SOUTHEAST ROSEVILLE SPECIFIC PLAN 1987 AMENDMENT FINAL EIR

PREPARED FOR
CITY OF ROSEVILLE

JANUARY 4, 1988

PREPARED BY
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I. INTRODUCTION

A. Project Overview

The existing Southeast Roseville Specific Plan (SERSP) encompasses approximately 637.4 acres south of Douglas Boulevard and west of Sierra College Boulevard, and includes 3,798 residential dwelling units. Proposed amendment of the existing SERSP includes addition of approximately 367 acres, with land uses allowing construction of 167 residential units, to the already adopted specific plan area. The additional area proposed for inclusion is located east of Sierra College Boulevard, south of Eureka Road and north of the Placer/Sacramento County line. With addition of this area, the size of the SERSP area would increase to approximately 1,004.4 acres. Similarly, the number of units allowed by the specific plan would increase from 3,798 to 3,965.

In addition to increasing the plan area size, reallocation of land use within the plan area is proposed. For the most part, the proposed land use modification consists of the transfer of residential densities, primarily from higher density parcels within the already adopted specific plan area west of Sierra College Boulevard, to the area east of Sierra College Boulevard which is proposed for inclusion in the amended SERSP.

The essential impetus for the proposed density reallocation is the existing low density presently assigned to the area east of Sierra College Boulevard and not covered by the existing specific plan. Existing land use designations provide for a total of 167 residential units in this area. The proposed amendment includes transfer of 783 residential units from the already adopted specific plan area, increasing the number of residential units assigned to the area located east of Sierra College Boulevard to 950 single family homes. However, the overall total number of units to be developed within the area proposed to be included within the amended specific plan area will not change from that currently allowed by existing Specific and General Plan designations.

B. Environmental Review Process

The **Southeast Roseville Specific Plan** was approved by the Roseville Planning Commission on August 9, 1984 and adopted by the Roseville City Council on February 20, 1985. As approved, the specific plan area encompasses approximately 637.4 acres south of Douglas Boulevard and west of Sierra College Boulevard. Since adoption of the specific plan, development of the area has taken place, with some projects already being completed and occupied. Generally, this development has occurred from west to east with the yet to be developed properties being located in the southeastern portion of the plan area. In March of 1987, amendment of the SERSP was proposed to incorporate additional property into the plan area and transfer units from the existing plan area to this additional property. The Draft version of this environmental impact report (DEIR), dated August 13, 1987, and this Final Environmental Impact Report (FEIR), have been prepared to describe and analyze the impacts associated with the proposed amendment.

In accordance with the requirements of the California Environmental Quality Act (CEQA), and the requirements of the City of Roseville, the DEIR has been circulated to State, Federal, and local agencies and the general public for their review, and has been the subject of public hearings held by the City of Roseville Project Review and Planning Commissions. As shown in the Table of Contents of this document, this Final Environmental Impact Report consists of the original DEIR, its technical appendices, the comments which were made on the DEIR, and the responses to these comments, all appended by reference to this document. Comments responded to include those submitted in writing, those made by the public during the public hearings, and those made by the Planning and Project Review Commissions. The purpose of this FEIR is to summarize the essential information contained in the DEIR and subsequent documents, with an emphasis on those issues which were the major subjects of comment and discussion during the process. In addition to fulfilling the CEQA requirements, the purpose of this FEIR is to provide a single document which can be effectively utilized in the specific plan decision making process which follows approval of the FEIR.

C. Purpose and Scope of EIR

As provided in the California Environmental Quality Act (CEQA) Guidelines, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. In discharging this duty, the public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social (Section 15021). The EIR is an informational document, the purpose of which is to inform public agency decision makers and the general public of the significant environmental effects of a proposed project, to identify possible means to minimize the significant effects, and to describe reasonable alternatives to the project. The public agency is required to consider the information in the EIR along with any other information available in making its decision (Section 15121). Sections 15122 through 15132 describe the content requirement for Draft and Final EIRs. This information includes the environmental setting, environmental impact, mitigation measures, alternatives, short term uses vs. long term productivity, significant irreversible changes, growth inducing impacts, and cumulative impacts.

In accordance with CEQA Section 15182, no EIR or negative declaration need be prepared for a residential project in conformity with the adopted specific plan. This includes land subdivisions, zoning changes, and residential planned unit developments. If a supplemental or subsequent EIR on the specific plan is required, this exemption would not be available until these documents are complete.

II. SUMMARY

Tables B1 and B2 contain recommendations for findings of significance for project specific and cumulative impacts. Further information and detail regarding these subjects is presented in the appropriate sections of the text of this report. In accordance with CEQA Guidelines Section 15126 (a), all of the impacts examined in detail in the body of this report are potentially significant. However, the Guidelines (CEQA Sections 15064, 15382 and CEQA Appendix G) require a very specific examination of significance in light of mitigation measures which can be utilized to reduce the impact.

Project specific impacts refers to those impacts which are generated solely by implementation of this project, irrespective of other growth in the vicinity. Project specific impacts in the areas of air quality, vegetation/wildlife, recreation, and visual/aesthetic impacts are suggested to be significant.

Cumulative impacts refer to the impacts which could result from regional growth, and are evaluated on a larger scale than that considered in the evaluation of impacts associated with a single project. Although this project may negligibly contribute to the impacts in a given subject, the combined effect of regional development may produce significant impacts. In some instances, such as air quality, an unacceptable condition already exists, and regardless of the magnitude of the contribution of this project, any additional contribution must be considered significant, both on a project specific and cumulative scale. Cumulative impacts which are anticipated to occur with continued regional growth for which mitigation has not been identified or implemented include air quality, hydrology, vegetation and wildlife, traffic, visual/aesthetics, and archaeology/history.

The final determination as to which impacts are judged to be significant is made by the City of Roseville, so the classification given must be considered as suggestive.

Table B1
Suggested Findings of Significance for Project Specific Impacts

	Project Specific Impacts		
	Less than Significant Impacts		Significant Impacts not fully Mitigated w/ identified Measures
	with existing Mitigation Measures	with Project Specific Mitigation	
Natural Environment			
Geology & Soils		X	
Hydrology		X	
Vegetation/Wildlife			X
Air Quality			X
Noise		X	
Cultural Environment			
Land Use		X	
Population	X		
Employment	X		
Housing		X	
Job Housing Balance		X	
Traffic			X
Utilities			
Water		X	
Sewer		X	
Natural Gas	X		
Electricity	X		
Telephone	X		
Energy		X	

Project Specific Impacts (Con't)

	Less than Significant Impacts		Significant Impacts not fully Mitigated w/ identified Measures
	with existing Mitigation Measures	with Project Specific Mitigation	
Public Services			
Police protection		X	
Fire Protection		X	
Solid Waste	X		
Hazardous Materials	X		
Schools		X	
Parks & Recreation			X
Visual & Aesthetic			X
Fiscal		X	
Archaeology/History		X	

Table B2
Suggested Findings of Significance
for Impacts Associated with Regional Cumulative Growth

	Cumulative Impacts	
	Impacts for which currently identified mitigation exists	Impacts for which full mitigation has not been Implemented
Natural Environment		
Geology & Soils	X	
Hydrology		X
Vegetation/Wildlife		X
Air Quality		X
Noise	X	
Cultural Environment		
Land Use	X	
Population	X	
Employment	X	
Housing	X	
Job Housing Balance	X	
Traffic		X
Utilities		
Water	X	
Sewer	X	
Natural Gas	X	
Electricity	X	
Telephone	X	
Energy	X	

Cumulative Impacts (Con't)

