.
E	0.91–1.00	Unstable Operation/Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.
F	Greater than 1.00	Forced Flow/Excessive Delays: Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.

NOTES:

The ratio of the traffic volume demand at an intersection to the capacity of the intersection.

The City of Roseville has established a volume-to-capacity ratio of 0.81 as the LOS C threshold.

SOURCE: Transportation Research Board 1985

of the Transportation Research Board Circular 212 (critical movement) method that was adopted for Roseville’s CIP. Table 4.3-3 presents the level of service categories for signalized intersections considered in this analysis and provides a definition of each category with the corresponding volume-to-capacity ratios. The P.M. peak hour is used in the operational analysis of the City’s roadway system since it generally represents the highest hour for overall traffic volumes during the day.

Table 4.3-4 summarizes the existing levels of service during the P.M. peak hour at 114 signalized intersections. The levels of service at these intersections are based on turning movement volumes collected by the City in April and May 2001.

**■ Transit and Passenger Rail**

Transit service is currently provided to the residents of the City of Roseville by two transit providers: Roseville Transit Services and Placer County Transit. Current transit routes serving the City are shown on Figure 4.3-3 (Existing Transit Routes). Other transit systems in Roseville include taxicab services, Greyhound Bus Lines, and Amtrak. These existing transit services are described below.

**City of Roseville, Roseville Transit Services**

Roseville Transit, which is operated by the City of Roseville, provides three types of local transit services, fixed route, dial-a-ride, and commuter. The fixed route and dial a ride services are local, within the City of Roseville, whereas the commuter service provides regional trips into the downtown Sacramento area.

**Table 4.3-4 Existing Levels of Service at Major Intersections in the City of Roseville**

Roadway		Existing Conditions	
North/South	East/West	LOS	V/C
Tiger/Center	Atlantic Street	A	0.44
Wills	Atlantic Street	A	0.60
Yosemite	Atlantic Street	A	0.52
Prairie Woods	Blue Oaks Boulevard	A	0.18
SR-65 NB off	Blue Oaks Boulevard	A	0.14
Washington Boulevard	Blue Oaks Boulevard	A	0.33
Woodcreek Oaks	Blue Oaks Boulevard	A	0.29
Champion Oaks	Cirby Way	A	0.44
Melody	Cirby Way	B	0.67
Northridge/Lindsay	Cirby Way	B	0.60
Oak Ridge Drive	Cirby Way	A	0.58
Orlando Avenue	Cirby Way	A	0.54
Parkview	Cirby Way	A	0.48
San Simeon	Cirby Way	B	0.65
Vernon Street	Cirby Way	E	0.91
Eureka Road	Douglas Boulevard	C	0.77
Folsom Road	Douglas Boulevard	A	0.52
Harding Boulevard	Douglas Boulevard	C	0.72
Judah	Douglas Boulevard	A	0.55
Keehner/Donner	Douglas Boulevard	A	0.37
Park	Douglas Boulevard	A	0.32
Riverside Avenue	Douglas Boulevard	E	0.94
Rocky Ridge Drive	Douglas Boulevard	C	0.74
Roseville Parkway	Douglas Boulevard	A	0.52
Santa Clara Drive	Douglas Boulevard	E	0.97
Sierra College	Douglas Boulevard	E	0.93
Sierra Gardens	Douglas Boulevard	C	0.76
Target	Douglas Boulevard	A	0.56
Eureka Road	Deer Valley	A	0.46
Eureka Road	Lead Hill Road	A	0.56
Ashland	Eureka Road	A	0.19
Five Star	Fairway Drive	A	0.2
Home Depot	Fairway Drive	A	0.25
Fiddymont Road	Baseline Road	B	0.65
Foothills Boulevard	Albertsons	A	0.37
Foothills Boulevard	Atkinson Street	C	0.75
Foothills Boulevard	Blue Oaks Boulevard	A	0.27
Foothills Boulevard	Cirby Way	E	0.96
Foothills Boulevard	H.P. South	A	0.3
Foothills Boulevard	Junction Boulevard	C	0.71
Foothills Boulevard	Village Green Drive	C	0.76
Foothills Boulevard	McAnally	A	0.47
Foothills Boulevard	Mistywood/NEC	A	0.54
Foothills Boulevard	Pleasant Grove	B	0.63

**Table 4.3-4 Existing Levels of Service at Major Intersections in the City of Roseville**

Roadway		Existing Conditions	
North/South	East/West	LOS	V/C
Foothills Boulevard	Rand/Pilgrims	A	0.42
Foothills Boulevard	Vineyard Road	A	0.53
Galleria	Antelope Creek	A	0.45
Galleria	Berry	A	0.41
Harding Boulevard	Estates Road	B	0.64
Harding Boulevard	Lead Hill Road	A	0.55
Harding Boulevard	Roseville Square	A	0.50
Harding Boulevard	Wills Road	A	0.44
I-80 WB Ramps	Atlantic Street	A	0.47
Americana	Junction Boulevard	A	0.32
Country Club	Junction Boulevard	A	0.37
Porter	Junction Boulevard	A	0.34
Revere	Junction Boulevard	A	0.27
Hallisey	Pleasant Grove	A	0.30
Washington Boulevard	Pleasant Grove	A	0.54
Pleasant Grove	Roseville Parkway	A	0.42
Riverside Avenue	Cirby Way	D	0.89
Riverside Avenue	Darling Way	B	0.68
Rocky Ridge Drive	Cirby Way	C	0.72
Rocky Ridge Drive	Eureka Road	D	0.84
Rocky Ridge Drive	Lead Hill Road	A	0.53
Rocky Ridge Drive	Maidu	A	0.49
Rocky Ridge Drive	McLaren	A	0.46
Rocky Ridge Drive	Professional	A	0.56
Roseville Parkway	Eureka Road	A	0.41
Roseville Parkway	Lead Hill Road	A	0.44
Roseville Parkway	Olympus Drive	A	0.45
Creekside	Roseville Parkway	A	0.26
Galleria Boulevard	Roseville Parkway	A	0.53
Gibson	Roseville Parkway	A	0.24
N. Cirby	Roseville Parkway	A	0.42
Old Auburn Road	Roseville Parkway	A	0.44
Reserve	Roseville Parkway	A	0.35
Sierra College	Roseville Parkway	C	0.73
Taylor Road	Roseville Parkway	A	0.39
Washington Boulevard	Roseville Parkway	A	0.14
West Mall	Roseville Parkway	A	0.35
Sierra College Boulevard	Eureka Road	A	0.59
Sierra College Boulevard	Indigo Creek	A	0.31
Sierra College Boulevard	Old Auburn Road	C	0.78
Sierra College Boulevard	Olympus Drive	B	0.64
South Cirby Way	Old Auburn Road	C	0.74
Stanford Ranch Road	Fairway Drive	A	0.54
Stanford Ranch Road	Five Star Boulevard	B	0.63

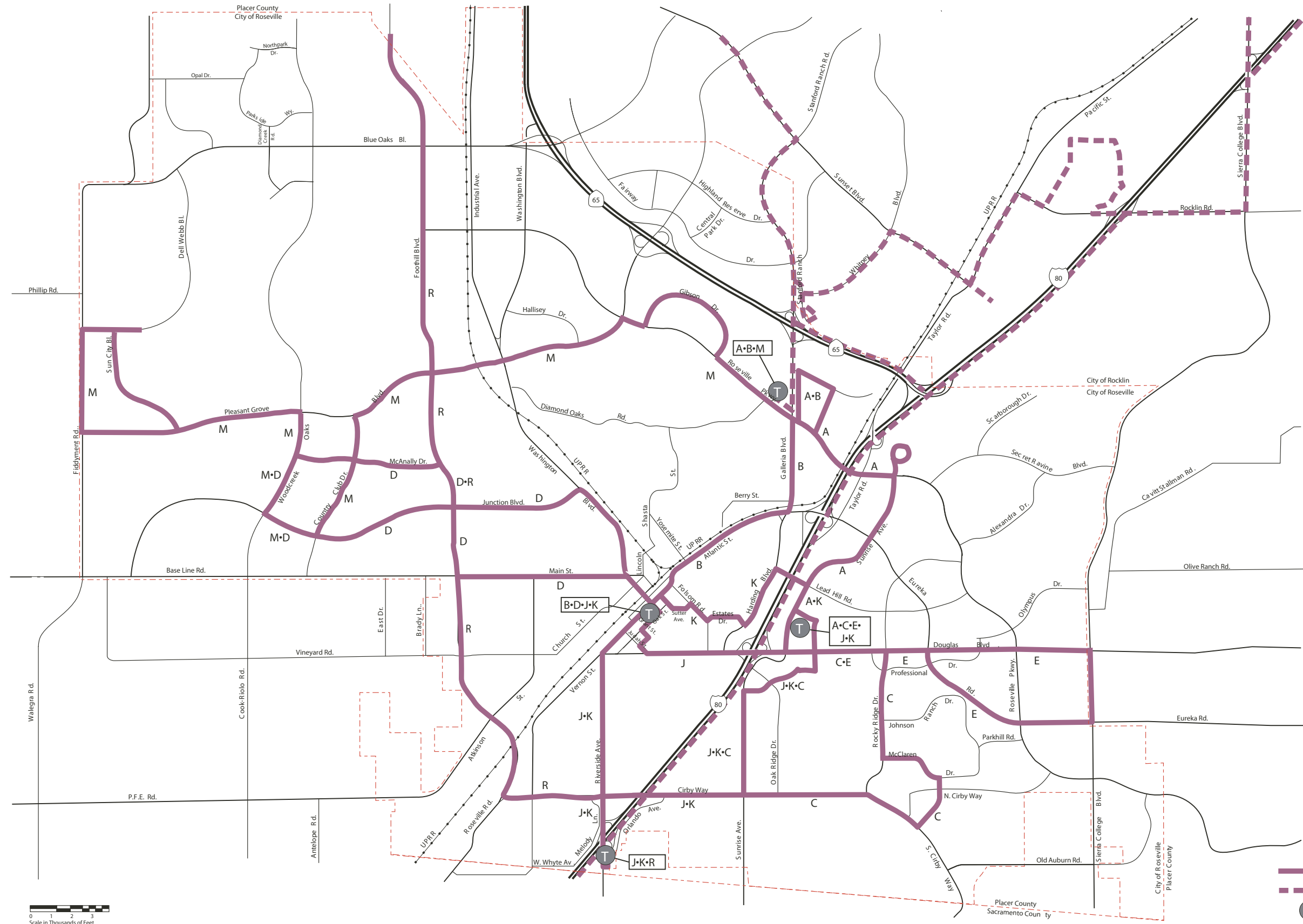
**Table 4.3-4 Existing Levels of Service at Major Intersections in the City of Roseville**

Roadway		Existing Conditions	
North/South	East/West	LOS	V/C
Stanford Ranch Road	Highland Park D	A	0.28
Stanford/Galleria	SR-65 NB ramps	A	0.54
Stanford/Galleria	SR-65 SB ramps	C	0.72
Sunrise Avenue	Automall	B	0.60
Sunrise Avenue	Cirby Way	F	1.08
Sunrise Avenue	Coloma Road	A	0.57
Sunrise Avenue	Douglas Boulevard	E	0.98
Sunrise Avenue	Eureka Road	D	0.82
Sunrise Avenue	Frances	A	0.50
Sunrise Avenue	Kensington	A	0.57
Sunrise Avenue	Lead Hill Road	C	0.80
Sunrise Avenue	Oak Ridge Drive	A	0.56
Sunrise Avenue	Roseville Parkway	A	0.59
Sunrise Avenue	Sierra Gardens	A	0.59
I-80 EB Ramps	Eureka Road	D	0.88
Grant Street	Vernon Street	A	0.42
Judah	Vernon Street	A	0.27
Lincoln Street	Vernon Street	A	0.57
Washington Boulevard	Hallisey	A	0.17
Washington Boulevard	Junction Boulevard	A	0.50
Washington Boulevard	Village Green Drive	B	0.62
Washington Boulevard	Oak Street	A	0.55
Washington Boulevard	Sawtell	A	0.53
Woodcreek Oaks	Baseline Road	C	0.75
Woodcreek Oaks	Canevari Road	A	0.39
Woodcreek Oaks	McAnally	A	0.53

NOTES:

1. Reflects 2001 traffic counts at all intersections.
2. V/C is volume capacity ratio that is used to define level of service (see Table 4.3-3).
3. Intersections operating at LOS D or worse conditions are shaded.

SOURCE: DKS Associates 2003



**FIGURE 4.3-3**  
**Existing Transit Routes**

Source: DKS Associates



10659-00

- Roseville Transit Routes
- Placer County Routes
- T Transfer Point

City of Roseville



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*Roseville Transit Commuter Service* is a fixed-route scheduled transit system operated by the City of Roseville. It provides weekday commute period service between Roseville and downtown Sacramento. Figure 4.3-3 shows the Roseville end of the transit route.

*Roseville Transit* also operates a fixed-route scheduled transit system operated by the City of Roseville within the City limits. There are currently 13 scheduled routes. There are five “transfer points”: Sierra Gardens, Galleria Mall, City Hall, Auburn/Whyte, and Woodcreek Oaks/Junction. Many of the Roseville Transit riders are elderly and disabled. The Roseville Transit system connects to both Placer County Transit (at Galleria Mall and Auburn/Whyte) and Sacramento Regional Transit (at Auburn/Whyte).

*Roseville Transit Dial-a-Ride Service* is a curb-to-curb system operated by the City of Roseville within its City limits, seven days a week. As a “dial-a-ride” service, it does not operate on fixed-route schedules; most of its ridership is elderly and disabled.

### **Placer County Transit Services**

*Placer County Transit* is a fixed-route scheduled transit system operated by Placer County that principally serves the I-80, Highway 49 and SR-65 corridors. Some of the routes are “deviated.” A “deviated route” means that the buses generally travel on a main route (i.e., I-80) but can deviate from that route up to a certain distance (three-quarter mile in the case of Placer County Transit) to serve the specific needs of transit patrons. Placer County Transit has an Auburn to Light Rail express route that stops at the Auburn/Whyte transfer point and connects to Sacramento Regional Transit there before proceeding to the Watt/I-80 light rail station. Placer County Transit also has a Lincoln to Galleria to Sierra College route.

### **Other Transit Services**

*Greyhound Bus Lines* has a station at the intermodal facility (the Amtrak station) in Roseville. This station is a stop on the Sacramento to Auburn route and offers six to seven trips to Sacramento per day. From Sacramento, passengers can continue to destinations in any direction.

Taxi service is provided by several private companies.

### **Rail Service**

*Amtrak* provides intercity rail service to Placer County via stations in Roseville and Colfax. The “California Zephyr” provides east/west service between Chicago and Oakland with one Roseville stop in each direction daily. Placer County residents can also access the California Zephyr at Truckee in Nevada

County. Other Amtrak trains can be accessed at Sacramento, or by using the Amtrak Throughway Bus Connections to Roseville.

*Capital Corridor Intercity Rail* links the Bay Area with the Sacramento area and Placer County. At present, one round trip train accesses Roseville daily. However, feeder bus service is provided to additional trains in Sacramento.

## ■ **Bicycles**

Bikeways are defined as specific routes and classes that meet minimum design standards. Roseville generally follows Caltrans' design standards for the following classes of bikeways:

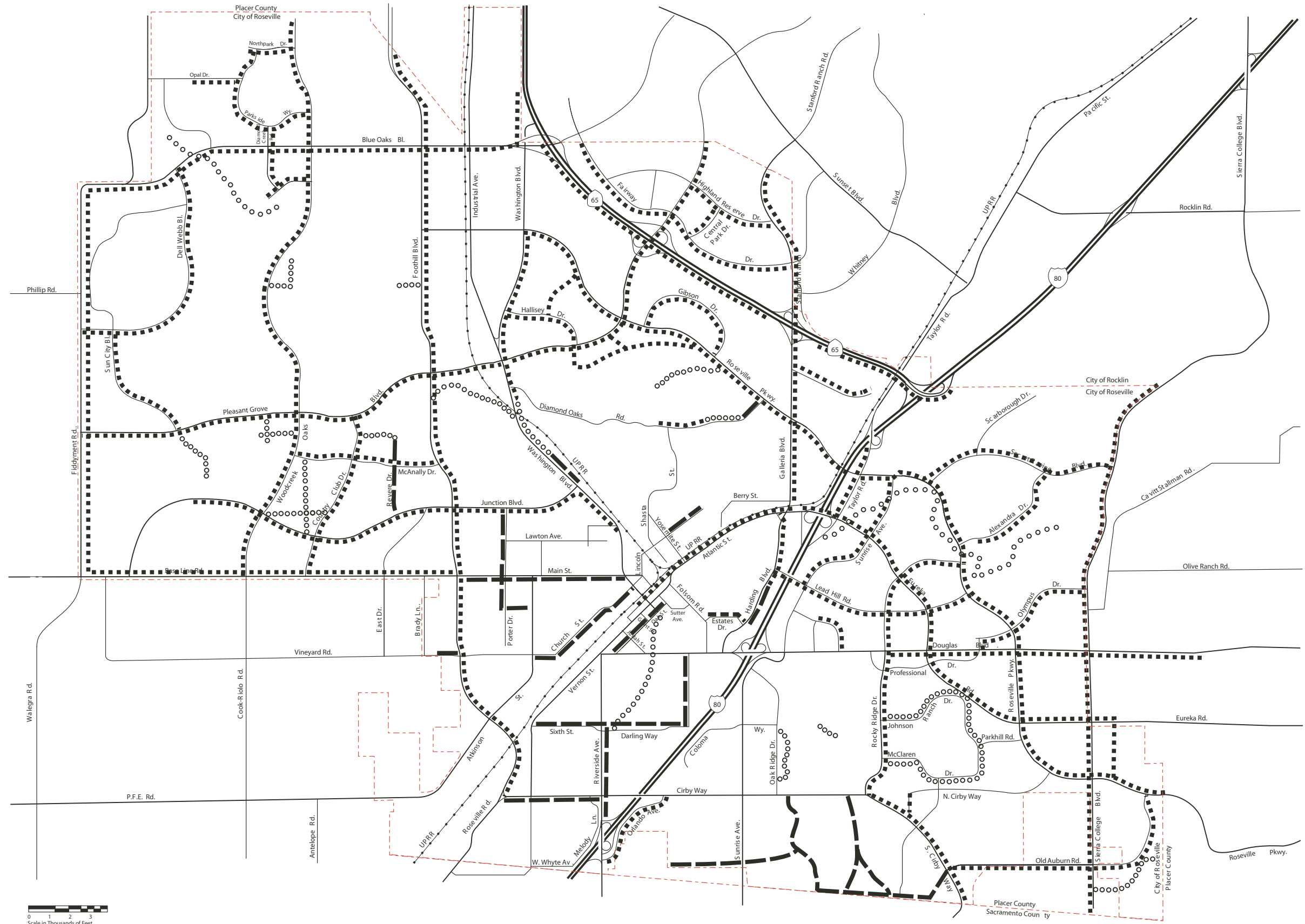
- Class I bikeways, which provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized. Class I bikeways are a minimum of 10 feet wide. A 2-foot graded area should parallel the bikeway on both sides, and the bikeway should be a minimum of 5 feet from an adjacent roadway. Class IA bikeways are a minimum of 8 feet wide.
- Class II bikeways, which provide a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted. Class II bikeways are typically 4 feet wide in Roseville and separated from vehicle traffic by a solid white stripe.
- Class III bikeways, which provide a right-of-way designated by signs or permanent markings, are shared with pedestrians or motorists.

In addition, Roseville has an additional classification for bikeways.

- Class IA facilities are bicycle paths that have been developed as parallel sidewalk routes along major roadways and are separated from the roadway by a landscape strip. Class IA bikeways have a minimum 8-foot planned width. Caltrans does not consider sidewalk facilities to be Class I facilities, and does not recommend that they be signed as bicycle routes. However, Class IA facilities are still desirable for bicyclists of lower skill levels, such as children, as well as others who are hesitant to utilize on-street routes.

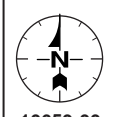
The City of Roseville has an adopted Bikeway Master Plan, which provides guidelines for the development of a Citywide network of Class I, II, and III bicycle facilities and design standards (based on Caltrans standards) for new bicycle facilities within Roseville.

Figure 4.3-4 (Existing Bikeways) shows the existing bikeways within Roseville City limits and all points where Roseville bikeways connect with Placer County bicycle routes. Each of the eight specific plan areas contains significant bikeway elements within the plan areas.



0 1 2 3  
Scale in Thousands of Feet

- ○ ○ ○ ○ Class I/A
- - - - - Class II
- Class III



**FIGURE 4.3-4**  
**Existing Bikeways**

10659-00

Source: DKS Associates



City of Roseville

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## ■ **Truck Routes**

Figure 4.3-5 (Truck Routes) shows the existing designated truck routes within the Roseville City limits. These include the following:

- I-80
- SR-65
- Baseline Road west of Foothills Boulevard
- Foothills Boulevard south of Baseline Road
- Cirby Way between Foothills Boulevard and Sunrise Avenue
- Roseville Road south of Cirby Way
- Riverside Avenue/Auburn Boulevard south of Cirby Way
- Sunrise Avenue south of Cirby Way
- Douglas Boulevard between Eureka Road and Sierra College Boulevard
- Eureka Road between Douglas Boulevard and I-80
- Sierra College Boulevard
- Fiddymont Road between Baseline and Blue Oaks Boulevard
- Blue Oaks Boulevard west of SR-65

These truck routes link with Sacramento County’s designated truck routes on Roseville Road, Auburn Boulevard, Sunrise Boulevard, and Hazel Avenue.

## ■ **Rail**

Union Pacific’s transcontinental rail line and its switching yard and maintenance facilities have played a major role in Roseville’s history. The railroad facilities in the City have and will continue to have a significant effect on the area’s economy. However, the railroad tracks and yard create a substantial barrier to both pedestrian and automobile circulation. They concentrate vehicle traffic into a limited number of crossings and thereby have a large influence on travel patterns through the City.

Figure 4.3-6 (Existing Railroad Facilities) shows the major rail lines that serve the City of Roseville, as well as existing crossings of these rail lines (both at-grade and grade-separated crossings).

The main line of the Union Pacific tracks crosses under SR-65 adjacent to Taylor Road. It then follows I-80 south to Atlantic Street, which it follows into downtown Roseville. It then connects with a northern spur

and enters the Roseville switching yard. Adjacent land use in this vicinity is a mixture of commercial, industrial, and residential land use. The switching yard then continues south past the City limits. There are only two at-grade crossings in the City limits, at Yosemite Street and Tiger Street. The main line crosses under Harding Boulevard, over Washington Boulevard and under Foothills Boulevard, which together with SR-65 are the only four grade-separated crossings of the Union Pacific main line tracks within the City (see Figure 4.3-6).

The northern spur of the Union Pacific rail line crosses under Blue Oaks Boulevard, adjacent to Industrial Avenue. The rail continues south and crosses over Washington Boulevard under Pleasant Grove Boulevard and under Sierra Boulevard before it joins the main line near the downtown area. There are no at-grade crossings of this spur line. The four grade-separated crossings (at Blue Oaks Boulevard, Pleasant Grove Boulevard, Washington Boulevard, and Sierra Boulevard) are shown on Figure 4.3-6.

Amtrak provides commuter rail service to the City. See discussion under the transit section, above.

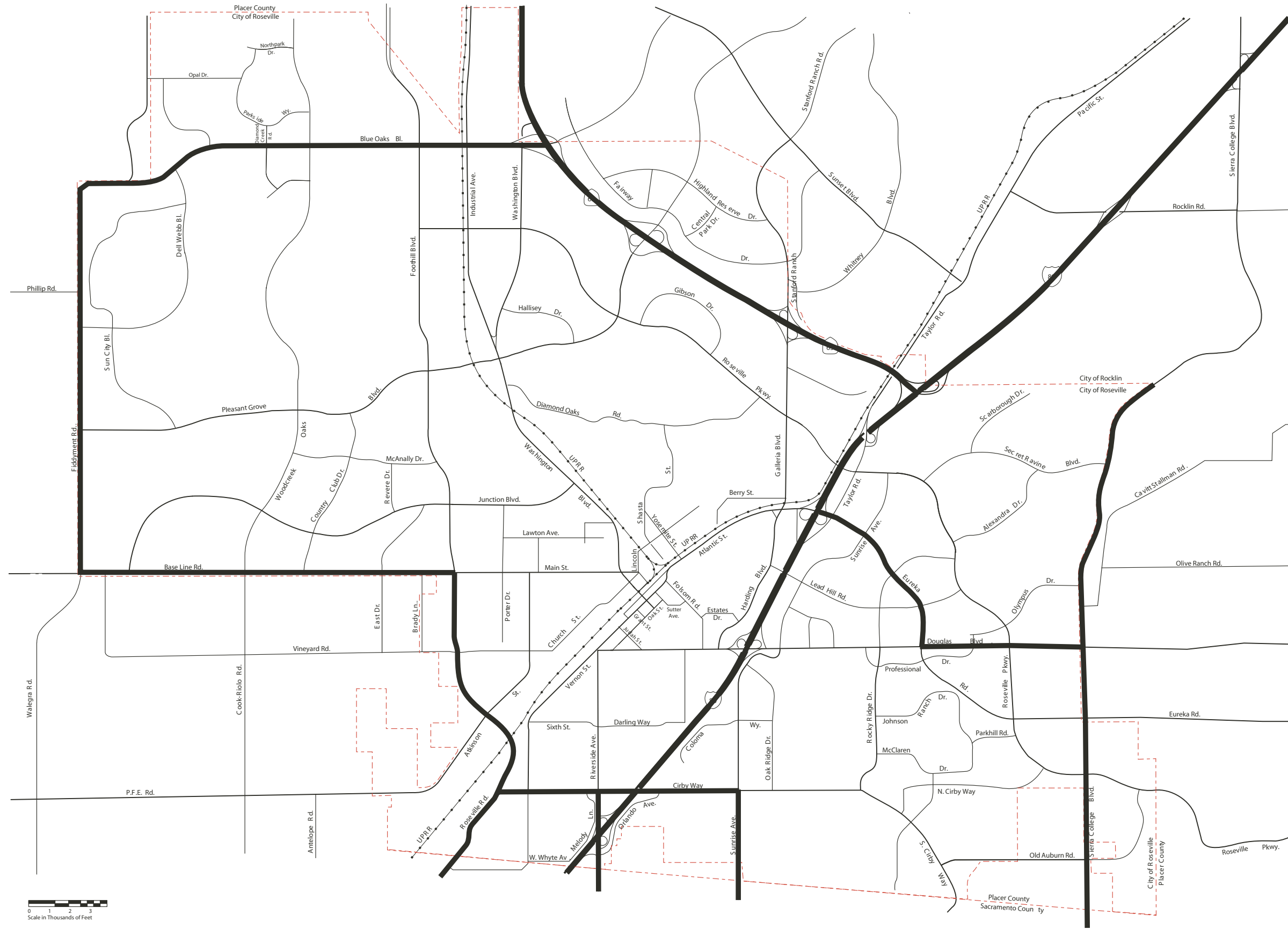
## ■ **Aviation**

There are no existing aviation facilities within the City limits of Roseville. The nearest general aviation airport is the Lincoln Airport, located roughly 10 miles north of Roseville along SR-65. Other general aviation airports in the vicinity are the Auburn Airport, located approximately 20 miles northeast of Roseville near Highway 49 north of I-80, Rio Linda Airport, approximately 11 miles southwest of Roseville, and the Sacramento Metropolitan Airport, located 25 miles southwest of Roseville along Interstate 5 north of I-80.

### **4.3.3 Regulatory Setting**

#### ■ **Federal and State**

There are no known federal standards that would directly affect the transportation and circulation aspects of the SOI Amendment Area. However, with respect to state regulations, Caltrans' Transportation Concept Reports for SR-65, SR 70/99, and I-80 provides relevant background information and guidance.



**Truck Routes**



**FIGURE 4.3-5**  
**Truck Routes**

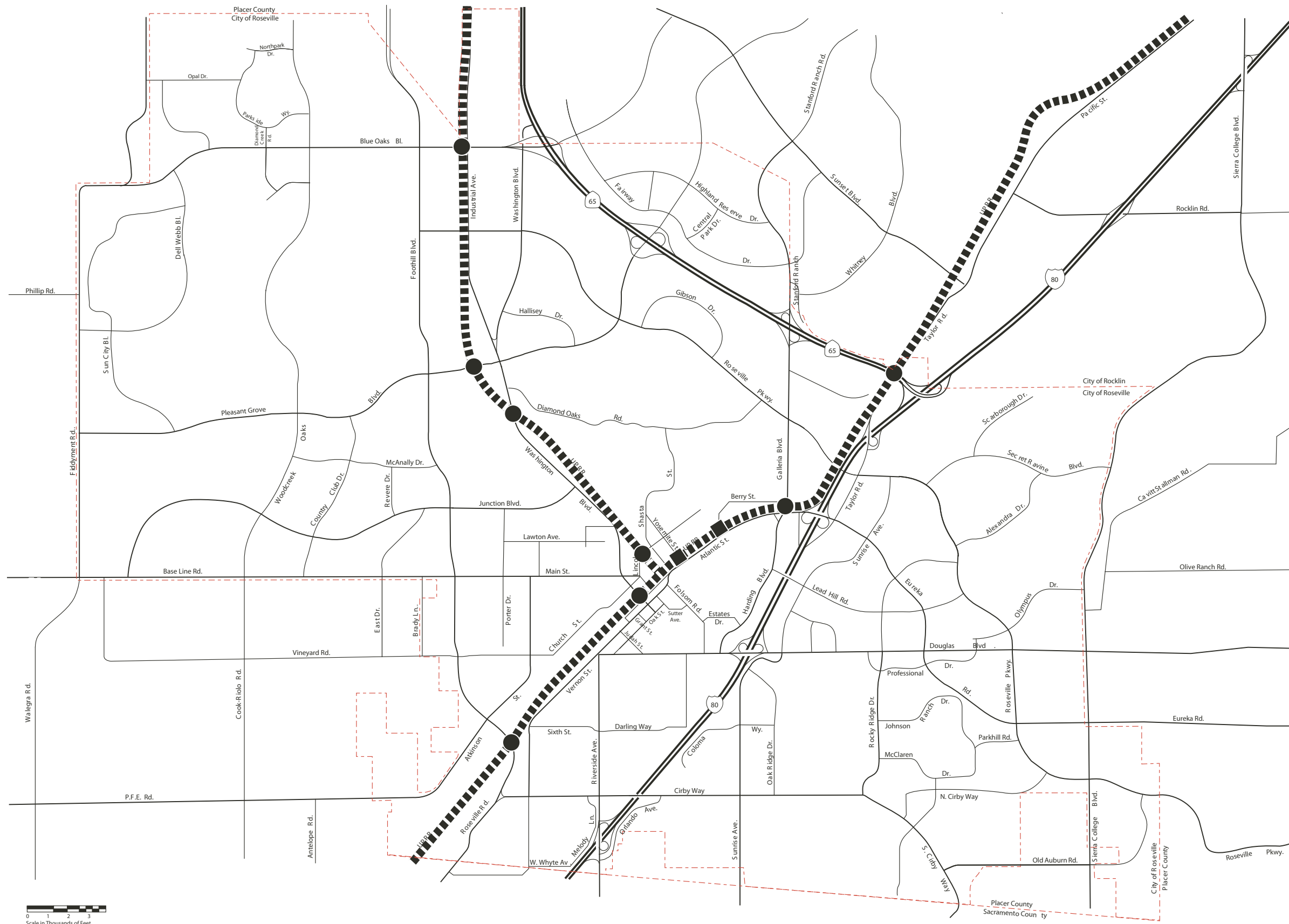
10659-00

Source: DKS Associates

City of Roseville



December 5 fig p2



- ▬▬▬ Union Pacific Transportation Company Mainline
- At-Grade Crossings
- Grade-Separated Crossings



**FIGURE 4.3-6**  
**Existing Railroad Facilities**

10659-00

Source: DKS Associates

City of Roseville



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**■ Local****City of Roseville*****General Plan Level of Service (LOS) Policy***

The City of Roseville level of service policy (General Plan Policy CB-1) calls for maintaining level of service (LOS) C at 70 percent of all signalized intersections in the City during the P.M. peak hour. Compliance with this policy is determined assuming build-out of currently entitled land within the City and 2020 market rate development outside of the City. Other transportation-related General Plan policies are provided in Appendix C.

***City of Roseville Improvement Standards***

Roadway improvements within the City of Roseville must conform to a set of standard plans that detail City standards for pavement width, lighting, drainage, sewer, and other roadside facilities. Roadway facilities associated with the WRSP must meet or exceed these standards.

***Capital Improvement Program (CIP)***

The CIP defines the roadway improvements that are needed to meet the City's General Plan level of service standard. The existing CIP that was adopted in September 2002 is based on build-out of currently entitled City land plus some potential redevelopment of properties within the City's Downtown area and 2020 market rate development outside of the City. The General Plan calls for the CIP to be updated at least every five years or following approval of a significant development. The CIP has been amended several times over the last 10 years as specific plans have been approved.

***Long Range Transit Master Plan***

The City has developed a plan to guide development of both inter- and intra-City transit services through year 2010.

***Short Range Transit Plan***

The SRTP is a state and federally mandated planning document that describes the plans, programs and goals of the transit operator. It has a 5-year planning horizon and is updated biennially. It focuses on the characteristics and capital needs of the existing system, and on committed (funded) expansion plans.

### ***Bikeway Master Plan***

The General Plan calls for the development of a comprehensive bikeway system that would provide connections between the City's major employment and housing areas and between existing and planned bikeways. The Bikeway Master Plan was updated in August 2002. It provides guidelines for the development of a citywide network of bicycle facilities and design standards for new bicycle facilities in Roseville.

### ***Truck Routes***

A number of roadways through the City of Roseville have been designated as truck routes. These routes are described in Section 4.3.2.

### ***Transportation System Management (TSM)***

TSM measures are designed to reduce vehicular travel demand and meet air quality goals. Employers of 50 or more employees within the City of Roseville are required to comply with the City's TSM ordinance and include TSM measures where feasible.

### ***West Roseville Specific Plan***

The WRSP Design Guidelines specify street configurations for all major roadways in the WRSP Area. Cross-sections for these roadways are provided in Appendix O, and described in the Methods section, above.

The WRSP also provides for a network of bike lanes.

The WRSP includes five park and ride lots with 20 parking spaces each, as well as bus turnouts and shelters.

## **4.3.4 Impacts and Mitigation Measures**

The baseline for the analysis in this section is "2020/build-out" conditions without the proposed project. The effects of the SOI amendment on existing conditions are addressed in Appendix Q.

### **■ Standards of Significance**

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area could do any of the following:

**City of Roseville**

- Cause a signalized intersection identified in the September 2002 CIP as functioning at LOS C or better in the P.M. to function at LOS D or worse
- Cause a signalized intersection identified in the September 2002 CIP as functioning at LOS D or E in the P.M. to degrade by one or more LOS category (i.e. from LOS D to LOS E)
- Cause the overall percentage of intersections meeting LOS C at P.M. peak hour to fall below 70 percent

The City's 2002 CIP update included a modification to the City's level of service policy which requires that the City maintain a minimum of 70 percent of its signalized intersections at LOS C or better during the P.M. peak period. The impacts associated with this modification were identified in an EIR prepared in conjunction with the CIP update. That EIR identified all intersections projected to function at less than LOS C at year 2020 assuming build-out of the then current City limits.

As implemented throughout the CIP, the revised General Plan LOS policy may allow additional intersections beyond those identified in the CIP EIR to function at less than LOS C provided the 70 percent is not exceeded. In addition, the EIR identified the potential for intersections which currently function at less than LOS C to degrade to a lower standard. Should either of these occur, the City's General Plan requires a formal action by the City Council at a public hearing to modify the projected LOS at these intersections.

This EIR analysis for Roseville City streets uses both aspects of this LOS policy (LOS at individual intersections and maintaining LOS C at 70 percent of City intersections) when determining the significance of impacts.

- Not meet the policies and guidelines of Roseville's Bikeway Master Plan
- Have a substantial negative impact on transit operations, travel times, and/or circulation

**Other**

- Cause a state highway that is operating at LOS E or better without the WRSP or SOI amendment to operate at LOS F conditions
- Within the unincorporated portions of Placer and Sutter counties and the City of Rocklin that are in the project study area (1) cause a roadway or intersection operating at LOS C or better without the WRSP and SOI amendment to degrade to LOS D or worse or (2) cause a roadway or intersection operating at LOS D or worse without the WRSP or SOI amendment to degrade by one or more level of service
- In unincorporated Placer County, cause a rural 2-lane collector or arterial roadway that carries less than 2,000 daily vehicles without the project to carry more than 2,000 daily vehicles
- Within Sacramento County would (1) cause a roadway segment operating at LOS E or better without the WRSP and SOI amendment to degrade to LOS F or (2) cause a roadway segment

already operating at LOS F without the WRSP and SOI amendment to degrade by at least 0.05 V/C ratio

## ■ **Methods of Analysis**

The development of transportation system needs and impacts is based on the travel demand model originally developed by DKS Associates in 1992 for the City of Roseville and Placer County, which has since been updated and recalibrated. The most recent update was conducted as part of the City of Roseville's 2002 CIP Update, which revalidated the model to 2001 traffic conditions. The model translates land uses into roadway volume projections. Its inputs are estimates of development (i.e., the number of single-family and multi-family dwelling units, and the amount of square footage of various categories of non-residential uses) and descriptions of the roadway and transit systems. The model covers not only the City of Roseville, but also the entire Sacramento region (including the portions of Placer County west of Colfax). The model maintains a general consistency with the trip distribution and mode choice estimates from the regional model used by the Sacramento Area Council of Governments (SACOG).

The travel demand model was used to estimate future "2020" traffic volumes with and without the proposed WRSP and SOI amendment. The outputs of the travel demand model include average daily and peak hour traffic volume forecasts on roadway segments as well as turning movements at intersections. The level of service of Roseville's arterial and collector roadway system is primarily dictated by the capacity and operations of its signalized intersections. For this EIR under the 2020 baseline scenario, levels of service were evaluated at 150 existing and planned signalized intersections throughout the City of Roseville.

It should be noted that the traffic volume forecasts are not based on a simple layering/adding of assumed project-generated traffic volumes onto existing traffic counts. Rather, the City's travel demand model is also used to predict how travel patterns would change if the project land uses is added to existing or build-out land uses. The travel model redistributes trips and can cause traffic on some roadways to decrease and cause changes in "critical" traffic movements at intersections, sometimes at intersections some distance from the SOI Amendment Area.

Therefore, when determining transportation and circulation impacts, the traffic volumes associated with the SOI Amendment Area cannot be determined by simply adding the new volumes attributed to the WRSP and Remainder Area. The Travel Demand Model does not simply add project-related volumes to before-project volumes. When major land uses are added to the model, the model redistributes trips based on changes in regional land use. With changes in jobs and housing, people may change their commuting patterns; therefore, when both the WRSP and Remainder Areas are added to the model,

some trips will remain within the new development. For example, if just the WRSP were built, a person might live in the new WRSP area and commute to somewhere else in Roseville. That person would be represented as trips between the WRSP and Roseville. The same holds true if just the Remainder Area were built. However, if the whole SOI Amendment Area were built, (WRSP plus Remainder Area), a person might live in the WRSP, Area and work in the Remainder Area, or vice versa. That person would, therefore, no longer be represented as trips between the WRSP or Remainder Areas and Roseville. Providing a mixture of jobs and housing can lead to a reduction in trips and trip lengths. The model takes these factors into account and, therefore, does not merely layer trips based on additional development. Redistribution of trips causes changes in volumes throughout the model network, including both increases and decreases in volume on roadways.

### Analysis Scenarios

The traffic associated with development of SOI amendment has been evaluated under existing and future conditions. The City's level of service policy focuses on conditions under full build-out of all vacant land within the City and 2020 "market levels" of development in the rest of the region. Therefore, the evaluation of the traffic impacts in this section focuses on "2020/build-out" conditions with and without the WRSP and SOI Amendment Area. The following scenarios of development are addressed in this section.

- 2020/Build-out Conditions
  - › Without Project
  - › Plus build-out of WRSP
  - › Plus build-out of full SOI Amendment Area

The following cumulative conditions and scenarios are described and evaluated in Chapter 5, CEQA Considerations:

- 2020 Conditions with Kaiser Medical Center Expansion
  - › Without Project with Kaiser Medical Center Expansion
  - › Existing conditions with build-out of WRSP
  - › Existing conditions with build-out of full SOI Amendment Area
- 2020 Conditions with Construction of Placer Parkway

In addition, a qualitative analysis of future roadway conditions with the addition of two projects that are expected to build-out well after 2020 (Placer Vineyards and South Sutter Specific Plan) and two

additional projects that have been discussed, but not formally proposed (Placer Ranch and a university-oriented project west of the SOI Amendment Area).

The following conditions and scenarios are addressed in Appendix Q and are provided for informational purposes, but are not considered to be reasonably likely to occur.

- Existing Conditions
  - › Existing conditions with build-out of WRSP
  - › Existing conditions with build-out of full SOI Amendment Area

**Development Assumptions for the 2020 Build-out Conditions**

The City’s recently adopted CIP Update and modified level of service standard considers traffic levels expected to occur under 2020 development levels, which was defined as build-out of currently entitled City land plus some potential redevelopment of properties within the City’s Downtown area and 2020 market rate development outside of the City. The build-out development forecasts for each of Roseville’s planning areas are summarized in Table 4.3-5.

Planning Area	Dwelling Units		1,000 Sq Ft (KSF)		
	SF	MF	Retail	Office	Industrial
Del Webb SP	3,223	100	89.3	0.0	0.0
Highland Reserve North SP	1,188	688	1,733.3	0.0	0.0
Infill Area	12,582	5,926	5,017.3	2,871.6	12,491.4
North Central Roseville SP	2,171	2,263	5,088.8	2,761.6	797.2
Northeast Roseville SP	616	795	2,603.4	4,795.1	0.0
North Industrial Area	351	0	0.0	0.0	6,389.4
North Roseville SP	4,293	845	500.1	184.0	0.0
Northwest Roseville SP	6,691	2,391	1,122.9	537.1	97.1
Southeast Roseville SP	1,804	1,671	792.9	1,131.7	0.0
Stoneridge SP	2,253	629	386.5	59.3	0.0
<b>Total</b>	35,172	15,308	17,334.5	12,340.3	19,775.1

SOURCE: DKS Associates 2003

Development assumptions outside the City of Roseville, particularly in adjacent communities, also have an important impact on the forecasts of travel patterns within the City. The CIP Update has incorporated the latest 2020 development forecasts for each jurisdiction in Placer County. Build-out of Area 1 of the proposed Placer Vineyards project in West Placer County was assumed to be developed by 2020 and thus was included in this development scenario. Outside of Placer County, the CIP Update used 2020 land use and trip generation estimates prepared by the Sacramento Area Council of Governments (SACOG) for the 1999 Metropolitan Transportation Plan (MTP), except in South Sutter County where build-out of

Phase 1 of the South Sutter County Specific Plan was assumed. Table 4.3-6 presents the 2020 assumptions for land uses in other jurisdictions.

**Table 4.3-6 Roseville Model Assumptions: 2020 Land Uses in Other Areas**

Region	Single Family DU	Single Family DU	Age Restricted DU	Total Residential DU	Commercial KSF	Office KSF	Industrial KSF
Rocklin	15,872	5,742	1,172	22,786	4,810	2,792	3,323
Lincoln	11,225	3,073	6,919	21,217	2,262	1,539	7,163
Placer Vineyards	7,006	651	0	7,657	920	288	0
Sunset Industrial	5	0	0	5	495	822	5,046
Granite Bay	8,974	888	0	9,862	1,043	253	103
Sunset Industrial	182	80	0	262	3	1	0
Lincoln/Sunset	436	56	0	492	1	94	335

SOURCE: DKS Associates 2003

### Trip Generation

#### SOI Amendment Area

The trip generation for the full SOI Amendment Area is a combination of trip generation for the WRSP and Remainder Area, as shown in Table 4.3-7 and Table 4.3-8 and as described below.

**Table 4.3-7 Estimated Trip Generation West Roseville Specific Plan**

Land Use	Units	Daily Trip Ends per Unit	Daily Trips
Single-Family Residential	5,866 DU	9	52,794
Multi-Family Residential	1,844 DU	6.5	11,986
Age Restricted Residential	720 DU	3.3	2,376
Subtotal Residential	8,430 DU		67,156
Retail	710.0 KSF	35	24,851
Office	60.1 KSF	17.7	1,064
Industrial	1,252.4 KSF	7.6	9,518
Church	73.2 KSF	9.3	681
Subtotal – Private Non-residential	2,157 KSF		37,658
Public/Quasi Public	61.8 KSF	25	1,545
Elementary School <sup>1</sup>	2,400 Students	0.8	1,920
Middle School <sup>2</sup>	1,000 Students	0.9	900
High School <sup>3</sup>	1,800 Students	1.2	2,160
Parks	248.4 Acres	2.2	546
Subtotal – Public Uses			7,065
<b>Initial Estimate of Total Daily Vehicle Trip Ends Generated by WRSP</b>			<b>110,341</b>

NOTES:

DU = dwelling unit and KSF = 1,000 square feet

1. Assumes 600 students per elementary school

2. Assumes 1,000 per middle school

3. Assumes 1,800 students per high school

Land use based on WRSP described in the Notice of Preparation, which vary slightly from the WRSP described in Chapter 2 of this Draft EIR. The resulting difference in number of trips is a less-than-one percent increase.

SOURCE: DKS Associates 2003

**Table 4.3-8 Estimated Trip Generation**

Land Use	Units	Daily Trip Ends per Unit	Daily Trip Ends	
<b>Remainder Area</b>				
Single-Family Residential	5,916	DU	9	53,244
Multi-Family Residential	1,487	DU	6.5	9,666
<b>Subtotal—Residential</b>	<b>7,403</b>	<b>DU</b>		<b>62,910</b>
Retail	589	KSF	35	20,612
Office	647	KSF	17.7	11,450
<b>Subtotal—Private Nonresidential</b>	<b>1,236</b>	<b>KSF</b>		<b>32,060</b>
Elementary School <sup>1</sup>	2,400	Students	0.8	1,920
Middle School <sup>2</sup>	1,000	Students	0.9	900
Parks	496	Acres	2.2	1,090
<b>Subtotal—Public Uses</b>				<b>3,910</b>
			<i>Initial Estimate of Total Daily Vehicle Trip Ends from Remainder Area</i>	98,882
			<i>Initial Estimate of Total Daily Vehicle Trip Ends Generated by WRSP<sup>4</sup></i>	110,341
			<i>Initial Estimate of Total Daily Vehicle Trip Ends of Full SOI Amendment</i>	209,223

NOTES:

DU = dwelling unit and KSF = 1,000 square feet

1. Assumes 600 students per elementary school
2. Assumes 1,000 per middle school
3. Assumes 1,800 students per high school
4. Refer to Table 4.3-7 for trip generation of WRSP

The land use assumptions for the Remainder Area are identical to those presented in both the Notice of Preparation and Chapter 2 of this Draft EIR.

SOURCE: DKS Associates 2003

The estimate of the trip generation of the full SOI Amendment Area is about 209,223 daily vehicle trip ends. Note that one vehicle trip contains two trip ends, and origin trip end and a destination trip end. Of these trip ends, approximately 134,000 vehicles would enter or exit the SOI Amendment Area on a daily basis and use roadways outside of the SOI Amendment Area. The remaining trip ends are represented by trips beginning and ending within the SOI Amendment Area.

**West Roseville Specific Plan**

The WRSP trip generation was estimated with the trip generation rates that were used in developing Roseville’s CIP, which are generally consistent with those in the Institute of Transportation Engineers’ (ITE) publications on trip generation, as shown in Table 4.3-7. The estimate of the WRSP’s trip generation is about 110,341 daily trip ends. Of these trip ends, approximately 71,000 vehicles would enter or exit the WRSP area on a daily basis and use roadways outside the WRSP area. The remaining trip ends are represented by trips beginning and ending within the WRSP area.

**Remainder Area**

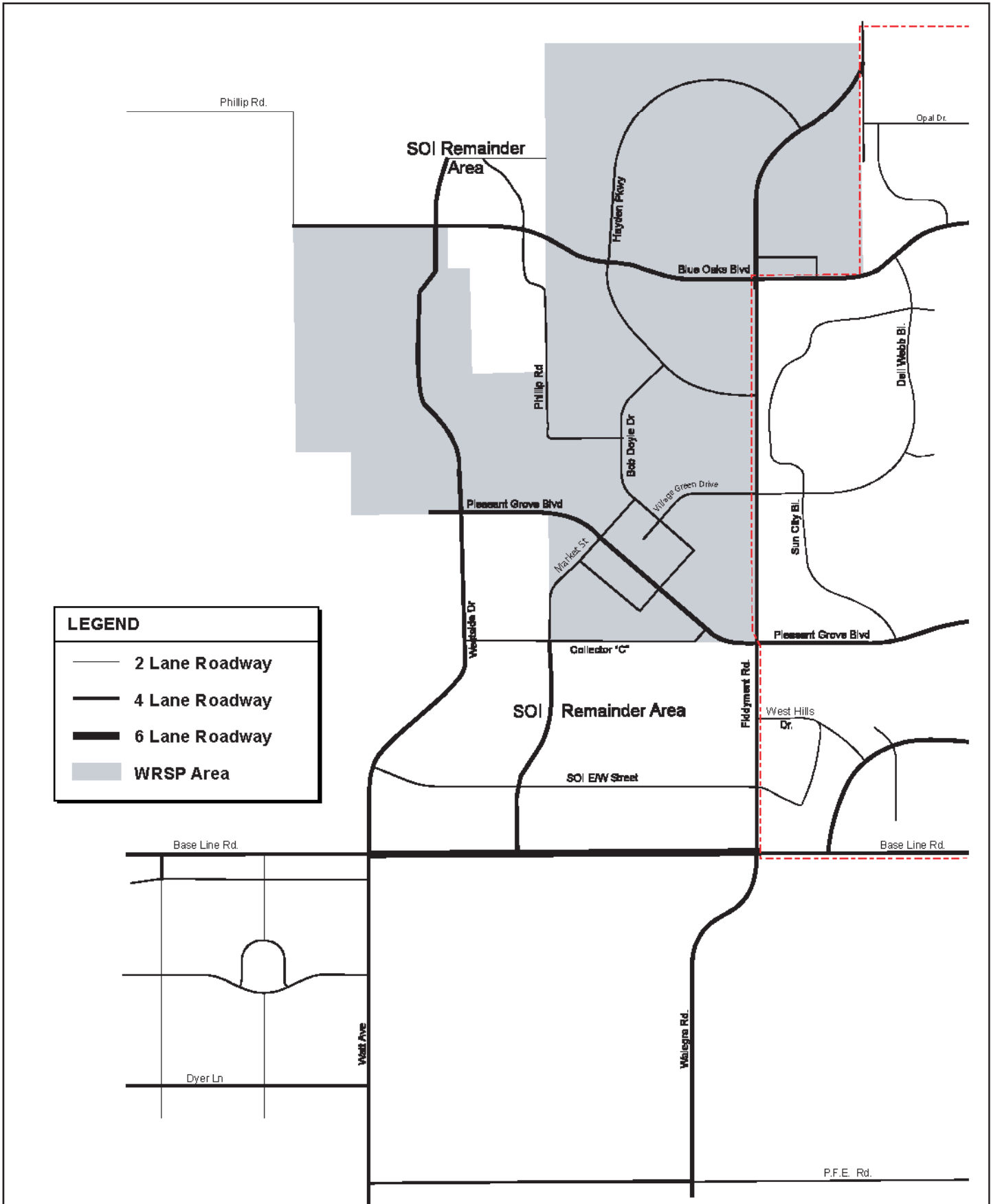
The trips generated by build-out of the Remainder Area were estimated with the trip generation rates that were used in developing Roseville's CIP, as shown in Table 4.3-8. The estimate of the Remainder Area's trip generation is about 98,882 daily trip ends. Of these trip ends, approximately 63,000 vehicles would enter or exit the Remainder Area on a daily basis and use roadways outside the Remainder Area. The remaining trip ends are represented by trips beginning and ending within the Remainder Area.

**Roadway Improvement Assumptions****SOI Amendment**

The analysis of the full SOI amendment scenario is based on the assumption that the roadways that are part of the development of the full SOI amendment are added to the 2020 CIP roadway network. This includes the roadway network proposed for the WRSP (shown in Figure 2-7 [West Roseville Specific Plan Major Roadway/Circulation Plan] in Chapter 2 [Project Description]) and a potential roadway system within the Remainder Area. Although a specific roadway network has not been defined, an assumed roadway system for that area was provided by the City and is shown in Figure 2-7 in Chapter 2. It is assumed that a similar backbone road system would be provided as part of any future development proposal for the Remainder Area.

The assumed roadway network within the Remainder Area consists of the extension of the north/south arterial north of Baseline Road near the terminus of Watt Avenue to meet up with the proposed West Side Drive, the extension of Market Street from Baseline Road to the proposed Village Green Drive, and Streets A Northwest and B Southeast connecting Fiddymment Road with West Side Drive. As these roadways are speculative in nature, detailed cross-sections and functional classifications have not been developed. Roadway lanes have been assumed so that traffic forecasts could be prepared. For forecasting purposes, the north/south Arterial/West Side Drive and Dyer Road are assumed to be four lanes and Village Green Drive and the two unnamed east/west streets are assumed to be two lanes within the Remainder Area. These potential roadways are shown in Figure 4.3-7 (Local Roadway Network WRSP and SOI Remainder Area).

It was assumed that with full development of the SOI Amendment Area, Fiddymment Road from Pleasant Grove Boulevard to Baseline Road would be annexed into the City of Roseville and would not be part of Placer County's roadway system. Fiddymment Road is assumed to be four lanes from Baseline Road to North of Pleasant Grove Boulevard and four lanes from the north end of Pleasant Grove Boulevard at the north end of the project site. Baseline Road is assumed to be six lanes from Watt Avenue to Fiddymment



**FIGURE 4.3-7**  
**Local Roadway Network WRSP and SOI Remainder Area**

Source: DKS Associates

Not to Scale



Road. For the remainder of the region, the roadway improvements assumed under the 2020 Without Project scenario were assumed.

### **West Roseville Specific Plan**

The analysis of the WRSP scenario is based on the assumption that the roadways that are proposed for the WRSP are added to the 2020 CIP roadway network. The roadway network shown in the Project Description (see Figure 2-7 in Chapter 2, Project Description) was assumed to be implemented consistent with the cross sections shown in the West Roseville Specific Plan (2003).

These roadways include the extension of Blue Oaks Boulevard and Pleasant Grove Boulevard from Fiddymment Road to the western portion of the WRSP Area. Blue Oaks would be extended as a four-lane arterial, but right-of-way would be reserved for six lanes. Pleasant Grove would be extended as a four-lane arterial from its current terminus in a northwest direction through the proposed Village Center to West Side Drive. West of West Side Drive, Pleasant Grove Boulevard will be constructed as a two-lane Collector roadway with right-of-way reserved for possible expansion to four-lanes. West Side Drive would be constructed as a four-lane arterial within the WRSP Area, but right-of-way would be preserved for six lanes, as this roadway could provide access to the proposed Placer Parkway. Two-lane collector roadways within the WRSP Area would include Hayden Parkway, Village Green Drive, Bob Doyle Drive, Village Green Drive, and Phillip Road. A portion of the existing Phillip Road would be abandoned within the WRSP site and would be realigned as a two-lane modified collector as described in the Project Description. Village Green Drive would meet Fiddymment Road at its current intersection with Del Webb Boulevard. These potential roadways are shown in Figure 4.3-7. As shown in Figure 2-13 (West Roseville Specific Plan Blue Oaks Alignment [Alternative 1]) and Figure 2-14 (West Roseville Specific Plan Blue Oaks Alignment [Alternative 2]) in Chapter 2 (Project Description), there are two potential alignments for Blue Oaks Boulevard north of the City-owned property. The first alignment would transect several parcels to the south. As an alternative, the road could be shifted to the north. Because these alignments would provide the same connections, they would have the same operational effects on traffic. Therefore, they are not evaluated separately in the traffic analysis.

Existing roadways adjacent to the WRSP were assumed to have geometries consistent with the Roseville CIP. Improvements to existing roadways (beyond those in the recently adopted CIP) assumed to be in place include widening Fiddymment Road to four lanes directly adjacent to the project site (from the northern boundary of the project to Pleasant Grove Boulevard). For the remainder of the region, the roadway improvements assumed under the 2020 Without Project scenario were assumed.

## Roadway Analysis

The City of Roseville’s LOS policy focuses on the operations of its signalized intersections during the P.M. peak hour because the P.M. peak hour typically represents the highest traffic period of the day. Placer and Sutter counties and the City of Rocklin use a combination of peak hour intersection analysis, plus roadway segment analysis based on daily traffic volumes, to assess their roadway networks. Table 4.3-9 shows the daily volume thresholds that were used in the roadway segment analysis for those jurisdictions.

**Table 4.3-9 Roadway Segment Level of Service Thresholds**

Facility Type	Average Daily Traffic Volume Threshold				
	LOS A	LOS B	LOS C	LOS D	LOS E
Two-Lane Collector	9,000	10,700	12,000	13,500	15,000
Two-Lane Arterial	10,800	12,600	14,400	16,200	18,000
Four-Lane Arterial	21,600	25,200	28,800	32,400	36,000
Six-Lane Arterial	32,400	37,800	43,200	48,600	54,000
Four-Lane Freeway	37,600	52,800	68,000	76,000	80,000
Six-Lane Freeway	56,400	79,200	102,000	114,000	120,000
Eight-Lane Freeway	75,200	105,600	136,000	152,000	160,000

SOURCE: DKS Associates 2003

## 2020 Without Project Conditions

### Roseville’s Capital Improvement Program

To meet the transportation needs of existing and anticipated development in the City of Roseville, as well as regional growth that impacts the City’s roadway system, a detailed transportation analysis and EIR was undertaken in 2002 as part of an update of Roseville’s Capital Improvement Program (CIP). The General Plan calls for the CIP to be updated a minimum of every five years or with the approval of a significant development. The CIP has been amended several times over the last ten years as specific plans have been approved. The WRSP is a significant development and its approval would clearly trigger the need to update the City’s CIP.

The CIP EIR analyzed future traffic impacts and roadway needs based on build-out of currently entitled land within the City plus some potential redevelopment of properties within the City’s Downtown area and 2020 market rate development outside of the City. As part of that update, the EIR also evaluated impacts associated with a revised roadway level of service policy. That revised policy calls for the City to maintain a LOS C standard at 70 percent of all signalized intersections in the City during the P.M. peak hour through year 2020.

### **CIP Funding Sources**

The City's CIP, which was initially adopted in 1989, defines roadway improvements that would be needed to meet the City's level of service policy through year 2020. The total cost of these roadway improvements is estimated at \$185 million. The City of Roseville has adopted a Traffic Mitigation Fee that, in conjunction with other identified funding sources, will fully fund these improvements. As noted in the previous section, the roadway improvements contained in the CIP have been identified to mitigate future traffic impacts resulting from build-out of existing entitled land within the City and 2020 growth outside of the City. The City's traffic impact fee program collects funds from new development in the City to finance these improvements. Fees are calculated separately for each of the City's specific plan areas, the North Industrial Area and the Infill Area. The fees vary by land use type in relationship to the relative traffic generated by each type of development. The intent of the fee program is to provide an equitable means of ensuring that future development contributes its fair share to roadway improvements and fully mitigates for their traffic impacts so that the City's General Plan Circulation Policies and quality of life can be maintained. The WRSP and any development in the Remainder Area would be obligated to participate in the CIP on a "fair share" basis.

In addition to traffic impact fees, funding for some CIP improvements will be derived from a number of other identified sources. These include developer funded projects, assessment districts, redevelopment funds, and state and regional sources. Traffic impact fees are projected to fund \$168 million, or 91 percent, of the total improvement costs. Since 1990, about \$70 million, or 38 percent, of the roadway improvements identified as being needed by year 2015 have been constructed.

In addition to the City's CIP, four freeway interchanges on SR-65 will be funded through separate traffic impact fees through the Highway 65 Joint Powers Authority (JPA). The benefit area that contributes to the Highway 65 JPA includes the entire cities of Roseville and Rocklin, and the Sunset Industrial Area of Placer County.

The following information is intended to summarize traffic conditions under 2020 conditions without the SOI amendment (WRSP and Remainder Area). This condition is defined as the latest development forecasts for the City of Roseville's 2020 CIP, which assumes build-out of all land uses in the City plus the roadway improvement projects needed to meet the City's level of service standards. This discussion, which describes the roadway needs analysis under the new 2020 CIP, will be helpful to the reader when reviewing the following section on impacts associated with the WRSP or Remainder Area, because the impact analysis focuses on the incremental differences between the 2020 Without Project scenario and the 2020 Plus WRSP or Full SOI Amendment.

The 2020 CIP analysis identified acceptable and feasible roadway improvements that would meet the level of service policy in the City's General Plan. To that end, the 2020 CIP includes a large number of roadway widening and intersection improvements that would be needed under full build-out of all vacant land in the City. The 2020 CIP roadway needs were based on a detailed analysis of afternoon peak hour traffic operations at 144 existing and planned signalized intersections throughout the City.

Since the CIP was adopted in September 2002, the City has also found that traffic signals will be installed at the following six intersections in addition to those assumed in the CIP analysis:

- Fairway Drive and Target Entrance
- Lead Hill Boulevard and Wal-Mart Entrance
- Pleasant Grove Boulevard and Wal-Mart Entrance
- Roseville Parkway and Trestle Drive
- Blue Oaks Boulevard and HP Road A
- Blue Oaks Boulevard and HP Road B

These six intersections will increase the 144 existing and planned signalized intersections assumed in the 2020 CIP to 150 under the 2020 Without Project scenario.

Outside the City of Roseville, the 2020 CIP analysis assumed that all of the 2020 transportation improvements contained in the Metropolitan Transportation Plan (MTP) would be implemented. One of those assumed improvement in the CIP analysis was the widening of Baseline Road by Placer County from two to four travel lanes between Fiddymont Road and the Sutter County line by 2020. Since the CIP was adopted in September 2002 Placer County has informed the City that under the County's CIP, Baseline Road will be widened to six lanes between Fiddymont Road and Watt Avenue by 2020. The CIP also assumed that Phase 1 of the proposed Placer Vineyards project would be developed by 2020. The Placer Vineyards project proposes to widen Baseline Road adjacent to that development, which would result in six lanes for a portion of Baseline Road west of Watt Avenue. Incorporating this revised roadway improvement assumption into the 2020 Without Project scenario required revised travel forecasts from those used to evaluate the 2020 CIP. Since the CIP was adopted in September 2002, it was also found that there were a few minor errors in the travel demand model's roadway network and land use inputs. These errors were also corrected in the 2020 Without Project Scenario. The CIP does not assume any development associated with the De La Salle/AKT University proposal.

These changes have resulted in changes to the without project scenario as noted below. Additional mitigation was identified at the intersection of Judah Street and Douglas Boulevard that could improve

traffic operations under 2020 Without Project scenario from LOS D to LOS C conditions. This simple improvement involves restriping the southbound Judah Street approach to that intersection to allow both a left-turn lane and a left/through/right lane.

Daily and P.M. peak hour volumes were estimated by the City’s travel demand model under the revised 2020 assumptions for roadways throughout the City of Roseville and in surrounding communities. The daily traffic volumes within the City under the 2020 Without Project scenario are shown in Figure 4.3-8 (Daily Traffic Volumes Under 2020 No Project Conditions).

Table 4.3-10 provides the estimated levels of service at all of the City’s existing and planned signalized intersections under the 2020 Without Project scenario. As shown in Table 4.3-11, this scenario would provide LOS C or better conditions for all hours of the day at 107 of the City’s 150 major signalized intersections. This represents 71.3 percent of the City’s signalized intersections. Of the other 43 intersections, 23 would operate at LOS D, 14 would operate at LOS E and 6 would operate at LOS F. The following intersections have changed LOS based on the minor network and land use changes implemented since the CIP was adopted and the additional mitigation measure that was identified at the intersection of Judah and Douglas.

- Harding Boulevard/Douglas Boulevard                   LOS E (1.00) to LOS F (1.04)
- Galleria/Antelope Creek                                       LOS C (0.81) to LOS D (0.82)
- Washington Boulevard/Pleasant Grove Boulevard   LOS D (0.90) to LOS E (0.91)
- Taylor Road/Roseville Parkway                           LOS C (0.81) to LOS D (0.82)
- Sierra Gardens/Douglas Boulevard                   LOS D (0.85) to LOS C (0.79)
- Douglas/Judah   LOS D (0.89) to LOS C (0.72)

**Table 4.3-10                   City of Roseville Signalized Intersections Levels of Service  
2020 Without Project Scenario**

Roadway		LOS	V/C
North/south	East/west		
Tiger/Center	Atlantic Street	C	0.72
Wills	Atlantic Street	C	0.76
Yosemite	Atlantic Street	D	0.84
Baseline Road	Junction Boulevard	A	0.58
Del Webb Boulevard	Blue Oaks Boulevard	A	0.25
Diamond Creek	Blue Oaks Boulevard	A	0.57
Fiddymont Road	Blue Oaks Boulevard	A	0.32
Prairie Woods	Blue Oaks Boulevard	A	0.46
SR-65 NB Off	Blue Oaks Boulevard	B	0.68
Washington Boulevard	Blue Oaks Boulevard	B	0.66
Woodcreek Oaks	Blue Oaks Boulevard	C	0.71
Champion Oaks	Cirby Way	C	0.78

**Table 4.3-10 City of Roseville Signalized Intersections Levels of Service 2020 Without Project Scenario**

Roadway		LOS	V/C
North/south	East/west		
Melody	Cirby Way	C	0.72
Northridge/Lindsay	Cirby Way	B	0.62
Oak Ridge Drive	Cirby Way	C	0.71
Orlando/Marlin	Cirby Way	C	0.75
Parkview	Cirby Way	A	0.55
San Simeon	Cirby Way	B	0.68
Vernon Street	Cirby Way	E	0.98
Eureka Road	Douglas Boulevard	D	0.87
Folsom Road	Douglas Boulevard	C	0.72
Harding Boulevard	Douglas Boulevard	F	1.04
I-80 WB Off	Douglas Boulevard	C	0.81
Judah	Douglas Boulevard	C	0.72
Keehner/Donner	Douglas Boulevard	C	0.78
Park	Douglas Boulevard	A	0.56
Riverside Avenue	Douglas Boulevard	E	0.95
Rocky Ridge Drive	Douglas Boulevard	D	0.88
Roseville Parkway	Douglas Boulevard	C	0.81
Santa Clara Drive	Douglas Boulevard	D	0.90
Sierra College	Douglas Boulevard	D	0.88
Sierra Gardens	Douglas Boulevard	C	0.79
Target	Douglas Boulevard	B	0.65
Eureka Road	Deer Valley	B	0.67
Eureka Road	Lead Hill Boulevard	D	0.89
Ashland	Eureka Road	A	0.51
Central Park	Fairway Drive	A	0.55
Five Star	Fairway Drive	A	0.45
Home Depot	Fairway Drive	B	0.68
Fiddymment Road	Baseline Road	D	0.86
Fiddymment Road	Opal Drive	A	0.40
Fiddymment Road	Del Webb Boulevard	A	0.25
Foothills Boulevard	Albertsons	A	0.55
Foothills Boulevard	Atkinson Road	A	
Foothills Boulevard	Blue Oaks Boulevard	C	0.81
Foothills Boulevard	Cirby Way	E	0.94
Foothills Boulevard	H.P. South	C	0.78
Foothills Boulevard	Junction Boulevard	D	0.86
Foothills Boulevard	Village Green Drive/Baseline	D	0.86
Foothills Boulevard	McAnally	C	0.79
Foothills Boulevard	Mistywood/NEC	C	0.78
Foothills Boulevard	Pleasant Grove	D	0.87
Foothills Boulevard	Rand/Pilgrims	B	0.70
Foothills Boulevard	Roseville Pkwy/HP	C	0.74
Foothills Boulevard	Vineyard Road	D	0.89
Galleria	Antelope Creek	D	0.82
Galleria	Berry	D	0.85
Harding Boulevard	Estates Road	E	0.94
Harding Boulevard	Lead Hill Boulevard	E	0.92
Harding Boulevard	Roseville Square	A	0.50

**Table 4.3-10 City of Roseville Signalized Intersections Levels of Service 2020 Without Project Scenario**

Roadway		LOS	V/C
North/south	East/west		
Harding Boulevard	Wills Road	D	0.89
I-80 WB On	Atlantic Street	C	0.75
Americana	Junction Boulevard	A	0.38
Country Club	Junction Boulevard	A	0.60
Park Regency	Junction Boulevard	A	0.40
Porter	Junction Boulevard	A	0.58
Revere	Junction Boulevard	A	0.51
Stoncrest	Junction Boulevard	A	0.37
Lincoln Street	Oak Street	C	0.75
Country Club	Pleasant Grove	A	0.57
Fiddymont Road	Pleasant Grove	A	0.59
Hallisey	Pleasant Grove	B	0.66
SR-65 NB Off	Pleasant Grove	A	0.56
SR-65 SB Off	Pleasant Grove	A	0.52
Sun City Boulevard	Pleasant Grove	A	0.44
Washington Boulevard	Pleasant Grove	E	0.91
Woodcreek Oaks	Pleasant Grove	B	0.69
Pleasant Grove	Fairway Drive	C	0.75
Pleasant Grove	Highland Drive	A	0.51
Roseville Pkwy	Pleasant Grove	E	0.95
Riverside Avenue	Cirby Way	E	0.97
Riverside Avenue	Darling Way	D	0.90
Riverside Avenue	I-80 WB Off ramp	A	0.44
Rocky Ridge Drive	Cirby Way	B	0.67
Rocky Ridge Drive	Eureka Road	C	0.71
Rocky Ridge Drive	Lead Hill Boulevard	D	0.89
Rocky Ridge Drive	Maidu	B	0.69
Rocky Ridge Drive	McLaren	B	0.66
Rocky Ridge Drive	Professional	C	0.73
Roseville Parkway	Alexandria	A	0.44
Roseville Parkway	Eureka Road	C	0.73
Roseville Parkway	Lead Hill Boulevard	B	0.61
Roseville Parkway	Olympus Drive	D	0.87
Roseville Parkway	Rocky Ridge Drive	A	0.59
Roseville Parkway	Secret Ravine	B	0.63
Roseville Parkway	Village/Slade	B	0.61
Creekside	Roseville Parkway	C	0.73
Galleria	Roseville Parkway	F	1.13
Gibson	Roseville Parkway	C	0.78
North Cirby	Roseville Parkway	C	0.71
Old Auburn Road	Roseville Parkway	B	0.61
Reserve Drive	Roseville Parkway	E	0.96
Sierra College	Roseville Parkway	D	0.83
Taylor Road	Roseville Parkway	D	0.82
Washington Boulevard	Roseville Parkway	C	0.81
West Mall	Roseville Parkway	B	0.69
Sierra College	Eureka Road	C	0.77
Sierra College	Indigo Creek	C	0.74

**Table 4.3-10 City of Roseville Signalized Intersections Levels of Service 2020 Without Project Scenario**

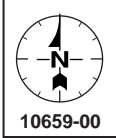
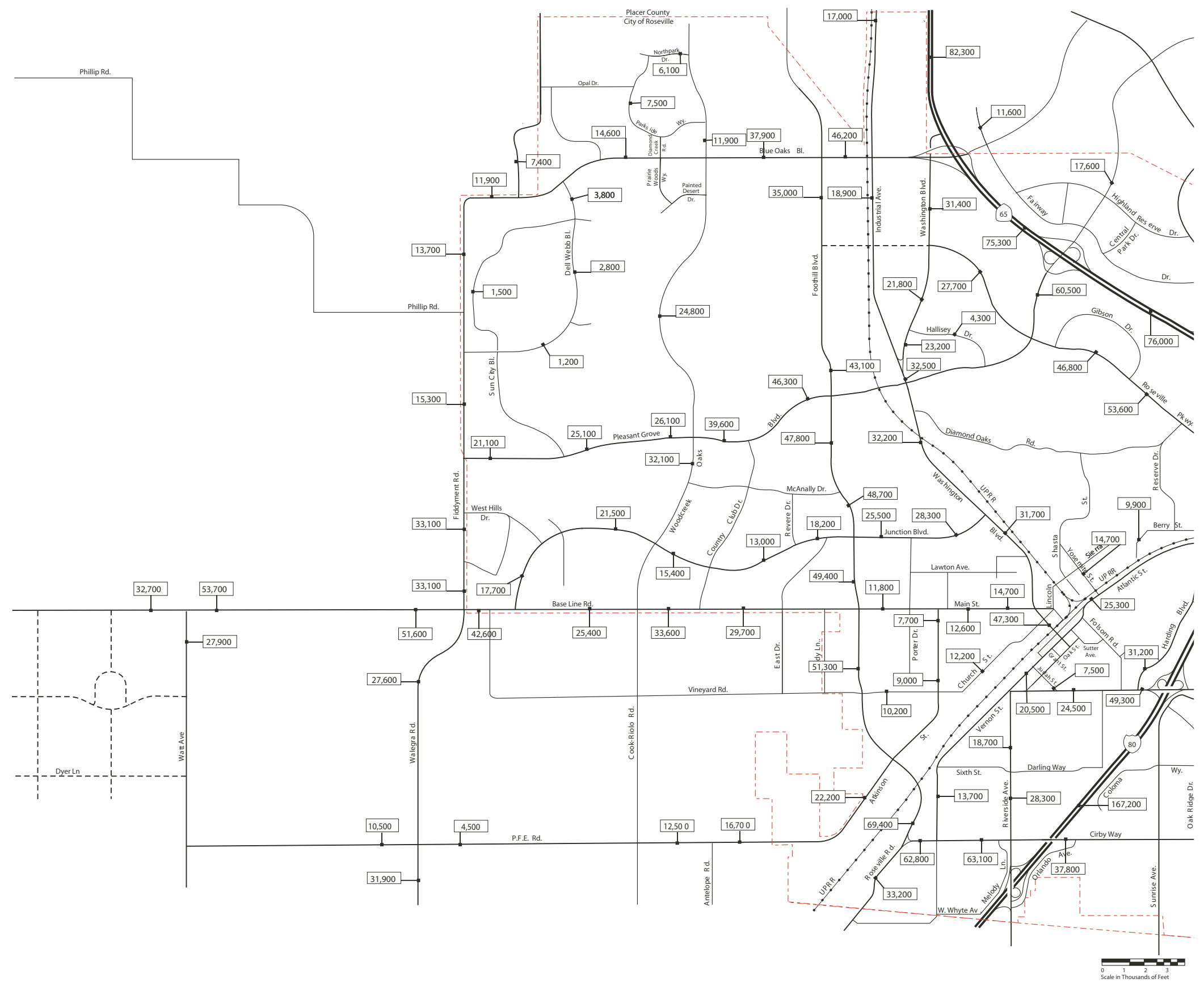
Roadway		LOS	V/C
North/south	East/west		
Sierra College	Old Auburn Road	C	0.78
Sierra College	Olympus Drive	B	0.71
Sierra College	Secret Ravine	A	0.55
South Cirby Way	Old Auburn Road	D	0.87
Stanford Ranch	Fairway Drive	B	0.63
Stanford Ranch	Five Star Boulevard	C	0.80
Stanford Ranch	Highlands Drive	B	0.61
Stanford Ranch	SR-65 NB On	B	0.68
Stanford Ranch/Galleria	SR-65 SB On	C	0.73
Sunrise Avenue	Automall	C	0.73
Sunrise Avenue	Cirby Way	F	1.09
Sunrise Avenue	Coloma Way	F	1.09
Sunrise Avenue	Douglas Boulevard	E	0.99
Sunrise Avenue	Eureka Road	F	1.09
Sunrise Avenue	Frances	B	0.68
Sunrise Avenue	Kensington	D	0.88
Sunrise Avenue	Lead Hill Boulevard	F	1.02
Sunrise Avenue	Oak Ridge Drive	E	0.95
Sunrise Avenue	Roseville Pkwy	B	0.65
Sunrise Avenue	Sierra Gardens	D	0.85
Sunrise Avenue	Suntree	B	0.62
Taylor Road	Eureka Road	E	0.94
Grant Street	Vernon Street	E	0.91
Judah	Vernon Street	A	0.58
Lincoln Street	Vernon Street	D	0.90
Washington Boulevard	Diamond Oaks	B	0.69
Washington Boulevard	Hallisey	A	0.46
Washington Boulevard	Industrial Avenue	B	0.61
Washington Boulevard	Junction Boulevard	C	0.80
Washington Boulevard	Village Green Drive	E	0.98
Washington Boulevard	Oak Street	A	0.58
Washington Boulevard	Sawtell	C	0.74
Woodcreek Oaks	Baseline Road	C	0.74
Woodcreek Oaks	Canevari Road	A	0.56
Woodcreek Oaks	Junction Boulevard	A	0.56
Woodcreek Oaks	McAnally	B	0.64
Target Entrance	Fairway Drive	C <sup>2</sup>	
WalMart Entrance	Lead Hill Boulevard	C <sup>2</sup>	
Pleasant Grove Boulevard	WalMart Entrance	C <sup>2</sup>	
Roseville Parkway	Trestle Drive	C <sup>2</sup>	
HP Road A	Blue Oaks Boulevard	C <sup>2</sup>	
HP Road B	Blue Oaks Boulevard	C <sup>2</sup>	

NOTES:

Intersections operating at LOS D or worse conditions are shaded.

Intersection that the City intends to signalize and ones that would have relatively low "minor street" volumes that would clearly allow LOS C or better conditions at build-out of the City.

SOURCE: DKS Associates 2002



**FIGURE 4.3-8**  
**Daily Traffic Volumes under 2020 No Project Conditions**

10659-00

Source: DKS Associates

City of Roseville



11x17 b&w fig2

**Table 4.3-11 City of Roseville Number of Intersections Operating at Los C or Better 2020 with Existing 2020 CIP**

Level of Service	Without Project		SOI Amendment Area		WRSP	
LOS A-C	107	71.3%	117	70.1%	112	70.9%
LOS D	23	15.3%	25	15.0%	22	13.9%
LOS E	14	9.3%	16	9.6%	17	10.8%
LOS F	6	4.0%	9	5.4%	7	4.4%
<b>Total Intersections</b>	<b>150</b>	<b>100%</b>	<b>167</b>	<b>100%</b>	<b>158</b>	<b>100%</b>

SOURCE: DKS Associates 2003

### Impacts

Impacts and mitigation measures for the SOI amendment, including the WRSP and Remainder Area are provided below. Because the Remainder Area is not likely to develop independently without the WRSP, the impacts of the Remainder Area are not considered separately from the SOI Amendment Area.

<b>IMPACT 4.3-1: INCREASED TRAFFIC ON CITY OF ROSEVILLE ROADWAYS.</b>			
<b>Applicable Policies and Regulations:</b>	General Plan Policy CB-1		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.3-2 (Pay fair share of identified improvements) (WRSP) MM 4.3-1 (Fair share policies) (Remainder Area)	MM 4.3-2 (Pay fair share of identified improvements)	MM 4.3-1 (Fair share policies)
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable

### SOI Amendment/Remainder Area

The City’s travel demand model was used to estimate the change in daily and P.M. peak hour traffic volumes on roadways throughout the City of Roseville and in surrounding communities due to development of the SOI amendment under 2020 conditions. Daily traffic under 2020 Without Project scenario are shown in Figure 4.3-8. The daily traffic volumes within the City under the 2020 Plus SOI Amendment scenario are shown in Figure 4.3-9 (Daily Traffic Volumes Under 2020 Plus SOI Amendment Area).

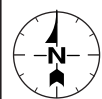
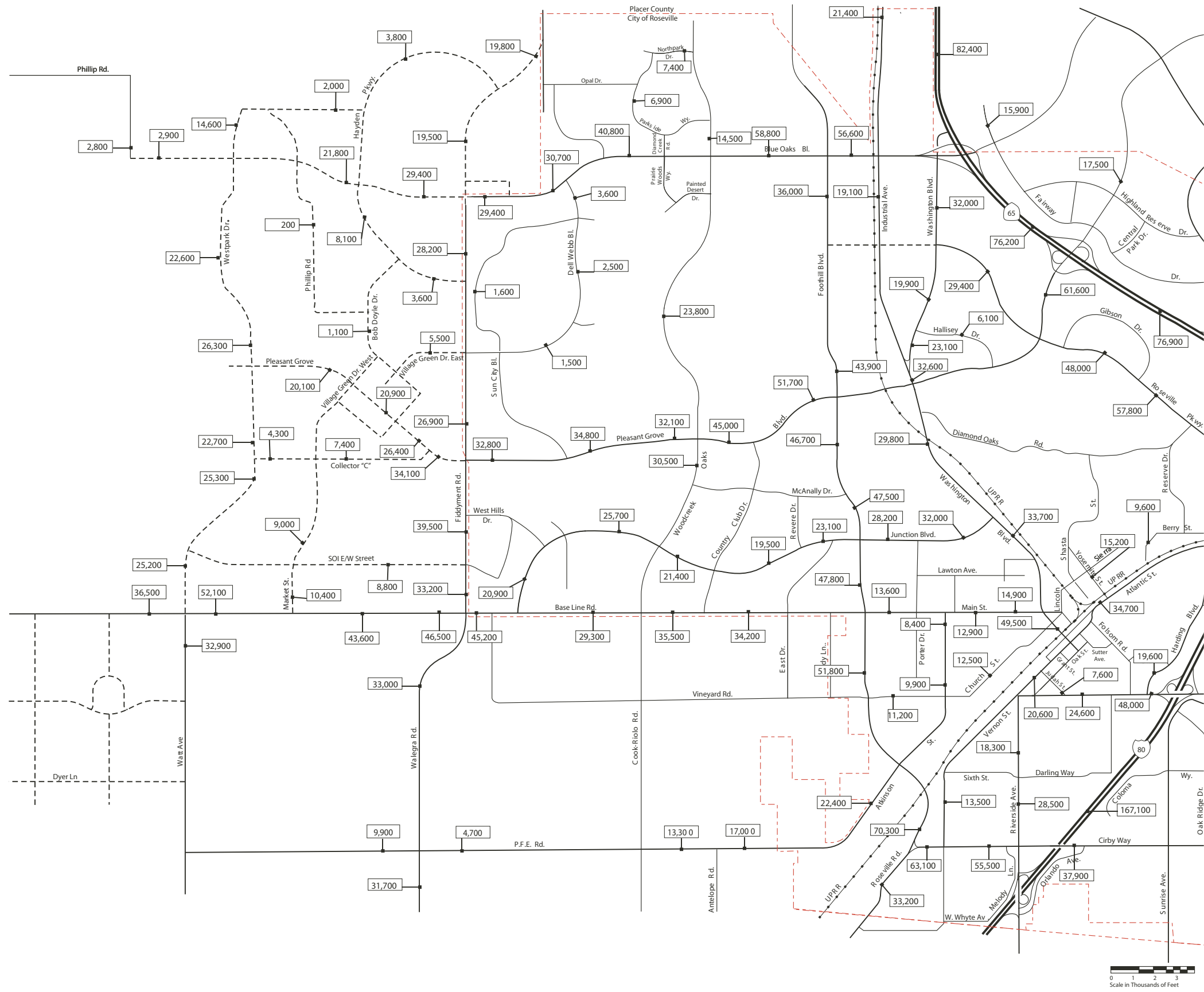
It must be noted that the traffic volume forecasts are not based on a simple layering/adding of assumed project-generated traffic volumes onto the 2020 Without Project traffic volumes. Rather, the City’s travel

demand model is used to predict how travel patterns would change if assumed land uses are added to 2020 land uses. The travel model redistributes trips and can cause traffic on some roadways to decrease and cause changes in “critical” traffic movements at intersections, sometimes at intersections some distance from the SOI Amendment Area.

An intersection level of service analysis was conducted for this scenario. This analysis includes all signalized intersections within the City of Roseville assumed under the Without Project scenario plus signals that would likely be warranted on or adjacent to the SOI Amendment Area due to development of the full SOI amendment. A planning-level signal warrant analysis indicates the following 17 intersections would require signalization under the 2020 Plus Full SOI amendment scenario:

- Within SOI amendment
  - › Fiddymment Road and Hayden Parkway South
  - › Fiddymment Road and Hayden Parkway North
  - › Fiddymment Road and SOI East/West Street
  - › Fiddymment Road and Westhills Drive
  - › Blue Oaks Boulevard and Hayden Parkway
  - › Blue Oaks Boulevard and West Side Drive
  - › Blue Oaks Boulevard and Phillip Road
  - › Blue Oaks Boulevard and “N/S” Street
  - › Pleasant Grove Boulevard and Village Green Drive
  - › Pleasant Grove Boulevard and Bob Doyle Drive
  - › Pleasant Grove Boulevard and Collector C
  - › Pleasant Grove Boulevard and West Side Drive
  - › Baseline Road and Watt Avenue
  - › Baseline Road and Market Street
  - › Market Street and Collector C
  - › Market Street and SOI E/W Street
  - › Watt Avenue and Collector C

It was assumed that with full development of the SOI Amendment Area, Fiddymment Road from Pleasant Grove Boulevard to Baseline Road would be annexed into the City of Roseville. The level of service analysis indicates that Fiddymment Road from north of Pleasant Grove Boulevard to Baseline Road would require widening to six lanes with development of the Full SOI Amendment Area and this widening was reflected in the travel demand forecasts for the Full SOI amendment scenario.



**FIGURE 4.3-9**  
**Daily Traffic Volumes under 2020 Plus SOI Amendment Area**

10659-00

Source: DKS Associates

City of Roseville



11x17 b&w fig pg2

Table K-2 in Appendix K provides the estimated levels of service for all signalized intersections in the City of Roseville under 2020 Without Project and 2020 Plus SOI Amendment conditions. This table includes new intersections that would warrant signals under 2020 Plus SOI Amendment conditions.

Table 4.3-11 shows the number and percentage of City intersections that would operate at LOS C or better under both Without Project and 2020 Plus Full SOI amendment conditions assuming no additional roadway improvements beyond those included in the City’s current CIP program. Under Full SOI amendment condition 117 signalized intersections would operate at LOS C or better. These represent 70.1 percent of the 167 total signalized intersections.

Table 4.3-12 provides the estimated levels of service for all signalized intersections in the City of Roseville impacted under Full SOI amendment conditions, including intersections that would warrant signals.

**Table 4.3-12 City of Roseville Intersections with Significant Level of Service Impacts 2020 with Existing 2020 CIP**

Roadway		Without Project		SOI Amendment Area		WRSP	
North/south	East/west	LOS	V/C	LOS	V/C	LOS	V/C
Diamond Creek	Blue Oaks Boulevard	A	0.57	F	1.08	E	0.92
Fiddymont Road	Baseline Road	D	0.86	E	0.96	E	0.91
Foothills Boulevard	Blue Oaks Boulevard	C	0.81	F	1.14	F	1.03
Woodcreek Oaks	Blue Oaks Boulevard	C	0.70	D	0.84	C	0.76
Vernon Street	Cirby Way	E	0.98	F	1.02	E	0.99
Foothills Boulevard	Vineyard Road	D	0.89	E	0.96	D	0.88
Fiddymont Road	Pleasant Grove	A	0.59	D	0.85	D	0.85
Gibson	Roseville Pkwy	C	0.78	D	0.85	D	0.82
Lincoln Street	Vernon Street	D	0.90	D	0.90	E	0.93
Washington Boulevard	Junction Boulevard	C	0.80	D	0.83	D	0.84
Sierra College Boulevard	Douglas Boulevard	D	0.88	E	0.92	D	0.90
Sierra Gardens	Douglas Boulevard	C	0.79	D	0.84	C	0.79
Watt Avenue	Baseline Road	N/A <sup>1</sup>	N/A <sup>1</sup>	E	0.98	N/A <sup>1</sup>	N/A <sup>1</sup>

NOTE:

1. This intersection is not in the City of Roseville under this scenario.

SOURCE: DKS Associates 2003

Table 4.3-12 shows the 12 intersections that would experience a significant level of service impact with build-out of the SOI amendment under 2020 conditions. Eight intersections that would operate at LOS C or better under Without Project conditions would deteriorate to LOS D or worse under Full SOI amendment conditions. Five of these intersections would degrade to LOS D, 1 would degrade to LOS E, and 2 would degrade to LOS F. Four intersections that would already operate at LOS D or worse under

Without Project conditions would degrade to a worse LOS under Full SOI Amendment conditions. Three of these would deteriorate from LOS D to LOS E and 1 would deteriorate from LOS E to LOS F.

The intersection of Watt Avenue and Baseline Road (on Placer County’s roadway system but adjacent to the SOI Amendment Area) would degrade from LOS C under Without Project conditions to LOS E under SOI amendment conditions.

As shown in Table 4.3-13, potential improvements, beyond the 2020 CIP improvements, were identified as mitigation measures at six of the 12 affected intersections. At 4 of these intersections, implementation of these improvements would provide a level of service as good as or better than the Without Project scenario and would increase the percentage of intersections functioning at LOS C from 70.1 percent to

**Table 4.3-13 City of Roseville Recommended Mitigation for Intersections 2020 Full SOI Amendment**

Intersection		Recommended Mitigation	Level of Service	
North/south	East/west		Before Mitigation	After Mitigation
Diamond Creek	Blue Oaks Boulevard	4.3-1(a). Add 3 <sup>rd</sup> eastbound and westbound through lanes (requires widening of Blue Oaks Boulevard from Woodcreek Oaks to west of Diamond Creek) <u>and</u> Restripe southbound approach to 1 Southbound left/through/right lane and 1 southbound left only lane	F	C
Fiddymment Road	Baseline Road	4.3-1(b). Add 2 <sup>nd</sup> southbound left-turn lane Add 2 <sup>nd</sup> northbound left-turn lane Add 3 <sup>rd</sup> southbound through lane Add 3 <sup>rd</sup> northbound through-lane	E	D
Foothills Boulevard	Blue Oaks Boulevard	4.3-1(c). Add 3 <sup>rd</sup> southbound through lane Add 3 <sup>rd</sup> northbound left-turn lane Add 4 <sup>th</sup> westbound through lane	F	D
Woodcreek Oaks	Blue Oaks Boulevard	4.3-1(d). Add 2 <sup>nd</sup> northbound left-turn lane and 2 <sup>nd</sup> southbound left-turn lane	D	C
Vernon Street	Cirby Way	No feasible improvement identified	F	F
Foothills Boulevard	Vineyard Road	No feasible improvement identified	E	E
Fiddymment Road	Pleasant Grove	No feasible improvement identified	D	D
Gibson	Roseville Pkwy	No feasible improvement identified	D	D
Washington Boulevard	Junction Boulevard	No feasible improvement identified	D	D
Sierra College Boulevard	Douglas Boulevard	No feasible improvement identified	E	E
Sierra Gardens	Douglas Boulevard	4.3-1(e) Add westbound right-turn lane.	D	C
Watt Avenue	Baseline Road	4.3-1(f). Add 3 <sup>rd</sup> northbound and add 3 <sup>rd</sup> southbound through lane	E	D
Percentage of Intersections Citywide Operating at LOS C or Better			70.1%	71.9%

NOTE:

Intersections that operate at LOS D or worse are shaded.

SOURCE: DKS Associates 2003

71.9 percent. At the intersection of Blue Oaks Boulevard and Foothills Boulevard, MM 4.3-1(f) would improve conditions from LOS F to LOS D, but not to the LOS C conditions shown under the No Project scenario. At the intersection of Watt Avenue and Baseline Road, MM 4.3-1(c) would improve conditions from LOS E to LOS D, but not to the LOS C conditions shown under the Without Project scenario. MM 4.3-1(a) provides for the addition of a third through lane in each direction on Blue Oaks Boulevard at its intersection with Diamond Creek Boulevard. Under the 2020 CIP, Blue Oaks Boulevard would be widened to six lanes east of Woodcreek Oaks Boulevard. Further analysis of the travel demand under SOI amendment scenario indicates that the SOI Amendment Area would require extending the widening of Blue Oaks Boulevard from Woodcreek Oaks Boulevard to west of Crocker Ranch Road and has been included in this mitigation measure.

No feasible improvements were identified at the other 6 intersections:

- Vernon Street/Cirby Way
- Foothills Boulevard/Vineyard Road
- Fiddymont Road/Pleasant Grove
- Gibson/Roseville Parkway
- Washington Boulevard/Junction Boulevard
- Sierra College Boulevard/Douglas Boulevard

The City's level of service policy allows the City Council to take an action to accept degradation in the level of service of one or more of its signalized intersections from the levels identified in the 2020 CIP as long as 70 percent or more of the total signalized intersections in the City would operate at LOS C or better. With or without the recommended intersection mitigation measures, more than 70 percent of the City's signalized intersections would operate at LOS C or better under 2020 Plus SOI Amendment conditions. However, since no feasible improvements were found to mitigate significant impacts on levels of service at six intersections, the SOI amendment would have a **significant and unavoidable** impact.

### **West Roseville Specific Plan**

The City's travel demand model was used to estimate the change in daily and P.M. peak hour traffic volumes on roadways throughout the City of Roseville and in surrounding communities due to development of the WRSP under 2020 conditions. The daily traffic volumes within the City under the 2020 Plus WRSP scenario are shown in Figure 4.3-10 (Daily Traffic Volumes Under 2020 Plus West Roseville Specific Plan).

As stated above, traffic volume forecasts are not based on a simple layering/adding of assumed project-generated traffic volumes onto the 2020 Without Project traffic volumes. Rather, the City's travel demand model is used to predict how travel patterns would change if WSRP land uses are added to 2020 land uses. The travel model redistributes trips and can cause traffic on some roadways to decrease and cause changes in "critical" traffic movements at intersections, sometimes at intersections some distance from the WRSP Area.

An intersection level of service analysis was conducted for this scenario. This analysis includes all signalized intersections within the City of Roseville assumed under the Without Project scenario plus additional signals that would likely be warranted on or adjacent to the WRSP site due to implementation of the WRSP. A planning-level signal warrant analysis indicates the following eight intersections would require signalization under the 2020 Plus WRSP scenario:

- Within WRSP
  - › Fiddymment Road and Hayden Parkway South
  - › Fiddymment Road and Hayden Parkway North
  - › Blue Oaks Boulevard and Hayden Parkway
  - › Blue Oaks Boulevard and West Side Drive
  - › Blue Oaks Boulevard and "N/S" Street
  - › Pleasant Grove Boulevard and Village Green Drive
  - › Pleasant Grove Boulevard and Bob Doyle Drive
- Outside WRSP
  - › Fiddymment Road and Westhills Drive

Table K-2 in Appendix K provides the estimated levels of service for 150 signalized intersections in the City of Roseville under 2020 Without Project and 158 signalized intersections under the 2020 Plus WRSP conditions.

Table 4.3-11 shows the number and percentage of City intersections that would operate at LOS C or better for both 2020 Without Project and 2020 Plus WRSP conditions assuming no additional roadway improvements beyond those included in the City's current CIP program. Under WRSP conditions, 112 signalized intersections would operate at LOS C or better. These represent 70.9 percent of the 158 total signalized intersections.