	Impacts for which currently identified mitigation exists	Impacts for which full mitigation has not been Implemented
Public Services		
Police Protection	X	
Fire Protection	X	
Solid Waste	X	
Hazardous Materials	X	
Schools	X	
Parks & Recreation	X	
Visual & Aesthetic		X
Energy	X	
Archaeology/History		X

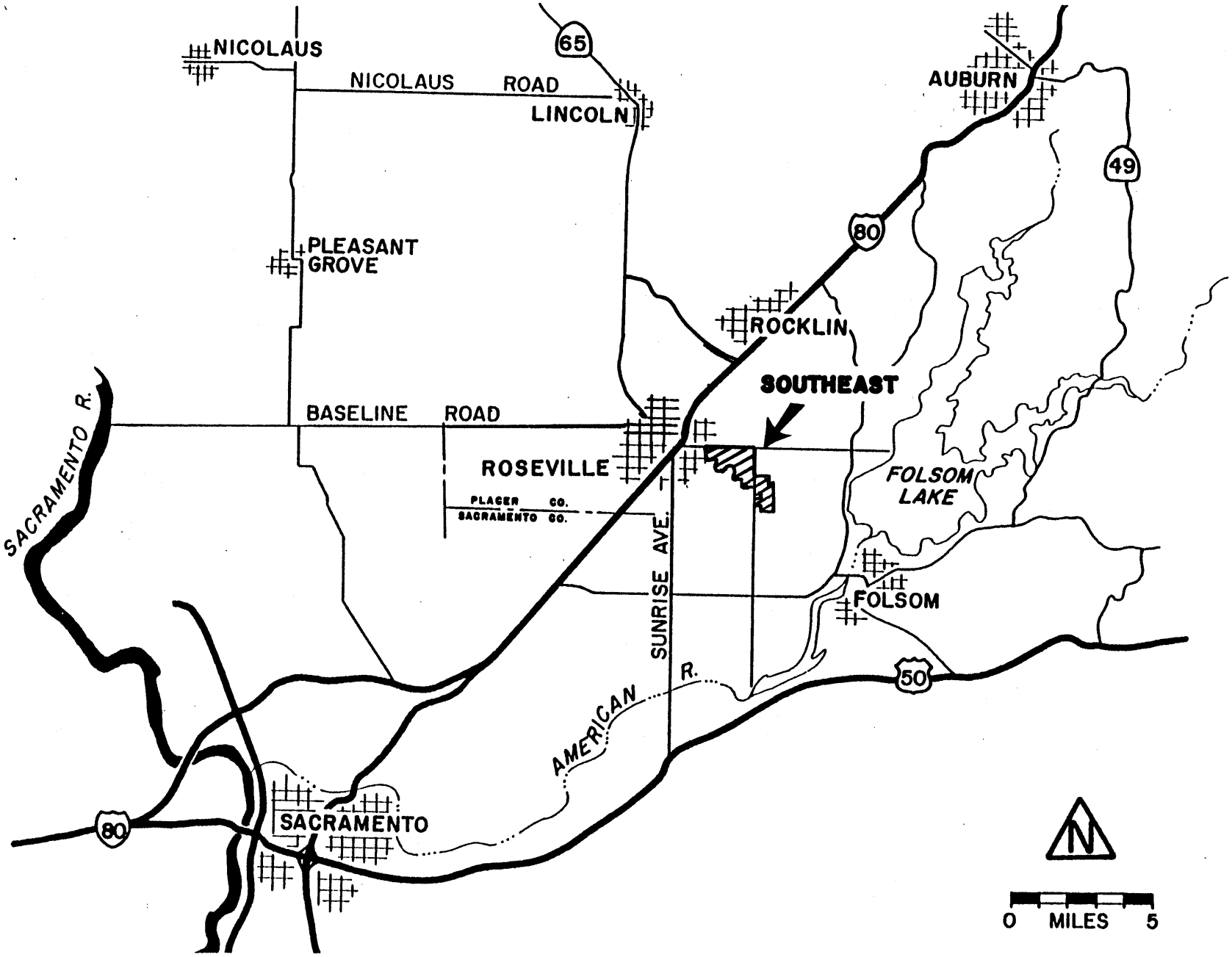
III. PROJECT DESCRIPTION

A. Location

The Southeast Roseville Specific Plan area is located within the southeastern portion of the City of Roseville as shown on Figure C1, the Regional Location Map. The currently adopted Southeast Roseville Specific Plan encompasses approximately 637 acres located south of Douglas Boulevard and west of Sierra College Boulevard. The proposed amendment to the existing plan area includes an additional 367 acres located east of Sierra College Boulevard and south of Eureka Road, as shown in Figure C2, the Vicinity Map. The total acreage of the area within the proposed specific plan area is approximately 1,004 acres. The boundaries of the amended plan area are Rocky Ridge Drive on the west, Douglas Boulevard and Eureka Road on the north, and the City corporate limits on the east and south.

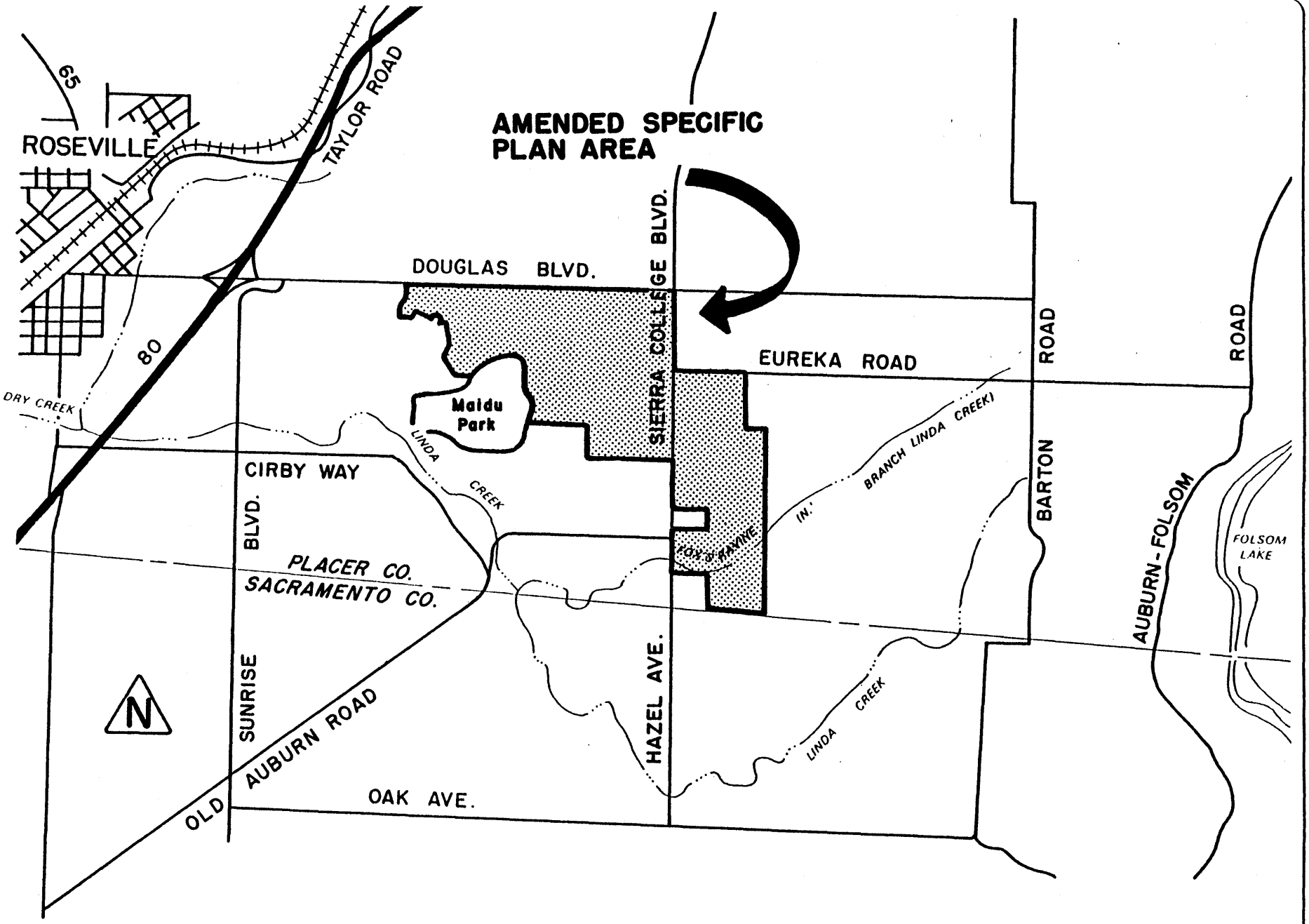
B. Project Site Description

The amended 1,004 acre Southeast Roseville Specific Plan area consists for the most part of gently rolling hills of annual grassland interspersed with oak woodland habitat and limited riparian vegetation along the major drainages. The most conspicuous structure within the plan area is an electrical transmission line within a 465 foot wide easement which bisects the site from northwest to southeast. Past use of the area has been dominated by low intensity agriculture, primarily grazing. Some structural remains of past uses occur throughout the site, including building foundations, fences, and a well. An abandoned orchard is located in the northeastern portion of the site. A portion of the additional property located east of Sierra College Boulevard supports an area of mature native oak woodland of high aesthetic value. The predominant species in this area includes Live Oak, Blue Oak, and Digger Pine. Riparian vegetation along the drainage courses includes blackberries, cattails, Oregon Grape, willows, tamarack, and cottonwood trees.



REGIONAL LOCATION MAP

FIGURE C1



VICINITY MAP | FIGURE C2

Regional drainage is typically to the southwest. Drainage within the plan area is concentrated in three major drainage courses, Strap Ravine Creek, North Branch Cirby Creek, and Cirby Creek. Strap Ravine drains the majority of the northern SERSP area, with the exception of the northwestern corner of the plan area which is drained by Cirby Creek. North Branch Linda Creek drains the southern portion of the area, most notably the 367 acres proposed for addition to the plan area.

Elevations on the site range from a high of 298 feet above mean sea level, located on an isolated knoll in the southeastern corner of the property, to a low of approximately 180 feet above mean sea level, within the Strap Ravine Creek channel. Scattered granite outcrops are found in several portions of the site.

C. Existing Use of Site and Adjacent Parcels

As discussed, the predominant historic use of the site has been grazing, both of sheep and cattle. Grazing is currently the only use, with some corrals, loading chutes, and other accouterments of livestock operations still in evidence, particularly in the portion of the plan area east of Sierra College Boulevard. The most notable exception to the agricultural nature of the area is the currently developing portion of the plan area, which contains recently developed residential, commercial, and professional uses. Development to date is predominantly concentrated to the area south of Douglas Boulevard and east of Rocky Ridge Drive.

Existing and proposed land uses in the vicinity of the plan area include the Northeast Roseville Specific Plan area across Douglas Boulevard to the north, and Maidu Park to the west. The Annabelle tract (in the county) and the Huntington Oaks residential subdivision (in the City) are to the southwest. Outside the City Limits, west of sierra College Boulevard and south of Old Auburn Road is the Woodbridge Ranch single family subdivision, which extends into Sacramento County. East of the plan area is the currently proposed Treelake Village project, an 1100 unit residential development within Placer County. South of Eureka Road, east of the City Limit line, are the sites of two

proposed new schools: a new high school for the Roseville Joint Union High School District, and a combined K-3/4-6 facility for the Eureka District. Directly north of Eureka Road, and east of Sierra College Boulevard is the site of a currently developing commercial area within Placer County.

D. Project Description

The existing Southeast Roseville Specific Plan was adopted by the Roseville City Council in 1985. As shown in Figure C3, the Existing Specific Plan Map, the Southeast Roseville Specific Plan encompasses approximately 637 acres south of Douglas Boulevard and west of Sierra College Boulevard. Proposed amendment of the existing specific plan includes addition of approximately 367 acres to the plan area, all east of Sierra College Boulevard and south of Eureka Road, as shown in Figure C4, the Amended Specific Plan Map. A full size copy of this map is located inside the back cover of this document.

Table C1 presents a detailed breakdown of land uses adopted under the current Southeast Specific Plan as well as land uses in the proposed plan amendment.

The proposed project which is the subject of this environmental impact report, consists of the adoption of an amended specific plan for the project area. In general, the major purpose of a specific plan is to establish goals, policies, and guidelines for development within the plan area. In this instance, the immediate purpose of the proposed amendment to the Southeast Specific Plan is to reallocate land use throughout the newly defined plan area.

The specific plan proposed does not contain any individual development proposals, so no particular schedule or cost information is available on a project by project basis. For regional planning and forecasting purposes, it has been assumed that approximately two thirds of the plan area will build out by the year 2005.