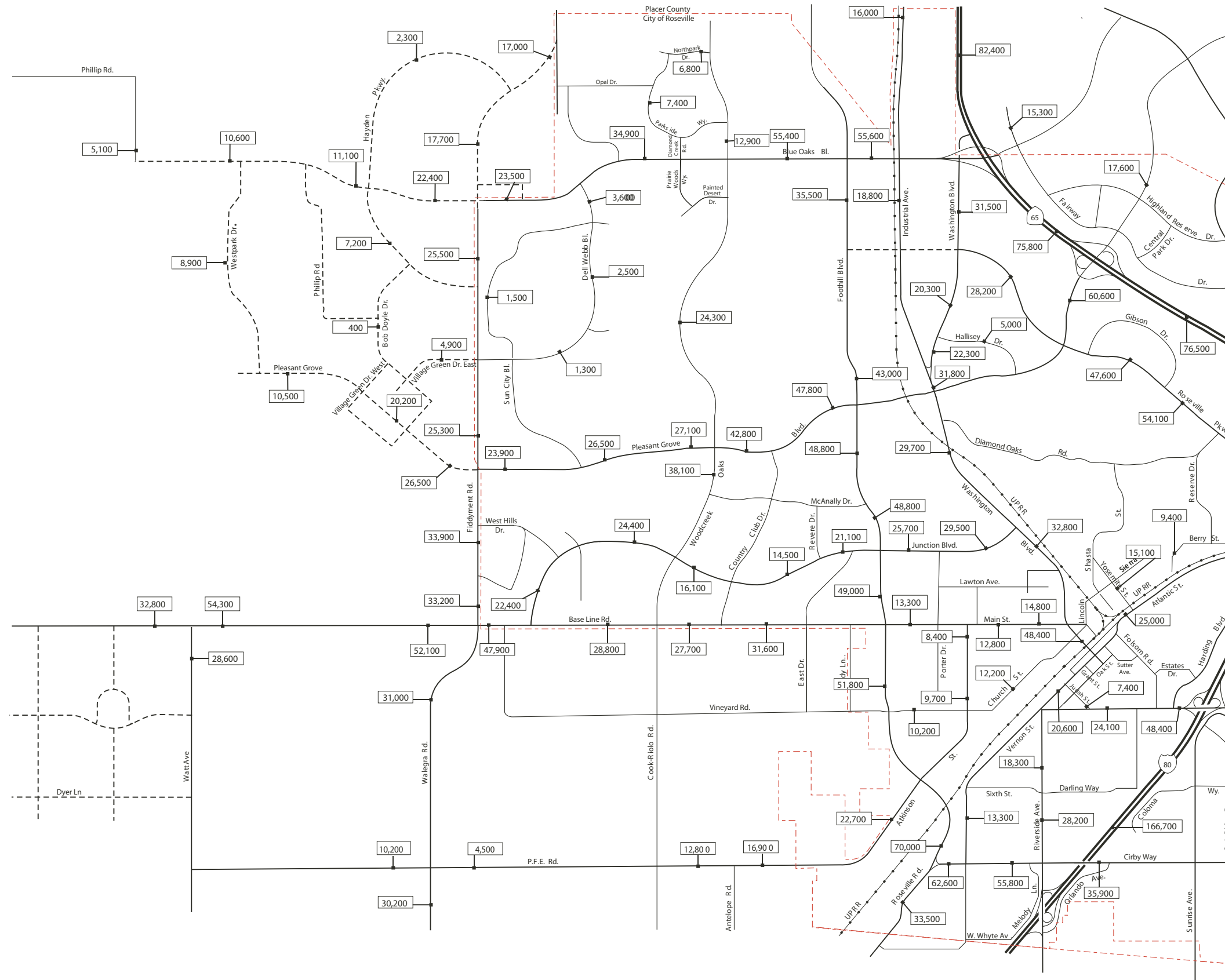


FIGURE 4.3-10  
**Daily Traffic Volumes under 2020 Plus West Roseville Specific Plan**



10659-00

Source: DKS Associates

1 2 3  
 1" = 3,000'  
 in Thousands of Feet

11x17 b&w Fig pg 2

Table 4.3-12 provides the estimated levels of service for all signalized intersections in the City of Roseville affected under WRSP Amendment conditions. This table includes new intersections that would warrant signals under WRSP conditions.

Table 4.3-12 shows the seven intersections that would experience a significant level of service impact with build-out of the WRSP under 2020 conditions. Five intersections that would operate at LOS C or better under Without Project conditions would deteriorate to LOS D or worse under 2020 Plus WRSP conditions. Three of these would degrade to LOS D, one would degrade to LOS E, and one would degrade to LOS F. Two intersections that would operate at LOS D or worse under Without Project conditions would be further degraded under WRSP conditions. These two intersections would deteriorate from LOS D to LOS E.

As shown in Table 4.3-14, potential improvements, beyond the 2020 CIP improvements, were identified as mitigation measures at four of the seven affected intersections. Implementation of the improvements identified in Table 4.3-14 and identified under MM 4.3-2 would provide a level of service as good as or better than the Without Project scenario at these intersections, and would increase the percentage of intersections functioning at LOS C from 70.9 percent to 72.8 percent. As discussed above, under the 2020 CIP Blue Oaks Boulevard would be widened to six lanes east of Woodcreek Oaks Boulevard. Further analysis of the travel demand under Cumulative Plus WRSP scenario indicates that the WRSP would require extending the widening of Blue Oaks Boulevard from Woodcreek Oaks Boulevard to west of Crocker Ranch Road and has been included in this mitigation.

**Table 4.3-14 City of Roseville Recommended Mitigations for Intersections 2020 Plus WRSP**

Intersection			Level of Service	
North/South	East/West	Recommended Mitigation	Before Mitigation	After Mitigation
Diamond Creek	Blue Oaks Boulevard	MM 4.3-2(a). Add 3rd eastbound and westbound through lanes (requires widening of Blue Oaks Boulevard from Woodcreek Oaks to west of Diamond Creek)	E	C
Fiddymet Road	Baseline Road	MM 4.3-2(b). Add 2nd northbound left and 2nd southbound left-turn lanes	E	D
Foothills Boulevard	Blue Oaks Boulevard	MM 4.3-2(c). Add 3rd southbound through lane Add 3rd northbound left-turn lane Add 4th westbound through lane	F	C
Fiddymet Road	Pleasant Grove	MM 4.3-2(d). Add 3rd northbound and 3rd southbound through lanes	D	C
Gibson	Roseville Pkwy	No feasible improvement identified	D	D
Lincoln Street	Vernon Street	No feasible improvement identified	E	E
Washington Boulevard	Junction Boulevard	No feasible improvement identified	D	D
Percentage of Intersections Citywide Operating at LOS C or Better			70.9%	72.8%

NOTE:

Intersections that experience significant impacts are shaded.

SOURCE: DKS Associates 2003

No feasible improvements were found at the following three intersections:

- Gibson/Roseville Parkway
- Lincoln Street/Vernon Street
- Washington Boulevard/Junction Boulevard

As discussed in Chapter 2 (Project Description), two options are being considered for the extension of Blue Oaks Boulevard north of the WRSP. Because the intersection configuration would be similar, traffic operations would be identical under the two options.

The City’s level of service policy allows the City Council to take an action to accept degradation in the level of service of one or more of its signalized intersections from the levels identified in the 2020 CIP as long as 70 percent or more of the total signalized intersections in the City would operate at LOS C or better. With or without the recommended intersection mitigation measures, more than 70 percent of the City’s signalized intersections would operate at LOS C or better under 2020 Plus WRSP conditions. However, since no feasible improvements were found to mitigate significant impacts on levels of service at three intersections, the WRSP would have a **significant and unavoidable** impact on City of Roseville roadways.

<b>IMPACT 4.3-2: INCREASED TRAFFIC ON STATE HIGHWAYS.</b>			
<b>Applicable Policies and Regulations:</b>	None Applicable		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant
<b>Mitigation Measures:</b>	None available	None available	None available
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable

**SOI Amendment Area**

Table 4.3-15 shows the projected daily traffic volumes and levels of service on state highways within the City of Roseville under 2020 SOI amendment conditions. Table 4.3-16 provides estimated change in daily traffic volumes for interchange ramps to the State highways within the City, while Table 4.3-17 provides the peak hour levels of service at intersections between freeway ramps and local roadways in Roseville.

**Table 4.3-15 State Highways 2020 Average Daily Traffic Volumes**

Facility	Segment	Lanes	Without Project		SOI Amendment Area		WRSP	
			ADT	LOS	ADT	LOS	ADT	LOS
I-80	Sac. County line to Riverside Avenue	8+ 2HOV	200,900	F1	202,700	F1	201,400	F1
	Riverside Avenue to Douglas Boulevard	6	167,400	F3	167,100	F3	166,400	F3
	Douglas Boulevard to Eureka Road	6	159,800	F2	160,300	F2	159,900	F2
	Eureka Road to SR-65	8	180,900	F1	181,800	F2	181,900	F1
	SR-65 to Rocklin Road	6	116,900	E	117,100	E	117,000	E
SR-65	Galleria to Pleasant Grove Boulevard	4	75,700	D	77,000	E	76,300	E
	Pleasant Grove Boulevard to Blue Oaks Boulevard	4	75,300	D	76,200	E	75,900	D
	Blue Oaks Boulevard to Sunset Boulevard	4	82,300	F	82,700	F	82,500	F
SR-70/99	North of Riego Road	4	28,800	A	29,000	A	28,700	A
	South of Riego Road	4	52,500	B	52,800	B	51,300	B

NOTES:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in Table 4.3-9

F1 represents LOS F conditions for 1 hour during the morning and evening peak commute periods while F2 represents LOS F conditions for 2 hours.

Intersections that experience significant impacts are shaded.

SOURCE: DKS Associates 2003

**Table 4.3-16 Interchange Ramps 2020 Estimated Change in Average Daily Traffic Volumes**

Interchange	Ramps	Estimated Change in Daily Volume Due to SOI Amendment	Estimated Change in Daily Volume Due to WRSP
I-80 / Riverside Avenue	Westbound On from Southbound Riverside Avenue	-1470 (11.0%)	-680 (5.0%)
	Westbound On from Northbound Riverside Avenue	+760 (16.0%)	0
	Westbound Off	-810 (10.5%)	-1460 (19.0%)
	Eastbound On	-530 (7.2%)	-220 (0.4%)
	Eastbound Off to Northbound Riverside Avenue	-20 (0.2%)	0
	Eastbound Off to Auburn Boulevard/Orlando Avenue	-500 (3.9%)	+630 (4.9%)
SR-65 / Pleasant Grove Boulevard	Northbound On from Eastbound Pleasant Grove	+180 (4.3%)	+230 (5.5%)
	Northbound On from Westbound Pleasant Grove	+340 (16.2%)	+290 (13.9%)
	Northbound Off	+600 (6.9%)	+480 (5.6%)
	Southbound On from Eastbound Pleasant Grove	+370 (5.5%)	+40 (0.6%)
	Southbound On from Westbound Pleasant Grove	+510 (17.5%)	+420 (14.4%)
	Southbound Off	+630 (9.7%)	+510 (7.8%)
SR-65 / Blue Oaks Boulevard	Northbound On	+450 (3.6%)	+250 (2.0%)
	Northbound Off to Eastbound Blue Oaks Boulevard	+320 (13.3%)	0 (0%)
	Northbound Off to Westbound Blue Oaks Boulevard	+490 (5.1%)	+410 (4.3%)
	Southbound On from Eastbound Blue Oaks Boulevard	+700 (7.8%)	+590 (6.5%)
	Southbound On from Washington Boulevard	-430 (16.1%)	-840 (31.9%)
	Southbound Off	+110 (0.8%)	-530 (3.8%)

SOURCE: DKS Associates 2003

**Table 4.3-17 Intersections with State Highway Ramps 2020 Level of Service**

Location	Without Project		SOI Amendment Area		WRSP	
	LOS	V/C	LOS	V/C	LOS	V/C
Riverside Avenue and I-80 WB Off-ramp	A	0.44	A	0.44	A	0.44
SR-65 NB Off-ramp and Blue Oaks Boulevard	B	0.68	C	0.70	C	0.71
SR-65 NB Off-ramp and Pleasant Grove	A	0.54	A	0.54	A	0.54
SR-65 SB Off-ramp and Pleasant Grove	A	0.51	A	0.51	A	0.50
Washington Boulevard/SR-65 SB Off and Blue Oaks Boulevard	B	0.66	B	0.68	B	0.69
I-80 WB Off-ramp and Douglas Boulevard	C	0.81	C	0.79	C	0.78
I-80 WB On-ramp and Atlantic Street	C	0.75	C	0.73	C	0.72
SR-65 NB On-ramp and Stanford Ranch Boulevard	B	0.68	B	0.69	B	0.69
SR-65 SB On-ramp and Stanford Ranch Boulevard/Galleria Boulevard	C	0.73	C	0.75	C	0.74
I-80 WB Off-ramp/Taylor Road and Eureka Road	E	0.94	E	0.91	E	0.91

SOURCE: DKS Associates 2003

The analysis assumes that all of the 2020 transportation improvements contained in the Metropolitan Transportation Plan (MTP) would be implemented, including the widening of I-80 to accommodate HOV lanes between Madison Avenue and the Sacramento/Placer County line and construction of the State Route 65 Lincoln Bypass.

The estimated development levels under the adopted General Plans of Roseville and surrounding jurisdictions would increase traffic volumes on state highways within the City of Roseville. I-80 between SR-65 and Sacramento/Placer County line and SR-65 through Roseville would operate at LOS F conditions during peak hours. The poor level of service anticipated on both I-80 and SR-65 under 2020 conditions would exist with or without the SOI amendment, which would increase the average daily traffic on state highway segments by 1,300 vehicles, or by 1.4 percent. As shown in Table 4.3-17, all intersections with state highway ramps would operate at LOS C or better. Although the SOI amendment would not cause any highway segment to degrade to LOS F, it would add traffic to segments already operating at LOS F. This increase would be a **significant and unavoidable** impact on state highways. Highway operations could be improved by the addition of HOV, auxiliary and/or mixed-flow lanes on I-80 and SR-65 through Roseville, ramp metering (throughout the I-80 and SR-65 corridors) and regional TSM/TDM elements. Such improvements and measures should be resolved on a regional level, through cooperative effort involving SACOG, the Placer County Transportation Planning Agency (PCTPA) and Caltrans. These improvements could not be implemented by a single project.

It must be noted that the traffic volume forecasts are not based on a simple layering/adding of assumed project-generated traffic volumes onto the 2020 Without Project traffic volumes. Rather, the City’s travel demand model is used to predict how travel patterns would change if the project land uses is added to 2020 land uses. The travel model redistributes trips and can cause traffic on some roadways to decrease

and cause changes in “critical” traffic movements at intersections, sometimes at intersections some distance from the SOI Amendment Area. Because of this redistribution and the SOI amendment Area’s distance from a State highway, the SOI Amendment contribution to highway traffic is relatively small, or even improves traffic slightly, as shown in Table 4.3-16.

### **West Roseville Specific Plan**

Table 4.3-15 shows the projected daily traffic volumes and levels of service on State Highways in the vicinity of the WRSP Area under 2020 Plus WRSP conditions. Table 4.3-16 provides estimated change in daily traffic volumes for interchange ramps to the State highways within the City, while Table 4.3-17 provides the peak hour levels of service at intersections between freeway ramps and local roadways in Roseville. The analysis assumes that all of the 2020 transportation improvements contained in the Metropolitan Transportation Plan (MTP) would be implemented, including the widening of I-80 to accommodate HOV lanes between Madison Avenue and the Sacramento/Placer County line and construction of the State Route 65 Lincoln Bypass.

The poor level of service anticipated on both I-80 and SR-65 under 2020 conditions would exist with or without the WRSP. As shown in Table 4.3-15, the WRSP would contribute only a small fraction (less than one percent) of the traffic volumes on these highways. As discussed above, this relatively small contribution to highway traffic is due to the redistribution of traffic and the distance between the WRSP Area and State highways. On some segments, the WRSP would reduce traffic levels. As shown in Table 4.3-17, intersections with state highway ramps would operate at LOS C or better. While the WRSP would not cause any highway segment or ramp intersection to degrade from LOS E or better to LOS F, it would contribute to traffic congestion on segments that have degraded to LOS F under 2020 Plus WRSP conditions. Therefore, the WRSP would have a **significant and unavoidable** impact on State highways.

As discussed above, traffic operations could be improved by the addition of HOV, auxiliary and/or mixed-flow lanes on I-80 and SR-65 through Roseville, ramp metering (throughout the I-80 and SR-65 corridors) and regional TSM/TDM elements. Such improvements and measures should be resolved on a regional level, through cooperative effort involving SACOG, the Placer County Transportation Planning Agency (PCTPA) and Caltrans. However, such measures could not be implemented by a single project.

<b>IMPACT 4.3-3: INCREASED TRAFFIC ON PLACER COUNTY ROADWAYS.</b>			
<b>Applicable Policies and Regulations:</b>	None Applicable <sup>86</sup>		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.3-3 (Construct identified improvements on Placer County roadways and limit access) (WRSP) MM 4.3-4 (Construct identified improvements on Placer County roadways and limit access) (Remainder Area)	MM 4.3-3 (Construct identified improvements on Placer County roadways and limit access)	MM 4.3-4 (Construct identified improvements on Placer County roadways and limit access)
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable

Table 4.3-18 shows the projected daily traffic volumes on Placer County roadways under 2020 Plus WRSP and 2020 Plus SOI Amendment conditions. These daily volumes were estimated by the City of Roseville’s travel demand model. The analysis assumes that those improvements to Placer County’s roadways that were included in the Sacramento Area Council of Government’s (SACOG’s) Metropolitan Transportation Plan (MTP) for 2020 would be implemented under with and without project conditions. This includes the widening of Baseline Road from Fiddymont Road to west of Watt Avenue to six lanes and the remainder of Baseline Road to the Sutter County line to 4 lanes, plus the widening of both Watt Avenue and Walerga Road from two to four lanes between Baseline Road and the Sacramento/Placer County line. The 2020 without project lane assumptions on Placer County roadways are shown in Table 4.3-18.

**SOI Amendment/Remainder Area**

Table 4.3-18 shows the projected daily traffic volumes on Placer County roadways under 2020 Plus SOI Amendment conditions. It was assumed that with full development of the SOI Amendment Area, Fiddymont Road from Pleasant Grove Boulevard to Baseline Road would be annexed into the City of Roseville and thus would not be part of Placer County’s roadway system. Table 4.3-18 shows the lane assumptions for Placer County roadways under 2020 Plus SOI Amendment conditions.

<sup>86</sup> The County does have policies regarding service levels on local roadways. These policies are the basis of the standards of significance for County roadways. However, because they do not apply to City of Roseville actions, they are not identified as policies or regulations that would reduce impacts.

**Table 4.3-18 Placer County 2020 Average Daily Traffic Volumes and Levels of Service**

Roadway	Location	Assumed Lanes in 2020	Without Project		SOI amendment Area		WRSP	
			ADT	LOS	ADT	LOS	ADT	LOS
Baseline Road	Sutter Co. to Tanwood	4	29,300	D	30,100	D	29,700	D
	Tanwood to Watt Avenue	6	32,700	B	36,500	B	32,800	B
	Watt Avenue to Fiddymment	6	51,600	E	46,500	D	52,100	E
Fiddymment Road	Baseline Road to Pleasant Grove Boulevard	4	33,100	E	N/A <sup>1</sup>	N/A <sup>1</sup>	33,200	E
	Roseville City Limits to Sunset Boulevard	2	12,900	C	16,000	D	14,200	C
Walerga Road	Baseline Road to PFE Road	4	27,600	C	33,000	E	31,000	D
Watt Avenue	Baseline Road to PFE Road	4	27,900	C	36,100	F	28,600	D
Phillip Road	WRSP to Brewer Road	2	300	A	2,800	A	5,100	A
Brewer Road	Baseline Road to Phillip Road	2	2,900	A	3,800	A	6,800	A

NOTES:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in Table 4.3-9.

Intersections that experience significant impacts are shaded.

1. Roadway segment would be within City limits under this scenario.

SOURCE: DKS Associates 2003

A roadway segment level of service analysis (summarized in Table 4.3-18) indicates that development of the SOI Amendment Area would cause Walerga Road between Baseline Road and PFE Road to worsen from LOS C to LOS E, and Watt Avenue between Baseline Road and PFE Road to worsen from LOS C to LOS F. The analysis also indicates that development of the SOI amendment would cause Fiddymment Road between the north Roseville City limit and Sunset Boulevard to worsen from LOS C to LOS D.

It was estimated that development of the SOI Amendment Area would increase traffic on Phillip Road west of the SOI Amendment Area from a very low volume (approximately 300 vehicles per day) to about 2,800 daily vehicles. Currently, Phillip Road is a narrow, unimproved rural road, a portion of which is gravel. While this roadway’s traffic carrying capacity is sufficient that the SOI amendment would not cause a level of service impact, it would cross a threshold used by Placer County in its CIP and traffic fees for defining improvements to rural roadways. If a rural collector or arterial roadway currently carries less than 2,000 daily vehicles but future growth causes the roadway to carry more than 2,000 daily vehicles, then improvements to that roadway, primarily involving a wider cross-section and potentially paved shoulders is justified and thus included in the CIP and traffic fees. This impact could be lessened by improving Phillip Road to Placer County’s Rural Collector standards between the SOI Amendment Area and Brewer Road (see MM 4.3-4.).

An intersection level of service analysis, summarized in Table 4.3-20, was also conducted at several key intersections in unincorporated Placer County. This analysis indicates the SOI amendment would cause the intersection of Watt Avenue and PFE Road to worsen from LOS C to LOS D, the intersection of Watt

Avenue and Baseline Road would degrade from LOS C to LOS E, and the intersection of Pleasant Grove Drive and Baseline Road to degrade from LOS D to LOS E.

The degradation of County roadway and intersection operations to LOS D or worse would be a significant impact. Implementation of MM 4.3-4, which recommends improvements to the affected roadways, would improve conditions on affected roadways. MM 4.3-4 improvements are shown in Table 4.3-19 (for roadway segments) and Table 4.3-21 (for intersections).

**Table 4.3-19 Placer County Recommended Mitigation for Roadway Segments SOI Amendment**

Roadway	Location	Assumed Lanes in 2020	Mitigation	LOS	
				Before Mitigation	After Mitigation
Fiddymont Road	North Roseville City Limits to Sunset Boulevard	2	MM 4.3-4 (a) Widen to 4 lanes	D	A
Walerga Road	Baseline Road to PFE Road	4	MM 4.3-4 (b) Widen to 6 lanes	E	B
Watt Avenue	Baseline Road to PFE Road	4	MM 4.3-4 (c) Widen to 6 lanes	F	B
Phillip Road	WRSP to Potero Road	2	MM 4.3-4(d) Improve Phillip Road to Placer County Rural Standard	N/A	N/A

NOTES:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in Table 4.3-9.

Intersections that experience significant impacts are shaded.

SOURCE: DKS Associates 2003

**Table 4.3-20 Placer County 2020 Intersections Levels of Service**

Roadway		Without Project		Full SOI Amendment		WRSP	
North/South	East/West	LOS	V/C	LOS	V/C	LOS	V/C
Watt Avenue	PFE Road	C	0.73	D	0.88	C	0.76
Watt Avenue	Baseline Road	C <sup>1</sup>	0.73	E <sup>1</sup>	0.98	C <sup>1</sup>	0.75
Pleasant Grove Drive	Baseline Road	D	0.87	E	0.92	D	0.88

NOTES:

All intersections assumed to be signalized by 2020.

Intersections that experience significant impacts are shaded.

1. Level of service analysis for this intersection is based on modified Circular 212 capacities used by Roseville for its CIP

SOURCE: DKS Associates 2003

**Table 4.3-21 Placer County Recommended Mitigation for Intersections SOI Amendment**

Intersection			LOS	
			Before Mitigation	After Mitigation
North/South	East/West	Mitigation		
Watt Avenue	PFE Road	MM 4.3-4(e): Widen Watt Avenue to 6 lanes at this intersection	D	C
Watt Avenue	Baseline Road	MM 4.3-4(f): Add 3rd northbound and 3rd southbound lanes	E	D
Pleasant Grove Drive	Baseline Road	MM 4.3-4(g): Add northbound right-turn lane	E	D

NOTE:

Intersections that experience significant impacts are shaded.

SOURCE: DKS Associates 2003

Implementation of MM 4.3-2(f) (Add 3<sup>rd</sup> northbound and add 3<sup>rd</sup> southbound through lane to the intersection of Watt Avenue and Baseline Road) would result in LOS D conditions but not to LOS (under the Without Project scenario). Implementation of an “extraordinary” improvement at the intersection of Watt Avenue and Baseline Road would result in LOS C or better, however, because the improvement may not be feasible, it has not been included as a mitigation measure.

Implementation of the measures identified in Table 4.3-19 and Table 4.3-21 would reduce this impact to a less-than-significant level. However, the improvements lie outside the jurisdiction of the City of Roseville. Placer County can implement this suggested mitigation measure, but may choose not to. If the improvements are not made, levels of service would remain as shown in Table 4.3-18 and Table 4.3-20. Therefore, this impact is considered **significant and unavoidable**.

### **West Roseville Specific Plan**

A roadway segment level of service analysis (summarized in Table 4.3-18) indicates that Baseline Road, west of Fiddymont Road and Fiddymont Road between Pleasant Grove Boulevard and Baseline Road, would both operate at LOS E under 2020 conditions with or without the WRSP. The analysis also indicates that the WRSP would cause both Walerga Road and Watt Avenue between Baseline Road and PFE Road to worsen from LOS C to LOS D. Both of these roadway segments are assumed to have four lanes. MM 4.3-3(a) and 4.3-3(b), which calls for the widening of these roadway segments from four to six lanes, would reduce these impacts to a less-than-significant level. To assist with the widening of Baseline Road and the Walerga/Fiddymont Corridor, the City and County are currently exploring the potential for a regional traffic fee to fund improvements to these roadways. The WRSP would be obligated to pay a fair share portion of these improvements. The estimated fee for the WRSP is estimated at between \$400 and \$600 per dwelling unit equivalent.

Implementation of these measures would reduce this impact to a less-than-significant level. However, the improvement lies outside the jurisdiction of the City of Roseville. Placer County can implement this suggested mitigation measure, but may choose not to. If the improvements are not made, levels of service would remain as shown in Table 4.3-18. Therefore, this impact is considered **significant and unavoidable**.

It was estimated that the WRSP would increase traffic on Phillip Road west of the WRSP from a very low volume (about 300 vehicles per day) to about 5,100 daily vehicles. Currently, Philip Road is a narrow, unimproved rural road, a portion of which is gravel. While this roadway’s traffic carrying capacity is sufficient so the WRSP would not cause a level of service impact, it would cross a threshold used by Placer County in its CIP and traffic fees for defining improvements to rural roadways. If a rural collector

or arterial roadway currently carries less than 2,000 daily vehicles but future growth causes the roadway to carry more than 2,000 daily vehicles, then improvements to that roadway, primarily involving a wider cross-section and potentially paved shoulders is justified and thus included in the CIP and traffic fees. In order to avoid this impact, MM 4.3-3(c) requires that Blue Oaks Boulevard between realigned Phillip Road West Side Drive not be opened to through traffic until a north/south connection is constructed from West Side Drive to Baseline Road. With this enclosure in place, Phillip Road would not carry more than 2,000 daily vehicles. Traffic volumes on Phillip Road would be reduced from 5,100 daily vehicles to 2,000 daily vehicles with this section of Blue Oaks Boulevard being closed to through traffic. Once a connection between Baseline Road and West Side Drive is established, Blue Oaks Boulevard could be opened to West Side Drive.

An intersection level of service analysis, summarized in Table 4.3-20, was also conducted at several key intersections in unincorporated Placer County under 2020 Plus WRSP conditions. This analysis indicates the WRSP would not significantly degrade the level of service at any intersections in Placer County.

<b>IMPACT 4.3-4: INCREASED TRAFFIC ON CITY OF ROCKLIN ROADWAYS.</b>			
<b>Applicable Policies and Regulations:</b>	None Applicable <sup>87</sup>		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Less Than Significant	Significant
<b>Mitigation Measures:</b>	MM 4.3-5 (Sunset Boulevard intersection improvements) (Remainder Area)	None required	MM 4.3-5 (Sunset Boulevard intersection improvements)
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Less Than Significant	Significant and Unavoidable

Table 4.3-23 shows the projected daily traffic volumes on roadways in the City of Rocklin under the 2020 Plus WRSP and 2020 Plus SOI Amendment scenarios. These daily volumes were estimated by the City of Roseville’s travel demand model. The analysis assumes that those improvements to Rocklin’s roadways that were included in Rocklin’s 2020 CIP, plus the roadways in Rocklin’s proposed Northwest Annexation Area would be implemented.

<sup>87</sup> The County does have policies regarding service levels on local roadways. These policies are the basis of the standards of significance for County roadways. However, because they do not apply to City of Roseville actions, they are not identified as policies or regulations that would reduce impacts.

**Table 4.3-23 Rocklin Roadways Average Daily Traffic Volumes and Levels of Service 2020**

Roadway	Location	Assumed Lanes in 2020	Without Project		SOI Amendment Area		WRSP	
			ADT	LOS	ADT	LOS	ADT	LOS
Sunset Boulevard	SR-65 to W. Stanford Ranch	6	27,100	A	30,000	A	28,900	A
	W. Stanford Ranch W. Oaks	6	40,800	C	41,400	C	40,500	C
	W. Oaks to Park	6	40,900	C	43,400	C	41,900	C
	Park to Stanford Ranch	6	42,200	C	44,300	D	43,300	C
	Stanford Ranch to Whitney Boulevard	6	40,700	C	42,300	C	41,700	C
	Whitney Boulevard to Pacific Avenue	6	46,900	D	47,800	D	47,500	D
Park Drive	Roseville City limits to Sunset Boulevard	4	17,500	A	17,500	A	17,600	A
Blue Oaks Boulevard	Route 65 to Lone Tree Boulevard	6	37,000	B	41,500	C	39,800	C
	Lone Tree Boulevard to Sunset Boulevard	4	25,600	C	26,200	C	26,200	C
Stanford Ranch Road	Fairway Drive to Sunset Boulevard	6	28,000	A	29,200	A	28,400	A

NOTES:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in Table 4.3-9.

Segments experiencing significant impacts are shaded.

SOURCE: DKS Associates 2003

**SOI Amendment Area**

Build-out of the City of Roseville plus the estimated “2020 market levels” of development under the adopted General Plans of other jurisdictions in South Placer County would increase traffic volumes on Rocklin’s roadways. The analysis shows that Sunset Boulevard between Whitney Boulevard and Pacific Avenue would operate at LOS D under 2020 Without Project conditions. The SOI Amendment Area would increase traffic volumes on this segment but would not cause degradation in the LOS of this segment as it would function at the LOS D with or without the SOI Amendment Area. The SOI amendment would cause one segment, Sunset Boulevard from Park to Stanford Ranch, to degrade from LOS C to LOS D. This would be a significant impact. MM 4.3-5 would improve operations on these segments to pre-project conditions, reducing this impact to a less-than-significant level. However, the improvement lies outside the jurisdiction of the City of Roseville. The City of Rocklin can implement this suggested mitigation measure, but may choose not to. If the improvements are not made, the level of service would remain as shown in Table 4.3-24. Therefore, this impact is considered **significant and unavoidable**.

**Table 4.3-24 City of Rocklin Recommended Mitigation for Roadway Segments SOI Amendment**

Roadway	Location	Assumed Lanes in 2020	Mitigation	LOS	
				Before Mitigation	After Mitigation
Sunset Boulevard	Park to Stanford Ranch	6	MM 4.3-5 Improve intersections at either end of segment	D	C or better

NOTE:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in Table 4.3-9.

SOURCE: DKS Associates 2003

### West Roseville Specific Plan

The level of service analysis for Rocklin’s roadways, also shown in Table 4.3-23, indicates that the WRSP would not cause any of Rocklin’s roadways to degrade to LOS D or worse conditions. Therefore, the WRSP would have a **less-than-significant** impact on Rocklin’s roadways.

<b>IMPACT 4.3-5: INCREASED TRAFFIC ON SUTTER COUNTY ROADWAYS.</b>			
<b>Applicable Policies and Regulations:</b>	None Applicable <sup>88</sup>		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None required	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

Table 4.3-25 shows the projected daily traffic volumes on selected roadways in Sutter County under the 2020 Plus WRSP and 2020 Plus SOI Amendment scenario. These daily volumes were estimated by the City’s travel demand model that includes build-out of Phase 1 of the South Sutter County Specific Plan. Therefore, this analysis also assumes that the Phase 1 improvements to Sutter County roadways that were included in the South Sutter County Specific Plan would be implemented by 2020, including a widening of Riego Road to six lanes and construction of an interchange at SR-70/99 and Riego Road.

**Table 4.3-25 Sutter County Average Daily Traffic Volumes 2020**

Roadway	Assumed Lanes in 2020	Without Project		WRSP		Full SOI Amendment	
		ADT	LOS	ADT	LOS	ADT	LOS
Riego Road	6	25,600	A	27,400	A	26,100	A
Sunset West/Howsley Road	2	5,900	A	6,900	A	6,500	A
Catlett Road	2	200	A	100	A	100	A

NOTE:  
Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in Table 4.3-9  
SOURCE: DKS Associates 2003

### SOI Amendment Area/Remainder Area

Build-out of the City of Roseville and the estimated “2020 market levels” of development under the adopted General Plans of other local jurisdictions would increase traffic volumes on Sutter County

<sup>88</sup> The County does have policies regarding service levels on local roadways. These policies are the basis of the standards of significance for County roadways. However, because they do not apply to City of Roseville actions, they are not identified as policies or regulations

roadways. The analysis shows that Riego Road at the Sutter/Placer County line would operate at LOS F conditions as a two-lane roadway during peak hours in 2020. If the Phase 1 roadway improvements that were included in the adopted South Sutter County Specific Plan are implemented, the six lanes on Riego Road would provide LOS A conditions with or without the SOI amendment. Therefore, the impact on Sutter County roadways would be **less than significant**.

**West Roseville Specific Plan**

Riego Road at the Sutter/Placer County line would operate at LOS F conditions as a two-lane roadway during peak hours in 2020. If the Phase 1 roadway improvements that were included in the adopted South Sutter County Specific Plan are implemented, the six lanes on Riego Road would provide level of service A conditions with or without the WRSP. Therefore, the impact of the WRSP on Sutter County roadways would be **less than significant**.

<b>IMPACT 4.3-6: INCREASED TRAFFIC ON SACRAMENTO COUNTY ROADWAYS.</b>			
<b>Applicable Policies and Regulations:</b>	None Applicable		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Less Than Significant	Significant
<b>Mitigation Measures:</b>	MM 4.3-6 (Widen Watt Avenue)	None required	MM 4.3-6 (Widen Watt Avenue)
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Less Than Significant	Significant and Unavoidable

Table 4.3-26 shows the projected daily traffic volumes on Sacramento County roadways with development of the WRSP and SOI amendment. These daily volumes were estimated by the City of Roseville’s travel demand model. The analysis assumes that those improvements to Sacramento County’s roadways that were included in the Sacramento Area Council of Government’s (SACOG’s) Metropolitan Transportation Plan (MTP) for 2020 would be implemented with and without the WRSP.

that would reduce impacts.

**Table 4.3-26 Sacramento County 2020 Average Daily Traffic Volumes and Levels of Service**

Roadway	Location	Assumed Lanes in 2020	Without Project		SOI Amendment		WRSP	
			ADT	LOS	ADT	LOS	ADT	LOS
Watt Avenue	Placer Co Line to Elverta Road	4	33,500	E	36,200	F	34,100	E
Walerga Road	Placer Co Line to Elverta Road	4	31,200	D	34,800	E	33,200	E
Elverta Road	West of Watt Avenue	4	28,100	C	29,000	D	28,200	C

NOTES:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in Table 4.3-9.

Intersections that experience significant impacts are shaded.

SOURCE: DKS Associates 2003

**SOI Amendment Area**

Table 4.3-26 shows the projected daily traffic volumes on Sacramento County roadways under 2020 Plus Full SOI amendment conditions. Table 4.3-26 also shows the lane assumptions for Sacramento County roadways under these conditions.

A roadway segment level of service analysis (summarized in Table 4.3-26) indicates that development of the full SOI amendment would cause Watt Avenue From the Placer County Line to Elverta Road to worsen from LOS E to LOS F, Walerga Road from Placer County Line to Elverta Road to worsen from LOS D to LOS E, and Elverta Road west of Watt Avenue to worsen from LOS C to LOS D. Of these LOS changes, only a degradation of LOS from E to F is considered a significant impact in Sacramento County.

Implementation of MM 4.3-6 would reduce this impact to a less-than-significant level by increasing the number of lanes on Watt Avenue. However, the improvements lie outside the jurisdiction of the City of Roseville. Sacramento County can implement this suggested mitigation measure, but may choose not to. If the improvement is not made, levels of service would remain as shown in Table 4.3-26. Therefore, this impact is considered **significant and unavoidable**.

**West Roseville Specific Plan**

Table 4.3-26 shows the projected daily traffic volumes on Sacramento County roadways under 2020 Plus Full WRSP conditions, as well as the lane assumptions for Sacramento County roadways.

A roadway segment level of service analysis (summarized in Table 4.3-26) indicates that development of the full WRSP would cause Walerga Road from Placer County Line to Elverta Road to worsen from LOS D to LOS E. Since only a degradation of LOS from E to F is considered a significant impact in Sacramento County, this change in LOS is considered **less than significant**.

<b>IMPACT 4.3-7: INCREASED DEMAND FOR BICYCLE FACILITIES.</b>			
<b>Applicable Policies and Regulations:</b>	City of Roseville General Plan, Circulation Element, Bicycle Master Plan		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Less Than Significant	Significant
<b>Mitigation Measures:</b>	MM 4.3-7 (Provide appropriate bicycle network with future Specific Plan submittal) (Remainder Area)	None Required	MM 4.3-7 (Provide appropriate bicycle network with future Specific Plan submittal)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

**SOI Amendment Area**

Development of the SOI Amendment Area would result in a substantial demand for safe and convenient bicycle facilities by residents and employees of the SOI Amendment Area for primarily transportation-related purposes. As discussed in detail below, the WRSP provides for adequate bicycle pathways. The bikeway system in the Remainder Area has not been defined. The lack of Class I and II bikeways within the Remainder Area would be a significant impact, because it would not provide for safe bicycle travel within the Remainder Area, or connection to and completion of the City’s bicycle network. MM 4.3-7 would reduce this impact to a **less-than-significant** level by ensuring that appropriate bicycle facilities are provided. A critical element of that bikeway system would be the provision of bikeway facilities between the WRSP and Baseline Road, including an uninterrupted Class I bike trail facility.

**West Roseville Specific Plan**

The WRSP would result in a substantial demand for safe and convenient pedestrian/bicycle facilities by residents and employees of the WRSP for primarily transportation-related purposes. A network of Class I and Class II bikeways is provided in the WRSP that would allow travel throughout the WRSP Area and provide linkage to the City’s planned bikeway system. The City’s Bicycle Master Plan specifies that Class II bike lanes will be included on several arterials in the vicinity of the WRSP, including Fiddymont Road, Pleasant Grove Boulevard and Blue Oaks Boulevard. The WRSP also identifies each of the above roadways as bicycle commuter routes, with Class I and II bike lanes and connections to the City’s existing and planned bikepath network. Because the WRSP would provide adequate bicycle facilities and conditions, this is considered a **less-than-significant** impact.

The Bicycle Master Plan would be updated to reflect proposed bicycle facilities within the WRSP. No further improvements are required for bicycle transportation impacts. Implementation of the Bikeway Master Plan would reduce impacts associated with an increased demand for bicycle facilities by providing guidelines for the development of a bikeway system that provides connections between the City’s major employment and housing areas and planned bikeways.

<b>IMPACT 4.3-8: TRANSIT ACCESS AND CIRCULATION.</b>			
<b>Applicable Policies and Regulations:</b>	City of Roseville General Plan, Circulation Element, Short and Long Range Transit Plans		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.3-8 (Pay fair share of additional transit service) (WRSP) MM 4.3-9 (Transit service policies) (Remainder Area)	MM 4.3-8 (Pay fair share of additional transit service)	MM 4.3-9 (Transit service policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

**SOI Amendment Area**

The development in SOI Amendment Area, especially the age-restricted community within the WRSP Area, would generate significant unmet transit demand. The City’s Long Range Transit Master Plan did not anticipate development of the SOI amendment and thus did not include future transit service to the SOI Amendment Area. Such unmet transit needs are identified by the Placer County Transportation Planning Agency (PCTPA) and are reviewed on an annual basis. Unmet needs could be for any one of the three transit services provided by the City; commuter, fixed route or dial-a-ride. These unmet needs could be met by extending or adding new transit services into key portions of the SOI Amendment Area, while providing connections to other transit routes at one or more of the City’s five transfer points.

Providing adequate transit service to the SOI Amendment Area could be difficult economically even at full build-out for two reasons. First, the SOI Amendment Area is some distance from major destinations, such as hospitals/medical offices, regional shopping and major employers. Second, the residential densities within the SOI Amendment Area would be relatively low. For these reasons, bus fares would likely cover less than the average percentage of operating costs currently covered by existing routes, i.e., the farebox recovery ratio would decline as a result of adding new services for the SOI Amendment Area.

MM 4.3-8, which requires that WRSP development pay its fair share toward transit improvements, and MM 4.3.9, which requires that plans in the Remainder Area provide for fair share funding of capital and operating costs for expanded transit services, would reduce the transit impact to a **less-than-significant** level. The amount of transit services needed would be identified in an updated Short Range Transit Plan and an updated Long Range Transit Master Plan.

### **West Roseville Specific Plan**

There is currently one transit route in the vicinity of the WRSP. Roseville transit's Route M extends from Timber Creek Lodge in Del Webb Sun City eastward to Galleria Mall and travels on Fiddymont Road between Pleasant Grove Boulevard and Del Webb Boulevard. Route M operates on an hourly headway and has transfers to other routes at two transfer points: Woodcreek Oaks/Junction and Galleria Mall. All of Roseville Transit's fixed route and dial-a-ride bus services (including Route M) operates Monday through Friday 6:00 A.M. to 8:00 P.M. and Saturdays 8:00 A.M. to 6:00 P.M. Dial-a-ride services also operate on Sundays from 8:00 A.M. to 6:00 P.M.

The City's Long Range Transit Master Plan (LRTMP) guides development of both inter- and intra-City transit services through year 2010. This Plan did not anticipate development of the WRSP and thus did not include future service to the WRSP Area.

The 8,430 residential dwelling units and the non-residential development in WRSP, especially the proposed age-restricted community would generate significant transit demand. The WRSP provides for five park and ride lots to be dispersed throughout the WRSP Area in commercial, office and industrial locations. Each designated location includes 20 park and ride spaces. Bus turnouts and shelters (stops) will also be provided within the WRSP Area, and will be designed and constructed in accordance with the City's Improvement Standards. The WRSP does not provide for expansion of bus service to these bus stops.

The development of the WRSP would create an "unmet transit need" by build-out. Such unmet transit needs are identified by the Placer County Transportation Planning Agency (PCTPA) and are reviewed on an annual basis. An unmet need could be met by a variety of methods and based upon the needs, current and planned services, current and planned capital purchases, and current farebox recovery ratios, e.g., an unmet need for fixed route service may be met by extending an existing route, such as Route M, or providing an additional route that flows through key portions of the WRSP and provides connections to other transit routes at one or more of the City's five transfer points.

Providing adequate transit service to the WRSP Area would be economically difficult in early phases of the WRSP. The WRSP Area is some distance from major destinations within the existing City of Roseville, such as hospitals/medical offices, regional shopping and major employers. During early phases of the WRSP, residents are likely to rely on existing services and employment opportunities within the City. The WRSP includes land designated for commercial, business/professional, light industrial and industrial land uses that could support uses and employment-generating land uses needed to service the WRSP. As WRSP develops, service and employment uses will be developed as well to serve the population within the WRSP. At build-out of the WRSP, bus fares are projected to fall short of the average percentage of operating costs currently covered by existing routes, i.e., new services to the WRSP would likely lower current farebox recovery ratio for the entire system to a point below 15%, which is the minimum required by the State of California in order to continue receiving operating funds.

MM 4.3-8 requires that WRSP development contribute its fair share towards the capital and operating costs for expanded transit services to the WRSP Area. The amount of transit services needed would be identified in an updated Short Range Transit Plan and/or an updated Long Range Transit Master Plan prepared for the WRSP. Implementation of the Short and Long Range Transit Plans would reduce impacts associated with transit access and circulation by guiding development of both inter- and intra-City transit services. The expansion of transit services to the WRSP would reduce the impact on transit to a **less-than-significant** level.

<b>IMPACT 4.3-9: INCREASED CONGESTION DUE TO PROPOSED PEDESTRIAN DISTRICT OVERLAY.</b>			
<b>Applicable Policies and Regulations:</b>	General Plan Policy CB-1		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Less Than Significant	Significant
<b>Mitigation Measures:</b>	None available	None required	None available
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Less Than Significant	Significant and Unavoidable

**SOI Amendment Area**

As discussed in Chapter 2 (Project Description), a number of General Plan amendments are proposed to incorporate the WRSP, if adopted, into the City’s General Plan. One of the proposed General Plan amendments is the creation of a Pedestrian District overlay that could be used to reinforce the pedestrian

nature of the Village Center within the WRSP Area. While proposed specifically for the Village Center, the Pedestrian District policy could be applied elsewhere in the City, if the City Council chooses to do so.

In order to enable the creation of Pedestrian Districts, the following policy would be added to the General Plan Circulation Element:

Enable the City to designate a Pedestrian District over a geographic area for the purpose of implementing measures that promote pedestrian walkability. In these districts, the City recognizes that pedestrian travel takes a higher priority than automobile travel, which could reduce the vehicular level of service.

The objectives of the Pedestrian District policy are

- Create a safe walking environment
- Ensure security of pedestrians
- Create land use patterns conducive to walking
- Integrate walking with other modes of transportation
- Integrate public services into a Pedestrian District

These objectives would be achieved by a variety of measures, such as

1. Mid-block crossing treatments
2. Intersection Crossing Treatments
3. Traffic Calming
  - › Raised crosswalks
  - › Raised intersections
  - › Textured pavement
  - › Neckdowns
  - › Pedestrian refuge islands
  - › Split pedestrian crossovers
4. Pedestrian Enhancements
  - › Comprehensive sidewalk networks
  - › Pedestrian-only walkways
  - › Street furniture
  - › Covered areas
  - › Street trees
  - › Lighting
  - › Building setback

- › Parking lot walkways
- › Consolidation of driveways
- › Use of on-street parking

Such measures would improve conditions for pedestrians, but could slow vehicular travel. For the most part, these measures would not affect levels of service at signalized intersections, because the number of lanes and traffic controls (e.g., signals) would not change. For intersections that are close to the next lower (worse) service level, a capacity reduction from a traffic calming measure at that intersection could be enough to trigger a lower service level. For example, if an intersection was operating at LOS C, but its v/c ratio is 0.81 (LOS D begins at a v/c ratio of 0.82), measures that marginally reduce the intersections traffic carrying capacity could trigger LOS D.

Under the proposed Pedestrian District policy, the City Council could, after a public hearing, establish a Pedestrian District in any project. Under the City's current Level Of Service policy, LOS C or better must be maintained at 70 percent or more of the City's signalized intersections during the P.M. peak hour, and the City must strive to maintain LOS C at all locations. The City will generally seek to improve intersections that operate at LOS D or worse, unless extraordinary improvements (e.g., grade separations) are required. Signalized intersections within that district could be exempt from the level of service policy, so they would be able to operate at LOS D or worse, which would indicate that vehicles were experiencing congestion. In addition, intersections within the District may not be included in the calculations of percentage of intersections operating at LOS C or better.

Depending on traffic operations at intersections within Pedestrian Districts, their exemption from the LOS policy could affect the ability of the City to maintain LOS C at 70 percent of its intersections. If most or all of the intersections were operating at LOS C or better, their removal from the calculation would decrease the percentage at LOS C or better. If most or all operated at LOS D or worse, their removal would increase the percentage. Because of the relatively large number of signalized intersections that are considered (over 150), exempting a small number from the equation is unlikely to have an effect on achievement of the 70 percent standard, unless the ratio is very close to 70 percent. For example, within the WRSP, two signalized intersections could be exempted. Because both are estimated to operate at LOS A, their exemption would reduce the percentage of intersections operating at LOS C or better from 70.9 percent to 70.5 percent. If both intersections operated at LOS D or worse, their exemption would increase the ratio from 70.9 percent to 71.2 percent.

Because the proposed Pedestrian District policy would not cause any intersections within the SOI Amendment Area to operate at an unacceptable level, or cause the number of intersections operating at

LOS C or better to drop below 70 percent, the impact for the SOI Amendment Area would be less than significant. However, the City could choose to apply the Pedestrian District to other areas of the City. The outcome of applying the policy outside of the SOI Amendment Area cannot be determined without a specific proposal and separate analyses. Depending on the service level and number of intersections that would be exempt, a Pedestrian District could include intersections that operate at LOS D or worse, and/or reduce the number of intersections operating at LOS C or better below the 70 percent required by City policy. In such a case, roadway improvements to achieve LOS C or better would likely not be constructed because they would increase traffic flow, thereby counteracting the intent of the policy, which is focused on improving pedestrian conditions. Therefore, this would be a **significant and unavoidable** impact.

If a Pedestrian District was proposed for an area that was projected to have intersections operating at or close to LOS D or worse, separate environmental review would be required and the City Council would consider whether the improvements in pedestrian circulation and safety in that particular proposed district outweighed the increase in traffic congestion.

### **West Roseville Specific Plan**

The Pedestrian District is proposed for the Village Center. There would be two signalized intersections within the Village Center:

- Pleasant Grove Boulevard and Bob Doyle Drive
- Pleasant Grove Boulevard and Village Green Drive

These intersections are predicted to operate at LOS A under 2020 conditions with the WRSP. The traffic model assumes that traffic speeds through the Village Center would be slower than in other areas with similar roadways. The pedestrian improvements that could be implemented in the Village Center as a result of the Pedestrian Overlay could slow traffic even more than assumed in the model. However, given that the Pedestrian Overlay would not alter the number of lanes, roadway capacity would be unchanged. Given the high LOS that would occur at these two intersections, the amount of delay resulting from the pedestrian improvements would not be substantial enough to reduce operations below LOS C.

If the two Village Center intersections were exempted from the City's LOS policy, then the number of intersections used to calculate the percentage of intersections operating at LOS C or better would drop from 70.9 percent (see Table 4.3-11) to 70.5 percent.

Because the Pedestrian Overlay would not cause any intersections in the WRSP Area to operate at LOS D or worse, or reduce the number of intersections operating at LOS C or better below 70 percent, the impact would be **less than significant**.

### ■ Mitigation Measures

*MM 4.3-1(a-f): Pay Fair Share of Improvements in the CIP Including Improvements to the Following City Intersections (Impact 4.3-1 – SOI Amendment Area):*

- *Diamond Creek/Blue Oaks Boulevard*
- *Fiddymment Road/Baseline Road*
- *Foothills Boulevard/Blue Oaks Boulevard*
- *Woodcreek Oaks/Blue Oaks Boulevard*
- *Sierra Gardens/Douglas Road*
- *Watt Avenue/Baseline Road*

The following roadway improvements would be necessary to achieve acceptable service levels under the 2020 Plus SOI Amendment scenario.

- (a) Intersection of Diamond Creek/Blue Oaks Boulevard: Add 3<sup>rd</sup> eastbound and westbound through lanes to the intersection of Diamond Creek and Blue Oaks Boulevard (requires widening of Blue Oaks Boulevard from Woodcreek Oaks to west of Diamond Creek) and restripe southbound approach to one southbound left/through/right lane and one southbound left-only lane. This mitigation measure would result in LOS C.
- (b) Intersection of Fiddymment Road/Baseline Road: Add 2<sup>nd</sup> southbound left-turn lane and 2<sup>nd</sup> northbound left-turn lane, add 3<sup>rd</sup> southbound through lane and add 3<sup>rd</sup> northbound through lane to the intersection of Fiddymment Road and Baseline Road. This mitigation measure would result in LOS D.
- (c) Intersection of Foothills Boulevard/Blue Oaks Boulevard: Add 3<sup>rd</sup> southbound through, add 3<sup>rd</sup> northbound left-turn lane, and 4<sup>th</sup> westbound through lane to the intersection of Foothills Boulevard and Blue Oaks Boulevard. This mitigation measure would result in LOS D.
- (d) Intersection of Woodcreek Oaks/Blue Oaks Boulevard: Add 2<sup>nd</sup> northbound left-turn lane and 2<sup>nd</sup> southbound left-turn lane to the intersection of Woodcreek Oaks and Blue Oaks Boulevard. This mitigation measure would result in LOS C.
- (e) Intersection of Sierra Gardens/Douglas Boulevard: Add westbound right turn only lane to the intersection of Sierra Gardens and Douglas Boulevard. This mitigation measure would result in LOS C.

- (f) Intersection of Watt Avenue/Baseline Road: Add 3<sup>rd</sup> northbound and add 3<sup>rd</sup> southbound through lane. This mitigation measure would result in LOS D.

The SOI Amendment Area would develop over a period of years. Therefore, the impacts on these intersections would occur over a period of time. As with other improvements in the 2020 CIP, the City will monitor traffic conditions and determine when specific improvements are needed. The City of Roseville's traffic impact fees should be revised to include the SOI Amendment Area. Specific Plans and/or development proposals shall provide for fair share contributions of the cost of the improvement through the updated traffic impact fees.

As discussed above, construction of intersection improvements could have impacts on biological and cultural resources, air quality, water quality, and noise levels. These impacts will be evaluated as part of the CIP update to incorporate the adopted mitigation. Such impacts are not anticipated to be substantial as they would occur in an urban area and/or would be temporary.

*MM 4.3-2(a-d): Fair Share Policies for Improvements in the CIP at the Following City Intersections (Impact 4.3-1 – WRSP):*

- *Diamond Creek/Blue Oaks*
- *Fiddymment Road/Baseline Road*
- *Foothills Boulevard/Blue Oaks Boulevard*
- *Fiddymment Road/Pleasant Grove Boulevard*

As new Specific Plans and/or development proposals are approved in the WRSP Area, the CIP shall be revised to include the following improvements to be funded by new development through payment of traffic mitigation fees.

- (a) **Intersection of Diamond Creek/Blue Oaks Boulevard:** Add 3<sup>rd</sup> eastbound and westbound through lanes to the intersection of Diamond Creek and Blue Oaks Boulevard (requires widening of Blue Oaks Boulevard from Woodcreek Oaks to west of Diamond Creek). This mitigation measure would result in LOS C.
- (b) **Intersection of Fiddymment Road/Baseline Road:** Add 2<sup>nd</sup> northbound left-turn lane, add 2<sup>nd</sup> southbound left-turn lane, to the intersection of Fiddymment Road and Baseline Road. This mitigation measure would result in LOS D.
- (c) **Intersection of Foothills/Blue Oaks Boulevard:** Add 3<sup>rd</sup> southbound through lane, add 3<sup>rd</sup> northbound left-turn lane and add 4<sup>th</sup> westbound through lane to the intersection of Foothills Boulevard and Blue Oaks Boulevard. This mitigation measure would result in LOS D.

- (d) **Intersection of Fiddyment Road/Pleasant Grove Boulevard:** Add 3<sup>rd</sup> southbound and 3<sup>rd</sup> northbound through lanes. This mitigation measure would result in LOS C.

The WRSP would develop over a period of years. Therefore the impacts to these intersections would occur over a long period of time. As with other improvements in the 2020 CIP, the City will monitor traffic conditions and determine when specific improvements are needed. The City of Roseville's traffic impact fees shall be revised to include the WRSP. The applicants shall contribute the WRSP's fair share of the cost of these improvements through payment of the updated traffic impact fees at the time of building permits.

Construction of the above intersection improvements would result in temporary increases in construction noise and dust, as well as the potential loss of or degradation to biological and cultural resources, and increased urban runoff. The exact impacts cannot be determined at this time because the roadway design has not been determined. When the City updates the CIP to include these improvements, the area of disturbance will be evaluated for such impacts, as required by CEQA. In addition, impacts on air quality, noise and water quality will need to be evaluated. Because the intersections to be improved are within the City, the potential for impacts on biological and cultural resources is likely to be insubstantial, and could be mitigated with measures similar to those identified in this EIR. Impacts related to erosion, noise and air emissions would be temporary, and typically are mitigable during construction.

*MM 4.3-3(a-c): Construct Identified Roadway Improvements on Placer County Roadways and Limit Access to Phillip Road (Impact 4.3-3 – WRSP):*

- (a) **Walerga Road:** Widen Walerga Road between Baseline Road and PFE road from four to six lanes. Based on Placer County's roadway segment capacities, this mitigation measure would result in LOS C or better conditions.
- (b) **Watt Avenue:** Widen Watt Avenue between Baseline Road and PFE Road from four to six lanes. Based on Placer County's roadway segment capacities, this mitigation measure would result in LOS C or better conditions on this segment of Watt Avenue.
- (c) **Phillip Road:** Blue Oaks Boulevard shall not be opened to through traffic between Realigned Phillip Road and West Side Drive until a north/south connection is constructed from West Side Drive to Baseline Road.

By limiting through traffic on Blue Oaks Boulevard from Phillip Road to West Side Drive until an additional north/south connection is available, the City will ensure that volumes on the portion of Phillip Road in the County will meet County standards for rural roadways.

Implementation of MM 4.3-3 (a) through (c) would reduce these impacts to a **less-than-significant level**; however, these improvements lie outside the jurisdiction of the City of Roseville. Placer County can implement the suggested mitigation measures, but may choose not to. If the improvements are not made, levels of service would remain as shown in Table 4.3-21 and Table 4.3-22. The City of Roseville will monitor traffic volumes and coordinate with the County to consider and implement additional operational measures/restrictions if needed as the plan develops.

**Table 4.3-22 Placer County Recommended Mitigation for Roadway Segments WRSP**

Roadway	Location	Assumed Lanes in 2020	Mitigation	LOS	
				Before Mitigation	After Mitigation
Walerga Road	Baseline Road to PFE Road	4	MM 4.3-3(a) Widen to 6 lanes	D	A
Watt Avenue	Baseline Road to PFE Road	4	MM 4.3-3(b) Widen to 6 lanes	D	A
Phillip Road	WRSP to Brewer Road	2	MM 4.3-3(c) Limit access	A	A

NOTES:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in Table 4.3-9.

Intersections that experience significant impacts are shaded.

SOURCE: DKS Associates 2003

As discussed above, if these improvements were constructed, there could be environmental effects on biological and cultural resources, noise, air quality, and water quality. Because the design of such improvements, or even if the responsible jurisdiction would choose to construct the improvements, is not known at this time, exact environmental impacts cannot be determined.

*MM 4.3-4(a-g): Construct Identified Improvements on Placer County Roadways (Impact 4.3-3 – SOI Amendment Area).*

Placer County should construct the following roadway improvements:

- (a) **Fiddlyment Road:** Widen Fiddlyment Road between the North Roseville City limit and Sunset Boulevard from two to four lanes. Based on Placer County’s roadway segment capacities, this mitigation measure would result in LOS A.
- (b) **Walerga Road:** Widen Walerga Road between Baseline Road and PFE road from four to six lanes. Based on Placer County’s roadway segment capacities, this mitigation measure would result in LOS C or better conditions.
- (c) **Watt Avenue:** Widen Watt Avenue between Baseline Road and PFE Road from four to six lanes. Based on Placer County’s roadway segment capacities, this mitigation measure would result in LOS C or better conditions on this segment of Watt Avenue.
- (d) **Phillip Road:** Improve Phillip Road outside of the WRSP to Placer County Rural Collection Standards. This includes wider cross-section and potentially paved shoulders.

- (e) **Intersection of Watt Avenue/PFE Road:** Widen Watt Avenue to six lanes through the intersection, which would provide LOS C at this intersection.
- (f) **Intersection of Watt Avenue/Baseline Road:** Add 3<sup>rd</sup> northbound and add 3<sup>rd</sup> southbound lane. This would result in LOS D at this intersection or better.
- (g) **Intersection of Pleasant Grove Drive/Baseline Road/Riego Road:** Add a northbound right-turn lane. This would result in LOS D.

Implementation of these measures would reduce these impacts to a less-than-significant level; however, the specified improvements lie outside the jurisdiction of the City of Roseville. Placer County can implement these suggested mitigation measures, but may choose not to. If the improvements are not made, levels of service would remain as shown in Table 4.3-22 and Table 4.3-23.

As discussed above, if these improvements were constructed, there could be environmental effects on biological and cultural resources, noise, air quality and water quality. Because the design of such improvements, or even if the responsible jurisdiction would choose to construct the improvements, is not known at this time, exact environmental impacts cannot be determined.

MM 4.3-5: *Improve Sunset Boulevard/Park Drive and Sunset Boulevard/Stanford Ranch Road. (Impact 4.3-4 – Remainder)*

Traffic operations and levels of service of a roadway like Sunset Boulevard are controlled by the capacity of its signalized intersections. The impact could be mitigated by the addition of through-lanes or turn-lanes on Sunset Boulevard at its intersections with Park Drive and Stanford Ranch Road. Implementation of this measure would reduce this impact to a less-than-significant level. However, the improvement lies outside the jurisdiction of the City of Roseville. The City of Rocklin can implement this suggested mitigation measure, but may choose not to. If the improvements are not made, levels of service would remain as shown in Table 4.3-17.

MM 4.3-6: *Widen Watt Avenue (Impact 4.3-6 – Remainder Area)*

Concurrent with the City's receipt of an application for development of the balance of the SOI (i.e., Remainder Area), the City of Roseville would work with Sacramento County to conduct a detailed peak hour operations analysis of this section of Watt Avenue focusing on the signalized intersections. The analysis would include specific land use and roadway information proposed within the Remainder Area, and would identify intersection improvements (i.e., additional turn lanes) or traffic operational improvements (i.e., signal interconnect/coordination, ITS, etc.) that could mitigate significant impacts to a less-than-significant level.

Widening of Watt Avenue from the Placer County line to Elverta Road would improve traffic operations on Watt Avenue. While Sacramento County could implement this measure, it could also elect not to implement this measure. If the widening is not constructed, service levels would remain as shown in Table 4.3-26.

As discussed above, if these improvements were constructed, there could be environmental effects on biological and cultural resources, noise, air quality and water quality. Because the design of such improvements, or even if the responsible jurisdiction would choose to construct the improvements, is not known at this time, exact environmental impacts cannot be determined.

*MM 4.3-7: Provide Appropriate Bicycle Network With Future Specific Plan Submittal (Impact 4.3-7 – Remainder)*

Any Specific Plan and/or development proposals in the SOI Amendment Area shall include a bicycle circulation plan that identifies Class I and II bicycle paths throughout the proposal area, and connects those bike paths to the City's network so that bicyclists can safely travel from home to schools, parks, open space areas, and employment areas. Class I bike paths shall connect with Baseline Road and the Class I bike paths in the WRSP.

The Bicycle Master Plan should be updated to include adequate bicycle facilities within the Remainder Area when it is planned.

*MM 4.3-8: Pay Fair Share of Additional Transit Services (Impact 4.3-8 – WRSP)*

The WRSP shall contribute their fair share towards the capital and operating costs for expanded transit services to the WRSP area. The amount of transit services needed would be identified in an updated Short Range Transit Plan and an updated Long Range Transit Master Plan.

*MM 4.3-9: Transit Services Policies (Impact 4.3-8 – Remainder)*

Any Specific Plan and/or development proposals in the Remainder Area shall contribute their fair share towards the capital and operating costs for expanded transit services to the project area. The amount of transit services needed would be identified in an updated Short Range Transit Plan and an updated Long Range Transit Master Plan prepared for projects in the Remainder Area.



## 4.4 AIR QUALITY

### 4.4.1 Introduction

This section evaluates the potential impacts on air quality resulting from development of the SOI Amendment Area. Referenced materials include

- *City of Roseville General Plan*
- *West Roseville Specific Plan*
- *Placer County General Plan*
- *Sacramento Area Regional Ozone Attainment Plan*

This section describes the air basin and the physical conditions affecting air pollution in the City of Roseville and surrounding areas. Sources, types, and health effects of air pollutants are also described.

Comments received in response to the Notice of Preparation (NOP) (see Appendix B) included concerns regarding the amount of pollutants generated during construction and operation of development slated to occur within the SOI Amendment Area as well as residential exposure to toxic air contaminants (TACs) associated with the Pleasant Grove Wastewater Treatment Plant (PGWWTP) and the potential electric power plant. Comments also expressed concern about the potential for locating a school in the vicinity of facilities that could emit TACs. These issues are addressed in this section.

As discussed in Chapter 1, Introduction, this EIR evaluates the impacts of the WRSP, which would include a Sphere of Influence Amendment and annexation to the City, at a project-specific level. Because a Sphere Amendment is the only action proposed for the Remainder Area (that portion of the SOI Amendment Area outside of the WRSP), a program-level analysis is provided for the Remainder Area. In order to conduct the analysis, development assumptions are made for the Remainder Area (see Chapter 2, Project Description, for details). Figure 1-1 (SOI Amendment Area) in Chapter 1 (Introduction) identifies the boundaries of the WRSP Area and Remainder Area (which comprise the total SOI Amendment Area).

As discussed in Chapter 4 of this EIR, Environmental Analysis, minor changes have been made to the proposed land uses for the WRSP since publication of the NOP. The change in the land use plan resulted in a modification to the backbone infrastructure network (e.g. roads) and a slight increase in the trip generation rate (less than 1 percent), which would slightly increase vehicle emissions. No other potential air quality impacts would be affected by the changes.

## **4.4.2 Environmental Setting**

Air quality is determined from a combination of weather, topography, and the quantity and type of pollutants released in an area. Air quality in the Roseville area is affected by local and regional sources of pollution.

### **■ Climate and Topography**

The proposed project area is located west of the City of Roseville in western Placer County, within the Sacramento Valley Air Basin (SVAB). Weather patterns throughout the basin, including Roseville, are affected by geography. The SVAB extends from south of Sacramento to north of Redding, and is bounded by the Sierra Nevada on the east, the Coast Range on the west, and the Cascade Range on the north. These mountain ranges tend to buffer the basin from the marine weather systems that originate over the Pacific and are drawn inland by the jet stream. The Carquinez Strait serves as the only westerly breach in this barrier, and exposes the midsection of the Valley to the Pacific Coast marine weather regime. Western Placer County is noticeably affected by this marine influence, which moderates climatic extremes and transports air pollutants into the area from distant sources, such as the San Francisco Bay Area and the Sacramento region. Temperature moderation is especially evident on summer evenings when cooling occurs as a result of the penetration of sea breezes.

Weather in Roseville is typically characterized by hot, dry summers and mild, wet winters. Summer temperatures range from an average low of 70°F to an average high of 90°F with temperatures in excess of 100°F being fairly common. This high average summer temperature, combined with very low relative humidity, produces hot, dry summers that contribute to ozone buildup. The winter season is characterized by overcast days and lengthy periods of rain and drizzle. Winter temperatures range from an average low of 40°F to an average high of 57°F, with occasional overnight freezing temperatures. During the winter months, carbon monoxide accumulation is of concern due to winter use of wood stoves and fireplaces. Annual precipitation averages 25 inches, with 90 percent falling from November through April. Prevailing winds are from the southwest, with a secondary concentration from the northwest.

Surface or elevated temperature inversions are common in late summer and fall. Surface inversions are formed when the air close to the surface cools more rapidly than the warm layer of air above it. Elevated inversions occur when a layer of cool air is suspended between warm air layers above and below it. Both situations result in air stagnation. Air pollutants accumulate under and within inversions, subjecting people in the region to elevated pollution levels and ensuing health concerns.

## ■ Criteria Air Quality Standards and Existing Concentrations

Much of the effort to improve air quality in the United States and California is directed toward the control of five “criteria” air pollutants: ozone (O<sub>3</sub>), carbon monoxide (CO), particulate matter less than ten microns in diameter (PM<sub>10</sub>), nitrogen oxides (NO<sub>x</sub>), and sulfur oxides (SO<sub>x</sub>). Pollutants subject to federal ambient standards are referred to as “criteria” pollutants because the U.S. Environmental Protection Agency (U.S. EPA) publishes criteria documents to justify the choice of standards. The federal and State standards for the criteria pollutants of greatest concern in the Sacramento Valley Air Basin—ozone, carbon monoxide, and particulate matter—are provided in Table 4.4-1. Table 4.4-2 provides a summary of the health effects associated with major air pollutants. Specific air quality regulations are discussed in the Regulatory Setting.

Air quality standards have been created to protect people who are most sensitive to the adverse health effects of air pollution, termed “sensitive receptors.” The term “sensitive receptors” refers to specific population groups as well as the land uses where they would reside for long periods. Children, the elderly, the acutely ill, and the chronically ill are commonly identified sensitive population groups. Residences, schools, playgrounds, childcare centers, retirement homes or convalescent homes, hospitals, and clinics are commonly identified sensitive land uses. Areas sensitive to air pollutants in or near the SOI Amendment Area include age-restricted residential areas (e.g., Del Webb to the east) and the nearest right-of-way where the elderly have continuous access, such as sidewalks.

The California Air Resources Board (CARB) collects ambient air pollutant concentration data at three locations near the City of Roseville: the Roseville air monitoring station at 151 North Sunrise Avenue, the North Highlands station in Sacramento County, and the Rocklin station at 5000 Rocklin Road. Recent ozone, carbon monoxide, and particulate data collected at these three stations are summarized in Table 4.4-3.

Each air basin, county, or, in some cases, specific urban area is classified by comparing actual monitoring data with state and federal standards. If a pollutant concentration is lower than the standard, the area is classified as “attainment” for that pollutant. If a pollutant exceeds the standard, the area is classified as “non-attainment.” If data are insufficient to determine whether a pollutant is exceeding the standard or not, the area is designated “unclassified.” The formation, health effects, ambient air pollutant concentrations, and classifications for the three key criteria pollutants in the Sacramento Valley Air Basin are discussed below. Health effects associated with criteria pollutants are presented in Table 4.4-2.

**Table 4.4-1 State and Federal Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards <sup>a</sup>	National Standards <sup>b</sup>		Sacramento Valley State Status/ Classification	Sacramento Valley National Status/ Classification
		Concentrations <sup>c</sup>	Primary <sup>d</sup>	Secondary <sup>e,f</sup>		
Photochemical Oxidants <sup>f</sup>	8-hour	—	0.08 ppm	Same as	Nonattainment/ Serious	Nonattainment/ Serious
	1-hour	0.09 ppm	0.12 ppm	Primary		
Carbon Monoxide	8-hour	9.0 ppm	9 ppm	Same as	Attainment/ None	Attainment/ None
	1-hour	20.0 ppm	35 ppm	Primary		
Nitrogen Dioxide	Annual Mean	—	0.053 ppm	Same as	Attainment/ None	Attainment/ None
	1-hour	0.25 ppm	—	Primary		
Sulfur Dioxide	Annual Mean	—	0.03 ppm	—	Attainment/ None	Attainment/ None
	24-hour	0.04 ppm	0.14 ppm	—		
	3-hour	—	—	0.5 ppm		
	1-hour	0.25 ppm	—	—		
Fine Particulate Matter (PM <sub>10</sub> )	Annual Mean	—	50 µg/m <sup>3</sup>	Same as Primary	Nonattainment	Attainment/ None
	Annual Geometric Mean	30 µg/m <sup>3</sup>	—	—		
	24-hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Same as Primary		
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Mean	—	15 µg/m <sup>3</sup>	Same as	Not Designated/ None	Not Designated/ None
	24-hour	—	65 µg/m <sup>3</sup>	Primary		

NOTES:

ppm = parts per million, µg/m<sup>3</sup> = micrograms per cubic meter

- a California standards, other than carbon monoxide, sulfur dioxide (1-hour), and fine particulate matter, are values that are not to be equaled or violated. The carbon monoxide, sulfur dioxide (1-hour), and fine particulate matter standards are not to be violated.
- b National standards, other than ozone, the 24-hour PM<sub>2.5</sub>, the PM<sub>10</sub>, and those standards based on annual averages, are not to be exceeded more than once a year. The 1-hour ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the annual fourth highest daily maximum concentration is less than 0.08 ppm. The 24-hour PM<sub>10</sub> standard is attained when the 99<sup>th</sup> percentile of 24-hour PM<sub>10</sub> concentrations in a year, averaged over 3 years, at the population-oriented monitoring site with the highest measured values in the area, is below 150 µg/m<sup>3</sup>. The 24-hour PM<sub>2.5</sub> standard is attained when the 98<sup>th</sup> percentile of 24-hour PM<sub>2.5</sub> concentrations in a year, averaged over 3 years, at the population-oriented monitoring site with the highest measured values in the area, is below 65 µg/m<sup>3</sup>. The annual average PM<sub>2.5</sub> standard is attained when the 3-year average of the annual arithmetic mean PM<sub>2.5</sub> concentrations, from single or multiple community oriented monitors is less than or equal to 15 µg/m<sup>3</sup>.
- c All measurements of air quality are to be corrected to a reference temperature of 25° C and a reference pressure of 760 mm of mercury (Hg) (1013.2 millibar), ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- d National Primary Standards: The levels of air quality deemed necessary by the federal government, with an adequate margin of safety, to protect the public health.
- e National Secondary Standards: The levels of air quality deemed necessary by the federal government, to protect the public welfare from any known or anticipated adverse effects to a pollutant.
- f Measured as ozone.
- g The 1-hour ozone standard will be replaced by the 8-hour standard on an area-by-area basis when the area has achieved 3 consecutive years of air quality data meeting the 1-hour standard.

SOURCE: CARB <http://www.arb.ca.gov>, June 2002.

**Table 4.4-2 Health Effects Summary of the Major Criteria Air Pollutants**

Air Pollutant	Adverse Effects
Ozone	<ul style="list-style-type: none"> <li>▪ Eye irritation</li> <li>▪ Respiratory function impairment</li> </ul>
Carbon Monoxide	<ul style="list-style-type: none"> <li>▪ Impairment of oxygen transport in the blood stream</li> <li>▪ Aggravation of cardiovascular disease</li> <li>▪ Impairment of central nervous system function</li> <li>▪ Fatigue, headache, confusion, dizziness</li> <li>▪ Can be fatal in the case of very high concentrations in enclosed places</li> </ul>
Particulate Matter	<ul style="list-style-type: none"> <li>▪ May be inhaled and lodge in and irritate the lungs</li> <li>▪ Increased risk of chronic respiratory disease with long exposure</li> <li>▪ Altered lung function in children</li> <li>▪ May produce acute illness with sulfur dioxide</li> </ul>

SOURCE: Bay Area Air Quality Management District

**Table 4.4-3 Summary of Air Pollutant Data Compared to Relevant Federal and State Ambient Air Quality Standards, 1999–2001**

Pollutant	1999			2000			2001		
	RCK <sup>1</sup>	RSV <sup>1</sup>	NHI <sup>1</sup>	RCK <sup>1</sup>	RSV <sup>1</sup>	NHI <sup>1</sup>	RCK <sup>1</sup>	RSV <sup>1</sup>	NHI <sup>1</sup>
<b>OZONE</b>									
Highest 1-hour (ppm)	0.128	.136	.121	.118	.128	.120	.128	.122	.132
Days>0.12 ppm (Fed)	3	2	0	0	1	0	1	0	1
Days>0.09 ppm (Cal)		14	11	16	13	10	10	9	12
<b>CARBON MONOXIDE</b>									
Highest 1-hour (ppm)	—	3.2	5.06	—	3.37	4.39	—	2.7	4.47
Days>35 ppm (Fed)	—	0	0	—	0	0	—	0	0
Days>20 ppm (Cal)	—	0	0	—	0	0	—	0	0
Highest 8-hour (ppm)	—	2.24	3.54	—	2.36	3.07	—	1.89	3.13
Days>=9.5 ppm (Fed)	—	0	0	—	0	0	—	—	—
Days>=9.1 ppm (Cal)	—	0	0	—	0	0	—	—	—
<b>PARTICULATE MATTER (PM<sub>2.5</sub>)</b>									
Highest 24-hour (ug/m <sup>3</sup> )	—	79	—	—	51	—	—	49	—
Days>50 ug/m <sup>3</sup> (Cal) <sup>2</sup>	—	1	—	—	0	—	—	0	—
<b>PARTICULATE MATTER (PM<sub>10</sub>)</b>									
Highest 24-hour (ug/m <sup>3</sup> )	75	89	73	46	58	82	57	59	64
Days>50 ug/m <sup>3</sup> (Cal) <sup>2</sup>	24	24	24	0	6	9	12	18	12

## NOTES:

1 Stations: RCK (Rocklin), RSV (Roseville), NHI (North Highlands).

2 Calculated by estimating the number of days that a measurement would have been greater than the standard had measurements been collected every day.

-- Data unavailable.

SOURCE: California Air Resources Board, www.arb.ca.gov site accessed 5-8-02.

## **Ozone**

Ozone is a colorless gas with a pungent odor. Ozone causes eye irritation and impairs respiratory function. Most ozone in the atmosphere is formed as a result of the interaction of ultraviolet light, reactive organic gases (ROG), and nitrogen oxides. Reactive organic gases are non-methane hydrocarbons, and nitrogen oxides consist mainly of nitric oxide and nitrogen dioxide. Motor vehicles are the primary source of reactive organic gases and nitrogen oxides. Ozone is a highly reactive molecule that readily combines with many different components of the atmosphere. High levels of ozone tend to exist when reactive organic gas and nitrogen oxide levels are high and sustain the ozone formation process. When the precursors are depleted, ozone levels rapidly decline. Because these reactions occur on a regional scale, ozone is considered a regional pollutant.

Western Placer County has been designated as a severe non-attainment area for the federal ozone standard and is included within the Sacramento Air Quality Maintenance Area defined by the U.S. EPA. The portion of Placer County within the Sacramento Valley Air Basin is also designated as a non-attainment area for the state ozone standard. In addition, the current recommended area designations for the Federal eight-hour ozone standard place the Sacramento Valley Air Basin in nonattainment.

## **Carbon Monoxide**

Carbon monoxide is an odorless, colorless gas. It causes a number of health problems including fatigue, headache, confusion, and dizziness. The incomplete combustion of petroleum fuels by on-road vehicles is a major cause of carbon monoxide emissions. Carbon monoxide is also produced during the winter from wood stoves and fireplaces. Carbon monoxide tends to dissipate rapidly into the atmosphere; consequently, violations of the state carbon monoxide standard are generally limited to major traffic intersections during peak-hour traffic conditions.

Carbon monoxide levels recorded at the Roseville air monitoring station are considered representative of existing conditions in the project vicinity; however, the extensive future development projected for the west Placer County area could result in land use intensities and carbon monoxide conditions more similar to those in the North Highlands area today. The urban area of Placer County is designated as attainment for the federal carbon monoxide standards. Placer County is designated an attainment area for state carbon monoxide standards.

## **Sulfur Dioxide**

Sulfur dioxide (SO<sub>x</sub>) is a combustion product of sulfur or sulfur-containing fuels such as coal. The Sacramento Valley Air Basin is currently in attainment for SO<sub>x</sub>.

### **Particulate Matter**

Particulate matter consists of atmospheric particles resulting from fume-producing industrial and agricultural operations, and natural activities. Current standards define acceptable concentrations of particles smaller than 10 microns in diameter (PM<sub>10</sub>). In addition, standards now exist for acceptable concentrations of particles smaller than 2.5 microns in diameter (PM<sub>2.5</sub>). Placer County is designated an unclassified area for the federal standards for particulate matter and a non-attainment area for state standards for particulate matter.

### **Toxic Air Contaminants**

In addition to the criteria air pollutants, another group of airborne substances, called Toxic Air Contaminants (TACs) are known to be highly hazardous to health, even in small quantities. TACs are airborne substances capable of causing short-term (acute) and/or long-term (chronic or carcinogenic) adverse human health effects (i.e., injury or illness). Although there are hundreds of substances that can be toxic when inhaled, air quality standards have not been set for most of them.

TACs can be emitted from a variety of common sources, including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. Natural source emissions include windblown dust and wildfires. Research facilities, farms, construction sites, and residential areas can also contribute to toxic air emissions. TACs include both organic and inorganic chemical substances. Examples include certain chlorinated hydrocarbons such as solvents, certain metals, and asbestos. In 1998, the CARB identified particulate matter from diesel-fueled engines as a TAC. Compared to other air toxics the CARB has identified and controlled, diesel particulate emissions are estimated to be responsible for approximately 70 percent of the total ambient air toxics risk throughout California.

Placer County does not currently have a monitoring station for toxic air contaminants. Since the project site is undeveloped and consists of grazing land and agricultural fields, there are no known sources emitting TACs within the site.

Land uses surrounding the site are primarily undeveloped agricultural land and residential development, however the Western Regional Sanitary landfill (WRSL) is located approximately one mile north of the Amendment Area and the soon to be completed PGWWTP located to the west of the Fiddyment Ranch property and northeast of the Westpark property.

## **Odors**

There are four major elements involved in evaluating odor emissions: deductibility, recognition, intensity, and hedonic tone. Deductibility is the lowest concentration of an odorant that will elicit a sensory response; at this concentration there is an awareness of the presence of an added substance, but not necessarily an odor sensation. Recognition, however, is the minimum concentration that is recognized as having a characteristic odor quality noticeable to a segment of the population. Odor intensity refers to the perceived strength of the odor sensation, and odorant character is what the substance smells like (e.g. fishy, rancid, hay, sewer). Hedonic tone is a judgment of the relative pleasantness or unpleasantness of the odor, and is influenced by factors, such as subjective experience and frequency of occurrence. The apparent presence of an odor in ambient air depends on the properties of the substance emitted, its concentration in facility emissions, and the dilution of emission between the mission point and the receptor.

The primary existing odor source in the area is the PGWWTP.

### **■ Existing Emission Sources and Concentrations**

There are many types of air pollutant sources in the portion of Placer County located within the Sacramento Valley Air Basin. These sources can be divided into two categories: mobile and stationary sources. The California Air Resources Board maintains an emission inventory of air pollutants within the state's air basins and counties inside those air basins. Table 4.4-4 presents the latest emission inventory of reactive organic gases, nitrogen oxides, carbon monoxide, and particulate matter for the portion of Placer County located within the Sacramento Valley Air Basin. Exhaust emissions from on-road motor vehicles are the primary source of reactive organic gases, nitrogen oxides, and carbon monoxide in the western portion of Placer County. Mobile sources account for approximately 55 percent of the reactive organic gases emissions, 74 percent of the carbon monoxide emissions in this portion of the County, and 90 percent of the nitrogen oxide emissions. Mobile sources account for high carbon monoxide concentrations at some congested traffic intersections. Area-wide sources -- particularly entrained road dust, agricultural activities, construction activities and demolition activities -- are the primary sources of particulate matter in western Placer County, accounting for approximately 85 percent of particulate emissions.

### **SOI Amendment Area**

The SOI Amendment Area is bounded primarily by agricultural grazing land to the north, south, and west, and residential development (Del Webb Specific Plan and the North Roseville Specific Plan) to the

east. The Western Regional Sanitary Landfill (WRSL) is located approximately one mile north of the SOI Amendment Area. Within the central portion of the WRSP, some agricultural facilities and an occupied homestead exist. The City's PGWWTP is surrounded by the WRSP to the east, south, and west, and the Remainder Area to the north.

**Table 4.4-4      2001 Base Year Emissions Summary for the Sacramento Valley  
Air Basin Portion of Placer County (tons/day)**

Source Category	ROG	CO	NO <sub>x</sub>	PM <sub>10</sub>
<b>Stationary Sources</b>				
Fuel Combustion	0.04	1.15	1.41	0.10
Cleaning and Surface Coatings	5.07	--	--	0
Petroleum Process, Storage and Transfer	0.51	--	--	--
Industrial Processes	1.38	0.10	0.12	0.91
<b>Total Stationary Sources</b>	<b>6.99</b>	<b>1.24</b>	<b>1.53</b>	<b>1.01</b>
<b>Areawide Sources</b>				
Solvent Evaporation	3.57	--	--	--
Miscellaneous Processes	6.65	48.43	1.07	21.46
<b>Total Areawide Sources</b>	<b>6.65</b>	<b>48.43</b>	<b>1.07</b>	<b>21.46</b>
<b>Mobile Sources</b>				
On-Road Vehicles	10.78	104.16	13.79	0.40
Other Mobile	6.04	40.06	10.76	0.63
<b>Total Mobile Sources</b>	<b>16.82</b>	<b>144.2</b>	<b>24.5</b>	<b>1.03</b>
<b>Natural (Non-Anthropogenic) Sources</b>				
<b>Total Natural Sources</b>	<b>0.02</b>	<b>0.34</b>	<b>0.01</b>	<b>0.06</b>
<b>Total</b>	<b>30.49</b>	<b>194.5</b>	<b>27.16</b>	<b>23.56</b>

SOURCE: California Air Resources Board.

The City's PGWWTP and landfill could be sources of air contaminants and odors. Traffic on access roads bounding the SOI Amendment Area could also produce air contaminants. The Remainder Area consists primarily of agricultural land with limited rural residential development, and does not currently contain major sources of air pollutants; however, some contaminants are likely produced by vehicles traveling on access roads bounding the area (e.g., Baseline Road).

Of the land uses surrounding the SOI Amendment Area, the residential areas would be considered sensitive receptors with respect to air quality. Within the SOI Amendment Area, the rural residences in the SOI Amendment Area would also be considered sensitive receptors.

### 4.4.3 Regulatory Setting

Air quality is regulated by the U.S. EPA, the California Air Resources Board (CARB), and the Placer County Air Pollution Control District. These agencies develop rules or regulations to meet the goals or

directives imposed on them through legislation. Although U.S. EPA regulations may not be superseded, both state and local regulations may be more stringent. In general, air quality evaluations are based on air quality standards developed by the federal and state government. Mobile sources of air pollutants are largely controlled through federal and state agencies, while most stationary sources are regulated by the local air pollution control districts or air quality management districts.

Placer County spans three air basins in California: the southwestern third of the County, which includes the project site, is within the Sacramento Valley Air Basin; the northeastern portion is within the Lake Tahoe Air Basin; and the remainder is within the Mountain Counties Air Basin. Because air quality is sometimes regulated on a county-by-county basis and sometimes on a regional basis (or within an air basin), air quality regulations and planning efforts in Placer County are intricate. For instance, under federal law, a large region called the Sacramento Air Quality Maintenance Area, which includes Sacramento and parts of Yolo, Solano, and Placer Counties (including Roseville), has been designated non-attainment for the federal ozone standard. Consequently, the jurisdictions in this region must solve the ozone problem jointly.

## ■ **Federal**

### **Clean Air Act**

The Federal Clean Air Act (FCAA), as amended, establishes air quality standards for several pollutants. These standards are divided into primary standards and secondary standards. Primary standards are designed to protect public health, and secondary standards are intended to protect public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. In addition, the State of California has adopted its own standards. The State and federal standards for the pollutants of greatest concern in the Sacramento Valley Air Basin are presented in Table 4.4-2. The Federal Clean Air Act requires that regional plans be prepared for non-attainment areas illustrating how the federal air quality standards could be met. The California Air Resources Board approved the most recent revision of the State Implementation Plan in 1994, and submitted it to the U.S. EPA. The State Implementation Plan was approved by the U.S. EPA in 1996. The State Implementation Plan consists of a list of reactive organic gas and nitrogen oxide control measures for demonstrating future attainment of ozone standards. The steps to achieve attainment will continue to require significant emissions reductions in both stationary and mobile sources.

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### **Eight-Hour Ozone Standard**

The federal eight-hour ozone standard was established in response to human health studies indicating that longer ozone exposures at lower levels also resulted in adverse health effects, including coughing, increased asthma attacks, chronic lung inflammation, decreased lung function, and decreased lung defenses against bacterial infections. The eight-hour standard was established in order to complement, not replace, the existing one-hour standard. Both federal ozone standards now apply, along with California's own one-hour ozone standard.

### **Federal Ozone Attainment Plan**

The Sacramento Valley Air Basin is subject to a Federal Ozone Attainment Plan (the Sacramento Area Regional Ozone Attainment Plan). This plan was adopted by five air districts in the Sacramento area in order to build upon existing state and local air quality programs. The Plan contains adopted measures, implementation and adoption schedules for new measures, emission inventories, modeling results, contingency measures, and emissions reduction demonstrations that guide reduction of emissions in the Sacramento Region. Placer County needs to reach attainment for federal ozone standards by 2005.

### **Toxic Air Contaminants**

Regulation of TACs is achieved through federal and state controls on individual sources. The 1990 federal CAA Amendments offer a comprehensive plan for achieving significant reduction in both mobile and stationary source emissions of certain designated Hazardous Air Pollutants (HAP). All major stationary sources of designated HAP's are required to obtain and pay the required fees for an operating permit under Title V of the federal CAA Amendments.

The Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588), California Health and Safety Code Section 44300 et seq, provides for the regulation of over 200 air toxics and is the primary air contaminant legislation in the State. Under the Act, local air districts may request that a facility account for its TAC emissions. Local air districts then prioritize facilities on the basis of emissions, and high-priority designated facilities are required to submit a health risk assessment and communicate the results to the affected public. The TAC control strategy involves reviewing new sources to ensure compliance with required emission controls and limits, maintaining an inventory of existing sources of TACs, and developing new rules and regulations to reduce TAC emissions. The purpose of AB 2588 is to identify and inventory toxic air emissions and to communicate the potential for adverse health effects to the public.

Assembly Bill 1807 (AB 1807), enacted in September 1983, sets forth a procedure for the identification and control of TACs in California. The CARB is responsible for the identification and control of TACs, except in their pesticide use. AB 1807 defines a TAC as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The CARB prepares identification reports on candidate substances under consideration for listing as TACs. The reports and summaries describe the use of and the extent of emissions in California resulting in public exposure, together with their potential health effects.

As discussed previously, the CARB recently identified diesel particulate matter as a toxic air contaminant. In October 2000, the CARB released the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. This plan represents the State's comprehensive plan to substantially reduce diesel particulate emissions throughout the state. The plan contains the following three components:

1. New regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce diesel particulate emissions by about 90 percent overall from current levels;
2. New retrofit requirements for existing on-road, off-road, and stationary diesel-fueled engines and vehicles where determined to be technically feasible and cost effective; and
3. New phase 2 diesel fuel regulations to reduce the sulfur content levels of diesel fuel to no more than 15 parts per million to provide the quality of diesel fuel needed by the advanced diesel particulate emission controls.

### ■ **State**

The State of California air quality standards are generally more stringent than the corresponding federal standards for the criteria air pollutants. The California Clean Air Act (CCAA) requires non-attainment areas to plan for the eventual attainment of the standards. Areas have been designated as attainment or non-attainment with respect to the ambient air quality standards. The timeframe given to meet state air quality standards would depend upon the severity of air quality problems. The California Health and Safety Code Section 40914(A) requires that air districts design a plan to achieve an annual reduction in district-wide emissions of five percent or more for each non-attainment criteria pollutant or its precursor, averaged every consecutive three-year period, beginning at base year 1987.

The CARB, regulates mobile emissions sources, and oversees the activities of County air pollution control districts and regional air quality management districts. The CARB regulates local air quality indirectly by establishing vehicle emission standards, by conducting research activities, and through planning and coordination activities.

## ■ Local

### **Placer County Air Pollution Control District**

The project site is located within the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The PCAPCD regulates stationary emission sources through its permit authority, and indirect or area source emission sources (e.g., fireplaces, lawn maintenance equipment) through planning and review. The PCAPCD is responsible for implementing emissions standards for stationary sources and other requirements of federal and state laws.

The SOI Amendment Area is part of the Sacramento Air Quality Maintenance Area. Each County within this area has adopted individual programs to reduce air pollution. PCAPCD has published its Air Quality Attainment Plan. The plan complies with the California Clean Air Act requirement to meet the state ambient air quality standards. The plan focuses on ozone and carbon monoxide, and includes strategies to reduce air pollutants by promoting public involvement, encouraging compliance through positive influence and behavior, and public education.

Toxic air contaminants are considered separately from the criteria pollutants in the regulatory process. No ambient air quality standards have been set for toxic air contaminants. Therefore, a health risk assessment is generally performed to estimate the potential for health risks associated with emission of toxic air contaminants.

PCAPCD has several rules that relate to the SOI Amendment Area and are defined below:

#### ***Rule 205 Nuisance***

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause to have a natural tendency to cause injury or damage to business or property.

#### ***Rule 207 Particulate Matter***

A person shall not release or discharge into the atmosphere from any source or single processing unit, exclusive of sources emitting combustion contaminants only, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions.

#### ***Rule 217 Cutback and Emulsified Asphalt Paving Materials***

A person shall not discharge into the atmosphere volatile organic compounds (VOCs) caused by the use or manufacture of Cutback or Emulsified asphalts for paving, road construction or road maintenance, unless such manufacture or use complies with the provisions of this rule.

### **Rule 218 Architectural Coatings**

1. Except as provided in Subsections (D)(2) and (D)(5) a person shall not sell or offer for sale, apply or manufacture for sale any architectural coating which at the time of sale or manufacture:
  - a. Contains more than 250 grams of VOC's per liter of coating excluding water and any colorant added to tint bases, or
  - b. Is recommended for use as a bituminous pavement sealer unless it is an emulsion-type coating.
2. A person shall not sell, offer for sale, apply or manufacture for sale any non-flat architectural coating which at the time of sale or manufacture has a VOC content excluding water and colorant added to tint bases in excess of the following:
  - a. 380 grams of VOC per liter of coating if manufactured prior to September 1, 1989.
  - b. 250 grams of VOC per liter of coating if manufactured on or after September 1, 1989.

### **Rule 228 Fugitive Dust**

301 VISIBLE EMISSIONS NOT ALLOWED BEYOND BOUNDARY LINE: A person shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area (including disturbance as a result of the raising and/or keeping of animals or by vehicle use), such that the presence of such dust remains visible in the atmosphere beyond the boundary line of the emission source.

302 VISIBLE EMISSIONS FROM ACTIVE OPERATIONS: In addition to the requirements of Rule 202, Visible Emissions, a person shall not cause or allow fugitive dust generated by active operations, an open storage pile, or a disturbed surface area, such that the fugitive dust is of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke as dark or darker in shade as that designated as No. 2 on the Ringelmann Chart (i.e., 40% opacity), as published by the United States Bureau of Mines.

303 CONCENTRATION LIMIT: A person shall not cause or allow PM<sub>10</sub> levels to exceed 50 micrograms per cubic meter, 24 hour average, when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other EPA-approved equivalent method for PM<sub>10</sub> monitoring. Sampling shall be conducted in accordance with the procedures specified in Section 500.

304 TRACK-OUT ON TO PAVED PUBLIC ROADWAYS: Visible roadway dust as a result of active operations, spillage from transport trucks, and the track-out of bulk material onto public paved roadways shall be minimized and removed.

### **City of Roseville General Plan**

The City of Roseville General Plan includes goals and policies aimed at improving air quality in Roseville and coordinating with the PCAPCD's plans. See Appendix C for a complete list of all applicable City goals and policies.

### **Department of Public Works Construction Standards, Section 111**

The City of Roseville has adopted construction standards that apply to all projects within the City limits. These standards require projects to meet specific engineering and design requirements. The following

requirements from Section 111 of the Construction Standards would minimize fugitive dust and PM<sub>10</sub> during construction activities.<sup>89</sup>

#### 111-3 Installation

##### 3. Dust/Mud Control

- a. **Adjacent Streets**—Adjacent street frontages shall be swept at least once a day to remove silt and other dirt which is evident from construction activities.
- b. **Construction vehicles**—The Contractor is responsible for cleaning construction vehicles leaving the site on a daily basis to prevent dust, silt, mud, and dirt from being released or tracked off site.
- c. **Grading Spoils**—Dry stockpiles of soil shall be watered to prevent the generation of airborne dust. Trucks transporting dry soil shall be covered with tarpaulins.
- d. **Water**—Water shall be sprayed on all exposed earth surfaces during clearing, grading, earth moving, and other site preparation activities. The exposed earth shall be watered throughout the day to minimize dust. The Contractor shall obtain a hydrant permit from the Environmental Utilities Department.
- e. **Wind Allowances** – Grading activities shall be restricted or halted when winds exceed 15 miles per hour or as deemed necessary by the Public Works Inspector.