DOUGLAS BOULEVARD

COMM. (1) 6.46 ac

B P (2) 4.49 ac

B P (3) 9.25 ac

B P (4) 2.47 ac

PROFESSIONAL DRIVE

B P (5) 12.28 ac

7 A-6g

1 A-6a

B P (7) 41.59 ac

0.65 ac

B P (21) 11.09 ac

4.73 ac

R (8) 33.81 ac 530 du

R (9) Elderly Housing 21.02 ac 400 du

R (6) 8.67 ac 52 du 4.01 ac

3.64 ac

Day Care Center

EUREKA ROAD

ROCKY RIDGE DRIVE

(11) Park Addition 0.65 ac

FS-1 1.56 ac

(10) 3.56 ac

0.99 ac

0.37 ac

0.72 ac

(23) (24) ESD-2 K-3 School Site 1.39 ac

2.54 ac

1.80 ac

R (22) 10.87 ac 184 du

R (25) 9.47 ac 126 du

5.53 ac

B P (30) 25.42 ac

8.98 ac

3 A-6c

COMM. (20) 12.05 ac

R (31) 12.69 ac 165 du

R (29) 38.60 ac 474 du

1.85 ac

0.15 ac Elect. Sub. (ESS-1) 0.81 ac

6.07 ac

15.08 ac

EAST ROSEVILLE PARKWAY

0.45 ac

R (28) 35.35 ac 496 du

4 A-6b

4.02 ac

ESD-1 4-6 School Site & MP-1 Park Addition (12) 21.38 ac

JOHNSON RANCH DRIVE

R (13) 18.04 ac 124 du

R (16) 11.94 ac 123 du

COMM. (17) 10.02 ac

R (19) 20.19 ac 270 du

10.71 ac (57) ESD-3 7-8 School Site

R (32) 4.08 ac 30 du

COLLEGE BOULEVARD

SIERRA COLLEGE BOULEVARD

CITY OF ROSEVILLE

MAIDU PARK

(14) MP-2 Park Addition 9.04 ac

PARKHILL DRIVE

6 A-6f

R (15) 2.61 ac 22 du

R (18) 18.863 ac 88 du

R (33) 25.99 ac 227 du

(58) 7.79 ac

R (36) 29.13 ac 221 du

McCLAREN DRIVE

R (34) 20.54 ac 82 du

R (35) 19.67 ac 158 du

COMM. (37) 6.63 ac

N. CIRBY WAY

north

0 200 400 600 800 1000

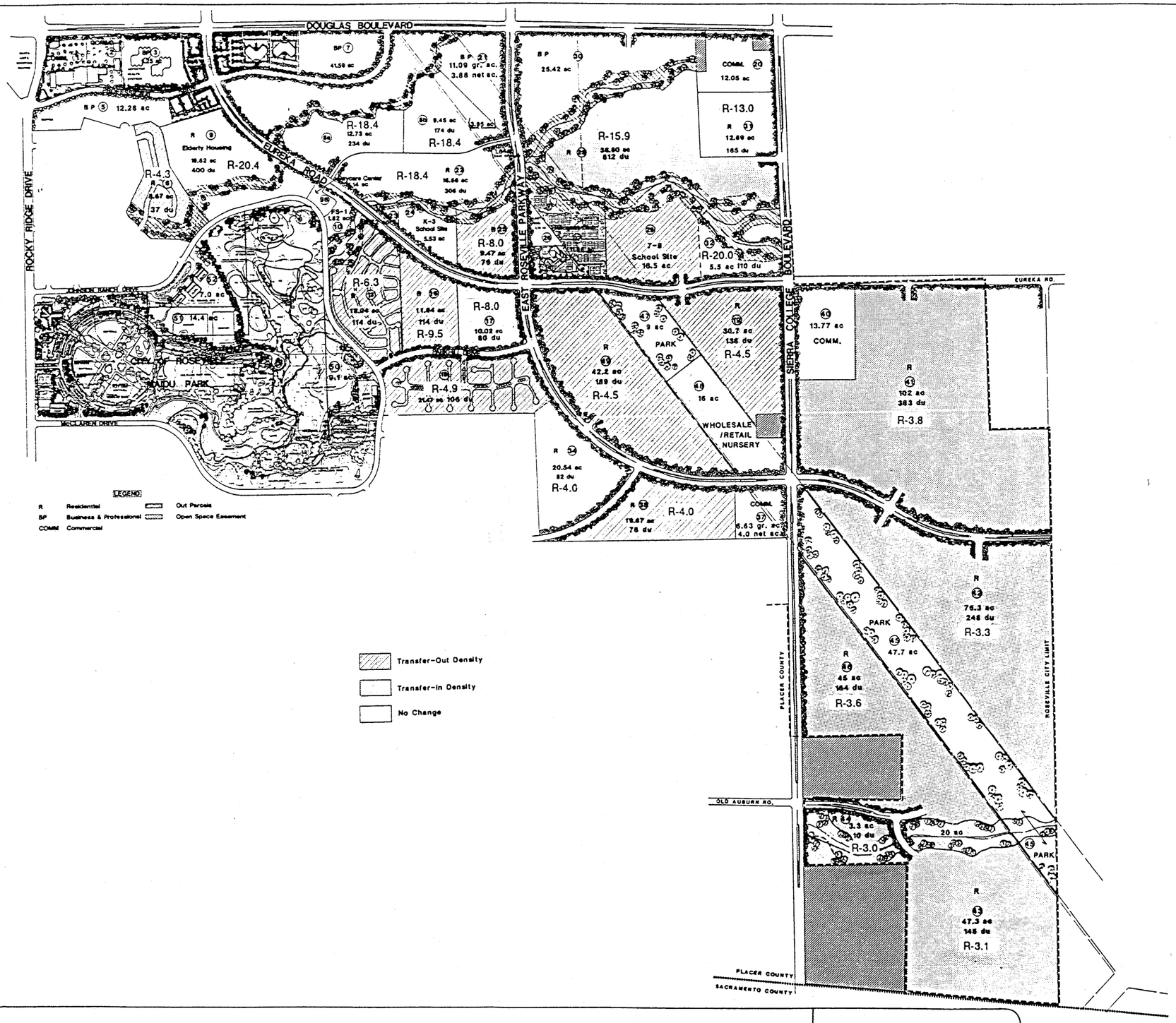
PREPARED BY: DAVID WADE & ASSOCIATES — WILLIAMS + PADDON ARCHITECTS + PLANNERS INC

LAND USE PLAN
EXHIBIT "A-1"

EXISTING PLAN MAP

FIGURE C3

SERSP AMENDMENT C-6 FINAL EIR



PREPARED BY: WADE ASSOCIATES
PLANNING · DESIGN · ECONOMICS

AMENDED SPECIFIC PLAN AREA MAP

FIGURE C4

Table C1
Existing Land Use Designations and Proposed Land Uses

Existing Designations				Proposed Specific Plan			
Parcel	Acres	Units	Land Use	Parcel	Acres	Units	Land Use
1	6.5		Comm.	1	6.5		Comm.
2	4.5		BP	2	4.5		BP
3	9.3		BP	3	9.3		BP
4	2.5		BP	4	2.5		BP
5	12.3		BP	5	12.3		BP
6	8.7		R-4	6	8.7		R-5
7	41.6		BP	7	41.6		BP
8	33.8	530	R-16	8a	12.7	234	R-19
9	21.0	400	R-22 (Elderly)	8b	9.5	174	R-19
10	1.6		FS	9	19.6	400	FS
11	1.0		Park	9b	1.1		Daycare
12	21.4		Park/School	10	1.8		FS
13	18.0	124	R-7	13	18.0	114	R-7
14	9.0		Park Addition	16	11.9	114	R-10
15	2.6	22	R-4	17	10.0	80	R-8
16	11.9	123	R-10	18	21.5	106	R-5
17	10.0		Comm.	19	30.7	138	R-5
18	18.9	88	R-4	20	12.1		Comm.
19	20.2	270	R-15	21	11.1		BP
20	12.1		Comm.	22	16.7	306	R-19
21	11.1		BP	23	0.7		School
22	10.9	184	R-16	24	5.5		School
23	1.0			25	9.5	76	R-8
24	5.5		School Site	26	2.1		ES
25	9.5	126	R-14	27	11.9		Racquet Club
26A	1.0		ES	28	18.5		School
26B	0.5		Misc.	29	38.6	612	R-16
27A	0.4		Misc.	30	25.4		BP
27B	1.0		Misc.	31	12.7	165	R-13
28	35.6	496	R-13	32	5.5	110	R-20
29	38.6	474	R-12	34	20.5	82	R-4
30	25.4		BP	35	19.7	78	R-4
31	12.7	165	R-15	37	6.6		Commercial
32	4.1	30	R-7	40	13.8		Commercial
33	26.0	227	R-12	41	102.0	383	R-4
34	20.5	82	R-4	42	76.3	248	R-4
35	19.7	158	R-8	43	47.3	145	R-4
36	29.1	221	R-7	44	3.3	10	R-3
37	6.6		Comm.	45	47.7		Park
57	10.7		School	46	45.0	164	R-4
58	7.8		School	47	9.0		Park
	92.8	____	Flood/Road/Misc	48	16.0		Nursery
	637.4	3798		49	42.2	189	R-5
				50	9.1		Park
	367.0	167	Outside Current	51	14.4		Park
			Specific Plan	52	7.0		School
	_____	____	Area		75.7		Floodway/Open
	1,004.4	3965			56.3	____	Roads
					1,004.4	3965	

The essential impetus for the proposed density reallocation is the existing low density presently assigned to the parcels east of Sierra College Boulevard. Under the existing land use designations, the property located east of Sierra College Boulevard is designated for development of 167 residential dwelling units. As proposed, the amended specific plan includes addition of this area to the Southeast Specific Plan area, and the redistribution of density from the existing plan area to the newly added portion of the amended specific plan. Proposed density transfers would allow development of 950 units east of Sierra College Boulevard, a net transfer of 783 units from the existing plan area. Other proposed changes to land use within the existing specific plan area include addition of parkway area, transfer of a school site, creation of a tree nursery area, and transfer of 13.8 acres of commercial.

E. Required Approvals

Full implementation of the land uses described in the specific plan would require the following approvals:

1) EIR Certification
2) Specific Plan approval
3) Development Agreement
4) Tentative Subdivision Map approval for the major parcels into which the plan area is to be subdivided.
5) Approval of zoning consistent with specific plan land uses.
6) Granting of use permits for individual projects.
7) Approval of Engineering Improvement Plans and final maps for individual projects.
8) Building permits for all structures within the plan area.
9) Stream Alteration Agreements from the California Department of Fish and Game may be required for individual projects which could affect streambeds within the plan area.

IV. General Plan Consistency

All policies of the SERSP are required to be consistent with the policies of the **Roseville General Plan** and its respective Elements. At the time of preparation of the DEIR, several potential inconsistencies were identified. Since that time, the SERSP has been changed to achieve consistency. However, there are still areas where inconsistencies exist. Prior to adoption of the SERSP, these inconsistencies must be resolved. Following is a discussion of the policies which were initially suggested to be inconsistent and a discussion as to why they are still inconsistent or an explanation of the solution which allows them to be considered consistent.

Land Use Element

Policy 17: Commercial land uses shall be located in accordance with the following general criteria: **a.** adjacent to arterial roadways, and, if possible, adjacent to intersections of arterial roadways or at the intersection of an arterial roadway and collector street; **b.** commercial land uses located in predominantly residential areas or or in close proximity to residential areas shall consist primarily of retail activities; **c.** commercial land use sites located in predominantly residential areas shall be a minimum of 10 acres in size and shall, when possible, include a retail food market; **d.** intensive commercial uses, serving other than local residential neighborhoods, shall be located on sites of over 10 acres where surrounding land use is predominantly non-residential (except for high-density residential); **e.** continuous commercial development along arterial roadways (where development does not currently exist) shall be prohibited unless such development is part of a specific development plan that coordinates use and design with adjacent properties; minimizes access to arterial roadways; and, maintains aesthetic standards of the Scenic Highway Element.

Potentially Inconsistent. Commercial development proposed within the specific plan area is in accordance with this policy with a possible single exception, a 6.63 acre commercial parcel located at the intersection of East Roseville Parkway and Sierra College Boulevard, which is less than 10 acres is size. If this location is considered a predominantly residential area, the minimum commercial parcel size must be 10 acres.

Policy 21: The number and location of Public elementary and secondary school facilities shall be in accordance with the following general criteria: **1.** Elementary schools shall be located to serve neighborhoods and secondary schools shall be centralized to serve a larger population; **2.** Elementary school sites under this criteria of site selection, should be ten (10) net acres and planned cooperatively with the City Parks and Recreation Department. The actual school site may be less than 10 acres when the total school/park site equals or exceeds ten (10) acres; **3.** Secondary intermediate school sites would be fifteen (15-20 net) acres depending upon educational programs and planned cooperatively with the City Parks & Recreation Department. The actual school site may be less than fifteen (15) acres when the total school/park site equals or exceeds fifteen (15) acres. High school sites should be 40-45 net acres; **4.** Schools should be located in an area that is safe and easily accessible away from major street arterials; **5.** Elementary schools should be master planned to accommodate approximately 400-600 students depending upon the educational program; **6.** Secondary intermediate schools should be master planned to accommodate approximately 600-850 students depending upon the educational program; **9.** Size, capacity, and number of buildings for initial construction shall be determined by each individual district's enrollments, both current and anticipated. Changes and/or additions may result from district revisions regarding pupil/teacher ratios and other related variables.

Inconsistent. School sites have been provided in accordance with the requirements of the Eureka Elementary School District. The District has indicated that the proposed sites are acceptable. The suggested inconsistency stems from the fact that one of the sites is located on Eureka Road which is designated as an arterial roadway.

Circulation Element

Policy 1: For the City of Roseville, the Level of Service C shall be used in determining the roadway capacities and intersection delays for all freeway, arterial and collector streets. For long-range development, Level of Service C need not be strictly maintained if other policies and action plans indicate that a lesser level of service may be acceptable on a short-term basis providing there are sufficient overriding considerations.

Potentially Inconsistent. There is disagreement as to whether this policy refers to maintenance of LOS C at individual locations or across screenlines. LOS will be maintained across all screenlines. LOS C will be achieved at all intersections within the SERSP. LOS C will not be maintained at all intersections within the City. However, the traffic analysis for this project indicates that traffic generated by the specific plan will not alter the LOS at the concerned intersections.

Scenic Highways Element.

Policy 5: Those soils which currently support viable agricultural activities, such as grain production, shall not be converted to urban development prior to development of the less valuable, for agricultural uses, lands consisting of the Mehrten formations and associated soils.

Consistent. Because a portion of the specific plan is included in a Williamson Act contract, the specific plan was

initially suggested to be inconsistent with this policy. However, since the concerned area is not being utilized for agricultural production the specific plan is consistent.

Open Space and Conservation Element.

Policy 11: Provide for adequate park and recreational facilities for all existing and future neighborhoods.

Inconsistent. Because a proposal for designation park sites within the specific plan area has not been accepted by the City, the specific plan is suggested to be inconsistent with this policy. However, the project proponents are working with the Planning Department and the Park and Recreation Department to develop a proposal which satisfies City requirements. Once such a park proposal is accepted, the specific plan would be considered to be consistent with this **General Plan** policy.

Policy 13: Provide for continued public park/school development.

Consistent. Initially, school sites were not located adjacent to park facilities. Since preparation of the initial specific plan, park facilities have been proposed adjacent to the school sites.

V. NATURAL ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

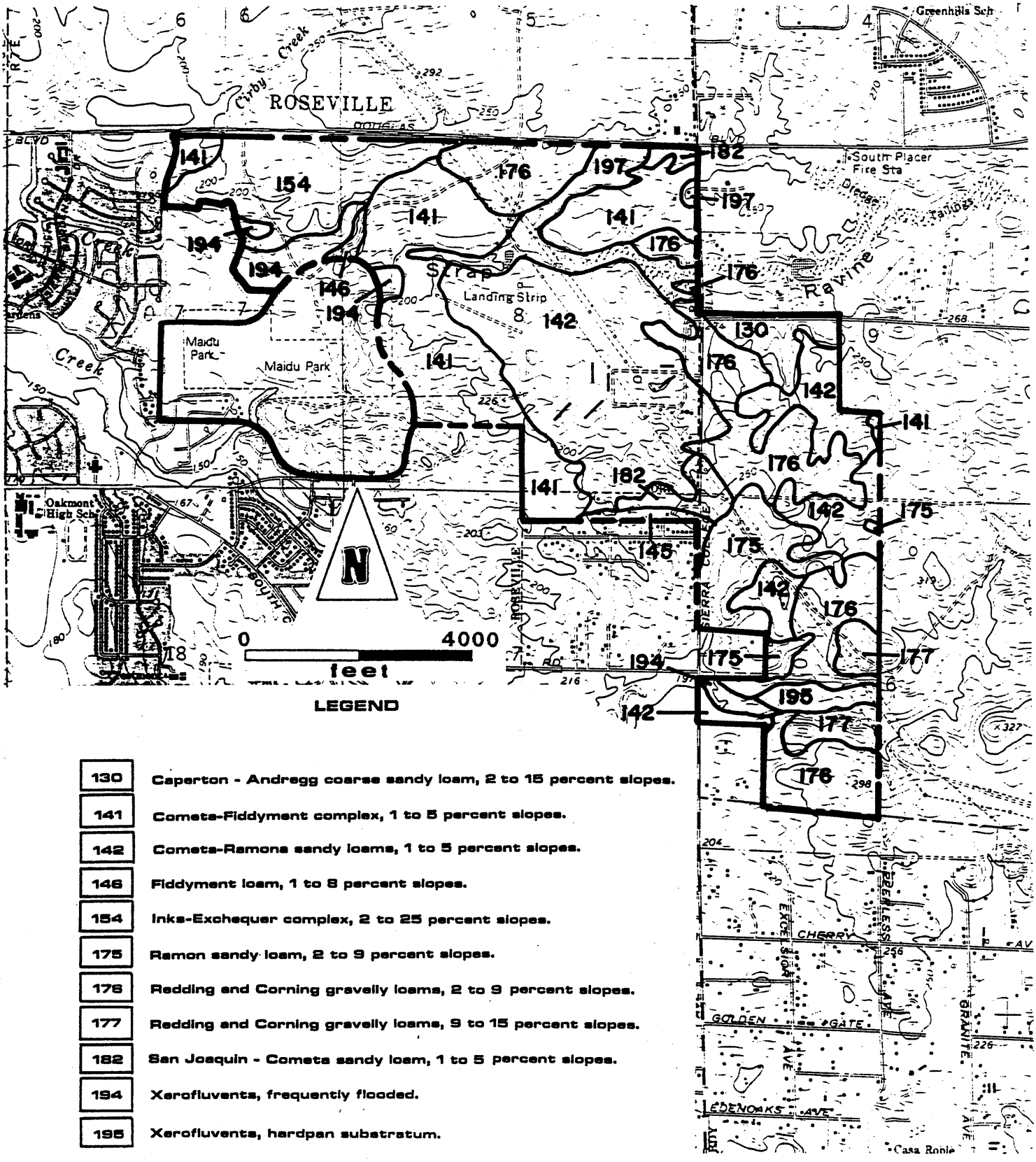
Geology, Seismicity, and Soils.