### **City of Roseville Transportation Systems Management Ordinance**

The City's Transportation Systems Management (TSM) Ordinance would require companies with more than 50 employees to prepare a TSM plan that promotes the use of alternative modes of transportation. Operational emissions exceeding Placer County APCD thresholds would be slightly reduced as a result of this ordinance.

### **Assembly Bill 2588**

Assembly Bill (AB) 2588 provides regulation for over 200 air toxics to minimize their effects requiring the installation of BACT in facilities exceeding the 10 in 1 million health risk.

### **West Roseville Specific Plan**

The WRSP includes features that would minimize operational emissions containing ROG, NO<sub>x</sub>, PM<sub>10</sub> and CO. The following measures are required to reduce the generation of these operational emissions:

- Class II and III on-street bikeway system.
- Class I bikeway system that connects all aspects of the plan area.
- Development of a Village Center that promotes the pedestrian over the automobile.
- Design streets to maximize pedestrian access to transit stops.
- Preparation of a Transportation System Management Plan for employers with 50 or more employees.
- Park and ride lots.

<sup>89</sup> City of Roseville. *Department of Public Works Construction Standards*. May 2001. Pp GR2-GR3.

#### 4.4.4 Impacts and Mitigation Measures

##### ■ Methods of Analysis

Air quality impacts fall into two categories: short-term emissions due to construction and long-term impacts due to project operation. Impacts in each category can be classified as having effects on a regional or local scale. Project grading and construction equipment would create PM<sub>10</sub>, ROG and NO<sub>x</sub> on a short-term or temporary basis. Long-term operational emissions would consist of vehicle emissions and area source emissions such as fireplaces, woodstoves, industrial operations and landscaping equipment. Motor vehicle use would be the primary long-term source of additional O<sub>3</sub> and CO resulting from project operation.

When evaluating traffic-related air quality impacts, analysis depends on the same assumptions made in Section 4.3, Transportation, because traffic volumes associated with the SOI Amendment Area as a whole cannot be determined by simply adding the new volumes attributed to the WRSP and Remainder Area components since the traffic model utilized redistributes trips based on changes in regional land use. Changes in jobs and housing may change community patterns, and redistribution of trips causes changes in traffic volumes throughout the model network, including both increases and decreases in volume on roadways. Therefore, for this section, the air quality impacts for the SOI Amendment Area as a whole are analyzed independently of the analysis for the WRSP and Remainder Area.

Operational impacts on local CO concentrations were quantified using the CALINE4 model and the traffic data provided in Section 4.3, Transportation and Circulation. Model output results are located in Appendix H.

The CARB's URBEMIS7G emission estimation program was used to quantify potential emissions from construction activities and vehicle trips. Model output results are located in Appendix H. The assumed average winter temperature was 50 degrees and the average summer temperature was 85 degrees. For operational emissions, it was assumed that 10 percent of the homes would have wood-burning stoves and 10 percent of all homes would have traditional fireplaces. The remaining 80 percent were assumed to have no wood burning appliances. It was also assumed that an average of one cord of wood would be burned per season per home within the WRSP and Remainder Area. It should also be noted that the modeling assumptions used for woodstove emissions were very conservative. Given the average winter temperature in the SOI Amendment Area is approximately 50 degrees, wood burning devices are infrequently used and it is possible that residences within either the WRSP or Remainder Area would not result in the addition of any wood burning stoves. Modeling also assumes that one cord of wood would be burned during a season. For the reason discussed above, it is unlikely that an entire cord of wood

would be burned by 10 percent of residents with homes. Finally, emissions associated with wood burning stoves occur only during the winter months, and are not produced year round like many other area source emissions. In addition, new homes would be required to install only EPA-certified wood burning stoves, which have reduced emissions compared to traditional stoves.

Modeling assumptions did not include the use of architectural coatings, because information on the extent of use of such coatings was not available.

It was assumed that 20 percent of the WRSP and Remainder Area would be paved. Each land use has a trip generation rate. Land use parameters entered into the model were consistent with those used in the traffic analysis. The double counting correction was on for vehicle emission modeling to prevent the individual trips within the WRSP from being counted twice (i.e., a trip from home to the store would be counted as one trip instead of two). The generation rates would normally count that trip as two since the store attracts the trip and the home generates the trip.

For construction emissions, it was assumed that all construction equipment would be diesel-powered. Use of construction equipment was evenly distributed between all equipment types, but the pieces of heavy equipment that were identified as defaults by the model were weighted at a 2:1 ratio compared to other types of equipment. When modeling PM<sub>10</sub> construction emissions, it was assumed that a total of 22 pieces of construction equipment would be operating simultaneously and that a maximum of 10 acres would be disturbed within any 24-hour period. For most subdivisions, the grading of 10 acres per day is a conservative assumption. Construction was assumed to take place starting in 2004.

Specific air quality data for each impact are discussed in detail below. The baseline for the analysis in this section is buildout of the City's General Plan and approved projects.

### ■ Standards of Significance

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area could:

- Cause or contribute to local CO concentrations exceeding 20 ppm over a 1-hour averaging period or 9 ppm over an 8-hour averaging period at worst-case locations near congested intersections;
- Result in construction or operational emissions that would exceed the following thresholds established by the PCAPCD:
  - › ROG: 82 lb/day
  - › NO<sub>x</sub>: 82 lb/day

- › PM<sub>10</sub>: 82 lb/day
- › CO: 550 lbs/day
- Exceed the toxic air contaminants health risk level of 10 in 1 million;
- Obstruct the goals of relevant air quality plans, particularly the 1994 Sacramento Area Regional Ozone Attainment Plan; or
- Expose sensitive receptors to objectionable odors emitted from existing or proposed sources.

**Impacts**

<b>IMPACT 4.4-1: FUGITIVE DUST AND PM<sub>10</sub> FROM GRADING, AND TRENCHING ACTIVITIES.</b>			
<b>Applicable Policies and Regulations:</b>	PCAPCD Rules 205 and 207 City of Roseville Construction Standards, Section III		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.4-1 (Dust control measures) (WRSP) MM 4.4-2 (Dust control policies) (Remainder Area)	MM 4.4-1 (Dust control measures)	MM 4.4-2 (Dust control policies)
<b>Significance after Mitigation:</b>	Short-term Significant and Unavoidable	Short-term Significant and Unavoidable	Short-term Significant and Unavoidable

**SOI Amendment**

Construction activities associated with development within the proposed project area would consist of clearing of vegetation, excavation, trenching and grading, which would temporarily increase particulate (dust) emissions. In addition, construction vehicles traveling on unpaved surfaces would generate dust, as would wind blowing over exposed earth at active construction sites. These emissions could contribute to regional fugitive dust and PM<sub>10</sub> air pollution problems. The generation of dust during construction activities could adversely affect sensitive receptors, including construction workers, and would exceed the PCAPCD thresholds. Dust caused by construction activities could exacerbate existing respiratory problem such as asthma. Dust can also adversely affect children and the elderly who are more susceptible to respiratory illnesses.

Construction emissions associated with construction of the SOI Amendment Area are estimated to be 361.79 lbs/day, assuming that construction is occurring in both the WRSP and Remainder Areas at the same time. Because these would exceed PCAPCO thresholds, this is considered a significant impact. Development of the SOI Amendment Area would occur incrementally in a series of focused project areas

over a number of years, so the entire area would not likely be graded at one time. Unlike other sources of air pollutants, grading activities only occur once so that emissions associated with grading activities are finite.

The City of Roseville has construction standards, described earlier, that would minimize the creation of dust during construction activities.

The PCAPCD Rule 205, Nuisance, limits the amount of PM<sub>10</sub> that can be generated during construction activities. Rule 205 states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public.

PCAPCD Rule 207 Particulate Matter would limit the amount of PM<sub>10</sub> generated during construction activities. Rule 207 states that a person shall not release or discharge into the atmosphere from any source or single processing unit, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions. PCAPCD Rule 228 identifies specific measures that must be implemented for all construction projects in Placer County.

MM 4.4-1 and MM 4.4-2 would ensure dust control measures are in place to reduce fugitive dust associated with project construction. In combination with Rules 205, 207, and 228, these measures could reduce emissions below PCAPCD thresholds, if grading activities were limited to 20 acres or less. However, grading could occur in several areas of the SOI Amendment Area at one time, and on more than 20 total acres per day. Because grading activity would end once a project is under construction, this impact is considered a **short-term significant and unavoidable impact**.

### **West Roseville Specific Plan**

Construction associated with the WRSP is estimated to generate as much as 180.64 lbs/day of PM<sub>10</sub>, which would exceed PCAPCD's thresholds. PM<sub>10</sub> emissions would fluctuate in accordance with the amount of construction activities and at times would be less than those emissions presented in Table 4.4-5. Although compliance with the City of Roseville Construction Standards and the policies in the WRSP would minimize PM<sub>10</sub> emissions generated during construction activities, the amount of emissions generated would still exceed the PCAPCD thresholds. This is considered a significant impact.

MM 4.4-1 would reduce the amount of dust generated by construction by requiring covering all trucks that transport sand, soil and other loose materials, prohibiting open burning of vegetation and reducing traffic speeds on all unpaved roads. With implementation of the existing rules and regulations and the WRSP along with implementation of MM 4.4-1, PM<sub>10</sub> emissions associated with construction activities

could be reduced below the PCAPCD thresholds when grading occurs on fewer than 20 acres per day. However, two or more areas within the WRSP could be simultaneously under construction, thereby resulting in higher emissions than those presented in Table 4.4-5. Therefore, this impact would be considered **short-term significant and unavoidable** impact.

<b>Table 4.4-5 Construction Emissions (lbs/day)</b>				
	<b>ROG (lbs/day)</b>	<b>NOx (lbs/day)</b>	<b>PM<sub>10</sub> (lbs/day)</b>	<b>CO (lbs/day)</b>
<b>WRSP</b>				
Grading	33.86	418.35	135.86	--
Construction <sub>1</sub>	50.47	62.50	11.99	118.53
Stationary Equipment	1.85	1.51	0.09	--
Mobile Equipment	30.75	333.82	32.7	--
<b>Subtotal</b>	<b>116.92</b>	<b>816.18</b>	<b>180.64</b>	<b>118.53</b>
<b>Remainder Area</b>				
Grading	33.86	418.35	135.86	--
Construction <sub>1</sub>	52.34	65.15	12.50	123.56
Stationary Equipment	1.85	1.51	0.09	--
Mobile Equipment	30.75	333.82	32.7	--
<b>Subtotal</b>	<b>118.80</b>	<b>818.83</b>	<b>181.14</b>	<b>123.56</b>
<b>Total SOI Amendment Area</b>				
Grading	67.72	836.7	271.72	--
Construction <sub>1</sub>	102.81	127.65	24.49	242.09
Stationary Equipment	3.7	3.02	0.18	--
Mobile Equipment	61.5	667.64	65.4	--
<b>Total</b>	<b>235.73</b>	<b>1635.01</b>	<b>361.79</b>	<b>242.09</b>
Placer County APCD Thresholds	82	82	82	550
<b>Exceed Threshold?</b>				
WRSP	Yes	Yes	Yes	No
SOI Remainder Area	Yes	Yes	Yes	No
<b>Total</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>

NOTE:

1. For ROG emissions, includes construction worker trips and Asphalt offgassing.

SOURCE: EIP Associates 2003. Air quality model outputs are provided in Appendix F.

### Remainder Area

As with the WRSP, construction in the Remainder Area would generate PM<sub>10</sub>. As indicated in Table 4.4-5, PM<sub>10</sub> emissions associated with the construction of only the Remainder Area are estimated to be 181.14 lbs/day. These emissions would vary by day, depending on the amount of grading, and if multiple projects were graded simultaneously within the Remainder Area, PM<sub>10</sub> unmitigated emissions could be higher or lower than those presented in Table 4.4-5. MM 4.4-2 requires that dust control measures be implemented. Such measures could include covering all trucks transporting sand, soil or other loose material, prohibiting open burning of vegetation, and reducing traffic speeds on all unpaved roads.

Compliance with Rule 205 and Rule 207 as well as City regulations and with MM 4.4-2, would reduce that PM<sub>10</sub> emissions associated with construction activities. However, because the amount of grading on a single day could emit PM<sub>10</sub> that exceeds PCAPCD thresholds, this is considered a **short-term significant and unavoidable** impact.

<b>IMPACT 4.4-2 CONSTRUCTION EMISSIONS.</b>			
<b>Applicable Policies and Regulations:</b>	PCAPCD Rules 217 and 218		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.4-3 (Reduction of construction emissions) (WRSP) MM 4.4-4 (Reduction of construction emissions) (Remainder Area)	MM 4.4-3 (Reduction of construction emissions)	MM 4.4-4 (Reduction of construction emissions)
<b>Significance after Mitigation:</b>	Short-term Significant and Unavoidable	Short-term Significant and Unavoidable	Short-term Significant and Unavoidable

### SOI Amendment

Development of the SOI Amendment Area would result in NO<sub>x</sub>, ROG, and CO emissions generated by the use of mobile construction equipment for development within the WRSP as well as for off-site improvements such as roadway or infrastructure improvements. Construction equipment is frequently diesel-fueled, which generates more pollutants than construction equipment that uses gasoline. Given the size of the SOI Amendment Area, and the intensity of land uses that could occur, construction activities would generate substantial quantities of NO<sub>x</sub>, ROG, and CO emissions, and would exceed the PCAPCD thresholds of 82 pounds per day for ROG and NO<sub>x</sub>. In addition to exhaust from construction equipment, the use of architectural coatings and asphalt paving generate emissions. These additional activities would result in the generation of ROGs, which are ozone precursors and ultimately result in the creation of ozone.

As shown in Table 4.4-5, the total construction emissions associated with the development of the SOI Amendment Area are estimated to be approximately 235.73 lbs/day of ROG, 1,635.01 lbs/day of NO<sub>x</sub>, and 361.79 lbs/day of PM<sub>10</sub>. Because these levels would exceed PCAPCD thresholds, this is considered a significant impact. Compliance with Rule 217 (discussed below) as well as MM 4.4-3 and MM 4.4-4 would reduce emissions but not to a level that is less than the PCAPCD thresholds. Because development

of the SOI Amendment Area would still exceed the PCAPCD thresholds even with mitigation, this is considered a **short-term significant and unavoidable** impact.

### **West Roseville Specific Plan**

As shown in Table 4.4-5, construction in the WRSP is predicted to generate emissions of 116.92 lbs/day for ROG, 816.18 lbs/day for NO<sub>x</sub> and 118.53 lbs/day for CO. Construction activities would exceed PCAPCD thresholds for both ROG and NO<sub>x</sub>, so this is a significant impact. It should be noted that construction emissions are considered short-term emissions because they would only occur during the construction period that is considered short-term when compared to the life of the project itself.

The PCAPCD has adopted Rule 217, which states that a person may not discharge ROGs into the atmosphere by the use of cutback or emulsified asphalts, and Rule 218, which limits the amounts of VOC in architectural coatings. Implementation of the rules would reduce the amount of pollutants generated by asphalt paving and the application of architectural coatings.

Because emissions generated by construction equipment would still exceed the PCAPCD thresholds, even when complying with existing rules and regulations, additional mitigation measures are required. MM 4.4-3 requires that 20 percent of heavy-duty off-road equipment be powered by CARB certified off-road engines and would minimize idling time of construction equipment, which would minimize ROG and NO<sub>x</sub> emissions generated during construction activities. MM 4.4-3 would reduce emissions but not to a level that is less than the PCAPCD thresholds. Therefore, this impact would remain **short-term significant and unavoidable**.

### **Remainder Area**

As shown in Table 4.4-5, construction in the Remainder Area is estimated to result in emissions of 118.80 lbs/day for ROG and 818.83 lbs/day for NO<sub>x</sub>. Construction emissions for the Remainder Area would exceed PCAPCD thresholds for ROG and this is a significant impact. As previously noted, compliance with PCAPCD Rule 217 and Rule 218 would reduce construction emissions. MM 4.4-4 would require appropriate construction emission measures such as use of heavy-duty off-road equipment powered by CARB certified off-road engines, minimize idling time of construction equipment, emissions generated prohibiting open burning of vegetative material, and requiring a weekly evaluation of project-related on and off road heavy-duty engines. Nonetheless, even with these mitigation measures, development of the Remainder Area would still exceed the PCAPCD thresholds, resulting in a **short-term significant and unavoidable** impact.

IMPACT 4.4-3		OPERATIONAL EMISSIONS.		
<b>Applicable Policies and Regulations:</b>	Roseville's Transportation Systems Management Ordinance			
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>	
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant	
<b>Mitigation Measures:</b>	MM 4.4-5 (Reduction of operational emissions) (WRSP) MM 4.4-6 (Operational emissions policies) (Remainder Area)	MM 4.4-5 (Reduction of operational emissions)	MM 4.4-6 (Operational emissions policies)	
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	

### SOI Amendment

Long-term air quality within the SOI Amendment Area as well as within the air basin would be adversely affected by both mobile sources and area source emissions. Mobile sources include criteria air pollutant emissions, primarily from the addition of new mobile sources to the area (e.g., automobiles). Area source emissions, which are associated with operation of residential units, would be generated by fuel combustion in woodstoves, fireplaces, and landscaping equipment. Woodstoves and fireplaces contribute to the degradation of air quality during winter months, which is approximately four months of the year, while gas-operated landscaping equipment contributes to the degradation of air quality during the summer months. The amount of air pollution generated by each source is listed in the model outputs included in Appendix H.

As shown in Table 4.4-6, development of the SOI Amendment Area would result in a total of 14,092.72 lbs/day of ROG, 1,151.15 lbs/day of NO<sub>x</sub>, 15,187.81 lbs/day of CO, and 4,150.65 lbs/day of PM<sub>10</sub> during winter months, and a total of 1,430.14 lbs/day of ROG, 729.46 lbs/day of NO<sub>x</sub>, 5,462.16 lbs/day of CO, and 1,294.85 lbs/day of PM<sub>10</sub> during the summer smog season. This is considered a significant impact. MM 4.4-5 and MM 4.4-6 would reduce operational emissions but not below PCAPCD thresholds, for the reasons discussed below. Therefore, the impact would be **significant and unavoidable**.

### West Roseville Specific Plan

#### Mobile Sources

Mobile source criteria air pollutant emissions associated with WRSP traffic were calculated using URBEMIS 2002 emissions software using the trip generation rates presented in the traffic analysis. Table

4.4-6 lists the air pollutant emissions associated with the WRSP. As indicated in Table 4.4-6, vehicle emissions associated with the WRSP would exceed PCAPCD thresholds for ROG, NO<sub>x</sub>, CO, and PM<sub>10</sub> during both the winter and summer seasons.

**Table 4.4-6 Comparison of Placer County APCD Thresholds and Project Emission Levels in Pounds per Day Before Mitigation**

Thresholds	WRSP					Remainder Area				WRSP and SOI Amendment
	Emissions (lb/day)			Operation Exceeds Threshold?	Emissions (lb/day)			Operation Exceeds Threshold?	Total Operational Emissions	
	Area Source	Vehicle	Total Operational Emissions		Area Source	Vehicle	Total Operational Emissions			
<b>Winter Emissions</b>										
ROG	82	7,231.50	269.33	7,500.83	Yes	6,350.71	241.15	6,591.89	Yes	14,092.72
NO <sub>x</sub>	82	312.40	295.65	608.05	Yes	276.98	266.12	543.10	Yes	1,151.15
CO	550	10,522.47	2,853.90	13,376.67	Yes	9,241.90	2,569.24	11,811.14	Yes	15,187.81
PM <sub>10</sub>	82	1,520.89	680.83	2,201.72	Yes	1,335.61	613.33	1,948.93	Yes	4,150.65
<b>Summer Emissions</b>										
ROG	82	429.61	334.99	764.60	Yes	377.42	288.12	665.54	Yes	1,430.14
NO <sub>x</sub>	82	174.14	210.39	384.54	Yes	155.57	189.36	344.92	Yes	729.46
CO	550	114.07	2,760.63	2,874.70	Yes	100.97	2,486.49	2,587.46	Yes	5,462.16
PM <sub>10</sub>	82	0.37	680.83	681.20	Yes	0.33	613.33	613.65	Yes	1,294.85

SOURCE: URBEMIS 2002, EIP Associates, November 2003.

**Area Sources**

Area source emissions were quantified using URBEMIS 2002 for the WRSP. Model outputs for area sources operating under wintertime (worst-case day) conditions are presented in Table 4.4-6. Area source emissions associated with the WRSP would exceed PCAPCD thresholds for ROG, NO<sub>x</sub>, CO and PM<sub>10</sub> during both the winter and summer seasons.

It is important to note that it is likely new homes constructed as part of the WRSP would include natural gas fireplace inserts. PCAPCD has not yet established any method to model these emissions. These fireplace inserts emit far fewer emissions than conventional fireplaces.

**Total Operational Emissions for WRSP**

As presented in Table 4.4-6, both vehicular and area source emissions for the WRSP would exceed thresholds established by the PCAPCD during both the winter and summer seasons. Total operational emissions associated with the WRSP would generate 7,500.83 lbs/day of ROG, 608.05 lbs/day of NO<sub>x</sub>, 13,376.67 lbs/day of CO and 2,201.72 lbs/day of PM<sub>10</sub> during the winter, and 764.60 lbs/day of ROG,

384.54 lbs/day of NO<sub>x</sub>, 2,874.70 lbs/day of CO, and 681.20 lbs/day of PM<sub>10</sub> during the summer smog period. This would be a significant impact.

The WRSP provides a pedestrian/bikeway network of lanes along streets and “informal” paved and unpaved bike routes. A connection to the City’s existing bike trail along Pleasant Grove Creek would be extended through the WRSP area, as would connections to existing bike lanes located along Pleasant Grove Boulevard and Blue Oaks Boulevard. The pedestrian/bicycle pathway would provide convenient, safe access to retail services, schools, and parks.

Employers within the WRSP would be required to comply with the City of Roseville’s Transportation System Management (TSM) Ordinance, which requires companies with more than 50 employees to prepare a TSM plan that promotes the use of alternative modes of transportation including public transit and carpools/vanpools, flexible work hours, and ridesharing.

It is also proposed that Roseville Transit services be expanded to the WRSP as demand for these services occurs and funds become available. The WRSP will also include park and ride lots.

The WRSP has also included a list of procedures for reducing air emissions associated with operational activities. These procedures include developing practices that would maximize energy conservation, improve the thermal integrity of buildings, use window glazing, wall insulation and effective ventilation methods, using energy efficient appliances, installing electric vehicle recharging circuits in residential garages and parking lots, designing the site to maximize access to existing transit lines, providing lighted transit shelters and multimodal transfer stations for transit uses, and designing streets to maximize pedestrian access to transit stops. Since the use of alternative forms of transportation is dependent upon an individual’s preference, it is not possible to quantify how these amenities would reduce potential emissions. However, these measures would reduce the amount of emissions generated by WRSP development. In addition, MM 4.4-5 would further minimize the amount of operational emissions by requiring the planting of native plants (to minimize the use of lawn mowers and leaf blowers), allowing only Phase II EPA certified woodburning stoves and other measures. Nonetheless, operational emissions would substantially exceed the PCAPCD thresholds even with implementation of the above policies, rules, regulations and mitigation measures. This is a **significant and unavoidable** impact.

### **Remainder Area**

Emissions for the Remainder Area were modeled assuming that 5,916 single family homes, 1,487 multi-family homes, 589,000 retail square footage, 647,000 square feet of business parks, 496 acres of parks, an elementary school, and a middle school would be constructed. It is important to note that this is a

reasonable future land use scenario developed for analysis purposes only and is based on assumptions; future development could result in different square footage and allocation of development.

As presented in Table 4.4-6, both vehicular and area source emissions for only the Remainder Area would exceed thresholds established by the PCAPCD. Operational emissions associated with the Remainder Area would generate 6,591.86 lbs/day of ROG, 543.10 lbs/day of NO<sub>x</sub>, 11,811.14 lbs/day of CO and 1,948.93 lbs/day of PM<sub>10</sub> during the winter, and 665.54 lbs/day of ROG, 344.92 lbs/day of NO<sub>x</sub>, 2,587.46 lbs/day of CO and 613.65 lbs/day of PM<sub>10</sub> during the summer. Because these levels exceed PCAPCD thresholds, this is considered a significant impact.

Currently no specific development or land use plans are available for the Remainder Area, so it cannot be assumed to include precisely the same features as the WRSP. Therefore, MM 4.4-6 requires that specific plans and/or development plans include emission-reducing measures such as transit and pedestrian-oriented facilities, bike paths, and the measures identified in MM 4.4-5. These measures would reduce the generation of ROG, NO<sub>x</sub> and CO emissions. Nonetheless, operational emissions would continue to exceed PCAPCD thresholds, resulting in a **significant and unavoidable** impact.

<b>IMPACT 4.4-4 EXPOSURE OF SENSITIVE RECEPTORS TO UNACCEPTABLE TAC LEVELS.</b>			
<b>Applicable Policies and Regulations:</b>	Assembly Bill 2588, Statute 1987, Ch. 1252, Health and Safety Code 44300 et. seq.		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.4-7 (Review Uses by PCAPCD)	MM 4.4-7(Review uses by PCAPCD)	MM 4.4-7(Review uses by PCAPCD)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

**SOI Amendment/West Roseville Specific Plan/Remainder Area**

**TAC Levels**

There are multiple potential sources of TACs within and near the SOI Amendment Area, including stationary and mobile sources. Existing and future stationary sources include the PGWWTP and proposed industrial development in the WRSP (the potential Roseville Energy Park is discussed in Chapter 5, CEQA Considerations, Cumulative Impacts). Mobile sources of TACs include construction equipment and heavy duty trucks that use diesel fuel, which has been identified as a source of TACs. Individual sources are discussed below.

### Pleasant Grove Wastewater Treatment Plant

The PGWWTP is a stationary source that will emit toxic air contaminants. Studies have shown that wastewater treatment plants can release several types of toxic air contaminants and chemicals into the atmosphere. These chemicals can be present in the wastewater as it enters the plant or may be formed during the various treatment processes. Large amounts of VOCs such as benzene, chloroform, paradichlorobenzene, ethylene dichloride, methyl chloroform, methylene chloride, perchlorethylene, toluene, trichlorethylene, vinylidene chloride, and xylenes can be released in liquids processing. Recently recorded levels of VOCs (1999-2001) are presented in Table 4.4-7. These measurements were taken at the North Sunrise monitoring station, which is the air toxics monitoring station nearest the SOI Amendment Area. As noted in Table 4.4-7, ambient benzene levels currently are measured at a risk level of 36 in 1 million.

**Table 4.4-7 Volatile Organic Compound Levels in the Project Vicinity**

VOC	1999		2000		2001	
	Maximum Level Detected	Estimated Risk	Maximum Level Detected	Estimated Risk	Maximum Level Detected	Estimated Risk
Perchloroethylene	0.09	1	0.24	2	0.06	n/a
Methylene Chloride	0.3	0.8	1.2	2	2.8	n/a
Benzene	1.1	32	1.3	36	1.4	44
Chloroform	0.06	0.8	0.08	0.7	0.05	n/a
Methyl Chloroform	0.06	n/a	0.13	N/a	0.06	n/a
Toluene	2.2	n/a	2.2	N/a	1.4	n/a

SOURCE: [www.carb.ca.gov](http://www.carb.ca.gov) accessed August 22, 2002

According to the EIR prepared for the Roseville Regional Wastewater Treatment Service Area Master Plan, which includes the existing City's Dry Creek WWTP (DCWWTP), the City of Roseville prepared an inventory of TACs in May of 1994 for the DCWWTP. This inventory concluded that a health risk assessment was not warranted for the DCWWTP because TAC emissions were relatively low. TAC levels for the PGWWTP are also expected to be low because of the similar types and quantities of chemicals that will be used in its operation.

Even though TAC levels would be below applicable risk levels, consistent with mitigation identified in the Roseville Regional Wastewater Treatment Service Area Master Plan EIR, the WRSP would allow only non-residential uses within 1,000 feet of the PGWWTP so that residents would be partially buffered from any PGWWTP TACs.

CEQA establishes requirements for projects located within one-fourth mile of a school if the project involves construction or alteration of a facility that might be reasonably anticipated to emit hazardous or

acutely hazardous materials. The lead agency is required to consult with the affected school district regarding the potential impact of the project and notify the district, in writing, prior to project approval. The potential impact associated with emission of TACs within one-fourth mile of a school is addressed in the Hazardous Materials and Public Safety Section of this EIR.

For clarification purposes it should be noted that the 1,000-foot PGWWTP buffer was established by the Roseville Regional Wastewater Treatment Service Area Master Plan EIR. It is separate from, and has no relation to, the one-fourth mile school siting standard set fourth in CEQA. Furthermore, the 1,000-foot buffer applies only to the PGWWTP, not the proposed Roseville Energy Park or any other industrial or public utility facilities.

### **Other Sources**

TACs can be emitted from a variety of common sources, including gasoline stations, automobiles, dry cleaners, and painting operations. Sources such as these would likely be developed in the SOI Amendment Area. Another primary source of TACs would be industrial sources that could be developed within the WRSP. Because no specific land uses or types of uses have been identified for the industrial areas, it is not possible to determine or assess the level of risk that could be generated.

In 1998 the CARB identified diesel particulate matter as a toxic air contaminant. The risk to sensitive receptors associated with exposure to this pollutant depends upon a number of factors, including the wind direction, wind speed, concentration of the diesel particulate matter, the length of exposure, the existing concentration of diesel particulate matter in the air, and the distance from the source. However, existing background concentrations of diesel particulate matter already exceed the 10 in 1 million risk threshold. Diesel vehicles including heavy-duty trucks traveling to and from commercial and industrial areas and school buses would be associated with development of the SOI Amendment Area, and would also generate TACs.

As previously noted, TACs have historically been associated with point sources or area sources. When a stationary source or area source generates TACs, the PCAPCD evaluates the emissions and if necessary requires the installation of Best Available Control Technology (BACT). Diesel particulate matter is unique in that it is generated by mobile sources, which are currently unregulated by all air districts, including the PCAPCD. However, mobile source emissions, including diesel particulate matter, are regulated by the CARB, a State entity. The CARB has derived a number of strategies for reducing diesel particulate matter. These strategies include retro-fitting existing engines by installing diesel particulate filters, using alternative fuels, and stricter emission control standards for all new engines. The CARB is also considering proposed fuel regulations that would result in the reformulation of existing diesel fuel.

However, all of these measures must be implemented by the CARB and not the PCAPCD or the City of Roseville. According to the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, the CARB tentatively proposes implementation of the above strategies between 2002 and 2008.<sup>90</sup>

### **Total TACs**

As noted above in the Regulatory Setting, the TAC health risk threshold is 10 in 1 million. Each facility that emits TACs is required to comply with AB 2588 and is closely regulated by the local air district. If any facility is expected to exceed the 10 in 1 million health risk, then BACT must be installed to reduce the health risk to a level that is less than the thresholds.

As previously mentioned, according to the EIR prepared for the Roseville Regional Wastewater Treatment Service Area Master Plan, which includes the existing City's Dry Creek WWTP (DCWWTP), the City of Roseville prepared an inventory of TACs in May of 1994 for the DCWWTP. This inventory concluded that a health risk assessment was not warranted for the DCWWTP because TAC emissions were relatively low. TAC levels for the PGWWTP are also expected to be low because of the similar types and quantities of chemicals that will be used in its operation. However, no definitive risk data are available for the PGWWTP, and total TACs from the PGWWTP in combination with the TACs from proposed light industrial land uses proposed within the WRSP and diesel particulate matter cannot be quantified at this time because specific uses have not been identified.

Several comments on the NOP expressed concern about locating a school near a facility that emits TACs. Public Resources Code Section 21151.8 (a)(3)(B)(ii) specifies that "no environmental impact report shall be approved for any project involving the purchase of a school site or the construction of a new elementary school or secondary school by a school district unless the governing board of a school district finds that corrective measures required under an existing order by another jurisdiction that has jurisdiction over the facilities will, before the school is occupied, result in the mitigation of all chronic or accidental hazardous air emissions to levels that do not constitute an actual or potential endangerment or public health to persons who would attend or be employed at the proposed school." If the governing board makes this finding, the governing board shall also make a subsequent finding, prior to the occupancy of the school, that the emissions have been mitigated to acceptable levels that do not constitute an actual or potential endangerment to public health.

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<sup>90</sup> California Air Resources Board. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel Fueled Engines and Vehicles*. Stationary Source Division, Mobile Source Division. October 2000. Page 25.

The PCAPCD is responsible for ensuring that all stationary sources emitting TACs are in compliance with existing state and Federal regulations and standards. PCAPCD ensures that no individual facility will exceed these standards through permitting requirements, Toxic Emission Inventory Report updates, and inspections. Therefore, any new source (except mobile diesel sources) could not exceed the health risk standards. However, depending upon the amount of emissions from each source, it is possible that combined emissions could exceed the 10 in 1 million Health Risk Threshold. This is considered a significant impact.

MM 4.4-7 requires that each individual user within the WRSP demonstrate how the threshold will not be exceeded by submitting a permit to operate to the PCAPCD. The PCAPCD will review each use. If it is determined that the use may not exceed the threshold, PCAPCD will notify the City. Additional environmental review would be required or the use would need to be modified to ensure it would not, on a cumulative basis, cause the 10 in 1 million threshold to be exceeded at residential and public uses (e.g., parks, schools). Because the Remainder Area is more removed from the PGWWTP and proposed industrial areas than sensitive uses in the WRSP, this measure would protect residents and others in the entire SOI Amendment Area. With this mitigation, the impact would be **less than significant**.

It should also be noted, that the land uses associated with the WRSP are common throughout California and occur in all urban areas where a substantial number of people reside. So, although there is a possibility that the combined risk could exceed the adopted health risk threshold, this risk would not be expected to be any higher than the risk associated with living in any urban area.

<b>IMPACT 4.4-5 CARBON MONOXIDE EMISSIONS AT LOCAL INTERSECTIONS.</b>			
<b>Applicable Policies and Regulations:</b>	None Applicable		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

**SOI Amendment/Remainder Area**

The Remainder Area is assumed to develop after the WRSP, and would be integrated into the WRSP roadway system, so traffic-related analyses for the Remainder Area, such as CO levels at intersections, must be done in the context of buildout of the WRSP. Consequently, impacts of the Remainder Area would be the same as those of the full SOI Amendment.

Intersections that are projected to operate at an LOS of D or worse with under 2020 conditions with buildout of the SOI Amendment Area are shown in Table 4.4-8, The highest CO concentration would occur at the intersection of Foothills Boulevard/Blue Oaks and at Vernon St/Cirby Way, with an estimated 1-hour concentration of 4.5 ppm and an estimated 8-hour concentration of 3.3 ppm. Because there would be no violation of either the 1-hour or 8-hour CO standards, this would be a **less-than-significant** impact.

Intersection	1-hour Concentration	Threshold	8-hour Concentration	Threshold
<b>Cumulative WRSP</b>				
Harding/Douglas	4.3	20.0	3.1	9.0
Foothills/Blue Oaks	4.4	20.0	3.2	9.0
<b>Cumulative WRSP Plus SOI</b>				
Vernon/Cirby	4.5	20.0	3.3	9.0
Harding-Douglas	4.3	20.0	3.1	9.0
Foothills/Blue Oaks	4.5	20.0	3.3	9.0
Diamond Creek/Blue Oak	4.1	20.0	3.0	9.0

SOURCE: EIP Associates, CALINE 4 modeling results.

### **West Roseville Specific Plan**

Background CO concentrations in the Roseville area are low, and future roadside CO concentrations are expected to decrease from existing roadside CO concentrations despite anticipated increases in traffic volumes due to improved fuel combustion efficiency. Intersections that are projected to operate at an LOS of D or worse under cumulative conditions were modeled using CALINE4 to determine if any violations of the 1-hour 20 ppm and the 8-hour 9 ppm standards would occur. As shown in Table 4.4-8, the highest CO concentration that would occur with development of the West Roseville Specific Plan would occur at the intersection of Foothills Boulevard/Blue Oaks Boulevard with an estimated 1-hour concentration of 4.4 ppm and an estimated 8-hour concentration of 3.2 ppm. Because there would be no violation of either the 1-hour or 8-hour CO standards, this would be a **less-than-significant** impact.

IMPACT 4.4-6 EXPOSURE TO OBJECTIONABLE ODORS			
<b>Applicable Policies and Regulations:</b>	PCAPCD Rule 205		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

**SOI Amendment/West Roseville Specific Plan/Remainder Area**

Within the SOI Amendment Area the primary source of odors is the PGWWTP. Odors occur in fresh or incompletely treated wastewater and liquid process side-streams, or raw sludge, screenings, grit, and skimmings containing malodorous matter, and emissions from treatment processes. Aside from odors associated with normal treatment processes, other sources of objectionable odors would be general cleaning activities, anaerobic conditions in treatment units or sewer lines, or the use of solvents. Major sources of odors at wastewater treatment plants typically include the headworks, flow equalization basin, digesters, and sludge dewatering facilities. Other sources of odors within the treatment process include digester gas relief vents on the cover of the anaerobic digesters and the sludge dewatering facilities if the sludge has not been properly digested and stabilized. However, the PGWWTP does not have any digesters and as a result odors are minimized at the treatment plant.

In addition to the treatment facilities, physical/chemical processes could produce odors ranging from moderate to negligible. Primary sedimentation tanks, aeration basins, primary clarifiers, chlorine contact basins, the thickeners, and belt presses can produce varying amounts of minor odors. The secondary clarifiers produce little amounts of odors because the water surface is relatively calm. The PGWWTP is designed to operate without primary sedimentation tanks, primary clarifiers, and chlorine contact basins. The thickeners and belt presses in the PGWWTP are enclosed and include scrubbers that minimize odors generated from this process. As discussed in the environmental setting, perception of odors is subjective and not easily quantifiable.

Odors are affected by the rate, amount and location of meteorological conditions. Atmospheric conditions including wind speed, wind direction and air temperature, in combination with local surface topography, determine odor impacts on sensitive receptors. During high winds, odors are usually diluted. However, during light or calm wind conditions, potential odor impacts are high because dilution is minimized. In addition, odor becomes stronger during warmer weather. The prevailing wind direction

in the SOI Amendment Area is from the southwest. Residents located northeast of the PGWWTP, in the WRSP Area, could therefore be periodically exposed to odors associated with the operation of the plant. In addition, residents near the PGWWTP in any direction could be affected by odors from the plant in weather conditions of increased warmth or calm winds and open-air basins and ponds could result in high concentrations of odors at adjacent properties, particularly in warmer weather conditions, or when winds are low.

No homes would be allowed in the immediate vicinity of the PGWWTP because the City of Roseville requires a 1,000-foot buffer between the PGWWTP and residential areas (see Figure 4.9-2 [PGWWTP 1,000 Foot Buffer Area] in Section 4.9 [Hazards and Public Safety]). A portion of the proposed high school site, generally athletic fields and sporting facilities, would lie within the 1,000-foot buffer, however, all school buildings would lie outside of the buffer. Furthermore, the WRSP proposes 108.5 acres of light industrial and general industrial uses surrounding the PGWWTP, which would act as a barrier by blocking the direct path of drifting odors for residents of both the WRSP and the southern portion of the Remainder Area.

Other potential sources of odors would include restaurants, dry cleaning facilities and gasoline stations in commercial areas throughout the SOI Amendment Area, and light industrial operations in the WRSP Area. For the most part, odors associated with these commercial uses would not be significant since they are commonly found in all urban environments and generally do not elicit complaints from the public.

The PCAPCD Rule 205 regulates odors according to their potential to result in a nuisance to a “considerable number of persons.” No quantitative thresholds are in place to govern odors.

With normal operation and with the use of chorine, odors associated with the PGWWTP would be minimal and unlikely to be unpleasant for closest residents (more than 1,000 feet away from the plant). No other sources of substantial odor are anticipated in the SOI Amendment Area. Therefore, this impact would be **less than significant**.

### ■ Mitigation Measures

#### *MM 4.4-1: Dust Control (Impact 4.4-1 – WRSP)*

- After review and approval by the PCAPCD, the developer, if required, shall apply approved chemical soil stabilizers according to manufacturers specifications, to all inactive construction areas (previously graded areas which remain inactive for 96 hours).
- Reduce traffic speeds on all unpaved surfaces to 15 miles per hour or less.

- Creation of a dust control plan.
- No open burning of vegetation during project construction.
- Reestablishment of ground cover as soon as possible after construction.
- Suspension of grading activities when winds exceed 25 mph.

These mitigation measures could result in impacts to water quality. Please refer to the Best Management Practices discussed in Section 4.8, Hydrology, Water Quality, and Groundwater, for a description of how impacts on water quality will be minimized through erosion control measures.

*MM 4.4-2: Dust Control Policies (Impact 4.4-1 – Remainder Area)*

Specific plans and/or other development proposals for the Remainder Area shall require dust control measures that are adequate to reduce PM<sub>10</sub> emissions below PCAPCD thresholds. Such measures could include hydro seeding, covering trucks, reducing traffic speed, prohibiting open burning, or other effective measures.

*MM 4.4-3: Reduction of Construction Emissions (Impact 4.4-2 – WRSP)*

- The prime contractor shall submit to the PCAPCD a comprehensive inventory (i.e., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used an aggregate of 40 or more hours for the construction project. District personnel, with assistance from the California Air Resources Board, will conduct initial Visible Emission Evaluations of all heavy-duty equipment on the inventory list.
- An enforcement plan shall be established by the contractor in conjunction with the air district to weekly evaluate project-related on- and off-road heavy-duty vehicle engine emission opacities, using standards as defined in California Code of Regulations, Title 13, Sections 2180–2194. An Environmental Coordinator, CARB-certified to perform Visible Emissions Evaluations (VEE), shall routinely evaluate project-related off-road and heavy-duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified and the equipment must be repaired within 72 hours.
- Contractors shall provide a plan for approval by the PCAPCD 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 30 percent NO<sub>x</sub> reduction and 45 percent particulate reduction compared to the most recent CARB 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.

- Minimize idling time to 10 minutes.
- Use low sulfur fuel for stationary construction equipment, if feasible.
- Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
- Use low emission on-site stationary equipment.

*MM 4.4-4: Reduction of Construction Emissions (Impact 4.4-2 – Remainder Area)*

Specific plans and/or development proposals for the Remainder Area shall require emission control measures during construction. Such measures, which shall be developed in consultation with the PCAPCD, may include use of heavy-duty off-road equipment included in the inventory powered by CARB certified off-road engines, or other measures to reduce particulate matter and nitrogen oxide emissions through the use of emulsified diesel fuel and/or particulate matter traps.

*MM 4.4-5: Reduction of Operational Emissions (Impact 4.4-5 – WRSP)*

Following receipt of an application for a Tentative Map (excluding the large lot subdivision map) or Design Review Permit, the City will forward an early consultation notice to the Placer County Air Quality District (PCAQD). Where the PCAQD provides comments on a specific development proposal, the City shall work with PCAQD and the developer to incorporate any measures recommended by the PCAQD into the project. Where the PCAQD does not provide comment on a specific development proposal, the City shall incorporate measures that reduce vehicle emissions and operational emissions from the proposed development. These measures will be implemented through project design, conditions of approval, noticing and disclosure statements, or through the City's plan check and inspection processes. The following is a listing of potential measures that could be implemented for the purpose of reducing vehicle and operational emissions:

Measures Applied to Tentative Maps and Design Review Permits

- Provide tree plantings that meet or exceed the requirements of the City's Community Design Guidelines to provide shading of buildings and parking lots.
- Landscape with native drought-resistant plants (ground covers, shrubs, and trees) with particular consideration of plantings that are not reliant on gas-powered landscape maintenance equipment.
- Require all flat roofs on non-residential structures to have a white or silver cap sheet to reduce energy demand.

- Provide conductive/inductive electric vehicle charging stations and signage prohibiting parking for non-electric vehicles within designated spaces within nonresidential developments.
- Configure parking to minimize traffic interference.
- Provide vanpool parking only spaces to accommodate vanpools in employment areas (e.g., community commercial, business-professional, and industrial uses).
- Provide preferential parking for carpools and vanpools in employment areas (e.g., community commercial, business-professional, and industrial areas).
- All truck loading and unloading docks shall be equipped with one 110/208-volt power outlet for every two-dock doors. Signs shall be posted stating “Diesel trucks are prohibited from idling more than five minutes and trucks requiring auxiliary power shall connect to the 110/208-volt outlets to run auxiliary equipment.”
- Provide all day vehicle parking lots and secured bicycle storage near rail stations, transit stops, and freeway access points.
- Develop the Class I, II, and III bikeway system within the plan as identified within the WRSP.
- Develop the Village Center consistent with the WRSP policies that encourage pedestrian travel over use of the automobile.
- Design streets to maximize pedestrian access to transit stops.
- Require site design to maximize access to transit lines, to accommodate bus travel, and to provide lighted shelters at transit access points.
- Develop the plan consistent with the higher residential densities provided around the Village Center, transportation nodes, and transit corridors.
- Wood burning or pellet appliances shall not be permitted in multi-family developments. Only natural gas or propane fired fireplace appliances are permitted.

#### Measures for Detached Single-Family Residences

- Require electrical outlets to be installed on the exterior walls of both the front and back of residences or all commercial buildings to promote the use of electric landscape maintenance equipment.
- Require installation of a gas outlet in the rear of residential buildings for use of outdoor cooking appliances, such as gas burning barbeques.
- Require installation of gas outlets with ceramic logs in any proposed fireplaces, including outdoor recreational fireplaces or pits.
- Require installation of low nitrogen oxide (NO<sub>x</sub>), hot water heaters. (beyond District Rule 246 requirements).

- Require HVAC units be equipped with PremAir catalyst system (or another similar system) if available and economically feasible. The PremAir system is considered feasible if the additional cost is less than 10 percent of the base HVAC unit cost.
- Provide notice to homebuyers of the option to install electric vehicle charging raceways in residential garages.
- Provide notice to homebuyers of incentive and rebate programs available through Roseville Electric or other providers that encourage the purchase of electric landscape maintenance equipment.
- Require wood burning devices to meet U.S. EPA Phase II certification.

In lieu of each individual project implementing their own off-site mitigation program, an applicant may choose to pay an equivalent amount of money into the District's Air Quality Mitigation Fund. The District provides monetary incentives to sources of air pollutant emissions that are not required by law to reduce their emissions. Therefore, the emission reductions are real, quantifiable, and implement provisions of the 1994 State Implementation Plan. The off-site mitigation program has been implemented by a number of projects in Placer County. To the extent feasible, the implementation of any programs resulting from the WRSP in lieu of fees should be used in close proximity to the WRSP and the City of Roseville.

*MM 4.4-6: Operational Emissions Policies (Impact 4.4-3 – Remainder Area)*

Specific plans and/or development proposals for the Remainder Area shall include measures to reduce operational emissions. Such measures may include, but would not be limited to transit and pedestrian-oriented facilities (e.g., park and ride lots, bus stops), bike trails and facilities, energy-saving measures in buildings, as well as the measures described in MM 4.4-5, above. Appropriate measures shall be selected in consultation with the City and PCAPCD.

*MM 4.4-7: Maintain TAC Inventory and CAP (Impact 4.4-4 – SOI Amendment/West Roseville Specific Plan/Remainder Area)*

Industrial users proposed within the WRSP will be required to submit a Permit to Operate to the PCAPCD. The District will review the use and if a proposed industrial project would cause the combined emissions of TACs to exceed the risk standard of 10 in one million at residences or public uses (e.g., schools, park), additional modeling and/or environmental review would be required to demonstrate emissions from that use or other uses in the WRSP Area would be reduced so that the standard is not exceeded. For example, an applicant could propose to retrofit an existing operation in order to lower the total TAC emissions in the WRSP.



## 4.5 NOISE

### 4.5.1 Introduction

This section evaluates the potential noise impacts due to and upon development of the WRSP and SOI Amendment Area. Referenced materials include

- *City of Roseville General Plan*
- *City of Roseville Noise Ordinance*
- *Guidelines for Noise Study Reports as Parts of Environmental Impact Reports*, issued by the California Department of Health Services, Office of Noise Control
- *California Environmental Quality Act*
- *Federal Interagency Committee on Noise*

These documents are available for review at the City of Roseville Permit Center, 311 Vernon Street, Roseville, California.

This noise section was prepared in accordance with *Guidelines for Noise Study Reports as Parts of Environmental Impact Reports*, issued by the California Department of Health Services, Office of Noise Control.

In response to the Notice of Preparation comments were raised requesting an analysis of noise sources that could affect school facilities and classrooms and outside areas and traffic noise along Fiddymont Road (see Appendix B). These issues are all addressed in this section.

As discussed in Chapter 1, Introduction, this EIR evaluates the impacts of the WRSP, which would include a Sphere of Influence Amendment and annexation to the City, at a project-specific level. Because a Sphere Amendment is the only action proposed for the Remainder Area (that portion of the SOI Amendment Area outside of the WRSP Area), a program-level analysis is provided for the full SOI Amendment. In order to conduct the analysis, development assumptions are made for the Remainder Area (see Chapter 2, Project Description, for details). Figure 1-1 (SOI Amendment Area) in Chapter 1, Introduction, identifies the boundaries of the SOI Amendment Area, WRSP Area, and Remainder Area.

As discussed in Chapter 4 of this EIR, Environmental Analysis, minor changes have been made to the proposed land uses for the WRSP since publication of the NOP. The number of residential units and the mix of uses have not changed although the acreages for nonresidential uses have been altered slightly. The only noise-related impacts that would be expected from the changes are traffic noise impacts. The

change in the land use plan resulted in a modification to the backbone infrastructure network and a slight increase in trip generation rate (less than 1 percent). This change would not affect the traffic noise analysis, which typically requires a doubling of traffic to create a noticeable increase in traffic noise. With the exception of traffic noise, the noise analyses for this EIR are based on the land use plan shown in Chapter 2, Project Description, of this EIR.

## **4.5.2 Environmental Setting**

### **■ Acoustic Terminology**

Noise is often defined simply as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. Researchers have generally agreed that A-weighted sound pressure levels (sound levels) are very well correlated with community reaction to noise. The unit of sound level measurement is the decibel (dB), sometimes expressed as dBA. Variations in sound levels over time are represented by statistical descriptors, and by time-weighted composite noise metrics such as the Day-Night Average Level ( $L_{dn}$ ), or the Community Noise Equivalent Level (CNEL). Throughout this analysis, A-weighted sound pressure levels will be used to describe community noise unless otherwise indicated. Table 4.5-1 provides examples of maximum sound levels associated with common noise sources.

**Table 4.5-1 Typical A-Weighted Maximum Sound Levels of Common Noise Sources**

<b>Decibels</b>	<b>Description</b>
130	Threshold of pain
120	Jet aircraft take-off at 100 feet
110	Riveting machine at operators position
100	Shot-gun at 200 feet
90	Bulldozer at 50 feet
80	Diesel locomotive at 300 feet
70	Commercial jet aircraft interior during flight
60	Normal conversation speech at 5-10 feet
50	Open office background level
40	Background level within a residence
30	soft whisper at 2 feet
20	Interior of recording studio

The decibel notation used for sound levels describes a logarithmic relationship of acoustical energy, so that sound levels cannot be added or subtracted in the conventional arithmetic manner. For example, a doubling of acoustical energy results in a change of 3 decibels (dB), which is usually considered to be barely perceptible. A 10-fold increase in acoustical energy yields a 10-decibel change, which is subjectively like a doubling of loudness.

Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent sound level ( $L_{eq}$ ), which corresponds to a steady-state sound level containing the same total energy as a time-varying signal over a given period (usually one hour). The  $L_{eq}$  is the foundation of the composite noise descriptors such as  $L_{dn}$  and CNEL, and shows very good correlation with community response to noise.

### ■ Characteristics of Sound Propagation and Attenuation

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources such as construction sites, machinery, industrial operations. Noise generated by mobile sources typically attenuates at a rate between 3.0 to 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number of objects between the noise source and the receiver. Hard and flat surfaces such as concrete or asphalt have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces such as uneven or vegetated terrain have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate of approximately 6.0 dBA per doubling of distance.

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the line of sight between the source and the receiver. Buildings, walls, berms, and dense foliage can all act as noise barriers. Buildings, concrete walls, and berms are a great deal more effective at reducing noise levels than wooden walls or dense foliage.

### ■ Human Response to Noise

The human response to environmental noise, such as planes, trains and automobiles, is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage such as hearing impairment, but in terms of inhibiting general wellbeing and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities such as sleep, speech, recreation, tasks demanding concentration or coordination, and at the highest intensity levels, hearing loss. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases, and the acceptability and the threat to public wellbeing are the basis for land use planning policies preventing exposure to excessive community noise levels. Table 4.5-2 lists a summary of the public health effects of community noise and the noise levels at which they can occur.

**Table 4.5-2 Summary of the Public Health Effects of Community Noise and the Noise Levels at Which They Can Occur**

Effect	Level
I. Noise as a Stressor Increase incidence of high blood pressure that leads to increased risk of cardiovascular disease Vasoconstriction begins that can lead to high blood pressure	85 dBA (long term) 70 dBA
II. Adverse Effect on Task Performance Steady noise Irregular noise	90 dBA All levels
III. Prenatal and Childhood Effects Increased incidence of low birth weight High frequency hearing loss in fetuses Increased blood pressure in children Decreased reading ability, auditory discrimination or language development	(all long term) 70 dBA 85 dBA 75 dBA 65 dBA
IV. Social Behavior and Mental Health Decreased helpfulness and social interaction Increased incidence of mental disorders	80 dBA 90 dBA
V. Sleep Disturbance	35 dBA
VI. Speech Interference Less than 5 feet between conversant 5 to 12 feet between conversant Over 12 feet between conversant	65 dBA 60 dBA 55 dBA
VII. Recreational Hearing Loss	85 dBA (long term)

SOURCE: "The Public Health Effects of Community Noise" by Carol S. Pennenga and Raymond M. Manganelli. Rutgers University, New Brunswick, New Jersey. Presented at the 81st Annual Meeting of the Air Pollution Control Association, Dallas, Texas, June 19-24, 1988.

## ■ Fundamentals of Environmental Groundborne Vibration

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second and, in the U.S., is referenced as vibration decibels (VdB).

The background vibration velocity level in residential and educational areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

The general human response to different levels of groundborne vibration velocity levels is described in Table 4.5-3.

Vibration Velocity Level	Location
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

SOURCE: Federal Railroad Administration 1998

### ■ Existing Ambient Noise Levels

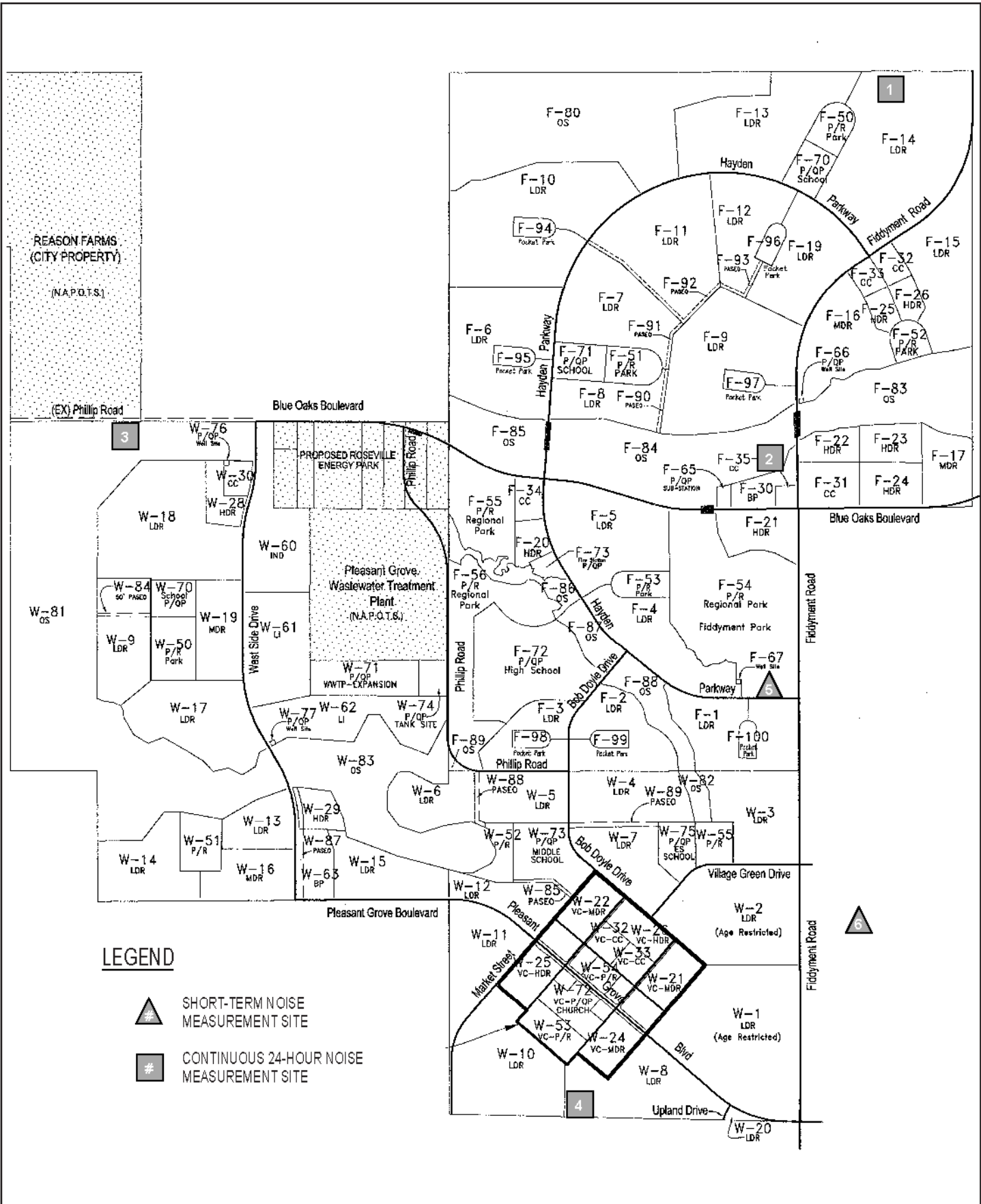
The majority of the SOI Amendment Area is undeveloped, with few sources of noise. On-site noise sources include the existing residences near Fiddymment Road, agricultural operations (primarily associated with the pistachio orchard), a kennel on Phillip Road, and construction of the Pleasant Grove Wastewater Treatment Plant (PGWWTP). The SOI Amendment Area is also subject to noise from adjacent roadways, particularly Fiddymment Road, and other noise sources such as aircraft overflights and community activities.

As with all noise sources, the extent to which these sources affect a particular portion of the SOI Amendment Area depends on the proximity to the noise sources. A combination of continuous 24-hour noise level measurements and short-term noise level measurements were conducted in the SOI Amendment Area. The noise level measurements were conducted to determine existing background noise levels and for comparison to projected future noise levels.



Noise measurements were conducted using Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters. The equipment was calibrated prior to use with an LDL Model CA200 acoustical calibrator to ensure accuracy. Figure 4.5-1 (Noise Measurement Sites) shows the locations of the noise level measurements. Table 4.5-4 shows the results of the noise level measurements, and Figures J-1 through J-3 in Appendix J graphically show the results of the continuous noise level measurements.

### ■ Sensitive Receptors

There are a number of noise-sensitive receptors adjacent to or near the SOI Amendment Area. The Del Webb and North Roseville Specific Plan areas, both east of Fiddymment Road, have extensive residential development. Larger-lot, more rural residential areas are present within the County, south of Baseline Road. Within the SOI Amendment Area there are several homes.



**LEGEND**

-  SHORT-TERM NOISE MEASUREMENT SITE
-  CONTINUOUS 24-HOUR NOISE MEASUREMENT SITE



**FIGURE 4.5-1**  
**Noise Measurement Sites**

Scale: 1" = 2000'

Source: Morton & Pitalo, Inc.

City of Roseville



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**Table 4.5-4 Community Noise Survey Results**

Site	Location	Date	Time	Measured Sound Levels, dB			
				L <sub>eq</sub>	L <sub>50</sub>	L <sub>90</sub>	L <sub>max</sub>
1	North end of site (500 from Fiddymment Road)	7/28/2000	1:30 P.M.	43	39	34	57
2	Fiddymment and Blue Oaks	7/28/2000	2:05 P.M.	45	41	36	56
3	Blue Oaks, East of Watt Ave	7/28/2000	2:40 P.M.	34	31	30	44
4	South end of site (Near Pleasant Grove Blvd)	7/28/2000	3:30 P.M.	38	36	29	45
5	Fiddymment Road (North of Phillip Rd.)	7/29-7/31/2000	Continuous 24-Hour	See Figures 4.5-2 and 4.5-3			
6	Burnt Cedar Road (Sun City) adjacent to Fiddymment Road	3/26-27 2003	Daytime	59.856.0	5642	4635	7370.5
			Nighttime				

SOURCE: Ballard &amp; Brennan, Inc. 2000, 2003

## ■ Traffic Noise Levels

### Existing Traffic Noise Levels

Traffic noise levels in the vicinity of the SOI Amendment Area have been quantified using the Federal Highway Administration (FHWA RD-77-108) traffic noise prediction model. Direct inputs to the model include traffic volumes provided by the project traffic consultant, day/night distribution of traffic volumes, speeds, and truck mix percentages. Table 4.5-5 shows the results of the existing traffic noise level calculations within the SOI Amendment Area. As shown in Table 4.5-5, a number of roadways, including Foothills Boulevard, Baseline Road, Blue Oaks Boulevard, Pleasant Grove Boulevard and Junction Boulevard, have noise levels that exceed the City's residential noise standard of 60 L<sub>dn</sub>. For this EIR, noise contours were prepared for 2020, assuming buildout of the General Plan and approved development (baseline). Figure 4.5-2 (Traffic Noise Level Contours Without West Roseville Specific Plan) shows the predicted 60 dB L<sub>dn</sub> noise contour for the City after buildout of currently approved or planned development, based on the 2020 traffic model outputs

Existing and planned residential uses abut these roadways, but for the most part, they are within Specific Plan areas (e.g., North Roseville Specific Plan, North Central Roseville Specific Plan) that required soundwalls along major roadways.

### Future Traffic Noise Levels

As development occurs, ambient noise levels increase, primarily due to increases in traffic. Figure 4.5-3 (Traffic Noise Level Contours Including West Roseville Specific Plan) shows the predicted 60 dB L<sub>dn</sub> noise contour for the City after buildout of currently approved or planned development, based on the 2020 traffic model outputs. Table 4.5-6 provides the distances to the 60 and 65 dB contours, as well as the L<sub>dn</sub> at 75 feet, for the City at buildout (without the WRSP or SOI Amendment Areas).

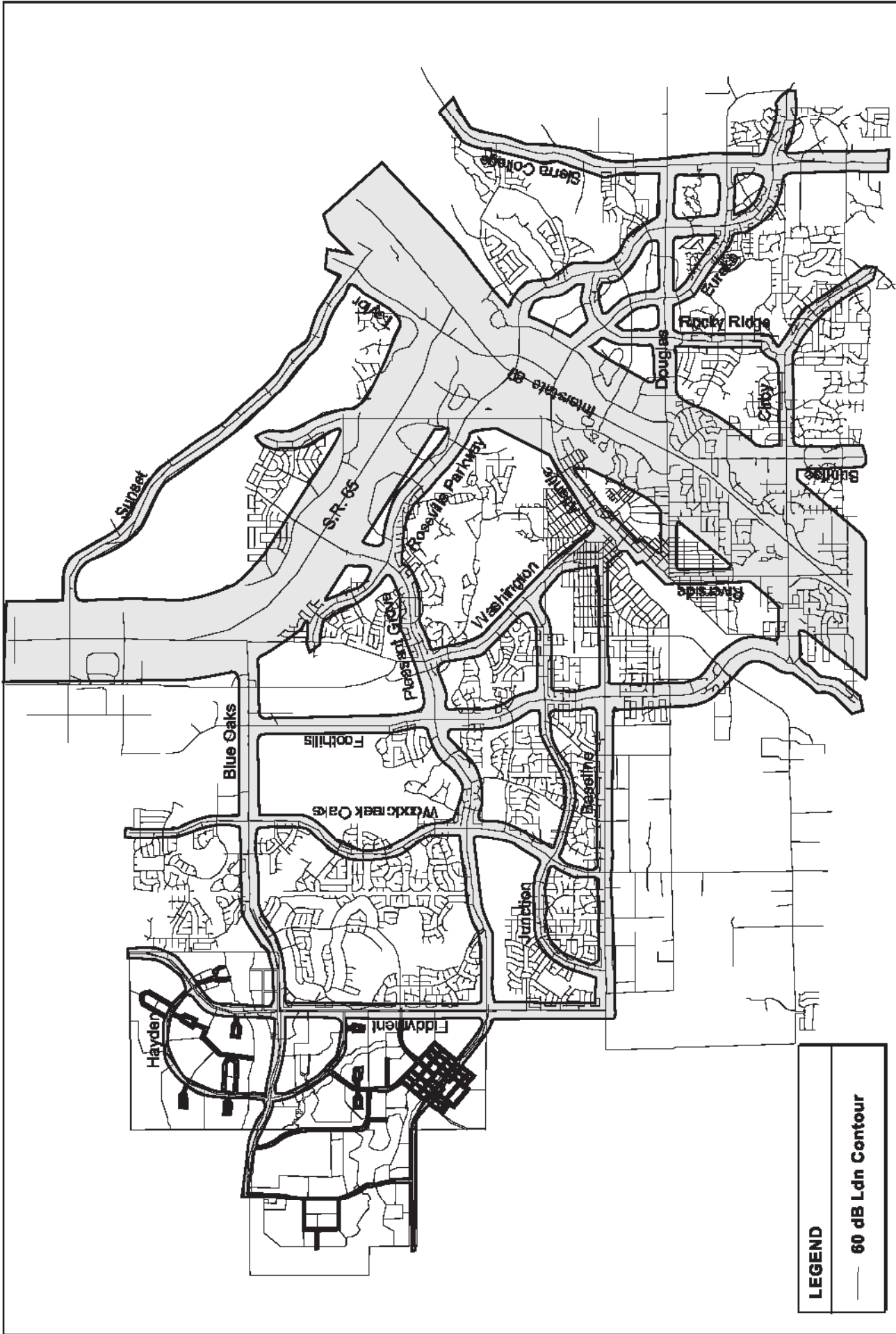
**Table 4.5-5 FHWA Traffic Noise Prediction Results Existing Conditions**

Roadway/Segment	Traffic Noise Levels (L <sub>dn</sub> , dB) 100 feet from Centerline	Distance to L <sub>dn</sub> Contours	
		65 dB L <sub>dn</sub>	60 dB L <sub>dn</sub>
<b>S.R. 65</b>			
South of Pleasant Grove	77	598'	1289'
Pleasant Grove to Blue Oaks	76	540'	1163'
Blue Oaks to Sunset	76	512'	1104'
<b>Roseville Parkway</b>			
South of Pleasant Grove	66	103'	221'
Pleasant Grove to Washington	61	57'	122'
Washington to Foothills	NA	NA	NA
<b>Sunset</b>			
East of S.R. 65	NA	NA	NA
<b>Foothills</b>			
Baseline to Junction	68	141'	305'
Junction to Pleasant Grove	67	141'	304'
Pleasant Grove to Blue Oaks	64	81'	173'
<b>Woodcreek</b>			
Baseline to Blue Oaks	63	65'	140'
North of Blue Oaks	NA	NA	NA
<b>Fiddymment</b>			
South of Baseline	NA	NA	NA
Baseline to Pleasant Grove	62	65'	140'
Pleasant Grove to Blue Oaks	61	50'	102'
Blue Oaks to Hayden	57	27'	59'
<b>Baseline</b>			
West of Watt	NA	NA	NA
Watt to Fiddymment	66	114'	246'
Fiddymment to Junction	NA	NA	NA
Junction to Woodcreek	64	83'	179'
Woodcreek to Foothills	65	97'	210'
Foothills to Washington	58	62'	133'
<b>Junction</b>			
Baseline to Woodcreek	58	33'	71'
Woodcreek to Foothills	62	63'	135'
Foothills to Washington	NA	NA	NA
<b>Pleasant Grove</b>			
West Side to Fiddymment	NA	NA	NA
Fiddymment to Woodcreek	63	79'	170'
Woodcreek to Foothills	66	109'	236'
Foothills to Washington	67	140'	303'
Washington to Roseville Parkway	67	127'	275'
Roseville Parkway to S.R. 65	66	124'	266'

**Table 4.5-5 FHWA Traffic Noise Prediction Results Existing Conditions**

Roadway/Segment	Traffic Noise Levels ( $L_{dn}$ , dB) 100 feet from Centerline	Distance to $L_{dn}$ Contours	
		65 dB $L_{dn}$	60 dB $L_{dn}$
<b>Blue Oaks</b>			
West Side to Hayden	NA	NA	NA
Hayden to Fiddymont	NA	NA	NA
East of Fiddymont	61	57'	122'
West of Woodcreek	61	57'	122'
Woodcreek to Foothills	63.4	83'	178'
Foothills to S.R. 65	67	126'	272'
S.R. 65 to Sunset	60.0	46'	100'
<b>Watt Ave</b>			
Baseline to Pleasant Grove	NA	NA	NA
Pleasant Grove to Blue Oaks	NA	NA	NA
North of Blue Oaks	NA	NA	NA
<b>West Side</b>			
Baseline to South of Pleasant Grove	NA	NA	NA
Pleasant Grove to Blue Oaks	NA	NA	NA
<b>Hayden</b>			
North of Blue Oaks	NA	NA	NA
South of Blue Oaks	NA	NA	NA

SOURCE: Ballard &amp; Brenman, Inc., 2002



**LEGEND**  
 — 60 dB Ldn Contour

**FIGURE 4.5-2**  
**Traffic Noise Level Contours Without West Roseville Specific Plan**

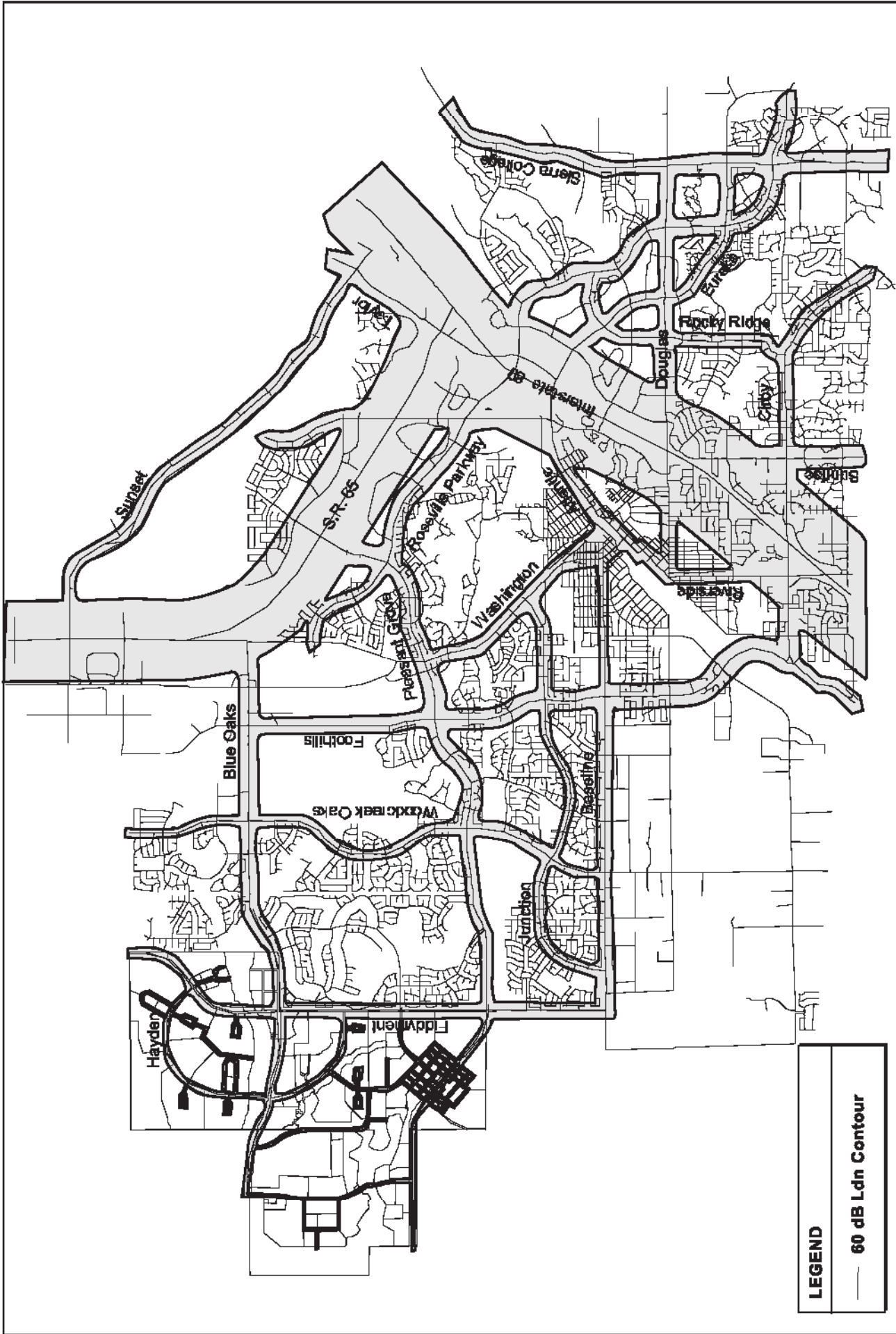
Not to Scale



Source: EIP Associates, 2003

City of Roseville

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**LEGEND**  
 — 60 dB Ldn Contour



**FIGURE 4.5-3**

**Traffic Noise Level Contours Including West Roseville Specific Plan**

10659-00

Source: EIP Associates, 2003

City of Roseville

Not to Scale



**Table 4.5-6 Traffic Noise Levels and Distances to Contours 2020  
Without West Roseville Specific Plan**

Roadway	From	To	L <sub>dn</sub> at 75 ft. (dB)	Distance to Noise Level Contours (ft.)	
				60 dB	65 dB
S.R. 65	S. of Pleasant Grove		80	1693	786
S.R. 65	Pleasant Grove	Blue Oaks	80	1683	781
S.R. 65	Blue Oaks	Sunset	81	1785	829
Roseville Parkway	S. of Pleasant Grove		72	466	216
Roseville Parkway	Pleasant Grove	Washington	69	303	141
Roseville Parkway	Washington	Foothills	70	349	162
Roseville Parkway	East of I-80		71	437	203
Sunset	East SR-65		69	298	138
Foothills	Baseline	Junction	71	435	202
Foothills	Junction	Pleasant Grove	71	431	200
Foothills	Pleasant Grove	Blue Oaks	70	349	162
Foothills	N. of Cirby		73	553	257
Woodcreek	Baseline	Junction	65	163	76
Woodcreek	Junction	Pleasant Grove	70	330	153
Woodcreek	Pleasant Grove	Blue Oaks	68	250	116
Woodcreek	N. of Blue Oaks		65	166	77
Fiddymment	S. of Baseline		69	280	130
Fiddymment	Baseline	Pleasant Grove	70	340	158
Fiddymment	Pleasant Grove	Blue Oaks	66	193	90
Fiddymment	Blue Oaks	Hayden	63	125	58
Fiddymment	N. of Hayden		63	125	58
Baseline	W. of Watt		70	325	151
Baseline	Watt	Fiddymment	72	439	204
Baseline	Fiddymment	Junction	71	401	186
Baseline	Junction	Woodcreek	69	284	132
Baseline	Woodcreek	Foothills	69	317	147
Baseline	Foothills	Washington	61	88	41
Junction	Baseline	Woodcreek	68	252	117
Junction	Woodcreek	Foothills	67	221	103
Junction	Foothills	Washington	69	288	134
Pleasant Grove	West Side	Fiddymment	0	0	0
Pleasant Grove	Fiddymment	Woodcreek	69	283	131
Pleasant Grove	Woodcreek	Foothills	71	423	196
Pleasant Grove	Foothills	Washington	72	443	206
Pleasant Grove	Washington	Roseville Parkway	71	416	193
Pleasant Grove	Roseville Parkway	S.R. 65	72	503	234
Blue Oaks	West Side	Hayden	0	0	0
Blue Oaks	Hayden	Fiddymment	0	0	0
Blue Oaks	E. of Fiddymment		65	171	79
Blue Oaks	W. of Woodcreek		68	266	124
Blue Oaks	Woodcreek	Foothills	70	371	172
Blue Oaks	Foothills	S.R. 65	72	475	221
Blue Oaks	S.R. 65	Sunset	70	364	169
West Side	Baseline	Pleasant Grove	0	0	0

**Table 4.5-6 Traffic Noise Levels and Distances to Contours 2020  
Without West Roseville Specific Plan**

Roadway	From	To	L <sub>d</sub> at 75 ft. (dB)	Distance to Noise Level Contours (ft.)	
				60 dB	65 dB
West Side	Pleasant Grove	Blue Oaks	0	0	0
Hayden	N. of Blue Oaks		0	0	0
Hayden	S. of Blue Oaks		0	0	0
I-80	W. of Auburn		83	2518	1169
I-80	Cirby	Douglas	83	2402	1115
I-80	Douglas	Lead Hill	82	2333	1083
I-80	Lead Hill	Roseville Parkway	83	2526	1172
I-80	E. of Roseville Parkway		81	1893	879
Riverside	N. of I-80		69	304	141
Auburn	S. of I-80		70	359	167
Washington	W. of Atlantic		70	328	152
Atlantic	W. of I-80		70	351	163
Galleria Blvd	Lead Hill	S.R. 65	71	426	198
Stanford Ranch	North of S.R. 65		71	395	183
Taylor Road	North of I-80		72	460	213
Sunrise	S. of Cirby		72	478	222
Sunrise	N. of Cirby		72	475	221
North Sunrise	Douglas	Eureka	71	413	192
Cirby	W. of Sunrise		72	447	208
Cirby	E. of Sunrise		70	325	151
Douglas	W. of I-80		70	328	152
Douglas	I-80	Rocky Ridge	72	489	227
Douglas	East of Rocky Ridge		72	490	228
Eureka	I-80 to Rocky Ridge		72	459	213
Eureka	East of Rocky Ridge		70	333	155
Sierra College	North of Douglas		70	344	159
Sierra College	South of Douglas		72	446	207
Rocky Ridge	Cirby	Douglas	69	320	148
Rocky Ridge	Douglas	Roseville Parkway	70	348	161
Roseville Road	South of Cirby		70	338	157
Vernon	North of Douglas		68	245	114

SOURCE: Ballard & Brenman, Inc. 2003.

### 4.5.3 Regulatory Setting

#### ■ Federal

There are no federal laws, regulations, or requirements that pertain to regulating noise on a local level.

#### ■ State

##### **State of California**

Title 24 of the California Code of Regulations establishes standards governing interior noise levels that apply to all new multifamily residential units (hotels, motels, apartments, condominiums, and other attached dwellings) in California. These standards require that acoustical studies be performed prior to construction at residential building locations where the existing exterior  $L_{dn}$  exceeds 60 dBA. Such acoustical studies are required to establish mitigation measures that will limit maximum  $L_{dn}$  noise levels to 45 dBA in any habitable room.

#### ■ Local

##### **City of Roseville General Plan Noise Element**

The City of Roseville General Plan establishes acceptable noise level criteria for both transportation and non-transportation noise sources. For transportation noise sources, such as roadway noise, the City of Roseville General Plan Noise Element establishes an “Acceptable” exterior noise level standard for residential uses of 60 dB  $L_{dn}$ , which is applied in the outdoor activity areas. A “Conditionally Acceptable” exterior noise level standard of 65 dB  $L_{dn}$  is applied only after careful study and inclusion of protective measures as needed for intended use. The City of Roseville also establishes an interior noise level criterion of 45 dB  $L_{dn}$  for residential uses.

For noise due to non-transportation noise sources, or stationary noise sources, such as those associated with commercial land uses, the City of Roseville establishes hourly noise level performance criteria. These hourly criteria are applied at the affected noise-sensitive use property line. Table 4.5-7 shows the hourly noise level performance criteria.

**Table 4.5-7 Performance Standards for Nontransportation Noise Sources<sup>1</sup>**

Noise Level Descriptor	Daytime (7 a.m.–10 p.m.)	Nighttime (10 p.m.–7 a.m.)
Hourly Average ( $L_{24}$ )	50 dB	45 dB
Maximum Level ( $L_{max}$ )	70 dB	65 dB

## NOTES:

Each of the noise levels specified above should be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

1. Table IX-3 of the City of Roseville General Plan Noise Element

## City of Roseville Noise Ordinance

The City of Roseville has a Municipal Code that establishes noise level criteria for different land uses and activities, and regulates noise produced by stationary sources, construction equipment, amplification and other sources. Specific sections of the Noise Ordinance that would reduce impacts associated with noise in the SOI Amendment are reproduced below.

### 9.24.030 Exemptions.

Noise or Sound emanating from the following sources and activities are exempt from provisions of this title:

- D. The normal operation of public and private schools typically consisting of classes and other school-sponsored activities.
- F. Emergencies involving the execution of the duties of duly authorized government personnel and others providing emergency response to the general public, including but not limited to sworn peace officers, emergency personnel, utility personnel, and the operation of emergency response vehicles and equipment.
- G. Private construction (e.g., construction, alteration or repair activities) between the hours of seven a.m. and seven p.m. Monday through Friday, and between the hours of eight a.m. and eight p.m. Saturday and Sunday. Provided, however, that all construction equipment shall be fitted with factory installed muffling devices and that all construction equipment shall be maintained in good working order.
- H. Governmental operations necessary to provide essential services including but not limited to treatment plants, electric substations, fire stations, police stations, and other civic buildings.

### 9.24.100 Sound Limits for Sensitive Receptors.

- A. It is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied or otherwise controlled by such person which causes the exterior sound level when measured at the property line of any affected other sensitive receptor to exceed the ambient sound level by three (3) dBA or exceed the sound level standards as set forth in Table 4.5-6 by three (3) dBA, which ever is greater.
  - A. Each of the sound level standards specified in Table 4.5-7 shall be reduced by five (5) dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus three (3) dB.
  - B. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table 4.5-7.
- B. Notwithstanding paragraph A above, it is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on industrial property owned, leased, occupied or otherwise controlled by such person where an industrial land use shares a common property line or is separated by a roadway which causes the exterior sound level when measured at the property line of any affected single or multiple-family residence, school, hospital, church, rest home, cemetery, public library or other sensitive receptor to exceed the ambient sound level by seven (7) dBA or exceed the sound level standards as set forth in Table 4.5-7 by

seven (7) dBA, which ever is greater. This provision solely applies to properties with an Industrial Zoning designation, and supercedes the provisions of Section 9.24.040.A.

**9.24.050 Amplified Sound Limits for Residential and Sensitive Receptors.**

In addition to the sound level standards established in Table 4.5-7, it is unlawful for any person at any location to produce amplified music or sound which causes the exterior sound level when measured at the property line of any affected single or multiple-family residence, school, hospital, church, rest home, cemetery, public library or other sensitive receptor to exceed the sound level standards as set forth in Table 4.5-8.

<b>Sound Level Descriptor</b>	<b>Daytime (7 A.M.–10 P.M.)</b>	<b>Nighttime (10 P.M.–7 a.m.)</b>
L <sub>eq</sub> A weighting dBA	50	45
L <sub>eq</sub> C weighting dBC	75	70

NOTES:  
 One-Third (1/3) octave band      Ten (10) dB increase in any one-third (1/3) octave band

**West Roseville Specific Plan Measures**

The WRSP Design Guidelines require soundwalls and landscape setbacks in a number of locations. These features, detailed below, would reduce noise levels in residential areas adjacent to roadways (see Impact 4.5-9). However, acoustical studies would be needed once more detailed design information is available in order to determine whether additional noise attenuation measures would be required to meet City standards (see mitigation measures below).

The WRSP Design Guidelines state a minimum masonry soundwall height of six feet will be provided along low- and medium-density residential along the following arterial streets:

- Blue Oaks Boulevard
- Fiddymment Road
- West Side Drive
- Pleasant Grove Boulevard (with the exception of through the Village Center)

In addition, the Design Guidelines include a minimum six-foot-high solid wood fence along Hayden Parkway. The Design Guidelines also include wood fencing between schools and residences and parks and residences where the back or side yard abuts either school or park property. A fence will be provided around the perimeter of the PGWWTP and City-owned property to the north of the PGWWTP.

The WRSP Design Guidelines also call for 35- to 50-foot landscape setback along major roadways.

## 4.5.4 Impacts and Mitigation Measures

### ■ Methods of Analysis

When evaluating traffic-related noise impacts, analysis depends on the same assumptions made in Section 4.3, Transportation, because traffic volumes associated with the SOI Amendment Area as a whole cannot be determined by simply adding the new volumes attributed to the WRSP and Remainder Area components since the traffic model utilized redistributes trips based on changes to regional land use. Changes in jobs and housing may change commuting patterns, and redistribution of trips causes changes in traffic volumes throughout the model network, including both increases and decreases in volume on roadways. Therefore, for this section, the noise impacts for the SOI Amendment Area as a whole are analyzed independently of the analyses for the WRSP and Remainder Area.

The baseline for the analysis in this section is existing conditions, in combination with approved development in the vicinity of the SOI Amendment Area. Traffic noise impacts are based on the traffic analysis, which assumes buildout of approved development within the City of Roseville and 2020 conditions outside of the City. Increases in traffic noise relative to existing conditions are discussed in Appendix K. Cumulative impacts on noise are addressed in Chapter 5, CEQA Considerations.

SOI Amendment Area activities are not expected to result in any significant vibrations impacts within the SOI Amendment Area.

### Traffic Noise

Traffic noise levels were determined using the Federal Highway Administration (FHWA RD-77-108) Traffic Noise Prediction Model. The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. Inputs to the model were based upon traffic data provided by the traffic consultant, posted speeds, standard truck percentage data, and traffic split information. The FHWA model was developed to predict hourly  $L_{eq}$  values for free-flowing traffic conditions. To predict traffic noise levels in terms of  $L_{dn}$ , it is necessary to adjust the input volume to account for the day/night distribution of traffic.

Traffic volumes for future conditions and scenarios are contained in Section 4.3 (Transportation). A complete listing of the FHWA Model input data for future conditions are provided in Appendix J.

## **Stationary Sources**

Noise levels associated with industrial, public service and commercial facilities were determined using noise level data collected for similar facilities and standard noise modeling techniques.

The noise level criteria shown in Table 4.5-7 are used to determine land use compatibility with residential uses. At the specific plan level, detailed site and grading plans associated with these types of noise sources have not yet been developed. As a result, specific noise impacts associated with these sources cannot be identified at this time. Instead, the potential for these sources to generate excessive or annoying noise levels is evaluated, and measures are identified that could ensure that City standards are achieved. Proposed land uses that could result in noise levels in excess of Table 4.5-8 include community commercial, industrial, sports facilities, schools and parks. In additions, the City of Roseville Capital Improvements Program EIR identified off-site construction projects which may produce noise levels which would exceed City thresholds. The increase in noise levels would be short-term in nature and would not result, in-and of themselves, a permanent increase in roadway noise.

## **Construction Noise**

Project development would require the use of heavy equipment for site grading and excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of development there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The U.S. EPA has compiled data regarding the noise generating characteristics of specific types of construction equipment and typical construction activities. These data are presented in Table 4.5-9 and Table 4.5-10 for a reference distance of 50 feet. These noise levels would diminish rapidly with distance from a construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 84 dBA measured at 50 feet from the noise source to the receptor would reduce to 78 dBA at 100 feet from the source to the receptor, and reduced by another 6 dBA to 72 dBA at 200 feet from the source to the receptor.

**Table 4.5-9 Noise Ranges of Typical Construction Equipment**

Construction Equipment	Noise Levels in dBA Leq at 50 Feet'
Front Loader	73-86
Trucks	82-95
Cranes (moveable)	75-88
Cranes (derrick)	86-89
Vibrator	68-92
Saws	72-82
Pneumatic Impact Equipment	83-88
Jackhammers	81-98
Pumps	68-72
Generators	71-83
Compressors	75-87
Concrete Mixers	75-88
Concrete Pumps	81-85
Back Hoe	73-95
Pile Driving	95-107
Tractor	77-98
Scraper/Grader	80-93
Paver	85-88

## NOTES:

1. Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table.

Source: U.S. EPA 1971

**Table 4.5-10 Typical Outdoor Construction Noise Levels**

Construction Phase	Noise Levels at 50 feet (dBA Leq)	Noise Levels at 50 Feet with Mufflers (dBA Leq)
Ground Clearing	84	82
Excavation, Grading	89	86
Foundations	78	77
Structural	85	83
Finishing	89	86

SOURCE: U.S. EPA 1971

## ■ Standards of Significance

Noise problems are typically composed of three basic elements: the noise source, a transmission path, and a receiver. The appropriate acoustical treatment for a given project should consider the nature of the noise source and the sensitivity of the receiver. The problem should be defined in terms of appropriate criteria ( $L_{dn}$ ,  $L_{eq}$ , or  $L_{max}$ ), the location of the sensitive receiver (inside or outside), and when the problem occurs (daytime or nighttime). Noise control techniques should then be selected to provide an acceptable noise environment for the receiving property while remaining consistent with local aesthetic standards and practical structural and economic limits. Fundamental noise control options are discussed in more detail in Appendix J.

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area could do any of the following:

- Expose sensitive receptors to noise levels that exceed the City of Roseville General Plan Noise Element criteria
- Violate the City of Roseville Noise Ordinance
- Cause a substantial increase (greater than 3dB) adjacent to existing or planned residential uses or other sensitive receptors
- Contribute to increased sound levels where noise levels exceed 60 dBA (adjacent to existing or planned sensitive receptors)
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- Expose persons to, or generation of, excessive ground-borne vibration or ground-borne noise levels

**Impacts**

<b>IMPACT 4.5-1: SHORT-TERM NOISE GENERATED BY CONSTRUCTION ACTIVITY.</b>			
<b>Applicable Policies and Regulations:</b>	City of Roseville Noise Ordinance Section 9.24.030		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	MM 4.5-1 (Construction Noise Reduction) (WRSP) MM 4.5-2 (Construction Noise Policies) (Remainder Area)	MM 4.5-1 (Construction Noise Reduction)	MM 4.5-2 (Construction Noise Policies)
<b>Significance after Mitigation:</b>	N/A	Less Than Significant	Less Than Significant

A separate analysis of the SOI Amendment Area, which consists of the WRSP Area and the Remainder Area, is not provided because construction of both areas will never occur simultaneously.

**West Roseville Specific Plan**

Construction activities would affect residences to the east of the WRSP Area, particularly at the adjacent Del Webb and North Roseville Specific Plan areas along Fiddymont Road, as well as those residences to the south of Baseline Road. In addition, because construction would occur in phases, some on-site residential uses built during the early phases of the development would be exposed to construction

activity noise levels during the latter phases of development. Off-site infrastructure improvements along Blue Oaks Boulevard and Pleasant Grove Boulevard would also expose residents in those areas to construction noise.

Activities involved in construction would generate typical noise levels indicated in Table 4.5-9, ranging from 84 to 89 dB at a distance of 50 feet. In addition, noise levels due to drilling for wells create noise levels of approximately 90 dB at a distance of 50 feet. No pile driving or other unusual construction practices are anticipated that would result in substantial ground-borne vibration or noise. 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, particularly trucks transporting 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.

The Roseville Noise Ordinance (Section 9.24.030) restricts construction activity to the hours of seven a.m. to seven p.m. Monday through Friday, and eight a.m. to eight p.m. Saturday and Sunday, and requires that appropriate sound muffling devices be installed on construction equipment. These measures ensure that construction noise was limited to the daytime and that equipment noise would be minimized. Compliance with the City's Noise Ordinance would ensure that this impact is **less than significant**. To further reduce noise levels near residences, MM 4.5-1 recommends that equipment warm up areas, water tanks, and equipment storage areas be located in an area as far away from existing residences as is feasible. In addition, as required by MM 4.5-2, noise levels associated with water well drilling shall be reduced by hanging flexible sound control curtains around the drilling apparatus, and the drill rig.

### **Remainder Area**

If the Remainder Area developed at levels similar to those proposed in the WRSP, the effects would be similar, but would affect different sensitive receptors, including existing residents along Phillip Road and the new occupants of the WRSP area. As indicated in Table 4.5-10, construction noise levels would range from 84 to 89 dB at a distance of 50 feet. Noise would also be generated during the construction phase by increased truck traffic on area roadways. Compliance with the City's Noise Ordinance, which limits the hours of construction and requires sound mufflers, would ensure that impacts from construction noise would be **less than significant**. MM 4.5-2 would further reduce noise levels by placing loud equipment away from residences and blocking noise from well drilling equipment.

<b>IMPACT 4.5-2: COMMERCIAL NOISE SOURCES.</b>			
<b>Applicable Policies and Regulations:</b>	Table IX-3 of the City of Roseville General Plan Noise Element		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.5-3 (Commercial noise control) (WRSP) MM 4.5-4 (Commercial noise policies) (Remainder Area)	MM 4.5-3 (Commercial noise control)	MM 4.5-4 (Commercial noise policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

### SOI Amendment

There are a variety of stationary noise sources associated with future development within the SOI Amendment Area that could create noise levels in excess of the City of Roseville General Plan noise standards, or result in annoyance at existing and future noise-sensitive developments within the WRSP area. Such uses/noise sources include, but are not limited to, commercial loading docks associated with such uses as grocery stores, on-site truck circulation on commercial facilities, rooftop heating and ventilation equipment, and trash pickup. These activities could generate noise in excess of City standards at nearby residences, which may result in a potentially significant impact.

To reduce impacts associated with commercial noise activities, MM 4.5-3 for the WRSP and MM 4.5-4 for the Remainder Area require specific design considerations along with an acoustical analysis as well as provisions for locating commercial uses more than 150 feet from residences. These measures would reduce commercial noise impacts to a **less-than-significant** level.

### West Roseville Specific Plan

Within the WRSP area, commercial uses are proposed adjacent to residential areas at the intersections of Fiddymment Road and Blue Oaks Boulevard, Fiddymment Road and Hayden Parkway (north of Blue Oaks Boulevard), Blue Oaks Boulevard and Hayden Parkway, along West Side Drive, and within the Village Center. Six-foot masonry walls are proposed between these commercial and residential areas, except between commercial uses and the medium and low density residential at the Fiddymment Road and Hayden Parkway Intersection (see Figure M-03 in the WRSP Design Guidelines). However, according to the WRSP Design Guidelines, all service and delivery areas will be integrated into the design of the buildings and would include masonry walls or landscaping.