Geology. The Southeast Roseville Specific Plan area is located within the Central Valley Region of California, approximately three-fourths of the way across the valley, nearer to the Sierras than to the coast ranges. The vicinity represents a transition area between the flatter terrain of the valley and the more rolling foothill region of the Sierra Nevada Mountains. Underlying material is generally of granitic origin and represents an extension of the Sierra Nevada complex. Scattered granitic outcroppings and shallow depth to underlying rock is a common geologic trait of the vicinity. The topography of the study area is gently rolling with elevations ranging from approximately 200 to 300 feet above mean sea level.

A geologic survey of the adopted SERSP area was not completed prior to adoption of the specific plan. Consequently, projects are subject to preparation of geotechnical reports on a project by project basis.

A soils/geologic/seismic risk evaluation for the area east of Sierra College Boulevard has been prepared by Lowry & Associates, and is appended to the DEIR.

Seismicity. Simply as a result of its location in central California, the plan area will likely be subjected to geologically induced groundshaking at some point in time. No known active faults are located within Placer County, and therefore, not within the City of Roseville. However, several inactive faults have been identified in the vicinity, and are shown on Figure D2, the Geologic Fault Map. According to the California Division of Mines and Geology bulletin, **Urban Geology - Master Plan for California**, the Sacramento/Roseville area is classified as a low severity earthquake zone.



SOILS MAP

FIGURE D1

SERSP AMENDMENT D-2 FINAL EIR

R.C. Fuller Associates

Soils. According to the **Soil Survey of Placer County, California, Western Part**, land in the Roseville vicinity is predominantly composed of soils associated with stream terraces and alluvial bottoms. Principal soils identified within the study area include San Joaquin-Cometa sandy loam, Fiddyment loam, Cometa-Fiddyment complex, Caperton-Andregg coarse sandy loam, Cometa-Ramona sandy loams, Ramona sandy loam, Redding and Corning gravely loams, Inks-Exchequer complex, Alamo Variant clay, Xerofluvents. The distribution of these soils throughout the specific plan area is presented in Figure D3, the Soils Map.

Specific limitations of the various soils are discussed in the DEIR. In summary, common constraints include a very slow permeability, shallow depth to rock, a high shrink swell potential, and a limited load bearing strength.

Impacts.

- Adoption of the specific plan is not anticipated to produce any perceivable change in the geologic characteristics of the area.

- The likelihood of seismic activity occurring within the plan area will not be impacted by urban development of the site. However, the potential for personal and/or property damage to result from seismic activity within the plan area will be increased due to the increased presence of people and property on the site.

- Development of the area will result in disturbance of soils and topographic alterations of the site. Development of roadways, building pads, and utility trenches pose the greatest potential for soil disturbance. Grading and trenching activities will be required for development of the area.

- Development will require construction in areas where identified soils constraints exist. Specific constraints include the shallowness to clay hardpan, steepness of slopes near North Branch Linda Creek, and very slow permeability.

- The potential for erosion will be increased in areas where grading and trenching occur. Associated with the increased erosion is the potential for siltation of area waterways including North Branch Linda Creek and Strap Ravine Creek.

- Development of the area will result in an increased amount of impervious surface within the plan area, resulting in an increase in runoff during mild rain events. Since soils in the study area tend to saturate relatively easily, the runoff from the unimproved area during a heavy rainstorm tends to be heavy. Taking this into consideration, runoff conditions during a heavy storm are not anticipated to substantially increase as a result of urbanization of the area. This impact is discussed in detail in the hydrology section of the DEIR.

Mitigation Measures.

- Project specific geotechnical investigations should be required for individual projects within the plan area to identify specific development constraints and mitigation measures. A geotechnical engineer should be retained in order to make project specific recommendations.

- The potential for personal and property damage which could result from seismic activity cannot be totally mitigated. However, adherence to the Uniform Building Code and City of Roseville building standards is suggested to reduce the potential for such damage to less than significant levels.

- Accepted engineering and construction techniques can be utilized to mitigate the identified development constraints of the soils. Examples of such practices include rip-rap, diversion dams, gravel subdrains, cut and fill practices, or similar measures to stabilize soil on slopes; storm drain systems, artificial swales, dry well culverts, and/or domestic vegetation can be utilized to compensate for impermeable soils; strengthened building foundations, concrete piers, imported base material, and/or subdrains can be utilized to compensate for high shrink swell potential or low weight bearing

capability beneath building pads. Site specific measures will be recommended by a geotechnical engineer.

- o Development of storm drain facilities and connection to the regional sewer system will compensate for the slow permeability characteristic of area soils.

- o Implementation of the following measures is suggested to reduce erosion and siltation impacts associated with construction to less than significant levels.

  -Grading or activities which directly disrupt the natural environment should be minimized throughout the plan area. These activities should only be necessary where roadway, utility line, or building pad construction is proposed.

  -Grading and trenching activities should be restricted to the dry season, and should not be permitted during rainy weather or high wind conditions.

  -Sprinkling should be required during dry weather to minimize soil loss due to wind erosion. Grading and similar activities should not be permitted during exceptionally windy weather.

  -In areas where exposed soil results from construction activities, prompt replanting with native compatible, drought resistant vegetation should be required. No areas should be left exposed during the winter season.

  -Measures to prevent eroded soil from entering area waterways should be implemented throughout developing properties, but should be especially required adjacent to major swales, watercourses, or North Branch Linda Creek. Measures should include placement of hay bales, development of temporary settling areas, energy dissipaters, and other acceptable means of reducing sediment loads.

Hydrology and Water Quality

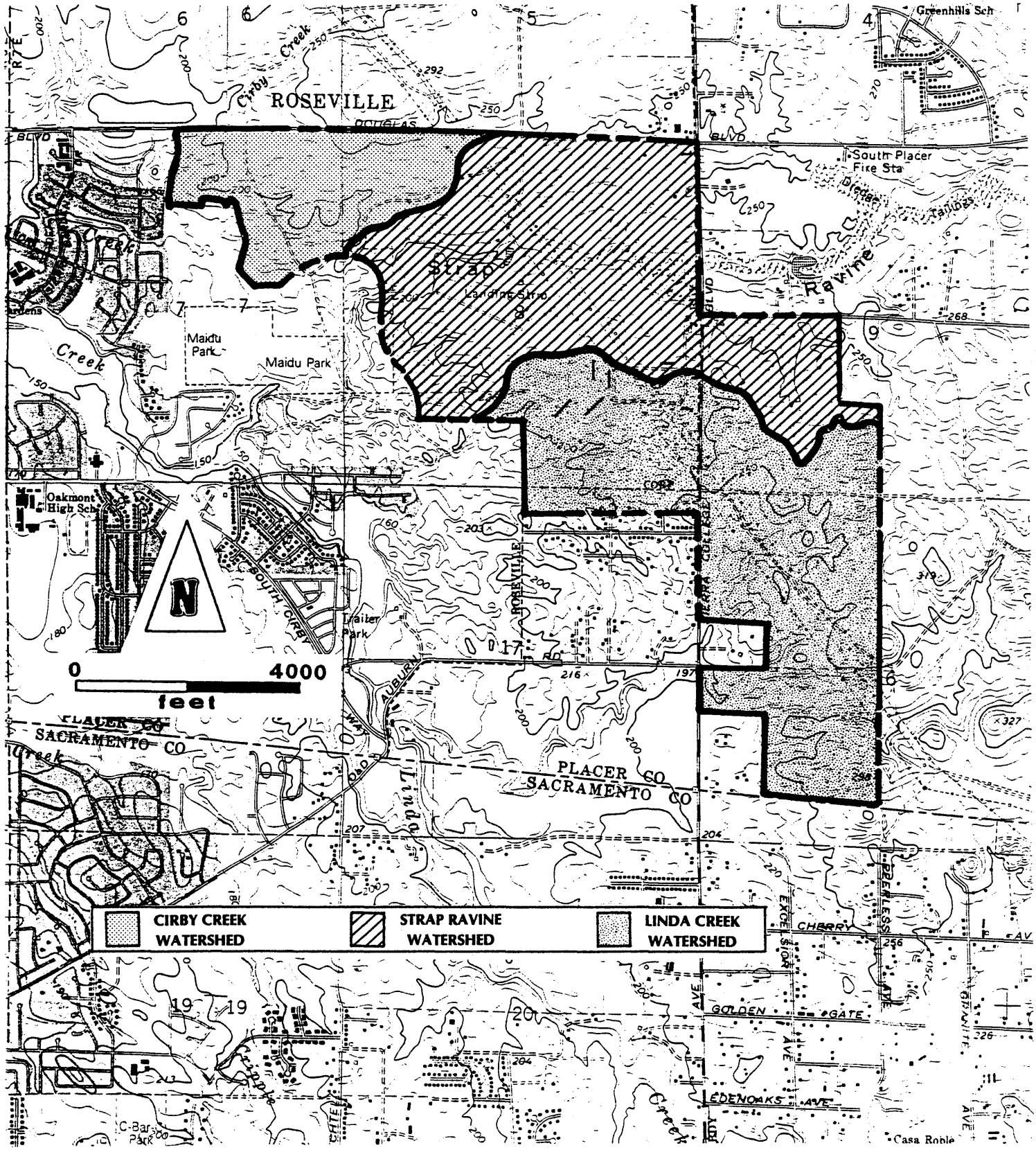
The SERSP area is drained by three watercourses, Cirby Creek, Strap Ravine Creek, and North Branch Linda Creek. The relative distribution of these watersheds in the plan area is presented in Figure E1, the Watershed Map.

Of the approximately 1,004 acres within the specific plan area, roughly 17% is within the Cirby Creek watershed, 41% in the Strap Ravine Creek watershed, and 42% within the North Branch Linda Creek watershed. Strap Ravine Creek and North Branch Linda Creek empty into Linda Creek, which in turn discharges into Cirby Creek, which joins Dry Creek within the City.

Runoff characteristics are a product of the soils and varying slopes which comprise the plan area. The shallow soils and impervious clay subsoils, naturally produce high runoff coefficients from the majority of the plan area. Flooding is not a problem within the plan area, but is a serious concern downstream of the plan area within and beyond the City of Roseville.

The vicinity of the confluence of the Sacramento and Feather Rivers, known as the American Basin, consists of large areas of slough and floodplain which absorb heavy flows generated during heavy rains and spring snowmelt. Much of the stormwater storage capacity of this floodplain area is maintained through a complex system of levees and dikes. Sutter County has requested that upstream municipalities require that measures to minimize drainage impacts be implemented as appropriate to reduce downstream hydrologic impacts.

No data was located concerning the quality of runoff from the plan area. However, since the area is largely undeveloped and not actively farmed, runoff is assumed to be of high quality.



WATERSHED MAP

FIGURE E1

Impacts.

- Development of the specific plan area will result in a change in the runoff characteristics of the site including an increase in runoff quantity and a decrease in time required to reach peak runoff conditions. This increase will result from a greater amount of impervious surface within the plan area, including roadways, roofs and other paved areas.

- The proposed densities for the specific plan on the east side of Sierra College Boulevard have increased from the existing zoning of two acres per unit to a residential zoning of between 3.1 and 3.8 units to the acre. Thus, what we would see in the Linda Creek drainage basin is a possible decrease in runoff from the existing plan (on the west side of Sierra College Boulevard) and an increased runoff for the specific plan area on the east side of Sierra College Boulevard. An examination of the runoff coefficients contained in the City of Roseville storm drain manual for the parcels in question, indicates that the peak runoff potential under the new proposed plan, at a point fairly close to the project, would increase somewhere between 5% and 10%. Using the same City of Roseville storm drain manual for the condition of increased peak runoff relatively close to the project, the manual indicates potential increases in peak flows similar to those stated in the Nolte study at the confluence of Linda Creek with Cirby Creek.

- Since Sutter County has indicated that increases in runoff to the American Basin will adversely impact flooding conditions, the increase in runoff which will be produced by development of the plan area, no matter how small, is suggested to be significant.

- A long term change in the quality of runoff from the site will result from urban development. Runoff from urban areas typically contains petroleums, phosphates, nitrates, metals, chlorides, and uncountable other "by products" of the urban lifestyle.

- Construction will invariably produce a short term increase in the sediment load of adjacent waterways. During construction, runoff from disturbed areas will likely contain silt and debris. The significance of this impact will vary depending on the level of construction activity, weather conditions, site conditions, etc. However, if left unmitigated the increased silt load could result in significant short term impacts.

- Development will produce a change in the availability of water on the site, and an unknown impact to ground water recharge in the vicinity. Development of the specific plan site will bring with it lawns and landscaped areas which will require year round irrigation. The impact of this watering will be twofold. Runoff from watered areas will represent a year round source of water for many of the swales and intermittent streams in the plan area, and secondly, water which infiltrates the soil will add to ground water supplies. The net impact on ground water in the plan area vicinity could be positive or negative.

Mitigation Measures.

- The use of infiltration as a measure to reduce runoff impacts was investigated as a potential mitigation measure. Findings of the geotechnical evaluation indicate that soils in the area do not have the capability to absorb runoff from the plan area, and consequently, structures to promote infiltration would not be effective in this locale.