No site designs are proposed for commercial designations at this time. Therefore, noise levels cannot be estimated, and the effectiveness of the 6-foot masonry walls cannot be determined. Nonetheless, as discussed under Methods of Analysis, above, there is evidence that activities in commercial areas could exceed City standards (shown in Table 4.5-7) at adjacent residential areas, resulting in a potentially significant impact. Noise sources located more than 150 feet from residences would not be expected to exceed City standards. Within 150 feet of residences, orientation and shielding (e.g., berms, soundwalls) could be used to reduce noise levels at nearby residences. If the design measures required in MM 4.5-3 are included in the commercial developments, then noise levels associated with commercial uses are expected to meet the acceptable noise level criteria. These measures include higher soundwalls, restriction of delivery hours, and use of quiet HVAC equipment. MM 4.5-3 also requires that an acoustic analysis demonstrate that the measures selected for each commercial development within 150 feet of residences would ensure that City noise standards are met. Therefore, this is considered a **less-than-significant** impact.

### Remainder Area

The location of commercial uses within the Remainder Area has not been determined, but similar to the WRSP, commercial and residential uses could be located in proximity to each other. Therefore, noise levels from commercial facilities could exceed City standards at some residences resulting in a potentially significant impact. MM 4.5-4 requires that Specific Plans and/or other development proposals include provisions for commercial uses located near residences to ensure that the City's standards are met. With implementation of MM 4.5-4 for the Remainder Area, commercial noise impacts would be **less than significant**.

<b>IMPACT 4.5-3: INDUSTRIAL NOISE.</b>			
<b>Applicable Policies and Regulations:</b>	Table IX-3 of the City of Roseville General Plan Noise Element		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	No impact
<b>Mitigation Measures:</b>	MM 4.5-5 (Industrial facilities noise controls)	MM 4.5-5 (Industrial facilities noise controls)	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	No impact

### SOI Amendment

Development within the SOI Amendment Area could include development of industrial uses such as heavy equipment rental and storage, light industrial operations, recycling, scrap and dismantling, and

other noise-generating uses (see Table 4.1-1 in Chapter 4.1, Land Use and Agricultural Resources, for a full list). In addition, there are a variety of stationary noise sources associated with these industrial operations that could generate high noise levels, such as loading docks, on-site truck circulation, rooftop heating and ventilation equipment, heavy equipment, and processing equipment. Industrial operations often extend over 24-hour periods, generating noise in the nighttime hours, when residents are particularly sensitive to noise. This would be a significant impact.

Compliance with MM 4.5-5, which requires that any industrial or light industrial proposal demonstrate that the City's noise standards would be met through a combination of setbacks, barriers, facilities orientation, and other noise control measures, would ensure noise levels at sensitive receptors meet City standards. Therefore, within the SOI Amendment Area this impact would be reduced to a **less-than-significant** level.

### **West Roseville Specific Plan**

The WRSP designates industrial and light industrial land uses to the south and west of the PGWWTP. The specific industrial operations that would occur in the WRSP are not known at this time, but could include the types of activities described above.

Most of the residential uses in the WRSP would be separated from industrial operations by open space south of the PGWWTP, West Side Drive to the west, and by the Citywide park, high school, and PGWWTP to the north and east. The park and high school would be located within 1,000 feet of the PGWWTP and proposed light industrial area south of the PGWWTP. As discussed in the EIR prepared for the new wastewater treatment plant (Roseville Regional Wastewater Treatment Service Area Master Plan DEIR) noise generation would be limited to operation of the Odor Control fans. To ensure noise impacts associated with these fans would be less than significant Mitigation Measure 9-2 requires that the centrifugal fans be installed with acoustical treatment.<sup>31</sup> This would ensure noise associated with the PGWWTP would not affect users in the adjacent park or high school. It is anticipated that future development of any light industrial uses south of the PGWWTP would comply with the City's non-transportation source noise level criteria and would not adversely affect the proposed high school. In addition, the WRSP Design Guidelines include a 25-foot landscaped buffer around the perimeter of the PGWWTP, as well as masonry soundwalls that would be constructed around the PGWWTP and City-owned property to the north. These features, in addition to West Side Drive would buffer residential uses to the south and west. There are residential uses proposed in the western portion of the WRSP area that

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<sup>31</sup> City of Roseville, Roseville Regional Wastewater Treatment Service Area Master Plan DEIR, May 1996. Page 9-7

would be in proximity to the industrial uses (see Figure 2-3 [West Roseville Specific Plan Land Use Plan] in Chapter 2 [Project Description]). These residential areas are separated from the industrial and light industrial areas by West Side Drive, which is proposed to be approximately 150 feet wide including a 35-foot landscape corridor and a 14-foot landscaped median. Nonetheless, depending on the types of industrial operations that occurred within the WRSP area, these residential areas could be exposed to noise levels that exceed City standards. This would be a potentially significant impact.

MM 4.5-5 requires that any industrial or light industrial proposal demonstrate that the City's noise standards would be met through a combination of setbacks, barriers, facilities orientation and other noise control measures. Noise levels associated with industrial facilities generally are a result of processing equipment and air handling equipment. These facilities can reduce noise levels through implementation of noise control techniques such as silencers on exhaust stacks and ventilation openings, enclosures around noisy equipment, and orienting noisy equipment or processing facilities away from noise-sensitive receivers. These types of noise control features can be incorporated into the future industrial facilities to reduce noise levels consistent with the City of Roseville Noise Element criteria. Given the size of the industrial area, and the distance between industrial uses and the closest sensitive receptor (a minimum of 150 feet, the width of West Side Drive), such measures can be used to feasibly attain the noise standards. Therefore, the noise levels would be **less than significant**.

### Remainder Area

The Remainder Area is not assumed to have any light industrial or industrial uses at this time. Therefore, no impact has been identified. However, if industrial uses are proposed in the future, they would be subject to separate environmental review, as part of the City's specific plan process.

<b>IMPACT 4.5-4: NOISE FROM SCHOOL RELATED ACTIVITIES.</b>			
<b>Applicable Policies and Regulations:</b>	City of Roseville Municipal Code Section 9.24.030 (D)		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

## **School-Related Noise**

### **SOI Amendment**

Within the SOI Amendment Area there are a number of new schools proposed. These include a high school, middle school, and four elementary schools planned in the WRSP, as well as elementary and middle schools in the Remainder Area. Schools can generate noise from outdoor play areas: specifically, outdoor football, basketball, baseball, and soccer fields. These facilities could exceed City noise standards at nearby residences, which would be a potentially significant impact. However, as per section 9.24.030 (D) of the City of Roseville Municipal Code, the normal operation of public and private schools typically consisting of classes and other school-sponsored activities are exempt from the noise level thresholds outlined in Table IV-3 of the City of Roseville General Plan Noise Element. Therefore, impacts associated with school related noise would be **less than significant**.

### **West Roseville Specific Plan**

The WRSP includes one 53-acre high school site west of Fiddymont Road and east of the proposed sports complex near Hayden Parkway. One 20-acre middle school site is designated north of Pleasant Grove Boulevard, northwest of the Village Center. Four elementary school sites are designated in the WRSP in residential areas—two sites are proposed north of Blue Oaks Boulevard and two are proposed south of Blue Oaks Boulevard.

Noise sources associated with school sites are generally limited to outdoor sports and play areas. Other noise sources could include heating and ventilation equipment and parking lot noise. There is a variety of noise sources associated with large outdoor play areas such as a football field, soccer fields, or baseball diamonds. These noise sources generally include crowd and player noise, and public address system noise. The following provides a description of noise sources and noise levels for varying facilities.

### **High School Football Stadium Noise Levels**

The noise generation of the stadium would depend mainly on the crowd size, the interest level in the sporting event, and on the design of the public address system. Typical noise levels associated with these types of facilities are 60 dB  $L_{eq}$  and 70–75 dB  $L_{max}$  at a distance of 500 feet, with a crowd size of approximately 5,000 people. However, as per section 9.24.030 (D) of the City of Roseville Municipal Code, the normal operation of public and private schools typically consisting of classes and other school-sponsored activities are exempt from the noise level thresholds outlined in Table IV-3 of the City of Roseville General Plan Noise Element. Therefore, impacts associated with school-related noise would be **less than significant**.

### Other Outdoor School Play Areas Noise Levels

The noise sources associated with these activities include crowd noise and yelling from participants. Bollard & Brennan, Inc. has conducted noise level measurements of soccer and softball games where the number of individuals was estimated to range from 50 to 100 people. Noise level measurements indicated that noise levels associated with 100 people shouting at a distance of approximately 100 feet from the center of the field was 60 dB  $L_{eq}$ , and 70 dB  $L_{max}$ . However, as per section 9.24.030 (D) of the City of Roseville Municipal Code, the normal operation of public and private schools typically consisting of classes and other school-sponsored activities are exempt from the noise level thresholds outlined in Table IV-3 of the City of Roseville General Plan Noise Element. Therefore, impacts associated with school related noise would be **less than significant**.

### Remainder Area

No high school is anticipated to be developed in the Remainder Area, because the proposed high school in the WRSP area would be adequate to serve the entire SOI Amendment Area. Elementary schools and a middle school would likely be needed in the Remainder Area, and, as discussed above, noise on playgrounds could exceed City noise standards. However, as per section 9.24.030 (D) of the City of Roseville Municipal Code, the normal operation of public and private schools typically consisting of classes and other school-sponsored activities are exempt from the noise level thresholds outlined in Table IV-3 of the City of Roseville General Plan Noise Element. Therefore, impacts associated with school related noise would be **less than significant**.

<b>IMPACT 4.5-5: CITYWIDE PARK NOISE.</b>			
<b>Applicable Policies and Regulations:</b>	Table IX-3 of the City of Roseville General Plan Noise Element		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.5-6 (Attenuate park noise) (WRSP) MM 4.5-7 (Park noise policies) (Remainder Area)	MM 4.5-6 (Attenuate park noise)	MM 4.5-7 (Park noise policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

## **Park Noise**

### **SOI Amendment**

Within the SOI Amendment Area two large Citywide parks are planned in the WRSP area. The types of parks that would be built in the Remainder Area are not known at this time. Noise associated with park uses includes noise from park activities such as baseball, softball, and soccer events as well as from the park bandstand. Noise levels could range from between 55 dB  $L_{eq}$  and 70 dB  $L_{max}$  at distances of approximately 500 feet that would be a potentially significant impact. Because residential uses within the WRSP area could be as close as 200 feet, MM 4.5-6 and MM 4.5-7 would be required to shield noise through berms or barriers. Compliance with this measure would reduce impacts within the SOI Amendment Area to a **less-than-significant** level.

### **West Roseville Specific Plan**

#### **Citywide Park at Blue Oaks Boulevard and Phillip Road**

A Citywide park (regional sports complex park) with active recreational facilities is proposed for the area east of Phillip Road (see Figure 2-5 [Regional Sports Park] in Chapter 2 [Project Description]). The park is proposed to include a soccer complex at the north end of the park site, and several additional facilities including baseball and softball diamonds along the south portion of the site. No noise-sensitive land uses are located to the west, north, or south of the park site. However, some high-density residential uses are located to the east of the site. Noise levels associated with a soccer complex are expected to be similar to those associated with a football stadium of approximately 4,000 to 5,000 people. Noise levels could range between 55 dB  $L_{eq}$  and 70 dB  $L_{max}$  at distances of approximately 500 feet. Based upon the current project design, it is expected that the nearest residential uses could be as close as 200 feet from the soccer complex. Therefore, predicted noise levels at the nearest residence are expected to be approximately 60 dB  $L_{eq}$  and 75 dB  $L_{max}$ , which would exceed City standards. This would be a potentially significant impact.

As a means of reducing noise levels associated with the proposed soccer complex, MM 4.5-6 requires that the soccer fields be enclosed, if feasible, or shielded through the use of berms or barriers. A minimum 8 dB to 10 dB reduction in noise can be achieved through the site design or through the use of walls and berms. This type of reduction of noise levels is expected to result in compliance with the City of Roseville daytime noise level standards. However, it is expected that the nighttime noise level criteria would be exceeded. Therefore, MM 4.5-6 restricts use to 7:00 A.M. to 10:00 P.M. and would reduce this impact to a **less than significant** level.

### Fiddymment Park

Fiddymment Park is proposed adjacent to and west of Fiddymment Road and south of Blue Oaks Boulevard. A preliminary design has been completed for the park (see Figure 2-6 [Fiddymment Park] in Chapter 2 [Project Description]). Festival grounds, the only major noise source associated with the park has been the proposed Garden Bandstand. The outdoor activities that the venue could host would include small musical groups and speaking events. The seating capacity would not exceed 300, and would be festival style. The stage would face to the southeast, and would be depressed approximately 20 feet below grade. The presence of people would produce some noise, depending upon the activity involved, but the most significant impacts would result from use of amplifiers for music or public speaking. Noise levels produced by amplified sound systems would be variable depending upon the amplifier power and the settings used. For this analysis, it is assumed that the amphitheater will be fairly small in size (approximately seating of 200 to 300 people).

In settings where speech intelligibility is extremely important, voice sound levels are required to be in the range of 60 dB to 65 dB. However, maximum noise levels from speech can be up to 7 dB higher than the average of 60 dB to 65 dB. Based upon the assumed small design of the amphitheater, it is expected that sound power levels from the stage would be required to be approximately 100 dB  $L_{eq}$  at the stage for speaking engagements. Therefore, predicted noise levels at the nearest property line to the northeast where the nearest proposed residences would be located (600 feet from the stage) is 45 dB  $L_{eq}$ , and 52 dB  $L_{max}$ . This assumes that overall voice efforts or amplified voice is at the lowest volume required to provide adequate speech intelligibility.

Amplified music or activities could have inherently louder noise levels at the stage. Noise level data for small outdoor performance venues generally result in maximum noise levels due to performances ranging between 80 dB and 90 dBA at a typical sound booth (100 feet from the stage). Based upon this analysis, typical maximum noise levels at the nearest property line to the northeast (600 feet from the stage) are predicted to be 68 dB  $L_{eq}$ , and 75 dB  $L_{max}$ . If maximum noise levels do not exceed 75 dB  $L_{max}$  at a distance of 100 feet from the stage, it can be expected that noise levels will comply with the daytime exterior noise level criteria of 50 dB  $L_{eq}$ , and 70 dB  $L_{max}$ .

A 8 dB to 10 dB of noise attenuation can be achieved through shielding of the stage and amplified system with the use of barriers or berm, as required by MM 4.5-7. Events that cannot achieve the City standards would be prohibited. With implementation of MM 4.5-7, park noise would have a **less-than-significant** impact, because noise levels would not exceed City standards at nearby residences.

**Remainder Area**

Development of the Remainder Area would likely include parks, but the type, size and location of those parks is not known at this time. If a Citywide park were developed with uses similar to those planned for the WRSP area, then nearby residents of the Remainder Area and/or WRSP area could be subjected to noise levels that exceed City standards. This would be a potentially significant impact. MM 4.5-9 would ensure that noise levels are acceptable in Remainder Area parks by requiring shielding, barriers, or similar methods to achieve City standards. With this mitigation, this impact would be reduced to a **less-than-significant** level.

IMPACT 4.5-6: PLEASANT GROVE WASTEWATER TREATMENT PLANT NOISE.			
<b>Applicable Policies and Regulations:</b>	City of Roseville Noise Ordinance Section 9.24.030 (D)		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None required	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

**SOI Amendment/WRSP/Remainder Area**

Residential development is restricted within a 1,000-foot non-residential buffer surrounding the east, west and southern boundaries of the PGWWTP. This buffer was established in a separate EIR prepared specifically for the PGWWTP. A portion of the proposed high school site would lie within the 1,000-foot buffer (athletic facilities), however all school buildings would lie outside of the buffer. A 70-acre parcel owned by the City buffers the northern boundary of the plant. The treatment plant includes mechanical equipment such as pumps, clarifiers, and digesters. Measured noise levels associated with each of those pieces of equipment ranged between 60 dBA and 62 dBA at a distance of 20 feet, so noise levels would be below 50 dBA at 1,000 feet (assuming a 3dB reduction for every doubling of distance). In addition, the WRSP Design Guidelines include a 6-foot masonry soundwall along the western and southern boundaries of the PGWWTP. Because residential uses and high school buildings would be located outside of the 1,000-foot buffer; equipment noise levels are not anticipated to be audible within the WRSP or Remainder Area. In addition, section 9.24.030 of the City’s Noise Ordinance exempts any government run facility that provides essential services to the City from noise restrictions. Therefore, the impact would be **less than significant**.

IMPACT 4.5-7: FIRE STATION NOISE.			
<b>Applicable Policies and Regulations:</b>	City of Roseville Noise Ordinance Section 9.24.030 (D)		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

### SOI Amendment

The primary noise sources associated with fire stations include emergency sirens and alarms associated with responding to fires. Although the noise levels may be annoying to residential uses, these types of noise sources are exempt under the City of Roseville Noise Ordinance. Section 9.24.030(C) specifically states that: *Safety, warning and alarm devices, including house and car alarms, and other warning devices that are designed to protect the health, safety and welfare* are exempt. Section 9.24.030 (F) also specifically exempts “emergencies, involving the execution of duties...providing emergency response to the general public, including but not limited to...emergency personnel.” Therefore, noise impacts associated with fire stations within the SOI Amendment Area are considered **less than significant**.

### West Roseville Specific Plan

The WRSP proposes a new fire station located on the west side of Hayden Parkway. The station is surrounded by high-density residential uses to the north, open space to the south, Citywide park to the west, and low density residential to the east. Fire station noise can be loud, due to sirens. However, the noise would be intermittent, limited to emergency response and possibly training and maintenance periods. As discussed above, Section 9.24.030(C) and (F) specifically exempt noise associated with fire stations from City of Roseville Noise standards. Therefore, this impact is **less than significant**.

### Remainder Area

No fire stations have been identified in the Remainder Area. However, it is anticipated that when development occurs within the Remainder Area at least one fire station would be required. As described above, the primary noise sources associated with fire stations are intermittent and are exempt under the City of Roseville Noise Ordinance, Section 9.24.030(C) and (F). Therefore, this impact is **less than significant**.

IMPACT 4.5-8: ON-SITE TRAFFIC NOISE.			
Applicable Policies and Regulations:	City of Roseville General Plan Noise Element		
	SOI	WRSP	Remainder Area
Significance with Policies and Regulations:	Significant	Significant	Significant
Mitigation Measures:	MM 4.5-8 (on-site traffic noise attenuation requirements) (WRSP) MM 4.5-10 (On-site traffic noise policies) (Remainder Area)	MM 4.5-8 (On-site traffic noise attenuation)	MM 4.5-10 (On-site traffic noise policies)
Significance after Mitigation:	Less Than Significant	Less Than Significant	Less Than Significant

### On-Site Traffic Noise

#### SOI Amendment

Projected future noise levels were calculated based on existing noise levels and the traffic analysis completed by DKS Associates, Transportation Consultants. Within the SOI Amendment Area, on-site traffic noise associated with future development would contribute to increased noise levels (refer to Table 4.5-11). Residential uses could be located near roadways, which would experience noise levels above 60 dBA due to traffic, specifically, the roadway segment along Blue Oaks Boulevard, Hayden Parkway, and Pleasant Grove Boulevard. The residential uses located along these segments would therefore experience this noise level at 100 feet from the roadway centerline. This would result in a potentially significant impact. However, MM 4.5-8 and MM 4.5-10 require acoustic analyses demonstrating that a combination of setbacks, barriers, building orientation, and construction techniques which would be adequate to ensure that noise levels meet City standards where residential uses are located inside of the 60 dB L<sub>dn</sub> noise level contours, as well as specific construction requirements and development of specific noise policies for future development. Compliance with these mitigation measures would ensure that future sensitive receptors within the SOI area would not be exposed to on-site traffic noise in excess of City standards. This impact would be reduced to a **less-than-significant** level with mitigation.

**Table 4.5-11 FHWA Traffic Noise Prediction Results 2020 Plus SOI Amendment**

Roadway/Segment	Traffic Noise Levels (Ldn, dB)100 feet from Centerline			SOI Amendment Distance to Ldn Contours	
	No project	SOI Amendment	Change	65 dB L <sub>dn</sub>	60 dB L <sub>dn</sub>
<b>S.R. 65</b>					
South of Pleasant Grove	78	79	1	793'	1708'
Pleasant Grove to Blue Oaks	78	78	0	787'	1696'
Blue Oaks to Sunset	79	79	0	831'	1791'
<b>Roseville Parkway</b>					
South of Pleasant Grove	70	70	0	214	461
Pleasant Grove to Washington	67	67	0	142	306
Washington to Foothills	68	68	0	148	319
<b>Sunset</b>					
East of S.R. 65	67	68	1	147	316
<b>Foothills</b>					
Baseline to Junction	70	70	0	200'	431'
Junction to Pleasant Grove	70	70	0	195'	420'
Pleasant Grove to Blue Oaks	68	68	0	167'	359'
<b>Woodcreek</b>					
Baseline to Junction	63	63	0	69'	148'
Junction to Pleasant Grove	68	68	0	149'	322'
Pleasant Grove to Blue Oaks	66	66	0	114'	245'
North of Blue Oaks	63	64	1	88'	189'
<b>Fiddymont</b>					
South of Baseline	67	68	1	156'	337'
Baseline to Pleasant Grove	68	69	1	171'	367'
Pleasant Grove to Blue Oaks	64	67	3	145'	313'
Blue Oaks to Hayden	62	66	4	110'	236'
N. of Hayden	62	66	4	111'	239'
<b>Baseline</b>					
West of Watt	68	68	0	167'	360'
Watt to Fiddymont	70	69	1	188'	405'
Fiddymont to Junction	69	69	0	193'	417'
Junction to Woodcreek	67	67	0	145'	313'
Woodcreek to Foothills	68	68	0	160'	344'
Foothills to Washington	59	60	1	45'	98'
<b>Junction</b>					
Baseline to Woodcreek	66	67	1	132'	284'
Woodcreek to Foothills	65	65	0	106'	228'
Foothills to Washington	67	67	0	140'	303'
<b>Pleasant Grove</b>					
West Side to Fiddymont	NA	66	NA	112'	242'
Fiddymont to Woodcreek	67	68	1	162'	349'
Woodcreek to Foothills	69	70	1	209'	451'
Foothills to Washington	70	71	1	234'	504'
Washington to Roseville Parkway	69	70	1	207'	445'
Roseville Parkway to S.R. 65	71	71	0	236'	508'

**Table 4.5-11 FHWA Traffic Noise Prediction Results 2020 Plus SOI Amendment**

Roadway/Segment	Traffic Noise Levels (Ldn, dB)100 feet from Centerline			SOI Amendment Distance to Ldn Contours	
	No project	SOI Amendment	Change	65 dB Ldn	60 dB Ldn
<b>Blue Oaks</b>					
West Side to Hayden	NA	66	NA	119'	256'
Hayden to Fiddymment	NA	67	NA	137'	295'
East of Fiddymment	64	67	3	139'	299'
West of Woodcreek	66	69	3	181'	389'
Woodcreek to Foothills	69	70	1	221'	477'
Foothills to S.R. 65	70	70	0	225'	485'
S.R. 65 to Sunset	68	67	1	134'	289'
<b>West Side</b>					
Baseline to Pleasant Grove	NA	67	NA	129'	278'
Pleasant Grove to Blue Oaks	NA	67	NA	132'	284'
<b>Hayden</b>					
North of Blue Oaks	NA	61	NA	55'	117'
South of Blue Oaks	NA	62	NA	61'	131'

SOURCE: Ballard & Brennar, Inc., 2003

**West Roseville Specific Plan**

Future noise levels were calculated based on existing noise levels and the traffic analysis completed by DKS Associates, Traffic Consultants. Tables 4.5-12 and 4.5-13 show the resulting future traffic noise levels on the local street system under existing conditions with and without the WRSP. As shown in Table 4.5-12, those roads within the WRSP that would have noise levels that exceed 60 dB Ldn include Fiddymment Road, Pleasant Grove Boulevard, Blue Oaks Boulevard, West Side Drive, and Hayden Parkway. Depending on the distance to actual residents in these locations, exterior and interior noise levels could exceed City standards. This would be a **potentially significant** impact.

**Table 4.5-12 FHWA Traffic Noise Prediction Results 2020 Plus WRSP**

Roadway/Segment	Traffic Noise Levels (Ldn, dB)100 feet from Centerline			SOI Amendment Distance to Ldn Contours	
	No project	SOI Amendment	Change	65 dB Ldn	60 dB Ldn
<b>S.R. 65</b>					
South of Pleasant Grove	78	78	0	788'	1697'
Pleasant Grove to Blue Oaks	78	78	0	785'	1691'
Blue Oaks to Sunset	79	79	0	830'	1788'
<b>Roseville Parkway</b>					
South of Pleasant Grove	70	70	0	212'	457'
Pleasant Grove to Washington	67	67	0	142'	305'
Washington to Foothills	68	67	1	145'	312'
<b>Sunset</b>					
East of S.R. 65	67	67	0	143'	308'
<b>Foothills</b>					
Baseline to Junction	70	70	0	204'	440'
Junction to Pleasant Grove	70	70	0	199'	428'
Pleasant Grove to Blue Oaks	68	68	0	164'	354'

**Table 4.5-12 FHWA Traffic Noise Prediction Results 2020 Plus WRSP**

Roadway/Segment	Traffic Noise Levels (Ldn, dB)100 feet from Centerline			SOI Amendment Distance to Ldn Contours	
	No project	SOI Amendment	Change	65 dB L <sub>dn</sub>	60 dB L <sub>dn</sub>
<b>Woodcreek</b>					
Baseline to Junction	63	64	1	85'	183'
Junction to Pleasant Grove	68	69	1	172'	370'
Pleasant Grove to Blue Oaks	66	66	0	116'	251'
North of Blue Oaks	63	64	1	83'	178'
<b>Fiddymment</b>					
South of Baseline	67	68	1	149'	320'
Baseline to Pleasant Grove	68	68	0	160'	345'
Pleasant Grove to Blue Oaks	64	67	3	134'	289'
Blue Oaks to Hayden	62	65	3	103'	222'
N. of Hayden	62	65	3	99'	214'
<b>Baseline</b>					
West of Watt	68	68	0	155'	333'
Watt to Fiddymment	70	70	0	205'	442'
Fiddymment to Junction	69	70	1	199'	428'
Junction to Woodcreek	67	67	0	142'	305'
Woodcreek to Foothills	68	68	0	152'	327'
Foothills to Washington	59	60	1	45'	97'
<b>Junction</b>					
Baseline to Woodcreek	66	67	1	126'	272'
Woodcreek to Foothills	65	64	-1	90'	194'
Foothills to Washington	67	67	0	132'	284'
<b>Pleasant Grove</b>					
West Side to Fiddymment	NA	64	NA	80'	173'
Fiddymment to Woodcreek	67	67	0	136'	293'
Woodcreek to Foothills	69	70	1	198'	428'
Foothills to Washington	70	70	0	227'	488'
Washington to Roseville Parkway	69	70	1	202'	435'
Roseville Parkway to S.R. 65	71	71	0	234'	504'
<b>Blue Oaks</b>					
West Side to Hayden	NA	63	NA	77'	165'
Hayden to Fiddymment	NA	66	NA	109'	234'
East of Fiddymment	64	67	3	125'	269'
West of Woodcreek	66	68	2	162'	349'
Woodcreek to Foothills	69	70	1	214'	460'
Foothills to S.R. 65	70	70	0	221'	476'
S.R. 65 to Sunset	68	70	2	134'	289'
<b>West Side</b>					
Baseline to Pleasant Grove	NA	NA	NA	NA	NA
Pleasant Grove to Blue Oaks	NA	63	NA	69'	149'
<b>Hayden</b>					
North of Blue Oaks	NA	61	NA	56'	121'
South of Blue Oaks	NA	61	NA	57'	122'

SOURCE: Ballard &amp; Brennan, Inc., 2003.

**Table 4.5-13 Traffic Noise Levels and Distances to Contours with West Roseville Specific Plan**

Roadway	From	To	L <sub>dn</sub> at 75 ft. (dB)	Distance to Noise Level Contours (ft.)	
				60 dB	65 dB
S.R. 65	S. of Pleasant Grove		80	1697	788
S.R. 65	Pleasant Grove	Blue Oaks	80	1691	785
S.R. 65	Blue Oaks	Sunset	81	1788	830
Roseville Parkway	S. of Pleasant Grove		72	457	212
Roseville Parkway	Pleasant Grove	Washington	69	305	142
Roseville Parkway	Washington	Foothills	69	312	145
Roseville Parkway	East of I-80		71	438	203
Sunset	East SR-65		69	308	143
Foothills	Baseline	Junction	72	440	204
Foothills	Junction	Pleasant Grove	71	428	199
Foothills	Pleasant Grove	Blue Oaks	70	354	164
Foothills	N. of Cirby		73	556	258
Woodcreek	Baseline	Junction	66	183	85
Woodcreek	Junction	Pleasant Grove	70	370	172
Woodcreek	Pleasant Grove	Blue Oaks	68	251	116
Woodcreek	N. of Blue Oaks		66	178	83
Fiddymnt	S. of Baseline		69	320	149
Fiddymnt	Baseline	Pleasant Grove	70	345	160
Fiddymnt	Pleasant Grove	Blue Oaks	69	289	134
Fiddymnt	Blue Oaks	Hayden	67	222	103
Fiddymnt	N. of Hayden		67	214	99
Baseline	W. of Watt		70	333	155
Baseline	Watt	Fiddymnt	72	442	205
Baseline	Fiddymnt	Junction	71	428	199
Baseline	Junction	Woodcreek	69	305	142
Baseline	Woodcreek	Foothills	70	327	152
Baseline	Foothills	Washington	66	182	84
Junction	Baseline	Woodcreek	68	272	126
Junction	Woodcreek	Foothills	66	194	90
Junction	Foothills	Washington	69	284	132
Pleasant Grove	West Side	Fiddymnt	65	173	80
Pleasant Grove	Fiddymnt	Woodcreek	69	293	136
Pleasant Grove	Woodcreek	Foothills	71	428	198
Pleasant Grove	Foothills	Washington	72	488	227
Pleasant Grove	Washington	Roseville Parkway	71	435	202
Pleasant Grove	Roseville Parkway	S.R. 65	72	504	234
Blue Oaks	West Side	Hayden	65	165	77
Blue Oaks	Hayden	Fiddymnt	67	234	109
Blue Oaks	E. of Fiddymnt		68	269	125
Blue Oaks	W. of Woodcreek		70	349	162
Blue Oaks	Woodcreek	Foothills	72	460	214
Blue Oaks	Foothills	S.R. 65	72	476	221
Blue Oaks	S.R. 65	Sunset	69	289	134

**Table 4.5-13 Traffic Noise Levels and Distances to Contours with West Roseville Specific Plan**

Roadway	From	To	L <sub>dn</sub> at 75 ft. (dB)	Distance to Noise Level Contours (ft.)	
				60 dB	65 dB
West Side	Baseline	Pleasant Grove	0	0	0
West Side	Pleasant Grove	Blue Oaks	64	149	69
Hayden	N. of Blue Oaks		63	121	56
Hayden	S. of Blue Oaks		63	122	57
I-80	W. of Auburn		83	2531	1175
I-80	Cirby	Douglas	83	2403	1115
I-80	Douglas	Lead Hill	82	2335	1084
I-80	Lead Hill	Roseville Parkway	83	2542	1180
I-80	E. of Roseville Parkway		81	1891	878
Riverside		N. of I-80	69	304	141
Auburn	S. of I-80		70	360	167
Washington	W. of Atlantic		70	336	156
Atlantic	W. of I-80		70	351	163
Galleria Blvd	Lead Hill	S.R. 65	71	430	200
Standford Ranch	North of S.R. 65		71	399	185
Taylor Road	North of I-80		72	465	216
Sunrise	S. of Cirby		72	479	222
Sunrise	N. of Cirby		73	514	239
North Sunrise	Douglas	Eureka	71	420	195
Cirby	W. of Sunrise		72	447	208
Cirby	E. of Sunrise		70	336	156
Douglas	W. of I-80		70	329	153
Douglas	I-80	Rocky Ridge	72	495	230
Douglas	East of Rocky Ridge		72	493	229
Eureka	I-80 to Rocky Ridge		72	463	215
Eureka	East of Rocky Ridge		70	333	154
Sierra College	North of Douglas		70	344	160
Sierra College	South of Douglas		72	447	208
Rocky Ridge	Cirby	Douglas	69	322	149
Rocky Ridge	Douglas	Roseville Parkway	70	366	170
Roseville Road	South of Cirby		70	339	158
Vernon	North of Douglas		68	245	114

SOURCE: Ballard & Brennan, Inc., 2003.

Based upon the noise analysis, proposed residential uses that are exposed to traffic noise levels that exceed 60 dB L<sub>dn</sub> would be required to use measures to reduce noise levels in outdoor activity areas to 60 dB L<sub>dn</sub> or less. A combination of setbacks and soundwalls, are expected to provide adequate mitigation to reduce traffic noise levels to 60 dB L<sub>dn</sub>. However, relative elevations of the roadways, elevations of the building pads, and distances from outdoor areas to the roadway centerlines can affect the performances of the barriers.

In many cases, the buildings are located in close proximity to roadways. In those instances, outdoor activity areas are located at the rear of the buildings. Therefore, outdoor areas would be shielded from roadway noise by the buildings and exterior noise levels at the outdoor activity areas are expected to comply with the City of Roseville exterior noise level criteria.

MM 4.5-8 requires acoustic analyses demonstrating that a combination of setbacks, barriers, building orientation, and construction techniques would be adequate to ensure that noise levels meet City standards where residential uses are located, as well as specific construction requirements and development of specific noise policies for future development. Compliance with these mitigation measures would ensure that future sensitive receptors within the WRSP would not be exposed to on-site traffic noise in excess of City standards. This impact would be reduced to a **less-than-significant** level with mitigation.

### ***WRSP Operational Impacts to the Project***

The WRSP includes a mix of residential and commercial uses within the Village Center (see Chapter 2, Project Description). The mix of uses could include commercial uses on the first floor with residential above, or higher density residential with roadway interfaces (such as “Brownstone” type townhomes). Compliance with the Uniform Building Code (UBC) and Title 24 of the California Code requires that specific sound transmission standards be adhered to between uses that share a common wall and common floor/ceiling. The standard rating of Sound Transmission Classification (STC) and Impact Insulation Classification (IIC) of 50 is required to reduce sound transmissions between uses such as between residences and commercial and residential uses, consistent with Title 24. Compliance with these standards is handled through the City’s Building Department.

The City of Roseville interior noise level standard is 45 dB L<sub>dn</sub>. Generally, new construction practices consistent with the UBC would result in an exterior to interior noise reduction of 30 dB L<sub>dn</sub>. Therefore, interior noise levels would not exceed 45 dB L<sub>dn</sub>. This would be considered a **less-than-significant** impact.

### ***Remainder Area***

As with the WRSP, traffic noise along roadways in the Remainder Area may exceed 60 L<sub>dn</sub> at some locations, which could be a significant impact. Because no specific development is proposed at this time, it is difficult to quantify future internal noise impacts. Additional environmental review will be required at the time specific development is proposed in the Remainder Area to determine potential roadway noise levels. MM 4.5-10 requires that future development would be subject to the City of Roseville noise standards and that mitigations such as setbacks, soundwalls, or building orientation, would be required

to ensure that noise levels meet acceptable standards. With mitigation, noise levels from the development within the Remainder Area would be reduced to a **less-than-significant** level.

<b>IMPACT 4.5-9: OFF-SITE TRAFFIC NOISE LEVELS.</b>			
<b>Applicable Policies and Regulations:</b>	An increase in noise levels of more than 3 dB $L_{dn}$ is considered to be a significant increase in noise levels.		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Less Than Significant	Significant
<b>Mitigation Measures:</b>	MM 4.5-10 (On-site traffic noise policies)	None Required	MM 4.5-10 (on-site traffic noise policies)
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Less Than Significant	Significant and Unavoidable

### **SOI Amendment/Remainder Area**

Noise levels associated with increased traffic noise are anticipated to increase on roadways adjacent to the SOI Amendment Area. While the WRSP would not increase off-site noise levels by more than 3 dB  $L_{dn}$ , the full SOI Amendment would increase noise levels by as much as 4 dB  $L_{dn}$  (see Table 4.5-10). The increase in traffic noise could disturb residences adjacent to these roadways and exceed the City's standards. This is considered a potentially **significant and unavoidable** impact.

### **West Roseville Specific Plan**

Table 4.5-11 summarizes the roadways that would be most affected by WRSP traffic noise. As shown in Table 4.5-11, portions of the existing street system noise levels would increase between 1 dB and 3 dB  $L_{dn}$ . Increases along other roadways would be lower than 3 dB  $L_{dn}$ . Because no increase would exceed 3 dB, the change in noise would not be audible, so this is considered a **less-than-significant** impact.

<b>IMPACT 4.5-10: CHANGES TO CITY NOISE CONTOURS.</b>			
<b>Applicable Policies and Regulations:</b>	None Applicable		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant	Significant
<b>Mitigation Measures:</b>	MM 4.5-10 (On-site traffic noise policies)	None Required	MM 4.5-10 (on-site traffic noise policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

## Noise Contours

### West Roseville Specific Plan

A number of amendments to the General Plan have been proposed to incorporate the WRSP area into the City, if the plan is approved (see Chapter 2, Project Description for a complete list of amendments). With respect to noise, the City would adopt a new map showing noise contours in the City, based on the 2020 traffic levels (see Figure 4.5-3 and Table 4.5-12).

The last time the City updated its Citywide noise contours was 1993, when the current General Plan was adopted. The proposed noise contours would update the General Plan for the WRSP, as well as other General Plan amendments and project approvals that have occurred since 1993. For this EIR, noise contours were prepared for 2020, assuming buildout of the General Plan and approved development (baseline), and 2020 baseline with the WRSP (the “without WRSP” condition is shown in Figure 4.5-2 and Table 4.5-6).

As discussed under Impact 4.5-9, the increase in traffic noise due to the WRSP would not be substantial. WRSP traffic would increase noise levels between 1 dB and 3 dB  $L_{dn}$  along portions of existing and planned roadways. Because the increases would be less than 3 dB, they would not be generally audible to people living or traveling along those roadways. Nonetheless, the increase in traffic noise would increase the distance to the 60 dB and 65 dB contours. That is, more land would be located in areas with noise levels above 65 dB. For example, along the segment of Baseline from Watt Avenue to Fiddymont Road, the distance to the 60 dB contour would increase from 204 feet to 205, so an additional 1 linear foot of parcels fronting Baseline Road would be subject to noise levels above 65 dB. The change in distance to the 60 or 65 dB contour would go down in some cases (the redistribution of traffic as a result of the WRSP would decrease traffic levels and noise on some segments) and would be as high as 45 feet for the 65 dB contour or 97 feet for the 60 dB contour. In most cases, however, the increase would be under 10 and 20 feet, respectively, and would occur in areas that have been developed fairly recently and with substantial setbacks from roadways and sound walls. As part of the analysis, Bollard and Brennan, the noise consultant, field-verified the locations where any substantial shift in the noise contour would occur to determine if sensitive receptors would be impacted. In all of the cases, soundwalls or non-residential uses were present that assured that exterior noise levels would meet the City’s noise standard. As a result, it was determined that impacts to the General Plan noise contours as a result of the WRSP would be **less than significant**.

### Remainder Area

Development of the Remainder Area would also increase traffic noise, and further alter traffic noise contours. Noise contours were not prepared for the Remainder Area, because it is not proposed for formal annexation to the City at this time. Nonetheless, because noise levels would be increased if the Remainder Area were developed, the distance to the 60 and 65 dB contours would increase. As discussed in Impact 4.5-9, the full SOI Amendment would increase noise levels by 4 dB, which could be perceptible to sensitive receptors living along affected roadways. This could result in a potentially significant impact. At the time development is proposed in the Remainder Area, additional environmental review as part of the specific plan process would be required to determine if significant changes in the General Plan 60 dBA noise contour would occur. As described in MM 4.5-10 Specific Plans and/or other development proposals for the Remainder Area shall include policies and/or conditions that require that residential development adjacent to roadways will be subject to traffic noise levels that fall within City standards. The standards could be achieved through a combination of setbacks, soundwalls or other barriers, building orientation or other measures. An acoustical analysis shall be required to demonstrate that these measures will result in acceptable noise levels. Therefore, this impact would be reduced to a **less than significant** level.

IMPACT 4.5-11: GROUNDBORNE VIBRATION LEVELS.			
<b>Applicable Policies and Regulations:</b>	Excessive ground borne vibrations of more than 80 VdB is considered a significant level.		
	<b>SOI</b>	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant	Less Than Significant

Construction activities that would occur under the proposed project have the potential to generate low levels of ground borne vibration. Table 4.5-14 identifies various vibration velocity levels for the types of construction equipment that would operate at the project site during construction.

**Table 4.5-14 Vibration Source Levels for Construction Equipment**

Construction Equipment	Approximate VdB				
	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Large Bulldozer	87	81	79	77	75
Loaded Trucks	86	80	78	76	74
Jackhammer	79	73	71	69	67
Small Bulldozer	58	52	50	48	46

SOURCE: Federal Railroad Administration 1998; EIP Associates 2003

Based on the information presented in Table 4.5-14, vibration levels could reach up to 87 VdB at the nearest properties located across the streets from the project site. This would exceed the 80 VdB threshold for residences and buildings where people normally sleep. However, the construction activities and their associated noise levels would be limited to between the hours of 7:00 A.M. and 7:00 P.M. on Monday through Friday, and 8:00 A.M. and 8:00 P.M. on Saturday and Sunday, in accordance with the City of Roseville Municipal Code. Therefore, they would not occur during recognized sleep hours for residences. Therefore, this impact would be **less than significant**.

## ■ Mitigation Measures

### *MM 4.5-1: Construction noise reduction (Impact 4.5-1-WRSP)*

As discussed under Impact 4.5-1, compliance with the City's Noise Ordinance would result in a less-than-significant impact for construction noise. However, the following measures are recommended to further reduce the effects of construction noise on residents.

- Equipment warm-up areas, water tanks, and equipment storage areas shall be located a minimum of 150 feet from occupied residences, where feasible.
- Flexible sound control curtains shall be placed around drilling apparatus and drill rigs, if sensitive receptors are located nearby.

These measures would reduce the amount of noise at residences by placing stationary sources of noise far enough from residences that the noise generated would not be disturbing, particularly during the daytime, when construction activities would occur. In addition, they would assist in reducing the potential for noise disturbances and potential noise-related complaints.

### *MM 4.5-2: Construction noise policies (Impact 4.5-1-Remainder Area)*

Specific Plans and/or other development proposals for the Remainder Area shall include policies and/or conditions that require equipment warm-up areas, water tanks and equipment storage areas be located a minimum of 150 feet from occupied residences, if feasible, and that noise measures (such as sound control curtains) be used in well-drilling.

### *MM 4.5-3: Commercial noise control (Impact 4.5-2-WRSP)*

For all commercial uses within 150 feet of residential uses, implement the following or equally effective measures:

- (a) For commercial loading docks and on-site truck circulation areas that are planned to be within 150 feet of sensitive receptors (including backyards), the following measures shall be implemented:

(1) Loading docks and on-site truck circulation routes shall be designed to ensure that noise levels do not exceed 70 dB  $L_{max}$  or 50 dB hourly  $L_{eq}$  at the nearest residence. An acoustic analysis shall demonstrate that the loading area design, including any noise attenuation features (e.g., covering, sound walls, orientation) would be adequate to achieve this standard;

and

(2) Deliveries shall generally be limited to the hours between 7:00 A.M. and 10:00 P.M.

(b) For all commercial buildings, roof-top HVAC shall be oriented away from residential areas and systems shall not produce noise levels that exceed 50 dB at a distance of 25 feet. In addition, roof-top parapets shall block line-of-sight from noise-sensitive uses to HVAC equipment.

(c) Setbacks or enhanced barriers (e.g., 8 feet tall) as needed to achieve City standards.

An acoustical analysis shall be conducted to demonstrate that City noise standards would be achieved by these measures. Additional measures shall be implemented, if needed, to meet the standards.

*MM 4.5-4: Commercial noise policies (Impact 4.5-2-Remainder Area)*

Specific Plans and/or other development proposals for the Remainder Area shall include policies and/or conditions that require that commercial areas located adjacent to residential area are designed to meet City noise standards through the use of setbacks, barriers, and other measures. Particular attention shall be given to loading docks, on-site truck circulation, and HVAC equipment. To the extent feasible, specific plans and/or development proposals for the remainder area shall locate commercial uses at least 1500 feet from residences.

*MM 4.5-5: Industrial facilities noise controls (Impact 4.5-3-WRSP)*

Prior to approval of a building permit, any proposal for an industrial or light industrial use shall demonstrate through an acoustical analysis that noise levels at the nearest sensitive receptor will not exceed City standards. The noise standards may be achieved through a combination of setbacks, soundwalls or other barriers, and other noise control techniques such as silencers on exhaust stacks and ventilation openings, enclosures around noisy equipment, and orienting noisy equipment or processing facilities away from noise-sensitive receivers.

MM 4.5-6: *Attenuate park noise (Impact 4.5-5-WRSP)*

- (a) The proposed soccer fields located in the northern portion of the proposed regional sports complex park shall be enclosed or shielded through the use of berms or barriers. A minimum of an 8 dB to 10 dB reduction in noise can be achieved through the site design or through the use of walls and berms. This type of reduction of noise levels is expected to result in compliance with the City of Roseville daytime noise level standards. In addition, the City of Roseville Parks Department allows parks to be open until 11:00p.m. However, due to the frequent use of the facility and the unique ability of public parks to generate noise, any function, which would generate noise beyond the 70dB threshold, as discussed earlier, shall be limited to the hours of 7:00 to 10:00p.m.
- (b) The Garden Bandstand shall be shielded from residential uses by berms or other barriers, or amplification at musical events shall be limited to maximum noise levels of 80 dB  $L_{max}$  at the property line of the property where the event is held. Amplified events shall be prohibited if it cannot be demonstrated that this standard can be met. In addition, amplified music shall be allowed only between the hours of 8:00 A.M. and 10:30 P.M. on Sunday through Thursday and between the hours of 8:00 A.M. and 11:00 P.M. on Fridays and Saturdays.

MM 4.5-7: *Park noise policies (Impact 4.5-5-Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall include policies and/or conditions that ensure that park noise meets City standards, as demonstrated by appropriate acoustical analyses.

MM 4.5-8: *On-site traffic noise attenuation (Impact 4.5-8-WRSP-SOI)*

The project developer shall demonstrate through an acoustical study that residences along roadways will be subject to noise levels consistent with the City's standards. The standards could be achieved through a combination of setbacks, soundwalls or other barriers, building orientation or other measures. An acoustical analysis shall be required to demonstrate that these measures will result in acceptable noise levels.

MM 4.5-9: *Village Center construction requirements (Impact 4.5-8-WRSP-SOI)*

In addition to complying with the standard construction practices set forth in the Uniform Building Code, the following shall be required for those residences in the Village Center that front roadways:

- Air conditioning or mechanical ventilation systems shall be installed so that windows and doors may remain closed.

- Windows and sliding glass doors shall be mounted in low infiltration rate frames (0.5 cfm or less, per ANSI specifications).
- Exterior doors shall be solid core with perimeter weather-stripping and threshold seals.
- Exterior walls shall be constructed of a three-coat stucco or wood siding with an underlayer of sound board.
- Glass in both windows and exterior doors shall have a Sound Transmission Classification (STC) rating of at least 32.
- Roof or attic vents facing the road shall be boxed.
- Compliance with these standard constructions practices would provide an attenuation of 30 dB.

*MM 4.5-10: On-site traffic noise policies (Impact 4.5-8-SOI and Remainder Area)*

Specific Plans and/or other development proposals for the Remainder Area shall include policies and/or conditions that require that residential development adjacent to roadways will be subject to traffic noise levels that fall within City standards. The standards could be achieved through a combination of setbacks, soundwalls or other barriers, building orientation or other measures. An acoustical analysis shall be required to demonstrate that these measures will result in acceptable noise levels.



## 4.6 GEOLOGY, SOILS, AND SEISMICITY

### 4.6.1 Introduction

This section addresses potential effects related to on-site geologic and soils conditions in the SOI Amendment Area. Site characteristics such as topography, regional and local geology, seismicity, soil types, and mineral resources are described. This information is based on information summarized from the following sources:

- *Natural Resources Conservation Service (NRCS)* (formerly the U.S. Soil Conservation Service)
- *West Placer County Soil Survey, 1980*
- *West Roseville Baseline Study, Geologic and Mineral Resource Reports* by the California Geological Survey (CGS) (formerly the California Division of Mines and Geology)
- Existing reports on geologic conditions in the area

Information referenced in the footnotes in this section is available for review at the City of Roseville Permit Center, 311 Vernon Street, Roseville, California.

No comments on the NOP were submitted regarding geologic conditions in the SOI Amendment Area.

Development of the SOI Amendment Area would not result in the loss of, or loss of availability of mineral resources that would be of value to the region or state, or loss of a locally important mineral resource recovery site delineated in the City's General Plan. These issues are not further evaluated in this EIR.

As discussed in Chapter 1, Introduction, this EIR evaluates the impacts of the WRSP, which would include a Sphere of Influence Amendment and annexation to the City, at a project-specific level. Because a Sphere Amendment is the only action proposed for the Remainder Area (that portion of the SOI Amendment Area outside of the WRSP), a program-level analysis is provided for the full SOI Amendment. In order to conduct the analysis, development assumptions are made for the Remainder Area (see Chapter 2, Project Description, for details). Figure 1-1 (SOI Amendment Area) in Chapter 1, Introduction, identifies the boundaries of the WRSP Area and Remainder Area (comprising the entire SOI Amendment Area).

As discussed in Chapter 4 of this EIR, Environmental Analysis, minor changes have been made to the proposed land uses for the WRSP since publication of the NOP. Overall the total amount of open space increased by 34.9 acres, primarily along the western boundary of the WRSP. However, the total amount

of area to be disturbed is very similar to the prior land use plan (August NOP). The open space corridors along Pleasant Grove Creek and Curry Creek have not changed.

## **4.6.2 Environmental Setting**

### **■ Topography**

The SOI Amendment Area is located within western Placer County, west of the City of Roseville. The approximately 5,400-acre site is characterized by gently rolling and undulating terrain with some steep cut banks located along creek channels. The SOI Amendment Area gently slopes to the west with topographically flatter land located along the western border. Elevations range from approximately 85 feet above mean sea level (msl) along the creek corridors and in the Remainder Area, to 120 feet msl in the WRSP area.

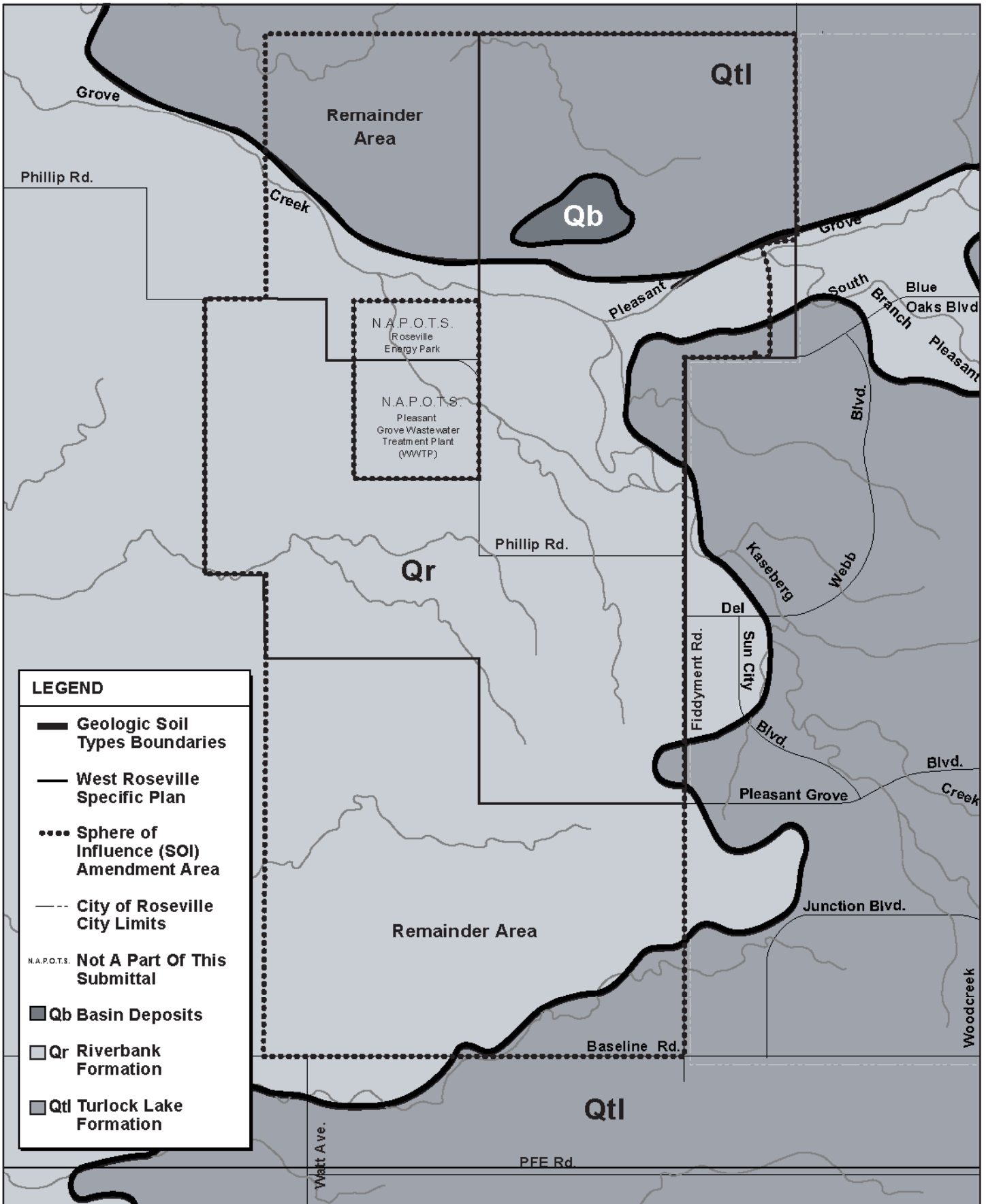
The dominant features in the WRSP area are Pleasant Grove and Kaseberg Creeks, which traverse and drain the area in an easterly to westerly direction. Pleasant Grove Creek is generally the north/south divide for the Fiddymont property. Kaseberg Creek converges with Pleasant Grove Creek near the center of the WRSP project area. Curry Creek crosses the southeast and southwest corner of the WRSP project area and northern portion of the Remainder Area in the vicinity of Baseline Road.

### **■ Regional Geology**

The SOI Amendment Area is situated within the Great Valley geomorphic province. The geologic formations of the Great Valley on the east side of the Sacramento valley are typified by thick sequences of alluvial (water-deposited) sediments derived from erosion of the Sierra Nevada. The geology in the vicinity of the SOI Amendment Area consists of transitional formations between the alluvial deposits of the Great Valley and granitic material characteristic of the Sierra Nevada. The Roseville area is principally underlain by relatively recent Plio-Pleistocene non-marine sedimentary deposits formed during the last 600,000 years.

### **■ Geology**

The CGS *Geologic Map of the Sacramento Quadrangle* (1981) identifies three geologic units in the SOI Amendment Area: the Turlock Lake Formation, the Riverbank Formation, and Quaternary alluvium. The location of geologic units is shown on Figure 4.6-1 (Geologic Map).



**LEGEND**

- Geologic Soil Types Boundaries
- West Roseville Specific Plan
- Sphere of Influence (SOI) Amendment Area
- City of Roseville City Limits
- N.A.P.O.T.S. Not A Part Of This Submittal
- Qb Basin Deposits
- Qr Riverbank Formation
- Qtl Turlock Lake Formation



**FIGURE 4.6-1**  
**Geologic Map**

Source: EIP Associates, 2003

Not to Scale



10659-00

City of Roseville

### **Turlock Lake Formation**

The Turlock Lake Formation (Qtl on Figure 4.6-1) consists of deeply weathered sandstone (arkosic) sediments composed on semi-consolidated gravel, sand, and silt that form highly dissected alluvial fans developed along the east margin of the Sacramento Valley between 450,000 and 600,000 years ago. The surface soil typically contains zones of cemented sand and silt (hardpan). This formation consists of eroded alluvial fans derived primarily from plutonic rocks (igneous rocks formed at great depth) of the Sierra Nevada. A principal constraint associated with the Turlock formation is the relative impermeability and limited water holding capability of the material.<sup>92</sup>

### **Riverbank Formation**

The Riverbank Formation (Qr on Figure 4.6-1) consists of moderately weathered reddish arkosic sediment composed of unconsolidated to semi-consolidated gravel, sand, and silt. These sediments form dissected alluvial terraces and fans that were developed along the east margin of the Sacramento Valley between 150,000 and 450,000 years ago. Soils associated with this formation are typically well drained and are underlain at varying depths by impervious clay hardpan.<sup>93</sup>

### **Quaternary Alluvium**

This geologic unit (Qb on Figure 4.6-1) is comprised of deposits of cobbles, gravel, silt, sand and clay. The unconsolidated terrace deposits and recent stream deposits are found along the creek channels within the SOI Amendment Area. Soils originating from alluvial deposits are typically well drained, and vary in depth to an impervious layer of clay hardpan.<sup>94</sup>

## **■ Geologic Constraints**

### **Slope Instability**

Landslides and slope stability are not known to be a problem in the SOI Amendment Area because of the low slopes and gently undulating terrain. However, there are some steep channels along Pleasant Grove Creek and Kaseberg Creek within the WRSP area. In some areas, these cut banks result in the creek bed lying 10 to 15 feet below the surrounding topography. The segments of Curry Creek that cross the Remainder Area are not as deeply incised as Pleasant Grove and Kaseberg creeks.

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<sup>92</sup> *Sacramento Quadrangle – Map No. 1A*, California Division of Mines and Geology, 1979.

<sup>93</sup> City of Roseville, *Comprehensive Land Use Element Update Project, Draft Environmental Impact Report*, 1995, page 4.3-4.

<sup>94</sup> City of Roseville, *Comprehensive Land Use Element Update Project, Draft Environmental Impact Report*, 1995, page 4.3-4.

## Subsidence

Subsidence is the sinking of the ground surface usually due to groundwater withdrawal or other subsurface collapse or extraction. The Roseville area is not known to have experienced significant subsidence or subsequent constraints to development due to subsidence.<sup>95</sup>

## ■ Seismicity

### Regional Faults

The SOI Amendment Area is located between the seismically active Coast Ranges and the historically seismic Foothills fault zone in the Sierra Nevada. There are a number of mapped faults within 50 miles of the SOI Amendment Area. Regional faults to the west include the Hayward fault (80 miles),<sup>96</sup> and to the east, the Bear Mountains (19 miles) and Melones faults (33 miles) in the Foothill fault zone. In addition, the Willows fault (7 miles) and Stockton fault (63 miles) are also in the Roseville vicinity, but are considered to be inactive faults with displacements occurring greater than two million years before the present.

### Local Faults

Although faults have been identified within the Sacramento area, no active faults are known to exist within Placer County, and the SOI Amendment Area is not located within an Alquist-Priolo Earthquake Fault Zone (formerly known as Special Studies Zone). Placer County is classified as a low-severity earthquake zone.<sup>97</sup> The probable maximum expected earthquake intensity that can be anticipated in this zone would be VI or VII on the modified Mercalli Scale and a 5.0-5.9 in magnitude on the Richter Scale.<sup>98</sup> The last geologic activity recorded in the area with an intensity of 4 or greater measured on the Richter Scale occurred in 1908. The epicenter of this event was located on a north/south line between Folsom and Auburn and on an east/west line between Placerville and Roseville. There have been several less severe events since 1908, but no significant activity has been recorded in the vicinity.<sup>99</sup>

Active faults are those that have experienced displacement in historic time, while inactive faults have not. However, there is the potential for inactive faults to reactivate or experience displacement along a branch of the zone sometime in the future. An example of a fault zone that is considered to have

<sup>95</sup>City of Roseville General Plan, November 18, 1992, Safety Element.

<sup>96</sup>Fault Activity Map of California and Adjacent Areas, California Department of Conservation, Division of Mines and Geology, 1994.

<sup>97</sup>City of Roseville General Plan, November 18, 1992

<sup>98</sup>City of Roseville, North Central Roseville Specific Plan, Annotated Draft Environmental Impact Report, SCH # 88053010, 1990, page 4.3-9.

<sup>99</sup>City of Roseville, North Central Roseville Specific Plan, Annotated Draft Environmental Impact Report, SCH # 88053010, 1990, page 4.3-9.

reactivated is the Foothills fault zone. The zone was considered inactive until evidence of an earthquake (approximately 1.6 million years ago) was found near Spenceville, California. Then, in 1975, an earthquake occurred on another branch of the zone near the City of Oroville (now known as the Cleveland Hills Fault). Due to the potential for fault movement, even though the likelihood of the occurrence is low, the following discussion about inactive faults is included in this section.

There are no mapped active faults within Placer County; however, three inactive faults have been identified within 10 miles of the SOI Amendment Area. These include the Volcano Hill fault, the Linda Creek fault, and an unnamed fault alignment which extends east/west between Folsom Lake and the City of Rocklin. The Volcano Hill fault extends northwesterly from Volcano Hill for a distance of approximately one mile, terminating near Eureka Road. There has been no recorded activity along the fault; therefore, it is generally considered inactive. In 1973, the CGS identified the "Linda Creek fault." As the name implies, this inferred fault is located along Linda Creek. The extent of this alleged fault is limited to a segment of creek in the City of Roseville and Sacramento County, east of the SOI Amendment Area.<sup>100</sup> The unnamed fault extends east to west between Folsom Lake and the City of Rocklin. Segments of this fault are concealed, and consequently, unmapped. However the east/west alignment suggests that the fault could connect to the Bear Mountain fault, branches of which are located beneath Folsom Lake. The Bear Mountain fault is identified as one of the faults that could be undergoing reactivation as a result of continental tectonic activity. However, no such evidence has been observed along the unnamed fault alignment.

## **Secondary Seismic Hazards**

### ***Liquefaction***

Liquefaction is defined as the loss of soil strength due to seismic forces acting on water-saturated granular soils, which leads to quicksand conditions that generate various types of ground failure. The potential for liquefaction must take into account soil type, soil density, depth to the groundwater table, and the duration and intensity of groundshaking. Liquefaction is most likely to occur in low-lying areas of poorly consolidated to unconsolidated water-saturated sediments or similar deposits. Though the City of Roseville's geographic location, soil characteristics and topography combined minimize the risk of liquefaction, a site-specific geotechnical study would be needed to characterize liquefaction potential in the SOI Amendment Area. The geotechnical study would be required as part of the building permit process and would be prepared prior to site development to ensure buildings, roadways, and utilities infrastructure are appropriately designed with regard to potential liquefaction hazard.

## ■ Soils

The distribution of soil units in the SOI Amendment Area is shown in Figure 4.6-2 (Soil Types). Each soil unit is listed in Table 4.6-1 (Soil Constraints) under the heading “Soil Name and Map Symbol” in the first column of the table. A brief description of each soil unit appears in the second column of the table under the heading “Physical Properties.” As illustrated in Figure 4.6-2, the SOI Amendment Area consists predominantly of Cometa-Fiddymment complex (soil unit 141) and San Joaquin Cometa sandy loam (soil unit 182). These two units are characterized by the NRCS as having very slow permeability, low to high shrink-swell potential, slow runoff, and slight erosion hazard. The combination of these characteristics with the low topographic relief of the area contributes to the formation of vernal pools at the end of the rainy season. Vernal pools are discussed in Chapter 4.7, Biological Resources, of this EIR.

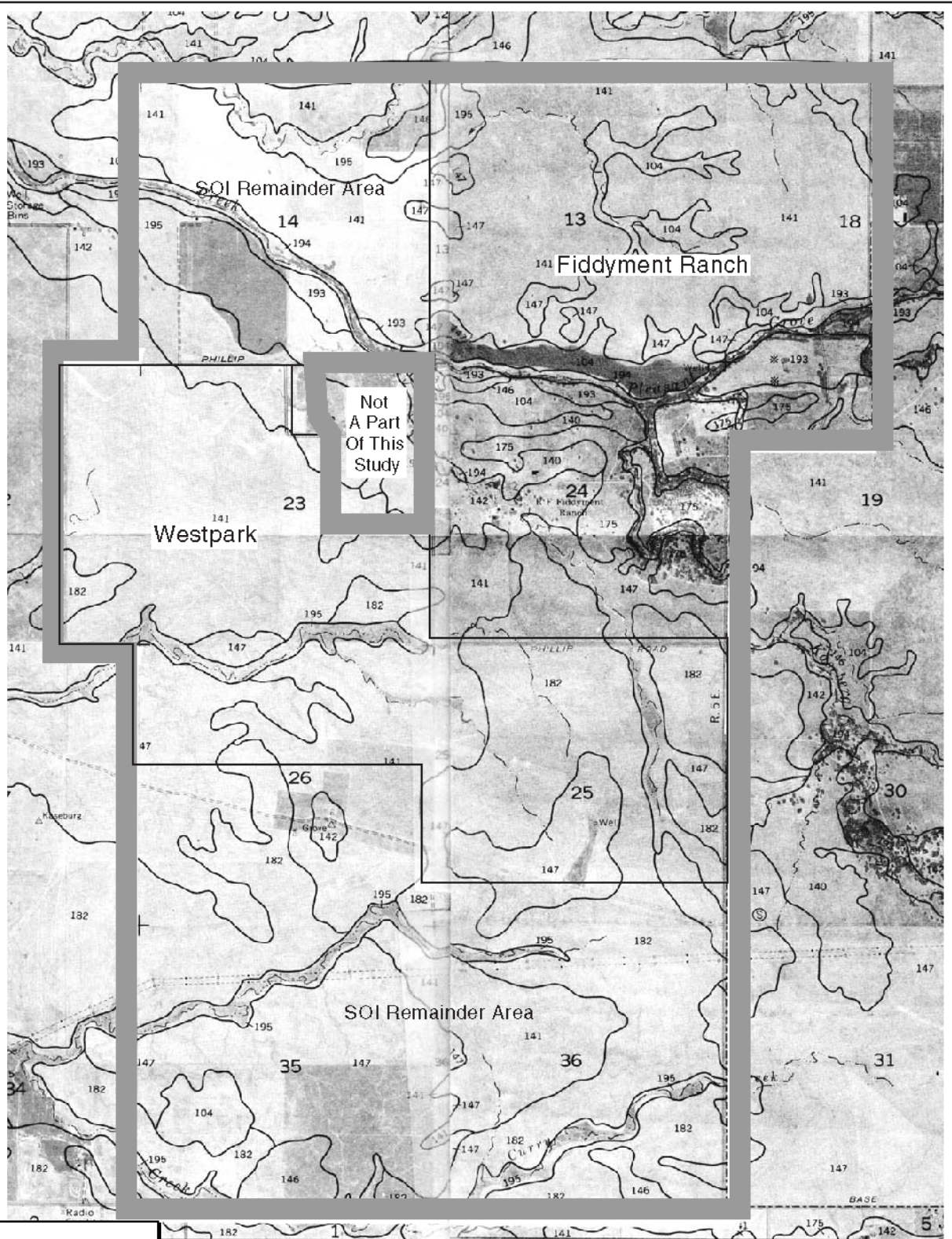
### Soil Characteristics

Soils of the Central Valley are generally characterized as erosional deposits of the Sierra Nevada to the east. 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. The NRCS has identified and mapped soils in Placer County. Each identified soil has characteristics that affect soil behavior. Characteristics of relevance to the SOI Amendment include the following:

- *Permeability*: The ability of a soil to transmit water or air. Permeability is considered in the design and construction of soil drainage systems, where the rate of water movement under saturated conditions affects the behavior of water movement through the soil.
- *Shrink-Swell Potential*: The potential for volume change in a soil with a loss or gain in moisture. If the shrink-swell potential is rated moderate to high, damage to buildings, roads, and other structures can occur.
- *Runoff*: The volume of rainwater directly leaving an area in surface drainage, as opposed to the volume that seeps out as groundwater.
- *Erosion*: The susceptibility of a soil to water (rainfall) or wind transport.

Soil characteristics and engineering properties that could constrain development in the SOI Amendment Area were identified by the NRCS in the Soil Survey Placer County, California, Western Part (1980), and have been used for the purposes of impact analysis in this EIR. These four characteristics are described briefly below and discussed in relation to the SOI Amendment Area in the following section (Soil Constraints). Table 4.6-1 indicates the nature of the constraint (wetness or tendency to flood, high shrink-swell or expansion potential, low soil strength or compressibility, etc.) and summarizes the level of

<sup>100</sup>City of Roseville General Plan, November 18, 1992, Safety Element.



**LEGEND**

Sphere of Influence (SOI) Amendment Area

Soils Key: See Table 4.6-1 for Description of Soil Types



**FIGURE 4.6-2**  
**Soil Types**

Not to Scale



Table 4.6-1 Soil Constraints

Soil Name And Map Symbol	Physical Properties	Shallow Excavations	Dwellings Without Basements, Small Commercial Buildings	Local Roads And Streets	Grassed Waterways (Protects Against Erosion)
104 Alamo-Fiddymet Complex	Very Slow Permeability, High Shrink-Swell Potential Slow Runoff, Slight Erosion Hazard	Severe To Moderate (Wetness, Shallow Depth To Rock, Clayey, Cemented Pan)	Severe (Wetness, Shrink-Swell)	Severe (Wetness, Shrink-Swell, Low Strength)	Wetness, Cemented Pan, Slow Percolation, Erodes Easily, Depth To Rock
140 Cometa-Sandy Loam	Very Slow Permeability, Low To High Shrink-Swell Potential, Slow Runoff, Slight Erosion Hazard	Severe (Clayey)	Severe (Floods, Wetness)	Moderate (Wetness, Floods)	Slow Percolation
141 Cometa-Fiddymet Complex	Very Slow Permeability, Low To High Shrink-Swell Potential, Slow Runoff, Slight Erosion Hazard	Moderate To Severe (Depth To Rock, Shrink-Swell, Clayey)	Severe (Low Strength, Shrink-Swell)	Severe (Low Strength, Shrink-Swell)	Slow Percolation, Erodes Easily, Depth To Rock
142 Cometa-Ramona Sandy Loams	Very Slow To Moderate Permeability, Low To High Shrink-Swell Potential, Slow To Medium Runoff, Slight Erosion Hazard	Severe (Clayey)	Severe (Shrink-Swell, Low Strength)	Severe (Shrink-Swell, Low Strength)	Slow Percolation, Erodes Easily
146 Fiddymet Loam	Very Slow Permeability, Low To High Shrink-Swell Potential, Slow To Medium Runoff, Slight To Moderate Erosion Hazard	Moderate (Depth To Rock, Cemented Pan, Clayey)	Severe (Shrink-Swell)	Severe (Shrink-Swell, Low Strength)	Erodes Easily, Depth To Rock
147 Fiddymet-Kaseberg Loams	Very Slow To Moderate Permeability, Low To High Shrink-Swell Potential, Slow To Medium Runoff, Slight To Moderate Erosion Hazard	Moderate To Severe (Depth To Rock, Cemented Pan, Clayey)	Severe (Shrink-Swell, Depth To Rock)	Severe (Low Strength, Shrink-Swell, Cemented Pan, Depth To Rock)	Erodes Easily, Depth To Rock
174 Ramona Sandy Loam	Moderately Slow Permeability, Low To Moderate Shrink-Swell Potential, Slow Runoff, Slight Erosion Hazard	Slight	Slight	Slight	Erodes Easily
175 Ramona Sandy Loam	Moderately Slow Permeability, Low To Moderate Shrink-Swell Potential, Slow To Medium Runoff, Slight To Moderate Erosion Hazard	Slight	Slight	Slight	Erodes Easily
182 San Joaquin-Cometa Sandy Loam	Very Slow Permeability, Low To High Shrink-Swell Potential, Slow Runoff, Slight Erosion Hazard	Severe (Cemented Pan, Clayey)	Severe (Shrink-Swell, Low Strength)	Severe (Shrink-Swell, Low Strength)	Slow Percolation, Cemented Pan
193 Xerofluvents – Occasionally Flooded	Moderate To Moderately Slow Permeability, Slow Runoff, Slight Erosion Hazard	Severe (Floods, Wetness)	Severe (Floods, Wetness)	Severe (Floods)	Wetness
194 Xerofluvents – Frequently Flooded	Variable Permeability, Slow Runoff, High Erosion Hazard	Severe (Floods, Wetness)	Severe (Floods, Wetness)	Severe (Floods)	Wetness
195 Xerofluvents – Hardpan Substratum	Moderately Slow Permeability, Slow Runoff, Slight Erosion Hazard	Severe (Floods, Wetness)	Severe (Floods, Wetness)	Moderate (Wetness, Floods)	Cemented Pan

SOURCE: Compiled From Natural Resources Conservation Service, Soil Survey Of Placer County, California, 1980, pp. 11 Through 72, Tables 7, 10, 12

constraint (slight, moderate, high, severe) for four types of construction activities expected to occur in the SOI Amendment Area. These activities include excavation and support for structures with shallow foundations (column 3 of the table); excavation and foundation support for dwellings without basements

and small commercial buildings (column 4); construction of local roads and streets (column 5); and the construction of grassed waterways (column 6). The City of Roseville's Improvement Standards require site-specific geotechnical studies to be prepared in conjunction with project approvals and building permits to ensure site development considerations and methods are used to manage soil conditions effectively and comply with the excavation and foundation support requirements of the City's Building Code.

## **Soil Constraints**

### ***Expansive Soils***

Expansive soils (i.e., clay or silt) are those that greatly increase in volume when they absorb water (swell) and shrink when they dry out. Expansion can cause damage to building foundations, concrete slabs, hardscape, pavement, underground utility lines, and other surface or near-surface improvements. Soils with moderate to high expansion potential are located throughout the SOI Amendment Area. Soils having high silt and/or clay content that could be expansive are found throughout the SOI Amendment Area.

### ***Runoff and Drainage***

All of the surface soils identified in the SOI Amendment Area, with the exception of areas along stream channels, exhibit slow to very slow permeability. These soils transmit water and/or air very slowly and can cause significant ponding and soil drainage problems. For further detailed discussion of site drainage and runoff features (including hydrologic soil types), please see Section 4.12, Hydrology and Water Quality of this EIR.

### ***Erosion***

As shown in Table 4.6-1, most of the soils throughout the SOI Amendment Area exhibit slight erosion hazard. Fiddymont and Ramona loams (soil units 146, 147, and 175), which are moderately erosive, are scattered through the site. Only the Xerofluvents—Frequently Flooded (soil unit 194) is characterized as having a high erosion hazard. This soil unit is located generally within the channel of Pleasant Grove Creek and Kaseberg Creek.

### ***Agricultural Soils***

Soils are also categorized by their potential use as agricultural land. "Prime Farmland" is defined by the State Department of Conservation as land that has the best combination of physical and chemical characteristics for the production of crops. These lands generally consist of Class I and II soils. They have

the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Most of the soils at the SOI Amendment Area are Class III and IV, which have severe limitations for agricultural production. The Ramona soils (soil units 174 and 175) and Xerofluvents (193) are Class I and II,<sup>101</sup> however, these soils are limited in extent and are generally in the vicinity of proposed open space areas along Pleasant Grove Creek and Kaseberg Creek.

These soils are also designated as Prime Farmland by the California Department of Conservation<sup>102</sup> because they meet the criteria for Prime Farmland as outlined in the U.S. Department of Agriculture's Land Inventory and Mapping. Prime Farmland must have been used at some time during which soils mapping has been conducted.<sup>103</sup> In this case, the lands along Pleasant Grove Creek and Kaseberg Creek were designated as Prime Farmland in 1980 when agricultural operations on the Fiddymment property were active. Anecdotal evidence from the Fiddymment Family regarding the history and success of various agricultural operations on the property suggest that low soil quality has resulted in lower agricultural productivity than would be indicated by published soil surveys. See Section 4.8, Cultural Resources for a description of historical farming operations and Section 4.1, Land Use and Agricultural Resources for additional information regarding conversion of agricultural land.

### **Topsoil**

Most of the topsoil in the SOI Amendment Area is characterized by the NRCS as "fair." These soils are loose, sandy soils or firm loamy or clayey soils in which the suitable material is only 8 to 16 inches thick, or soils that have appreciable amounts of gravel, stones, or soluble salt or are poorly drained. "Good" topsoil is present only in the Alamo-Fiddymment soils.<sup>104</sup> This soil unit is present generally adjacent to stream channels and is not abundant in the SOI Amendment Area. Forty acres within the WRSP are designated as Prime Farmland (see Section 4.1, Land Use Planning and Agricultural Resources).

### **Mineral Resources**

CGS is responsible under the California Surface Mining and Reclamation Act of 1975 (SMARA) for the classification and designation of areas that contain (or could contain) significant mineral resources. The purpose of the identification of these areas is to provide a context for land use decisions by local

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<sup>101</sup> USDA Natural Resources Conservation Service, *Soil Survey Placer County, California, Western Part*, 1980, pp. 11 through 74.

<sup>102</sup> *Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance*, Placer County, July 1980, California Department of Conservation Farmland Mapping and Monitoring Program

<sup>103</sup> *Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance*, Placer County, July 1980, California Department of Conservation Farmland Mapping and Monitoring Program

<sup>104</sup> USDA Natural Resources Conservation Service, *Soil Survey Placer County, California, Western Part*, 1980, Table 9 and p.83.

governments in which mineral resource availability is one of the pertinent factors being balanced along with other considerations. Aggregate resources are classified as one of several different mineral resource zone categories (MRZ-1, MRZ-2a, MRZ-2b, MRZ-3, MRZ-3a, and MRZ-4). These classifications are generally based upon the relative knowledge about the resource's presence and the quality of the material.

The CGS has mapped mineral resources in Placer County. Of the classifications listed, only MRZ-4 occurs within the SOI Amendment Area. The MRZ-4 designation is defined as "areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources."<sup>105</sup>

No mineral extraction operations exist in the SOI Amendment Area.

### **4.6.3 Regulatory Setting**

Regulations and standards related to geology, soils, and seismicity, as well as mineral resources, in Placer County are included in State regulations, City ordinances, and plans adopted to protect public safety and to conserve open space. The following is a brief summary of the regulatory context under which geologic and soils and hazards are managed. Agencies with responsibility for protecting people and property in the SOI Amendment Area from damage associated with soil conditions and geologic hazards are described below.

#### **■ Federal**

##### **Uniform Building Code**

Compliance with Chapter 16 of the UBC would reduce impacts associated with exposure of people and structures to seismic hazards and ensure development of structures on expansive soils remain less than significant by requiring that any development in the WRSP would meet specific minimum seismic safety and structural design requirements.

Compliance with Chapter 18 of the UBC would reduce impacts associated with exposure of people and structures to seismic hazards and development of structures on expansive soils by requiring that any development in the WRSP adhere to requirements for excavation of foundations and retaining walls.

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<sup>105</sup> *Open File Report 95-10, Mineral Land Classifications of Placer County, California*, California Department of Conservation, Division of Mines and Geology, 1995, page 18.

Compliance with Appendix 33 of the UBC would reduce impacts associated with exposure of people and structures to seismic hazards and development of structures on expansive soils by requiring that any development in the WRSP adhere to regulations of grading activities.

## ■ State

### **Seismicity and Soils**

The State of California provides minimum standards for structural design and site development through the California Building Standards Code (California Code of Regulations (CCR), Title 24). The California Building Code (CBC) is based on the Uniform Building Code (UBC), which is used widely throughout United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for California conditions with numerous more detailed and/or more stringent regulations.

Chapter 18 of the UBC/CBC regulates the excavation of foundations and retaining walls, and Appendix Chapter 33 regulates grading activities, including drainage and erosion control, and construction on expansive soils. The State Earthquake Protection Law (California Health and Safety Code 19100 et seq.) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the UBC/CBC. The UBC/CBC requires a site-specific geotechnical study to address seismic issues and identifies seismic factors that must be considered in structural design. Because the SOI Amendment Area is not located within an Alquist-Priolo Earthquake Fault Zone, no associated provisions would be required for project development related to fault rupture.

Installation of underground utility lines must comply with industry standards specific to the type of utility (e.g., National Clay Pipe Institute for sewers and American Water Works Association for water lines). These standards contain specifications for installation and design to reflect site-specific geologic and soils conditions.

Other State regulations pertaining to the management of erosion/sedimentation as they relate to water quality are described in Section 4.12, Hydrology and Water Quality. Such regulations include, but are not limited to, the National Pollutant Discharge Elimination System (NPDES) program for management of construction and municipal stormwater runoff, which is part of the federal Clean Water Act and is implemented at the State and local level through issuance of permits and preparation of site-specific pollution protection plans. While the primary purpose of these regulations and standards is the protection of surface water resources from the effects of land development, measures included within such regulations and standards also help to minimize the potential for erosion due to soil loss.

## **Streambed Alteration**

Sections 1600 through 1607 of the California Department of Fish and Game Code regulate activities that would alter stream characteristics, including erosion. Under Sections 1600-1607 of the California Fish and Game Code, the California Department of Fish and Game (CDFG) regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFG jurisdiction are defined in the code as the “bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit...”. A Streambed Alteration Agreement would identify the specific controls that would be implemented.

### **■ Local**

#### **City of Roseville**

The following Uniform Codes have been adopted in the Roseville Zoning Ordinance (Chapter 16) to ensure that buildings are designed and sited properly to protect against seismic and unstable soils conditions: Uniform Building Code (1998), Uniform Plumbing Code (1998), Uniform Housing Code (1998), and the Uniform Mechanical Code (1998).

The City of Roseville Planning and Public Works Departments maintain policies and guidelines regarding grading, erosion control, inspection and permitting. Section 16.20.040 of the Roseville Zoning Ordinance regulates stockpiling and grading and addresses conditions under which permits and grading plans are required. Section 16.20.070 identifies grading plan performance standards. Section 16.20.020 requires that all grading be performed in accordance with either City of Roseville Improvement Standards or Chapter 16 of the Zoning Ordinance, whichever is more restrictive.

Implementation of Section 11 of the City of Roseville Improvement Standards would ensure that exposure of people and structures to seismic hazards, development of structures on expansive soils, topographic changes and soil erosion due to grading, and slope instability and increased erosion along stream channels due to grading would be less than significant by requiring the development of a Grading Plan to include a description of the site, an erosion and sedimentation control plan, and mitigation monitoring requirements.

The City of Roseville requires the preparation of site-specific geotechnical studies as part of the building permit process.<sup>106</sup> The technical information that must be compiled for these studies, which address both seismic hazards and soil conditions, is specified in Chapters 16 and 18 of the UBC. Implementation of the

recommendations within the site-specific geotechnical evaluation would ensure that impacts associated with exposure of people and structures to seismic hazards, development of structures on expansive soils, grading activities increasing slope instability and increased erosion along stream channels, and soil erosion from grading would remain less than significant by providing grading and design recommendations to address potential slope and foundation instability, stream bank protection and slope evaluation, expansive soils, and differential settlement.

### **Site-Specific Geotechnical Investigation**

Prior to the commencement of any earthwork in the City of Roseville (which would include development in the SOI Amendment Area, if annexed), a full-scale geotechnical investigation must be completed. The geotechnical investigation must include soil borings to collect samples and laboratory testing to determine the appropriate design parameters for use in determination of the structural fill, roadbed fill, and landscaping fill requirements, along with the fill placement requirements. The various soils may be tested for corrosivity, to allow for proper infrastructure and foundation design. The Roseville Improvement Standards (Section 2) identifies specific requirements for the soils report.

The geotechnical evaluation must also provide grading and design recommendations to address potential slope and foundation instability, stream bank protection and slope evaluation, expansive soils, and differential settlement. The report must evaluate the soil types to test for shrink-swell potential to determine load-bearing and strength concerns. The geotechnical evaluation would be provided to the City as part of the City's building permit process. The City would review the geotechnical report along with project design to confirm that the recommendations in the geotechnical report are reflected in project design.

Design of engineered fills requires that the geotechnical investigation assess the structural properties of each of the different soils types throughout the SOI Amendment Area. Such an investigation would address specific areas of the SOI Amendment Area to be developed in order to account for the various structures and roadways proposed for that particular area. In addition to evaluation for engineered fills, specific geotechnical evaluation of engineered slopes must be included in the geotechnical evaluation. All proposed cut and/or fill slopes must be evaluated for proper design in order to reduce the hazard of over-steepening and/or removing of their lateral support, both of which could lead to slope instability, structural failure, and landsliding. If necessary, slopes must be designed with additional lateral support, such as buttressing, and fill slopes must be properly keyed into competent formational materials. Slopes (banks) along the creek channels must be designed with proper slope protection to prevent soil erosion

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<sup>106</sup> Rob Jensen, City of Roseville Engineering Department, personal communication, August 22, 2002.

and channel-bank undercutting. Grading and fill placement must be monitored and compaction testing should be performed to ensure proper placement of all fill types (structural, non-structural, and roadbed). In addition to the measures mentioned above, soils must be tested for their shrink-swell potential. Soils with low strength and/or high shrink-swell potential must be controlled by over-excavation, or covering with a sufficient amount of granular soils (as determined by the geotechnical investigation). Potentially expansive soils must only be placed in areas determined not to consist of structural fill.

The City of Roseville Department of Public Works Improvements Standards (Sections 2 and 11) identify requirements for grading plans. A grading permit must be obtained prior to grading activities. The Applicant must submit, for review and approval, Improvement and/or Grading Plans along with a site-specific erosion and sedimentation control plan.

Permits that are related to geology and soils that would be required for the WRSP and prior to development elsewhere in the SOI Amendment Area include:

- Major Grading Plan from the City of Roseville Public Works Department, which would subsequently need to be approved by the Roseville Planning Commission. This permit is applicable due to the size and scope of the WRSP, as well as specific plans that might be proposed for the Remainder Area. The major grading permit would minimize the topsoil's loss and degradation by evaluating: rough grading and stockpiling of material on site; the potential to degrade important natural features (e.g., an acre of wetlands, removal or damage to native oak trees, grading on slopes of more than 20 percent); and excavation or fill within any channel or tributary that would convey stormwater with a flow of 200 cubic feet per second (cfs) or more for a 10 year event.<sup>107</sup>
- Construction permits from the City of Roseville Building Department. These permits would ensure that individual projects within the WRSP, or the Remainder Area if annexed and developed, follow the City's adopted ordinances that pertain to construction-related activities.
- Drilling permits for geotechnical borings or piling borings from the County Department of Environmental Health.
- Streambed Alteration Agreement from the CDFG (see above)

In addition, it may be necessary to obtain easements for control structures and any associated piping and/or utilities.

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<sup>107</sup> *City of Roseville Grading Ordinance - Section 16.20*, accessed on the following website; <http://bpc.iserver.net/codes/rosevill/index.htm>, 6/03/02.

#### 4.6.4 Impacts and Mitigation Measures

##### ■ Methods of Analysis

The CGS fault activity map was reviewed to identify potential faults and seismic hazards in the SOI Amendment Area and from a regional perspective.

The NRCS Soil Survey for Placer County was reviewed to identify soil constraints present in the SOI Amendment Area. Soil constraints identified included high shrink-swell potential, low permeability, shallow depth to rock, and unstable slopes along drainages and creeks. Mineral resource classification studies developed by the CGS were reviewed to determine whether project development could occur over important mineral resources.

For a discussion of cumulative impacts on Soils, Geology and Seismicity, please see Chapter 5, CEQA Considerations.

##### ■ Standards of Significance

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area could:

- Expose people or structures to substantial risk of loss, injury or death due to major geologic hazards, such as rupture of a known earthquake fault, as defined on the most recent Alquist-Priolo Earthquake Fault Zoning Act Map, seismic groundshaking, liquefaction, slope failure, or landslides;
- Place structures on soils that are likely to collapse or subside, or be located on expansive soils (defined in Table 18-01-B of the UBC) that could damage foundations or structures; or
- Substantially increase erosion or loss of topsoil due to site disturbance.

##### ■ Impacts

<b>IMPACT 4.6-1: EXPOSURE OF PEOPLE AND STRUCTURES TO SEISMIC HAZARDS.</b>		
<b>Applicable Policies and Regulations:</b>	Roseville Improvement Standards Uniform (California) Building Code	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**West Roseville Specific Plan/Remainder Area**

Placer County is classified as a low severity earthquake zone, and no active faults are known to exist within the County. To reduce the risk of seismic-related safety hazards and structural damage (to pipelines, roads, and residential homes) from groundshaking to an acceptable level, the City of Roseville Conditions of Approval require that, at the time of tentative map approval, construction is in accordance with the UBC and local building standards, as administered by City of Roseville Building Department. Regular monitoring and enforcement of the UBC requirements regarding seismic and geologic safety by the City of Roseville through the building permit and plan check process would ensure that new development and construction meet all seismic and geologic safety standards, ultimately protecting the public by reducing the risk of building damage or collapse. In addition, the City of Roseville Improvement Standards require the development of a Grading Plan, an erosion and sedimentation control plan, and mitigation monitoring requirements, which would further reduce the risk of exposure of people and structures to seismic hazards. Therefore, the risk related to seismic activity in the SOI Amendment Area is considered **less than significant**.

<b>IMPACT 4.6-2: DEVELOPMENT OF STRUCTURES ON EXPANSIVE SOILS OR ON SOILS WITH OTHER LIMITATIONS.</b>		
<b>Applicable Policies and Regulations:</b>	Roseville Improvement Standards Uniform (California) Building Code	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**Soil Constraints**

**West Roseville Specific Plan/Remainder Area**

Based on information obtained from the NRCS, the majority of the soils in the SOI Amendment Area have high shrink-swell potential. The physical forces resulting from the shrink-swell processes of the soils can exert pressure on foundations and infrastructure lines which, in turn, could result in pipeline and foundation damage. Other soil constraints in the SOI Amendment Area include low strength, slow permeability and wetness, and shallow depth to rock. Soils exhibiting low strength can cause damage to structural foundations, and soils characterized by slow permeability can cause drainage problems. Shallow depth to rock could require special construction methods to prepare foundations.

Based on available information, the soil conditions in the SOI Amendment Area do not appear to pose any significant constraints to residential or commercial construction or infrastructure placement. These constraints described above can be overcome through the application of standard engineering practices and compliance with the UBC and City of Roseville Improvement Standards. Additionally, a site-specific geotechnical evaluation would be prepared by the developers, as required as part of the building permit process in the City of Roseville, that would identify locations where special construction and design methods would be needed and would include recommendations for alleviating constraints due to high shrink-swell potential or other soil constraints. The developer would be required to comply with the recommendations set forth in the geotechnical evaluation, per the City’s building permit process. Therefore, this is considered a **less-than-significant** impact.

**Topographic Changes**

**West Roseville Specific Plan/Remainder Area**

The change in topography as a result of grading would be consistent with surrounding lands that have been graded to accommodate mixed-use development and would be performed according to a Major Grading Plan, as required by the City of Roseville Public Works Department. Therefore, this is considered a **less-than-significant** impact.

<b>IMPACT 4.6-3: SOIL EROSION FROM GRADING ACTIVITIES.</b>		
<b>Applicable Policies and Regulations:</b>	Roseville Improvement Standards Roseville Zoning Ordinance (Section 16.20.020)	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**Erosion**

Natural forces, both chemical and physical, are continually at work breaking down soils. Erosion poses two hazards: (1) it removes soils, thereby undermining roads and buildings and producing unstable slopes, and (2) it deposits eroded soil in reservoirs, lakes, drainage structures, and on roads as mudslides. Natural erosion is frequently accelerated by human activities such as site preparation for construction and alteration of topographical features. The following analysis focuses on the potential geotechnical effects of erosion related to project development. For a discussion of potential effects on water quality

due to erosion and sedimentation caused by construction activities or urban runoff, please see Section 4.12, Hydrology, Water Quality, and Groundwater.

Future development within the project area would require some grading and leveling of the site to accommodate new residences, commercial and industrial uses. Grading activities would be necessary to prepare the WRSP Area for proposed new structures and infrastructure. There would be a general leveling of the gently undulating topography that is present on the site, particularly in the vicinity of stream channels. No unique topographic features would be removed, and because they would remain in open space, the gentle slopes and associated riparian vegetation adjacent to stream channels would be unchanged. Although development would permanently alter the topography of the project area through site preparation (e.g., grading and trenching) and the construction of project features, the topography of the project area development would preclude any substantial erosion. The alteration of topographic features can lead to increased erosion by creating unstable rock or soil surfaces, by changing the permeability or runoff characteristics of the soil, or by modifying or creating new pathways for drainage. Any development within the SOI Amendment Area would be required to prepare a Major Grading Plan, which would identify how soil would be moved and stored at the site. The intent of this plan is to minimize erosion effects. Site-specific information from a geotechnical evaluation would be required to more fully identify and address other erosion hazards, if any. The Major Grading Plan and site-specific geotechnical study are required by the City of Roseville as a condition of project approval and issuance of building permits. The grading plan would outline structural and nonstructural mechanisms designed to prevent or reduce project-related erosion. These would include, but not be limited to, sediment retention basins and energy dissipators that would reduce the power of erosion runoff entering the stream channel, and retain the majority of suspended sediment. Potential impacts resulting from the WRSP and Remainder Area are discussed below.

### **West Roseville Specific Plan**

It is anticipated that approximately 2,400 acres of the 3,162-acre<sup>108</sup> WRSP Area would be mass-graded to accommodate new development. However, because the WRSP area consists of gently undulating terrain, which is underlain by soils that exhibit low erosion hazard, and since there are no steep slopes that would be altered by cut-and-fill methods, it is anticipated there would be no geotechnical effects related to erosion. Implementation of the WRSP would result in the development of structures, roadways, and landscaping or revegetated areas that would eventually cover any soils exposed during construction; thus no new erodible soils created as a result of the WRSP.

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<sup>108</sup> Kris Steward, Law Offices of George Phillips, personal communication, December 19, 2002.

Development of the WRSP would be required to prepare a Major Grading Plan as required under the Roseville Improvement Standards Section 16.20.020 of the Roseville Zoning Ordinance, as well as provide site-specific information from a geotechnical evaluation to more fully identify and address other erosion hazards, if any. With implementation of these requirements, this is considered a **less-than-significant** impact.

**Remainder Area**

Because the topography of the Remainder Area is relatively flat, potential erosion effects would be less severe than those described for the WRSP. Further, as discussed above, implementation of required geotechnical studies and Major Grading Plan that are required under the City’s project approval and building permit process would reduce erosion impacts to a **less-than-significant** level.

<b>IMPACT 4.6-4: SLOPE INSTABILITY AND INCREASED EROSION ALONG STREAM CHANNELS.</b>		
<b>Applicable Policies and Regulations:</b>	Roseville Improvement Standards Streambed Alteration Agreement (Fish and Game Code Section 1600 through 1607)	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

The site topography of the project area consists of gently rolling and undulating ground surface with steep banks along Pleasant Grove Creek and Kaseberg Creek. No development is proposed within the banks of any creek channels or in any areas where there are steep slopes. In addition, the natural topography of the areas adjacent to the stream channel, and the associated riparian vegetation will be preserved. This would help retain any loose sediment, and would reduce or prevent erosion that would be associated with development of upland areas that are adjacent to stream channels. As discussed on previous pages, development within the SOI Amendment Area must comply with the City of Roseville Improvement Standards and prepare a site-specific geotechnical report, as well as a site-specific erosion and sedimentation control plan in order to receive a grading permit. The erosions and sedimentation control plan would identify both structural and non-structural mechanisms to protect stream areas from erosion (e.g., energy dissipators). In addition, any development that could affect streambeds must include measures to protect channels that would be identified in a CDFG Streambed Alteration Agreement under Section 1600 of the Fish and Game Code. Specific impacts for each area are discussed below.

### West Roseville Specific Plan

The soils located in the WRSP Area are predominantly characterized as having a slight erosion potential; however, the frequently flooded xerofluvents located immediately adjacent to the stream channels can be moderately to highly erosive. Although areas along the channels would remain as open space, earthwork, particularly along the stream channels to accommodate roadway crossings, could result in unstable slopes that could erode. This earthwork could affect the geomorphology of the creek by altering flow patterns or sediment transport.

As discussed above, development of the WRSP must comply with the City of Roseville Improvement Standards and would be required to prepare a site-specific geotechnical report, as well as a site-specific erosion and sedimentation control plan. In addition, Sections 1600 through 1607 of the CDFG Code would regulate activities that would alter stream characteristics, including erosion. Compliance with these requirements and implementation of recommendations outlined in the plans would reduce any impacts associated with slope instability to a **less-than-significant** level.

### Remainder Area

The western segment of Pleasant Grove Creek that crosses the northern portion of the Remainder Area is characterized by steep banks. Although no development is currently proposed in the Remainder Area, future development at levels similar to those proposed in the WRSP could result in areas of slope instability along the creek. In addition, if the northern portion of the Remainder Area along Pleasant Grove Creek were developed at levels similar to those proposed in the WRSP, additional grading activities would occur that could lead to soil erosion along the stream channel. Upon annexation, any development in the Remainder Area would be subject to the same performance standards and regulations as the WRSP. These standards and regulations would address potential impacts due to soil instability and erosion within the Remainder Area, and impacts associated with them would be **less than significant**.

IMPACT 4.6-5: LOSS OF TOPSOIL DUE TO CONVERSION OF AGRICULTURAL LAND TO URBAN USES.		
Applicable Policies and Regulations:	None Applicable	
	WRSP	Remainder Area
Significance with Policies and Regulations:	Less Than Significant	Less Than Significant
Mitigation Measures:	None Required	None Required
Significance after Mitigation:	Less Than Significant	Less Than Significant

## **Loss of Topsoil**

Development of the project area would result in the conversion of approximately 5,400 acres of agricultural land currently used for grazing activities. A majority of the SOI Amendment Area is characterized as having soils considering by the NRCS as “fair.” Topsoil rated “good” is present in areas adjacent to streams and is not very prevalent within the project area, with the exception of a small portion of the WRSP area that is classified Prime Farmland (shown on Figure 4.1-5 [Farmland Classification] in Section 4.1 [Land Use and Agricultural Resources]). Areas along stream channels, which generally contain higher quality topsoil, would remain in open space and would not be substantially disturbed by project development, so there would be no loss of higher quality topsoil. Specific impacts for each Area are discussed below.

### **West Roseville Specific Plan**

The WRSP Area is undeveloped and contains annual grasslands, which are used for seasonal livestock grazing. Topsoil characterized as “good” by the NRCS is generally present only adjacent to stream channels and is not abundant in the WRSP Area. A portion (less than 0.05 percent) of the WRSP Area is designated Prime Farmland (40.2 acres) by the State Department of Conservation. A portion of the Prime Farmland will be developed (19.8 acres) while the remaining 20.4 acres will be preserved within an Open Space Preserve. A two-acre portion of the land within the Open Space Preserve will be used as a Community Garden. Remaining soils in the WRSP Area are characterized as “fair.” As discussed above, areas along stream channels would not be substantially disturbed by project development, so there would be no loss of higher quality topsoil beyond the 20.4 acres of Prime Farmland that would be developed. Therefore, this impact is considered **less than significant**. For a discussion of the impact on agricultural productivity please see Section 4.1, Land Use and Agricultural Resources.

### **Remainder Area**

If the Remainder Area was developed at levels similar to those proposed in the WRSP, additional changes to topsoil would occur. The physical characteristics and land use of the Remainder Area are similar to the WRSP. Most of the Remainder Area contains soils rated as “fair” for topsoil, and there is no Prime Farmland within the Remainder Area. The loss of these soils as a result of project development would be considered **less than significant**.

## **■ Mitigation Measures**

No mitigation measures are required.



## 4.7 BIOLOGICAL RESOURCES

### 4.7.1 Introduction

This section addresses the effects that the proposed project could have on vegetation, wildlife, and wetland resources in the region. The analysis in this section is based upon the following documents and studies:

- A species list from the U. S. Fish and Wildlife Service (USFWS) in a letter dated June 12, 2002 (file number 1-1-02-SP-2224)
- Results of Surveys for Special-status Species in the Fiddymment/Placer 1600 Project Area by Miriam Green Associates, (July 18, 2000)
- Westpark/Fiddymment Ranch “Waters of the U.S. Acreage” tables, ECORP Consulting, (January 28, 2003)
- *Jurisdictional Delineation for the Placer 1600 Property* by Gibson & Skordal Wetland Consultants, (September 1998, Revised November 1998)
- California Natural Diversity Database (CNDD), (July 2002)
- California Native Plant Society (CNPS) Electronic Inventory
- Hickman, J.E. (ed). *The Jepson Manual*. University of California Press, Berkeley
- Sugnet & Associates, *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, (July 21, 1994)
- Placer County Planning Department. *Placer Legacy Open Space and Agricultural Conservation Program*. (June 20, 2000)
- ECORP Consulting Inc., Westpark/Fiddymment Ranch “Wetland Mitigation (Revised)” table, (January 28, 2003)
- ECORP Consulting Inc., Westpark/Fiddymment Ranch “Initial Biological Assessment of Off-site improvements: Blue Oaks Boulevard East of Fiddymment Ranch Road” (August 22, 2003)
- ECORP Consulting Inc., Westpark/Fiddymment Ranch “Initial Biological Assessment of Off-site improvements: Blue Oaks Boulevard and Phillip Road (Revised)” (August 22, 2003)
- ECORP Consulting Inc., Westpark/Fiddymment Ranch “Initial Biological Assessment of Off-site improvements: Pleasant Grove Boulevard Widening” (August 22, 2003)
- ECORP Consulting Inc., Westpark/Fiddymment Ranch “Initial Biological Assessment of Off-site improvements: Blue Oaks Boulevard West of Fiddymment Ranch Road” (August 22, 2003)
- ECORP Consulting Inc., Westpark/Fiddymment Ranch “Aerial Interpretation of Potential Wetlands Along the Proposed Powerline Easement” (August 22, 2003)

- ECORP Consulting Inc., Westpark/Fiddymont Ranch “Initial Biological Assessment of Off-site improvements: Proposed West Roseville Recycled Water Storage Tanks” (September 2, 2003)
- Jones & Stokes Associates *Wet-Season Surveys for Freshwater Invertebrates and Spring Surveys for Rare Plants for the Placer County Habitat Conservation Plan*, (July 2002)
- URS, April 2002 Rare Plant Survey, *West Roseville Specific Plan* (June 25, 2002)
- ECORP Consulting Inc., *West Roseville Specific Plan – Swainson’s Hawk Migration*, Memorandum February 3, 2003
- URS, *Lichen and Bryophyte Surveys, West Roseville Specific Plan*, (June 25, 2002)

All of these documents are available for review at the City of Roseville Permit Center, 311 Vernon Street, Roseville, California. Additionally, a reconnaissance level visit to the site was conducted on May 15, 2002, to determine the habitat types that are present within the SOI Amendment Area. Using the information gathered during the site visit, the list of species that was derived from the background research was analyzed to determine which of those species were likely to occur within the SOI Amendment Area.

Comment letters were received in response to the Notice of Preparation (refer to Appendix B) for this project from the USFWS and the Sierra Club (letter dated September 16, 2002). The letters raised concerns regarding the loss of wetlands and the resulting impacts on federally listed vernal pool crustaceans that are dependant on those resources, fragmentation of existing wildlife habitat, and degradation of the quality and value of habitat that remains in the open space areas proposed by this project. These issues are addressed in this section of the EIR.

As discussed in Chapter 1 (Introduction), this EIR evaluates the impacts of the WRSP, which would include a Sphere of Influence Amendment and annexation to the City, at a project-specific level. Because a Sphere Amendment is the only action proposed for the Remainder Area (that portion of the SOI Amendment Area outside the WRSP Area), a program-level analysis is provided for the full SOI Amendment. In order to conduct the analysis, development assumptions are made for the Remainder Area (refer to Chapter 2, Project Description, for details). Figure 1-1 (SOI Amendment Area) in Chapter 1 (Introduction) identifies the boundaries of the SOI Amendment Area, WRSP Area, and Remainder Area.

As discussed in Chapter 4 (Environmental Analysis), minor changes have been made to the proposed land uses for the WRSP since publication of the NOP. Overall, the total amount of open space increased by 34.9 acres, primarily along the western boundary of the WRSP Area. The WRSP includes a total of 684.6 acres of open space compared to 649.7 acres discussed in the NOP. As a result, there would be a

reduction in the amount of habitat lost to development. The open space corridors along Pleasant Grove Creek and Curry Creek have not changed.

## 4.7.2 Environmental Setting

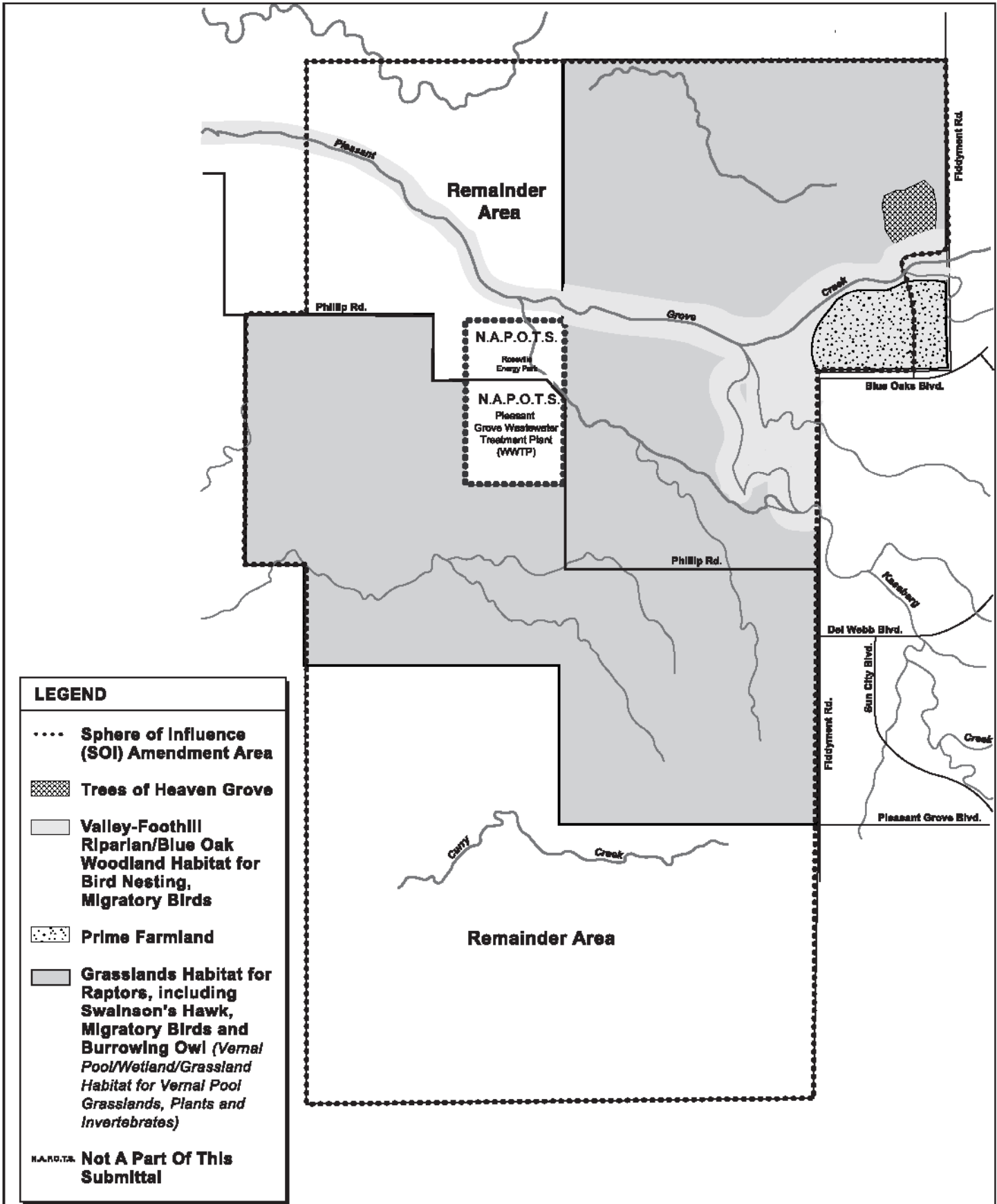
The SOI Amendment Area encompasses approximately 5,527 acres in western Placer County, adjacent to the western boundary of the City of Roseville. The 3,162-acre WRSP portion has been the subject of biological surveys, and is known to consist of a combination of annual grassland, oak woodland, and agricultural land. Figure 4.7-1 (WRSP Habitat Map and Site Features) illustrates the habitat types located on the project site. Federal jurisdictional waters in the WRSP Area include Pleasant Grove Creek, Kaseberg Creek, and their unnamed tributaries; vernal pools; seasonal wetlands; wet swales and emergent marsh habitat. Figure 4.7-2 (On-Site Wetland Mitigation Plan) illustrates the existing wetlands located within the project site. The Remainder Area includes an additional 2,365 acres. Although the Remainder Area has not been surveyed for biological resources, a review of aerial photographs and site reconnaissance indicate that it consists primarily of annual grasslands, ephemeral drainages, and seasonal wetlands.

### Terrestrial Habitats

#### Annual Grassland

Annual grassland habitats generally occupy what was once native grassland consisting primarily of perennial bunch grasses. Today, annual grasslands are composed largely of nonnative annual grasses and forbs, which out-compete and effectively prevent the reestablishment of native perennial grasses. Additionally, this community composes the herbaceous understory of the adjacent woodland habitats. There are approximately 4,500 acres of annual grasslands in the SOI Amendment Area, including 2,200 acres in the WRSP site and approximately 2,300 acres in the Remainder Area. Annual grassland is the most common habitat type in the SOI Amendment Area. This habitat occurs throughout these areas either as a distinct vegetation community, or as an understory to the oak and riparian woodlands. Annual grasslands are absent only from the portions of the project site that are either in agriculture or other development.

Annual grassland species that occur in these areas include ripgut brome (*Bromus diandrus*), soft chess (*Bromus mollis*), wild oat (*Avena fatua*), and Mediterranean barley (*Hordeum hystrix*). Common forbs found growing in the annual grassland were cranesbill (*Geranium dissectum*), hairgrass (*Aira caryophylla*), medusahead grass (*Taeniatherum caput-medusae*), red stem filaree (*Erodium botrys*), clover (*Trifolium* spp.), and bur clover (*Medicago polymorpha*). Other common species include fiddle-neck (*Amsinckia menziesii*),



**LEGEND**

- ..... Sphere of Influence (SOI) Amendment Area
- ▨ Trees of Heaven Grove
- ▒ Valley-Foothill Riparian/Blue Oak Woodland Habitat for Bird Nesting, Migratory Birds
- ▤ Prime Farmland
- ▓ Grasslands Habitat for Raptors, including Swainson's Hawk, Migratory Birds and Burrowing Owl (*Vernal Pool/Wetland/Grassland Habitat for Vernal Pool Grasslands, Plants and Invertebrates*)

N.A.P.O.T.S. Not A Part Of This Submittal



FIGURE 4.7-1  
WRSP Site Features and Habitat Map

Source: EIP Associates, 2003; Miriam Green Associates, 2000

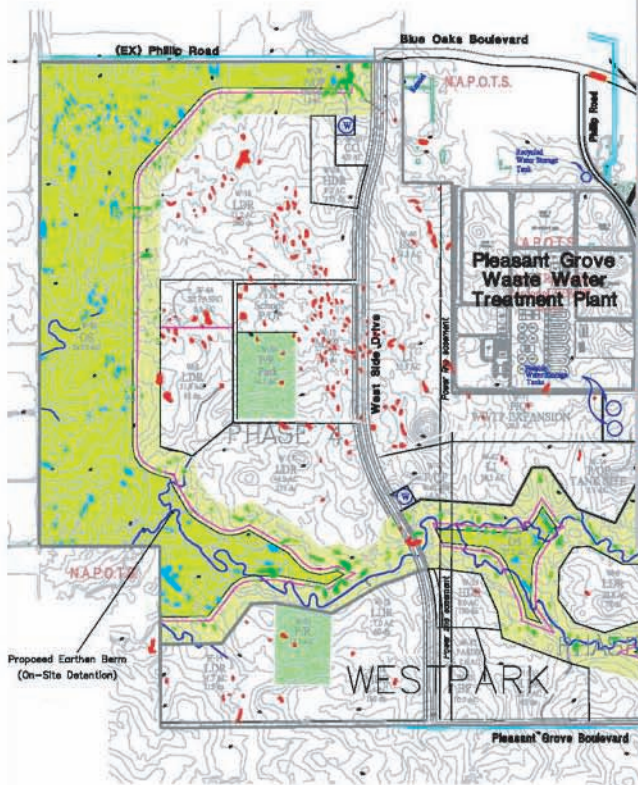
City of Roseville

Not to Scale

**Figure 4.7-2      On-Site Wetland Mitigation Plan**

WATERS OF THE U.S. ACREAGE				TOTAL INDIRECT IMPACT AREA
CLASSIFICATION	EXISTING ACREAGE	PRESERVE AREAS	TOTAL DIRECT IMPACT AREAS	
Vernal Pool	17.72			
Seasonal Wetland	3.92			N/A
Emergent Marsh	0.82	N/A		N/A
Wet Swales/Channels	21.57			N/A
<b>Total:</b>	<b>43.83</b>			

Wet Swales/Channels (Fairy Shrimp Habitat)



**FIGURE 4.7-2**  
**On-Site Wetland Mitigation Plan**

Scale: 1" = 2100'

10659-00

Source: ECORP Consulting, Inc., 2003

City of Roseville



blue dicks (*Dichelostemma capitatum*), spikeweed (*Hemizonia fitchii*), and vinegar weed (*Trichostema lanceolatum*).

Annual grasslands are important habitats to a variety of small rodents such as deer mice (*Peromyscus maniculatus*) and California vole (*Microtis californicus*) that feed on the abundance of grass seeds that this habitat provides. Other small mammals that use this habitat include species such as cottontail (*Sylvilagus audubonii*), blacktail hare (*Lepus californicus*), and California ground squirrel (*Spermophilus beecheyi*). These small mammals provide food for a variety of predators including mammals such as coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*) and birds such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), barn owl (*Tyto alba*), American crow (*Corvus brachyrhynchos*), and loggerhead shrike (*Lanius ludovicianus*). Other bird species that may occur in this habitat include prairie falcon (*Falco mexicanus*), meadowlark (*Sturnella neglecta*), scrub jay (*Aphelocoma coerulescens*), and western bluebird (*Sialia mexicana*). Reptile species that frequently occur in annual grasslands include northern Pacific rattlesnake (*Crotalus viridis oregonus*), Pacific gopher snake (*Pituophis melanoleucus catenifer*), California kingsnake (*Lampropeltis getulus californiae*), garter snakes (*Thamnophis* spp.), western fence lizards (*Sceloporus occidentalis*), southern alligator lizards (*Gerrhonotus multicarinatus*), and Gilbert's skink (*Eumeces gilberti*). Grasslands that are adjacent to wetlands or other sources of moisture will also support Pacific tree frog (*Hyla regilla*) and western toad (*Bufo boreas*).

### **Blue Oak Woodland**

Blue oak woodland is usually associated with shallow, rocky, infertile, and well-drained soils from a variety of parent materials. There are approximately 80 acres of blue oak woodland in the WRSP Area. This habitat occurs primarily in the vicinity of the confluence of Pleasant Grove Creek and Kaseberg Creek in the Fiddlyment Ranch portion of the WRSP Area. The largest concentration of this community is located in the central eastern portion of the Fiddlyment Property, north of the existing Phillip Road. The Remainder Area does not appear to support blue oak woodlands.

Blue oaks (*Quercus douglasii*) are well adapted to dry, hilly terrain where the water table is usually deep or unavailable. Dominant canopy species in this habitat are blue oak, but also may include small amounts of interior live oak (*Quercus wislizenii*), and some valley oak (*Quercus lobata*). Associated shrub species commonly include California buckeye (*Aesculus californica*), buckbrush (*Ceanothus cuneatus*), poison oak (*Toxicodendron diversilobum*), and toyon (*Heteromeles arbutifolia*). The understory typically consists of an herbaceous ground cover of mixed annual grasses and forbs.

Oak and riparian woodlands are an important habitat for a wide variety of wildlife species as they provide food (e.g., acorns, wild grapes), shelter, and nesting opportunities. Bird species that are typically found in this habitat include Acorn woodpecker (*Melanerpes formicivorus*), Nuttall's woodpecker (*Picoides nuttallii*), northern flicker (*Colaptes auratus*), white breasted nuthatch (*Sitta carolinensis*) and house wren (*Troglodytes aedon*). Other bird species that could be expected to occur in woodland communities include sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), red-tailed hawk, and great horned owl (*Bubo virginianus*). Common mammals that inhabit this community include bobcat, coyote, gray fox, and striped skunk (*Mephitis mephitis*). Additionally, western gray squirrel (*Sciurus griseus*), deer mice, dusky woodrat (*Neotoma fucipes*), and mule deer (*Odocoileus hemionus*) are common in these habitats.

### **Valley-Foothill Riparian**

Under natural conditions, riparian zones extend along creeks, streams, and rivers, providing a network of vegetation vital to the terrestrial and aquatic ecosystems of the surrounding area. Riparian zones function in a variety of ways that are beneficial to the surrounding environment. They provide habitat for special-status plant and wildlife species, act as a buffer for its associated waterway, improve the biological diversity of surrounding areas, and act as corridors and pathways for movement between areas. The riparian zone traps and filters sediments, nutrients, and chemicals from surface runoff and shallow groundwater before these pollutants can enter streams. A framework of tree roots stabilizes the streambank by reducing bank erosion and by slowing stream meandering. Trees and shrubs associated with riparian habitat provide shade that cools the water, moderates temperature fluctuation, and increases the water's ability to hold oxygen and support life. Plant stems slow water velocity and root systems keep the soil porous, so excess water is absorbed into the ground and flooding potential is reduced. The buffer's capacity to hold large amounts of water allows percolation to deeper water aquifers, replenishing groundwater supplies.

The vegetation of the valley-foothill riparian habitat is variable and often structurally diverse. Valley-foothill riparian habitats are found in valleys bordered by sloping alluvial fans and lower foothills. They are generally associated with low-velocity flowing creeks, floodplains, and gentle topography. There are approximately 80 acres of riparian woodland in the WRSP Area. This habitat occurs along Pleasant Grove Creek, Kaseberg Creek, and some of their unnamed tributaries. This habitat integrates into the blue oak woodlands that are located in the uplands adjacent to the creek channels.

Characteristic species on the project site include valley oak, Fremont cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), red willow (*Salix laevigata*), and Oregon ash (*Fraxinus latifolia*). Typical

understory includes California buckeye, blackberry (*Rubus* sp.), and poison oak. The herbaceous layer includes sedges (*Cyperus* spp.), rushes (*Juncus* spp.), spike rushes (*Eleocharis* spp.), and grasses.

Bird species that are characteristic of this habitat include California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), Nuttall's woodpecker (*Picoides nuttallii*), black phoebe (*Sayornis nigricans*), western wood-pewee (*Contopus sordidulus*), California towhee (*Pipilo crissalis*), and song sparrow (*Melospiza melodia*). A number of these species nest or roost in riparian woodland and feed in adjacent habitat types, such as annual grassland and agricultural fields. Riparian woodlands also provide important feeding, resting, and nesting habitat for neotropical migrant songbirds such as warblers, vireos, grosbeaks, and flycatchers.

Mammals found within riparian woodland habitat could include opossum (*Didelphis virginianus*), raccoon, deer mouse, broad-footed mole (*Scapanus latimanus*), striped skunk, coyote, and gray fox. Due to the presence of agricultural operations adjacent to this habitat, domestic mammals such as cows and other farm animals are also periodically present in this habitat. Amphibians and reptiles that are likely to occur in this community include western toad (*Bufo boreas*), Pacific tree frog, common king snake (*Lampropeltis getulus californicae*), valley garter snake (*Thamnophis sirtalis fitchii*), and Gilbert's skink (*Eumeces gilberti*). Riparian woodlands also provide nesting and foraging habitat for a variety of special-status wildlife species including Cooper's hawk, yellow warbler, white-tailed kite, and yellow-breasted chat.

### **Trees-of-Heaven Grove**

One area within the SOI Amendment Area includes a large grove of Tree-of-Heaven trees (*Ailanthus altissima*). Tree-of-Heaven is native to central China but is widely distributed across the United States. It is common in disturbed areas, where it is known as an invasive species.

Although the grove provides some cover and habitat for wildlife, the trees are currently listed as a noxious invasive species by the state. Removal of these trees would prevent the further spread of these highly invasive plants.

### **Wetlands**

Wetland delineations were conducted according to the standards of the U.S. Army Corps of Engineering Manual (Corps 1987) for the entire WRSP Area during 1998 (Fiddymment Property) and 1999 (Westpark Property). The delineation for the Fiddymment Property was verified by the Corps on November 19, 1998 (Corps file #99800628), and the delineation for the Westpark Property was verified on April 7, 1999 (Corps file #199900202). Existing wetlands are illustrated by Figure 4.7-2 and summarized in Table 4.7-1.

**Table 4.7-1 Area of Jurisdictional Waters Within the WRSP Area**

Type of Waters	Area (Acres)
Vernal Pools	33.91
Vernal Swales	8.05
Seasonal Wetlands	3.92
Emergent Marsh	0.62
Wet Swale	17.39
<b>Total</b>	<b>63.89</b>

SOURCES: Jurisdictional Delineation—Fiddymont Property, Placer County, California, Gibson & Skordal, September 1998, revised November 1998; Jurisdictional Delineation—Placer 1600 Property, Placer County, California, Gibson & Skordal wetlands consultants, January 1999, revised March 1999

To date, no wetland delineations have been conducted for the Remainder Area or the off-site improvement areas. However, as these areas are similar to the WRSP Area, it is expected that seasonal wetlands, including vernal pools, swales and ephemeral drainages are present in this area as well. Because no wetland delineations have been prepared for either of these areas it is difficult to assess accurately the acreage of wetlands and other “waters” of the U.S. Based on a review of the aerial maps, approximately 50 acres of wetlands are assumed to be present in the Remainder Area, and approximately 5.82 acres of wetlands and 4.5 acres of ephemeral drainages are within the areas proposed for off-site improvements.<sup>109</sup>

**Ephemeral Creeks**

The SOI Amendment Area is crossed by Pleasant Grove Creek and Kaseberg Creek, which originate to the east and southeast of the WRSP Area, respectively, and eventually join the Sacramento River northwest of the City of Sacramento. Curry Creek, another ephemeral drainage, passes in an east/west direction across the southern border of the Remainder Area. Historically, these creeks flowed with winter rainfall and were probably dry or nearly so during the summer. With additional runoff from urban and industrial sources, the creeks have a tendency to be more perennial (i.e., year round), but can occasionally be dry or run below the surface. They frequently exist as a series of small pools intermittently connected by small flowing channels. The acreage of creeks in the Remainder Area has not been determined.

The creeks are not known to contain anadromous fishes, but support mosquitofish, and potentially some warm water fish species. Mallards (*Anas platyrhynchos*), wood duck (*Aix sponsa*), great egret (*Casmerodius albus*), great blue heron (*Ardea herodias*), and belted kingfisher (*Ceryle alcyon*) use these areas to feed on

<sup>109</sup> ECORP Consulting Inc., Westpark/Fiddymont Ranch “Initial Biological Assessment of Off-site improvements, August 22, 2003

algae, crayfish, pacific treefrogs (*Hyla regilla*), western toad (*Bufo boreas*), and bullfrogs (*Rana catesbeiana*). Mammals such as raccoon (*Procyon lotor*) and striped skunk are also likely to forage there.

In addition to Pleasant Grove Creek, Kaseberg Creek, and Curry Creek, there are small swales and drainages throughout the Remainder Area that could carry water briefly during winter rainfall. These areas are not creeks per se, but soils beneath them could be saturated for a longer period than adjacent upland areas, and thus support a wetland floral community. They are distinct from vernal pools, but fall within the Corps definition of jurisdictional waters of the U.S. Wildlife use of these areas is similar to those of annual grassland. There are a total of 17.39 acres of wet swales and ephemeral creeks on the WRSP site. The Remainder Area could also contain wetland swales (Table 4.7-1).<sup>110</sup>

### **Vernal Pools and Seasonal Wetlands**

Vernal pools are ephemeral wetlands that form in shallow depressions underlain by a substrate near the surface that restricts the percolation of water. These depressions fill with rainwater during the fall and winter and can remain inundated until spring or early summer, sometimes filling and emptying numerous times during the rainy season. A flowering community dominated by characteristic wetland plants differentiates vernal pools from other seasonal wetlands. There are a total of 33.91 acres of vernal pools and vernal swales within the WRSP Area. There are likely vernal pools in the Remainder Area as well.<sup>111</sup>

Vernal pool species that are likely to occur within the project site include winged water-starwort (*Callitriche marginata*), annual hairgrass (*Deschampsia danthonioides*), horned downingia (*Downingia ornaticissima*), coyote thistle (*Eryngium vaseyi*), bractless hedge-hyssop (*Gratiola ebracteata*), slender popcorn flower (*Plagiobothrys stipitatus*), spine-fruit butter-cup (*Ranunculus bonariensis*), and purslane speedwell (*Veronica peregrina*).

Seasonal wetlands are distinguished from vernal pools in that they contain a greater abundance of facultative and grassy species, and may not be inundated for as long as vernal pools. The distinction between the two types is often unclear; the final determination of the type of wetland can often be dependent upon the verification of the Corps. The extent to which special-status plant and animal species

<sup>110</sup> Jurisdictional Delineation for the Placer 1600 Property by Gibson & Skordal Wetland Consultants, January 1999, revised March 1999. Jurisdictional Delineation for the Fiddymont Property by Gibson & Skordal Wetland Consultants, September 1998, Revised November 1998.

<sup>111</sup> Westpark/Fiddymont Ranch "Waters of the U.S. Acreage" tables, January 28, 2003, Ecorp Consulting

can use these habitats is variable, but, conservatively, any species present in vernal pools could be present in seasonal wetlands. There are a total of 3.92 acres<sup>112</sup> of seasonal wetlands in the WRSP Area.

In August 2003 the U.S. Fish and Wildlife Service formally designated approximately 740,000 acres in thirty California counties and one Oregon County as critical habitat for fifteen wetland animals and plants listed as threatened or endangered under the Federal Endangered Species Act.

The final designation represents a reduction in acreage from the approximately 1.7 million acres the Service proposed as critical habitat in September 2002. About 16 percent of the approximately 740,000 acres designated is in public ownership or is owned or administered by private conservation groups. The remainder is in private ownership. The proposed critical habitat is located in thirty (primarily Central Valley) counties in California (including western Placer County) and one County in southern Oregon.

### **Special-Status Species**

For the purposes of this section, special-status species include those plant or wildlife species that are listed as rare, threatened, or endangered by the California Department of Fish and Game (CDFG) or the USFWS; most species that are candidates for either state or federal listing; species designated as “fully protected” or “species of special concern” by CDFG; and some other species that are tracked by the California Natural Diversity Data Base or California Native Plant Society, but do not fall into any of the categories cited above. Although only species that are listed as threatened or endangered require mitigation under the State and Federal Endangered Species Acts, it is generally considered prudent, particularly for projects with a long timeline, to address impacts to these other species as they may become listed within the lifetime of the project. Table 4.7-2 lists special-status plant and wildlife species that either have habitat within the SOI Amendment Area, or are known to occur in the vicinity.

### **Special-Status Plants**

Special-status plant surveys of the WRSP Area were initially conducted by biologists at Miriam Green Associates during the months of April, May, and June of 2000. A total of nineteen visits to the site were conducted during this period and covered both the Fiddyment Ranch and the Westpark Property. Specific survey dates were April 12–14, 19, 21–22, 24–27 and 29; May 31; June 3, 6, 8, 14–15, 18 and 26. Additional special-status plant surveys were conducted within the WRSP Area by Jones & Stokes Associates on April 23, 2002, and May 3, 2002, and by URS on April 22, 2002. Habitat surveys for special-status lichens and bryophytes were also conducted by URS on March 29, 2002 (lichens), and April 5, 2002

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<sup>112</sup> Westpark/Fiddyment Ranch “Waters of the U.S. Acreage” tables, January 28, 2003, ECORP Consulting

(bryophytes). To date, no special-status plant surveys have been conducted on the Remainder Area. However, this property is adjacent to the WRSP Area, and appears to include a similar range of habitat types and is likely to support a similar species assemblage as the WRSP Area. The timing of the special-status plant surveys coincides with the period when these species were most visible and identifiable (i.e., flowering period).

**Big-scale balsamroot** (*Balsamorhiza macrolepis* var. *macrolepis*). Status: CNPS 1B. Big-scale balsamroot flowers from March through June. This member of the aster family occurs in the Central Valley and ranges to the San Francisco Bay Area on dry slopes and valley grasslands. Suitable habitat is present in the WRSP Area, but no big-scale balsamroots were observed during recent surveys that were conducted there.

**Table 4.7-2 Special-Status Species Potentially Occurring in the West Roseville Specific Plan Area**

Common Name	Scientific Name <sup>1</sup>	Status <sup>2</sup> (Fed/CA/CNPS)	Season <sup>3</sup>	Primary Habitat <sup>4</sup>	Present on Site <sup>5</sup>	Comments
<b>Plants</b>						
Big-scale balsamroot	<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	—/—/1B	March–June	Grassland	S	Not observed during surveys of the project site.
Hispid bird's beak	<i>Cordylanthus mollis</i> var. <i>hispidus</i>	FSC/—/1B	June–September	Grassland/ vernal pool	S	Not observed during surveys of the project site.
Dwarf downingia	<i>Downingia pusilla</i>	—/—/2	March–May	Vernal pool	O	Observed during surveys of project site.
Boggs Lake hedge hyssop	<i>Gratiola heterosepala</i>	—/E/1B	April–August	Vernal pool	S	Not observed during surveys of the project site.
Ahart's dwarf rush	<i>Juncus leiocarpus</i> var. <i>ahartii</i>	FSC/—/1B	March–May	Vernal pool	S	Not observed during surveys of the project site.
Legenere	<i>Legenere limosa</i>	FSC/—/1B	April–June	Vernal pool	R	Historic records for the project site.
Pincushion navarretia	<i>Navarretia myersii</i>	—/—/1B	May	Vernal pool	S	Not observed during surveys of the project site.
Slender orcutt grass	<i>Orcuttia tenuis</i>	T/E/1B	May–October	Vernal pool	S	Not observed during surveys of the project site.
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	FSC/—/1B	May–October	Marshes and swamps (assorted shallow fresh water)	S	Not observed during surveys of the project site.
<b>Invertebrates</b>						
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T/—	Resident	Vernal pool	O	Known to occur in the region, recorded at the Westpark property.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T/—	Resident	Elderberry plants	U	No elderberry shrubs have been observed during surveys conducted in the WRSP Site.
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	E/—	Resident	Vernal pool	S	Known to occur in the region. No records for the project site.
California linderiella	<i>Linderiella occidentalis</i>	FSC/—	Resident	Vernal pool	S	Known to occur in the region, recorded at the Westpark property.

**Table 4.7-2 Special-Status Species Potentially Occurring in the West Roseville Specific Plan Area**

Common Name	Scientific Name <sup>1</sup>	Status <sup>2</sup> (Fed/CA/CNPS)	Season <sup>3</sup>	Primary Habitat <sup>4</sup>	Present on Site <sup>5</sup>	Comments
<b>Amphibians</b>						
California tiger salamander <sup>6</sup>	<i>Ambystoma californiense</i>	C/CSC	Resident	Grasslands with vernal pools or other seasonal wetlands, and small mammal burrows in adjacent uplands	S	Suitable habitat exists at the site, however, this species is not known to occur in Placer County.
Western spadefoot	<i>Scaphiopus hammondi</i>	—/CSC	Resident	Wetlands/grasslands/vernal pools	R	Known to occur in the region, recorded at the Westpark property.
<b>Reptiles</b>						
Western pond turtle	<i>Clemmys marmorata</i>	FSC/CSC	Resident	Ponds/slow moving waters	S	Potential habitat along project area creeks. Known to occur in the region. Not observed in project area.
<b>Birds</b>						
Cooper's hawk	<i>Accipiter cooperii</i>	—/CSC (Nesting)	Resident	Woodland habitats	O	Observed during surveys of the project site.
Sharp-shinned hawk	<i>Accipiter striatus</i>	—/CSC (Nesting)	Winter	Nests in forests, forages in wooded habitats	S	Known to occur in the vicinity of the project site.
Golden eagle	<i>Aquila chrysaetos</i>	FP/CSC	Winter	Various upland habitats	S	May forage in the vicinity
Long-eared owl	<i>Asio otus</i>	—/CSC (Nesting)	Winter	Woodlands	S	Suitable habitat at the project site.
Burrowing owl	<i>Athene cunicularia</i>	—/PT (Nesting)	Summer	Grassland	O	Observed during surveys of the project site.
Ferruginous hawk	<i>Buteo regalis</i>	FSC/CSC	Winter	Various upland habitats	O	Observed during surveys of the project site.
Swainson's hawk	<i>Buteo swainsoni</i>	—/T	Summer	Nests in riparian trees, forages in open fields	O	Observed during surveys of the project site.
Northern harrier	<i>Circus cyaneus</i>	—/CSC	Resident	Nests in freshwater marsh and agricultural fields, forages in grasslands	O	Observed during surveys of the project site.
White-tailed kite	<i>Elanus leucurus</i>	(Nesting)	Resident	Woodland/grassland/marshes	O	Observed during surveys of the project site.
Loggerhead shrike	<i>Lanius ludovicianus</i>	—/CSC	Resident	Various open habitats such as grasslands and oak woodlands.	S	Known to occur in the vicinity of the project site.
Horned lark	<i>Eremophila alpestris</i>	SC/CSC	Resident	Open grasslands	O	Observed during surveys of the project site.

**Table 4.7-2 Special-Status Species Potentially Occurring in the West Roseville Specific Plan Area**

Common Name	Scientific Name <sup>1</sup>	Status <sup>2</sup> (Fed/CA/CNPS)	Season <sup>3</sup>	Primary Habitat <sup>4</sup>	Present on Site <sup>5</sup>	Comments
NOTES:						
1. Scientific names are based on the following source: California Department of Fish and Game, Special Animals, July 2000.						
2. Status = Status of species relative to the Federal and California State Endangered Species Acts and Fish and Game Code of California						
Fed = Federal status						
E = Federally listed as endangered						
T = Federally listed as threatened						
PE = Proposed endangered						
PT = Proposed threatened						
C = Federal candidate for listing as threatened or endangered						
FSC = Federal species of concern						
CA = California status						
E = Endangered; Species whose continued existence in California is jeopardized						
T = Threatened; Species that although not presently threatened in California with extinction, is likely to become endangered in the foreseeable future						
CSC = California Department of Fish and Game "Species of Special Concern". Species with declining populations in California						
FP = Fully protected against take pursuant to the Fish and Game Code Section 3503.5						
— = No California or federal status						
3. Season = season of use for animals RES = resident SUMAR = summer WNTR = winter						
4. Primary habitat = Most likely habitat association						
5. Present on-site:						
O = Observed on site R = Recorded on site S = Suitable habitat on site U = Unsuitable habitat on site						
6. Central California District Population Candidate						
SOURCE: California Department of Fish and Game, California Natural Diversity Database, 2002; <i>Results of Surveys for Special-status Species in the Fiddlyment/Placer 1600 Project Area Placer County, California (Final Report)</i> by Miriam Green Associates (July 18, 2000); <i>Wet-Season Surveys for Freshwater Invertebrates and Spring Surveys for Rare Plants for the Placer County Habitat Conservation Plan</i> by Jones & Stokes Associates (July 2002); <i>April 2002 Rare Plant Survey, West Roseville Specific Plan</i> by URS (June 25, 2002); <i>Lichen and Bryophyte Surveys, West Roseville Specific Plan</i> by URS (June 25, 2002)						

**Dwarf downingia** (*Downingia pusilla*). Status: CNPS 1B. The dwarf downingia grows in vernal pools and is known to occur in the Central Valley and San Francisco Bay Area. This species flowers from March through May. Dwarf downingia was observed in 18 vernal pools in the WRSP site during the surveys conducted in April 2000.<sup>113</sup>

**Hispid bird’s beak** (*Cordylanthus mollis* ssp. *hispidus*). Status: CNPS List 1B This species is an annual herb in the figwort family (Scrophulariaceae) that grows in saline or alkaline soils in meadows, sinks, playas, and valley and foothill grassland. It blooms June through September. Hispid bird’s beak occurs in Alameda, Kern, Merced, Placer, and Solano counties (CNPS 2001). Although suitable habitat for Hispid bird’s-beak is present in the WRSP Area, this species was not observed during rare plant surveys that were conducted for this project.

**Bogg’s Lake Hedge hyssop** (*Gratiola heterosepala*). Status: State-listed endangered, CNPS 1B. Gratiola heterosepala can be found in vernal pools and on lake margins. Bogg’s Lake hedge hyssop flowers from April through June. This species occurs in the Sacramento Valley, Sierra foothills, and ranges to the Modoc Plateau. Although suitable habitat occurs in the WRSP Area, no Bogg’s lake hedge hyssop was observed during recent surveys that were conducted there.

<sup>113</sup> Results of Surveys for Special-status Species in the Fiddlyment/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

**Ahart's dwarf rush** (*Juncus leiospermus* var. *ahartii*). Status: CNPS 1B. Ahart's dwarf rush grows in vernal pools and is known from only five occurrences in Butte and Calaveras Counties. Ahart's dwarf rush flowers from March through May. Although there is suitable habitat for this species in the WRSP Area, no Ahart's dwarf rush were observed during recent surveys that were conducted there.

**Legenere** (*Legenere limosa*). Status: CNPS 1B. Legenere flowers May through June. Legenere typically occurs in deep seasonal wetlands, such as vernal pools, seasonal swales, and ephemeral drainages that contain water for long periods during spring. Under these wet conditions, legenere forms dense mats. Legenere has become restricted in distribution as a result of habitat conversion and associated disturbance (e.g. degradation of wetland hydrology through plowing, grading, or grazing). Legenere is known to occur sporadically from Red Bluff in the north to Merced County in the south. Suitable habitat is present in the WRSP Area, but legenere was not observed during recent surveys that have been conducted there. However, historic records indicate that legenere occurs in the WRSP Area.

**Pincushion navarettia** (*Navarettia myersii*). Status: CNPS 1B. Pincushion navarettia inhabits vernal pools and flowers in May. There are four known occurrences,<sup>114</sup> in Sacramento, Amador, and Merced Counties. Although suitable habitat is present in the WRSP Area, no pincushion navarettia were observed during the recent surveys that were conducted there.

**Slender orcutt grass** (*Orcuttia tenuis*). Status: Federally listed as threatened, State-listed as endangered, CNPS 1B. Slender orcutt grass occurs in vernal pools and flowers from May through July. Although suitable habitat for this species occurs in the WRSP Area, slender orcutt grass was not observed during recent surveys that were conducted there.

**Sanford's arrowhead** (*Sagittaria sanfordii*). Status: CNPS list 1B. Sanford's arrowhead is a tuberous, perennial herb of fresh emergent wetlands that occurs in marshes and swamps throughout the Central Valley and North Coast Range,<sup>115,116</sup> and blooms May through August. Although suitable habitat for this species occurs in the WRSP Area, Sanford's arrowhead was not observed during recent surveys of that were conducted there.

### **Special-Status Wildlife**

Special-status wildlife surveys were conducted in the WRSP Area by biologists at Miriam Green Associates during the months of January through April 2002 for special-status amphibians, and April

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<sup>114</sup> California Natural Diversity Database, July 2002

<sup>115</sup> CNPS Electronic Inventory

<sup>116</sup> Hickman, J.E. (ed). *The Jepson Manual*. University of California Press, Berkeley, 1400 pp., p. 848, 1993

through June for special-status birds. As no special-status mammals are known to occur in the WRSP site, no focused surveys for this group were conducted. Additionally, reconnaissance level surveys for vernal pool crustaceans were conducted at the Westpark Property by Jones & Stokes Associates on March 21, 2002, and April 5, 2002. A total of 10 visits were conducted to sample for special-status amphibians during the January to April 2002 time period. The timing of these surveys coincides with the period when these species are present and able to be observed. The surveys sampled inundated potential breeding pools throughout the WRSP Area and also included nighttime spotlight surveys. Surveys for special-status birds were conducted between the months of April and June. Special-status bird surveys consisted of nine visits to the WRSP Area, all but two of which were conducted between the hours of 7 A.M. and 10 A.M.

To date, no special-status wildlife surveys have been conducted on the Remainder Area. However, these properties are adjacent to the WRSP Area, and appear to include a similar range of habitat types and are likely to support a similar species assemblage as the project site.

**Vernal Pool Fairy Shrimp** (*Branchinecta lynchi*). Status: Federal threatened. Fairy shrimp are small (11 to 27 mm) crustaceans adapted to survive the annual flooding and drying of vernal pools. They grow for about two weeks, breed, and produce eggs that are dropped to the silty bottom of the pool. As the vernal pool dries, the adults die. The “resting” eggs are protected by thick outer coverings that resist cold, heat, and desiccation during the summer months. The USFWS determined the vernal pool fairy shrimp to be threatened under the Federal Endangered Species Act in September 19, 1994 (59 FR 48136). Vernal pool fairy shrimp occur commonly in vernal pools in the Roseville area, and have been found in both natural and constructed vernal pools in the project site and surrounding vicinity.<sup>117</sup> Although specific surveys for vernal pool fairy shrimp or vernal pool tadpole shrimp were not conducted for the SOI Amendment, the species is very likely to occur in both the WRSP Area and Remainder Area and is assumed to be present throughout the vernal pools on the project site.<sup>118</sup>

**Valley Elderberry Longhorn Beetle** (*Desmocerus dimorphus californicus*). Status: Federal threatened. The valley elderberry longhorn beetle (VELB) occurs in riparian woodlands and other habitats where elderberry shrubs (*Sambucus mexicana*) are present. VELB are completely dependant on elderberry shrubs for all stages of their life cycle. The adults feed on the plants and lay their eggs on the branches. The larvae burrow into the pith of larger branches and live there until they emerge as adults through an exit hole they create. All elderberry shrubs that occur within the known range for VELB and have one or

<sup>117</sup> Sugnet & Associates. *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, p. 18, July 21, 1994

<sup>118</sup> Results of Surveys for Special-status Species in the Fiddymont/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

more stems with diameters of one inch or greater at ground level are considered potential habitat for this species. Although the UELB is typically associated with the Central Valley, the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999) recommend surveys for this species in all or portions of 31 counties in California. Although this species and its host plant are known to occur in the general project vicinity, no elderberry shrubs have been observed during biological surveys of the WRSP Area. Therefore, this species is not expected to occur in either the WRSP Area or Remainder Area.

**Swainson's Hawk** (*Buteo swainsoni*). Status: State threatened. Swainson's hawk is listed as a State "threatened" species. This finding was based on the sharp reduction in riparian woodlands and forests experienced over the state in the last 100 years, and the consequent reduction in Swainson's hawks, which use riparian woodlands for nesting. Swainson's hawks are open country birds, which forage in grasslands and agricultural fields, especially after disking or harvest. Swainson's hawk can forage as much as 20 miles from the nest, and observations of Swainson's hawk in the project vicinity are not uncommon. Several Swainson's hawk were observed flying over the WRSP site between April and June of 2000. Additionally, a pair of Swainson's hawks was observed nesting in a tree adjacent to the WRSP Area. The success of the nest could not be confirmed during the surveys.<sup>119</sup> As shown in Figure 4.7-3, Swainson's Hawk Nesting & Foraging Map, three historic records for this species occur within 1 mile of the WRSP Area.<sup>120</sup>

**Burrowing Owl** (*Athene cunicularia*). Status: State Proposed Threatened species and a "fully protected" raptor. It is also federally protected under the Migratory Bird Treaty Act (16 U.S.C §703-711). Burrowing Owl feed on rodents, small reptiles, and large insects in annual grasslands, pastures, and ruderal vegetation. They breed between March and August in communal burrow colonies that they have taken over from ground squirrels and other burrowing mammals. Three pairs and three individual burrowing owls have been observed during surveys of the WRSP Area.<sup>121</sup>

### **Other Special-Status Animals**

The following species are not listed as threatened or endangered species by the federal or State governments, but require analysis because they are fully protected species under State or federal laws or regulations, or because they are species for which there is evidence that they could meet the definition of rare contained in section 15380 of the CEQA Guidelines. These special-status species are included

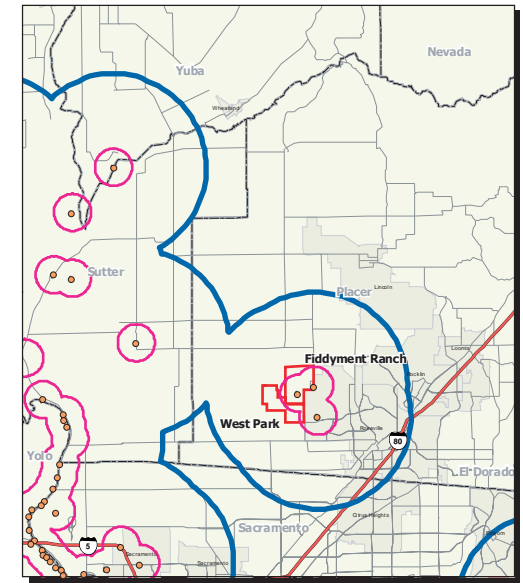
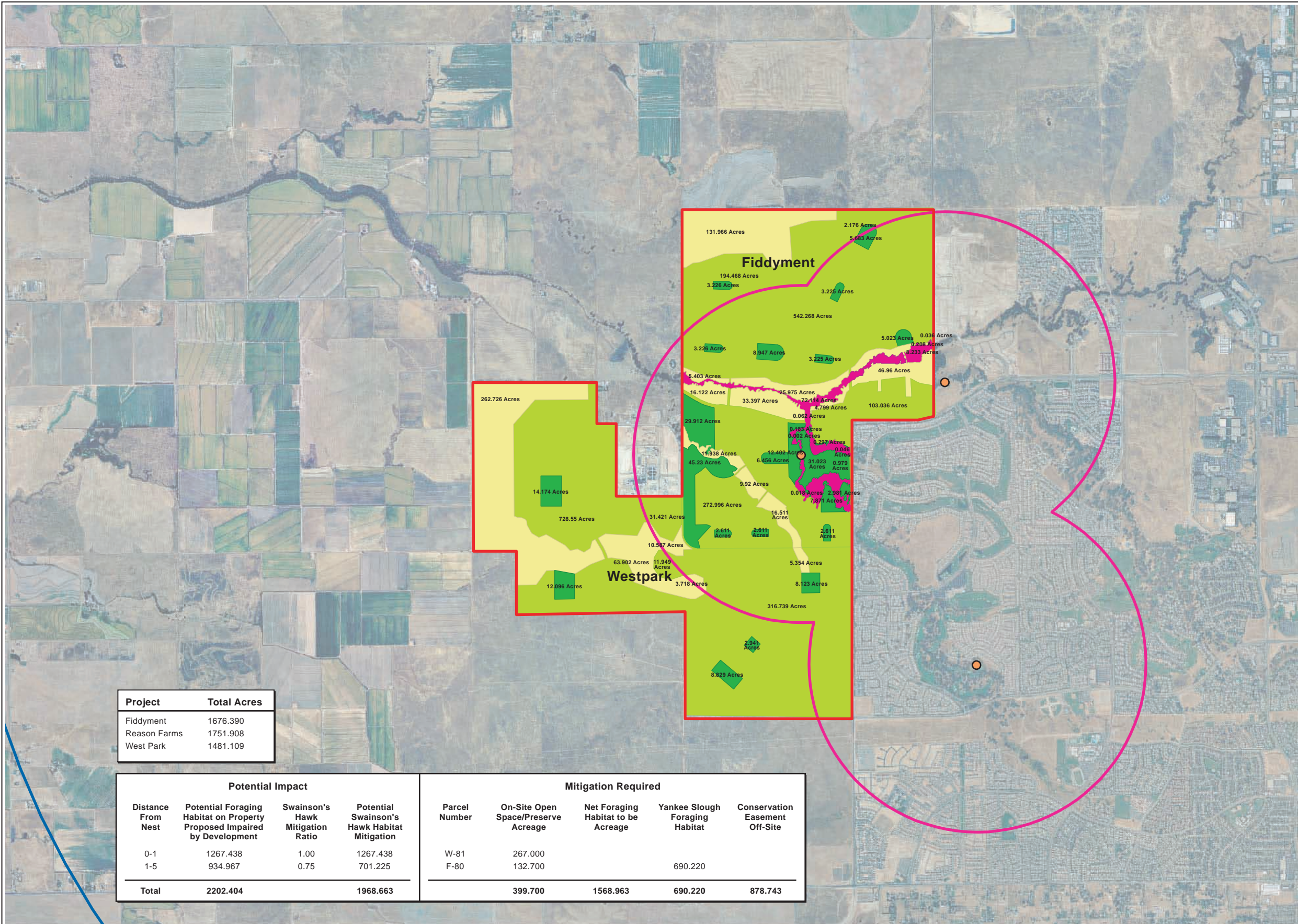
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<sup>119</sup> Results of Surveys for Special-status Species in the Fiddymen/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

<sup>120</sup> CDFG Natural Diversity Database, July 2002

<sup>121</sup> Results of Surveys for Special-status Species in the Fiddymen/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

**Figure 4.7-3 Swainson's Hawk Nesting & Foraging Map**

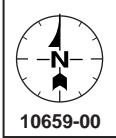
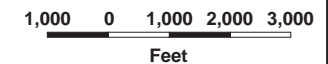


**LEGEND**

- Swainson's Hawk
- 1 Mile Radius
- 5 Miles Radius (see inset)
- Project Boundary (see inset)
- Onsite Nesting
- Onsite Foraging (Impacted)
- Open Space
- Park

Project	Total Acres
Fiddymnt	1676.390
Reason Farms	1751.908
West Park	1481.109

Potential Impact				Mitigation Required				
Distance From Nest	Potential Foraging Habitat on Property Proposed Impaired by Development	Swainson's Hawk Mitigation Ratio	Potential Swainson's Hawk Habitat Mitigation	Parcel Number	On-Site Open Space/Preserve Acreage	Net Foraging Habitat to be Acreage	Yankee Slough Foraging Habitat	Conservation Easement Off-Site
0-1	1267.438	1.00	1267.438	W-81	267.000			
1-5	934.967	0.75	701.225	F-80	132.700		690.220	
<b>Total</b>	<b>2202.404</b>		<b>1968.663</b>		<b>399.700</b>	<b>1568.963</b>	<b>690.220</b>	<b>878.743</b>



**FIGURE 4.7-3**  
**Swainson's Hawk Nesting & Foraging Map**

Source: ECORP Consulting, Inc.

Scale: 1" = 12,000'



10659-00

because, due to the timeline of this project, they could be elevated to State or federal endangered or threatened status prior to completion of the development of the WRSP Area.

**Prairie Falcon** (*Falco mexicanus*). Status: “Fully protected” raptor and State Species of Special Concern. Prairie falcons occur as fall and winter migrants in the project site, and feed on small birds, and rodents in annual grasslands, pastures, and ruderal vegetation. Although suitable habitat for this species occurs there, prairie falcon was not observed during surveys of the WRSP Area.

**White-tailed Kite** (*Elanus leucurus*). Status: “Fully protected” raptor in California. White tailed kites (also known as Black-shouldered kites) feed on rodents, small reptiles, and large insects in fresh emergent wetlands, annual grasslands, pastures, and ruderal vegetation. They breed between February and October. Unlike other raptors, kites often roost, and occasionally nest, communally. Therefore, disturbance of a relatively small roost or nesting area could affect a large number of birds. This species was observed during the winter surveys of the WRSP Area.<sup>122</sup>

**Cooper’s Hawk** (*Accipiter cooperii*). Status: State Species of Special Concern. Cooper’s hawks breed between March and August. Usually they nest and forage in woodlands or riparian vegetation near water. This species has been observed in the riparian corridors present on the WRSP Area.

**Northern Harrier** (*Circus cyaneus*). Status: State Species of Special Concern. Northern harriers breed between April and September and nest on the ground in shrubby vegetation. They hunt in annual grasslands, pastures, fresh emergent wetlands, and some croplands. Suitable foraging and potential nesting habitat for this species occurs in the WRSP Area and they are frequently observed foraging there.

**Loggerhead shrike** (*Lanius ludovicianus*). Status: State Species of Special Concern. Loggerhead shrikes occur in woodland and chaparral habitats throughout California. They feed primarily on insects or small rodents, which they hunt from grasslands adjacent to woodland areas. The shrike is also called “butcher bird” for its habit of impaling its prey on cactus thorns or barbed wire fences. Although suitable foraging and nesting habitat occurs in the WRSP Area, this species has not been reported in field surveys.<sup>123</sup>

**California Tiger Salamander** (*Ambystoma californiense*). Status: split in its listing status by location. The Central California Distinct Population Segment of the California Tiger Salamander is proposed as a Federally Threatened species, where the Sonoma County DPS and Santa Barbara DPS are already listed as Federally Endangered. Tiger salamanders occur in the Central Valley and adjacent foothills. They

<sup>122</sup> Results of Surveys for Special-status Species in the Fiddymont/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

<sup>123</sup> Results of Surveys for Special-status Species in the Fiddymont/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

breed in vernal pools and seasonal wetlands, and spend summer months in abandoned ground squirrel burrows in grassland and upland habitats. Although suitable habitat for this species occurs in the WRSP Area, California tiger salamander has not been observed during surveys.<sup>124</sup>

**Western spadefoot** (*Scaphiopus hammondi*). Status: State Species of Special Concern. Western spadefoot breed and lay eggs in vernal pools and seasonal wetlands throughout the Central Valley. After pools dry, the adults move into burrows in adjacent grassland and woodland areas. Although suitable habitat for this species occurs at the project site, and the CNDDDB contains recent records for this species on and adjacent to the WRSP Area, western spadefoot was not observed during surveys of the WRSP Area.<sup>125</sup>

**Northwestern Pond Turtle** (*Clemmys marmorata*). Status: State Species of Special Concern. Northwestern pond turtle occurs in ponds and slow streams throughout western California and requires a reliable source of water. Although most of the aquatic habitat in the WRSP Area is reported to be intermittent, which would be unsuitable, this species could occur in deeper pools that persist year round along Pleasant Grove and Kaseberg Creeks. However, this species was not observed during surveys of the WRSP Area.<sup>126</sup>

### **4.7.3 Regulatory Setting**

#### **Federal**

##### **Federal Endangered Species Act**

The U.S. Fish and Wildlife Service (USFWS) implements the Federal Endangered Species Act (FESA; 16 U.S.C §1531 *et seq.*). Projects that would result in “take” of any federally listed threatened or endangered species are required to obtain authorization from the USFWS through either Section 7 (interagency consultation) or Section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project. The authorization process is used to determine if a project would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species.

“Take” under the federal definition means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Candidate species do not have the full protection of FESA.

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<sup>124</sup> Results of Surveys for Special-status Species in the Fiddymen/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

<sup>125</sup> Results of Surveys for Special-status Species in the Fiddymen/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

<sup>126</sup> Results of Surveys for Special-status Species in the Fiddymen/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

Section 10 of the FESA provides an exception to the Section 9 prohibitions against take. This exception provides a regulatory mechanism to permit the “incidental take of federally listed fish and wildlife species by private interests and non-Federal government agencies during lawful land, ocean, and water use activities.” Incidental take is defined as a take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a Federal agency or private party. Section 10(a)(1)(B) requires an applicant for an incidental take permit to submit a “conservation plan that specifies, among other things, the impacts that are likely to result from the taking and the measures the permit applicant will undertake to minimize and mitigate such impacts.” FESA compliance through Section 10 is typically undertaken only when compliance cannot be conducted through Section 7 (i.e., when there is no federal funding, approval, or permit process other than the incidental take permit process).

#### ***City/U.S. Fish and Wildlife Service MOU***

In May 2000, the City and the USFWS entered into a MOU to prepare a Habitat Conservation Plan (HCP) or equivalent to minimize the indirect impact and incidental take of vernal pool species from future City growth. For a full discussion of this MOU and its applicability to the proposed project please see Impact 4.7-12 on this Section.

#### ***Migratory Bird Treaty Act of 1918***

The Migratory Bird Treaty Act, 16 U.S.C. §703–711, makes it “unlawful to take any migratory bird listed in 50 C.F.R. Part 10, including nests, eggs, or products.” This regulation is pertinent to any shrub or tree removal required for a proposed project, or project-related disturbance that could affect nesting migratory birds. It could require that elements of the proposed project (particularly vegetation removal) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by the California Department of Fish and Game (CDFG) and/or USFWS. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered “taking.”

#### ***Clean Water Act***

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters. Section 401 prohibits the discharge of any pollutant into the Nation’s waters without a permit, and Section 402 sets up the permit program. Section 404 of the Act regulates activities that result in discharge of dredged or fill material into waters of the United States. The

term “waters of the United States” as defined in the Code of Federal Regulations (33 C.F.R §328.3[a]; 40 C.F.R §230.3[s]) includes:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands. (Wetlands are defined by the federal government [CFR, Section 328.3(b), 1991] as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.);
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
  - which are or could be used by interstate or foreign travelers for recreational or other purposes; or
  - from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under the definition;
5. Tributaries of waters identified in paragraphs (1) through (4);
6. Territorial seas; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6).

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA [328.3(a)(8) added 58 FR 45035, Aug. 25, 1993].

In 1987, the Corps published a manual which standardized the manner in which wetlands are to be delineated nationwide. To determine whether areas that appear to be wetlands are subject to Corps jurisdiction (i.e., are “jurisdictional” wetlands), a wetlands delineation must be performed. Under normal circumstances, positive indicators from three parameters (1) wetland hydrology, (2) hydrophytic vegetation, and (3) hydric soils must be present to be classified as a jurisdictional wetland. Wetlands generally include swamps, marshes, bogs, and similar areas.

## **State**

### **California Endangered Species Act (CESA)**

The CDFG administers a number of laws and programs designed to protect plant, fish, and wildlife resources. The most significant of these regulations is the California Endangered Species Act of 1984 (CESA – Fish and Game Code Section 2050), which regulates the listing and take of state-endangered (SE) and state-threatened (ST) species. CESA declares that deserving species will be given protection by the

state because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the state. CESA has established that it is state policy to conserve, protect, restore, and enhance endangered species and their habitats.

Species listed under CESA cannot be taken without adequate mitigation and compensation. The definition of take under CESA is the same as described above for FESA. However, based on findings of the California Attorney General's Office, take under CESA does not prohibit indirect harm by way of habitat modification. Typically, the CDFG implements endangered species protection and take determinations by entering into management agreements (Section 2081 Management Agreements) with project applicants.

The CDFG maintains lists for Candidate-Endangered Species (SCE) and Candidate-Threatened Species (SCT). California candidate species are given protection that is equal to that provided to listed species. CDFG also lists Species of Special Concern (CSC) based on limited distribution, declining populations, diminishing habitat, and/or unusual scientific, recreational, or educational value. These species are not afforded the same legal protection as listed species, but may be added to official lists in the future. The designation of CSC is intended by the CDFG as a management tool for consideration in future land use decisions. As a consequence, the CDFG typically requests that CEQA lead agencies give consideration to minimization of impacts to CSC species when approving projects.

### **California Environmental Quality Act**

FESA and CESA protect only those species formally listed as threatened or endangered (or rare in the case of the State list). Section 15380 of the CEQA Guidelines independently defines "endangered" species of plants or animals as those whose survival and reproduction in the wild are in immediate jeopardy and "rare" species as those who are in such low numbers that they could become endangered if their environment worsens. Therefore, a project normally will have a significant effect on the environment if it will substantially affect a rare or endangered species of animal or plant or the habitat of the species. The significance of impacts to a species under CEQA must be based on analyzing actual rarity and threat of extinction despite legal status or lack thereof.

### **Sections 3511 and 3503.5 of the Fish and Game Code**

The CDFG derives its authority from the Fish and Game Code of California. Species listed under the California Endangered Species Act (Fish and Game Code section 2050 *et seq.*) cannot be "taken" without adequate mitigation and compensation.

Fish and Game Code section 3511 describes bird species, primarily raptors, which are “fully protected.” Fully protected birds may not be taken or possessed at any time. Section 3503.5 of the code protects all birds of prey and their eggs and nests.

### **Sections 1600–1607 of the Fish and Game Code**

Under Sections 1600–1607 of the California Fish and Game Code, CDFG regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFG jurisdiction are defined in the code as the bed, channel, or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit...” (Section 1601).

This broad definition gives CDFG great flexibility in deciding what constitutes a river, stream, or lake. The CDFG defines streams under the jurisdiction of Sections 1600–1607 as follows:

1. The term stream can include intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams (United States Geological Survey [USGS] maps), and watercourses with subsurface flows. Canals, aqueducts, irrigation ditches, and other means of water conveyance can also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.
2. Biological components of any stream may include aquatic and riparian vegetation, all aquatic animals including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system.
3. As a physical system, a stream not only includes water (at least on an intermittent or ephemeral basis), but also a bed or channel, a bank and/or levee, instream features such as logs or snags, and various flood plains, depending on the return frequency of the flood event being considered.
4. The lateral extent of a stream can be measured in several ways depending on a particular situation and the type of fish or wildlife resource at risk. The following criteria are presented in order from the most inclusive to the least inclusive:
  - The flood plain of a stream can be the broadest measurement of a stream’s lateral extent depending on the return frequency of the flood event used. For most flood control purposes, the 100-year event is the standard measurement. However, because it may include significant amounts of upland or urban habitat, in many cases the 100-year floodplain may not be appropriate.
  - The outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats and is, therefore, a reasonable and identifiable boundary for the lateral extent of a stream. In most cases, the use of this criterion should result in protecting the fish and wildlife resources at risk.
  - Most streams have a natural bank which confines flows to the bed or channel, except during flooding. In some instances, particularly on smaller streams or dry washes with little or no riparian habitat, the bank should be used to mark the lateral extent of a stream.
  - A levee or other artificial stream bank could also be used to mark the lateral extent of a stream. However, in many instances, there can be extensive areas of valuable riparian habitat located behind a levee (CDFG, 1992).

In practice, CDFG usually marks its jurisdictional limit at the top of the stream or bank or at the outer edge of the riparian vegetation, whichever is wider.

### **State Water Resources Control Board**

The State Water Resources Control Board has authority over wetlands through the Clean Water Act (Section 401). The Clean Water Act requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) to first obtain a certificate from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the State Water Resources Control Board to the nine regional boards. A request for certification or waiver will be submitted to the regional board at the same time that an application is filed with the Corps. The regional board has 60 days to review the application and act. Because no Corps permit is valid under the CWA unless "certified" by the state, these boards may effectively veto or add conditions to any Corps permit.

Additionally, implementation of the State Water Resources Control Board NPDES Construction Activities Permit would reduce impacts associated with erosion and runoff from construction sites containing soil or other materials that could degrade water quality of local streams by requiring contractors acquire a State General Construction Activity Stormwater Permit, which requires the implementation of BMPs, including schedule of activities, maintenance procedures, and other management practices to prevent or reduce pollution.

### **Local**

#### **Placer Legacy Open Space and Agricultural Conservation Program**

The Placer Legacy Open Space and Agricultural Conservation Program (Placer Legacy) is a program that is being developed by Placer County in conjunction with the resource agencies and local stakeholders to protect and conserve open space and agricultural lands in Placer County.<sup>127</sup> A description of the program is included below:

It is the goal of Placer Legacy to develop specific, economically viable, implementation programs which will enable the residents of Placer County to preserve a sufficient quantity of these resources to maintain a high quality of life and an abundance of diverse natural habitats while supporting the economic viability of the County and enhancing property values. Placer Legacy is intended to further the various open space and natural resource goals of the Placer County General Plan and associated General Plans of the six cities in Placer County.

The general goals of Placer Legacy for biological resources are (1) to conserve representative natural habitats within the Great Valley, Foothill, and Sierra Nevada ecoregions, (2) to identify and conserve smaller sensitive communities at the scales at which they occur, (3) to maintain or restore key ecosystem processes, and (4) whenever possible, to reduce threats to biodiversity (e.g., unnecessary habitat conversion, fragmentation, or degradation; disruption of ecosystem processes; invasive exotic species).

<sup>127</sup> Placer County Planning Department, Placer Legacy Open Space and Agricultural Conservation Program, June 20, 2000

The objectives of the Placer Legacy are to maintain a viable agricultural segment to the economy, conserve natural features necessary for access to a variety of outdoor recreation opportunities, retain important scenic and historic areas, preserve the diversity of plant and animal communities, protect endangered and other special status plant and animal species, separate urban areas into distinct communities, and ensure public safety.

Placer Legacy is intended to provide a wide variety of ownership, preservation, and funding methods to address the diverse circumstances present in the County and maintain local land use control by taking a leadership role in the preservation of endangered species and habitat protection.

In June of 2000, the Board of Supervisors directed County staff to begin implementation of the Placer Legacy Program. As a part of this effort, the County Planning Department has started to prepare a Natural Communities Conservation Plan (NCCP) (Section 2800 *et seq.* of the California Fish and Game Code) and a Habitat Conservation Plan (HCP) (Section 10 of the FESA).<sup>128</sup> As a part of developing these two conservation plans, the County will include requirements for meeting federal laws and regulations related to wetland impacts (Section 404 of the Clean Water Act). It is understood that the program will be based on a “willing seller, willing buyer” approach. At the time of the preparation of this EIR potential preservation areas have not been identified, so the SOI Amendment Area is not located within a defined acquisition area. For a full discussion of the applicability of this Plan to the proposed project please see Impact 4.7-12 of this Section.

#### **City of Roseville Improvement Standards**

Implementation of Section 11 of the City’s Improvement Standards would reduce impacts associated with erosion and runoff from construction sites containing soil or other materials that could degrade water quality if discharged to local streams and changes in surface water or groundwater quality resulting from stormwater runoff by requiring the development of an Erosion Control Plan, which would include a description of the site, time restrictions, erosion and sediment controls to be used, means of waste disposal, control of post-construction sediment and erosion control measures and maintenance responsibilities, landscaping during and after grading, and nonstormwater management controls.

#### **City of Roseville Zoning Ordinance—Tree Preservation Chapter (Chapter 19.66)**

The City of Roseville Tree Preservation Ordinance protects native oak trees 6 inches or more in diameter at breast height (dbh) and specified landmark trees. The ordinance requires a permit for any activity that would harm, destroy, kill, or remove any protected tree. In addition to removal, grading (cut or fill) and trenching within the dripline are subject to permit approval, as discussed below:

1. Grading around trees to be limited to outside the dripline. Any tree well graded should be drained to some outfall or swale.

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<sup>128</sup> Placer County Planning Department URL: <http://www.placer.ca.gov/planning/legacy/legacy-hcp-nccp.htm>

2. The following conditions shall apply to ensure the preservation of trees:
  - a. Each tree or group of trees to be saved shall be fenced by a chain link fence prior to any grading or movement of heavy equipment or issuance of any permits.
  - b. Fencing shall be located one foot (1') outside the dripline of the tree or trees.
  - c. Signs shall be posted on all sides of said fences stating that each tree/trees is/are to be preserved and indicating the amount of the bond that will be forfeited if any tree is damaged.
3. The grading plan for the project has been designed for no grading to occur within the dripline of any oak tree unless specifically approved by planning department and shown on these plans. No grades shall be modified without the approval of the civil engineer and the City of Roseville.
4. No trenching shall occur beneath the dripline of any oak tree to be saved unless stated on these plans "trenching under this tree is approved".
5. Parking of vehicles and equipment or storage of materials under the dripline of trees shall not occur at any time.

#### **Section 19.66.070—Oak Tree Planting and Replacement Program**

The review body may condition any tree permit or administrative tree permit involving removal of a protected tree upon the replacement of trees in kind. The replacement requirement shall be calculated based upon an inch for an inch replacement of the removed tree(s), an inch being equivalent to a 15-gallon tree. The total of replacement trees shall have a combined diameter of the tree(s) removed. A minimum of 50 percent of replacement trees shall be native. Up to 50 percent may be nonnative. The review body may approve a replacement program using one or any combination of the four methods described below. The preferred alternative is on-site replacement:

- A. **Replacement Trees.** Replacement trees may be planted on-site or in other areas where there is maintenance to ensure survival of the trees.
- B. **Relocation of Trees.** In certain cases, the City may consider the relocation of Native Oak Trees from one area in a project to another. Credit shall be given for relocation on the same basis as replacement. The guidelines and limitations for relocation are as follows:
  1. The tree(s) being recommended for relocation must be approved by the review body whose decision will be based upon factors relating to health, type, size, time of year and proposed location.
  2. The relocation of a tree shall be conditioned to require a secured five-year replacement agreement for the tree. If at the end of five (5) years the tree is deemed by an arborist to be in a substantially similar condition to that prior to the transplanting, the agreement will be terminated. If during the five (5) year period the tree dies it shall be replaced as required by this section.
- C. **Revegetation Requirements.** The Approving Authority may, instead of requiring replacement trees, require implementation of a revegetation plan. The Developer shall enter into a written agreement with the City obligating the developer to comply with the requirements of the revegetation program. A performance security or bond for 150 percent of the cost of the revegetation plan shall be required to insure that the agreement is fulfilled. The Director shall approve the bid for the proposed work. The revegetation program shall propagate native oak trees from seed using currently accepted methods. A revegetation program shall

identify the seed source of the trees to be propagated, the location of the plots, and the methods to be used to ensure success of the revegetation program. A revegetation program shall not be considered complete until the trees to be propagated have reached one (1) inch in diameter or a revegetation program which demonstrates the need for alternative success criteria and achieves mitigation on an inch for inch basis is approved by the Planning Commission.

- D. **In-Lieu Mitigation Fee.** The Approving Authority may determine that the remedies described above are not feasible or desirable and may require instead payment of a cash contribution based upon the cost of purchasing, planting and irrigating the required number of fifteen (15) gallon trees. The cost of purchasing, planting and irrigating a fifteen (15) gallon oak tree shall be set by City Council resolution. The cash contribution shall be deposited into one of the following funds as determined by the Community Development Director:
1. **Native Oak Tree Propagation Fund.** This fund shall be used to propagate and protect native oak trees. Uses of the fund include, but are not limited to, purchasing property to plant or protect native oak trees, propagating native oak trees from seed or container stock and maintaining existing native oak trees.
  2. **Nonnative Tree Fund.** This fund shall be used to purchase and plant nonnative trees within Roseville. Uses of the fund include, but are not limited to, purchasing and propagating nonnative trees from seed or container stock and maintaining existing nonnative trees (Ord. 3353 §1, 1999; Ord. 3014 (part), 1996.).

### **City of Roseville Floodplain Development Regulations**

Implementation of Chapter 9.80 of the Zoning Ordinance would control the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters. In addition, regulations would control fill, grading, dredging, and other development, which may increase flood damage.

### **City of Roseville General Plan**

The City of Roseville General Plan includes goals and policies for the preservation of the value of biological resources in the community. These policies are specific to vegetation and wildlife. However, other policies intended to preserve water quality, air quality and other features also benefit and protect biological resources. Refer to Appendix C for a complete list of all applicable City goals and policies.

### **Applicable WRSP Measures**

The WRSP includes several measures designed to protect existing resources, listed below:

- No net loss of wetland functions, habitat and values
- Development of a “vernal pool strategy” consistent with the City/USFWS MOU
- Designation of creek corridors/floodplains as open space
- Designation of concentrated area of oak woodland as park

## 4.7.4 Impacts and Mitigation Measures

### Methods of Analysis

Analysis of potential project impacts to biological resources is based on a combination of background and historic record searches, review of previous field investigations and a reconnaissance level visit to the site. Background research included the use of the California Department of Fish and Game's Natural Diversity Database (CNDDDB), and the California Native Plant Society's Electronic Inventory to determine what special-status plant or wildlife species are expected to occur in the vicinity of the SOI Amendment Area. Additional information on special-status species potentially occurring within the SOI Amendment Area was acquired from a species list from the USFWS in a letter dated June 12, 2002 (file number 1-1-02-SP-2224).

A series of natural resource investigations have been conducted for the WRSP Area. Reports detailing the results of these investigations were acquired and reviewed to determine which species have been recently observed in the WRSP Area. These reports are listed on page 4.7-1. These reports are available for review at the City of Roseville Planning Department, 311 Vernon Street, Roseville, California.

A reconnaissance level visit to the site was conducted on May 15, 2002, to determine the habitat types that are present within the SOI Amendment Area. Using that information, the list of species that was derived from the background research was analyzed to determine which of those species were likely to occur within both the WRSP Area and Remainder Area.

Surveys conducted in the WRSP Area for special status species are discussed above.

### Standards of Significance

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area would do any of the following:

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan
- Contribute to a substantial reduction in numbers, restriction of range, or loss of habitat for a population of special-status species, including fully protected, candidate for listing, proposed for threatened or endangered, and species considered "rare" under CEQA section 15380 by CDFG
- Interfere substantially with the movement of any resident or migratory fish or wildlife species
- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations
- Have a substantial adverse effect on federally protected wetlands defined by section 404 of the Clean Water Act through removal, filling, hydrological interruption, or by other means
- Violate the Tree Preservation chapter of the Roseville Zoning Ordinance, including damage, removal or encroachment into the protected zone of native oak trees greater than 6 inches in diameter at breast height (DBH)

**Impacts**

IMPACT 4.7-1:	LOSS OF FEDERALLY PROTECTED WETLANDS AND “OTHER WATERS” OF THE UNITED STATES.	
<b>Applicable Policies and Regulations:</b>	Section 404 and 401 of the Clean Water Act City/USFWS MOU	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.7-1 (Ensure no net loss of wetlands)	MM 4.7-2 (Wetland protection policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

Wetlands occur throughout south Placer County. Site-specific wetland delineations have been completed for the WRSP Area, but not for the Remainder Area. A total of 63.89 acres of wetlands or “other waters” of the U.S. have been identified in the WRSP (Figure 4.7-2). Implementation of the WRSP is anticipated to result in the loss of a total of 32.78 acres of those wetlands and “other waters” of the U.S (refer to Table 4.7-3, in MM 4.7-1). Development of the Remainder Area would be expected to have a similar effect on wetlands, and is discussed in this Section.

**West Roseville Specific Plan**

Jurisdictional delineations have been conducted for the entire WRSP Area and the Corps has verified delineations. A total of 63.89 acres of wetlands or “other waters” of the U.S. have been identified in the WRSP Area.<sup>129</sup> These wetlands consist of 33.91 acres of vernal pools, 8.05 acres of vernal swales, 17.39 acres of wet swales, 3.92 acres of seasonal wetlands and 0.62 acres of emergent marsh.<sup>130,131</sup>

<sup>129</sup> Jurisdictional Delineation for the Placer 1600 Property by Gibson & Skordal Wetland Consultants, January 1999, revised March 1999. Jurisdictional Delineation for the Fiddymont Property by Gibson & Skordal Wetland Consultants, September 1998, Revised November 1998.

<sup>130</sup> Jurisdictional Delineation for the Placer 1600 Property by Gibson & Skordal Wetland Consultants, January 1999, revised March 1999. Jurisdictional Delineation for the Fiddymont Property by Gibson & Skordal Wetland Consultants, September 1998, Revised November 1998.

Implementation of the WRSP is anticipated to result in the total loss of 32.78 acres of wetland habitat. Of this, direct losses account for of a total of 23.21 acres of wetlands and “other waters” of the U.S., including 13.80 acres of vernal pools, 3.29 acres of vernal swales, 4.17 acres of wet swales, 1.33 acres of seasonal wetlands, and 0.62 acres of emergent marsh.<sup>132</sup> Indirect impacts to wetlands account for an additional 8.83 acres of vernal pool habitat and 0.74 acres of vernal swale habitat (Table 4.7-3). Figure 4.7-2 shows the distribution of wetlands throughout the WRSP Area with an overlay of the land use plan, as well as the on-site areas of avoidance, mitigation, and preservation. Figure 4.7-4, Potential Off-site Mitigation Property Locations in Western Placer County, shows the areas that would be used for off-site preservation and mitigation. Approximately 40.19 acres of miscellaneous wetlands found within areas designated as open space would remain, while wetlands in other areas are assumed to be filled by WRSP development. Loss of these wetlands would occur as a result of grading in preparation for development, construction of roads and utility corridors, creation of stormwater detention basins along stream corridors and other ground disturbing activities related to construction in the WRSP Area. This impact would be considered **significant**.

MM 4.7-1 requires that the WRSP achieve no net loss of wetlands through on-site avoidance, on-site wetland construction, and/or off-site wetland construction, off-site wetland restoration, and off-site acquisition where approved by the permitting agencies. Because the Corps has a no-net loss policy for wetlands subject to its jurisdiction, MM 4.7-1 would be achieved through the 404-permit process.

On July 11, 2002, a Section 404 Individual Permit Application was submitted by the WRSP applicants to the Corps for review. The basic premise of the 404-permit program is that no discharge of dredged or fill material can be permitted into “waters of the U.S.” if a practicable alternative exists that is less damaging to the aquatic environment, or if the nation’s waters would be significantly degraded. Therefore, when a permit is applied for, the applicant must show that they have:

1. Taken steps to avoid wetland impacts where practicable
2. Minimized potential impacts to wetlands
3. Provided compensation for any remaining, unavoidable impacts through activities to restore or create wetlands

Regulated activities discharges are controlled by a permit review process, which includes a period designated for public and regulatory comments. An individual permit is usually required for potentially significant impacts. However, for most discharges that will have only minimal adverse effects (generally

<sup>131</sup> Westpark/Fiddymont Ranch “Wetland Mitigation (Revised)” table, August 19, 2003, ECORP Consulting

<sup>132</sup> Westpark/Fiddymont Ranch “Wetland Mitigation (Revised)” table, August 19, 2003, ECORP Consulting

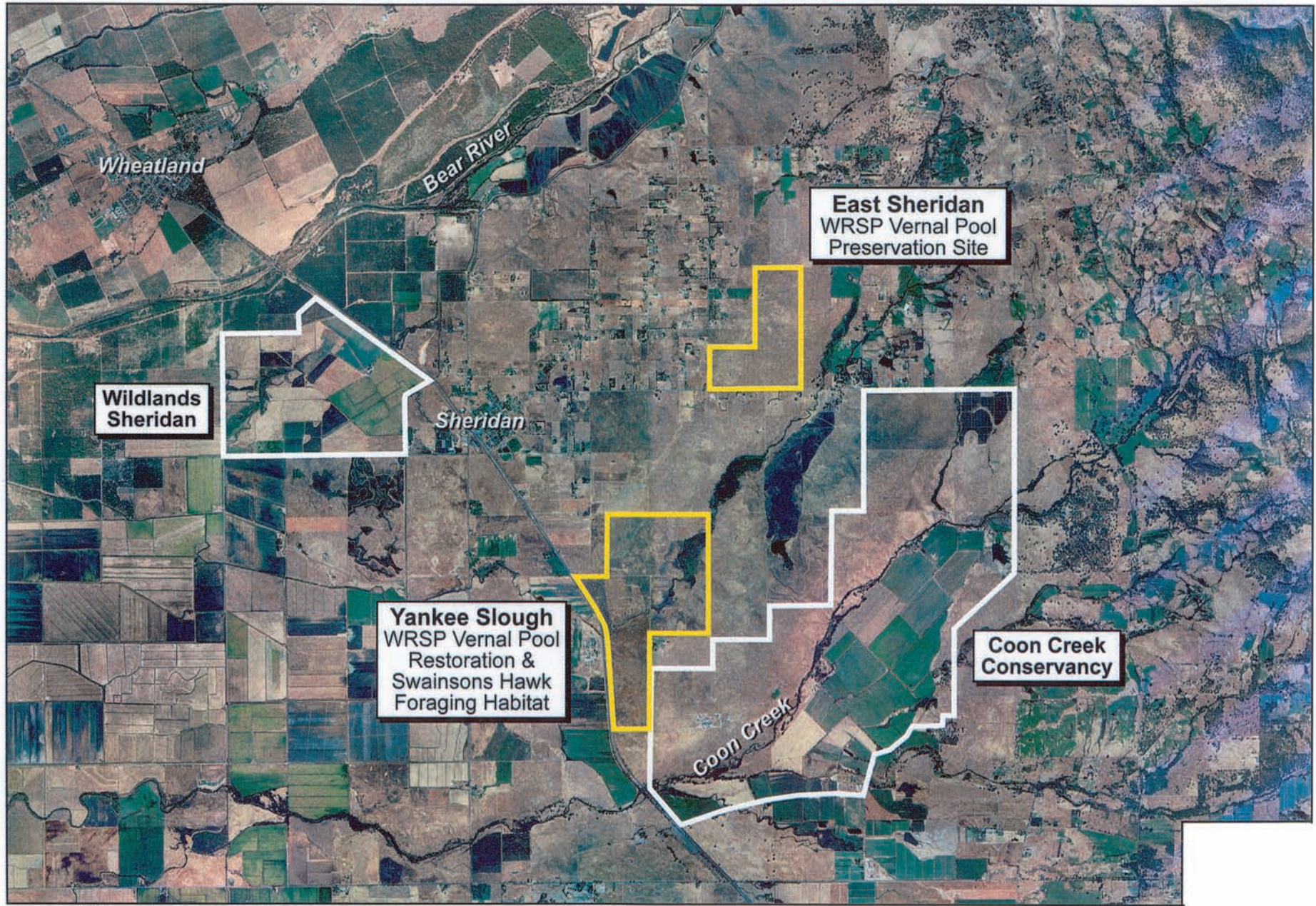
less than one-half an acre of wetland habitat or 300 linear feet of perennial streams), the Army Corps of Engineers often grants up-front general permits. These may be issued on a nationwide, regional, or state basis for particular categories of activities (for example, minor road crossings, utility line backfill, and bedding) as a means to expedite the permitting process. This application includes an analysis of impacts on wetlands and provides a detailed mitigation and monitoring plan for the WRSP Area. As described in the application, the WRSP has been designed to incorporate substantial habitat preservation, and includes approximately 684 acres of on-site preservation and open space land. The goal of the WRSP's conservation strategy is to achieve no net loss of wetlands through a combination of on-site avoidance and preservation, on-site enhancement and creation of wetlands, off-site acquisition and preservation of existing vernal pool complexes, off-site restoration of degraded vernal pool habitat, and purchase of vernal pool credits at an agency-approved mitigation bank. These wetlands, both on-site and off-site, would be preserved and managed in perpetuity to provide for the long-term viability of the protected wetlands. The project applicants have identified East Sheridan and Yankee Slough as off-site mitigation areas, which are discussed in detail in MM 4.7-1 and MM 4.7-2. Restoration of wetland habitats is preferred to wetland creation because creation of wetlands introduces wetlands to an area historically upland in nature, whereas restoration re-establishes topographic and hydrologic conditions to a landscape that historically contained wetlands but has undergone land conversion. This approach is consistent with the City/USFWS MOU. The Corps will determine whether the Permit Application meets the no net loss requirement, and request modification if it does not. The project applicant must obtain a 404 permit prior to discharging any dredged or fill material into any waters of the U.S. Because the 404 permit would ensure no net loss of wetlands, it would satisfy MM 4.7-1 reducing the severity of this impact to a level that is **less than significant**.

### **Remainder Area**

No wetland delineations have been conducted for the Remainder Area. However, based on a review of aerial photographs of the area, approximately 50 acres of wetlands are assumed to be present. If the remaining portions of the SOI Amendment Area were developed at levels similar to those proposed in the WRSP, future development in this area would cause further losses to wetland resources as a result of grading and other ground disturbance related to development of the property. This impact would be considered **significant**.

MM 4.7-2 requires that specific plans or development plans in the Remainder Area require that, prior to approval of development plans for the Remainder Area, wetland resources be delineated through a jurisdictional delineation of wetlands and 'other waters' of the U.S. submitted for Corps review, and that mitigation plans provide for no net loss of wetlands identified in the Remainder Area. No net loss of

**Figure 4.7-4 Potential Off-site Mitigation Property Locations in Western Placer County**



**FIGURE 4.7-4**  
**Potential Off-Site Mitigation Property Locations in Western Placer County**

Not to Scale



10659-00

Source: ECRP Consulting, Inc., 2003

City of Roseville



wetlands in the Remainder Area could be accomplished through on-site avoidance, on-site wetland construction, off-site wetland construction, off-site wetland restoration, or off-site acquisition where approved by the permitting agencies. Implementation of MM 4.7-2 would reduce the impact to a **less-than-significant level**.

<b>IMPACT 4.7-2: LOSS OF FEDERALLY LISTED VERNAL POOL CRUSTACEANS AND THEIR HABITAT.</b>		
<b>Applicable Policies and Regulations:</b>	Federal Endangered Species Act City/USFWS MOU	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.7-1 (Ensure no net loss of wetlands)	MM 4.7-2 (Wetland protection policies); MM 4.7-3 (Vernal pool crustacean policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**West Roseville Specific Plan**

Potential habitat for vernal pool crustaceans such as vernal pool fairy shrimp, vernal pool tadpole shrimp, and California linderiella is present in the WRSP Area. Although no protocol level surveys for federally listed vernal pool crustaceans have been conducted for the WRSP, vernal pool fairy shrimp are reported to occur within the WRSP Area in historic records, and are assumed to be present throughout the vernal pools in the WRSP Area.<sup>133</sup> Additionally, recent reconnaissance level surveys have documented the presence of California linderiella within the WRSP Area.<sup>134</sup> Potential habitat for vernal pool crustaceans in the WRSP Area includes 33.91 acres of vernal pools, 8.05 acres of vernal swales, 17.39 acres of wet swales, 3.92 acres of seasonal wetlands and 0.62 acres of emergent marsh.<sup>135,136</sup> Implementation of the WRSP is anticipated to result in the total loss of 22.63 acres of vernal pools, 4.03 acres of vernal swales, 4.17 acres of wet swales, 1.33 acres of seasonal wetlands, and 0.62 acres of emergent marsh would be lost.<sup>137</sup> The seasonal wetland is a single artificial feature. The berm that was built to create the wetland has been removed and the water has been allowed to drain away. Due to these

<sup>133</sup> CDFG Natural Diversity Database, July 2002

<sup>134</sup> Results of Surveys for Special-status Species in the Fiddlyment/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000

<sup>135</sup> Jurisdictional Delineation for the Placer 1600 Property by Gibson & Skordal Wetland Consultants, January 1999, revised March 1999. Jurisdictional Delineation for the Fiddlyment Property by Gibson & Skordal Wetland Consultants, September 1998, Revised November 1998.

<sup>136</sup> Westpark/Fiddlyment Ranch “Wetland Mitigation (Revised)” table, August 19, 2003, ECORP Consulting

<sup>137</sup> Westpark/Fiddlyment Ranch “Wetland Mitigation (Revised)” table, August 19, 2003, ECORP Consulting

changes in hydrology, this feature is being re-delineated. It is expected that when verified by the Corps, the size will be greatly reduced.<sup>138</sup>

Loss of wetland habitat would occur as a result of grading and other ground disturbing activities related to the development of the WRSP Area. Additionally, direct loss of vernal pool crustacean habitat could occur as a result of periodic inundation that could result from the construction of the proposed weir, culverts, and drainage detention basins along Curry Creek.

Complete inundation of these vernal pools would occur during periods of prolonged heavy rainfall and are likely to last from one to seven hours. Complete inundation of these pools for this period of time is not likely to result in a significant degradation of the quality of habitat, as connection with the main channel would be brief before the water receded.

Field surveys indicate that of the total impacts to vernal pool crustacean habitat, indirect impacts would account for 9.57 acres. Indirect impacts on vernal pool crustacean habitat include possible disturbance resulting from passive recreation, changes to hydrological conditions such that precipitation runoff supplies are interrupted and prevent the pools from filling properly, or erosion of adjacent uplands that causes siltation of the pools. Additionally, after project construction, vernal pool crustacean habitat that is preserved, restored, or created on or adjacent to the site could be subject to further indirect impacts resulting from urban runoff, increased human access (i.e., proximity to development, trails, etc.), vandalism or other human disturbances, and an increase in exotic weed species. Maintenance activities, such as fire break maintenance, weed abatement, and construction and maintenance of trails and utilities, could also degrade habitat. Such activities could occur seasonally. These impacts would degrade vernal pool crustacean habitat. Indirect effects could also occur to vernal pools and other seasonal wetlands as a result of flows from stormwater outfall structures that discharge directly into open space areas (refer to Figure 4.12-3 [Location of PGWWTP Outfall in WRSP] in Section 4.12 [Hydrology and Water Quality]) in the northern and western part of the WRSP Area. These indirect effects would result from high velocity flows that could scour seasonal wetlands that are not accustomed to high velocity flows. In addition, the characteristics of the wetlands could change by introducing a year-round source of water. The applicant's engineers are currently working on designs for these outfalls that will both decrease flows and reduce or eliminate debris or other pollution from being deposited in the pools. Although the exact configuration of future outfall structures and a description of how they operate is not available at this time, one potential measure could include the construction of drainage swales between outfalls and receiving waters to divert flows away from high quality vernal pool habitat.

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<sup>138</sup> Westpark/Fiddymont Ranch "Wetland Mitigation (Revised)" table, January 28, 2003, ECORP Consulting

Loss of potential habitat for vernal pool crustaceans federally listed as threatened or endangered and degradation of habitat for these species would be considered a **significant impact**.

Compliance with FESA would reduce impacts associated with the loss of federally listed vernal pool crustaceans and their habitat, and the loss and degradation of rare plant populations, by requiring any project that would result in the take of any federally listed threatened or endangered species to obtain authorization from the USFWS. In addition, the MOU would minimize the indirect impact of incidental take of vernal pool species resulting from future City growth. Further, MM 4.7-1 requires no net loss of wetlands. No net loss of vernal pool crustacean individuals and habitat could be achieved through the protection of their wetland habitat either on-site or at another off-site location in combination with the harvesting of soils containing the cyst bank of fairy shrimp egg cysts. This soil could then be used in the restoration and enhancement of vernal pools in the preservation area where it would establish the fairy shrimp and associated species in the new locations. As described in the CWA 404 application, the WRSP has been designed to incorporate substantial habitat preservation (see Table 4.7-3). The goal of the conservation strategy is to achieve no net loss through a combination of on-site avoidance and preservation, on-site enhancement and creation of nonvernal pool wetlands, along with the acquisition of off-site existing vernal pool complexes, off-site restoration of degraded vernal pool habitat, and purchase of vernal pool credits at an agency-approved mitigation bank. These wetlands, both on-site and off-site would be preserved and managed in perpetuity to provide for the long-term viability of the protected wetlands. The areas of potential off-site mitigation are shown in Figure 4.7-4. Additionally, the CWA 404 application for this project includes measures designed to ensure the long-term viability of the preserved wetlands. These measures include creation of contiguous connections with off-site preserve areas, the installation of high quality fencing around open space preserve area with signage describing the sensitivity of the habitat, and the implementation of an Operation and Management Plan with a financing mechanism to monitor the health of the preserve habitat, and to remediate any disturbance to the preserve. An annual report describing the monitoring activities and condition of the preserve will be prepared by the preserve steward and submitted to the resource agencies. With implementation of MM 4.7-1, this impact would be **less than significant**.

### **Remainder Area**

A delineation of potential habitat for vernal pool crustaceans has not been conducted for the Remainder Area. However, based upon the similarity of the land to the WRSP and surrounding region, it is very likely that additional acres of potential vernal pool crustacean habitat exist within this area. Development within the Remainder Area would result in take of potential vernal pool crustacean habitat as well as degradation of habitat due to ongoing maintenance activities, urban runoff, erosion, human and

domestic animal access, and introduction of nonnative invasive plants. This would be considered a **significant impact**.

MM 4.7-3 would reduce impacts on vernal pool crustacean species. Once potential habitat is delineated, the project applicant shall retain a qualified biologist to conduct protocol level surveys for vernal pool crustaceans at the project site, or the applicant may assume presence within the site. If the results of the protocol level surveys indicate that federally listed vernal pool crustaceans are not present at the site, then no further mitigation would be required. However, if they are determined to be present, or if the project applicant chooses to forego surveying and assumes presence of vernal pool crustaceans at the site, MM 4.7-2 would ensure no net loss of habitat by using generally acceptable mitigation ratios and practices for loss of vernal pool crustacean habitat.<sup>139</sup> By requiring identification of potential habitat, and ensuring no net loss of habitat, MM 4.7-2 and MM 4.7-3 would reduce this impact to a **less-than-significant level**.

<b>IMPACT 4.7-3: LOSS OF RARE PLANT POPULATIONS.</b>		
<b>Applicable Policies and Regulations:</b>	Federal Endangered Species Act	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.7-1 (Ensure no net loss of wetlands)	MM 4.7-2 (Wetland protection policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

The project area contains habitat for special-status plant species, particularly in vernal pools (refer to Table 4.7-3). Vernal pools represent potential habitat for dwarf downingia, legenera, and other special-status plants. Loss of special-status plant species that are known to occur on-site could result from grading and other ground disturbing activities related to development of the SOI Amendment Area.

**West Roseville Specific Plan**

The 33.91 acres<sup>140</sup> of vernal pools in the WRSP Area represent potential habitat for dwarf downingia, legenera, and other special-status plants (refer to Table 4.7-2). Both dwarf downingia and legenera have either been recently observed within, or have historic records within the WRSP Area. Surveys for special-status plant species that were conducted for the WRSP have documented the presence of dwarf

<sup>139</sup> Designation of Critical Habitat for vernal pool Species does not change these options.

<sup>140</sup> Westpark/Fiddymont Ranch "Waters of the U.S. Acreage" table, January 28, 2003, ECORP Consulting

downingia in vernal pools in the WRSP Area.<sup>141</sup> Additionally, historic records indicate that legenera occurs in the WRSP Area, although this species was not observed during the recent surveys.<sup>142</sup> Potential habitat for other special-status plant species, including wetland species such as Bogg's Lake hedge hyssop, slender orcutt grass, Sacramento orcutt grass, and Sanford's arrowhead, and upland species such as hispid bird's beak and big-scale balsamroot occurs within the WRSP Area. Although focused special-status plant surveys were conducted during the bloom period for these species, none of these special-status plant species were observed in the WRSP and thus no impacts to these absent species would be expected to occur.<sup>143</sup>

Implementation of the WRSP is anticipated to result in the direct loss of 13.80 acres<sup>144</sup> of vernal pools, which are potential habitat for dwarf downingia and legenera. Loss of these plants would occur as a result of grading and other ground disturbing activities related to the development of the WRSP Area. Additionally, indirect impacts would occur to 8.83 acres of vernal pools. Indirect impacts on dwarf downingia and legenera habitat could be caused by changes to hydrological conditions that result from grading or other topographic changes such that precipitation runoff supplies are interrupted and prevent the pools from filling properly, or erosion of adjacent uplands causes siltation of the pools. Loss of special-status plants would be considered a **significant impact**.

Compliance with FESA would reduce impacts associated with the loss of federally listed vernal pool crustaceans and their habitat, and the loss and degradation of rare plant populations, by requiring any project that would result in the take of any federally listed threatened or endangered species to obtain authorization from the USFWS. Protection, preservation, and replacement of special-status plants can be achieved through implementation of MM 4.7-1 (ensure no net loss of wetlands). Special-status plants would receive protection through the preservation, enhancement, or restoration and protection of potential habitat for these species. Additionally, transfer of topsoil from pools that are lost, to pools that are enhanced, recreated, or restored will preserve the seedbank for those plant species that occupy those pools that are lost as a result of the development of the proposed project. This type of soil transfer process is generally highly successful, and is readily accepted by the USFWS as appropriate mitigation for the loss of vernal pool habitat. Additionally, this type of restoration effort is required to contain

<sup>141</sup> Results of Surveys for Special-status Species in the Fiddymont/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000; Wet-Season Surveys for Freshwater Invertebrates and Spring Surveys for Rare Plants for the Placer County Habitat Conservation Plan by Jones & Stokes Associates (July 2002)

<sup>142</sup> April 2002 Rare Plant Survey, West Roseville Specific Plan by URS (June 25, 2002)

<sup>143</sup> Results of Surveys for Special-status Species in the Fiddymont/Placer 1600 Project Area by Miriam Green Associates, July 18, 2000; Wet-Season Surveys for Freshwater Invertebrates and Spring Surveys for Rare Plants for the Placer County Habitat Conservation Plan by Jones & Stokes Associates (July 2002); April 2002 Rare Plant Survey, West Roseville Specific Plan by URS (June 25, 2002)

<sup>144</sup> Westpark/Fiddymont Ranch "Wetland Mitigation (Revised)" table, January 28, 2003, ECORP Consulting

success criteria acceptable to, and monitored by the USFWS, as well as the drafting of and compliance with a formal restoration plan. Implementation of MM 4.7-1 would reduce the severity of this impact to a **less-than-significant level**.

**Remainder Area**

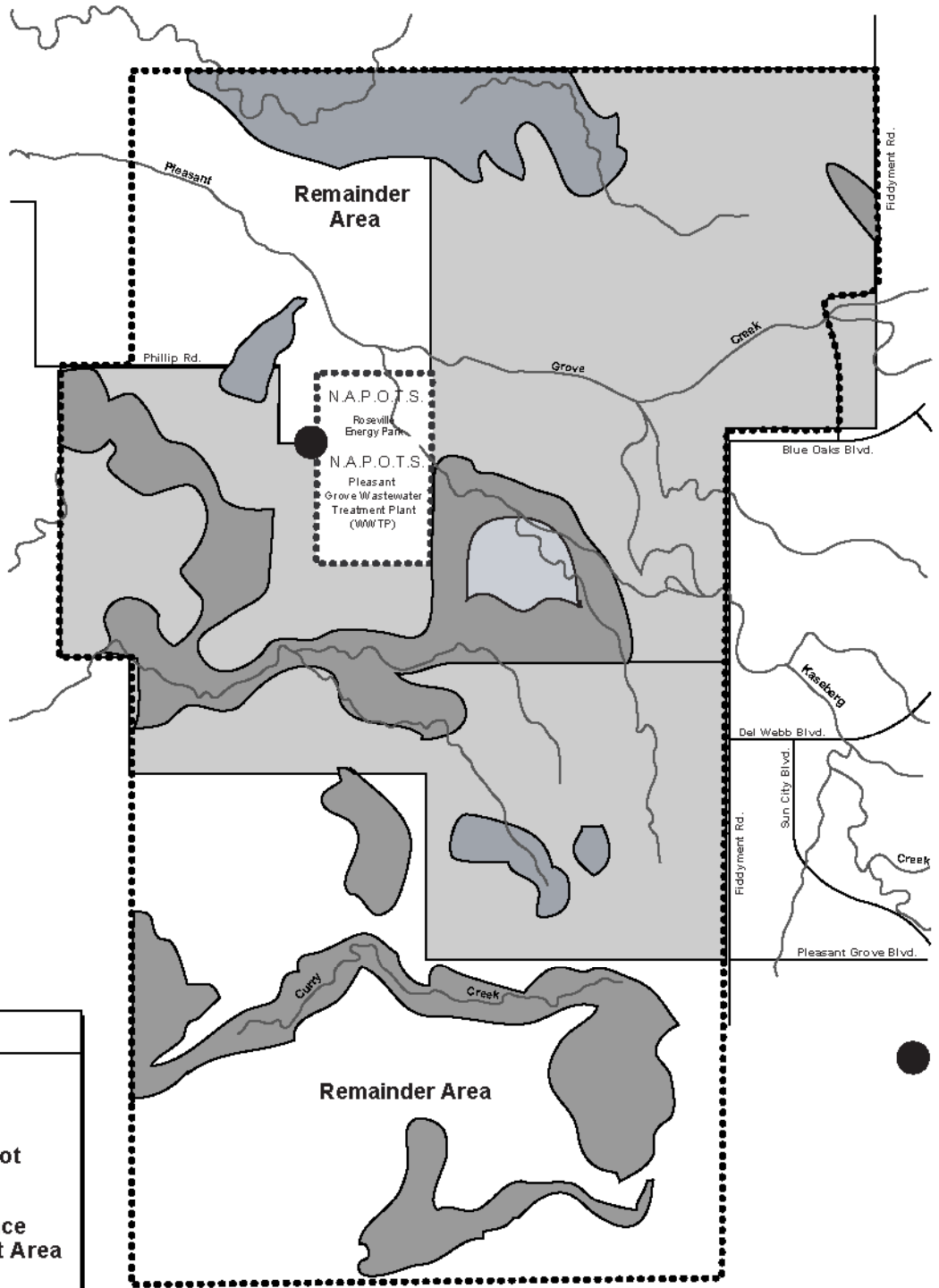
Surveys for special-status plant species have not been conducted in the Remainder Area. However, this area is similar to the WRSP Area, so it is likely to contain suitable habitat for these species in the habitats that are present there. Loss of special-status plant species would be a **significant impact**. MM 4.7-2 requires that surveys for special-status plants be conducted prior to any development in the Remainder Area. If no special-status plants are determined to be present in the Remainder Area, then no further mitigation would be required. However, if special-status plants are determined to be present in the area, then the project applicant shall ensure that no net loss of special-status plant species will occur. This measure, in addition to the FESA, would reduce the impact on special-status plant species to a **less-than-significant level**.

<b>IMPACT 4.7-4: LOSS OR DEGRADATION OF HABITAT FOR WESTERN SPADEFOOT , A SPECIAL-STATUS SPECIES.</b>		
<b>Applicable Policies and Regulations:</b>	Federal Endangered Species Act State Endangered Species Act California Fish and Game Code	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.7-1 (Ensure no net loss of wetlands); MM 4.7-4 (Relocate individual western spadefoots)	MM 4.7-2 (Wetland protection policies); MM 4.7-5 (Spadefoot protection policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant





Within the project area, potential habitat for the western spadefoot includes vernal pools, seasonal wetlands, and adjacent grassland habitat. Impacts on this species would occur as a result of the loss of vernal pools, seasonal wetlands, and grassland habitat due to grading or other ground disturbance related to development of the SOI Amendment Area. This species is a state and federal species of concern and is fully protected pursuant to the California Fish and Game Code.

**West Roseville Specific Plan**

Although this species was not observed on site during recent surveys of the proposed site, Figure 4.7-5, West Roseville Specific Plan Western Spadefoot Toad Habitat, shows the locations of highly reliable



**LEGEND**

-  West Roseville Specific Plan
-  Western Spadefoot Records
-  Sphere of Influence (SOI) Amendment Area
-  Potential Western Spadefoot Habitat
- N.A.P.O.T.S. Not A Part Of This Submittal**



10659-00

**FIGURE 4.7-5**  
**West Roseville Specific Plan Western Spadefoot Toad Habitat**

Source: EIP Associates, 2003

Not to Scale



City of Roseville

historic records that document the western spadefoot occurring within the WRSP Area<sup>145</sup> (refer to Figure 4.7-5). Furthermore, it highlights potential toad habitat within the WRSP Area. Because the western spadefoot has been sighted in the past, and suitable habitat occurs within the WRSP Area, it must be assumed that it could be present. Development on vernal pools, seasonal wetlands, and the adjacent habitat could result in the destruction of individual western spadefoot and/or its habitat. This would be considered a **significant impact**.

Compliance with CESA would reduce impacts associated with loss or degradation of habitat for western spadefoot, by regulating the take of state-endangered and state-threatened species and declaring that deserving species will be given protection by the State. In addition, compliance with FESA would reduce impacts associated with the loss or degradation of habitat for western spadefoot by requiring any project that would result in the take of any federally listed threatened or endangered species to obtain authorization from the USFWS.

Although suitable habitat exists for western spadefoot within the WRSP Area there is no standardized survey protocol for this species. The adults are very cryptic and difficult to find. However, surveys for vernal pool crustaceans are likely to pick up western spadefoot larvae if they have spawned in the given year that the surveys were conducted. MM 4.7-4 requires that the location of pools that are occupied by western spadefoot be determined through surveys conducted during the appropriate season (i.e., November through March when seasonal pools are inundated), by a qualified biologist. As no official western spadefoot survey protocol exists, the survey protocol shall be developed in consultation with CDFG. Those pools that are found to support western spadefoot shall be avoided wherever possible. If avoidance is not possible, then the CDFG shall be consulted to develop measures to capture any adult or larval western spadefoots, or western spadefoot egg masses, and relocate them to suitable unoccupied habitat that is approved by the CDFG. This measure will greatly enhance the survival rates of western spadefoots that are displaced during construction by relocating them to protected areas of unoccupied suitable habitat.

Additionally, implementation of MM 4.7-1, which includes preservation and protection of existing vernal pools, would protect individual western spadefoots by avoiding impacts on existing populations in areas that are designed as open space. Ensuring no net loss of wetlands would provide protection of potential habitat for western spadefoot by preserving or enhancing and protecting habitat that is capable of

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<sup>145</sup> CDFG Natural Diversity Database, July 2002

supporting this species. MM 4.7-1 and MM 4.7-4 would reduce this impact to a **less-than-significant level**.

**Remainder Area**

Potential habitat for western spadefoot also occurs in the Remainder Area. Future development would likely result in further impacts on this species, including the loss of vernal pools, seasonal wetlands and the adjacent grassland habitat due to grading or other ground disturbance, which would be a **significant impact**.

MM 4.7-5 requires that the location of pools that are occupied by western spadefoot be identified through surveys conducted during the appropriate season, by a qualified biologist and the subsequent formation of a CDFG approved relocation plan if avoidance of occupied habitat is not possible. This measure would greatly enhance, to the extent possible, the survival rates of western spadefoots that are displaced during construction by relocating them to areas of suitable unoccupied habitat.

In addition, preservation and protection of existing vernal pools, as required by MM 4.7-2, would protect individual western spadefoots by avoiding impacts on existing populations in areas that are designated as open space. Additionally, ensuring no net loss of wetlands would provide protection for potential habitat for western spadefoot by preserving or enhancing, and protecting potential habitat that is capable of supporting this species. Implementation of the above mitigation measures as well as compliance with the Federal and State Endangered Species Act would reduce the severity of this impact to a level that is **less than significant**.

<b>IMPACT 4.7-5: DISRUPTION OF SWAINSON'S HAWK, BURROWING OWL, AND OTHER LEGALLY PROTECTED RAPTORS.</b>		
<b>Applicable Policies and Regulations:</b>	State Endangered Species Act California Fish and Game Code Migratory Bird Treaty Act	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.7-6 (Avoid nesting sites)	MM 4.7-7 (Nest protection policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

Woodland and grassland habitats within the project area provide suitable nesting sites for legally protected raptor species, including Swainson’s hawk, burrowing owl, Cooper’s hawk, white-tailed kite, northern harrier, and ferruginous hawk among others. Disturbance resulting in active nest abandonment

or removal of an active nest or otherwise injuring, pursuing, or killing a Swainson's hawk, burrowing owl or other raptor would be prohibited under the Federal Migratory Bird Treaty Act, the California Endangered Species Act, and/or the California Department of Fish and Game Code.

**West Roseville Specific Plan**

Special-status species surveys in the WRSP Area have documented the presence of several legally protected raptor species, including Swainson's hawk, burrowing owl, Cooper's hawk, white-tailed kite, northern harrier, and ferruginous hawk. Woodland and grassland habitats in the WRSP Area provide suitable nesting sites for these species, among others. Two Swainson's hawk nests have been recorded in the riparian woodland along the Pleasant Grove Creek/Kaseberg Creek corridor, within one mile of the WRSP Area, and the oak and riparian woodlands in the WRSP Area provide suitable nesting habitat for many other legally protected raptor species. Additionally, three pairs of burrowing owls (and three single owls) have been observed in association with a series of ground squirrel burrow complexes in the grasslands near Phillip Road. Disturbance resulting in active nest abandonment, removal of an active nest or otherwise injuring, pursuing or killing a Swainson's hawk, burrowing owl or other raptor would be a **significant impact**.

Compliance with CESA would reduce impacts associated with the loss or degradation of habitat or disruption to Swainson's hawk, burrowing owl, and other legally protected raptors by regulating the take of state-endangered and state-threatened species and declaring that deserving species will be given protection by the State. In addition, compliance with the Migratory Bird Treaty Act would reduce impacts by prohibiting the take of any migratory bird listed, including nests, eggs or products, or the removal of any pertinent shrub or tree that could affect nesting.

To ensure that legally protected birds-of-prey are not taken during project construction, MM 4.7-6 requires that, when feasible, tree removals, or excavation near potential burrowing owl burrows occur during the period when these species are not nesting (September through February). If removal of trees or excavation near potential burrowing owl burrows during the nesting season is unavoidable, pre-construction raptor nest/burrowing owl surveys shall be conducted to determine whether or not legally protected raptor nests are present in trees designated for removal, or in areas slated for grading or other excavation. In the event that nests are present, appropriate protocols shall be developed in consultation with CDFG and followed during the removal or relocation of those nests. Implementation of these measures would reduce impacts on the nesting raptors to a **less-than-significant level** by preventing disturbance that would cause nest abandonment and subsequent loss of their young.

### Remainder Area

Potentially suitable habitat for legally protected raptor species exists within the Remainder Area. Disturbance resulting in active nest abandonment, removal of an active nest or otherwise injuring, pursuing or killing a Swainson’s hawk, burrowing owl or other raptor would be a **significant impact**. However, similar to the WRSP, compliance with the State Endangered Species Act, CDFG code, and the Migratory Bird Treaty Act would be required. MM 4.7-7 requires that surveys for special-status and other legally protected raptors be conducted, and if special-status or other legally protected raptors are determined to have active nests in the area, then a mitigation program that incorporates the protective measures set form in MM 4.7-6 must be developed in consultation with CDFG. Implementation of MM 4.7-7 would reduce impacts on the nesting raptors to a **less-than-significant level** by preventing disturbance that would cause nest abandonment and subsequent loss of young.

<b>IMPACT 4.7-6: LOSS OF GRASSLAND HABITAT.</b>	
<b>Applicable Policies and Regulations:</b>	California Endangered Species Act California Environmental Quality Act
	<b>WRSP</b> <span style="float: right;"><b>Remainder Area</b></span>
<b>Significance with Policies and Regulations:</b>	Significant <span style="float: right;">Significant</span>
<b>Mitigation Measures:</b>	MM 4.7-8 (Off-site and on-site preservation of lost grassland habitat) <span style="float: right;">MM 4.7-9 (Swainson’s hawk habitat policies)</span>
<b>Significance after Mitigation:</b>	Less Than Significant <span style="float: right;">Less Than Significant</span>

Annual grassland habitat occurs throughout the project area as either a distinct habitat, or as an understory to the woodland habitats. These grasslands provide important foraging habitat for special-status and other legally protected raptors including Swainson’s hawk, and a wide variety of other wildlife species that are known to occur in the region. CDFG considers the loss of foraging habitat for Swainson’s hawk (which includes grasslands and certain agricultural croplands such as alfalfa) from within 10 miles of an active Swainson’s hawk nest site, and the loss of foraging habitat within 500 feet of active burrowing owl nests, to be detrimental to the breeding success of these species. This habitat is also used by a number of other predatory bird species such as red-tailed hawk, white-tailed kite, loggerhead shrike, and a wide variety of other wildlife species.

### **West Roseville Specific Plan**

Implementation of the WRSP would result in the loss of an estimated 2204.6 acres<sup>146</sup> of grassland habitat through grading and conversion to various urban land uses. Approximately 604.8 acres of the WRSP Area lie within 1 mile of active Swainson's hawk nests, and 1599.8 acres lies within 5 miles of these nests. Of the 604.8 acres of Swainson's hawk foraging habitat present in the WRSP Area from within one mile of an active nest site, 78.06 acres will remain in open space, leaving 526.74 acres that will be lost to development activities. Of the 1599.8 acres of Swainson's hawk foraging habitat that are present in the WRSP Area from within 1 to 5 miles of an active nest site (i.e., the remainder of the habitat at the site), 567.79 acres will remain in open space preserve, leaving 1032.01 acres to be lost to development. Due to the potential negative effects that loss of foraging habitat could have on nesting Swainson's hawk and burrowing owl, this impact would be considered **significant**.

Compliance with the requirements set forth in CEQA would reduce impacts associated with the loss of grassland habitat and substantial interference with the movement of resident and migratory species by requiring that grassland habitat is preserved or replaced and that crossings of stream corridors are designed such that they do not impede the passage of wildlife. In addition, compliance with CESA would reduce impacts associated with the loss of grassland habitat by regulating one take of state-endangered and state-threatened species and declaring that deserving species will be given protection by the State. Implementation of MM 4.7-8 would further reduce the severity of this impact to a level that is **less than significant** by providing protection for a quantity of similar habitat in southwestern Placer County (see Figure 4.7-4), in perpetuity, elsewhere in the region according to a CDFG-established mitigation formula.

### **Remainder Area**

Approximately 2,314 acres<sup>147</sup> of annual grassland occurs within the Remainder Area. Approximately 42 acres of the Remainder Area lie within 1 mile of active Swainson's hawk nests. Approximately 2,314 acres of the Remainder Area (2,314 acres) lie within 5 miles of these nests. Loss of this habitat would be a **significant impact**. However, similar to the WRSP, compliance with CEQA and the CESA would be required, which would reduce impacts to grassland. In addition, MM 4.7-9 would reduce the severity of this impact to a level that is **less than significant** by providing protection for similar habitat in perpetuity.

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<sup>146</sup> West Roseville Specific Plan—Swainson's Hawk Mitigation, Memorandum dated June 2, 2003, ECORP Consulting, Inc.

<sup>147</sup> West Roseville Specific Plan—Swainson's Hawk Mitigation, Memorandum dated February 3, 2003, ECORP Consulting, Inc.

<b>IMPACT 4.7-7: SUBSTANTIAL INTERFERENCE WITH THE MOVEMENT OF RESIDENT AND MIGRATORY WILDLIFE SPECIES.</b>	
<b>Applicable Policies and Regulations:</b>	California Environmental Quality Act Section 1600 of the California Fish and Game Code City Floodplain Development Regulations City Improvement Standards NPDES Requirements
	<b>WRSP</b> <span style="float: right;"><b>Remainder Area</b></span>
<b>Significance with Policies and Regulations:</b>	Significant <span style="float: right;">Significant</span>
<b>Mitigation Measures:</b>	MM 4.7-10 (Stream protection policies); MM 4.13-1(d) (Avoid light spill over into riparian habitat); MM 4.7-13(d) (Riparian habitat policies) <span style="float: right;">MM 4.7-11 (Stream protection policies); MM 4.13-1(d) (Avoid light spill over riparian habitat); MM 4.7-13(d) (Riparian habitat policies)</span>
<b>Significance after Mitigation:</b>	Less Than Significant <span style="float: right;">Less Than Significant</span>

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open-space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open-space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, would not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information. Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, or searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as “wildlife corridor,” “travel route,” “habitat linkage,” and “wildlife crossing” to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion of wildlife movement in this analysis, these terms are defined as follows:

- **Travel Route**—A landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is

generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover while moving between habitat areas and provides a relatively direct link between target habitat areas.

- **Wildlife Corridor**—A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat or landscape linkages”) can provide both transitory and resident habitat for a variety of species.
- **Wildlife Crossing**—A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent “choke points” along a movement corridor.

Within a large, open-space area in which there are few or no manmade or naturally occurring physical constraints to wildlife movement, wildlife corridors, as defined above, may not yet exist. Given an open-space area that is both large enough to maintain viable populations of species and provide a variety of travel routes (canyons, ridgelines, trails, riverbeds, and others), wildlife would use these “local” routes while searching for food, water, shelter, and mates, and would not need to cross into other large open space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source areas for food, water, and cover, particularly for small- and medium-size animals. This is especially true if the travel route is within larger open-space areas. However, once open-space areas become constrained and/or fragmented as a result of urban development or construction of physical obstacles, such as roads and highways, the remaining landscape features or travel routes that connect the larger open-space areas can “become” corridors as long as they provide adequate space, cover, food, and water, and do not contain obstacles or distractions (e.g., manmade noise, lighting) that would generally hinder wildlife movement.

The SOI Amendment area is traversed by three major stream corridors (Pleasant Grove Creek, Kaseberg Creek, and Curry Creek) and their associated tributaries. With the exception of the riparian channels, the site contains no distinctive landscape features that would be significantly different from, or more attractive as, movement corridors than those found in the surrounding landscape. Thus, the site is not expected to currently function as an important regional wildlife corridor or wildlife crossing because habitat similar to what is on-site is fairly common within the surrounding area. However, development of the SOI Amendment Area could impede the movement of wildlife by disturbing and/or blocking local

movement corridors such as the riparian strips that run through the site, that most-likely act as local travel routes. Additionally, those species that would normally use the grasslands as foraging area would not easily move across the future urbanized landscapes proposed for the site. They would then be restricted to the remaining areas of designated open space such as the streams and associated riparian channels. Thus, as a result of the project, these stream/riparian areas could “become” wildlife corridors through the urbanized landscape. Construction of stream crossings and other activities, as well as the introduction of artificial light, would alter the corridors and disturb the wildlife using them. The potential loss of local travel routes, and the potential future restriction of movement through the site via impacts to the stream/riparian open space corridor, are discussed below for each area.

### **West Roseville Specific Plan**

Implementation of the WRSP could impede the movement of wildlife through the WRSP Area. As discussed above, those wildlife species that are adapted to live in grasslands and woodlands, or that move between isolated pockets of water, would not easily move across the future urbanized landscapes and would be relocated to, or concentrate their movements within the remaining open space, including the riparian/stream corridors.

Due to the type of habitat that exists on the WRSP Area, the only wildlife migratory or movement corridors that exist are the corridors along Pleasant Grove Creek, Kaseberg Creek, and the Curry Creek drainage, shown in Figure 4.7-2. The WRSP provides for an open space corridor along these drainages, which would allow free access through the site along Pleasant Grove Creek and Kaseberg Creek. However, the construction of the proposed weir across Curry Creek and a series of four culverts and four bridges for road crossings over Pleasant Grove Creek, Kaseberg Creek, and their unnamed tributaries could create barriers that could prevent wildlife passage along these corridors. Erosion and runoff during construction of these facilities would be controlled by best management practices (BMPs) as required by the City’s Improvement Standards and NPDES General Permit (refer to Impact 4.12-4 in Section 4.12 Hydrology, Water Quality, and Groundwater). Nonetheless, alterations to the flow, bed, channel, or bank of any streams in the project area as a result of project improvements would affect the ability of the creek(s) to provide habitat for the wildlife species that depend upon them for feeding, cover, and nesting and thus could result in a loss of that habitat. Outdoor lighting can also have a negative effect on wildlife by interfering with nocturnal movement and causing disorientation, making individuals more vulnerable to predation or making it more difficult for them to capture prey. Passive recreational use along nature or bicycle trails may also have indirect impacts such as interfering with foraging, breeding, or movement. These impacts would be considered **significant**.

Compliance with the requirements set forth in CEQA would reduce impacts associated with the loss of grassland habitat and substantial interference with the movement of resident and migratory species by requiring that grassland habitat is preserved or replaced and that crossings of stream corridors are designed such that they do not impede the passage of wildlife. In addition, the City Floodplain Development Regulations would reduce impacts associated with floodplains, stream channels, and natural protective barriers.

Implementation of MM 4.7-10 would require the use of either bridges or culverts that are large enough that wildlife have enough space to pass through these road crossings without having travel over the road surface. MM 4.7-10 requires that the project applicant obtain a Section 1600 Streambed Alteration Agreement from the CDFG prior to any construction activities that could affect stream corridors. Specific measures would be developed during discussions with the CDFG, but may include measures such as using bridges instead of culverts, use of erosion control and bank stabilization measures, and restoration of stream corridor habitat that has been damaged due to the project's construction. In addition, MM 4.13-1(d) and 4.7-13(d) require that outdoor lighting be placed, designed, and directed to avoid spillover light into the riparian habitat of Pleasant Grove Creek, Kaseberg Creek, Curry Creek, and open space preserve areas. (Refer to Section 4.13 Aesthetics and Visual Resources for a detailed discussion of MM 4.13-1(d)). These measures would reduce the severity of this impact to a level that is **less than significant** through the maintenance of a clear corridor along Pleasant Grove Creek, Kaseberg Creek and their unnamed tributaries.

### **Remainder Area**

Due to the type of habitat existing in the Remainder Area, potential significant wildlife movement corridors would be limited to Pleasant Grove Creek in the northern portion of the Remainder Area, and along Curry Creek in the southern portion of the Remainder Area. The City would require that these streams and their floodplains remain in open space in perpetuity, under some form or easement or other deed restriction, so these potentially significant corridors would be protected. However, the construction of new development is likely to require new creek crossings over Pleasant Grove Creek and Curry Creek, and their unnamed tributaries. Construction of berms, bridges, culverts or other activities that intrude upon the floodplain of these stream corridors would alter those corridors, affecting the ability of the creek(s) to provide habitat for the wildlife species that depend upon them for feeding, cover and nesting and thus could result in a loss of that habitat. As discussed above, night lighting would also affect wildlife. These impacts would be considered **significant**.

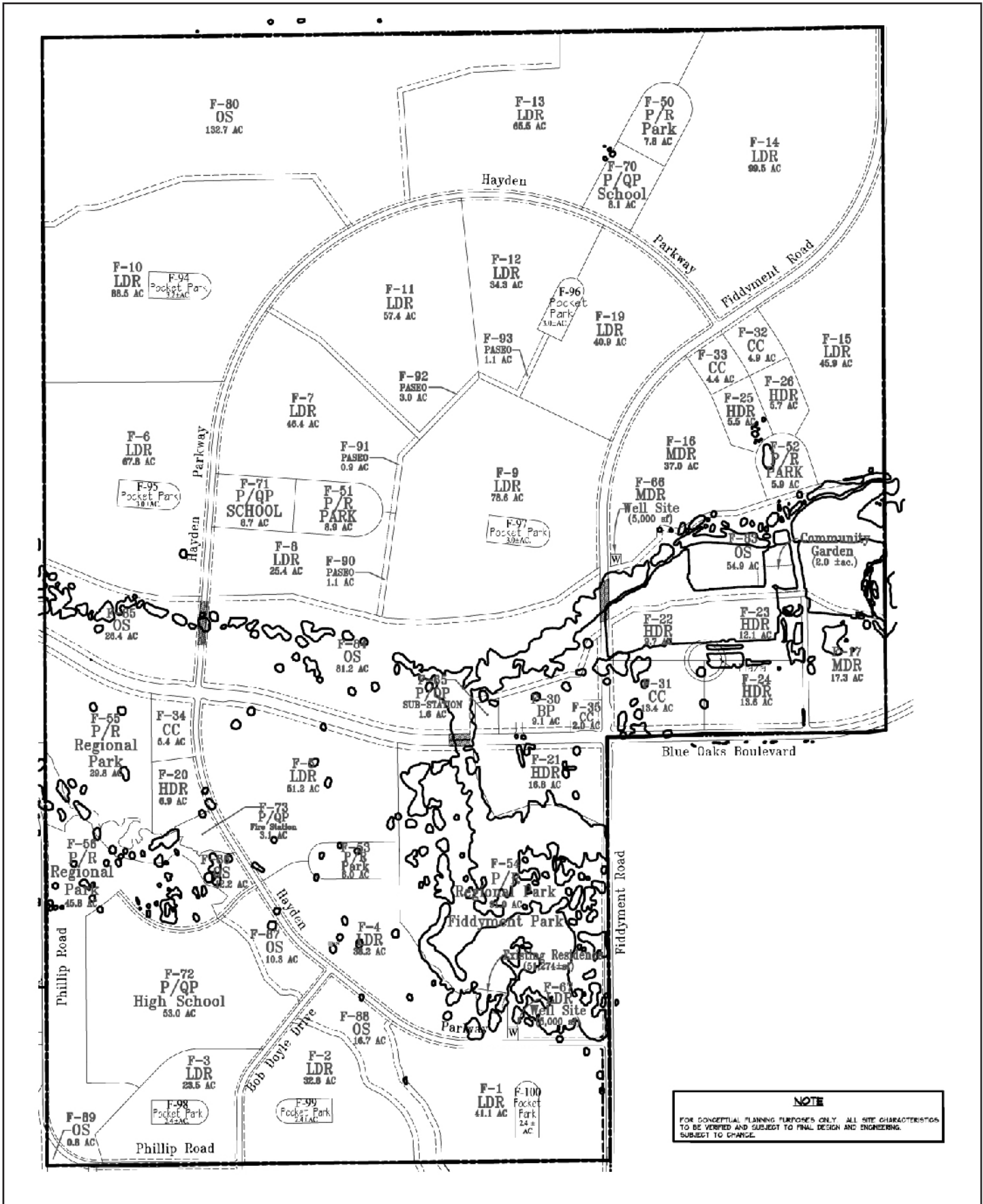
Requirements set forth under CEQA and the City Floodplain Development Regulations would reduce impacts associated with the movement of species by controlling the alteration of habitat areas, such as

grassland stream corridors, and floodplains. MM 4.7-11 provides for the development of stream protection policies, primarily through the Section 1600 Streambed Alteration Agreement process. Specific measures would be developed during discussions with the CDFG, but may include using bridges instead of culverts, use of erosion control and bank stabilization measures, and restoration of stream corridor habitat that has been damaged due to the project construction. In addition, MM 4.7-13(d) and MM 4.13-1(d) (refer to Section 4.13, Aesthetics and Visual Resources) would ensure that outdoor lighting does not spill over into creeks or open space preserves. These mitigation measure would reduce impacts on stream bed habitat in the Remainder Area by ensuring that stream corridors are protected against alterations that affect their ability to provide habitat for the wildlife species that depend upon them for feeding, cover, and nesting. Therefore, this would be a **less-than-significant impact**.

<b>IMPACT 4.7-8: LOSS OF OAK TREES OF GREATER THAN 6 INCHES DBH.</b>		
<b>Applicable Policies and Regulations:</b>	Tree Preservation chapter of the Roseville Zoning Ordinance	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Short-term: Significant; Long-term: Less Than Significant	Short-term: Significant; Long-term: Less Than Significant
<b>Mitigation Measures:</b>	None available	None available
<b>Significance after Mitigation:</b>	Short-term: Significant and Unavoidable; Long-term: Less Than Significant	Short-term: Significant and Unavoidable; Long-term: Less Than Significant

Oak trees are a highly important biological resource because they support a diverse community of insects and wildlife in both their overstory (branches and leaves) and in their understory (grasses, brush, and limbs on the ground under the tree). Oak woodlands have been reduced in California to an extent that the loss of any oak trees must be considered a substantial loss of habitat for a number of native wildlife species. The City of Roseville has recognized the importance of the preservation and enhancement of oak woodlands by implementing the Tree Preservation Chapter of the Roseville Zoning Ordinance, which protects oak trees. Because oak trees take a relatively long time to reach a large size (>100 years) it is nearly impossible to replace the biological habitat value of a mature oak tree by planting numerous small, young oak saplings. An old oak tree provides much better habitat than an equivalent (by trunk diameter) number of young oaks. Figure 4.7-6, Oak Tree Locations, shows the locations of on-site oak woodlands.

Oak trees in the floodplain would be protected from development. However, oak trees outside of the floodplain could be removed. The City’s Zoning Ordinance (Tree Preservation Chapter) would ensure that, oak trees removed for development would be replaced.



**NOTE**  
 FOR CONCEPTUAL PLANNING PURPOSES ONLY. ALL SITE CHARACTERISTICS TO BE VERIFIED AND SUBJECT TO FINAL DESIGN AND ENGINEERING. SUBJECT TO CHANGE.



**FIGURE 4.7-6**  
**Oak Woodland Locations**

Source: Wood Rodgers, 2003

Not to Scale



City of Roseville

10659-00

Through implementation of the City's Tree Preservation Regulation, the long-term impact of the loss of native oaks over 6 inches dbh would be **less-than-significant**. However, the loss of oak trees would be a **short-term significant and unavoidable impact** because of the time needed for replacement trees to mature.

### **West Roseville Specific Plan**

The WRSP proposes to minimize losses of oak trees by designating approximately 685 acres of the WRSP Area in open space preserves. These open space preserves would be located primarily along Pleasant Grove Creek and Kaseberg Creek where the greatest concentration of native oaks occurs. In addition, Fiddyment Park provides protection for a dense grove of existing oak trees. Therefore, the majority of the native oak trees at the site would be preserved. However, some removal of oak trees would be necessary to accommodate building footprints, roadways and other project related facilities in the northern section of the WRSP. It is estimated that the total loss of oak trees as a result of grading for residential and commercial development and infrastructure could be as high as 325 trees, or 5,812 inches. The Tree Preservation Chapter of the City's Zoning Ordinance requires the replacement of native oak trees with a dbh of 6 inches or greater that are lost as a result of development activities on an inch for inch basis. This tree replacement can be accomplished through planting of new trees on an inch for inch basis using the required number of fifteen (15) gallon sized native oak trees, or by paying an in-lieu mitigation fee that is based upon the required number of fifteen gallon sized trees, in either the Native Oak Tree Propagation Fund, or the Nonnative Tree Fund as described in Section 19.66.070—Oak Tree Planting and Replacement Program. At this time, the applicant proposes to plant oak trees in several areas along Pleasant Grove Creek. As shown in Figure 4.7-7, Oak Tree Mitigation Areas, approximately 45.6 acres would be planted, with 150 trees per acre, or 6,840 total trees (refer to Figure 4.7-7). In the long-term, the replacement trees would mature and replace the value of the trees that were lost. However, the replacement trees will not mature for many years, so in the short-term they would not provide the wildlife habitat or aesthetic value that existing mature trees do. Therefore, the loss of oak trees would be a **short-term significant and unavoidable impact**, but a **long-term less-than-significant impact**.

### **Remainder Area**

Surveys to identify numbers and locations of native oak trees have not been conducted for the Remainder Area. However, information gathered during a review of aerial photography of the Remainder Area and through reconnaissance level visits to the site indicates that trees of any kind are limited largely to the Pleasant Grove Creek corridor, and possibly the Curry Creek corridor. Most of the Remainder Area is composed of annual grassland that contains no trees at all. Future development

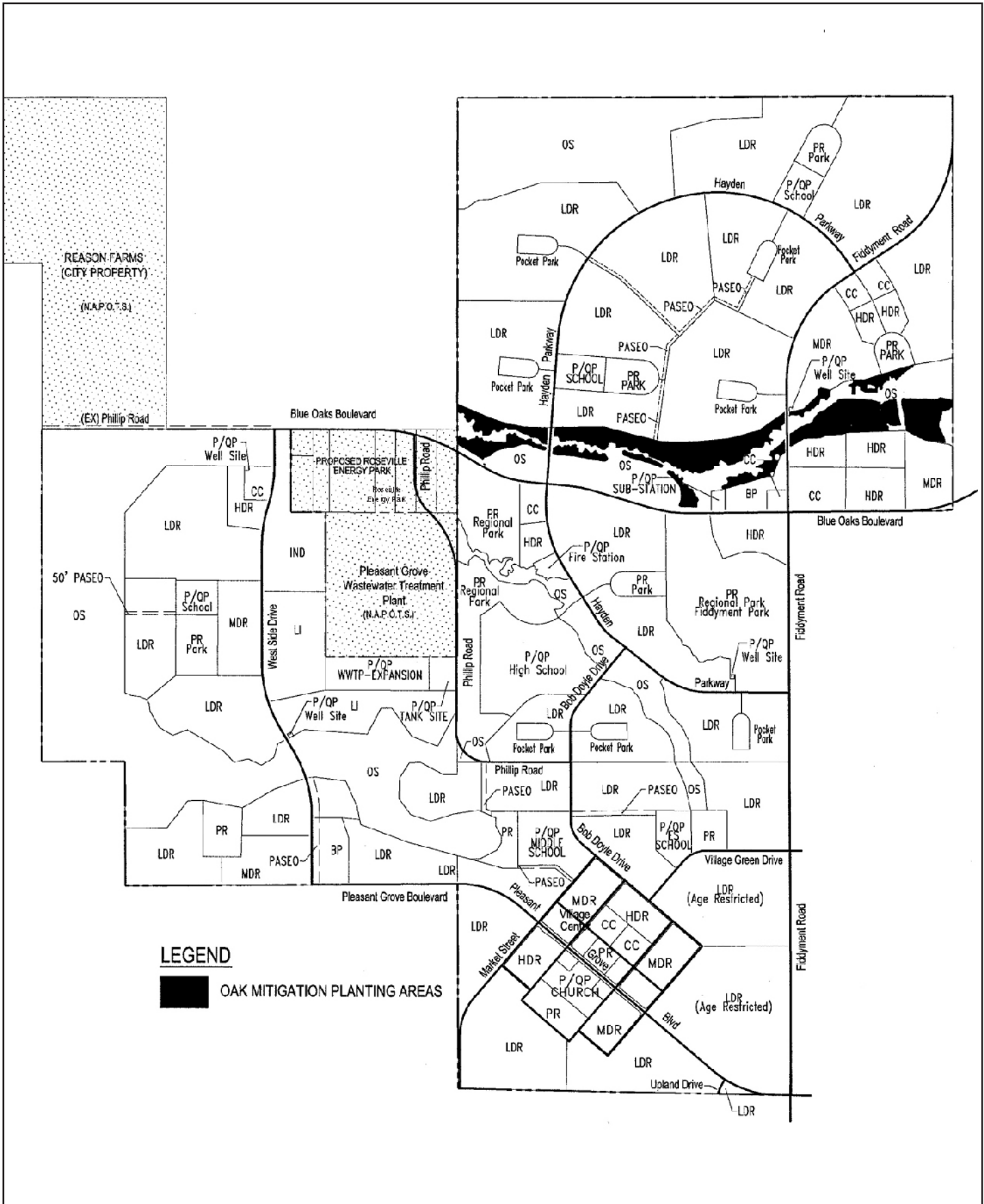


FIGURE 4.7-7  
Oak Tree Mitigation Areas

Not to Scale



10659-00

Source: Wood Rodgers, 2003

City of Roseville



would be required to comply with requirements for the designation of open space lands along natural stream courses. It is likely that most trees would be protected by buffer zones as dictated by the above regulations. At the least some trees would likely need to be removed for stream crossing and other infrastructure. If the Remainder Area is eventually annexed to the City of Roseville, the project applicant would be required to comply with the Tree Preservation Chapter of the Roseville Zoning Ordinance. According to the California Department of Fish and Game, “the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.” The transition between riparian vegetation and adjacent vegetation communities is usually abrupt and easily discernible, and is characterized by a decline in the canopy cover of riparian-associated woody shrubs and trees such as willows and cottonwoods, and an increase in herbaceous vegetation. CDFG generally recommends a riparian corridor setback of 100-feet or greater in order to protect stream channels and habitat.

<b>IMPACT 4.7-9: LOSS OF RIPARIAN HABITAT.</b>		
<b>Applicable Policies and Regulations:</b>	City floodplain regulations Section 1600 of the California Fish and Game Code	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.7-12 (Buffer zones or barriers); MM 4.7-13 (Buffer policies)	MM 4.7-12 (Buffer zones or barriers); MM 4.7-13 (Buffer policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

As currently proposed, implementation of the proposed project would result in development that would occur within riparian habitat and stream corridors along some portions of Pleasant Grove Creek and other drainages. Some portions of the proposed project are located entirely within the riparian buffer area. This proximity presents the possibility of direct and secondary effects to the habitat due to removal of riparian habitat and/or spillover of human intrusion. Deterioration of riparian habitat could result from construction activities, intrusion of lighting, non-native invasive plant species, domestic animals, or human activity (i.e., jogging, walking, biking) into or along the riparian corridor. Trampling of riverbanks could occur when people descend or climb the banks. Increased trampling would remove vegetation directly or indirectly by causing soil compaction or erosion. Increased human recreational and residential uses could result in an increase in domestic animals, which could impact native wildlife by reducing habitat suitability and by increasing wildlife mortality. These impacts could also occur during construction of the proposed project in the vicinity of this area.

### **West Roseville Specific Plan**

Implementation of the WSRP could result in the loss of riparian habitat in areas where proposed development is placed adjacent to the edge of riparian habitat. This loss of habitat would occur either directly during the ground disturbance related to the construction of the proposed project, or indirectly through illegal dumping, traffic, noise, glare and increased pedestrian and domestic animal access. This impact would be considered **significant**.

Implementation of sections 1600-1607 would reduce impacts associated with the blocking or degradation of stream corridors by regulating activities that would alter the flow, bed, channel, or bank of streams and lakes. Additionally, implementation of Chapter 9.80 of the Zoning Ordinance would control the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters. In addition, regulations would control fill, grading, dredging, and other development, which may increase flood damage.

MM 4.7-12 and MM 4.7-13 would reduce the severity of this impact to a level that is **less than significant** by requiring a minimum setback be maintained and through the maintenance of riparian habitat buffer zones along Pleasant Grove Creek, and Kaseberg Creek, and the implementation of riparian habitat protection policies.

### **Remainder Area**

Riparian habitat in the Remainder Area only occurs along the Pleasant Grove Creek corridor in the northern portion of the Remainder Area. The City and CDFG would require that this corridor remain in open space because it is floodplain, so this potentially significant habitat would be protected. However, new development could occur adjacent to this sensitive habitat. Lack of an appropriate buffer zone between existing riparian habitat and development could result in loss of habitat that would occur either directly during the ground disturbance related to the construction of the proposed project, or indirectly through illegal dumping, traffic, noise, glare and increased pedestrian and domestic animal access. This impact would be considered **significant**.

Design of future projects shall require the use of buffer zones that comply with City of Roseville policies, between all development and the edge of riparian habitat. MM 4.7-12 and MM 4.7-13 would reduce this impact to a **less-than-significant level** by requiring the use of buffer zones or barriers to protect riparian habitat and the resident wildlife from loss or degradation resulting from the development of adjacent lands, and the implementation of riparian protection policies.

<b>IMPACT 4.7-10: LOSS OF BIOLOGICAL RESOURCES DUE TO CONSTRUCTION OF OFF-SITE INFRASTRUCTURE.</b>		
<b>Applicable Policies and Regulations:</b>	None Applicable	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.7-1 (Ensure no net loss of wetland); MM 4.7-4 (Relocate individual western spadefoots); MM 4.7-6 (Avoid nesting sites); MM 4.7-8 (Off-site and on-site preservation of lost grassland habitat); MM 4.7-10 (Protect stream corridors); and MM 4.7-14 (Conduct appropriate surveys)	MM 4.7-2 (Wetlands protection policies); MM 4.7-3 (Vernal pool crustacean policies); MM 4.7-5 (Spadefoot protection policies); MM 4.7-7 (Nest protection policies); MM 4.7-9 (Swainson's hawk habitat policies); MM 4.7-11 (Stream protection policies); and MM 4.7-15 (Off-site survey policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

Development of the SOI project area would require infrastructure improvements outside of the SOI Amendment Area, such as extension of roadways; water, wastewater, and recycled water infrastructure; and electric and natural gas lines.

Preliminary surveys done by ECORP Consulting, Inc.<sup>148</sup> indicate that potential impacts from these activities include both direct and indirect impacts to

- Special status species, including state and federally threatened and endangered species
- Wetland and vernal pool habitat
- Oak trees
- Stream and riparian habitat

Although no formal focused surveys or wetland delineation have been performed within the Off-site Improvement Areas, preliminary field work indicated that approximately 6.60 acres of wetlands (including vernal pools and wet swales), 4.5 acres of ephemeral drainages, numerous oak trees, and habitat that is appropriate for up to 16 special status species occurs within the areas proposed for off-site improvements. Potential impacts are discussed below.

<sup>148</sup> Initial assessment of WSRP off-site improvements, ECORP Consulting Inc., August 22, 2003

**West Roseville Specific Plan**

Development of the WRSP would require infrastructure improvements outside of the WRSP Area, such as extension of roadways; water, wastewater, and recycled water infrastructure; and electric and natural gas lines. The off-site infrastructure would also require the construction of bridges and/or culverts to accommodate new or improved (i.e., widened) roadways. These improvements include the widening of Pleasant Grove Boulevard, which will require the construction of a bridge over the southern branch of Pleasant Grove Creek, east of Sun City Boulevard, a new bridge on Blue Oaks Boulevard over Coyote Creek, and another new bridge constructed on Blue Oaks Boulevard across the south branch of Pleasant Grove Creek west of Crocker Ranch Road (refer to Figure 2-12a, Off-Site Improvements (1 of 2), and Figure 2-12b, Off-Site Improvements (2 of 2), in Chapter 2 [Project Description]).

Other roadways that would be subject to off-site improvements include Pleasant Grove Boulevard between Woodcreek Oaks Boulevard and Fiddymment Road, Blue Oaks Boulevard and Phillip Road near their intersection with each other, Blue Oaks Boulevard between Fiddymment Road and Crocker Ranch Road, and Blue Oaks Boulevard between Woodcreek Oaks Boulevard and Foothills Boulevard. Construction of these road improvements would result in the loss of special-status species or their habitat. Although these resources have not yet been quantified in relation to the proposed impact area, preliminary surveys of these sites have documented the presence of wetlands including vernal pools, seasonal wetlands, ephemeral streams and marshes, native and heritage oak trees, and foraging habitat for Swainson's hawk and other protected raptor species.

In addition to the proposed off-site road improvements, there would be off-site power line easements that would extend south and east/west in the Remainder Area from the WRSP Area (refer to Figure 2 11, West Roseville Specific Plan Electric Substation and 60kV Powerline Easement). An aerial photograph study and preliminary survey of the proposed alignment has revealed the presence of up to one acre of seasonal wetlands that could include vernal pools, up to 3.5 acres of ephemeral drainages and an undetermined amount of foraging habitat for Swainson's hawk and other protected raptors. Construction and installation of these off-site improvements would be considered a significant impact.

MM 4.7-14 requires that surveys be conducted by qualified biologists prior to the construction of the off-site infrastructure facilities. The purpose of these surveys will be to determine the presence or absence of sensitive biological resources in areas that would be disturbed. If such resources are discovered, then appropriate mitigation measures as described in this document shall be extended to the off-site infrastructure areas (MM 4.7-1, MM 4.7-4, MM 4.7-6, MM 4.7-8, and MM 4.7-10). These measures would ensure that impacts on special-status species or their habitat that occur within the off-site infrastructure

areas would be reduced to a **less-than-significant level**, by requiring appropriate surveys and measures (including appropriate permits) to ensure protection and/or no net loss of such resources.

**Remainder Area**

Development of the Remainder Area would require infrastructure improvements outside of the Remainder Area, including diversion of water from the Sacramento River, extension of a north/south arterial from the Sacramento County Terminus at Baseline Road to West Side Drive, drainage improvements, and electrical, water, and sewer lines. Construction and installation of these off-site improvements could destroy special-status species and/or degrade or destroy their habitat. This would be a **significant impact**.

MM 4.7-15 requires that formal surveys be conducted by qualified biologists prior to the construction of the off-site infrastructure facilities. The purpose of these surveys would be to determine the presence or absence of sensitive biological resources in areas that will be disturbed. If such resources are discovered, then appropriate mitigation measures described throughout this section shall be extended to the off-site infrastructure areas (MM 4.7-2, MM 4.7-3, MM 4.7-5, MM 4.7-7, MM 4.7-9, and MM 4.7-11). This measure would ensure that impacts to special-status species or their habitat that occur within the off-site infrastructure areas would be **less than significant**, by requiring appropriate surveys and measures, including appropriate permits for and protection of such resources, and no net loss of habitat.

<b>IMPACT 4.7-11: CHANGES IN GENERAL PLAN POLICIES REGARDING FLOOD CONTROL FACILITIES IN OPEN SPACE.</b>		
<b>Applicable Policies and Regulations:</b>	City of Roseville General Plan	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**West Roseville Specific Plan/Remainder Area**

Implementation of the proposed project, including a revision to the General Plan to add a new Open Space System Policy 10 (refer to Chapter 2 Project Description) would allow flood control facilities to be considered in open space areas, such as the detention basins proposed for Curry Creek. Such facilities could destroy or degrade habitat during grading and other ground disturbance. Impacts that could occur

include loss of wetlands, loss of special-status species habitat, and alteration of wetland/stream corridor hydrology.

Flood control facilities are not prohibited in open space areas under the current General Plan, so Policy 10 would not allow for a new form of habitat disturbance. Instead, the proposed policy makes explicit the ability to place such facilities in open space, and provides direction to use such facilities for compatible passive recreational use and resource preservation. Furthermore, any such facilities would be subject to environmental review and state and federal regulations, including the Federal Endangered Species Act (ESA), the California ESA, Sections 404 and 401 of the Clean Water Act and Section 1600 of the CDFG Code. The detention basins in Curry Creek have been included in the 404 permit application for the WRSP. Revisions to the City of Roseville General Plan that are a part of this project would not change these requirements. Therefore, impacts on biological resources that would result from the implementation of the revisions and additions to the City of Roseville’s General Plan Policy would be considered **less than significant**.

<b>IMPACT 4.7-12:</b>	<b>CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL CONSERVATION COMMUNITY PLAN, OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN.</b>	
<b>Applicable Policies and Regulations:</b>	Section 10(a)(2)(A) of the Engendered Species Act (HCP), California Fish and Game Code 2800-2840 (NCCP), and City/USFWS MOU	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	No Impact	No Impact
<b>Mitigation Measures:</b>	None Required	None Required
<b>Significance after Mitigation:</b>	No Impact	No Impact

**West Roseville Specific Plan/Remainder Area**

The NCCP program is a cooperative effort between the CDFG, and numerous private and public partners. Its goal is to apply a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity in an effort to protect habitats and species. The program, which began in 1991 under the State’s Natural Community Conservation Planning Act, is designed to identify and protect individual species that have already declined in number significantly. The primary objective of the NCCP program is to conserve natural communities at the ecosystem scale while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species’ listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process. The federal equivalent to this program is the Habitat Conservation

Plan, or HCP. HCPs resulted from 1982 amendments to the Endangered Species Act that stated that, as a condition of obtaining an "incidental take" permit (which allows the "take" of endangered species), the applicant must prepare a HCP which specifies, among other things, the actions the applicant will take to minimize and mitigate any adverse impacts to the species and available funding to implement these measures. This permit will be issued if the Secretary of Commerce or the Interior finds that the impacts to the species have been minimized and mitigated to the "maximum extent practicable," that the anticipated take will not jeopardize the species' continued existence, and that funding will be sufficient to implement the HCP.

In May 2000, the City and the U.S. Fish and Wildlife Service (USFWS) entered into a MOU to prepare a Habitat Conservation Plan (HCP) or equivalent. The purpose of the MOU was to minimize the indirect impact of incidental take of vernal pool species resulting from future City growth served by the then under construction regional PGWWTP. To accomplish this, the MOU commits the City to development of an "interim conservation strategy" to address City development that would be served by Phase I treatment plant operation (i.e., the initial capacity of 12 million gallon per day) and a HCP or equivalent for future City development served by Phase II operation (expansion beyond the initial 12 million gallons per day). At the time the MOU was signed, the planning area was restricted to existing City boundaries. However section 2.1 of the MOU recognizes that City boundaries may change in the foreseeable future to include lands annexed through an agreement with Placer County, in which case those annexed areas are intended to be incorporated into the "planning area" covered by the MOU.

As part of advancing the development of an interim strategy, consistent with the MOU, the City worked with the USFWS to assess the status of remaining vernal pool resources within the City. This included several mapping tasks to identify current development trends and remaining vernal pool resources. Based on the information gained through the mapping effort and ongoing dialog and written communication between City and USFWS staff, the USFWS concurred that nearly all remaining undeveloped land containing vernal pools had received federal permits for development through the Clean Water Act 404 process and, therefore, preparation of an HCP or equivalent to address remaining City development would not be necessary. The USFWS further determined that the conservation strategy could be developed and approved through the Section 7 consultation process in the context of permitting pursuant to Section 404 of the Clean Water Act. (USFWS Letter of June 28, 2001 – see Appendix G).

As described in the City's December 5, 2001 letter to the USFWS (Appendix G), the City is committed to developing a "vernal pool strategy" which is consistent with direction provided by the USFWS in their letter of June 28, 2001. This would include, in the context of an annexation project, development of an overarching management strategy to tie the existing City preserve system together under a broader more

unified framework. It also includes the commitment to develop an annexation area conservation plan in a manner that would not prejudice or conflict with the County's proposed larger scale conservation effort. This has been communicated to the WRSP landowners and was considered in their development of the WRSP's 404 permit application.

Through the 404-permit process the landowners have nearly completed a Section 7 Consultation with the USFWS.<sup>149</sup> The General Vernal Pool and Wetland Mitigation and Conservation Plan resulting from this consultation was conceptually accepted as complete on July 15, 2003, and a Biological Opinion from the USFWS is expected at anytime. Therefore, the proposed project is in compliance with "vernal pool strategy" as described above, and is consistent with USFWS direction. At this time the SOI Amendment Area is not located within a defined acquisition area of the County's proposed Placer Legacy. The mitigation program required for the MOU and this project are consistent with the goals of the County's program by achieving preservation of habitat (wetland, vernal pool, and raptor foraging habitat). Therefore, the proposed project would not conflict with the provisions of a proposed or adopted habitat conservation plan, natural conservation community plan, or other approved local, regional, or state habitat conservation plan, and there would be no impact.

### ■ Mitigation Measures

**MM 4.7-1:**     *Ensure no net loss of wetlands (Impact 4.7-1 through Impact 4.7-4 and Impact 4.7-9 – WRSP)*

Consistent with the Clean Water Act, the WRSP shall achieve no net loss of wetlands. As used here, 'no net loss of wetlands' shall account for all wetlands impacted by the project, both directly (e.g., filled or drained) and indirectly (e.g., subjected to polluted and accelerated runoff, or damage caused by human or domestic animal access). No net loss may be achieved through on-site avoidance where practicable and desirable, on-site wetland construction where practicable and desirable, and/or off-site wetland construction, off-site wetland restoration, and off-site acquisition where approved by the permitting agencies. Restoration of wetland habitats is preferred to wetland creation because creation of wetlands introduces wetlands to an area historically upland in nature, whereas restoration re-establishes topographic and hydrologic conditions to a landscape that historically contained wetlands but has undergone land conversion. The benefit of the restoration approach, as opposed to wetland creation, is that because of the historic hydrologic footprint it is evident that the soils contain a restrictive layer which assists in the ponding of seasonal surface water.

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<sup>149</sup> USFWS Letter Dated July 16, 2003, Conservation Measures for WestPark/Fiddymont Ranch Project (Corps## 200200666), Placer County, California, USFWS File # 1-1-03-TA-2485

The Clean Water Act Section 404 permit process (including a Section 7 Consultation under the Federal Endangered Species Act) is the standard method for developing mitigation for projects that affect wetlands and vernal pool species such as special-status plants, vernal pool crustaceans, and western spadefoots. Through this process, project applicants will be required to acquire the necessary permits and approvals to implement their proposed project while remaining in compliance with the Clean Water Act and the Federal Endangered Species Act. Mitigation, as outlined below in Table 4.7-3, would consist of a combination of the preservation of on-site vernal pool habitat and the acquisition of off-site property with existing vernal pool habitat for preservation.

**Table 4.7-3 Wetland Impact Mitigation Analysis**

Type of Wetland	Total Acreage	Direct Impact	Indirect Impact	Mitigation Requirements (acres)			
				Total Off-Site Preservation	Total Off-Site Restoration	Total On-Site Preservation	Total On-Site Restoration
<b>ESA Wetlands</b>							
Vernal Pool	33.91	13.80	8.83	21.45 <sup>2</sup> 1.2 <sup>1</sup>	36.43 <sup>1</sup>	19.62	n/a
Vernal Swale	8.05	3.29	0.74	4.03 <sup>2</sup>	7.32 <sup>1</sup>	4.76	n/a
<b>CWA Wetlands</b>							
Wet Swales	17.39	4.17	n/a	n/a	n/a	13.22	5.421 <sup>3</sup>
Seasonal Wetlands	3.92	1.33	n/a	n/a	n/a	2.59	1.729 <sup>3</sup>
Emergent Marsh	0.62	0.62	n/a	n/a	n/a	n/a	0.806 <sup>3</sup>
<b>Subtotal</b>	<b>63.89</b>	<b>23.21</b> <b>+(0.49)<sup>5</sup></b> <b>23.70</b>	<b>9.57</b>	<b>26.68</b>	<b>43.75</b>	<b>40.193</b>	<b>7.956</b>
<b>Total Mitigation Acres</b>					<b>118.58</b>		

## NOTES:

1. Provided in Yankee Slough
2. Provided in East Sheridan
3. Provided on-site within Pleasant Grove Creek
4. Provided on-site in areas set aside for permanent conservation as open space
5. City of Roseville Waste Water Treatment Plant Pipeline Impacts. Mitigated previously under USFWS Biological Opinion 1-1-10-F-0034.

SOURCE: ECORP Consulting, Inc., August 28, 2003

Additionally, mitigation shall include off-site creation and/or restoration of vernal pool habitat, and/or participation in a mitigation credit program from a wetlands mitigation bank approved by the Corps and the USFWS. These banks would collect a fee that is based upon the mitigation obligation of the client. That fee would then be used to create, enhance, or preserve vernal pool habitat at an established mitigation bank. The credits shall be in direct proportion to vernal pool losses on the property, as determined by a wetland or habitat delineation. The project applicants have identified appropriate off-site mitigation as shown in Figure 4.7-4. These areas include restoration of 43.75 acres at Yankee Slough and East Sheridan in Southwestern Placer County. This restoration will be a component of the compensation required for impacts to on-site habitat within the WRSP. The restoration of vernal pools on the Yankee

Slough property will not result in artificial habitat being created. Although degraded due to agricultural practices, the habitat can be mapped through the use of current aerial photos taken during the wet season, which assist in the identification of remnant pools. In addition, historical aerial photos taken of the site prior to the intensive agricultural practices show evidence of the hydrological footprint of the area and can be used as the baseline for the restoration effort.

In the mitigation of vernal pools that would be filled or otherwise disturbed, the landowners shall use harvested inoculum (i.e., the top few inches of soil containing the seed bank and vernal pool crustacean cysts) from on-site vernal pools. Topsoil from vernal pools contains both the seed bank for the plant species that occur in that individual pool and the vernal pool crustacean cysts (eggs) for those species that occur there. Removal of topsoil from harvested vernal pools shall comply with the most recent Corps and USFWS guidelines at the time of construction, or consist of removal of the top 2 inches of soil, following by the next 4 inches of soil, and placement of these layers in constructed vernal pools in reverse order (e.g., first the 4 inches followed by the 2 inches) to approximately reconstruct the natural soil horizon.

Following the filing by the project applicant of its Clean Water Act Section 404 application with the Corps, the Corps initiated its Section 7 (Endangered Species Act) consultation with the USFWS in November 2002. During this consultation process, the project applicant and the USFWS and the CDFG have focused on a number of alternative properties providing off-site mitigation for the wetland and Swainson's hawk habitat impacts resulting from the WRSP Area (refer to Figure 4.7-4). As a result of this a Wetland Impact Mitigation Plan has been developed, to mitigate for the loss of wetland habitat, and identify proposed off-site mitigation efforts.

The results of this Plan mandate that the applicant must obtain a California Department of Fish and Game 1603 Streambed Alteration Agreement and/or U.S. Army Corps of Engineers (Corps) Section 404 Permit prior to final approval of grading and site construction plans. Although only a small portion of the site is subject to Corps jurisdiction (e.g., water's of the U.S.), the potential direct indirect impacts to vernal pool and wetland habitat from grading necessitates the restriction of the issuance of any grading permit to after the completion of the 1603 and 404 permitting process. While the final conditions of the permits will be determined through coordination with these agencies, at a minimum the following actions shall be performed:

- (A) Impacted wetland habitat (including vernal pools) that cannot be avoided, shall be replaced per a mitigation plan approved by the Corps and CDFG. Acreages listed in Table 4.7-3 shall be adhered to, and supplemented if additional impacts occur (e.g., in the Improvement Areas)

- (B) Restoration shall be performed by a qualified wetland revegetation specialist and shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for each wetland habitat type. First priority shall be given to areas that are adjacent to existing patches of native habitat, including the Yankee Slough.
- (C) A wetland and vernal pool restoration/revegetation plan shall be prepared by a qualified specialist to include all measures for the revegetation and maintenance of on and/or off-site habitat, whether preserved or created. The plan shall include the following:
- (1) The details and procedures required to prepare the restoration site for construction or planting (i.e., grading, soil preparations, soil stocking, etc.), including the need for a supplemental irrigation system, if any.
  - (2) The methods and procedures for the installation of the soil and plant materials.
  - (3) Guidelines for the maintenance of the mitigation site(s) shall be developed during the establishment phase of the restoration areas. The maintenance program shall contain guidelines for the control of nonnative plant species, the maintenance of any irrigation system or hydrology (if necessary).
  - (4) The restoration plan shall provide for monitoring, acceptable to the permitting State and federal agency(s), to evaluate the growth of the developing habitat and/or vegetation. Specific goals for the restored habitat shall be defined by quantitative and qualitative characteristics of similar habitats and plants (e.g., density, cover, species composition, structural development). The monitoring effort shall include an evaluation of not only the habitat installed, but the use of it by wildlife. Monitoring reports of the mitigation site shall be reviewed by the permitting State and federal agency(s).
  - (5) Contingency plans and appropriate remedial measures shall also be outlined in the plan should the restoration efforts fail to meet designated success criteria and goals.

Additionally, the CWA 404 application for this project includes measures designed to ensure the long-term viability of the preserved wetlands. These measures include creation of contiguous connections with off-site preserve areas, the installation of high quality fencing around open space preserve areas with signage describing the sensitivity of the habitat, and the implementation of an Operation and Management Plan with a financing mechanism to monitor the health of the preserve habitat, and to remediate any disturbance to the

preserve. An annual report describing the monitoring activities and condition of the preserve will be prepared by the preserve steward and submitted to the resource agencies.

As a result of the implementation of this plan, as outlined in Table 4.7-3, and associated measures detailed above, the project applicant would incur no further obligation for surveys, salvage notification, or seedbank salvage for areas covered by the Plan other than those surveys indicated under MM 4.7-14 and MM 4.7-15.

MM 4.7-2: *Wetlands protection policies (Impact 4.7-1 through Impact 4.7-4 and Impact 4.7-9 – Remainder)*

Prior to the adoption of any Specific Plans and/or other development proposals for the Remainder Area wetland delineations shall be conducted, and, if wetlands are present, the project achieves no net loss of wetlands. As used here, ‘no net loss of wetlands’ shall account for all wetlands impacted by the project, both directly (e.g., filled or drained) and indirectly (e.g., subjected to polluted and accelerated runoff, or damage caused by human or domestic animal access). No net loss could be achieved through on-site avoidance where practicable and desirable, on-site wetland construction where practicable and desirable, and/or off-site wetland construction, or off-site wetland restoration, and off-site acquisition where approved by the permitting agencies.

Where appropriate, the plans shall specify that special-status plant surveys be conducted for species that have a high probability to occur within areas of potential impacts (e.g., big-scale balsamroot and Hispid bird’s beak), such that, if found, no net loss of special-status plants occur, and that landowners use harvested inoculum (i.e., the top few inches of soil containing the seed bank and vernal pool crustacean cysts) from on-site vernal pools in constructed wetlands. Additionally, if wetland habitat would be impacted methods listed to ensure no net loss of wetlands, as detailed in MM 4.7-1, would be applicable, and required.

MM 4.7-3: *Vernal pool crustacean policies (Impact 4.7-2 and Impact 4.7-9 – Remainder Area)*

Prior to the adoption of any Specific Plans and/or other development proposals for the Remainder Area a delineation of all potential vernal pool crustacean habitat and appropriate surveys shall be performed. Surveys for vernal pool crustaceans shall follow the January 19, 1995 (or more recent version, if available) USFWS *Guidelines for Surveys of the Endangered Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, Riverside Fairy Shrimp, Vernal Pool Tadpole Shrimp, and the Threatened Vernal Pool Fairy Shrimp* to determine the extent of the potential habitat that is present in the proposed development area. For those areas of potential habitat that are determined not to be occupied by federally listed vernal pool crustaceans, no further mitigation would be required. If federally listed vernal pool crustaceans are determined

to occupy potential habitat that could be developed, MM 4.7-1 shall be implemented. Alternatively, the project applicant may assume that all potential vernal pool crustacean habitat is occupied and implement MM 4.7-1. In implementing MM 4.7-1, it shall be demonstrated in the project-level environmental document that the mitigation strategy would ensure no net loss of vernal pool crustacean habitat.

*MM 4.7-4: Relocate individual western spadefoots (Impact 4.7-4 and Impact 4.7-9 – WRSP)*

The location of pools that are occupied by western spadefoot shall be determined through surveys conducted during the appropriate season (generally February), by a qualified biologist. Those pools that are found to support western spadefoot shall be avoided if feasible. If avoidance is not feasible, then the CDFG shall be consulted to approve an adult or larval western spadefoots, or western spadefoot egg masses capture and relocation plan. Although there are no set protocol for this type of activity, the capture and relocation of reptile and amphibian species from areas that will be destroyed to areas of unoccupied suitable habitat is a fairly standard part of both USFWS and CDFG procedure for mitigating loss of population. When done in combination with habitat restoration and preservation, the procedure is known to be successful in preserving displaced populations. This measure would mandate that to the extent feasible, western spadefoots, which are displaced from pools that are destroyed during construction, would be relocated to protected areas of suitable habitat, thereby reducing impacts on western spadefoots to **less-than-significant levels**. MM 4.7-1, which requires no net loss of wetlands, would further reduce impacts on this species by, protecting or restoring its preferred breeding habitat (vernal pools and seasonal wetlands).

*MM 4.7-5: Spadefoot protection policies (Impact 4.7-4 and Impact 4.7-9 – Remainder Area)*

Prior to the adoption of any Specific Plans and/or other development proposals for the Remainder Area CDFG approved protocol surveys shall be conducted, if necessary, to determine the presence or absence of pools occupied by western spadefoot. These surveys shall be conducted during the appropriate season (generally February), by a qualified biologist. If western spadefoot is found during surveys, the Specific Plan and/or development plan shall provide a plan and/or policies to protect this species. The plan and/or policies shall provide for avoidance of those pools that are found to support western spadefoot wherever feasible. If avoidance is not feasible, then the CDFG shall be consulted to approve an adult or larval western spadefoots, or western spadefoot egg masses capture and relocation plan. In addition, MM 4.7-2, which would result in no net loss of wetlands would assist in the preservation of vernal pool and seasonal wetland habitat that this species requires for breeding. This measure would ensure the survival of western

spadefoots that are displaced from pools that are destroyed during construction by relocating them to protected areas of suitable habitat.

*MM 4.7-6: Avoid nesting sites (Impact 4.7-5 and Impact 4.7-9 – WRSP)*

To ensure that fully protected bird and raptor species are not injured or disturbed by construction in the vicinity of nesting habitat, the project applicant shall implement the following measures:

- (a) When feasible, all tree removal shall occur between August 30 and February 15 to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area. This period may be modified with the authorization of the DFG; or
- (b) Prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15 and August 30, all trees and potential burrowing owl habitat within 350 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30 days prior to disturbance. If active raptor nests or burrows are found, and the site is within 350 feet of potential construction activity, a fence shall be erected around the tree or burrow(s) at a distance of up to 350 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City in consultation with CDFG.
- (c) No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones), unless directly related to the management or protection of the legally protected species.
- (d) In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the developer shall contact CDFG and, subject to CDFG approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).
- (e) If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30th, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.
- (f) The project applicant, in consultation with the CDFG, shall conduct a pre-construction survey within the phases of the project site that are scheduled for construction activities. The survey shall be conducted by a qualified biologist to determine if burrowing owls are occupying the project site. The survey shall be conducted no more than three weeks prior to grading of the project site.

If the above survey does not identify burrowing owls on the project site, then no further mitigation would be required. However, should burrowing owls be found on the project site, the following measures shall be required.

- (g) The applicant shall avoid all potential burrowing owl burrows that may be disturbed by project construction during the breeding season between February 15 and August 30 (the period when nest burrows are typically occupied by adults with eggs or young). Avoidance shall include the establishment of a 350-foot diameter nondisturbance buffer zone around any occupied burrows. The buffer zone shall be delineated by highly visible temporary construction fencing. Disturbance of any occupied burrows shall only occur outside of the breeding season (August 30 through February 15).
- (h) Based on approval by the CDFG, preconstruction and nonbreeding season exclusion measures may be implemented to preclude burrowing owl occupation of the project site prior to project-related disturbance (such as grading). Burrowing owls may be passively excluded from burrows in the construction area by placing one-way doors in the burrows according to current CDFG protocol. The one-way doors must be in place for a minimum of three days. All burrows that may be occupied by burrowing owls, regardless of whether they exhibit signs of occupation, must be cleared. Burrows that have been cleared through the use of the one-way doors shall then be closed or backfilled to prevent owls from entering the burrow. The one-way doors shall not be used more than two weeks before construction to ensure that owls do not recolonize the area of construction.

*MM 4.7-7: Nest protection policies (Impact 4.7-5 and Impact 4.7-9 – Remainder Area)*

Prior to the adoption of any Specific Plans and/or other development proposals for the Remainder Area a plan and/or policies shall be developed and enacted to ensure that fully protected and raptor species are not injured or disturbed by construction in the vicinity of nesting habitat. The plan and or policies shall include the measures set forth above in MM 4.7-6.

*MM 4.7-8: Off-site and on-site preservation of grassland habitat (Impact 4.7-6 and Impact 4.7-9 – WRSP)*

- CDFG recommends that projects that will result in the loss of potential foraging habitat for Swainson's hawk (which includes grasslands and certain agricultural croplands such as alfalfa) within 10 miles of an active nest site provide mitigation for that loss. To the extent feasible, strategies for preserving on-site grasslands as raptor and migratory bird foraging habitat will be addressed in the O&M Plan prepared pursuant to the Section 404 Permit. Some of these strategies could include, but are not necessarily limited to, grazing for grassland management, monitoring for

biological values, and adaptive management. Mitigation for Swainson’s hawk foraging habitat would concurrently mitigate for loss of habitat for a number of other wildlife species in the region such as burrowing owl, red-tailed hawk, white-tailed kite, northern harrier, and loggerhead shrike among many others.

Based upon consultation with CDFG, a Swainson’s Hawk Grassland Habitat Mitigation Plan has been developed to mitigate for the loss of grassland foraging habitat. Areas within Yankee Sough and other as of yet an undermined southern Placer County site (possibly Reason Farms) would be preserved (see Figure 4.7-4). Up to 400 acres of the 878.743 additional Off-site Conservation Easement acres are proposed to be located at Reason Farms. Acquisition of the preservation acreages in two areas near Sheridan in southwestern Placer County detailed in Table 4.7-4 and Figure 4.7-4 would reduce impacts due to loss of grasslands to **less than significant**.

**Table 4.7-4 Swainson’s Hawk Grassland Habitat Mitigation Plan**

Distance from Nest (miles)	Potential On-Site Foraging Habitat Proposed for Development (acres)	Swainson’s Hawk Mitigation Ratio	Potential Swainson’s Hawk Habitat Mitigation (acres)	On-Site Open Space Preservation (acres) <sup>1</sup>	Total Net Foraging Habitat to Be Acquired Off-Site (acres) <sup>2</sup>	Habitat Acquired at Yankee Slough (acres)	Additional Off-Site Conservation Easement (acres)
0–1	1,267.438	1.0:1	1,267.438			0	
1–5	934.967	0.75:1	701.225				
<b>Total</b>	<b>2,204.404</b>		<b>1,968.663</b>	<b>399.700</b>	<b>1,568.963</b>	<b>690.220</b>	<b>878.743</b>

NOTES:

- 1. Does not include any oak woodland habitat at Fiddymont Ranch, only grassland habitat.
- 2. Located within southern Placer County.
- 3. Includes WRSP open space parcels F-80 and W-81.

SOURCE: ECORP Consulting, October 30, 2003

**MM 4.7-9: Swainson’s hawk habitat policies (Impact 4.7-6 and Impact 4.7-10 – Remainder Area)**

Prior to the adoption of any Specific Plans and/or other development proposals for the Remainder Area, the applicant shall conduct additional environmental review and implement measures to protect Swainson’s hawk habitat at a ratio commensurate with the habitat area to be lost due to proposed development.

**MM 4.7-10: Stream protection policies (Impact 4.7-7 and Impact 4.7-9 – WRSP)**

To protect the sensitive habitat within the riparian area, and its potential use by wildlife as movement corridors, the project applicant shall provide for the protection of stream corridors on the WRSP Area from disturbance due to construction or obstruction (e.g., fill, culverts) through compliance with Section 1600 of the CDFG Code (Section 1600). Compliance with Section 1600 requires that the applicant enter into a Section 1600 Streambed Alteration Agreement prior to conducting any construction activities within a stream corridor (as defined in Section 1600), which sets forth mitigation measures that

the applicant must implement. These measures shall include, but not be limited to, the use of either bridges or culverts that are large enough that wildlife have enough space to pass through these road crossings without having to travel over the road surface, the implementation of bank stabilization measures, and/or restoration and revegetation of stream corridor habitat that has been damaged due to the project's construction. Furthermore, the recreational trails and garden area shall be lined by post and rail fence and signage would be used to direct trail and garden users to stay within the designated trail corridor or garden area. The trails and garden would also be closed after dark and no exterior lighting shall be used. Lastly, the implementation of MM 4.7-1, and MM 4.7-8, which would provide for the conservation of on-site open space and riparian areas around Pleasant Grove and Kaseberg Creeks.

*MM 4.7-11: Stream protection policies (Impact 4.7-7 and Impact 4.7-9 – Remainder Area)*

To protect the sensitive habitat within the riparian area, and its potential use by wildlife as movement corridors, project-related activities would be prohibited within a buffer zone adjoining the riparian area a minimum of 50 horizontal feet from the edge of the riparian vegetation or active channel, whichever is greatest. Buffers are established and managed to reduce the impact of adjacent land use. The design of a buffer serves several important functions: it preserves the stream's natural characteristics, protects water quality, and improves habitat for plants and animals on land and in the water. Any Specific Plans and/or other development proposals for the Remainder Area that involve the alteration or development of areas within the 50 foot riparian buffer areas shall demonstrate how the stream corridors, and the wildlife that use them, will be protected from disturbance due to construction or obstruction (e.g., fill, culverts), passive recreation, or other activities that would otherwise restrict or prevent the unobstructed movement of wildlife through them. This shall be demonstrated to the satisfaction of the CDFG or other jurisdictional bodies. Those plans or proposals shall require use of either bridges or culverts that are large enough that wildlife have enough space to pass through these road crossings without having travel over the road surface. Additionally future development within the Remainder Area would be required to maintain the stream corridors in perpetuity via a conservation easement or other deed restriction. The conservation easement shall stipulate permitted uses within this area, as well as provide a maintenance and enhancement plan that would list, among other maintenance and enhancement plans, the details, responsible parties, funding mechanisms, and schedule. Alternately, this measure may be implemented by obtaining a Section 1600 Streambed Alteration Agreement from the CDFG prior to any construction activities within stream corridors. Specific measures would be developed during discussions with the CDFG, but may include using bridges instead of culverts, erosion control and bank stabilization measures, and/or

restoration of stream corridor habitat that has been damaged due to the projects construction.

*MM 4.7-12: Sensitive habitat buffer zones (Impact 4.7-10 – WRSP/Remainder Area)*

The applicant shall avoid and preserve riparian vegetation within SOI Amendment Area to the extent feasible. Native streamside vegetation occurring in the riparian zone shall be protected and retained to filter groundwater runoff. In addition, a 50-foot buffer shall be established from the edge of the riparian vegetation or top of the bank, whichever is greatest, and, if necessary, enhanced by plantings of native species within the project site adjacent to the drainage. Essential infrastructure including maintenance road access and utilities may occur within the riparian buffer area. Buffers are established and managed to reduce the impact of adjacent land use. The design of a buffer serves several important functions: it preserves the stream's natural characteristics, protects water quality, and improves habitat for plants and animals on land and in the water. Project design would strive to site any drainage crossings in areas where riparian trees and other riparian vegetation are least dense. Additionally the stream corridors identified as wetlands mitigation areas shall be conserved in perpetuity via a conservation easement or other deed restriction. The conservation easement shall stipulate permitted uses within this area, as well as provide a maintenance and enhancement plan that would list, among other maintenance and enhancement plans, the details, responsible parties, funding mechanisms, and schedule. If impacts to riparian vegetation do occur as a result of the project, they shall be minimized to the extent feasible through the use of BMPs, and mitigated for at a ratio acceptable to the CDFG.

*MM 4.7-13: Riparian habitat policies (Impact 4.7-10 – WRSP/Remainder Area)*

To protect riparian vegetation within the SOI Amendment Area, the following policies shall be implemented:

- (a) The project applicant shall provide for temporary fencing along the top of the bank during construction of those areas of the proposed project site adjacent to riparian habitat to discourage access to the riparian habitat by humans and pets.
- (b) The project applicant shall provide for permanent fencing and/or a landscape barrier to discourage access to the riparian habitat by humans and pets. The fencing and/or landscape barrier shall be placed at the top of the bank of the creeks along those portions of the site adjacent to riparian habitat. The proposed recreation trail shall be on the project site side of the fence/landscape barrier. The fencing and/or landscape barrier shall be constructed of wood or other natural materials and shall allow for the viewing of the riparian habitat while discouraging access.

- (c) Interpretive signs and displays shall be posted along the border of the riparian area to educate the public and route access away from sensitive areas. These informative signs will be posted at intervals of not less than 500 feet along the border with information regarding the objectives of creek and riparian habitat protection. Signs should also include information regarding the importance of restricting access to the riparian area by household pets. Such signs will be made of wood or similar natural material, and be maintained by the applicant.
- (d) Lighting adjacent to riparian buffers should be shielded away from the riparian areas.

Implementation of MM 4.7-13 would reduce project impacts to riparian habitat to a *less-than-significant level* by ensuring *the* protection of riparian resources from encroachment or disturbance due to the increased number of pets and humans in the proposed project site.

*MM 4.7-14: Conduct appropriate surveys (Impact 4.7-10 – WRSP)*

Prior to construction of any off-site infrastructure, a qualified biologist shall perform general (detailed) and, if necessary, focused biological surveys of any undisturbed areas that would be affected by infrastructure development. Because infrastructure for the proposed project would be located in road rights-of-way, or undeveloped land similar to the project site, the biological resources that would be expected to occur would not differ substantially from those identified in this EIR. If it is determined that wetland resources or sensitive species would be impacted, MM 4.7-1, MM 4.7-4, MM 4.7-6, MM 4.7-8, and MM 4.7-10 shall be implemented, as appropriate to the resource.

*MM 4.7-15: Off-site survey policies (Impact 4.7-10 – Remainder)*

Prior to construction of any off-site infrastructure for Specific Plans and/or other development proposals for the Remainder Area, the City shall require that appropriate biological surveys have been conducted, and mitigation implemented. The surveys shall be performed, as needed, and within any undisturbed areas that would be affected by infrastructure development. Because infrastructure for the Remainder Area would be located in road rights-of-way, or undeveloped land similar to the project site, the biological resources that would be expected to occur would not differ substantially from those identified in this EIR. Therefore, if such resources are found, MM 4.7-2, MM 4.7-3, MM 4.7-5, MM 4.7-7, MM 4.7-9, and MM 4.7-11 shall be implemented, as appropriate to the resource.



## 4.8 CULTURAL RESOURCES

### 4.8.1 Introduction

This section of the EIR describes prehistoric and historic resources that could be damaged or destroyed as a result of development in the SOI Amendment Area. Prehistoric resources include sites and artifacts associated with the indigenous, non-Euroamerican population, generally prior to contact with people of European descent. Historical resources consist of structures, features, artifacts, and sites that date from Euroamerican settlement of the region.

Unless otherwise noted, information contained in this section was derived from the following source:

- *Cultural Resources Investigation of the Westpark/Fiddymment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California*, PAR Environmental Services, Inc. (May 2001).

This document is available for review at the City's Permit Center, 311 Vernon Street, Roseville, California. The results of the PAR analysis were based on a review of records at the Northwest Information Center, as well as site reconnaissance of the WRSP Area.

No specific concerns were raised in response to the Notice of Preparation related to cultural resources.

As discussed in Chapter 1 of this EIR, Introduction, this EIR evaluates the impacts of the WRSP, which would include a Sphere of Influence Amendment and annexation to the City, at a project-specific level. Because a Sphere Amendment is the only action proposed for the Remainder Area (that portion of the SOI Amendment Area outside of the WRSP), a program-level analysis is provided for the full SOI Amendment. In order to conduct the analysis, development assumptions are made for the Remainder Area (see Chapter 2, Project Description, for details). Figure 1-1 (SOI Amendment Area) in Chapter 1, Introduction, identifies the boundaries of the SOI Amendment Area, WRSP, and Remainder Area.

As discussed in the introduction to Chapter 4 of this EIR, Environmental Analysis, minor changes have been made to the proposed land uses for the WRSP Area since publication of the NOP. Overall the total amount of open space increased by 34.9 acres, primarily along the western boundary of the WRSP. However, the total amount of area to be disturbed is very similar to the prior land use plan. The open space corridors along Pleasant Grove Creek and Curry Creek have not changed and the historic Fiddymment Ranch Main Complex will remain in its current location and be integrated into the regional Sports Park.

## 4.8.2 Environmental Setting

### ■ Prehistory Background

The Native Americans who occupied the project vicinity at the time of Euroamerican contact (ca. 1850s) are known as the Nisenan, also referred to as the Southern Maidu. Several ethnographers have studied the Maidu people and generally agree that Nisenan territory included the drainages of the Bear, American, Yuba, and southern Feather rivers. Their permanent settlements were generally located on ridges separating parallel streams, either on crests, knolls, or terraces part way up these ridges.

A typical village consisted of several conical houses covered with bark slabs. The nearest ethnographic village in relationship to the project was called *Pichiku*. The name *Pich-u-gut* is also given for a village site in Roseville. The exact location of these villages has never been determined but many long time residents of Roseville indicate that a village was located in the vicinity of present-day Roseville Square off of Douglas Boulevard. Also, a village site has been identified and preserved at Maidu Park in Roseville.

The lower foothills and valley were rich in natural resources and the Maidu took advantage of many available foods. Acorns were important to their diet and were supplemented with seeds, nuts, berries, herbs, and fruit. Virtually every animal was hunted or trapped, excluding lizards, snakes, and grizzly bears. The Maidu were nomadic throughout much of the year, moving from place to place following game migration patterns and gathering seasonal plants.

In the 1860s, the owners of both the Fiddymint Ranch and Kaseberg Ranch, located a few miles north of the project site, allowed Maidu families to collect acorns, tubers, and grasshoppers on their property during the late summer and fall. These activities took place along Pleasant Grove Creek. Families traditionally went to special places to get acorns, and may have owned certain trees.

The Nisenan hunting and gathering cycle was altered drastically with the discovery of gold in Coloma in 1848. As miners poured into the Roseville and Auburn areas, the Native Americans were forced out of their winter villages, land was fenced, streams were silted, and food resources became increasingly difficult to procure. The Nisenan survived as best they could, working for Euro-Americans in mines or on ranches, panning for gold, and other activities.

### ■ History of SOI Amendment Area

The earliest Euro-American use of the general project vicinity was probably in the late 1840s, when Placer and Sacramento counties swarmed with men searching surface placer deposits for gold. By 1854, the area was sparsely settled and small-scale ranching had begun. Around this time, a man named Lee acquired

10,500 acres of land through government script and settled on Pleasant Grove Creek north of the project site. In 1856, he sold his parcel to Stephen A. Boutwell, who began to acquire other land near the California and Oregon Railroad (now Southern Pacific). Boutwell and his partner, William Dunlap, used their land for a sheep ranch, combining their holdings with those of a new partner, James W. Kaseberg, in 1864. During the 1870s, as many as 30,000 head of sheep were sheared on the ranch each year. Some of the first thoroughbred and trotting horses raised in California were on the Boutwell, Dunlap, and Kasberg ranch. All of these ranch sites are located less than five miles north of the SOI Amendment Area.

Property in the SOI Amendment Area vicinity followed this same pattern of rural land use. Settled in the 1850s and occupied by the Walter Fiddymment family since 1879, this property has been used for homestead and various agricultural operations for nearly 150 years.

### **Fiddymment Ranch**

The Fiddymment family has a long history in the Roseville area. Elizabeth Jane Fiddymment came to the Sacramento area from Illinois in 1854, a widow with a four-year-old son, Walter Frederick Fiddymment. Upon arriving in the Elk Grove area in southern Sacramento County, she met and married a local farmer and stock-raiser, George Hill. The new family moved to the Pleasant Grove District in Roseville in 1856 to live and work with her sister's family on their farming operation. Around this time, Elizabeth's brother-in-law repaid a debt to her with a parcel of land, the first of what would eventually become extensive land holdings. This property was west of modern Roseville in the Pleasant Grove District. By the time of her death in 1912, Elizabeth reportedly owned over 13,000 acres in southern Placer County, between Lincoln and present-day Folsom Lake.

In 1879, Elizabeth's son, Walter, left his mother's home when he married Ella Bond. He bought 80 acres in the Pleasant Grove District, the first of 240 acres he eventually owned in the Plan Area. This property had been occupied as early as 1855, when government surveyors recorded farming activity there including fences and a field. Walter, 29, and Ella, 24, moved into a small cabin already on the property and Walter started farming. A year later their first child, Ira, was born. The Fiddymment family ranch, which dates to the 1870s, is located in the Fiddymment Ranch property near the eastern boundary of the WRSP Area. When the soil and natural irrigation proved too poor for farming, Walter turned to raising horses and mules, which also proved unprofitable. His next venture was raising cattle and sheep.

During the 1880s, the Fiddymments continued to expand their ranch. Ella's father, a brick mason, helped by building a smokehouse, cooler, reservoir, hog scalding, and chimneys on the house. The family reportedly modified and enlarged the original cabin on the property into a two-story ranch house. This

was necessary to accommodate their growing family, which eventually numbered seven children and probably farm hands as well.

By the turn of the century land north of Pleasant Grove Creek was used for rangeland. In the northeastern quarter of Section 13, a small complex of structures was built, including a barn, a bunkhouse for farm hands, and a concrete horse trough with a windmill. The red barn was a standard barn with eight-foot eaves and two-pole supports. The original windmill was a wooden structure on concrete footings. It was later replaced by a 1920s-era Aerodyne metal windmill, set on the same footings. The small complex also included a blue stone vat on a concrete pad. When side panels were attached, it created a pen where sheep were corralled for the treatment of hoof diseases.

Within the next few years, Walter diversified his farming income by acquiring commercial and residential property in Roseville. He purchased a half interest in G. W. Lohse's General Merchandising Store in 1906, buying out his partner in 1911 and changing the store's name to W. F. Fiddymment and Son.

Walter himself stopped farming in 1918. Around 1920, his son, Russell, started raising bronze turkeys at the ranch, supplementing the family sheep and cattle operations. While Walter had previously tried domesticating wild turkeys, Russell's was the first commercial turkey venture. At that time, Walter, 69, and Ella, 64, continued to live at the ranch with their adult children and a servant. Later in 1920, Russell married and moved with his wife, Cora, to a house in Roseville. In 1927, Walter and Ella left the ranch house and Russell and Cora moved in.

After Walter died in 1933, his sons continued agricultural land use on the property, although in independent operations consisting primarily of raising livestock and turkeys. Walter's son, Russell, became the head of the household, living in the farmhouse with his wife, Cora, and their four children. Russell and Cora continued to develop their turkey production and added chickens in the late 1930s. They switched from bronze to white turkeys in the 1940s. Russell gave John and David the chicken operation, which David bought out entirely around 1942.

A relative, Eric Fiddymment, built a turkey house and pens. One feature at the site was a cooking trough, moved from an unknown location elsewhere on the ranch. Water was boiled with grain and food scraps to make hog feed in the metal-lined brick trough. The family also moved a salvaged duplex from Camp Beale Air Force Base to the ranch for farm working housing.

The extended Fiddymment family has continued to be active throughout the ranch. The Fiddymments were using airplanes by the 1950s to assist in their livestock operations, leading to the construction of a private airstrip there. During the 1950s and 1960s there was an effort to grow rice irrigated by a ditch and well.

After this proved unsuccessful, that area was used as irrigated pasture until it was eventually allowed to return to a natural state.

During the early 1970s David Fiddymment began raising pistachios on a portion of the site near Pleasant Grove Creek. In 1971, he built a removable dam on Pleasant Grove Creek to impound irrigation water for use during the dry season. Today he runs a pistachio operation with a small roadside sales stand, continuing a long family tradition of working close to the land.

In the early 1990s, turkey and sheep ranching ended on the property. Today only cattle operations remain an active part of the Fiddymments' long history of ranching on the land. Walter's granddaughter, Cora Lee, and her husband, Earl Corin, live in the main house while John and Dana Corin and Eric and Denise Fiddymment also live on the family ranch property, continuing nearly 125 years of family ownership.

### ■ **Cultural Resources Identified within the SOI Amendment Area**

The SOI Amendment Area is considered sensitive for cultural resources. Known and potential resources are described below.

#### **West Roseville Specific Plan Area**

##### **Non-Significant Resources**

The entire WRSP Area was surveyed for cultural resources by PAR Environmental Services, Inc., in February and March 2001. During surveys, 48 recent, moved, or substantially modified objects or structures were identified, but found not to be significant historic resources, because of their age, lack of integrity, and/or displacement from their original context. Because they did not meet California Register or National Register of Historic Places (NRHP) criteria for significance, these items were not studied further.<sup>150</sup>

There is a small stand of Tree of Heaven located on the Fiddymment Ranch property north and west of Fiddymment Road. Stands of this type are sometimes associated with early Chinese encampments in the areas in the late 1800's and early 1900's. However, this particular stand of Tree of Heaven was established as a "volunteer" grove after 1930 according to the current property owner<sup>151</sup>. The Tree of

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<sup>150</sup> PAR Environmental Services, Inc., *Cultural Resources Investigation of the Westpark/Fiddymment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California*, May 2001, page 13.

<sup>151</sup> John S. Fiddymment, personal communication, September 3, 2003

Heaven have no cultural association that could be potentially significant. Therefore, the impact of removal of the stand of Tree of Heaven would not be significant from a cultural resource standpoint.

Five isolated artifacts and features (non-formal sites) were also identified during the survey, including a structure pad, trash dump, historic debris redeposited in Pleasant Grove Creek, and windmill parts. Four of these resources were found to be ineligible for the California Register or NHRP, and were recorded. The fifth feature was identified as a potential portion of an emigrant trail, and required further study. The trail is discussed in more detail below.<sup>152</sup>

Eleven formal archaeological or architectural sites were also recorded during the survey. These sites included structures and/or artifacts related to agricultural operations and homes. With the exception of the Fiddymment Ranch complex, described below, these resources were related to sheep or turkey ranching, and did not meet California Register or NHRP criteria for historic significance. As discussed below, the Fiddymment Ranch complex was found to be historically significant.

### **Potentially Significant Resources**

#### **Fiddymment Ranch Main Complex**

The Fiddymment Ranch Main Complex is located in the southwest portion of the Fiddymment Ranch portion of the WRSP. The ranch complex today represents the headquarters of Walter and Russell Fiddymment's ranching and living operations. It is the oldest, continually operating family ranch in Roseville. The complex consists of a main house dating to the 1860's, with at least three renovations, a barn, brick cooler, brick smokehouse, and reservoir, all from the 1880's. Twentieth century features include a 1929 bunkhouse, 1930's windmill, 1948 turkey hatchery building, second house and 1949 garage. Photographs of the Fiddymment Ranch Complex are found in Figures 4.13-7 through 4.13-10 in Section 4.13, Aesthetics and Visual Resources. Archaeological features are also present within the complex. These include, but may not be limited to, a septic tank, chicken house and garage foundations, landfill as well as debris and a waterline ditch. The complex retains a high degree of integrity of location, setting, design, materials, workmanship, association and feeling. This complex appears to meet California and National Register Criterion 1 (*Footnote Criteria or refer to definition below*) for the role the ranch played in the social and economic development of the Roseville community, Criterion 3 for its architecture, and Criterion 4 for its archaeological potential.<sup>153</sup>

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<sup>152</sup> PAR Environmental Services, Inc., *Cultural Resources Investigation of the Westpark/Fiddymment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California, May 2001, pages 15 through 17.*

<sup>153</sup> PAR Environmental Services, Inc., *Cultural Resources Investigation of the Westpark/Fiddymment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California, May 2001, page 20.*

### **Old Road Segment**

During the 2001 surveys, PAR identified an old road as a potential emigrant trail. During the February 2001 survey, the road alignment was noted and photographed. Within the WRSP Area, the road consists of a nearly unidentifiable dirt grade.<sup>154</sup>

The old road appears to be a wagon road that served several ranches in the mid to late 1800s. After 1908, the road was no longer depicted on maps. PAR could find no evidence that the road had served as an emigrant trail, nor was the road found to meet any of the criteria for listing on the California Register or the NHRP. The road was found to retain integrity of location, workmanship and design, but not setting, feeling or association. The setting and feeling of the road have changed considerably over time. In addition, integrity of association has been compromised by extensive modifications to the original transportation network of which the road was a component. The road was one of many minor local trails, was not associated with historically significant persons, is commonplace and not distinctive, and lacks archaeological components. For all of these reasons, the road is not considered historically significant.<sup>155</sup>

### **Potential Prehistoric Resources**

A prehistoric archaeological site had been previously noted but not recorded north of Pleasant Grove Creek in the eastern portion of Fiddymont Ranch. The site reportedly contained remnants of stone tool manufacture. Groundcover prohibited a clear view of the area during the PAR survey, so the presence or absence of this unrecorded site could not be confirmed.<sup>156</sup>

### **Remainder Area**

A review of the records at the Northwest Information Center found no formally recorded historic or prehistoric sites that have been identified in the Remainder Area. No specific cultural resource surveys have been conducted of the Remainder Area. There are some structures in the Remainder Area, including several residences north of Blue Oaks Boulevard and the dog kennel located south of Blue Oaks Boulevard, but they have not been evaluated for historic significance. The area's potential to contain subsurface historic or prehistoric sites or artifacts would be similar to the WRSP Area because the history of occupation and development in the Remainder Area is the same as in the WRSP Area due to the geographical, geologic, and hydrologic connections of the two areas.

<sup>154</sup> PAR Environmental Services, Inc., *Historical Evaluation of the Fiddymont Ranch Road, Placer County, California*, August 2002, page 11.

<sup>155</sup> PAR Environmental Services, Inc., *Historical Evaluation of the Fiddymont Ranch Road, Placer County, California*, August 2002, page 12.

<sup>156</sup> PAR Environmental Services, Inc., *Cultural Resources Investigation of the Westpark/Fiddymont Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California*, May 2001, page 21.

## ■ Paleontological Resources

There are three geologic units in the SOI Amendment Area: the Turlock Lake Formation, the Riverbank Formation, and Quaternary alluvium (see Section 4.6, Geology, Soils, and Seismicity). The Riverbank and Turlock Lake formations are classified as “terrace deposits.” These deposits were laid down during mid-continental glacial episodes in the Plio-Pleistocene less than 600,000 years ago. As shown in Figure 4.6-1 (Geologic Map), the Riverbank Formation is present throughout much of the SOI Amendment Area. Although the Riverbank Formation in the west Roseville area has not been comprehensively surveyed for paleontologic resources,<sup>157</sup> construction activities in areas containing Riverbank Formation in the Sacramento area (e.g., during the construction of ARCO Arena) have yielded a number of important vertebrate animal fossils. These fossils included ground sloth, bison, horse, camel, antelope or deer, and mammoth, which were found about 13 to 30 feet below the surface. Plant fossils have also been found. While all of animals were widely distributed in North America during the Plio-Pleistocene, this discovery in the Riverbank Formation at the Arco Arena site is important in that it is one of a small number of sites in northern California that helps expand scientific knowledge about the range of animals and the general paleoecology of the Sacramento Valley.<sup>158</sup> The Turlock Lake Formation, small areas of which are found in the eastern part of the SOI Amendment Area, also has yielded animal fossils. Investigations in the Granite Bay area southeast of the SOI Amendment Area have uncovered horse bones and teeth from the Turlock Lake Formation, and other fossil fragments have been discovered in Roseville as well.<sup>159</sup>

### 4.8.3 Regulatory Setting

The treatment of cultural resources is governed by federal, State, and local laws and guidelines. There are specific criteria for determining whether prehistoric and historic sites or objects are significant and/or protected by law. Federal and State significance criteria generally focus on the resource’s integrity and uniqueness, its relationship to similar resources, and its potential to contribute important information to scholarly research. Some resources that do not meet federal significance criteria may be considered significant by State criteria. The laws and regulation seek to mitigate impacts on significant prehistoric or historic resources. The federal, State, and local laws and guidelines for protecting historic resources are summarized below.

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<sup>157</sup> Richard Hilton, Sierra College, Department of Geology, personal communication, September 20, 2002.

<sup>158</sup> Richard P. Hilton, D. Charles Dailey, and H. Gregory McDonald, “A Late Pleistocene Biota from the ARCO Arena Site, Sacramento, California,” *in* *PaleoBios* 20(1): 7-12, April 15, 2000.

<sup>159</sup> Paula J. Noble, Ph.D. and Richard P. Hilton, “Assessment of Paleontologic Resources of the Silverwood Project, Granite Bay, Placer County, California,” July 10, 1997.

## ■ Federal

### **The National Historic Preservation Act of 1966**

The National Historic Preservation Act of 1966 established the NRHP as the official federal list of cultural resources that have been nominated by State Offices for their historical significance at the local, State, or national level. Properties listed in the NRHP, or “determined eligible” for listing, must meet certain criteria for historical significance and possess integrity of form, location, and setting. Significance is determined by four aspects of American history or prehistory recognized by the NRHP Criteria, which are listed in Chapter 3 of this document under “Definitions of Historical Resources.” Eligible properties must meet at least one of the criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character, the degree to which the original fabric has been retained, and the reversibility of changes to the property.

The Department of the Interior has set forth Standards and Guidelines for Archaeology and Historic Preservation.<sup>160</sup> These standards and Guidelines are not regulatory and do not set or interpret agency policy. A project that follows the Standards and Guidelines shall be considered mitigated to a less-than-significant level, according to Section 15064.5(b) of the California Public Resources Code.

## ■ State

### **California Register of Historic Resources (PRC Section 5020 et seq.)**

State law also protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. These criteria are nearly identical to those for the NRHP, which are listed in Chapter 3 of this document under “Definitions of Historical Resources.”

The State Historic Preservation Office (SHPO) maintains the CRHR. Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the CRHR, as are State Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

<sup>160</sup> The full title of the Standards and Guidelines is “The Standards for the Treatment of Historical Properties with Guidelines for Rehabilitating Historic Buildings.”

### **California Senate Bill 297 (1982)**

This bill addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the Native American Heritage Commission to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the State CEQA Guidelines.

### **California Environmental Quality Act**

As described above, State law protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. Section 21084.1 of CEQA requires an environmental document to evaluate the potential effects of a project on a historical resource, as further defined in Section 15064.5(a) of the CEQA Guidelines.

Section 21083.2 of CEQA requires an environmental document to address archaeological resources if a project may have a significant effect on a unique archaeological resource. Under CEQA, a “unique archaeological resource” is defined by Section 21083.2(g) as

An archaeological artifact, object, or site about which is 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 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.

Sections 21803.2(b)–(f) describes mitigation for affected unique archaeological resources under CEQA. Mitigation includes preservation of the resource in-place, either through site planning or recording easements, as well as mitigation by excavation.

### **CEQA Guidelines**

Section 15064.5 of the CEQA Guidelines defines historical resources for the purposes of CEQA, as described above under “Definitions of Historical Resources.” Archaeological and paleontological resources may also be considered historical resources, as they can meet the criterion of yielding, or likely to yield, information important in history or prehistory. Section 15064.5 also explicitly includes significant effects on historical resources as significant environmental effects for the purposes of analysis, and provides criteria for analysis, as well as treatment of, historical structures and other resources, archaeological resources, and human burials.

Section 15126.4 of the CEQA Guidelines describes mitigation measures related to historical resources, including archaeological resources. Although the section includes provisions for mitigating effects on archaeological resources through excavation, similar to the provisions of Sections 21083.2(b)–(e) of CEQA, Section 15126.4(b)(3) of the CEQA Guidelines states, “public agencies should, whenever feasible, seek to avoid damaging effects on any historical resources of an archaeological nature.” Further, Section 15126.4(b)(3)(A) establishes a clear preference for preservation in-place of archaeological resources, stating “[p]reservation in place is the preferred manner of mitigating impacts to archaeological sites.”

## ■ **Local**

### **City of Roseville General Plan**

The City of Roseville currently does not have a Historic Preservation ordinance nor has it conducted a Historic Resources Inventory. Significant cultural resources are shown on Figure V-4 in the City’s General Plan.

The City of Roseville General Plan includes goals and policies for the preservation of cultural resources. Please see Appendix C for a complete list of all applicable City goals and policies.

### **West Roseville Specific Plan**

The WRSP recognizes that the Fiddymment Ranch Complex would be preserved as a community facility for future use by the City. The complex would be owned by the City and could be used for meetings, weddings, receptions, and other events. Because the Fiddymment Complex would be owned and operated by the City, the WRSP does not include any specific measures that pertain to the reuse of this complex. Preservation of the Fiddymment Ranch Main Complex would be assured through implementation of MM 4.8-4(a) and MM 4.8-4(b) as well as MM 4.8-5 and MM 4.8-6.

## **4.8.4 Impacts and Mitigation Measures**

### ■ **Methods of Analysis**

The baseline for the analysis in this section is existing conditions. Cumulative impacts on cultural resources are addressed in Chapter 5 (CEQA Considerations).

### **West Roseville Specific Plan**

Evaluation of cultural resources was conducted by PAR Environmental Services, Inc (PAR). In addition to consultation with the North Central Information Center at California State University Sacramento,

previous environmental documents for projects in the area were reviewed, and full cultural resource field surveys were conducted for the WRSP Area. Areas of historic or prehistoric concern, particularly those where construction could occur as a result of WRSP development, were identified based on the work previously done by PAR for the WRSP Area. These areas have been described and mapped to identify individual sites and to indicate generalized geographic areas with high presence of these resources. The proximity of potential development areas to cultural resources has been identified. If development could occur on or near a cultural resource, measures for avoiding and/or recording the resource prior to excavation are discussed. Federal and state criteria for determining historical and cultural significance were previously discussed, under Regulatory Setting.

**Remainder Area**

Because no surveys have been conducted in the Remainder Area, and no development plans have been proposed, the analysis identifies what impacts could be expected given the history and character of the area.

**Standards of Significance**

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area would do any of the following:

- Create a substantial adverse change in the significance of an historical or archaeological resource, pursuant to section 15064.5 of the State CEQA Guidelines
- Directly or indirectly destroy a unique paleontological resource or unique geologic feature
- Disturb any human remains

**Impacts**

<b>IMPACT 4.8-1: DISTURB, DAMAGE OR DESTROY UNIDENTIFIED SUBSURFACE ARCHAEOLOGICAL RESOURCES DURING PROJECT CONSTRUCTION.</b>		
<b>Applicable Policies and Regulations:</b>	Section 15126.4(b)(3) of the CEQA Guidelines	
	<b>WRSP:</b>	<b>Remainder:</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.8-1 (Cease work and consult with qualified archaeologist)	MM 4.8-2 (Include policies and conditions that require proper handling of resources); MM 4.8-3 (Conduct archaeological surveys)
<b>Significant After Mitigation</b>	Less Than Significant	Less Than Significant

### **West Roseville Specific Plan**

As discussed in the Environmental Setting section, the field survey of the WRSP Area did not find evidence of prehistoric archaeological resources. An unrecorded prehistoric site in the northern end of the WRSP Area had been reported previously, but was not found during the recent field survey, possibly due to the extent of groundcover. This prehistoric site was located near Pleasant Grove Creek. The creek and its floodplain are designated open space in the WRSP, so the site may be undisturbed by future development. However, if the site extends beyond the floodplain, or is located in the path of facilities that would be placed in proximity to the creek (e.g., crossings, pipelines, trails), it could be damaged during grading and/or construction. In addition, there could be subsurface historic or prehistoric resources elsewhere in the WRSP Area. If encountered during grading, excavation and/or construction, such resources could be damaged, destroyed, or removed, resulting in a loss of integrity. This would be considered a potentially significant impact.

If evidence of historic or prehistoric artifacts or sites is uncovered during project development, MM 4.8-1 requires that all work cease within 100 feet of the find so that artifacts are not damaged by equipment. This is consistent with Section 15126.4(b)(3) of the CEQA Guidelines, which seeks to avoid damaging effects on archaeological resources. The measure would ensure that impacts on unknown cultural resources and human remains would be **less than significant**, by requiring appropriate study, handling and recordation of such resources. No further surveys or monitoring would be required with implementation of this mitigation measure.

### **Remainder Area**

If the Remainder Area were developed at levels similar to those proposed in the WRSP, the effects would likely be similar, because, as with the WRSP Area, the Remainder Area could contain historic and/or prehistoric archeological resources along Pleasant Grove Creek and/or other drainages, as well as areas that were formally used for ranching or farming. Excavation, grading and construction activities in these areas could destroy such resources, if present. This would be considered a significant impact.

MM 4.8-2 requires that specific plans or other development proposals for the Remainder Area include policies or conditions that require proper handling of any subsurface cultural resources unearthed during project construction. This is consistent with CEQA Guidelines Section 15126.4(b)(3) MM 4.8-3 requires that specific plans or other development proposals for the Remainder Area also identify any known significant resources, based on field studies done by qualified archeologists. Areas with significant resources are to be retained in open space, if feasible. If preservation is not feasible, proper

recording of the resources would be required. With these mitigation measures, impacts on cultural resources in the Remainder Area would be **less than significant**.

<b>IMPACT 4.8-2: REMOVAL OF HISTORICALLY SIGNIFICANT PROPERTIES AND/OR LOSS OF HISTORIC INTEGRITY OF SUCH RESOURCES.</b>		
<b>Applicable Policies and Regulations:</b>	Section 1504.5 of the CEQA Guidelines Department of Interior Standards and Guidelines for Archaeology and Historic Preservation CEQA Sections 21803.2(b)–(f)	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.8-4 [(a) Retain Fiddymment Ranch Main Complex in current location, or (b) Retain portions of the Fiddymment Ranch Main Complex]; MM 4.8-5 (Record historically significant resources); MM 4.8-6 (Rehabilitate and reuse historically significant properties;)	MM 4.8-7 (Include policies to survey structures over 45 years of age); MM 4.8-8 (Properly record any identified historical resources); MM 4.8-9 (Include policies that require rehabilitation and reuse of historically significant properties)
<b>Significance after Mitigation:</b>	Significant and Unavoidable	Significant and Unavoidable

The Project Area contains a number of buildings that are over 50 years old, including structures in the WRSP portion that have been surveyed and found to be historically significant resources (the Fiddymment Ranch Complex). If any of the buildings or structures within the Remainder Area are over 50 years of age, and they meet the California Register or NHRP criteria for significance, they would also be considered historically significant. Potential impacts are discussed below.

**West Roseville Specific Plan**

Development of the WRSP would alter the context of the Fiddymment Ranch Main Complex, which appears to meet the criteria for significance as a historical resource established in section 15064.5 of the CEQA Guidelines. The Fiddymment Ranch Main Complex is located within the WRSP in the proposed Regional Sports Park, and adjacent to the proposed high school site. As discussed above, this complex appears to meet California and National Register criteria 1, 3, and 4. If the City retained some or most of the site, some structures or buildings may be removed or remodeled for use as public buildings. Structures or buildings that cannot be feasibly rehabilitated or reused may be removed or relocated. The loss or alteration of structures or buildings would change the character of the individual building or structure, as well as the ranch complex as a whole. Removal or relocation of the complex, if necessary, would separate it from its historic setting and result in the loss of the complex as a historic resource. These potential changes (removal, relocation, reuse, demolition) could reduce the integrity of the

complex so that it would no longer be considered a potentially historically significant property. This would be a significant impact.

The most effective approach to retaining the historic integrity of the Fiddymment Ranch Main Complex would be to retain the structures and buildings in their current location, as recommended by MM 4.8-4(a) so that their relationship to each other and their surroundings can be understood. If retained in the current location and rehabilitated to Secretary of Interior Standards, which ensure that renovation is compatible with historic properties (see MM 4.8-6), the impact would be reduced to a **less-than-significant** level because the complex would retain its historic character and integrity. The project applicant is proposing to donate the Fiddymment Ranch Main Complex to the City in its current location. The City's Parks Department is exploring the potential to use the facility for special events such as weddings. At this time, it is not certain which buildings specifically will remain and which buildings may be removed. Based on an architectural evaluation it is likely the City would retain all of Fiddymment Ranch Main Complex except for the barn, which is in a dilapidated state. In any case, recordation of the complex, as required by MM 4.8-5 and consistent with Sections 21803.2(b)-(f) of CEQA, whether the complex is retained in its entirety or modified, would ensure that information about the complex would be preserved for future study, partially reducing the impact of its reuse, loss or relocation.

It is not known what structures may be removed, although it is anticipated that the buildings removed could be barns or outbuildings; however, because historic buildings could potentially be removed under the WRSP, the impact is considered **significant and unavoidable**.

### **Remainder Area**

The Remainder Area contains buildings that have not been surveyed, so it is not known whether historic resources are present. If any of the buildings or structures within the Remainder Area are over 50 years of age, and they meet the California Register or National Register criteria for significance, they would be considered historically significant. Development within the Remainder Area could affect historic resources, if present, through removal, relocation, reuse and/or substantially altering the context in which the historic resources occur. This is a significant impact.

MM 4.8-7 requires that specific plans or other development proposals for the Remainder Area document the age of all structures or buildings within the area proposed for future development. If any significant resources are identified, the preferable approach would be to retain them in their existing location. If retention is not feasible, and the resources needed to be relocated or destroyed, the impact could be significant and unavoidable because of the permanent loss of the resource and/or its context. Recordation of the resource, as required by MM 4.8-8, would reduce the impact by ensuring that information about it

was available for future use. Depending on the condition and importance of the resource, recordation may be adequate to reduce the impact to a less-than-significant level. Implementation of MM 4.8-9 would reduce impacts by requiring rehabilitation, restoration, or reconstruction of historic structures in compliance with the Secretary of the Interior’s Standards of Rehabilitation. However, because of the presence of historic resources in the Remainder Area, and because the feasibility of preserving such resources is unknown at this time, this impact is considered **significant and unavoidable**.

<b>IMPACT 4.8-3: DISTURB UNKNOWN PALEONTOLOGICAL RESOURCES DURING SITE PREPARATION.</b>		
<b>Applicable Policies and Regulations:</b>	Section 15126.4(b)(3) of the CEQA Guidelines	
	<b>WRSP:</b>	<b>Remainder:</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.8-10 (Cease work until review conducted by qualified paleontologist and recommendations implemented)	MM 4.8-11 (Include policies in specific plans to ensure the proper handling of paleontological resources)
<b>Significant After Mitigation</b>	Less Than Significant	Less Than Significant

There are three geologic units in the Project Area: the Turlock Lake Formation, the Riverbank Formation, and Quaternary alluvium (see Section 4.6, Geology, Soils, and Seismicity for more information). These formations, which consist of alluvial materials (gravel, sand, and silt) derived from older granitic and volcanic rocks in the Sierra Nevada to the east, could contain substantial numbers or unique types of invertebrate (marine), plant, or vertebrate fossils or other resources of paleontologic value.

In areas where the geologic formations are not exposed, paleontological resources would typically not be visible where the ground has not been disturbed and the formations exposed. However, they could be damaged or destroyed during site preparation, similar to archaeological resources. The potential for discovery and disturbance of paleontological resources would exist throughout the SOI Amendment Area. Potential impacts to paleontological resources are discussed below.

**West Roseville Specific Plan**

As discussed above, there are geologic units in the WRSP Area that could contain substantial numbers or unique types of invertebrate (marine), plant, or vertebrate fossils or other resources of paleontologic value. These resources could be damaged or destroyed during site preparation, similar to archaeological resources. This would be a potentially significant impact. Therefore, MM 4.8-10 requires that, if any evidence of fossils is discovered during excavation or grading, all work cease within 100 feet of the find.

This is consistent with Section 15126.4(b)(3) of the CEQA Guidelines, which seeks to avoid damaging effects on archaeological resources. Work would not resume until a qualified paleontologist is retained to review the find, and the paleontologist's recommendation for recordation and, if appropriate, preservation of the find have been implemented. Compliance with MM 4.8-10 would ensure the impact is reduced to a **less-than-significant** level.

### Remainder Area

The Remainder Area also contains geologic formations that could contain paleontological resources that could be disturbed resulting in potentially significant impact. MM 4.8-11 would reduce impacts on such resources to a **less-than-significant** level by ensuring that appropriate study and treatment would occur before the resources could be destroyed. This is consistent with CEQA Guidelines Section 15126.4(b)(3).

<b>IMPACT 4.8-4: DAMAGE OR DESTROY HISTORIC OR PREHISTORIC RESOURCES DURING CONSTRUCTION OF OFF-SITE INFRASTRUCTURE.</b>		
<b>Applicable Policies and Regulations:</b>	CEQA Sections 21803.2(b)-(f) Section 15064.5 of the CEQA Guidelines	
	<b>WRSP:</b>	<b>Remainder:</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.8-1 (Cease work and consult with qualified archeologist); MM 4.8-5 (Record historically significant resources); MM 4.8-6 (Rehabilitate and reuse historically significant properties); MM 4.8-10 (Cease work until review conducted by a qualified paleontologist and recommendations implemented); MM 4.8-12 (Conduct appropriate studies)	MM 4.8-2 (Include policies and conditions that require proper handling of resources); MM 4.8-7 (Include policies to survey structures over 45 years of age); MM 4.8-8 (Properly record any identified historic resources); MM 4.8-11 (Include policies in specific plans to ensure the proper handling of paleontological resources); MM 4.8-13 (Conduct appropriate studies)
<b>Significant After Mitigation</b>	Less Than Significant	Less Than Significant

Development of the Project Area would require off-site infrastructure improvements, including diversion of the Sacramento River (for the Remainder Area), roadway expansion and/or extensions, drainage improvements, and electrical, water, and sewer lines. Construction and installation of off-site improvements could result in disturbance of historic or prehistoric resources. Such resources could be damaged, destroyed, or removed, resulting in a loss of integrity if encountered during grading, excavation and/or construction. Potential impacts are discussed below.

### **West Roseville Specific Plan**

Development of the WRSP Area would require infrastructure improvements outside of the WRSP project area, such as extension of water, wastewater, and power lines, drainage infrastructure and easements, and roads. In most cases, off-site infrastructure would be located within existing or planned roadway rights-of-way, and the potential for cultural resources to occur would have been addressed during the planning of those roads. However, in some cases, new infrastructure may be required in areas that are not planned for development, or have not been subject to environmental review. Because the alignments for such off-site infrastructure have yet to be determined, surveys have not been conducted. Therefore, this analysis assumes that historic resources (both subsurface and buildings), prehistoric resources (primarily subsurface), and/or paleontological resources could be located within areas that would be disturbed during construction of off-site infrastructure. If encountered during grading, excavation and/or construction, such resources could be damaged, destroyed, or removed, resulting in a direct loss and/or loss of integrity. This would be a potentially significant impact.

MM 4.8-12 requires that appropriate studies be conducted prior to construction of off-site infrastructure, and that if any prehistoric or historic resources are found that they be evaluated for significance, and avoided, preserved and/or recorded as appropriate. This is consistent with Section 15064.5 of the CEQA Guidelines (for determining significance) and 21803.2(b)–(f) CEQA (regarding preservation and recording). In addition, MM 4.8-1, MM 4.8-5, MM 4.8-6, and MM 4.8-10 would ensure that historic resources are appropriately recorded, and that work cease if cultural resources are discovered during construction, until such resources can be evaluated and treated as warranted by their significance. These mitigation measures would reduce this impact to a **less-than-significant** level.

### **Remainder Area**

Like the WRSP, development of the Remainder Area would require infrastructure improvements outside of the Remainder Area, including diversion of the Sacramento River, roadway improvements, drainage improvements, and electrical, water, and sewer lines. Construction and installation of these off-site improvements could damage, destroy, or remove such cultural resources, resulting in a loss of integrity if encountered during grading, excavation and/or construction. This is considered a potentially significant impact.

MM 4.8-13 requires that appropriate studies be conducted prior to construction of off-site infrastructure, and that if any prehistoric or historic resources are found, that they be evaluated for significance, and avoided, preserved and/or recorded as appropriate. In addition, MM 4.8-2, MM 4.8-7, MM 4.8-8, and MM 4.8-11 would ensure that historic resources are appropriately recorded, and that work cease if

cultural resources are discovered during construction, until such resources can be evaluated and treated as warranted by their significance. These mitigation measures would reduce this impact to a **less-than-significant** level.

### ■ Mitigation Measures

*MM 4.8-1: Cease Work and Consult with Qualified Archaeologist (Impacts 4.8-1 and 4.8-4 – WRSP)*

Should any cultural resources, such as structural features, any amount of bone or shell, artifacts, human remains, or architectural remains be encountered during any subsurface development activities, work shall be suspended within 100 feet of the find, and the City of Roseville shall be immediately notified. At that time, the City shall coordinate any necessary investigation of the site with qualified archaeologists as needed to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations. The contractor shall implement any measures deemed necessary for the protection of the cultural resources. In addition, pursuant to section 5097.98 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, 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.

*MM 4.8-2: Include Policies and Conditions That Require Proper Handling of Resources (Impacts 4.8-1 and 4.8-4 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall include policies and/or conditions that require proper handling of any subsurface cultural resources unearthed during project construction. The policies and/or conditions shall provide that, if any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains, are encountered during any development activities, work shall be suspended within 100 feet of the find, and the City of Roseville shall be immediately notified. At that time, the City shall coordinate any necessary investigation of the site with qualified archaeologists as needed to assess the resource and provide proper management recommendations. If the find is determined to be an historical or unique archeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures and mitigation will be made available. Possible management recommendations for important resources could include resource avoidance or data recovery excavations. The contractor shall implement any measures deemed necessary by the archeologists for the

protection of the cultural resources. In addition, pursuant to section 5097.98 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, 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.

**MM 4.8-3:** *Conduct Archeological Surveys (Impact 4.8-1 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area, shall identify known and/or potential archaeological sites, based on field surveys of the area proposed for development conducted by a qualified archaeologist as part of the specific plan environmental review process. If significant resources or significant archaeological sites are present, the Specific Plan and/or development proposal shall designate the area surrounding the site as open space, as feasible. If retention of such resources is not feasible, recordation of the sites shall be required, along with treatment as is recommended by the archaeologist after consultation with SHPO and, if the find is prehistoric, the Native American Heritage Council.

**MM 4.8-4 (a):** *Retain Fiddymment Ranch Main Complex (Impact 4.8-2 – WRSP)*

The WRSP calls for the preservation of the integrity of the Fiddymment Ranch Complex (the main ranch house and associated outbuildings) as a historical resource within the Regional Soccer Complex. To ensure its preservation the retention of the Fiddymment Ranch Main Complex is included as a mitigation measure.

Before planning of the park site, the City will evaluate buildings and structures as significant resources and treated in accordance with the Secretary of Interior Standards for Preserving, Rehabilitating and Reconstructing Historic Buildings, which ensure that any renovation is compatible with historic properties.

**MM 4.8-4 (b):** *Retain Portions of the Fiddymment Ranch Main Complex (Impact 4.8-2 – WRSP)*

If any future specific proposals propose altering or removing any part of the existing Fiddymment Ranch Main Complex (e.g., removing buildings), the project applicant shall record the resource prior to issuance of a demolition permit by the City (see also MM 4.8-5) and shall be required to consult with an architectural historian prior to removal of any buildings within the complex.

**MM 4.8-5:** *Record Historically Significant Resources (Impacts 4.8-2 and 4.8-4 – WRSP)*

For any historically significant resource, including the Fiddymment Ranch Main Complex, the record of the building shall be prepared by the Project Applicant prior to issuance of a demolition permit. In addition, the record shall comply

with the National Parks Service standards [Historical American Building Surveys (HABS)]. A copy of the record shall be deposited with the State Office of Historic Preservation (SHPO). The appropriate level of recordation shall be determined in consultation with SHPO. Recordation shall include:

- The development of site-specific history and appropriate contextual information regarding the historic resource; in addition to archival research and comparative studies, this task could involve limited oral history collection;
- Accurate mapping of the resource, scaled to indicate size and proportion of each structure;
- Architectural descriptions;
- Photodocumentation in both still and video formats; and
- Recordation of measured architectural drawings.

*MM 4.8-6: Rehabilitate and Reuse Historically Significant Properties (Impacts 4.8-2 and 4.8-4 – WRSP)*

Prior to approval of reuse and/or alteration of the Fiddyment Ranch Complex, an architectural historian shall review the proposal and provide recommendations to assure that the integrity of the complex is retained. If adaptive reuse of the buildings is an option, the exterior of the historic properties should be rehabilitated and adaptively reused in accordance with the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992 [Standards]). Finish materials, case work, and trim on the interior should be restored and/or reused where feasible.

*MM 4.8-7: Include Policies to Survey Structures Over 45 Years of Age (Impacts 4.8-2 and 4.8-4 – Remainder)*

The project applicant(s) for Specific Plans and/or other development proposals for the Remainder Area shall document the age of all structures or buildings within the area proposed for development (including areas proposed to remain in open space). If any buildings or structures are over 45 years of age, a qualified architectural historian or similar professional shall assess their historic significance. If feasible, historically significant structures, buildings or complexes shall be retained in their present location.

*MM 4.8-8: Properly Record Any Identified Historical Resources (Impacts 4.8-2 and 4.8-4 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall require that, if any historically significant resource is identified, the project applicants shall be required to prepare a record of the building in

compliance with to National Parks Service standards [Historical American Building Surveys (HABS)]. A copy of the record shall be deposited with the State Office of Historic Preservation (SHPO). The appropriate level of recordation shall be determined in consultation with SHPO. Recordation shall include

- The development of site-specific history and appropriate contextual information regarding the historic resource; in addition to archival research and comparative studies, this task could involve limited oral history collection
- Accurate mapping of the resource, scaled to indicate size and proportion of each structure
- Architectural descriptions
- Photodocumentation in both still and video formats
- Recordation of measured architectural drawings

MM 4.8-9: *Include Policies that Require Rehabilitation and Reuse of Historically Significant Properties (Impacts 4.8-2 and 4.8-4 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall include policies or conditions of project approval requiring the exteriors of historic properties that will be adaptively reused, to be rehabilitated and reused in accordance with the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992 [*Standards*]). In addition, finish materials, case work, and trim on the interior should be restored and/or reused where feasible.

MM 4.8-10: *Cease Work Until Review Conducted by Qualified Paleontologist and Recommendations Implemented (Impacts 4.8-3 and 4.8-4 – WRSP)*

Should any evidence of paleontological resources (e.g., fossils) be encountered during grading or excavation, work shall be suspended within 100 feet of the find, and the City of Roseville shall be immediately notified. At that time, the City shall coordinate any necessary investigation of the site with a qualified paleontologist to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations. The contractor shall implement any measures deemed necessary by the paleontologist for the protection of the paleontological resources.

MM 4.8-11: *Include Policies in Specific Plans to Ensure the Proper Handling of Paleontological Resources (Impacts 4.8-3 and 4.8-4 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall include policies and/or conditions of approval that require the proper handling should any evidence of paleontological resources (e.g., fossils) be encountered during grading or excavation. If any paleontological resources are identified during project construction, work shall be suspended within 100 feet of the find, and the City of Roseville shall be immediately notified. At that time, the City shall coordinate any necessary investigation of the site with a qualified paleontologist to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations. The contractor shall implement any measures deemed necessary by the paleontologist for the protection of the paleontological resources.

*MM 4.8-12: Conduct Appropriate Studies (Impacts 4.8-4 – WRSP)*

Prior to undertaking construction of off-site infrastructure, the City shall determine whether cultural resource surveys have been undertaken for any areas to be disturbed during construction. If surveys were conducted, the City shall document that any identified resources were treated as recommended in the studies. If no studies or surveys were conducted, the City shall ensure that a qualified archaeologist conducts the appropriate level of study. If resources are found, the study recommendations shall be implemented to ensure that the resources are avoided, protected and/or recorded, as appropriate.

*MM 4.8-13: Conduct Appropriate Studies (Impact 4.8-4 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall require that prior to undertaking construction of off-site infrastructure, the City shall ensure that cultural resource surveys are completed for any areas to be disturbed during construction. If surveys were conducted, the City shall document that any identified resources were treated as recommended in the studies. If no studies or surveys were conducted, the City shall ensure that a qualified archaeologist conducts the appropriate level of study. If resources are found, the study recommendations shall be implemented to ensure that the resources are avoided, protected and/or recorded, as appropriate.



## 4.9 HAZARDOUS MATERIALS AND PUBLIC SAFETY

### 4.9.1 Introduction

This section describes the potential adverse impacts on human health due to exposure to hazards that could result from the development of the SOI Amendment Area. Hazards evaluated include those associated with existing identified or suspected contaminated sites, potential exposure to hazardous materials used, generated, stored, or transported in or immediately adjacent to the SOI Amendment Area, potential hazards associated with high-voltage transmission lines and electromagnetic fields, and use of recycled water in public areas. Included in the discussion is a summary of applicable hazardous materials laws and regulations and agencies responsible for their implementation. Potential hazards and associated impacts related to toxic air contaminant emissions are discussed in Section 4.4 (Air Quality) of this EIR.

Sources of information to describe existing conditions and for the analysis are identified in the footnotes. These sources include a variety of City planning documents, agency and provider correspondence, consultation with City staff, and published technical information available through various websites.

Primary sources reviewed during preparation of this section include

- *Environmental Site Assessment, Placer 1600-Acre Property* (December 1999)
- *Phase I Environmental Site Assessment, Fiddymont Property* (August 1999)
- *City of Roseville: Roseville Regional Wastewater Treatment Service Area Master Plan and EIR* (May 1996)
- *Phase I Environmental Site Assessment Advisory: School Property Evaluations* (September 2001)

Information referenced in the footnotes in this section is available for review at the City of Roseville Permit Center, 311 Vernon Street, Roseville, California.

The following issues related to hazardous materials and public safety were raised during the NOP Scoping Meeting (see Appendix B): potential effects on WRSP Area residents from chemical use at the Pleasant Grove Wastewater Treatment Plant (PGWWTP) and adequacy of buffer zone; proximity of the proposed energy facility and potential health risks to WRSP Area occupants; potential soil contamination from historic pesticide use; and use of recycled water and potential public health effects. These issues are addressed in this section, except the energy facility, which is addressed under cumulative conditions in Chapter 5, CEQA Considerations. No written comments regarding hazardous materials and public safety on these topics or other issue areas were submitted during the NOP comment period.

As discussed in Chapter 1, Introduction, this EIR evaluates the impacts of the WRSP, which would include a Sphere of Influence Amendment and annexation to the City, at a project-specific level. Because a Sphere Amendment is the only action proposed for the Remainder Area (that portion of the SOI Amendment Area outside of the WRSP Area), a program-level analysis is provided for the full SOI amendment. In order to conduct the analysis, development assumptions are made for the Remainder Area (refer to Chapter 2, Project Description, for details). Figure 1-1 (SOI Amendment Area) in Chapter 1, Introduction, identifies the boundaries of the entire SOI Amendment Area, encompassing the WRSP Area and Remainder Area.

As discussed in the introduction to Chapter 4 of this EIR, Environmental Analysis, minor changes have been made to the proposed land uses for the WRSP since publication of the NOP. The number of dwelling units did not change, so the number of residents would not change. The amount of commercial uses was reduced from 88.1 to 46.8 acres (47 percent) and the mix of industrial and light industrial uses was altered, with a two-acre reduction. These changes do not substantially affect this analysis, which is based on the land use plan described in Chapter 2.

## **4.9.2 Environmental Setting**

The presence of hazardous materials or other safety hazards is a part of everyday urban life that could affect residents, workers, and visitors within and adjacent to the SOI Amendment Area. Some of these activities can pose a risk of exposure to people or the environment due to accidental releases, such as spills, or as a result of soil or groundwater contamination related to past uses of properties within and adjacent to the SOI Amendment Area. Transportation of hazardous materials through or near the SOI Amendment Area could also present hazards.

The following section discusses existing land uses that have the potential to result in accidental releases of hazardous materials or present other health risks and identifies existing hazardous materials management programs applicable to the SOI Amendment Area. For purposes of this EIR, the term “hazardous materials” refers to both hazardous substances and hazardous wastes.<sup>161</sup>

A summary of potential hazards related to the presence of high-voltage electric power lines is also presented.

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<sup>161</sup> This EIR uses the definition stated in the California Health and Safety Code (CHSC) § 25501: “A hazardous material is any material that, because of its quantity, concentration, or physical, chemical characteristics poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. ‘Hazardous materials’ include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or

## ■ Past and Existing Uses

The primary past activity within the SOI Amendment Area is grazing, which would not typically involve the use of pesticides or other potentially hazardous materials. Land uses within the SOI Amendment Area that could have used potentially hazardous materials include an orchard, rice farming, turkey ranching, and residences with septic systems. Known and potential hazards within the SOI Amendment Area are discussed in detail below.

### **West Roseville Specific Plan**

Phase I Environmental Site Assessments (ESAs) were performed in 1999 by Wallace Kuhl & Associates and Rosewood Environmental Engineering to identify recognized environmental conditions in the WRSP Area that could affect the area or that could affect the property from off-site locations. Recognized environmental conditions are defined as the presence or likely presence of regulated hazardous substances, wastes, or petroleum products that indicate a release of material or material threat to the soil or groundwater at a site. The assessments were performed in accordance with American Society for Testing and Materials (ASTM) Standard Practice E-1527 and included the following: review and evaluation of information available from State and local agencies; site reconnaissance of the property and adjacent areas; interviews with knowledgeable individuals (e.g., property owners, Placer County Agriculture Commissioner and Assessor's Office staff, and Pacific Gas and Electric Co. staff); and aerial photograph and map review.

The following is a summary of information from the ESAs that were prepared for the Westpark and Fiddyment Ranch properties within the WRSP Area.

### **Westpark Phase I Environmental Site Assessment**

The review of historic maps and photographs indicated the Westpark property was a portion of a larger, undeveloped grassland and dry-farmed area of southwestern Placer County. The Westpark property has no known history of having contained above-ground storage tanks or underground storage tanks (USTs), oil/water separators, septic systems, farm equipment maintenance areas, or agricultural chemical mixing facilities. Historically, grassland and dry-farmed sites used little or no agricultural chemicals such as pesticides or herbicides.<sup>162</sup>

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the environment.”

<sup>162</sup> Wallace, Kuhl & Associates, *Environmental Site Assessment, Placer 1600-Acre Property*, December 1999, p. 23

The Westpark property is currently undeveloped. At the time of the assessment, the following were observed: a water supply well that operates with a submersible pump motor and above-ground water pressure tank; a molasses tank, cattle watering troughs, and miscellaneous debris (wood fencing, scrap metal, empty containers, tire casings, and other household-type items). In addition to the one well, there could be a second well, based on a review of historic maps. The ESA indicated the debris was not considered hazardous and recommended removal prior to site development. Neighborhood distribution (12-kilovolt) electric lines are located in the north central portion of the site near the well. A pole-mounted electric transformer was tagged as “non-PCB” (does not contain polychlorinated biphenyl oils). No discolored soils, areas of stressed vegetation or obvious evidence of surface water contamination, or odors were noted.<sup>163</sup> Several areas showed signs of sporadic vehicular traffic and cattle trails.<sup>164</sup>

The Westpark ESA noted that two 550-gallon heating oil tanks (previously containing diesel fuel) were removed from the adjacent Del Webb Sun City Roseville development in 1992. Approximately 120 cubic yards of contaminated soils and unspecified amount of groundwater were removed. The City of Roseville Fire Department issued a closure letter for the tank site in February 1993. A former hand-dug groundwater well discovered during construction at the Sun City (Del Webb Specific Plan) development was investigated in 1994. Laboratory analyses of groundwater samples taken from the well were reported to contain detectable concentrations of petroleum hydrocarbons. There was no record of a closure letter for the tank or request for further investigation by either the City of Roseville or the Regional Water Quality Control Board. A small painting equipment rinse water spill that occurred during construction at Sun City in 1996 was remediated. The ESA concluded that these incidents at the adjacent site do not pose a threat to the Westpark property.<sup>165</sup>

The Westpark ESA noted that off-site property to the south and west of Westpark consists of rural ranches and undeveloped land.<sup>166</sup> The report did not identify any environmental conditions in those areas that could affect the Westpark property.

### **Fiddymment Ranch Phase I Environmental Site Assessment**

The Fiddymment Ranch property has been owned by the Fiddymment family since 1854. The majority of the site is covered by grasslands that have been used for decades for cattle and sheep grazing and related agricultural activities. It has also been used for dry-farmed wheat and oat grass. Rice was grown for a short time in the northwest corner of the property. From 1875 to 1990, the Fiddymment family operated a

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<sup>163</sup> Wallace, Kuhl & Associates, *Environmental Site Assessment, Placer 1600-Acre Property*, December 1999, pp. 4–5

<sup>164</sup> Wallace, Kuhl & Associates, *Environmental Site Assessment, Placer 1600-Acre Property*, December 1999, pp. 3–4

<sup>165</sup> Wallace, Kuhl & Associates, *Environmental Site Assessment, Placer 1600-Acre Property*, December 1999, pp. 20–24

turkey ranch. Other activities included a vineyard and a pistachio orchard, which is still in operation.<sup>167</sup> For additional information about the history of the Fiddyment Ranch, the reader is referred to Section 4.12 (Cultural Resources).

The approximately 1,700-acre Fiddyment Ranch site is currently undeveloped land with five small areas of residential/commercial operations that include the “Old Homestead,” the John Corin House, the Eric Fiddyment house, the Eric Fiddyment construction support operations or “Mill Field,” and the Pistachio Orchard Office. Various structures and buildings associated with historic and current uses are located in these five areas. One hand-dug well is located at the site, and there may be others. There are at least six active and seven inactive groundwater wells. There may be six or more additional wells, according to Department of Water Resources records.<sup>168</sup>

Hazardous substances reportedly used and stored at the ranch included formaldehyde, lye, and arsenic-based pesticides for disinfecting cattle, diesel and 2,4-D (alkanolamine) as herbicides, and vehicle and equipment fuels contained in underground tanks. There are several overhead transmission lines and pole-mounted transformers adjacent to and within the Fiddyment Ranch property; however, according to PG&E, none of the PG&E transformers contain Polychlorinated Biphenyls (PCBs).<sup>169</sup>

A number of locations on the site were observed as having unidentified liquids and/or petroleum products stored in a variety of containers on site. Mounds of waste, trash and sod were observed in different locations. A household dump was identified, which was reportedly used for several decades and exhibits evidence of having been burnt. There are also several equipment scrap yards.<sup>170</sup>

There are reportedly no remaining underground storage tanks on the Fiddyment Ranch property. A gasoline tank was removed near the Old Homestead site around 1954, but no evidence of residue remains. There are approximately 17 above-ground storage tanks containing gasoline, diesel, and waste oil on site. All observed tanks, except for the two located at the John Corin house site, were located on concrete slabs or were within secondary containment systems. There was very little staining observed near these tanks.<sup>171</sup>

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<sup>166</sup> Wallace, Kuhl & Associates, *Environmental Site Assessment, Placer 1600-Acre Property*, December 1999, pp. 6-7

<sup>167</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddyment Property, Roseville, California*, August 1999, pp. 17-18

<sup>168</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddyment Property, Roseville, California*, August 1999, pp. 8 and 30

<sup>169</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddyment Property, Roseville, California*, August 1999, pp. 17-22

<sup>170</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddyment Property, Roseville, California*, August 1999, p. 31

<sup>171</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddyment Property, Roseville, California*, August 1999, p. 31

No records of organochlorine, organophosphate, or other environmentally persistent pesticides were reported. No soils samples were taken to determine potential soil contamination related to arsenic-based pesticides or formaldehyde use.<sup>172</sup>

It is likely the structures and buildings contain materials that have asbestos (e.g., floor tiles, insulation wrap, roofing material, and siding). No sampling was performed during the ESA. Lead-based paint could also be present. A stack of fluorescent lights was observed in the hatchery building within the Old homestead. PCBs might be associated with fluorescent lights, but no further investigation was conducted.<sup>173</sup>

Septic systems could be present. It is not known whether hazardous materials were disposed of in on-site septic tanks, if such tanks exist.<sup>174</sup>

The ESA recommended soil sampling at the fuel storage tank, pesticide use areas, and locations containing debris (including the household dump) to identify whether soils have been adversely affected by historic uses, and remediation, as necessary, prior to grading. In addition, the report recommended that existing wells that will not be used should be closed to minimize the potential for contamination pathways and because of the physical hazard they could present.<sup>175</sup> The recommended actions have not yet been implemented.

During site reconnaissance in 1999, unauthorized dumping of motor oil bottles and other trash was observed less than 100 yards upstream of Pleasant Grove Creek in the WRSP Area.<sup>176</sup> Flows in Pleasant Grove Creek and Kaseberg Creek have reportedly increased as a result of development upstream. The runoff could have affected water quality within the Fiddymont Ranch property. Additional water quality investigation was recommended by the ESA preparer.<sup>177</sup>

### **Remainder Area**

The physical characteristics of the Remainder Area are similar to those of the WRSP Area, consisting of undeveloped nonnative, annual grasslands. The current predominant land use is seasonal livestock grazing. As noted in the Westpark ESA, historically, grassland and dry-farmed sites used little or no

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<sup>172</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddymont Property, Roseville, California*, August 1999, p. 32

<sup>173</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddymont Property, Roseville, California*, August 1999, p. 34

<sup>174</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddymont Property, Roseville, California*, August 1999, p. 34

<sup>175</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddymont Property, Roseville, California*, August 1999, pp. 30–34

<sup>176</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddymont Property, Roseville, California*, August 1999, p. 25

<sup>177</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddymont Property, Roseville, California*, August 1999, p. 35

agricultural chemicals such as pesticides or herbicides.<sup>178</sup> However, a Phase 1 ESA has not been prepared for the Remainder Area to determine whether past uses have affected soil or groundwater conditions.

### **Other Facilities in the Vicinity of the SOI Amendment Area**

Several facilities outside the SOI Amendment Area involve operations in which hazardous materials are used or could be present, or could present physical hazards. These facilities are important in the context of evaluating potential impacts associated with occupancy of the SOI Amendment Area.

#### ***Pleasant Grove Wastewater Treatment Plant***

A regional wastewater treatment plant under construction adjacent to and north and west of the WRSP Area is expected to be operational in January 2003 (refer to Figure 2-3 [West Roseville Specific Plan Land Use Plan] in Chapter 2 [Project Description]).

The PGWWTP will provide tertiary-level treatment through the process of screening, grit removal, extended aeration, secondary clarification, filtration, chlorination and dechlorination.<sup>179</sup> As further described in Section 4.11 (Public Utilities), the plant will provide full nitrification and will produce recycled water that meets Title 22 regulations for full, unrestricted use.<sup>180</sup>

The City of Roseville certified the Roseville Regional Wastewater Treatment Service Area Master Plan EIR (SCH# 93092079) in May 1996 for the PGWWTP. The EIR analyzed the potential environmental effects of PGWWTP operation and identified mitigation measures to reduce potential hazards. A 1,000-foot non-residential buffer around the PGWWTP was delineated in the EIR as a risk reduction measure to address the potential of an accidental release of chlorine gas.<sup>181</sup> However, as discussed below, the PGWWTP will not be using gaseous chlorine for disinfection. Instead, a liquid solution of sodium hypochlorite at a concentration slightly greater than household bleach will be used, which will substantially reduce the hazards that could result from an accidental release. The 1,000-foot buffer remains unchanged, however.

The PGWWTP would use several chemicals in varying amounts for treatment and disinfection processes and plant maintenance. Because the plant is not yet operational, exact quantity information is not

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<sup>178</sup> Wallace Kuhl & Associates, *Environmental Site Assessment, Placer 1600-Acre Property*, December 1999, p. 23

<sup>179</sup> Montgomery Watson, City of Roseville: Roseville Regional Wastewater Treatment Service Area Master Plan, May 1996, p. ES-21

<sup>180</sup> Kelye McKinney, P.E., City of Roseville, Personal Correspondence, June 10, 2002

<sup>181</sup> City of Roseville, *Roseville Regional Wastewater Treatment Service Area Master Plan Draft Environmental Impact Report* (SCH #93092079), May 1996, Chapter 10.0

available. However, preliminary estimates for use, storage, and delivery have been developed.<sup>182</sup> This information is summarized in Table 4.9-1.

**Table 4.9-1 Pleasant Grove Wastewater Treatment Plant Anticipated Chemical Use, Storage, and Delivery**

Product (Use)	Amount Stored	Rate(gallons/month)	Frequency of Deliveries to PGWWTP
Sodium hypochlorite, 12% solution in liquid form (disinfection)	two 8,750-gallon tanks	83,000	1/week
Sodium bisulfite, 25% solution in liquid form (dechlorination)	two 8,750-gallon tanks	19,000	every other week
Sodium hydroxide (pH [acidity] control)	two 10,500-gallon tanks	66,000	every three weeks
Aluminum sulfate (coagulant)	two 6,500-gallon tanks	52,000	one/month
Ferric chloride, 39–47% solution (odor control)	one 8,750-gallon tank	15,000 (preliminary)	1/month
Polymer (coagulant)	one 6,000-gallon tank, 300/400-gallon tote bins, 55-gallon drums	59,000 gallons/ 9 months	every three to four weeks

**NOTES:**

All trips are for 6 mgd and all trucks are 5,000 gallon tractor/trailer rigs.

SOURCE: Art O'Brien, City of Roseville EUD, personal communication, June 11, 2002

All of the chemicals listed in Table 4.9-1 will have secondary containment and will be stored outside, with the exception of the polymer tote bins and drums, which would be stored inside buildings at the plant.<sup>183</sup> The PGWWTP has been designed so that all site drainage is kept on-site. Therefore, in an event a chemical were to be released on-site, it would be routed to the treatment plant's head works where it would enter the influent waste stream for treatment. Other products such as oil, lubricants, paints, solvents, and small amounts of laboratory chemicals for testing wastewater quality would also be used. The City of Roseville Fire Marshal reviewed the anticipated chemical use and plant operational design in August 2002 for potential off-site consequences at the WRSP Area and concluded that plant operations were not likely to result in off-site consequences.

**Treatment Chemicals**

As with other facilities using hazardous materials, the use of wastewater-treatment chemicals at the PGWWTP is strictly regulated by State and local regulations. The City of Roseville Fire Department will be responsible for routine hazardous materials inspections and incident response in case of an accidental release of hazardous materials (see Regulatory Setting, below). Further, operation of the plant would implement National Fire Protection Association 820 standards. Because no gaseous or liquid chlorine would be used for disinfection, the facility is not required to prepare a Risk Management Program under

<sup>182</sup> Art O'Brien, City of Roseville EUD, personal communication, June 14, 2002

<sup>183</sup> Art O'Brien, City of Roseville EUD, personal communication, June 14, 2002

the California Accidental Release Program (CalARP) requirements (California Health and Safety Code Sections 25531–25543).<sup>184</sup>

### **Fiddymont Substation and High-Voltage Electric Power Lines (Remainder Area Only)**

A 230-kilovolt (kV) electrical receiving station is located east of the Remainder Area on the east side of Fiddymont Road, approximately 375 feet south of Pleasant Grove Boulevard. The transmission lines are shared by Pacific Gas & Electric Company (PG&E) and the Western Area Power Administration (WAPA). The locations of these facilities are shown in Figure 4.11-7 (West Roseville Specific Plan Electric Substation and 60 kV Power Line Easements) in Section 4.11 (Public Utilities).

The northern boundary of the substation site is adjacent to an existing 425-foot-wide transmission corridor that consists of aboveground 230 kV transmission lines that run east/west through the Remainder Area approximately 375 feet south of Pleasant Grove Boulevard. Buffer zones are provided around the facility. Materials used at the Fiddymont receiving station include batteries and mineral oil. Sixty-three cells of sealed, maintenance-free gel-type batteries are located in a fire-proof control center that provides secure containment for the unit. Secondary containment consists of a subfloor container capable of holding 100 percent of the total acid content of the batteries. Secondary containment for the mineral oil is a pit surrounding the transformer. This structure can hold 100 percent of the transformer's oil capacity and the maximum rainfall over a 24-hour period for the greater of the area's 25-year history, as required by the Uniform Fire Code, or the total maximum rainfall over a 1-month period, as required by the U.S. EPA.<sup>185</sup> Areas inside the electrical easements are restricted from structural- and building-type development, although the easement area is allowed to contain driveways or parking lots, for example, subject to review and approval by PG&E and/or other electric utility providers involved.<sup>186</sup>

### **Electric and Magnetic Field Strength**

Electric and magnetic fields (EMF) are invisible lines of force that surround any electrical device. Electric fields are produced by voltage and increase in strength as the voltage increases. Magnetic fields result from the flow of current through wires or electrical devices and increase in strength as the current increases. Most electrical equipment has to be turned on, i.e., current must be flowing, for a magnetic field to be produced. Electric fields, on the other hand, are present even when the equipment is switched

<sup>184</sup> Art O'Brien, City of Roseville EUD, personal communication, June 11 and 14, 2002

<sup>185</sup> Resource Management Inc., *City of Roseville Electric Department 230-6--kV Fiddymont Substation Project Initial Study/Negative Declaration*, December 1994

<sup>186</sup> Wallace Kuhl & Associates, *Environmental Site Assessment, Placer 1600-Acre Property*, December 1999, p. 6

off, as long as it remains connected to the source of electric power.<sup>187</sup> Electric fields are shielded or weakened by materials that conduct electricity (including trees, buildings, and human skin). Magnetic fields, on the other hand, pass through most materials and are therefore more difficult to shield. Both electric and magnetic fields decrease as the distance from the source increases.<sup>188</sup> Electric field intensity decreases rapidly with increasing distance from a transmission line. In addition, electric fields are effectively shielded by larger objects such as trees and houses.

The potential health effects of EMF associated with transmission lines, such as those that traverse the Remainder Area, have been the focus of scientific controversy for several years. As a result, utility companies and public health agencies are trying to address public concern over the potential health effects of exposure to EMFs. Experts are uncertain there is a danger, and if so, what constitutes a safe level of exposure. The following discussion is a general summary of existing information related to the hazards associated with EMF exposure.

### **Potential Health Hazards**

For some time, the only potential hazard associated with electricity was the potential for electrical shock. In the late 1970s, some questions were raised with the potential for other health hazards that could be associated with the electricity, particularly if there was a link between living near power distribution lines and childhood cancer mortality. Several studies were subsequently approved to study the attributable effects of electrical energy in the extremely low frequency (ELF) range in addition to EMFs.<sup>189</sup>

In 1992, Congress authorized the Electric and Magnetic Field Research and Public Information Dissemination Program (EMF-RAPID Program). The study, which was published in 1999, concluded that the scientific evidence connecting health risks due ELF-EMF exposure is weak. The epidemiological study (studies of humans living in these environments) demonstrated a small increased risk, while the mechanistic and animal toxicology studies have failed to demonstrate any consistent patterns in the biological effects.<sup>190</sup> The National Institute of Environmental Health Sciences (NIEHS) study concluded “virtually all of the laboratory evidence in animals and humans, most of the mechanistic work done in cells fails to support a causal relationship between exposure to ELF-EMF at environmental levels and changes in biological function or disease status”.<sup>191</sup> Conversely, the study also stated that “exposure

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<sup>187</sup> Website: [http://www.cpuc.ca.gov/static/industry/environment/electromagnetic+fields/what\\_are\\_emf.htm](http://www.cpuc.ca.gov/static/industry/environment/electromagnetic+fields/what_are_emf.htm), Accessed June 10, 2002

<sup>188</sup> Website: [http://www.cpuc.ca.gov/static/industry/environment/electromagnetic+fields/what\\_are\\_emf.htm](http://www.cpuc.ca.gov/static/industry/environment/electromagnetic+fields/what_are_emf.htm), Accessed June 10, 2002

<sup>189</sup> National Institute of Environmental Health Sciences, *Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields* (No. 99-4493), Executive Summary, 1999, p. i

<sup>190</sup> National Institute of Environmental Health Sciences, *Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields* (No. 99-4493), Executive Summary, 1999, p. ii

<sup>191</sup> National Institute of Environmental Health Sciences, *Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields* (No.

cannot be recognized as entirely safe because of weak scientific evidence that exposure may pose a leukemia hazard.”<sup>192</sup>

### **Peaking Facility**

The Northern California Power Agency (NCPA) operates a peaking facility one-quarter mile west of the end of Sunset Boulevard, approximately two miles northeast of the Fiddymont Road/Blue Oaks Boulevard intersection. The 25,800-kilowatt combustion-turbine facility is part of an expanded peaker system that reduces the need for outside power purchases, resulting in lower electrical costs to NCPA customers. The facility uses natural gas during normal operation, but there is a 100,000-gallon storage tank that contains fuel oil in case the natural-gas supply is interrupted. The natural-gas power system contains built-in controls for shutdown if monitored systems deviate from established normal operating conditions. The fuel-oil storage tank is bermed to contain accidental spillage, and the fuel pipeline is equipped with a secondary containment feature to control leakage.<sup>193</sup>

Transmission lines would be a potential source of EMF in portions of the WRSP Area and Remainder Area. EMF levels along the transmission systems are anticipated to be within the following limits: 1.0 kilovolts per meter (kV/m) to 3.0 kV/m for electric fields at the edge of the right-of-way to 11 kV/m within the ROW, and 150 milligauss (mG) to 250 mG at the edge of the right-of-way, depending on voltage. Risks associated with these numerical ranges, which have been adopted by some states in the U.S. but not California, are considered small, given the current understanding of EMF and health effects.<sup>194</sup>

### **Western Regional Sanitary Landfill**

The southern boundary of the Western Regional Sanitary Landfill property is located approximately 1 mile north-northeast of the WRSP Area, at the intersection of Athens and Fiddymont Roads. The 320-acre facility is a permitted Class II and III landfill that receives solid waste from Lincoln, Rocklin, Roseville, Loomis, Auburn, and the unincorporated portion of Placer County Franchise Areas 1, 5 and 6. In addition to typical household-type municipal solid wastes, the facility also accepts sludge (biosolids) and ash. Hazardous or medical wastes are not accepted at the landfill. Landfill operations and water quality protection are subject to the requirements specified in Titles 14 and 27 of the California Code of Regulations.

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99-4493), Executive Summary, 1999, p. ii

<sup>192</sup> National Institute of Environmental Health Sciences, *Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields* (No. 99-4493), Executive Summary, 1999, p. iii

<sup>193</sup> Placer County, *Negative Declaration for the Northern California Power Agency Roseville Area Peaking Facility*, June 28, 1984

<sup>194</sup> Roseville Energy Park Application for Certification, July 2001, p. 5.16-18

### **Other Commercial Industrial Facilities**

There are no existing businesses or commercial operations adjacent to the SOI Amendment Area that use hazardous materials. However, facilities operated by NEC and Hewlett Packard, approximately one mile east of the Fiddymment Ranch property, use various types and quantities of hazardous substances. The primary risk to the SOI Amendment Area posed by these facilities is the release of substances to the air either as toxic air contaminants (TACs) or through inadvertent or accidental releases. Please see Section 4.4 (Air Quality) for additional information.

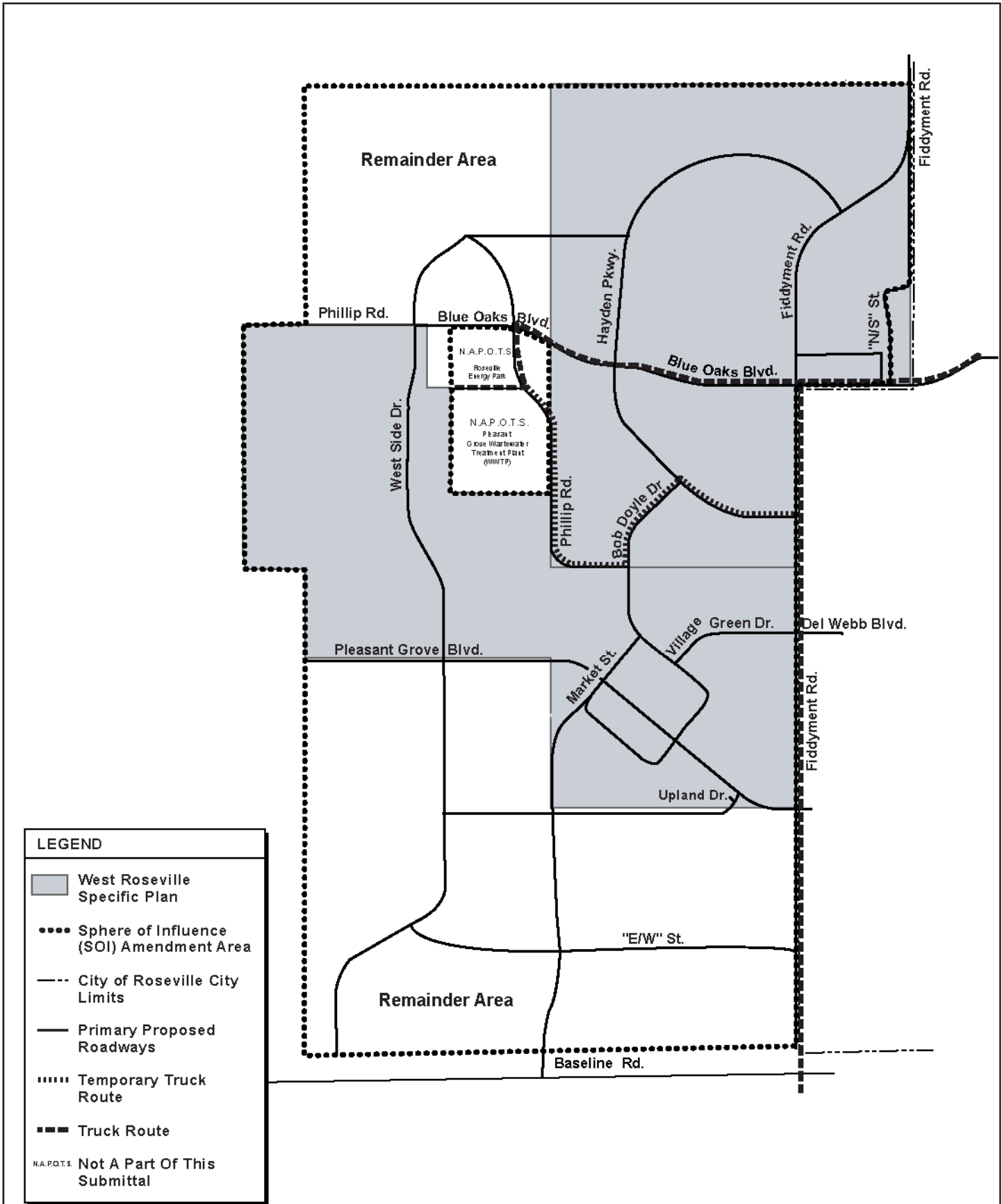
According to the Roseville Fire Department, hazardous-materials-related incidents, such as an inadvertent release of material, have been minimal in existing facilities. Where there was a release, facility operators corrected the situation to minimize the potential for a repeat occurrence.<sup>195</sup>

### **Transportation of Hazardous Materials within and Adjacent to the SOI Amendment Area**

Hazardous materials are routinely transported by truck or rail. With few exceptions, Section 31303 of the California Vehicle Code and U.S. Department of Transportation (DOT) regulations prohibit the through-transportation of hazardous materials through residential neighborhoods and require that hazardous materials be transported via routes with the least overall travel time; however local deliveries are allowed (e.g., delivery of chemicals to the PGWWTP). Temporary and permanent truck routes are illustrated by Figure 4.9-1 (Truck Routes). The City of Roseville Public Works Department Traffic Division has designated truck routes upon which hazardous materials may be transported by common carrier through the City to light industrial and industrial facilities. Currently, near the SOI Amendment Area, hazardous materials can be transported only on Blue Oaks Boulevard west from State Route 65 and on Baseline Road west of Foothills Boulevard. Hazardous materials may also be transported on State Route 65 or the Union Pacific Railroad line, approximately two miles east of the WRSP boundary. Transportation of hazardous materials along any City or State roadways or rail lines is subject to all DOT hazardous materials transportation regulations. Current deliveries to the PGWWTP will be via State Route 65 to Blue Oaks Boulevard south and Fiddymment Road to Phillip Road. Please see Impact 4.9-8 for a discussion of a temporary truck route to access the PGWWTP until the Blue Oaks Boulevard, Phillip Road connection is completed.

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<sup>195</sup> City of Roseville, *North Roseville Specific Plan Draft Environmental Impact Report*, May, 1997, p. 4.8-15



10659-00

**FIGURE 4.9-1**  
**Truck Routes**

Source: Wade Associates, 2003; EIP Associates, 2003

Not to Scale



City of Roseville

### 4.9.3 Regulatory Setting

The following discussion summarizes federal, State, and local regulatory authorities pertaining to hazardous materials management and cleanup. In California, State agencies have obtained regulatory primacy with respect to hazardous waste management. Thus, the State has developed its own regulatory scheme that it implements with federal oversight. For this reason, the Regulatory Setting section focuses primarily on State and local authorities, as they would have the most involvement in hazardous waste management for this project.

#### ■ Federal

Several federal agencies regulate hazardous materials. These include the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Applicable federal regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). Title 40 of the CFR addresses emergency planning and notification, hazardous material management plans, soil and water pollution remediation and reporting, and community right-to-know reporting. The hazardous materials use and reporting programs would be administered by the CUPA [Roseville Fire Department]. Any investigation and/or cleanup of soil contamination by the Applicant and/or school district (see also California Code of Regulations Title 27) would be subject to standards set forth in Title 40.

#### **Uniform Building Code and Uniform Fire Code**

Prior to issuance of building permits and during occupancy, the City of Roseville Permit Division and Fire Department would be responsible for reviewing plans for facilities proposing to use hazardous materials to ensure that applicable Uniform Building Code and Uniform Fire Code standards are included in project design. These standards address, among other elements, proper storage and secondary containment for hazardous materials and fire-safe construction and materials. Use of appropriate design features would help reduce the potential for accidental releases of hazardous materials that could affect occupants or require emergency response services.

#### ■ State

The California Environmental Protection Agency (Cal/EPA) and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in the State. Within Cal/EPA, the Department of Toxic Substance Control (DTSC) has primary regulatory responsibility for hazardous waste management. Enforcement of regulations has been delegated to local jurisdictions that enter into

agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law. Along with the DTSC, the Regional Water Quality Control Board (RWQCB) is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the CCR. The DTSC, RWQCB, and/or a local agency (e.g., Placer County Environmental Health Division) typically oversee investigation and cleanup of contaminated sites. Additional State regulations applicable to hazardous materials are contained in Title 22 of the California Code of Regulations (CCR). Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials management. Title 8 of the CCR addresses workplace regulations involving the use, storage, and disposal of hazardous materials.

In January 1996, Cal/EPA adopted regulations implementing a “Unified Hazardous Waste and Hazardous Materials Management Regulatory Program” (Unified Program). The six program elements of the Unified Program are hazardous waste generators and hazardous waste on-site treatment, underground storage tanks, above-ground storage tanks, hazardous material release response plans and inventories, risk management and prevention program, and Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency – the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction.

The California Health and Safety Code provides minimum Statewide standards and regulations for the management of hazardous wastes to protect against potential hazards to public health or the environment.

The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. California Vehicle Code Section 31303 regulates the transport of hazardous materials.

## **School Siting**

### **Contaminated Sites**

The California Education Code (Section 17210 *et seq.*) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. The code requires that, prior to commencing the acquisition of property for a new school site, an environmental site investigation be completed to determine the health and safety risks (if any) associated with a site. Recent

legislation and changes to the Education Code identify DTSC's role in the assessment, investigation, and cleanup of proposed school sites. All proposed school sites that will receive State funding for acquisition and/or construction must go through a comprehensive investigation and cleanup process under DTSC oversight. DTSC is required to be involved in the environmental review process to ensure that selected properties are free of contamination, or if the property is contaminated, that it is cleaned up to a level that is protective of students and faculty who will occupy the new school. All proposed school sites must be suitable for residential land use, which is DTSC's most protective standard for children.

Prior to acquiring a school site or engaging in a construction project, school districts must contract for the preparation of a Phase I ESA, which must be reviewed by DTSC according to established timelines. The Phase I ESA, which must be prepared by a qualified professional, can be used to support a conclusion that no recognized environmental conditions are present, or a Preliminary Endangerment Assessment (PEA) is necessary. Although the methodology for conducting Phase I ESAs is the ASTM Industry Standard E-1527 (previously described), DTSC has developed an interim draft advisory that supplements the ASTM E-1527 standard that more specifically addresses school sites.<sup>196</sup>

If the Phase I concludes, or DTSC determines, that a PEA be conducted, the school district can either proceed with the PEA or drop the school site from further consideration. If the district chooses to proceed with a PEA, it will be required to enter into an Environmental Oversight Agreement with DTSC to oversee preparation of the PEA, which must be submitted to DTSC for review and approval. If the approved PEA concludes the property would not pose a threat, DTSC will issue a "No Further Action" determination and will not require additional investigation or cleanup. If the PEA concludes the property is contaminated, the district must clean up the site, or it can choose not to proceed with development of the school project. When all necessary cleanup activities are completed according to DTSC-approved plans, DTSC will certify the site cleanup is complete.<sup>197</sup>

If a previous Phase I ESA has been conducted for the proposed school site and is more than 180 days old, DTSC recommends an addendum be prepared to verify the site conditions or describe changes in site conditions.<sup>198</sup>

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<sup>196</sup> California Environmental Protection Agency, Department of Toxic Substances Control, "Phase I Environmental Site Assessment Advisory: School Property Evaluations, Revised September 5, 2001," September 5, 2001

<sup>197</sup> California Environmental Protection Agency, Department of Toxic Substances Control, School Property Evaluation and Cleanup Division, *Fact Sheet: New Environmental Requirements for Proposed Schoolsites (Assembly Bill 387 and Senate Bill 162)*, April 2001

<sup>198</sup> California Environmental Protection Agency, Department of Toxic Substances Control, "Phase I Environmental Site Assessment Advisory: School Property Evaluations, Revised September 5, 2001," September 5, 2001

In conjunction with the Phase I and PEA process, DTSC has also developed specific sampling guidance for schools proposed on land historically used for agriculture where pesticides have been routinely applied (“Interim Guidance for Sampling Agricultural Fields for School Sites,” August 2002). DTSC recommends that school districts and their hazardous materials consultant coordinate with DTSC to determine the applicability of the Interim Guidance to a specific location and the need for testing.<sup>199</sup>

#### **Location Relative to Source of Hazardous Emissions**

In addition to an evaluation of potential site contamination issues, Public Resources Code Sections 21151.4, 21151.8, and 21151.2 require that no EIR be approved for a project involving the construction or alteration of a facility that might reasonably be anticipated to result in hazardous air emissions within one-quarter mile of a school unless the lead agency has consulted with the school district having jurisdiction regarding the potential impact of the project on the school, or the school has been given written notification of the project not less than 30 days prior to approval of the EIR. Section 4.4 (Air Quality) includes additional information about hazardous emissions.

#### **Location Relative to Electrical Transmission Sources**

The California Department of Education School Facilities Planning Division has developed specific guidelines that address the location of schools relative to electrical transmission lines. Any part of a school site must be a minimum of 100 feet from the edge of an easement for a 50 to 133 kV line, 150 feet from the edge of an easement for a 220 to 230 kV line, or 350 feet from the edge of an easement for a 500 to 550 kV line.<sup>200</sup>

#### **Use of Recycled Water**

Recycled water refers to wastewater treatment plant effluent that has received treatment that meets the State requirements for direct nonpotable use (e.g., irrigation of landscaping, industrial cooling purposes). These treatment requirements are set forth in Section 60301 *et seq.* of Title 22 of the CCR. Section 60301.230 specifies the following requirements for recycled water that would be produced by the PGWWTP:

“Disinfected tertiary recycled water” means a filtered and subsequently disinfected wastewater that meets the following criteria:

- (a) The filtered wastewater has been disinfected by either:

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<sup>199</sup> California Environmental Protection Agency, Department of Toxic Substances Control, “Interim Guidance for Sampling Agricultural Fields for School Sites,” 2nd revision, August 26, 2002

<sup>200</sup> California Department of Education, School Facilities Planning Division, Resources for School Facilities Planning. 2000, p. 6

- (1) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or
  - (2) A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.
- (b) The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

Water meeting these standards (referred to as “tertiary-2.2 criteria”) may be used for unrestricted use, which includes (but is not limited to) body contact for recreation (swimming), irrigation of food crops, and irrigation of parks, playgrounds, and schoolyards. The State Department of Health Services (DHS) considers a properly filtered and disinfected water meeting the tertiary-2.2 standard to be essentially pathogen-free and adequately protective of public health.<sup>201</sup>

Prior to using the recycled water for irrigation, the City would be required to prepare an Engineering Report in accordance with Title 22 of the California Code of Regulations, which would be submitted to and reviewed by DHS.

DHS regulations also require that recycled water must be conveyed in a totally separate distribution system from the potable water supply. Areas where recycled water will be used for irrigation must be maintained by professional landscape maintenance contractors and City maintenance staff. The City would be responsible for implementing a cross-connection program to ensure that future potable services are not accidentally connected to the recycled water system and a public information program (including signage) to notify the public of the use and location of nonpotable water application. Section 60301 of the regulations establishes specific use area requirements that address proximity of application areas to domestic supply wells and runoff control.

## ■ Local

The City of Roseville and Placer County are responsible for enforcing many State regulations governing hazardous materials management, including waste generation, minimization, and storage, and underground storage tanks. Sampling plans written to define the extent of lead based paint, fuel or waste

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<sup>201</sup> Jeff Stone, California Department of Health Services, “San Diego Unified School District Unrestricted Landscape Irrigation,” letter to San Diego City Schools, June 24, 1999

oil contamination in soil shall be reviewed by the Roseville Fire Department. Removal of material containing asbestos where surface areas are in excess of 100 square feet shall be performed by a licensed asbestos abatement contractor. A permit shall be obtained from the Roseville Fire Department to remove any remaining aboveground tanks (above 60 gallon capacity). During construction, contractors intending to utilize temporary tanks to supply fuel or propane shall obtain permits from the Roseville Fire Department, and shall comply with provisions of the CFC Article 87. Storage and disposal of hazardous waste during clean-up, or development shall comply with Title 22 requirements.

### **Placer County**

The Roseville Fire Department administers CUPA elements within its jurisdiction, and the Placer County Department of Health and Medical Services, Environmental Health Division (PCDEH) administers CUPA elements in the County and in unincorporated areas of the County. The Placer County Office of Emergency Services (PCOES) provides emergency planning and response services in conjunction with the City of Roseville Fire Department (see below).

A Hazardous Waste Management Plan (HWMP) was developed in 1988 and adopted in 1989 by Placer County in response to the Tanner Act (AB 2948). The HWMP includes information on current and projected hazardous waste generation in the County, including household hazardous waste, an inventory of contaminated sites and hazardous waste treatment, storage, and disposal (TSD) facilities, and administrative policies and implementation measures. Placer County has determined the amount of waste generated does not justify the need for a TSD facility within the County. As such, hazardous wastes generated as a result of the SOI Amendment Area would require disposal at TSD facilities outside the County until demand for these facilities exceeds their capacity or until on-site treatment of hazardous wastes becomes more cost effective than off-site disposal.<sup>202</sup>

### **■ City of Roseville**

Chapter 9.60 of the Roseville Municipal Code establishes City regulations for the identification and disclosure of hazardous materials use and management in the City.

### **Fire Department**

The Roseville Fire Department works cooperatively with the PCDEH in matters regarding hazardous materials management. The Roseville Fire Department is the CUPA for the City. The City of Roseville Fire Department is responsible for enforcing UST regulations, which include issuing permits for tank use

and removal and annual inspections. The Fire Department also oversees cleanup of soil contamination related to leaking USTs in cooperation with the County and the RWQCD. As described above, the Roseville Fire Department also inspects and monitors facilities required to comply with federal and State hazardous materials inventory and reporting regulations and provides emergency response in the event of an incident involving hazardous materials.

The City of Roseville does not have a specific policy that addresses minimum setback requirements for land uses that could involve the use of hazardous materials, although existing City setback requirements would provide some level of protection from accidental releases.

### **Hazardous Materials Emergency Response**

The Roseville Fire Department has developed a Hazardous Materials Emergency Response Plan. The plan describes organizational and operational responsibilities in the event of a hazardous materials emergency, including cleanup and decontamination procedures. As first responders to hazardous material incidents, personnel on each shift are trained to respond to hazardous materials incidents according to standards specified in CCR Title 8, Section 5192 (Hazardous Waste Operations and Emergency Response). Through mutual aid agreements, the Roseville Fire Department can also request services from the Placer County Hazardous Materials Response Team in the event of a large-scale incident. The Roseville Fire Department would also provide assistance to the California Highway Patrol, Office of Emergency Services, and other responding agencies as requested in the event of a hazardous materials spill on State Route 65 or Interstate 80.

The City revises its Emergency Response Plan (Disaster Plan) every three years.<sup>203</sup> The plan is an extension of the City's Multi-Hazard Functional Plan and follows nationally adopted Incident Command System guidelines. The Emergency Response Plan describes roles and responsibilities during emergencies, operating procedures, equipment, and administrative procedures. Specific evacuation routes are generally not included in disaster plans since emergency response procedures and evacuation would need to be determined on a case-by-case basis. Although existing City emergency plans do not indicate specific routes, they have determined that if evacuation in response to a hazardous materials incident in existing or planned areas was needed that evacuees would be directed to areas upwind of the incident. The predominant wind direction is from the south or southwest. Depending on weather conditions, evacuation to the east or west would be the second option. Evacuation to the north would

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<sup>202</sup> Placer County, *General Plan Update, Draft General Plan Background Report, volume II*. September 25, 1992

<sup>203</sup> Steve Anderson, Roseville Fire Department. Personal communication, May 28, 2002

occur only if weather conditions necessitated it. The exact routes and distances would be determined in response to the nature and severity of the incident.

### **Household Hazardous Waste Program**

The City of Roseville's Environmental Utilities Department is responsible for ensuring compliance with the Source Reduction and Recycling Element (SRRE) provisions of the Integrated Waste Management Act (AB 939), which includes guidelines for the management of household hazardous waste. Current programs being used by the City include a drop-off program for used motor oil managed by the City's Solid Waste Division as a recycle-only site, and a permitted Household Hazardous Waste Facility managed by the Western Placer Waste Management Authority (WPWMA). The WPWMA developed a permanent drop-off location in conjunction with a regional Materials Recovery Facility (MRF), which would allow for the removal of hazardous materials in delivered refuse prior to disposal in the landfill. The MRF became operational in November 1995.<sup>204</sup>

### **General Plan**

The City of Roseville General Plan includes several policies relating to hazardous materials and safety, as outlined below. Refer to Appendix C for a complete list of all City goals and policies that are directly applicable to hazardous materials and safety:

- City of Roseville General Plan Policy SE-1
- City of Roseville General Plan Policy SD-2
- City of Roseville General Plan Policy SG-1
- City of Roseville General Plan Policy SG-2

### **Stormwater Management Program (SWMP)**

The March 2003 SWMP includes procedures that the City would implement to minimize the potential for the illicit or illegal disposal of materials that could be hazardous (e.g., household hazardous waste). These procedures, which would be performed by City staff, would include random inspections in the WRSP Area, with a particular emphasis on inspection of open space/waterways.

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<sup>204</sup> City of Roseville, *Comprehensive Land Use Element Project Update*, February 1995

## 4.9.4 Impacts and Mitigation Measures

### ■ Methods of Analysis

For purposes of this analysis, the typical use of hazardous materials and their effects were qualitatively assessed through review and evaluation of available documents that identified potential contaminants and hazardous materials users within the SOI Amendment Area and vicinity. City of Roseville planning documents were reviewed and information was obtained from City staff to qualitatively assess the potential for hazardous materials use and accidents in future development and at industrial uses adjacent to the SOI Amendment Area. Sources of information are referenced in the footnotes throughout this section. Published information regarding the potential hazards generated by EMFs and related City of Roseville “prudent action” policies were also reviewed.

The potential for airborne releases of toxic air contaminants or odors from adjacent industrial facilities are discussed in Section 4.4 (Air Quality).

In determining the level of significance, the analysis assumes that the WRSP Area and Remainder Area, if annexed, would comply with relevant federal and State laws and regulations, City General Plan policies, ordinances, and Improvement Standards. Therefore, such policies, ordinances, and standards are not identified as mitigation measures. The baseline for the analysis in this section is existing conditions. Approved uses that are under development, such as the PGWWTP, are also considered in this section. Cumulative impacts relating to hazardous materials and public safety are addressed in Chapter 5.

### ■ Standards of Significance

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area would do any of the following:

- 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 or accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school
- Expose people to potential known hazards associated with high-voltage transmission lines

IMPACT 4.9-1: INCREASED POTENTIAL FOR ACCIDENTAL RELEASE OR SPILL OF HAZARDOUS MATERIALS DURING CONSTRUCTION OR OCCUPANCY		
<b>Applicable Policies and Regulations:</b>	Code of Federal Regulations Title 49 General Plan Policy SE-1 California Health and Safety Code Chapter 6.95 California Code of Regulations Titles 8, 22, and 26 Unified Hazardous Waste and Hazardous Materials Management Regulatory Program Uniform Building Code, Uniform Fire Code Roseville Fire Department/CUPA permitting and enforcement	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures</b>	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

### West Roseville Specific Plan/Remainder Area

Hazardous materials would be used in varying amounts during construction and operation of the WRSP and development of the Remainder Area. The types and quantities of hazardous materials that would be present during occupancy of the residential and commercial land uses in the SOI Amendment Area are expected to include, for example, household-type and maintenance products (e.g., paints, solvents, pool chemicals, pesticides/herbicides). In the light-industrial and industrial areas, other chemicals would be stored and used, which by their nature and/or quantity, would pose greater risks to project occupants and visitors. The four groundwater wells (see Impact 4.11-4 in Section 4.11, Public Utilities) would include well-head chlorination and fluoridation. Contact should be made with Ken Glotzbach of Roseville Environmental Utilities Department regarding closure or continued use of wells referenced herein. It is recommended that baseline sampling be performed on groundwater for contaminants of concern to determine if it has been impacted. If this is confirmed, the RWQCB will assume lead oversight in remedial work necessary to achieve an acceptable clean-goal. The types and amounts of hazardous materials would vary according to the nature of the activity. However, specific businesses or commercial activities have not been identified in either the WRSP Area or Remainder Area. Therefore, the actual hazardous materials and amounts that would be on site or within a specific location in the SOI Amendment Area cannot be determined at this time. In some cases, it is the type of hazardous material that is potentially hazardous; in others, it is the amount of hazardous material that would present a hazard.

Exposure of construction workers or site occupants to hazardous materials would occur in the following manner: improper handling or use of hazardous materials or hazardous wastes during construction or operation of the project, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion or other emergencies. Construction workers and future site residents would be exposed to hazards associated with accidental releases of hazardous materials, which would result in adverse health effects.

Hazardous materials regulations, which are codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code, were established at the State level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. These regulations must be implemented by employers/businesses, as appropriate, and are monitored by the State (e.g., Cal OSHA in the workplace or DTSC for hazardous waste) and/or local jurisdictions (e.g., the Roseville Fire Department).

By ensuring that businesses in or adjacent to the WRSP Area comply with the Unified Program (UP), the City would reduce impacts associated with the potential for accidental release of hazardous materials during occupancy of the WRSP Area that would result in increased risk of exposure to accidental release of hazardous materials from the PGWWTP and proposed Roseville Energy Park, and the potential for an increased demand for incident emergency response. This would be accomplished by ensuring that regulated activities (e.g., businesses) within the WRSP Area are managed in accordance with applicable regulations such as Hazardous Materials Release Response Plans and Inventories (Business Plans), the California Accidental Release Prevention (CalARP) Program, and the California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements, as discussed in Impacts 4.9-1 through 4.9-3. Off-site activities (e.g., the PGWWTP and proposed Roseville Energy Park) would also be required to comply with these regulations.

Compliance with Title 26, Division 6, of the CCR, which would be monitored by the City, would reduce impacts associated with potential for accidental release during construction or occupancy of the WRSP Area, the risk of exposure to accidental release of hazardous materials from the PGWWTP, the potential for an increased demand for incident emergency response, and a temporary truck route for transportation of hazardous materials through the WRSP Area. Compliance with this regulation would ensure that businesses in the WRSP Area and public facilities where hazardous materials are used or stored (e.g., PGWWTP and groundwater) well sites adhere to regulations designed to prevent leakage and spills of material in transit and provide detailed information to clean-up crews in the event of an accident.

Workplace regulations addressing the use, storage, and disposal of hazardous materials in Title 8 of the CCR would apply to businesses (e.g., light-industrial uses) and public facilities (e.g., PGWWTP) in and adjacent to the SOI Amendment Area. Compliance with these regulations would be monitored, in part, by the Roseville Fire Department when it performs hazardous materials inspections. Other mechanisms in place to enforce the Title 8 regulations include compliance audits and reporting to local and State agencies. Implementation of the workplace regulations would further reduce the potential for hazardous materials releases.

Implementation of Title 49, Parts 171-180, of the Code of Federal Regulations would reduce any impacts associated with the potential for accidental release during construction or occupancy of the WRSP if implemented, by transporters delivering hazardous materials to the WRSP Area or PGWWTP or picking up hazardous waste. These regulations establish standards by which hazardous materials will be transported, within and adjacent to the SOI Amendment Area.

Implementation of existing General Plan Policy SE-1, which addresses hazardous materials disclosure, and compliance with applicable federal and State laws and regulations that are administered and enforced by the CUPA (Roseville Fire Department), and Roseville Fire Department standards (the local agency that implements applicable hazardous materials-related sections of the Uniform Fire Code and Uniform Building Code) would reduce impacts associated with the routine use, storage, and transportation of hazardous materials in the SOI Amendment Area to a **less-than-significant** level.

<b>IMPACT 4.9-2: INCREASED DEMAND FOR HAZARDOUS MATERIALS INCIDENT EMERGENCY RESPONSE.</b>		
<b>Applicable Policies and Regulations:</b>	General Plan Policies SE-1, SD-2 California Code of Regulations Titles 8, 22, 26 Uniform Building Code, Uniform Fire Code Roseville Fire Department/CUPA permitting and enforcement	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Significant
<b>Mitigation Measures:</b>	None required	MM 4.10-3 (Construct new fire station)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

*Emergency Response*

Development in the Project Area would increase the use of hazardous materials, so additional hazardous materials emergency response capabilities would be needed. Implementation of applicable regulations and standards (e.g., Uniform Fire Code, hazardous materials management laws and regulation

monitored and enforced by the CUPA [Roseville Fire Department], etc.) described below is an important component of reducing potential risks associated with hazardous materials use. The hazardous materials disclosure provisions of General Plan Policy SE-1 are intended to ensure that preventative steps are taken to minimize the occurrence of hazardous materials incidents and to establish response procedures should such incidents occur. Impacts associated with increased demand for hazardous material emergency response for both the WRSP and Remainder Areas are discussed below.

### **West Roseville Specific Plan**

The increase in the amount of hazardous materials within the WRSP Area would require additional hazardous materials emergency response capabilities, as compared to existing conditions. In the event of an emergency, the Roseville Fire Department hazardous materials response protocols, operational, and administrative procedures contained in the Emergency Plan would be critical in safely managing a hazardous materials incident involving the WRSP Area.

According to the Roseville General Plan, Section VIII (Safety Element), targeted response times have not been met consistently, and there is a need for additional fire service. As described in Section 4.10 (Public Services), one permanent fire station has been identified in the WRSP that would maintain adequate response times. Thus, conformance with the CCR, UBC, and Uniform Fire Code, as well as development of the additional fire station in the WRSP Area, as discussed in Impact 4.10-2 in Section 4.10 (Public Services), would provide hazardous materials incident response services. In addition, General Plan Policy SE-1 and compliance with applicable federal and State laws that are administered and enforced by the CUPA (Roseville Fire Department) standards would ensure that this impact would be **less than significant**.

### **Remainder Area**

Residential and commercial development in the Remainder Area would further increase the demand for hazardous materials incident emergency response, which would be provided by the Roseville Fire Department. The location of specific activities and a fire station have not been determined, so it is unknown whether adequate emergency response would be available to the Remainder Area in a timely manner, as required under General Plan Policy SD-2. This is considered a potentially significant impact. However, with implementation of MM 4.10-3, which requires construction of an additional fire station to meet response time goals, as discussed in Section 4.10 (Public Services), this impact would be **less than significant** by ensuring that emergency response services would be available to the entire Remainder Area.

<b>IMPACT 4.9-3 RISK OF EXPOSURE TO ACCIDENTAL RELEASES OF HAZARDOUS MATERIALS FROM THE PLEASANT GROVE WASTEWATER TREATMENT PLANT.</b>		
<b>Applicable Policies and Regulations</b>	Code of Federal Regulations Titles 40 and 49 California Code of Regulations Titles 8, 22, 26 Uniform Building Code, Uniform Fire Code Roseville Fire Department/CUPA permitting and enforcement	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**West Roseville Specific Plan/Remainder Area**

The proposed project includes development adjacent to the nearly completed PGWWTP, as shown in Figure 2-3 (West Roseville Specific Plan Land Use Plan) in Chapter 2 (Project Description). The PGWWTP would be operational prior to occupancy of the WRSP Area or development of the Remainder Area. Operation of the PGWWTP would involve the use and storage of chemicals. As noted in the setting, the use of hazardous materials is closely regulated. These regulations include federal hazardous materials and transportation regulations in Titles 40 and 49 of the Code of Federal Regulations, State workplace hazards regulations (Title 8 of the CCR), Titles 22 and 26 of the CCR that address hazardous materials and wastes, and elements of the Uniform Building Code and Uniform Fire Code. Title 49 related to the transportation of hazardous materials is enforced primarily by the Department of Transportation, and the California Highway Patrol. Title 22 is enforced by the Roseville Fire Department, as the CUPA for Roseville. Although regulations are in place to minimize hazards, there is a potential for an inadvertent chemical release. The most likely type of release would be a spill from a storage tank or when chemicals are transferred from delivery vehicles to storage areas. For a discussion of potential toxic air contaminant emissions, please see Section 4.4 (Air Quality).

In conjunction with the environmental analysis of the PGWWTP in 1996, a 1,000-foot non-residential buffer was established around the PGWWTP restricting land use to non-residential development to minimize risks to sensitive off-site land uses. The land use buffer is illustrated by Figure 4.9-2 (1000-Foot Buffer). Although the buffer was originally intended to mitigate hazards associated with the use of chlorine gas, current plans are to use hazardous sodium hypochlorite, which is typically less hazardous than chlorine gas. Nonetheless, the 1,000-foot buffer has been retained. The WRSP designates land within the 1,000-foot buffer commercial, light-industrial, public/quasi-public, park, and open space.



Furthermore, the PGWWTP has been designed so that all site drainage is kept on-site. Therefore, in an event a chemical were to be released on-site, it would be routed to the treatment plant’s head works where it would enter the influent waste stream for treatment. The City of Roseville Fire Marshal reviewed the anticipated chemical use and plant operational design in August 2002 for potential off-site consequences at the WRSP Area and concluded off-site consequences were not likely to occur. In order to reduce the likelihood of incompatible land uses adjacent to the PGWWTP, the Roseville Fire Department recommended certain light industrial land uses in the WRSP Area adjacent to the plant be designated under the Conditional Use category.<sup>205</sup> A list of uses that would be subject to a Conditional Use Permit can be found in Section 4.1 (Land Use and Agricultural Resources). Any development in the Remainder Area would also be restricted to non-residential uses within 1,000 feet of the PGWWTP.

There is no evidence that operation of the PGWWTP would result in any conditions that would unduly expose future occupants of the SOI Amendment Area to unmitigated risks. No residential uses would be located within 1,000 feet of the plant. Buildings (classrooms and teaching facilities) associated with the proposed high school would be located over 1,000 feet from the PGWWTP. Plant operations would be required to comply with numerous hazardous materials laws and regulations that were adopted to ensure that potential risks associated with the use of chemicals at facilities such as wastewater treatment plants would not present an unacceptable risk to human health and the environment. For these reasons, this is considered a **less-than-significant** impact. Please see Impact 4.9-8 for a discussion of hazardous materials deliveries on roadways through the WRSP Area.

<b>IMPACT 4.9-4: INCREASED RISK OF SOIL OR WATER CONTAMINATION FROM IMPROPER DISPOSAL OF HOUSEHOLD HAZARDOUS WASTES.</b>		
<b>Applicable Policies and Regulations:</b>	City of Roseville Stormwater Management Program	
	City of Roseville Household Hazardous Waste Program	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

<sup>205</sup> Dennis M. Mathisen, Fire Marshal, Roseville Fire Department, internal memo to Kathy Pease, City of Roseville, August 20, 2002

**West Roseville Specific Plan/Remainder Area**

Roseville residents and those in Placer County may dispose of household hazardous wastes on Saturdays at the Western Placer Waste Management Authority (recycling facility) located at Athens and Fiddymont Roads.

Residential and commercial uses in the SOI Amendment Area would generate household hazardous material wastes, such as used paints, automotive fluids, unused or unwanted pesticides and herbicides, photographic chemicals, and others. A resulting increase in hazardous waste disposal in residential trash pick-ups, dumpsters, transfer stations, and landfills would accordingly occur. The disposal of household hazardous wastes into containers or facilities not designed for such materials can cause fires or explosions. Illicit disposal adjacent to or into Pleasant Grove and Kaseberg Creeks would cause soil, surface water, or groundwater contamination that would affect use of these resources.

Current household hazardous waste programs in the City include a drop-off program for used motor oil and periodic household hazardous waste drop-off days. The City has also developed a permanent drop-off location, in conjunction with a regional Materials Recovery Facility (MRF), which provides for the removal of hazardous materials in delivered refuse prior to disposal in the landfill.<sup>206</sup> In addition, the Monitoring and Reporting Element of the City’s SWMP (refer to Section 4.12, Hydrology, Water Quality, and Groundwater) includes procedures for random monitoring (testing and visual observation) for illicit or illegal disposal of hazardous materials to waterways. Implementation of these programs would minimize impacts associated with risk of exposure due to improper disposal of household hazardous wastes, reducing impacts to a **less-than-significant** level.

<b>IMPACT 4.9-5: SOIL OR GROUNDWATER CONTAMINATION RELATED TO PAST USES.</b>		
<b>Applicable Policies and Regulations:</b>	California Code of Regulations Titles 26 and 27 Code of Federal Regulations Title 40 California Education Code Section 17210 <i>et seq.</i>	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.9-1 (Identify and remediate soil contamination)	MM 4.9-2 (Soil contamination policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

<sup>206</sup> City of Roseville, *Comprehensive Land Use Element Project Update*, February 1995

### West Roseville Specific Plan

Preliminary Environmental Site Assessments (ESAs) have been performed for the two properties within the SOI Amendment Area. The ESA for the Fiddlyment Ranch property recommended soil sampling at the fuel storage tank, pesticide use areas, and locations containing debris (including the household dump) to identify whether soils have been adversely affected by historic uses, and remediation, as necessary, prior to grading. In addition, the report recommended that existing wells that will not be used should be properly closed to minimize the potential for contamination pathways and because of the physical hazard they would present.<sup>207</sup> The ESA for the Westpark property indicated miscellaneous debris observed on the property was not considered hazardous, but removal prior to site development was recommended.

Based on the information presented in the assessment reports, some locations would contain elevated levels of contaminants in soils. Depending on the concentration and extent, soils contaminated with products containing hazardous substances would present a human health risk during construction activities. Further, it is possible that not all septic tanks, wells, or other underground storage devices or conveyance systems have been identified, because these would have been installed prior to permitting requirements, or additional information would have become available in agency files or databases since 1999, when the ESAs were performed.

Soil-disturbing activities would expose workers to contaminated debris, elevated levels of chemicals that would be hazardous, or hazardous substances would be inadvertently spread, resulting in a greater aerial extent of contamination. Soil (or groundwater) containing elevated levels of contaminants, if left unmanaged, would pose a health risk to site occupants. This is considered a potentially significant impact.

Implementation of applicable regulations in the CCR and Title 40 of the CFR by the Applicant, under the oversight of the City and/or RWQCB, would ensure that soil contamination, if any, as a result of past uses is remediated according to established protocols.

Implementation of MM 4.9-1 would reduce the risk of exposure to site contamination to a **less-than-significant** level for the WRSP Area by ensuring that known or potentially hazardous site conditions are identified and appropriately managed in accordance with regulations adopted prior to development.

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<sup>207</sup> Rosewood Environmental Engineering, *Phase I Environmental Site Assessment, Fiddlyment Property, Roseville, California*, August 1999, pp. 30–34

It should be noted that the California Education Code requires site-specific information for school site development, including approval from DTSC that proposed school site(s) are free of contaminants that would pose a risk to students and faculty. School sites have been designated in the land use plan for the WRSP. Although all the steps in the DTSC assessment process have not been completed, the district would be required under the California Education Code to complete the necessary assessments to insure development of proposed school sites would not expose children and teachers to risks associated with contaminated sites.

**Remainder Area**

As noted in the Environmental Setting, it is assumed that grassland and dry-farmed sites, such as those in the Remainder Area, were treated with little or no agricultural chemicals such as pesticides or herbicides. However, a Phase 1 ESA has not been prepared for the Remainder Area to determine whether past uses have adversely affected soil or groundwater conditions. Similar to the effects described for the WRSP, development of sites where undetermined potential for soil or groundwater contamination exists would result in the inadvertent exposure of construction workers or site occupants to adverse health effects. The total effect of developing the Remainder Area would increase the number of people who would be exposed to such hazards. This is considered a potentially significant impact.

Implementation of applicable regulations in the CCR and Title 40 of the CFR by the Applicant, under the oversight of the City and/or RWQCB, would ensure that soil contamination, if any, as a result of past uses is remediated according to established protocols.

Implementation of MM 4.9-2 would reduce this impact for the Remainder Area to a **less-than-significant** level by ensuring that, prior to development, appropriate assessments be conducted, and, if contaminated soil or groundwater is present, remediation be completed prior to development.

<b>IMPACT 4.9-6: USE OF RECYCLED WATER FOR LANDSCAPE IRRIGATION IN AREAS ACCESSIBLE TO THE PUBLIC.</b>		
<b>Applicable Policies and Regulations:</b>	California Code of Regulations Title 22	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None required	None required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

### **West Roseville Specific Plan/Remainder Area**

Recycled water from the PGWWTP would be conveyed to the SOI Amendment Area and used for irrigation in parks and for irrigation of landscaping in other places accessed by the public. Individuals using or maintaining the parks and landscaped facilities in areas accessible to the public would come in contact with the water when these features are actively irrigated, from water adhering to grass and other landscaping, or through any remaining water that has not yet infiltrated into the subsurface. Ponding would be minimized by controlling the rates and frequency of application, as required under Municipal Code Chapter 14.17 and the City's "Rules and Regulations for the Use of Recycled Water" (refer to Section 4.11, Public Utilities).

As noted in Section 4.11.3 (Public Utilities, Wastewater), the PGWWTP would be designed and operated to produce effluent that meets or exceeds standards consistent with "Disinfected Tertiary Recycled Water" as defined by Title 22 of the California Code of Regulations (Division 4, Chapter 3, Section 60301.230). Water meeting these standards (referred to as "tertiary-2.2 criteria") may be used for unrestricted use, which includes (but is not limited to) body-contact for recreation (swimming), irrigation of food crops, and irrigation of parks, playgrounds, and schoolyards. The DHS considers a properly filtered and disinfected water meeting the tertiary-2.2 standard to be essentially pathogen-free and adequately protective of public health.<sup>208</sup> As previously noted, prior to using the recycled water for irrigation, the City would be required to prepare an Engineering Report in accordance with Title 22 of the CCR, which would be submitted to and reviewed by DHS. The City would be responsible for ensuring the application sites comply with the siting and use requirements established in Section 60310 of the CCR. The cross-connection requirements would ensure that recycled water does not enter the potable water distribution system.

Compliance with Title 22, Division 4.5, would reduce impacts associated with the use of recycled water for landscape irrigation in areas accessible to the public by requiring the City's PGWWTP to be designed and operated to produce effluent that meets or exceeds standards consistent with "Disinfected Tertiary Recycled Water," and requiring the City to prepare an engineering report to be submitted to and reviewed by DHS, as discussed in Impact 4.9-6.

Because there is no evidence that use of tertiary-2.2 recycled water would result in any conditions that would unduly expose future occupants to unmitigated risks, this is considered a **less-than-significant** impact.

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<sup>208</sup> Jeff Stone, California Department of Health Services, "San Diego Unified School District Unrestricted Landscape Irrigation," letter to San Diego City Schools, June 24, 1999

IMPACT 4.9-7: POTENTIAL EFFECTS OF ELECTROMAGNETIC FIELDS (EMFS) FROM HIGH-VOLTAGE TRANSMISSION LINES		
<b>Applicable Policies and Regulations:</b>	General Plan Policies SG-1, SG-2	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	No Impact	Less Than Significant
<b>Mitigation Measures</b>	None required	None required
<b>Significance after Mitigation:</b>	No Impact	Less Than Significant

Existing high voltage transmission lines and substations would be potential sources of Electromagnetic fields (EMFs) in the Remainder Area portion of the SOI Amendment Area. Electromagnetic field levels along the transmission systems are anticipated to be within a range of numerical limits adopted by some states in the U.S., but not California. However, the risks are considered small, given the current understanding of EMF and health effects.<sup>209</sup>

As discussed in the Environmental Setting, current research to date has not identified a relationship between EMF exposure and adverse health effect. However, potential effects are discussed below.

### West Roseville Specific Plan

No new high-voltage transmission lines are proposed in the WRSP, and there are no existing lines where permanent, occupied structures would be located. There would be **no impact**.

### Remainder Area

An existing 230-kV electrical receiving station and existing high-voltage transmission lines are located in the Remainder Area on the west side of Fiddymont Road, approximately 375 feet south of Pleasant Grove Boulevard. The transmission lines are a source of EMF that would be present in the Remainder Area.

Development of the Remainder Area would increase the number of people who would be exposed to potential risks associated with EMF. However, as discussed above with implementation of existing City policies SG-1 and SG-2, which address siting of development in proximity to sources of EMF, the impact of development in the Remainder Area with respect to EMFs would be **less than significant**.

<sup>209</sup> Roseville Energy Park Application for Certification, July 2001. pp.5.16-18.

IMPACT 4.9-8: TEMPORARY TRUCK ROUTE FOR TRANSPORTATION OF HAZARDOUS MATERIALS THROUGH THE WRSP AREA		
<b>Applicable Policies and Regulations:</b>	California Vehicle Code, Section 31303 California Code of Regulations Title 26 Code of Federal Regulations Title 49	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	No Impact
<b>Mitigation Measures:</b>	MM 4.9-3 (Temporary truck route notification)	None required
<b>Significance after Mitigation:</b>	Less Than Significant	No Impact

### West Roseville Specific Plan

As a part of the WRSP, Phillip Road would be realigned and extended north to intersect with an extension of Blue Oaks Boulevard. Until Blue Oaks Boulevard is extended to intersect with the re-aligned Phillip Road, deliveries to the PGWWTP proposed Roseville Energy Park and well sites would be provided by a temporary truck route. The proposed temporary truck route would extend west on Blue Oaks Boulevard, south on Fiddymment Road, west on Hayden Parkway and south on Bob Doyle Drive, west on Phillip Road and north to the PGWWTP (shown on Figure 4.9-1). Hayden Parkway and Bob Doyle Drive would traverse residential areas. Because of regulations governing transport of hazardous materials (CFR, Title 49, and California Vehicle Code Section 31303) and hazardous materials storage regulations (Title 26 of the CCR), the temporary use of these roads is considered a **less-than-significant** impact.

As discussed above, a temporary truck route to access the PGWWTP is proposed as part of the WRSP. The transportation of chemicals and supplies to the City’s PGWWTP would be along Blue Oaks Boulevard and Phillip Road, and it is anticipated that there will be a minimum of one trip per week. The chemicals expected to be transported are shown in Table 4.9-1.

To minimize the potential for accidental spills of hazardous materials during transit, suppliers and transporters are required to follow federal and State regulations for packaging and handling hazardous materials. These regulations set forth requirements for testing of shipping containers, marking containers and vehicles, inspecting vehicles, and training drivers. Hazardous waste shipping requirements are subject to more stringent requirements. Because of these requirements, containers are unlikely to release their contents in the event of an accident. For this reason, the consequences of a vehicle accident involving hazardous materials in the project area would likely be minimal, and the impact would be **less**

**than significant.** Nonetheless, the transport of such materials through a residential neighborhood would be a concern to local residents, and would slightly increase the risk of exposure.

Therefore, MM 4.9-3 is recommended to ensure that residences along the route are notified of the use of these roads as a temporary truck route for chemical deliveries to the PGWWTP. Compliance with California Vehicle Code Section 31303 would reduce impacts associated with a temporary truck route for transportation of hazardous materials through the WRSP Area by requiring that all hazardous materials be transported by routes which offer the least overall transit time. In addition, the City will require that construction of Blue Oaks Boulevard to Phillip Road, and the Phillip Road realignment to connect to Blue Oaks Boulevard, commence within five years of the first residential building permit along the temporary truck route to ensure the timely construction of the roadway.

The use of Hayden Parkway and Bob Doyle Drive as a truck route would terminate with the extension of Blue Oaks Boulevard and Phillip Road.

MM 4.9-3 is recommended, although not required, to ensure that residents are aware of the use of Phillip Road as a temporary truck route.

**Remainder Area**

The Remainder Area lies outside of the proposed temporary and permanent truck route. Therefore, there would be **no impact** associated with truck trips to the PGWWTP in the entire Remainder Area.

<b>IMPACT 4.9-9 SITING OF A SCHOOL WITHIN ONE-FOURTH MILE OF THE HANDLING OR TRANSPORTATION OF HAZARDOUS MATERIALS</b>		
<b>Applicable Policies and Regulations:</b>	California Health and Safety Code	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Significant
<b>Mitigation Measures:</b>	None required	None available
<b>Significance after Mitigation:</b>	Less Than Significant	Significant and Unavoidable

**West Roseville Specific Plan**

Section 15186 of the CEQA Guidelines establishes requirements for school projects, as well as projects near schools, to ensure that potential health impacts resulting from exposure to hazardous materials, wastes, and substances are examined and disclosed in an environmental document. Section 15186 of the CEQA Guidelines states that hazardous materials that must be considered a risk are those which may impose a health or safety hazard to persons who would attend or would be employed at the school.

Specifically, when a project located within one-quarter mile of a school involves the construction or alteration of a facility that might reasonably be anticipated to emit hazardous materials or a mixture containing acutely hazardous materials in a quantity equal to or greater than that specified in Section 25534 of the California Health and Safety Code, the Lead Agency must (1) consult with the affected school district regarding the potential impact of the project when circulating the environmental document and (2) notify the affected school district in writing prior to approval and certification of the environmental document. The high school in the WRSP Area is proposed to be located near the southeast corner of the PGWTTTP. As such, a portion of the proposed high school site containing play fields would be located within one-quarter mile of the PGWWTP. No educational structures (classrooms and teaching facilities) would be located within one-fourth mile of the PGWWTP. The one-fourth mile criterion for notification and consultation is required by CEQA and relates to any source of hazardous materials. It is important to note that it is not related to the 1,000-foot buffer established by the 1996 Roseville Regional Wastewater Treatment Service Area Master Plan EIR.

The applicant has discussed the proposed high school location with the school district and has agreed to notify the district in writing prior to approval and certification of the environmental document. Given compliance with Section 15186 of the CEQA Guidelines, this impact is found to be **less than significant**.

### **Remainder Area**

In the Remainder Area, implementation of the proposed project may place new industrial and commercial uses, that use, store, and dispose of hazardous materials within ¼-mile of school sites. Schools are considered sensitive receptors. The exact use, intensity, or nature of development of the Remainder Area is not certain at this time. However, it is assumed that some type and level of development similar to that proposed for the WRSP Area would occur within the Remainder Area in the future. Therefore, it can be reasonably assumed that schools would be located in the Remainder Area in the future.

Due to the use, transport, storage, and disposal of potentially hazardous materials at new industrial and commercial land uses, adjacent sensitive receptors would be exposed to greater risk of exposure to hazardous materials, waste, or emissions. Accidental release or combustion of hazardous materials at developments would endanger students in the surrounding community. Given that the exact locations of potential school sites are currently unknown, the potential exists for future schools to be located near hazardous materials. Therefore, this impact is considered **significant and unavoidable**.

Although hazardous materials used and waste generated from new developments may pose a health risk to sensitive land uses nearby, all businesses that handle or have on-site transportation of hazardous

materials would be required to comply with the provisions of applicable federal, State, and local regulations. However, as specific project impacts are currently unknown, it cannot be anticipated that applicable regulations would reduce potential impacts to hazardous material to a less-than-significant level. Thus, impacts would remain **significant and unavoidable**.

## ■ Mitigation Measures

### *MM 4.9-1: Identify and Remediate Soil Contamination (Impact 4.9-5 – WRSP)*

Prior to site development in the WRSP Area, recommended testing and remediation identified in the Phase I ESA shall be performed and existing groundwater wells shall be properly closed.

If evidence of soil contamination is encountered in previously unidentified locations in the WRSP Area, work shall cease until the area can be tested, and, if necessary, remediated. Remediation activities could include removal of contaminated soil and/or on-site treatment. As part of this process, the City shall ensure that any necessary investigation and/or remediation activities conducted in the WRSP Area are coordinated with the Roseville Fire Department, Placer County Division of Environmental Health, and, if needed, other appropriate state and/or local agencies. Once a site is remediated, construction may continue. The City shall also continue to update its records concerning contamination or hazards that could be present at facilities or sites adjacent to WRSP Area, and take necessary action to ensure that the health and safety of the public is protected.

### *MM 4.9-2: Soil Contamination Policies (Impact 4.9-5 – Remainder Area)*

Specific Plans and/or other development proposals for the Remainder Area shall include a Phase I ESA and require that recommended testing and remediation identified in the Phase I ESA be performed.

Specific Plan and/or development proposal policies or conditions shall require that, if evidence of soil contamination is encountered in previously unidentified locations in the Remainder Area to be developed, work shall cease until the area can be tested, and, if necessary, remediated. As part of this process, the City shall ensure that any necessary investigation and/or remediation activities conducted in the Remainder Area are coordinated with the Roseville Fire Department, Placer County Division of Environmental Health, and, if needed, other appropriate state and/or local agencies. Once a site is remediated, construction may continue. The City shall also continue to update its records concerning contamination or hazards that could be present at facilities or sites adjacent to the SOI Amendment Area, and take necessary action to ensure that the health and safety of the public is protected.

*MM 4.9-3: Temporary Truck Route Notification (Impact 4.9-8 – WRSP)*

Residents purchasing homes along Hayden Parkway and Bob Doyle Drive shall be notified that Hayden Parkway and Bob Doyle Drive will be used as a temporary truck route to transport potentially hazardous materials to the PGWWTP, and potentially the Roseville Energy Park until the extensions of Blue Oaks Boulevard and Phillip Road are constructed. In addition, signage shall be installed along Hayden Parkway and Bob Doyle Drive notifying residents and visitors that these roadways are used as a temporary truck route.



## 4.10 PUBLIC SERVICES

### 4.10.1 Introduction

This section describes public services provided in the City of Roseville, including law enforcement, fire protection, schools, libraries, and parks and recreation. This section also identifies the anticipated demand for these services resulting from future development within the SOI Amendment Area.

For this section, the following documents were reviewed:

- *West Roseville Specific Plan Feasibility Analysis Report*
- *West Roseville Specific Plan (2003)*
- *Vision 2010 Comprehensive Parks and Recreation Master Plan (1995)*
- Previous studies prepared for other projects in the City of Roseville

All of these documents are available for review at the City of Roseville Permit Center, 311 Vernon Street, Roseville, California.

The following issues were raised in NOP comment letters (see Appendix B):

- The status and statistics relating to existing schools and recreation facilities
- School funding
- Impacts on Folsom Lake State Park
- Concerns regarding increased traffic along Interstate 80 (I-80), State Route 65 (SR-65), and Baseline Road as a result of the WRSP and SOI Amendment, and the ability of the California Highway Patrol (CHP) to adequately patrol those areas

The following issues were raised during the NOP Scoping Meeting:

- The library level of service is too low and more libraries are needed Citywide
- There could be air quality impacts to schools
- More passive open space is needed in the WRSP Area
- More public transit and bikeways are needed
- A Teen Center should be provided in the SOI Amendment Area
- Financial costs associated with park construction, schools construction, and utilities provision are a concern

School capacity, recreational facilities, police protection, and library services are addressed in this section. Impacts associated with air quality can be found in Section 4.4, Air Quality. Recreational amenities will be available to all residents and site users, including teens; however, no Teen Center is proposed at this time. A Teen Center is not required under CEQA or by City policy, but this comment is hereby forwarded to the decision makers. Impacts on Folsom Lake State Park are not addressed because the WRSP contains regional park facilities that should meet project demand for active and passive park use. While project residents could visit Folsom Lake, such use would be intermittent, and would represent a very small portion of overall use, because the SOI Amendment Area is not in proximity to the Lake. Financial costs associated with the construction of facilities are addressed in the financing plan being prepared for the WRSP.

As discussed in Chapter 1 of this EIR, Introduction, this EIR evaluates the impacts of the WRSP, which would include a Sphere of Influence Amendment and annexation to the City, at a project-specific level. Because a Sphere of Influence Amendment is the only action proposed for the Remainder Area (that portion of the SOI Amendment Area outside of the WRSP), a program-level analysis is provided for the full SOI Amendment. In order to conduct the analysis, development assumptions are made for the Remainder Area (see Chapter 2, Project Description, for details). Figure 1-1 (SOI Amendment Area) in Chapter 1, Introduction, identifies the boundaries of the WRSP Area and Remainder Area (which combined comprise the entire SOI Amendment Area).

As discussed in the introduction to Chapter 4 of this EIR, Environmental Analysis, the WRSP described in the NOP is different from the WRSP proposed at this time. However, the changes to the WRSP would not affect the analysis of public services, because demand for services is based on population, and the number of residential units would remain at 8,430 units.

## **LAW ENFORCEMENT**

### **4.10.2 Environmental Setting**

The Roseville Police Department (RPD) provides police protection services to the City of Roseville. The RPD has a force of 95 sworn officers and 97.5 nonsworn employees headquartered at 1051 Junction Boulevard, approximately four miles from the WRSP Area.<sup>210</sup> Sworn officers are responsible for emergency and law enforcement-related activities. Nonsworn employees are responsible for specific duties including animal control, dispatch, record maintenance, jail management, and clerical tasks. The

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<sup>210</sup> Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, May 31, 2002.

RPD has a department training plan that ensures that personnel are sufficiently prepared to fulfill their responsibilities.<sup>211</sup> Funding for law enforcement services comes from the City's General Fund that primarily includes revenue generated by sales tax and property taxes.

The RPD has divided the City into two major patrol beats, east and west of I-80, that include 34 neighborhood areas. The eastern patrol beat has 10 neighborhood areas, and the western beat has 24 neighborhood areas.<sup>212</sup> The western patrol beat extends from I-80 to the western boundary of the City limits. In addition to routine patrol, traffic enforcement, and responding to calls for service, the RPD assigns a beat officer to each neighborhood area on a long-term basis. Each beat officer monitors his or her assigned area for recurring crime and social disorder problems, helps organize neighborhood groups, attends community meetings, and works with the residents and businesses to solve problems and maintain a high quality of life.

The Placer County Sheriff's Department is responsible for providing law enforcement services to the unincorporated areas immediately adjacent to the City, including the SOI Amendment Area. This area is served by the South Placer Sheriff's Substation. The Sheriff's Department also serves as the County Coroner and serves legal papers in all areas of the County. An interagency coordination program between the RPD and the Placer County Sheriff's Department exists. Roseville Police Department has interoperability agreements with the cities of Rocklin and Lincoln to provide 911 and dispatching services in the event of an evacuation or system failure.<sup>213</sup>

The RPD's Community Services Unit is responsible for community-based crime prevention and public education. The Unit administers Neighborhood Watch programs and community relations events. It acts as a liaison between the department and the Roseville Coalition of Neighborhood Associations (RCONA), organizing neighborhood areas. Each organization is paired with at least one beat officer. The Youth Services Division assigns police officers to every public elementary, intermediate, and high school in the City.

The RPD has indicated that flexibility is a key component in the provision of competent police service, and that standard ratios of police officers to population do not define adequacy of protection. Flexibility in service ratios allows the department to better respond to changes in the frequency and nature of crimes in the City. For this reason, the City has not adopted a police-to-population ratio. RPD has indicated that even without an adopted ratio, they would not want the ratio to fall below 1.2 officers per

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<sup>211</sup> City of Roseville, North Roseville Specific Plan Draft EIR, page 4.12-10.

<sup>212</sup> Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, May 31, 2002.

<sup>213</sup> Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, May 31, 2002.

1,000 persons.<sup>214</sup> However, the Department is currently below the desired police-to-population ratio.<sup>215</sup> The RPD has also not adopted a formal response time standard, but the current response time is approximately 3 to 5 minutes or less for an emergency call.<sup>216</sup>

### **4.10.3 Regulatory Setting**

#### **■ Federal and State**

There are no specific federal or State regulations pertaining to law enforcement applicable to the SOI Amendment Area.

#### **■ Local**

##### **WRSP**

The WRSP will comply with the RPD recommendations regarding safety and security.

##### **City of Roseville**

Revenues generated by sales tax and property taxes supply the City of Roseville's General Fund to pay for additional law enforcement personnel.

The City of Roseville General Plan includes goals and policies for police services. Please see Appendix C for a complete list of all applicable City goals and policies.

### **4.10.4 Impacts and Mitigation Measures**

#### **■ Methods of Analysis**

Although the RPD does not have an adopted police-to-population ratio, it has indicated that a ratio of 1.2 officers per 1,000 persons is desirable. For this analysis, a ratio of 1.2 officers is used as a threshold to determine adequate service. Since the RPD has also not adopted a formal response time standard, this analysis assumes maintenance of the current response time, approximately 3 to 5 minutes or less for an emergency call.

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<sup>214</sup> Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, May 31, 2002.

<sup>215</sup> Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, May 31, 2002.

<sup>216</sup> Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, May 31, 2002.

## ■ Standards of Significance

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area would:

Create an increased demand for police protection services that would substantially interfere with the ability of the police department to provide adequate response time to the project site or require the construction of new facilities, or the physical alteration of existing facilities that could result in substantial adverse physical impacts on the environment.

## ■ Impacts

<b>IMPACT 4.10-1: INCREASED DEMAND FOR POLICE PROTECTION SERVICES.</b>		
<b>Applicable Policies and Regulations:</b>	City of Roseville General Plan	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.10-1(a) (Increase number of police officers in the Roseville Police Department); MM 4.10-1(b) (Expand the Roseville Police Department Headquarters); MM 4.10-1(c) (Expand the voice radio communication system and data radio systems)	MM 4.10-2 (Law enforcement policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

## West Roseville Specific Plan

The increased residential population resulting from the WRSP would create additional demand for police services. The WRSP would create approximately four additional neighborhood areas within the City's western patrol beat.<sup>217</sup> The WRSP would contribute a total of approximately 20,810 new residents to the area. Based on the desired ratio of 1.2 officers per 1,000 population, approximately 25 new officers would be required, consistent with City of Roseville General Plan goals and policies. More administrative support staff would also be needed to support the additional police force. An expansion to the Police Headquarters would likely be needed at buildout of the WRSP to accommodate the additional Department staff.<sup>218</sup> In addition, the existing police voice radio communication system and data radio

<sup>217</sup> Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, May 31, 2002.

<sup>218</sup> Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, May 31, 2002.

system would need to be expanded to serve the WRSP project site, including possibly an additional antenna tower.<sup>219</sup>

Revenues generated by sales tax and property taxes associated with development of the WRSP would increase the City's General Fund, a portion of which would be expected to pay for the additional law enforcement personnel needed to serve the WRSP. However, because the WRSP could require expanded police headquarters to accommodate new officers, and would require expanding the voice radio communication system and data radio system to provide internal and external communication within the WRSP Area to meet the demand for police services, the impact is considered significant.

MM 4.10-1(a) would ensure that an adequate number of officers would be added to the RPD to serve the WRSP. MM 4.10-1(b) would provide for expansion of the Police Headquarters, if needed, to accommodate the addition of new officers to the RPD as a result of the WRSP. MM 4.10-1(c) would ensure that the voice radio communication system and data radio system would be expanded to serve the WRSP. Expansion of these systems would ensure a less-than-significant impact on RPD communication systems by allowing the RPD to effectively serve the WRSP. Therefore, with implementation of MM 4.10-1(a) through MM 4.10-1(c), the impact on law enforcement would be **less than significant**. If future law enforcement structures were to be constructed or physically altered, construction and/or alteration activities could have potentially significant environmental impacts that would need to be addressed on a project-specific basis prior to approval and construction or alteration.

### **Remainder Area**

It is assumed that the remaining portions of the Remainder Area would be developed at levels similar to those proposed in the WRSP. The Placer County Sheriff's Department would continue to serve the Remainder Area until (and if) it is annexed to the City, at which time the RPD would serve the area. The Remainder Area is assumed to be developed primarily with residential uses of a similar density and type proposed for the WRSP, so additional police personnel would be required. Buildout of the Remainder Area would generate approximately 18,722 new residents. Based on the City's desired ratio of 1.2 officers per 1,000 population, approximately 22.5 new officers would be required to service this area. This would be a significant impact. Implementation of MM 4.10-2 would ensure that personnel and facilities are adequate and would reduce the impact to a **less-than-significant** level.

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<sup>219</sup> Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, May 31, 2002.

## FIRE PROTECTION

### 4.10.5 Environmental Setting

The Roseville Fire Department (RFD) provides fire protection, suppression, emergency medical services, and hazardous material management within the City of Roseville. The RFD operates six fire stations serving the City of Roseville. The RFD employs 80 staff members for fire operations, 9.48 Fire Prevention personnel, one fire training professional and 6.75 staff members for administrative support.<sup>220</sup>

The existing and planned fire stations are listed below and illustrated on Figure 4.10-1 (Existing and Proposed Fire Stations):

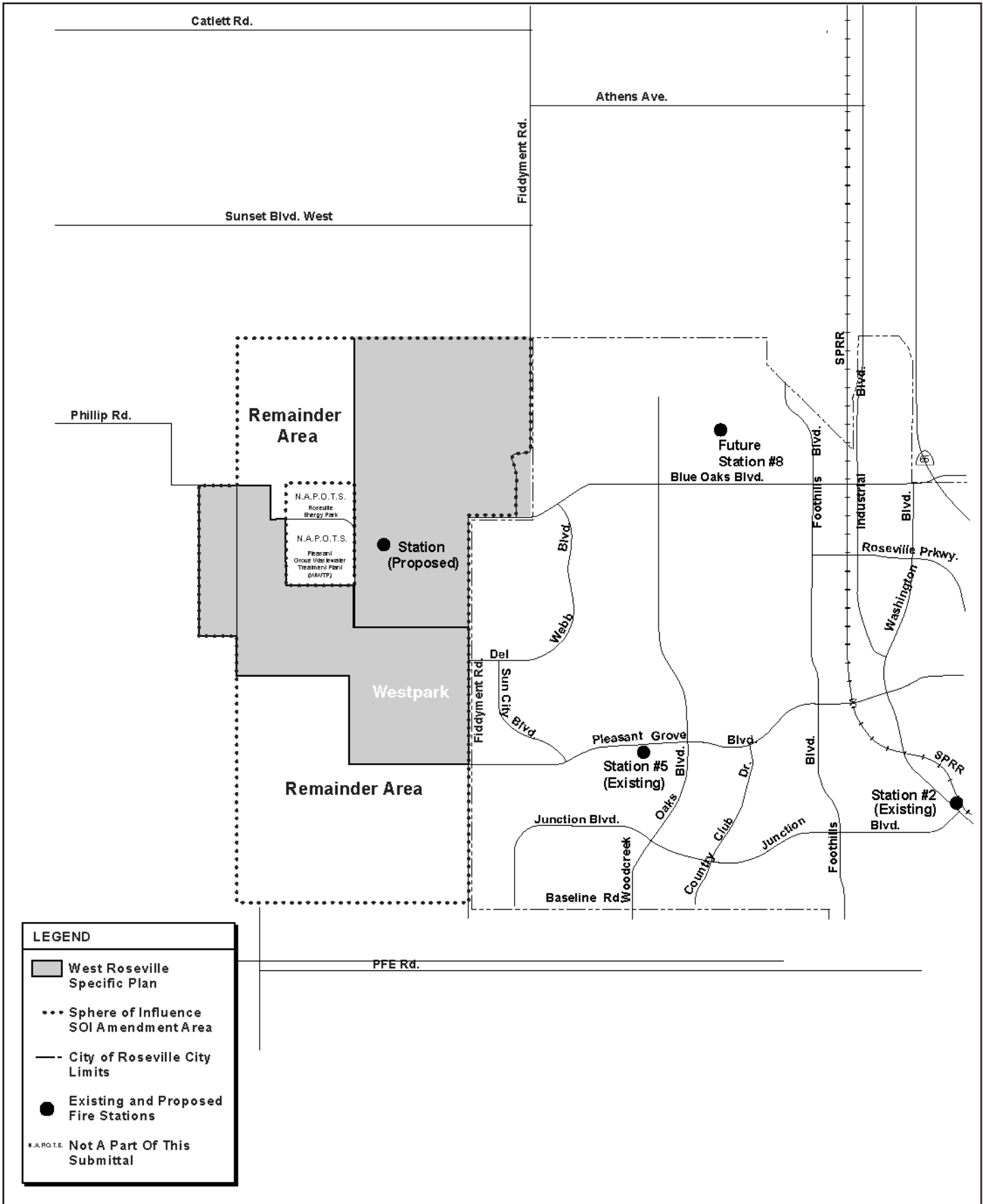
- **Station No. 1** at 401 Oak Street
- **Station No. 2** at 1398 Junction Boulevard
- **Station No. 3** at 1300 Cirby Way
- **Station No. 4** at 1900 Eureka Road
- **Station No. 5** at 1565 Pleasant Grove Boulevard
- **Station No. 6:** “Stoneridge Station” near the intersection of East Roseville Parkway and Sunrise Avenue
- **Station No. 7:** “Highlands Reserve Station” near Pleasant Grove Boulevard and SR-65 (planned for construction in Summer 2003 with allocated monies already in the 2002-2003 City budget)
- **Station No. 8:** “Blue Oaks Station” in the Del Webb development at Blue Oaks Boulevard and Fiddymment Road (construction likely to begin in 2005-2006)

The first responding station to the WRSP Area would be Station #8, the Blue Oaks Fire Station, once constructed. A site for this facility was secured in the Del Webb Specific Plan along Blue Oaks Boulevard approximately one mile east of the intersection of Blue Oaks Boulevard and Fiddymment Road. However, the Roseville Fire Department may choose to relocate this site to the east of Woodcreek Oaks Boulevard along Blue Oaks Boulevard to better serve the North Roseville Specific Plan, North Industrial Area and the North Central Roseville Specific Plan Area.<sup>221</sup>

Fire Station #5 would serve as the primary responding engine for the south portion of the WRSP Area accessible from Pleasant Grove Boulevard and Fiddymment Road. Station #5 is an interim station currently located in Mahany Park, east of the SOI Amendment Area. This location was constructed in 1997, and

<sup>220</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002.

<sup>221</sup> City of Roseville, Draft West Roseville Specific Plan, April 2002, page 6-6.



**LEGEND**

- West Roseville Specific Plan
- Sphere of Influence SOI Amendment Area
- City of Roseville City Limits
- Existing and Proposed Fire Stations

N.A.P.O.T.S. Not A Part Of This Submittal



**FIGURE 4.10-1**  
**Existing and Proposed Fire Stations**

Not to Scale



originally was projected to remain in this location until 2007. A different possible permanent location for Fire Station #5 has been identified within the Del Webb Specific Plan area along Pleasant Grove Boulevard. However, movement to a permanent location is not in the foreseeable future due to funding constraints.<sup>222</sup> Station #5 would be the first responding station to the WRSP Area until Station #8 and/or station(s) within the WRSP are constructed.

Station staffing depends on the type of station. Station #1 is a two-company house, with an engine company and a truck company. There are three to four personnel each shift per company and there are three 24-hour shifts. In the engine company, there are three personnel: 1 captain, 1 engineer, and 1 firefighter/paramedic. In the truck company, there are four personnel: 1 captain, 1 engineer, and 2 firefighters. The hazardous materials response team is also located at this station, requiring one Battalion Chief.<sup>223</sup>

Stations #2 through #5 are one-company houses, and also have three personnel each shift with three 24-hour shifts. In each of these stations, there are: 1 captain, 1 engineer, and 1 firefighter/paramedic.<sup>224</sup>

Each station has specific equipment, and can share the equipment as necessary.<sup>225</sup> The following is a list of each station's equipment:

- Station #1: engine, ladder truck, HazMat truck, Battalion chief's command vehicle, reserve engine
- Station #2: engine, Type III grass engine
- Station #3: engine, medium duty rescue unit
- Station #4: engine, Type IV grass engine, reserve engine
- Station #5: engine, Type IV grass engine
- Station #6: engine, Type III grass engine

The RFD has a mutual aid agreement with Placer County/California Department of Forestry and Sacramento Metro Fire District.<sup>226</sup> The RFD also an automatic aid agreement with the South Placer Fire District, the Rocklin Fire Department, and the Sacramento Metro Fire District. An automatic aid agreement with Placer County Fire/CDF is pending.<sup>227</sup>

<sup>222</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002

<sup>223</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002

<sup>224</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002

<sup>225</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002

<sup>226</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002

<sup>227</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002

The RFD does not necessarily associate higher population levels with the need for new fire stations. Instead, the RFD uses a risk assessment model in relation to existing fire stations and the number of engine/truck companies as the primary criterion when evaluating the need for a new fire station or additional staff. Large infill development can, for example, be adequately served by an existing, proximate station, while a remote smaller development could require a new facility. To maintain adequate fire protection, the RFD uses three different service standards documented in the City's General Plan: (1) respond to all emergencies within four minutes, 80 percent of the time; (2) maintain an ISO rating of 3; and (3) deliver 500 gallons per minute (GPM) to a fire scene within 10 minutes.<sup>228</sup> The emergencies are not broken down by type, such as fire response, basic life support or advanced life support. The Department strives to respond within four minutes in all cases.<sup>229</sup> The RFD's emergency fire response standards are being met 58 percent of the time within the existing City limits.<sup>230</sup>

A Standards of Response Coverage Study is currently underway and expected to be completed by the end of 2003. This document is a department self-audit of services and programs. It helps to reaffirm station locations, equipment and staffing placement. It also serves to assess response time goals.

#### **4.10.6 Regulatory Setting**

##### **■ Federal and State**

There are no specific federal or state regulations pertaining to fire protection associated with the SOI Amendment Area.

##### **■ Local**

##### **City of Roseville**

The City of Roseville General Plan includes goals and policies for fire protection services. Please see Appendix C for a complete list of all applicable City goals and policies.

The RFD traditionally receives its budget from the City's General Fund. For the fiscal year 2002-2003, the City has allocated \$12,218,581 to the RFD. In 1984, to compensate for the City's rapid growth rate, the Fire Service Construction Tax was approved. This tax requires that 0.5 percent of the value of any new construction be collected as part of the building fee and designated for fire suppression and protection. For 2002-2003, the RFD will receive \$678,900 from the Fire Service Construction Tax. These funds

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<sup>228</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002.

<sup>229</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002.

supplement the General Fund and are specifically intended for capital improvements, such as fire stations and fire equipment. None of these funds are allocated to operating expenses, such as salaries or training. The tax will remain in effect until December 2009, at which time it will be considered for extension pursuant to Prop. 218 provisions which require voter approval for new local taxes. It has not yet been determined what additional funding sources will be used if the Fire Services Construction Tax is not renewed.

## **WRSP**

The WRSP includes provisions that the timing of construction and staffing of fire stations will be consistent with the Fire Department's standards from its Response Coverage study

### **4.10.7 Impacts and Mitigation Measures**

#### **■ Methods of Analysis**

The Roseville Fire Department does not have an adopted ratio of fire protection personnel to resident population. Instead, the impact analysis is based on the ability of the RFD to respond to all emergencies within four minutes, 80 percent of the time; maintain an ISO rating of 3; and deliver 500 gallons per minute (GPM) to a fire scene within 10 minutes.

#### **■ Standards of Significance**

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area could:

Create an increased demand for fire protection that would substantially interfere with the ability of the fire department to provide adequate response time to the project site or require the construction of new facilities, or the physical alteration of existing facilities, which could result in substantial adverse environmental impacts.

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<sup>29</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002.

**Impacts**

<b>IMPACT 4.10-2: INCREASED DEMAND ON FIRE PROTECTION SERVICES.</b>		
<b>Applicable Policies and Regulations:</b>	City of Roseville General Plan Fire Service Construction Tax	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Significant
<b>Mitigation Measures:</b>	None Required	MM 4.10-3 (Construct new stations as needed); MM 4.10-4 (Demonstrate adequate response time or provisions); MM 4.10-5 (Identify appropriate fire station locations); and MM 4.10-6 (Fire prevention and suppression policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

At total buildout 15,833 units would be build in the Project Area. These residences, as well as commercial, industrial and public uses, would require fire protection services.

Project developers would be required to pay the Fire Service Construction Tax (Tax), which requires that 0.5 percent of the value of any new construction be collected as part of the building fee and designated for fire suppression and protection. These funds would help provide additional fire protection resources to serve the project site. This tax is in effect until December 2009 but could be renewed. If approval of the Project occurs before the Tax expires, monies from the Tax would continue to be collected to fund the buildout of fire capital improvements<sup>231</sup>. If approval of the Project occurs after the Fire Service Construction Tax and is not consequently renewed, additional funding would need to be secured to fund capital improvements and the construction of new stations. These funds could come from development fees or user fees, or from an agreement between the RFD and the developers within the Project Area, where a percentage of the funds necessary to increase staff to serve the Project Area would come from the developer. The City could also provide funds for personnel expansion.<sup>232</sup>

**West Roseville Specific Plan**

As part of the WRSP, annexation of the WRSP Area from Placer County to the City of Roseville would occur. Once the WRSP is approved, the RFD, rather than the Dry Creek Fire Protection District or the County Service Area 28, would serve the WRSP.

<sup>231</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, January 28, 2003.

<sup>232</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, January 28, 2003

As discussed briefly above, project developers would be required to pay the Fire Service Construction Tax, which requires that 0.5 percent of the value of any new construction be collected as part of the building fee and designated for fire capital improvements, such as fire stations and safety equipment. If approval of the WRSP occurs after the Fire Service Construction Tax expires and is not subsequently removed, additional funding would need to be secured to fund the capital improvements. These funds could come from developer fees or other user fees. Staff funding could come from developer fees, other user fees, General Funds, property tax or sales tax revenues, or from an agreement between the RFD and the WRSP developer, where a percentage of the funds necessary to increase staff to serve the WRSP would come from the developer. The City could also provide funds for personnel expansion.<sup>288</sup>

Open space, including the open space preserves in the WRSP, include large open grassland areas and oak woodlands that could be subject to fires. A 50-foot-wide open space buffer area would be maintained at the perimeter of all open space preserves for fuel modification and fire management among other uses. All fences at the perimeter of the open space preserves would be constructed of noncombustible materials, except that wood posts may be used in post and cable barriers adjacent to landscape corridors and street edges. The RFD would maintain a fire management plan that includes maintenance of firebreaks and periodic fuel reduction. Fuel reduction may include controlled burns subject to the management standards included in the 404 permit.

The above standards and measures would ensure that impacts associated with wild land fires would be minimal. Firebreaks would ensure that if fires are started, they would be located in a contained area and would not spread to adjacent lands. The lack of combustible fence materials would also minimize the risk of fire by reducing the amount of potential fire fuel. The RFD's fire management plan would ensure there is adequate access to the site and that there is adequate fire staff to serve the WRSP, in the event of a wild land fire.

The existing Station #5 on Pleasant Grove Boulevard would serve the WRSP until other stations are constructed. Once it is constructed, the Blue Oaks Station, Station #8, would also serve the WRSP. According to the RFD, in order to provide adequate fire protection services and response times to the WRSP, one new station would be needed within the WRSP. The location for the proposed station is based on modeling performed by the Fire Department to determine the optimal location to serve the area. The station would be located on 3.1 acres west of Hayden Parkway, north of the high school and east of the proposed regional sports park. The station would likely be equipped with one engine, a ladder

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<sup>288</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, January 28, 2003.

truck, and a battalion chief's command vehicle.<sup>234</sup> Staffing of the station would require approximately 3 operations personnel plus fire prevention, inspection, training, and administrative staff, consistent with City of Roseville General Plan goals for provision of fire services.<sup>235</sup>

The fire station site is located in the Phase 1 portion of the WRSP Area. Construction of the fire station facility would occur when deemed necessary by the City. According to the Department's model, development within the WRSP Area could be adequately served by the proposed fire station on Hayden Parkway in the WRSP Area. The RFD would monitor the response times in the WRSP Area to ensure that the response time standard is met in the WRSP Area. Timing of construction and staffing of the new fire station would be consistent with Fire Department Standards of Response Coverage Study, as required by WRSP provisions.

Because the Hayden Parkway fire station would meet City standards for serving WRSP residents, the impact on fire protection would be considered **less than significant**.

### **Remainder Area**

If the Remainder Area were developed at levels similar to those proposed in the WRSP, the effects would be that a total of 7,403 residential units would be constructed within the Remainder Area. These residences, as well as commercial, industrial and public uses, would require fire protection services. The southern portion of the Remainder Area would be served by existing Station #5 on Pleasant Grove Boulevard. The northern portion of the Remainder Area would also be served by the proposed fire station on Hayden Parkway. However, these stations may not be able to maintain adequate response times for the Remainder Area.<sup>236</sup> An additional station may be needed to serve the southern portion of the Remainder Area. In order for the RFD to estimate response times consistent with WRSP provisions, it would need to run the Department's model, as required by MM 4.10-3 and MM 4.10-5. The model requires a land use plan, which is not available at this time. At the time specific development is proposed, the model will be able to indicate the appropriate location of a fire station in the Remainder Area to ensure that the response time standard of four minutes is met for all uses in the Remainder Area.

Development in the Remainder Area may require additional funding for fire suppression and protection. The Fire Construction Tax, if renewed, could supplement the General Fund for capital improvements. Additional funding would be generated by development or other fees, or from an agreement between

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<sup>234</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, July 3, 2002.

<sup>235</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department, personal communication, January 28, 2003.

<sup>236</sup> Dennis Mathisen, Fire Marshal, Roseville Fire Department Internal Memo to Kathy Pease, May 24, 2002.

RFD and the developers in the Remainder Area. These funds would help provide additional fire protection resources ensuring that the existing service standards would be met.

The intensity and layout of development within the Remainder Area has not yet been specified. There are no specific plan policies that relate to fire prevention and suppression. As a result, there is a possibility that wild land fires could occur within the Remainder Area. Without any fire prevention policies or suppression measures, wild land fires in the Remainder Area could add to an increased demand for fire protection that would substantially interfere with the ability of the fire department to provide adequate response time to the SOI Amendment Area or surrounding areas.

The Fire Service Construction Tax, and MM 4.10-3, MM 4.10-4, MM 4.10-5, and MM 4.10-6 would ensure that fire stations are sited to maintain a City's response time standard and that fire prevention and suppression policies be adopted in the Remainder Area, reducing the impact to a **less-than-significant** level. If future fire stations were to be constructed or physically altered, construction and/or alteration activities could have potentially significant environmental impacts that would need to be addressed on a project-specific basis prior to approval and construction or alteration.

## SCHOOLS

### 4.10.8 Environmental Setting

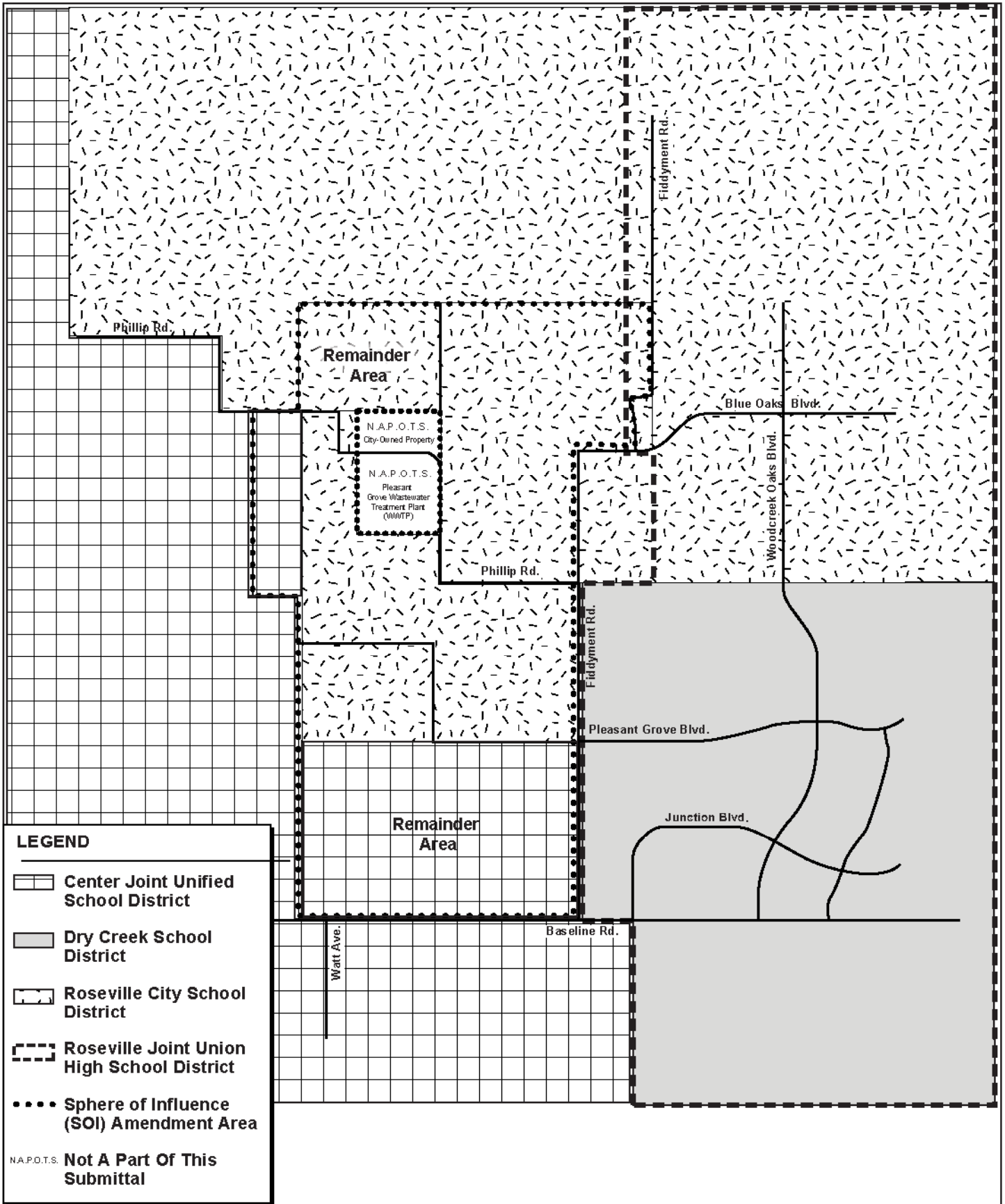
The SOI Amendment Area falls within the boundaries of the Roseville Joint Union High School District (RJUHSD), the Roseville City School District (RCSD), and the Center Joint Unified School District (CJUSD). The boundaries of these schools districts are illustrated by Figure 4.10-2 (School Districts Boundaries).<sup>287</sup> These districts and the existing and planned school facilities that would serve the SOI Amendment Area are described below.

#### **Roseville Joint Union High School District**

The RJUHSD serves 9th through 12th grades and receives students from three main elementary school districts, including RCSD, the Dry Creek Joint Elementary School District (DCJESD), and the Eureka School District. The RJUHSD boundaries overlap numerous jurisdictions, including the City of Roseville, Placer County, and Sacramento County. The District boundaries include Folsom Lake on the east, the Sutter County line on the west, Sunset Boulevard in Placer County on the north, and Antelope Road in Sacramento County on the south.

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<sup>287</sup> City of Roseville, Draft West Roseville Specific Plan, April 2002, page 6-12.



10659-00

**FIGURE 4.10-2**  
**School District Boundaries**

Source: EIP Associates, 2003

Not to Scale



City of Roseville

The RJUHSD currently operates a total of eight high schools: Adelante High School, Granite Bay High School, Independence High School, Oakmont High School, Roseville High School, Success High School, Woodcreek High School, and Roseville Adult School. Current 2002 enrollment in the RJUHSD is approximately 7,506 students, excluding the Roseville Adult School, Adelante and Success High Schools (see Table 4.10-1).<sup>238</sup> The District's capacity is 6,400 students, excluding the Roseville Adult School, Adelante, Independence and Success schools. Oakmont High School is the only school that is not yet at capacity.<sup>239</sup>

**Table 4.10-1 Roseville Joint Union High School District  
School Capacities And Enrollment**

School	Maximum Capacity	Current Enrollment	Percent of Capacity
Adelante High School	N/A	200	N/A
Granite Bay High School	1,600	2,041	128%
Independence High School	N/A	345	N/A
Oakmont High School	1,600	1,400	88%
Roseville High School	1,600	1,740	109%
Success High School	N/A	20-25	N/A
Woodcreek High School	1,600	1,980	124%
Roseville Adult School	N/A	N/A	N/A

SOURCE: Roseville Joint Union High School District, 2003.

The RJUHSD Board of Trustees adopted the District Facilities Master Plan on January 13, 1998. Over a 10-year horizon, the plan calls for construction of three comprehensive high schools, two continuation high schools, and one alternative high school.<sup>240</sup> Since adoption of the plan, Woodcreek High School has been completed and Granite Bay High School is open.<sup>241</sup> Site selection for a fifth comprehensive high school is in progress.<sup>242</sup> It is anticipated that this school would be located in the Antelope area. A ballot initiative on the November 2002 election, which would have provided funding for a high school in the Antelope area, did not pass.<sup>243</sup> Currently, a large portion of students residing in Antelope attend school at RJUHSD facilities.

<sup>238</sup> Cheri Fedder, Roseville Joint Union High School District, personal communication, August 22, 2002.

<sup>239</sup> Cheri Fedder, Roseville Joint Union High School District, personal communication, August 22, 2002.

<sup>240</sup> City of Roseville, North Roseville Specific Plan Draft EIR, page 4.12-22.

<sup>241</sup> Roseville Joint Union High School District, Facilities Master Plan, January 13, 1998.

<sup>242</sup> Roseville Joint Union High School District, Facilities Master Plan, January 13, 1998.

<sup>243</sup> Roseville Joint Union High School District website, Measure K Bond Information, <http://www.rjuhsd.k12.ca.us/bondinfo/main1.html>, accessed January 28, 2003.

### Roseville City School District

The RCSD provides both elementary and intermediate school facilities for portions of the City. Schools within the RCSD include Vencil Brown Elementary, George Cirby Elementary, Crestmont Elementary, William Kaseberg Elementary, George Sargeant Elementary, Sierra Gardens Elementary, Ferris Spanger Elementary, Bradford Woodbridge Fundamental School, Catheryn Gates Elementary, Stoneridge Elementary, Robert Cooley Middle School, George Buljan Intermediate, and Warren T. Eich Intermediate. According to the RCSD, the District’s current capacity is 9,425<sup>244</sup> and its existing enrollment is 7,040 students.<sup>245</sup> The current enrollment and existing capacity of each school is shown in Table 4.10-2. To accommodate overcrowding in the schools and the new class reduction requirement for grades K-3, the school district uses portable classrooms as well as busing children to other schools in the district that have space available.

**Table 4.10-2 Roseville City School District School Capacities and Enrollment<sup>1</sup>**

School	Maximum Capacity	Current Enrollment <sup>1</sup>	Percent of Capacity
Vencil Brown Elementary	600	539	90%
George Cirby Elementary	800	492	62%
Crestmont Elementary	575	491	85%
William Kaseberg Elementary	675	429	64%
George Sargeant Elementary	600	505	84%
Sierra Gardens Elementary	625	518	83%
Ferris Spanger Elementary	625	431	69%
Bradford Woodbridge Fundamental School	625	274	44%
Catheryn Gates Elementary	600	444	74%
Diamond Creek Elementary	600	581	97%
Stoneridge Elementary	400	218	55%
Robert Cooley Middle School	999	801	80%
George Buljan Intermediate	891	775	87%
Warren T. Eich Intermediate	810	542	67%
<b>Total</b>	<b>9,425</b>	<b>7,040</b>	<b>75%</b>

NOTES:

<sup>1</sup> Enrollment as of September 4, 2002.

SOURCE: Heidi Eller, Executive Assistant to the Superintendent, personal communication, September 11, 2002; Schelli Landreth, Administrative Assistant, written communication, September 13, 2002.

### Center Unified School District

The CUSD provides elementary, intermediate, and high school facilities for portions of the City, including part of the project site. CUSD schools include Spinelli Elementary, Oak Hill Elementary, North Country Elementary, Dudley Elementary, Center Junior High, Center High, McClellan High, and

<sup>244</sup> Schelli Landreth, Roseville City School District, written communication, September 13, 2002.

Antelope View Charter School (see Table 4.10-3).<sup>246</sup> Wilson Rile, Jr. High, is a new middle school planned at the corner of PFE Road and Walerga. It is scheduled to open in 2005. Another middle school is planned west of Watt Avenue, but a site has not been identified and funding is not secured. When the second middle school is constructed and accepting students, the District plans to close Center Jr. High School and consolidate it into the adjacent Center High School to create a larger high school.

**Table 4.10-3 Center Unified School District School Capacities and Enrollment, 2001-2002**

School	Maximum Capacity	Current Enrollment	Percent of Capacity
Spinelli Elementary		597	
Oak Hill Elementary		792	
North Country Elementary		727	
Dudley Elementary		848	
K-6	2,014	2,964	147%
Center Junior High		950	
7-8	324	916	283%
Center High		1,541	
McClellan High		96	
Antelope View Charter School		N/A	
9-12	1,080	1,637	152%

NOTES:

The individual school maximum capacities could not be provided by the Center Unified School District or their consultant, so capacity is provided by grade level.

SOURCE: John Loehr, Director of Maintenance and Operations, Facilities, Technology, and Transportation, Center Unified School District, written communication, August 16, 2002.

## 4.10.9 Regulatory Setting

### ■ Federal

Other than access requirements, there are no specific federal regulations pertaining to school facilities.

### ■ State

#### Proposition 1A/Senate Bill 50

Proposition 1A/Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) is a school construction measure that was approved by the voters on the November 3, 1998 ballot. It authorized the expenditure of State general obligation bonds totaling \$9.2 billion through 2002, primarily for the modernization and rehabilitation of older school facilities and the construction of new school facilities related to new growth.

<sup>245</sup> Heidi Eller, Roseville City School District, personal communication, September 9, 2002.

<sup>246</sup> Center Unified School District website, <http://www.centerusd.k12.ca.us/>, accessed on May 27, 2002.

Of the \$9.2 billion, \$2.5 billion is targeted for higher education facilities and the remaining \$6.7 billion is targeted for K-12 facilities, throughout the state.

Of the \$6.7 billion for K-12 schools, \$2.9 billion is for new construction, \$2.1 billion is for modernization of older schools, \$1.0 billion is for districts in hardship situations, and \$700 million is for class size reduction. The new construction money is available through a 50/50 state/local match program. The modernization money is available through an 80/20 state/local match program. There are a number of other program reforms that are not summarized here.

Proposition 1A/SB 50 has resulted in full State preemption of school mitigation. Satisfaction of the statutory requirements by a developer is deemed to be “full and complete mitigation.” The new law does identify certain circumstances under which the statutory fee can be exceeded. These include preparation and adoption of a “needs analysis,” eligibility for State funding, and satisfaction of one of four requirements (prior to January 1, 2000) identified in the law including year-round enrollment, general obligation bond measure on the ballot over the last four years that received 50 percent plus one of the votes cast, 20 percent of the classes in portable classrooms, or specified outstanding debt. As of January 1, 2000, the district must satisfy two of the four requirements obliging the increased fee.

Assuming a district can meet the test for exceeding the statutory fee, the law establishes ultimate fee caps of 50 percent of costs where the State makes a 50 percent match, or 100 percent of costs where the State match is unavailable. All fees are levied at the time the building permit is issued. District certification of payment of the applicable fee is required before the City or County can issue the building permit.

## **Department of Education Standards**

The California Department of Education has published the Guide to School Site Analysis and Development in order to establish a valid technique for determining acreage for new school development. Rather than assigning a strict student/acreage ratio, this guide provides flexible formulas that permit each district to tailor its answers as necessary to accommodate its individual conditions. The Department of Education then recommends that a site utilization study be prepared for the site, based on these formulas.

### **■ Local**

#### **City of Roseville**

The City of Roseville General Plan includes goals and policies for schools. Please see Appendix C for a complete list of all applicable City goals and policies.

## **School Facilities Funding and Fees**

To ensure adequate funding for new school facilities in order to accommodate substantial new development and population growth within the City, the Roseville City Council adopted Ordinance 2434 (School Facilities Mitigation Plan) in February 1991. This ordinance requires the payment of fees, participation in a Mello-Roos Community Facilities District, and school facility mitigation plans for new development proposed within overcrowded districts. The mitigation fees established in the ordinance may be greater than the state-mandated fees. These mitigation fees vary depending upon the school district. If the applicant chooses to submit a mitigation plan, the plan must explain how the project developer would participate in financing additional interim and permanent school facilities needed to serve the applicant's residential development project. The mitigation plan would be reviewed by the school district(s) in which the project is situated. The district(s) may approve, disapprove, or modify the mitigation plan based upon the funding and facilities needs identified in the construction schedule or plan by each district.

## **WRSP Measures**

The WRSP will fully mitigate school impacts in accordance with the Development Agreements and funding agreements with the respective school districts.

### **4.10.10 Impacts and Mitigation Measures**

#### **■ Methods of Analysis**

The demand for school services is based upon the additional number of students generated by development of residential uses assumed for the SOI Amendment. The student generation rates for the Roseville Joint Union High School District, the Roseville City School District, and the Center Unified School District are provided in Table 4.10-4.

To quantify the total number of students, the residential development identified in the WRSP and the Remainder Area is multiplied by the appropriate student generation rates. Because the age-restricted housing identified in the WRSP is not expected to generate any students, these housing units are not included in the student calculation.

**Table 4.10-4 School Enrollment Projections**

		Single-Family Generation Rate	Multi-Family Generation Rate	Students Generated	School Capacity	Schools Required
<b>WRSP Area</b>						
<b>Roseville City School District</b>						
	<b>Units</b>	4,842	2,878			
Grades K-5		0.365	0.073	1,977	600	3
Grades 6-8		0.158	0.028	846	1000	0.85
	<b>Total</b>			<b>2,823</b>		
<b>Roseville Joint Union High School District</b>						
	<b>Units</b>	4,842	2,878			
Grades 9-12		0.227	0.067	1,292	1,800	0.72
	<b>Total</b>			<b>1,292</b>		
<b>Remainder Area</b>						
<b>Roseville City School District</b>						
	<b>Units</b>	2,674	380			
Grades K-5		0.365	0.073	1,004	600	1.67
Grades 6-8		0.158	0.028	433	1000	0.43
	<b>Total</b>			<b>1,437</b>		
<b>Roseville Joint Union High School District</b>						
	<b>Units</b>	2,674	380			
Grades 9-12		0.23	0.07	632	1,800	0.35
	<b>Total</b>			<b>632</b>		
<b>Center Unified School District</b>						
	<b>Units</b>	2,622	1,727			
Grades K-6		0.371	0.538	1,902	600	3.17
Grades 7-8		0.102	0.154	533	1000	0.53
Grades 9-12		0.188	0.269	958	1,800	0.53
	<b>Total</b>			<b>3,393</b>		
<b>SOI Amendment Area (WRSP and Remainder Area-Combined)</b>						
<b>Roseville City School District</b>						
	<b>Units</b>	7,516	3,258			
Grades K-5		0.365	0.073	2,981	600	5
Grades 6-8		0.158	0.028	1,279	1000	1.3
	<b>Total</b>			<b>4,260</b>		
<b>Roseville Joint Union High School District</b>						
	<b>Units</b>	7,516	3,258			
Grades 9-12		0.227	0.067	1,924	1,800	1.07
	<b>Total</b>			<b>1,924</b>		
<b>Center Unified School District</b>						
	<b>units</b>	2,622	1,727			
Grades K-6		0.371	0.538	1,902	600	3.17
Grades 7-8		0.102	0.154	533	1000	0.533
Grades 9-12		0.188	0.269	958	1,800	0.53
	<b>Total</b>			<b>3,393</b>		

SOURCES: Barbara Herndon, Assistant Superintendent of Business Services, Roseville City School District, personal communication, January 10, 2003; Chris Grimes, Director of Facilities Development, Roseville Joint Union High School District, written communication, January 13, 2003; Mike Winters, Caldwell Flores Winters Inc., personal communication, September 11, 2002.

To estimate the number of schools required to serve the additional students, the following students threshold per school estimates are used:<sup>247</sup>

- High School: 1,800 students
- Intermediate School: 1,000 students
- Elementary School: 600 students

**Standards of Significance**

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area would:

- Create an increased demand for schools that would exceed existing school capacity or require the construction of new facilities or the physical attention of existing facilities, which could result in substantial adverse environmental impacts.

**Impacts**

IMPACT 4.10-3: INCREASED DEMAND FOR SCHOOLS.		
<b>Applicable Policies and Regulations:</b>	Roseville Ordinance 2434	
	City of Roseville General Plan	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance With Policies and Regulations:</b>	Less Than Significant	Significant
<b>Mitigation Measures:</b>	None required	MM 4.10-7 (Designate school sites)
<b>Significance After Mitigation:</b>	Less Than Significant	Less Than Significant

The total number of students generated in the Project Area would be approximately 4,883 elementary, 1,812 intermediate, and 2,882 high school students. As a result, there would be a total need in the SOI Amendment Area for approximately eight elementary schools, two intermediate schools, and one to two high schools (see Table 4.10-4).

The WRSP developers will enter into agreements with the school districts to provide 53 acres to develop a high school and 54.4 acres to provide four elementary school sites and one intermediate school site within the Roseville City School District. Because no land use plans have been prepared for the Remainder Area, the number and location of schools is unknown. Some Remainder Area students could be served by the WESP schools. City of Roseville General Plan Policies FC-2 and FC-3 require adequate

<sup>247</sup> California Department of Education website, School Facilities Fingertip Facts, January 2000, <http://www.cde.gov/facilities/field/facts2002.htm>, accessed September 26, 2002.

school facilities be available and the financing for new schools be identified and secured before new residential development is approved.

### **West Roseville Specific Plan**

Table 4.10-4 shows school enrollment projections using generation rates accepted by the City in its General Plan as well as by the school districts. Based on this analysis, the WRSP would generate demand for approximately three RCSD elementary schools, one RCSD intermediate school and one RJUHSD high school.

The WRSP designates 54.4 acres to provide four elementary school sites and one intermediate school site within the Roseville City School District. The construction and operation of these new school sites are expected to accommodate the anticipated kindergarten through eighth grade students generated by the WRSP within the Roseville City School District. One elementary school would be located in the northeast corner of the development, north of Hayden Parkway and west of Fiddymment Road. Another elementary school would be located along Hayden Parkway, north of Blue Oaks Boulevard. A third elementary school would be located in the southern portion of the development along Village Green Drive. The fourth elementary school would be located in the western portion of the development, near West Side Drive, as shown in Figure 2-3 (West Roseville Specific Plan Land Use Plan) in Chapter 2 (Project Description). The intermediate school would be located along Bob Doyle Drive, north of the Village Center.

A 53-acre high school is planned near the middle of the WRSP, and would be constructed and operated by RJUHSD (see Figure 2-3, Chapter 2, Project Description).

No schools are planned within the CUSD, because no residential units are proposed within the district boundaries, although a portion of the Westpark property is located in the CUSD. Open space uses are proposed within CUSD boundaries on the Westpark property.

The elementary and intermediate schools would be built by the developers in lieu of fees. Signature Properties and Westpark Associates would convey elementary and middle school sites to the school district and be compensated for the land and construction of the school(s) after the district obtains state funding and the schools have been constructed. The high school site would be sold to the school district. All of the schools would be located near parks to be used as joint-use facilities. Phasing of school construction is subject to an agreement between Signature Properties and Westpark Associates and the school district.

City of Roseville General Plan policies FC-2 and FC-3 require adequate school facilities be available and the financing for new schools be identified and secured before new residential development is approved. The WRSP project applicants would enter into agreements with the school districts. Each of the two school districts would use this analysis for their environmental review should they obtain any of the designated school sites within the WRSP. The provision of school sites, along with implementation of the General Plan policies, would reduce impacts on the schools to a **less-than-significant** level. If future school facilities were to be constructed or physically altered, construction and/or alteration activities could have potentially significant environmental impacts that would need to be addressed on a project-specific basis prior to approval and construction or alteration.

**Remainder Area**

If the Remainder Area were developed at levels similar to those proposed in the WRSP, the effects would be similar. The northern portion of the Remainder Area and part of the southern portion is within the RCSD and RJUHSD, while a portion of the southern Remainder Area is in the CUSD. Although land use designations have not been assigned in the Remainder Area, some assumptions have been made about the distribution of land uses, primarily in order to conduct the traffic analysis (see Section 4.3, Transportation and Circulation). Using those assumptions, Remainder Area residences would generate approximately 1,003 RCSD K-5 students, 1,902 CUSD elementary, 433 RCSD intermediate, 533 CUSD intermediate, and 632 RJUHSD high school, and 957 CUSD high school students (see Table 4.10-5). These students in the Remainder Area would require three CUSD elementary schools, two RCSD elementary schools, one CUSD intermediate school, less than one RCSD intermediate school, one CUSD high school, and less than one RJUHSD high school.

**Table 4.10-5 Summary of Park Area Required**

Total Population <sup>1</sup> (including active adult)	Required Total Park Acreage <sup>9</sup> ac/1,000 residents)
<b>WRSP</b>	
20,810	187.29 acres
<b>Remainder Area</b>	
18,730	168.57 acres
<b>SOI Amendment Area</b>	
39,539	355.85 acres

NOTES:

1. Average population per dwelling unit = 2.53. Active adult units (710) = 1.8.

SOURCE: West Roseville Specific Plan, March 2003.

Because no land use plans have been prepared for the Remainder Area, the number and location of schools is unknown. Some Remainder Area students could be served by the WRSP schools. For example, the four RCSD elementary schools in the WRSP could serve 2,400 students; the WRSP would generate

only 1,977 elementary school students in the RCSD, leaving capacity for approximately 423 additional students. Other schools in the vicinity might have capacity as well. Nonetheless, the number of students in the Remainder Area would exceed planned capacity. This is a **significant** impact.

MM 4.10-7 would require that school sites be identified as needed in proposed specific plans. Development of the Remainder Area would also be required to pay school impact fees pursuant to City of Roseville General Plan policies FC-2 and FC-3, participation in a Mello-Roos Community Facilities District, and school facility mitigation plans for new development proposed within overcrowded districts in accordance with Roseville City Ordinance 2434 (School Facilities Mitigation Plan). The provision of school sites, along with implementation of the General Plan policies, would reduce impacts on the local school districts to a **less-than-significant** level. If future school facilities were to be constructed or physically altered, construction and/or alteration activities could have potentially significant environmental impacts that would need to be addressed on a project-specific basis prior to approval and construction or alteration.

<b>IMPACT 4.10-4: INSUFFICIENT SCHOOLS FOR CUSD STUDENTS IN PROXIMITY TO THE SOI AMENDMENT AREA.</b>		
<b>Applicable Policies and Regulations:</b>	Roseville Ordinance 2434	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	No Impact	Significant
<b>Mitigation Measures:</b>	None Required	MM 4.10-8 (School transportation policies)
<b>Significance after Mitigation:</b>	No Impact	Less Than Significant

**West Roseville Specific Plan**

Development within the WRSP would not generate any students within the CUSD. Therefore, no new CUSD schools would be required, and there would be **no** impact.

**Remainder Area**

As discussed above, approximately 2,622 single-family and 1,727 multi-family homes are estimated to be developed within the CUSD. Students in the Remainder Area would require approximately three CUSD elementary schools, less than one CUSD intermediate school, and one CUSD high school. It is expected that students living within the Remainder Area, inside the CUSD boundaries, would attend the newly constructed schools in the Remainder Area. The exact locations of school sites in the Remainder Area, would be determined through the development of specific plans. Until new schools are built in the

Remainder Area, CUSD students would need to be bused to existing CUSD schools outside of the SOI Amendment Area. Students would attend Oak Hill Elementary, Wilson Riles Jr. High (to be completed in 2005), and Center High School.<sup>248</sup> This would be a significant impact. Implementation of MM 4.10-8 would ensure that a safe and reliable transportation mechanism to and from schools be established for CUSD students living within the Remainder Area. This is consistent with Ordinance 2434, requiring the provision of interim school facilities. The provision of adequate student transportation to CUSD schools would reduce the impact on CUSD schools and students to **less than significant**.

## LIBRARIES

### 4.10.11 Environmental Setting

While most library systems are operated by County governments, the City of Roseville operates its own library system. According to the City of Roseville General Plan, the City views libraries as an essential public service and contributing factor to the community's quality of life.

The City of Roseville Main Library is located at 225 Taylor Street, approximately four miles from the project site. The Main Library is approximately 30,000 square feet, but according to the Library Director, is currently inadequate to serve its users.<sup>249</sup> The Main Library site is constrained for space and cannot accommodate expansion, and the nearby City parking garage is insufficient to serve the library.<sup>250</sup> In addition, the library is located in a floodplain and has experienced flood damage in the past.<sup>251</sup> The City has indicated the need for a new main library which would be larger and better able to accommodate growth, parking, and office space needs.<sup>252</sup> The City's General Plan standard for new library facilities is one new branch library (approximately 10,300 square feet) for every 15,000 to 20,000 population.<sup>253</sup>

The City of Roseville also operates a branch library at the Maidu Regional Park located in southeast Roseville. The Maidu Branch is located at 1530 Maidu Drive and is approximately 10,300 square feet. Built in 1990, the Maidu Branch Library serves the neighborhood around the park and draws customers from other areas as well. This branch helps the Roseville community meet its needs for educational and recreational materials and for information of all kinds by providing efficient basic neighborhood library services. A City branch library will be located near the project site within Mahany Park. The branch

<sup>248</sup> Mike Winters, Caldwell Flores Winters, Inc., personal communication, January 21, 2003.

<sup>249</sup> Sue Nickerson, Library Director, personal communication, June 3, 2002.

<sup>250</sup> Sue Nickerson, Library Director, personal communication, June 3, 2002.

<sup>251</sup> City of Roseville, North Roseville Specific Plan Draft EIR, page 4.12-21.

<sup>252</sup> Sue Nickerson, Library Director, personal communication, June 3, 2002.

<sup>253</sup> City of Roseville, Draft West Roseville Specific Plan, April 2002, page 6-13.

library at the Mahany Park site, located approximately one mile east of the WRSP on Pleasant Grove Boulevard, would be the closest library facility to the WRSP. The planned library facility would have a floor area of approximately 10,300 square feet each. An additional library component could be included in a community center within the WRSP, but is not currently proposed as part of the project at this time.

Together these libraries serve populations from the City of Roseville, as well as the surrounding counties of Placer, Sacramento, El Dorado, Nevada, Yuba, and Sutter.

### **4.10.12 Regulatory Setting**

#### **■ Federal and State**

There are no specific federal or state regulations pertaining to the provision of libraries.

#### **■ Local**

##### **City of Roseville**

The City of Roseville General Plan includes goals and policies for libraries. Please see Appendix C for a complete list of all applicable City goals and policies.

##### **WRSP Measures**

The WRSP does not include plans to construct a new library facility. The proposed multi-purpose community center in the WRSP could be expanded to include a library component if the City determines a library is needed in the WRSP.

##### **Placer County**

Placer County currently collects a public facilities fee which helps to fund library facilities. This fee is not collected in the City of Roseville. The City of Roseville funds its own libraries.

### **4.10.13 Impacts and Mitigation Measures**

#### **■ Methods of Analysis**

The demand for library services needed to serve the increased Roseville resident population resulting from development of the WRSP and Remainder Area is estimated based upon the City of Roseville's General Plan guidelines for libraries. The impact analysis includes the calculation of additional library building area to serve the anticipated demand. As stated previously, the City of Roseville General Plan

guideline for libraries includes one new library of approximately 10,300 square feet for every 15,000 to 20,000 residents.

### ■ Standards of Significance

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area could:

- Create an increased demand for the provision of library services that would exceed the current or planned level of library services so that new or expanded facilities would be required which could result in substantial adverse environmental impacts.

### ■ Impacts

IMPACT 4.10-5: INCREASED DEMAND ON LIBRARY SERVICES.		
<b>Applicable Policies and Regulations:</b>	City of Roseville General Plan	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Significant	Significant
<b>Mitigation Measures:</b>	MM 4.10-9 (Provide library branches, as needed)	MM 4.10-10 (Library facilities policies)
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

### West Roseville Specific Plan

Development within the Project Area would add approximately 39,539 people to the City of Roseville, or enough residents to warrant two or more branches. Implementation of the WRSP would add approximately 20,810 people to the City of Roseville. As discussed previously, the City General Plan standard (General Plan Policy FB-4) for new library facilities is one new library branch for every 15,000 to 20,000 population. Project development within the WRSP would contribute to the General Fund that finances libraries. However, there are no provisions for ensuring that library branches are added as the City’s population grows and expands geographically. Therefore, the increased demand for library services would be a significant impact.

MM 4.10-9 requires the WRSP will meet the standard or provide equivalent mitigation as needed, to meet the needs of WRSP residents according to General Plan standards. Compliance with MM 4.10-9 would reduce impacts on libraries to a **less-than-significant** level. Potentially significant adverse

environmental impacts associated with construction of new library facilities or the expansion of existing facilities would be addressed on a project-specific basis at the time of construction or alteration.

### **Remainder Area**

Development within the Remainder Area would add approximately 18,722 residents to the City of Roseville. As discussed above, the City's General Plan standard for new library facilities is one new library branch for every 15,000 to 20,000 population. It is anticipated that Remainder Area development would contribute to the General Fund that finances libraries. Nonetheless, because there is no mechanism to ensure that additional library facilities are constructed, this is considered a significant impact. Potentially significant adverse environmental impacts associated with construction of new library facilities or the expansion of existing facilities would be addressed on a project-specific basis at the time of construction or alteration.

MM 4.10-10 would ensure that facilities are adequate to serve residents in the Remainder Area by requiring that library branches be built and/or expanded consistent with the General Plan or provide an equivalent mitigation. This mitigation would reduce any impacts on libraries to a **less-than-significant** level.

## **PARKS AND RECREATION**

### **4.10.14 Environmental Setting**

The SOI Amendment Area is located within the Sacramento metropolitan region. This location has relatively easy access to the Sierra Nevada mountain range, the Central Valley, and the Pacific coast. Locally, recreational opportunities are commonly associated with parkway and river corridors, lakes and reservoirs, and community programs and facilities. The following discussion focuses on the existing parks and recreational facilities provided by the City of Roseville.

#### **Park Types**

The City has defined parklands to include developed parks, recreational open space, and joint-use park-school facilities. Parklands are further divided to distinguish between traditional ("active") and nontraditional ("open space or passive") parks.

There are currently 43 active park sites in the City, and 20 active parks are planned in the City for development in the future.<sup>254</sup> There are currently 1700 acres of passive parkland in the City, and 561 acres of recreational areas in joint use with schools.<sup>255</sup> Parks, public golf courses, and open space areas within the City are managed and maintained by the City's Parks and Recreation Department.

### **Traditional Parks**

Traditional parklands typically provide a variety of active facilities, such as ball fields, multi-use turf areas, hard court areas, and picnic areas. This sort of parkland is classified by the Park Visions 2010 Comprehensive Parks and Recreation Master Plan into a hierarchy of park types: Mini, Neighborhood, Neighborhood/Community, Community, Citywide (Regional), and School Recreation Areas.

Park facilities near the project site include School House Park, located just west of the WRSP Area in the Del Webb Specific Plan area, an eight-acre neighborhood passive park, which has picnic tables, walking paths, and a group gathering area.<sup>256</sup> Veterans Memorial Park, also located in the Del Webb Specific Plan area, is a 10-acre park which has a softball field, picnic and play areas, horseshoe pits, a basketball court, natural area with interpretive trail, and landscaping, and a parking lot.<sup>257</sup> Mahany Park, located at 1545 Pleasant Grove Boulevard on the corner of Woodcreek Oaks Boulevard and Pleasant Grove is a 200-acre park featuring the Roseville Aquatics Center, the Roseville Sports Center, a lighted Softball Complex, and lighted Youth Baseball Complex. The park also contains a large lighted all-weather soccer field, a large picnic area with shelter, six tennis courts, and a bike trail. Permanent restrooms are available.<sup>258</sup> Maidu Regional Park is located in the eastern portion of the City. This 152-acre park features a large sheltered picnic area, a four-diamond lighted softball complex, a pedestrian and bike path, a large turf areas, two play equipment areas, permanent restrooms, and an historical area.<sup>259</sup> This is also the home of Maidu Community Center and Library and Maidu Interpretive Center.

### **Nontraditional Parks and Other Recreation Facilities**

The City also provides nontraditional, park/open space areas such as vernal pool preserves, oak woodlands, watershed/riparian areas, and greenbelts. These areas are typically used for passive recreation and for visual and aesthetic enjoyment. Open space preserves commonly include pathways for walking, jogging, or bike riding.

<sup>254</sup> Paula Finley, Park Development Manager, Roseville Parks and Recreation Department, personal communication, September 5, 2003.

<sup>255</sup> Paula Finley, Park Development Manager, Roseville Parks and Recreation Department, personal communication, June 4, 2002.

<sup>256</sup> City of Roseville Parks and Recreation Department website, <http://www.roseville.ca.us/parks/facilities.htm>, accessed July 2, 2002.

<sup>257</sup> City of Roseville Parks and Recreation Department website, <http://www.roseville.ca.us/parks/facilities.htm>, accessed July 2, 2002.

<sup>258</sup> City of Roseville Parks and Recreation Department website, <http://www.roseville.ca.us/parks/parks.htm>, accessed December 11, 2002.

<sup>259</sup> City of Roseville Parks and Recreation Department website, <http://www.roseville.ca.us/parks/facilities.htm>, accessed July 2, 2002.

There are four golf courses within the City. The City operates Diamond Oaks Golf Course, in the north central portion of the City and Woodcreek Oaks Golf Club, opened in August 1995, located in the Northwest Roseville Specific Plan Area. The 18-hole golf course, located in the Del Webb Plan area, is available for public use on a time-available basis. Sierra View Country Club, located at 105 Alta Sierra Avenue, is the fourth course, which is private.

The City also operates three swimming pools – Johnson Pool, Oakmont Pool, and the Roseville Aquatics Complex.

The Parks and Recreation Department also manages pedestrian and bicyclist pathways throughout the City (e.g., along Miners Ravine, Dry Creek, and Linda Creek). The paths are part of a larger planned pathway system which is intended to provide east/west connections within the City, integrate the City with future regional paths, and improve accessibility to the City's creek system.

### **Placer County**

Areas that are outside of the City limits are provided park services by Placer County. Demand on City recreation services and park facilities corresponds with outlying area population density that is largely due to development. Those areas that are more developed and have higher densities create more demand on City services and facilities. Based on limited available data, approximately 30 to 40 percent of City recreation services and park facilities are used by County residents.<sup>260</sup> The Placer County General Plan identifies several open space and roadway corridors that are integrated with City facilities.

Placer County has identified (through policies or master plans) some park sites near the WRSP Area. The Dry Creek-West Placer Community Plan identifies a proposed park site approximately one-half mile south of the Baseline Road and Fiddymont Road intersection. Additionally, several open space or roadway corridors have been identified that reflect the important connections of nontraditional parkland and pedestrian/bicycle trail corridors between the Plan Area and Placer County. These connections include a bicycle lane/equestrian hiking trail along Fiddymont Road, and a planned regional trail corridor along Pleasant Grove Creek, which would connect the American River Recreational Area at Beale's Point on Folsom Lake with the Sacramento River in Sutter County.

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<sup>260</sup> City of Roseville, North Roseville Specific Plan Draft EIR, page 4.12-28.

### 4.10.15 Regulatory Setting

#### ■ Federal

There are no specific federal regulations pertaining to the provision of local parks and recreation facilities.

#### ■ State

##### **Quimby Act**

California Government Code Section 66477, often referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees for park and recreation purposes. The City's requirement of nine acres per 1,000 residents exceeds the Quimby Act requirements, because as a charter City, Roseville set its own park dedication requirements.

#### ■ Local

##### **City of Roseville**

###### ***Visions 2010, Comprehensive Parks and Recreation Master Plan***

The City of Roseville Parks and Recreation Department adopted the Visions 2010, Comprehensive Parks and Recreation Master Plan in 1995. The Master Plan includes baseline data, policies, and recommendations for the day-to-day tasks of the Department, as well as standards for planning future park and recreation facilities.

###### ***WRSP Measures***

The WRSP provides 955 acres in parks and open spaces. This includes 251 acres of neighborhood and Citywide parkland, 14.5 acres of paseos, 19.4 acres of pocket parks and 670.1 acres of open space.

###### ***City of Roseville General Plan***

The City of Roseville General Plan establishes a park acreage standard of nine acres per 1,000 residents. Parks are classified as either "traditional" (active) or "nontraditional" (open space or passive). The City of Roseville General Plan includes other goals and policies for parks and recreation. Please see Appendix C for a complete list of all applicable City goals and policies.

**Park Credits for Development**

The City has an adopted park-to-population standard of nine acres per 1,000 residents. This standard is based on population estimates and demographic characteristics, and was derived from evaluating existing inventory and land needed for future expansion of recreation facilities. Typically, developers include park land in their development plans to meet the City Standard. The nine acres per 1,000 standard is further defined as follows:

- 3 acres Neighborhood/Community Park
- 3 acres Citywide Park
- 3 acres Open Space/Passive

Currently, park acreage credit can be obtained for any property with public recreational value; however, properties with less active recreation value typically receive less credit. A traditional “active” park is normally granted a 1:1 park acreage credit, while nontraditional “passive” parks are granted partial park acreage credits ranging from 10:1 to 5:1.

**Park Facility Funding**

Parks and recreation facilities are funded through a variety of mechanisms which vary depending on the location of the facility. Roseville Municipal Code Chapter 4.36, which established the Residential Construction Tax, was rescinded in February 1996.

The Neighborhood and Community Park Fee is required by Roseville Municipal Code, Chapter 4.37, and varies in amount depending on the neighborhood (and corresponding population) in which the park is located. Like the City-Wide Park Fee (discussed below), this fee increases annually (each July 1st) based on the inflation rate for construction costs from the previous year. It is collected from all new residential units and a park fee credit may apply. Based on neighborhoods, this fee is intended to provide sufficient funds to develop neighborhood and community parks within a specific plan area.

The City-Wide Park Fee was established in 1989 by the Roseville Municipal Code Chapter 4.38. This fee is collected from all new residential dwelling units within the City limits and is adjusted each July 1 based on the inflation rate for construction costs from the previous year. The City-Wide Park Fee is allocated for large-scale active recreation facilities intended to serve the entire City, typically located within identified Citywide parks.

Park Fee Credits have been allowed in the past pursuant to Roseville Municipal Code Chapter 4.38.06. Park fee credits have been granted to developers in specific plan areas in exchange for citywide park

property dedication that averages five acres or more per 1,000 residents. For neighborhood parks where improvements have been completed by developers on behalf of the City in advance of normal park development, the park fee credits vary by specific plan areas and are increased annually to account for inflation. However, park fee credits are not automatic and the WRSP Area’s fees will be based on this plan’s park program and credits may or may not apply.

### 4.10.16 Impacts and Mitigation Measures

#### ■ Methods of Analysis

The amount and type of park acreage included in the SOI Amendment Area has been compared to the standards established in the Parks Visions 2010 Master Plan. The following factors have been applied to determine the park acreage required by the SOI Amendment.

- 3 acres Neighborhood/Community Park land per 1,000 residents
- 3 acres Citywide Park/land per 1,000 residents
- 3 acres Open Space/Passive land per 1,000 residents

#### ■ Standards of Significance

For the purposes of this EIR, a significant impact would occur if development proposed in the SOI Amendment Area would:

- Fail to meet the City’s standards for the provision of parkland.

#### ■ Impacts

<b>IMPACT 4.10-6: INCREASED DEMAND FOR PARK FACILITIES.</b>		
<b>Applicable Policies and Regulations:</b>	City of Roseville General Plan Roseville Municipal Code Chapters 4.36, 4.37 and 4.38	
	<b>WRSP</b>	<b>Remainder Area</b>
<b>Significance with Policies and Regulations:</b>	Less Than Significant	Less Than Significant
<b>Mitigation Measures:</b>	None Required	None Required
<b>Significance after Mitigation:</b>	Less Than Significant	Less Than Significant

**West Roseville Specific Plan**

The WRSP would result in a population increase of approximately 20,810 residents. Based on the City’s parkland ratio, the WRSP would need approximately 187 credible acres for new parks total, with 62 acres each of Neighborhood/Community Park; Citywide Park; and Open Space/Passive parks (see Table 4.10-5). The WRSP proposes to rededicate a total of 320 credible acres per City required parkland. This includes approximately 83.5 acres of Neighborhood/Community parks, 166.6 acres of Citywide parks, 14.5 acres of open space paseo, and 684.6 acres of passive open space, for a total of 949.2 acres (see Table 4.10-6). In addition, the plan will provide 19.9 acres of pocket parks in Fiddymment Ranch. The WRSP would provide several active and passive recreational amenities such as oak woodland open space areas including Fiddymment Park, a regional sports park, neighborhood parks with tot lots and turf, bike/pedestrian paths, and paseos. Six joint use park-school facilities would also be created. In addition, the WRSP includes seven pocket parks of approximately three acres in size. Since the WRSP provides more than 62 acres for each of the park categories, the WRSP would provide more park acreage than required by City policy.

**Table 4.10-6 Summary of Park Area Provided**

	Total WRSP	SOI Remainder Area	SOI Amendment Area
Open Space Acreage	670.1	364.6	1,034.7
Open Space Paseo Acreage	14.5	--	14.5
Active Park Acreage	251.0	195.7	446.7
Pocket Parks (no credit)	19.4	--	19.4
<b>Total Park and Open Space Acreage</b>	<b>955</b>	<b>560.3</b>	<b>1,515.3</b>

NOTES: Parkland is not provided in the Remainder Area. Average listed is the park land projected for the Remainder Area if annexed.  
 SOURCE: West Roseville Specific Plan, September 15, 2003.

Parks and recreation facilities in Roseville are funded through a variety of mechanisms. The Neighborhood and Community Park Fee and the City-Wide Park Fee would be collected from all residential units. The applicants of the WRSP would be required to dedicate the required parkland and to pay park development fees. For these reasons, adequate park facilities would be provided and this impact is considered to be **less than significant**.

**Remainder Area**

Because it is assumed that the Remainder Area would be developed primarily with residential uses of a density and type similar to the WRSP, parklands would need to be included in the development of the Remainder Area. The City policy of nine acres of parks per 1,000 people would also apply to the Remainder Area. The Remainder Area would add approximately 18,722 residents, requiring approximately 169 acres of parkland, with 56 acres each of Neighborhood/Community Park; Citywide

Park; and Open Space/Passive Parks. The applicants of the Remainder Area would be required to dedicate parkland and to pay park development fees. With the allocation of nine acres of parkland per 1,000 people and the payment of appropriate development fees to pay for construction of park facilities, the impact would be considered **less than significant**.

### ■ Mitigation Measures

*MM 4.10-1(a): Increase Number of Police Officers in the Roseville Police Department (Impact 4.10-1 – WRSP)*

Police Department staffing to serve the WRSP shall be increased to meet General Plan standards. Based on the projected population increase of approximately 20,810 residents in the WRSP Area, additional officers would be required to serve the new population. The City would fund these positions through increased general revenues generated by new development and the City's General Fund.

*MM 4.10-1(b): Expand the Roseville Police Department Headquarters (Impact 4.10-1 – WRSP)*

An expansion of the Police Headquarters or potentially a satellite facility in the WRSP would likely be needed at buildout of the WRSP to accommodate the additional Department staff required by MM 4.10-1(a). The current size of Police Headquarters is insufficient to accommodate a large increase in police staff. The City would fund the expansion through increased general revenues generated by new development through the Capital Facilities Fee collected at the Building Permit stage. Planning and environmental review would be required for the development of an additional station or the expansion of the existing station. Depending on its design, size, and location, the expansion of the existing station or the construction of new law enforcement facilities could lead to increased air emissions, noise, and traffic, as well as loss or degradation of biological habitat, cultural resources, water quality, or other potentially significant environmental impacts. Impacts would be addressed on a project-specific basis prior to approval of construction.

*MM 4.10-1(c): Expand the Voice Radio Communication System and Data Radio Systems (Impact 4.10-1 – WRSP)*

The voice radio communication system and data radio system shall be expanded, including possibly an additional antenna tower, to provide adequate radio service to the WRSP Area. The City would fund the expansion through increased developer contributions generated by new development and the City's General Fund.

*MM 4.10-2: Law Enforcement Policies (Impact 4.10-1 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall provide for Police Department staffing and facilities at levels consistent with General Plan standards that would extend law enforcement into the area to be developed at levels needed to provide adequate public safety, and at ratios consistent with the City as a whole. The City would fund these positions through increased general revenues generated by developer fee contributions and the City's General Fund. Planning and environmental review would be required for the development of an additional station or the expansion of existing stations. Depending on its design, size, and location, the expansion of existing stations or the construction of new law enforcement facilities could lead to increased air emissions, noise, and traffic, as well as loss or degradation of biological habitat, cultural resources and water quality, or other potentially significant environmental impacts. Impacts would be addressed on a project-specific basis prior to approval of construction.

*MM 4.10-3: Construct New Stations as Needed (Impact 4.10-2 – Remainder)*

The Roseville Fire Department shall closely monitor the response times within any new development area and provide for new stations as needed. Timing the construction and staffing of the new fire stations shall be consistent with Fire Department Standards of Response Coverage Study. Potentially significant environmental impacts associated with construction of new fire stations will be addressed in a project-specific basis prior to approval of construction.

*MM 4.10-4: Demonstrate Adequate Response Time or Provisions (Impact 4.10-2 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall strive to meet the RFD's response time standard.

*MM 4.10-5: Identify Appropriate Fire Station Locations (Impact 4.10-2 – Remainder)*

Prior to any development or Specific Plan approval for the Remainder Area, the Roseville Fire Department shall determine whether response times within the Remainder Area could be met with existing stations and/or stations shown in the West Roseville Specific Plan.

*MM 4.10-6: Adopt Fire Prevention and Suppression Policies (Impact 4.10-2 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall either include specific policies or condition development to include the following:

- A 30-foot-wide mowed or graded fire break maintained at the perimeter of all Open Space areas.

- All fences at the perimeter of Open Space Preserve Areas constructed of noncombustible materials, except that wood posts may be used in post-and-cable barriers adjacent to landscape corridors and street edges.
- The Roseville Fire Department shall maintain a fire management plan that includes the maintenance of fire breaks and periodic fuel reduction.

*MM 4.10-7: Designate School Sites (Impact 4.10-3 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall designate school sites needed to serve that plan's student population, unless the appropriate school district confirms in writing that other existing and planned schools would have adequate capacity. Potentially significant environmental impacts associated with the construction of new school facilities or the physical alteration of existing school facilities would be addressed on a project-specific basis at the time of construction or alteration.

*MM 4.10-8: School Transportation Policies (Impact 4.10-4 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area in the Center Unified School District should encourage an appropriate mechanism for transporting students to schools outside the SOI Amendment Area, in coordination with CUSD.

*MM 4.10-9: Provide Library Branches, as Needed (Impact 4.10-5 – WRSP)*

Pursuant to General Plan policy FB-4, library branches or components shall be expanded and/or constructed to serve the additional 20,810 residents in the WRSP. At the time of building permits, the capital facilities fee would be collected, a portion of which could fund the expansion of existing or construction of new library facilities. Special attention shall be paid to the locations of existing and planned library facilities, and their proximity to existing and future residents. Potentially significant adverse environmental impacts associated with construction of new library facilities or the expansion of existing facilities would be addressed on a project-specific basis at the time of construction or alteration.

*MM 4.10-10: Library Facilities Policies (Impact 4.10-5 – Remainder)*

Specific Plans and/or other development proposals for the Remainder Area shall provide for library branches and/or components to be expanded and/or constructed to serve the additional residents in the Remainder Area. Developers shall pay a fair share fee to the City for the expansion of existing facilities or construction of new library facilities. Special attention shall be paid to the locations of existing and planned library facilities, and their proximity to existing and future residents.