- As mitigation, each individual project within the Southeast Roseville Specific Plan area must prepare a drainage study, as required by the City of Roseville Public Works Department, to address each project's impact on storm drainage in the City. As a result of this study, measures could be implemented to speed up, or slow down, the flow depending upon the conditions for the particular watershed under study and the existing City policy for each watershed.

- Developers will be required to delineate the 100 year floodplain on all tentative maps prior to development.

- All areas within the 100 year floodplain will be dedicated to the City. Policy dictates that these areas be maintained as vegetated corridors in order to provide natural filters for runoff as well as storm runoff capacity.

- Drainage swales, culverts, bridges, or other structures built within the floodplain will be required to be sized and installed to accommodate existing plus anticipated drainage flows with no obstruction.

- Implementation of erosion control and topsoil conservation mitigation measures, including prompt revegetation of disturbed areas, development of temporary silt traps and energy dissipaters, avoidance of grading and construction activities during wet weather, and avoidance of disturbance within drainageways should be required of all developments within the specific plan area.

- Roseville, Rocklin, Lincoln, Loomis, Auburn, Colfax, and Placer County are in the process of forming a flood control district. If such a district is created, the policies of the Flood Control District would be required to be implemented in all developments within the specific plan area.

- Future drainage studies prepared for individual drainages within the plan area should include a cumulative assessment of impacts.

Vegetation and Wildlife

The basis for the assessment of biological resources on the site includes a series of general site visits, a survey of the vernal pool and oak woodland resources for rare and endangered plant species, a survey of the pools and creek channel for the tiger salamander, and an inspection of elderberry plants on the site for evidence of the presence of the valley elderberry longhorn beetle. A complete copy of the biotic report is included in the Technical Appendix of the DEIR. In addition, a search of the California Department of Fish and Game's Natural Diversity Data Base (NDDB), which includes the California Native Plant Society listing of rare and endangered plants, was conducted to ascertain the reported existence of rare and endangered species in the vicinity.

Wildlife species likely to frequent the project vicinity include **a) mammals:** mule deer, coyote, gray fox, striped skunk, opossum, blacktailed jackrabbit, California ground squirrel, pocket gopher, and deer mouse; **b) birds:** redtailed hawk, kestrel, California quail, mourning dove, white crowned sparrow, Anna's hummingbird, scrub jay, mockingbird, and western meadowlark; **c) reptiles and amphibians:** western toad, foothill alligator lizard, gopher snake, common kingsnake, western garter snake, skinks, western fence lizard, slender salamander; and **d) fish:** Sacramento squawfish, bluegill, green sunfish, Sacramento perch, and brown bullhead. Area streams, including Secret Ravine and Miners Ravine Creeks, are known to support annual populations of spawning salmon and trout. However, because of the intermittent character of the watercourses within the plan area, fisheries are limited. Seasonal presence of the more common species, particularly various species of minnows or mosquito fish, likely occur within the plan area. The biotic report includes a more complete list, by habitat type, of the wildlife species likely to utilize the site as well as those sited during the surveys.

No rare or endangered wildlife species are known to inhabit the project site. However, as discussed in the DEIR, several species have been reported in the region. None were identified on the project site.

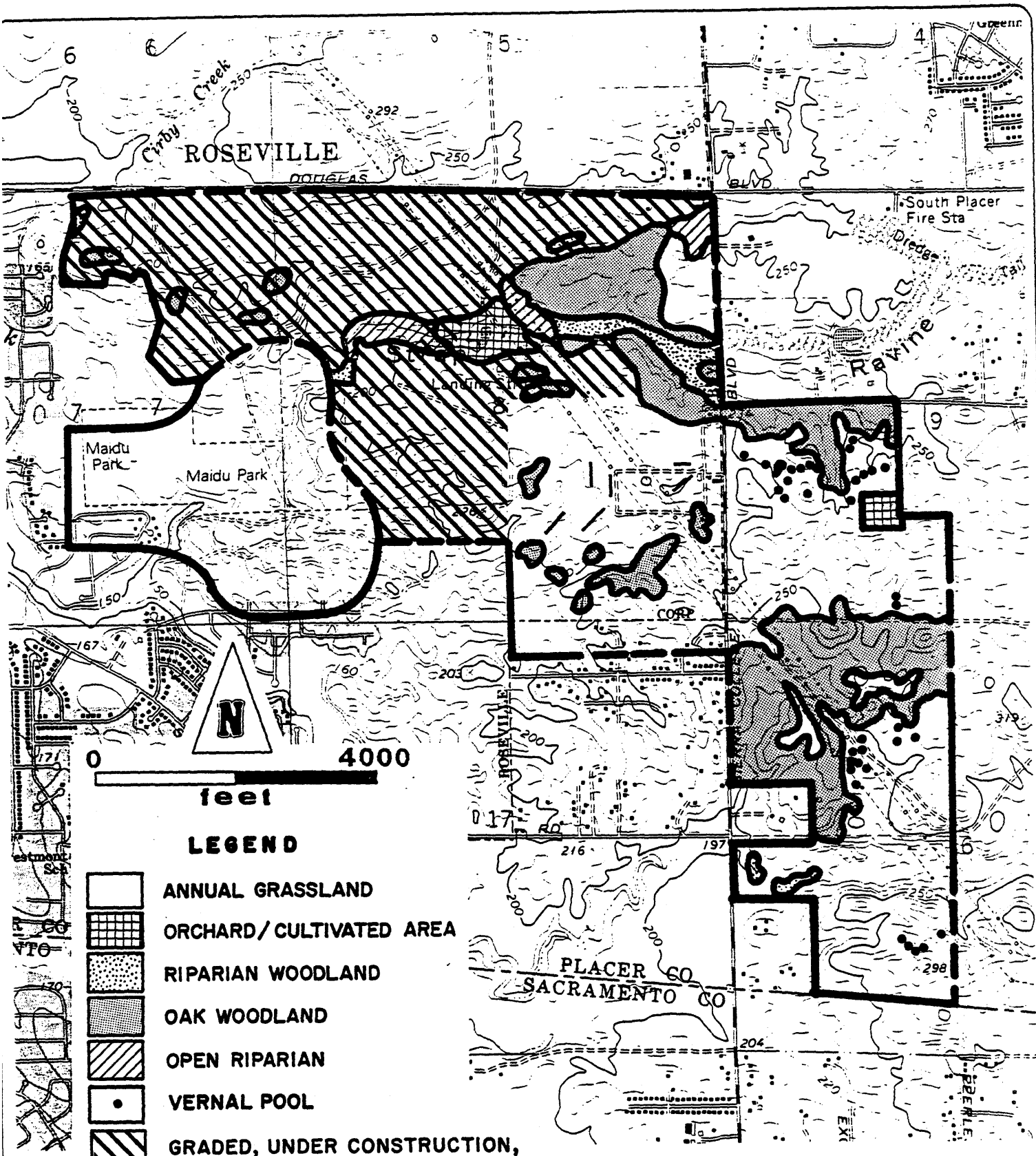
As shown in Figure F1, the Vegetation Map, approximately three-fourths of the adopted SERSP area has been disturbed by development activities. The most common disturbance includes grading and construction of buildings and roadways. In some areas, construction has been completed and occupied residential or professional land uses exist. The major portion of the existing plan area which remains largely undisturbed includes the Cirby Creek corridor and the southeastern portion of the adopted plan area.

The portion of the amended SERSP area located on the east side of Sierra College Boulevard contains the most extensive area of natural habitat. This portion, consisting of approximately 367 acres, includes roughly 100 acres of oak woodland, 250 acres of annual grassland. The balance of the acreage supports an abandoned almond orchard, riparian woodland, and vernal pools.

The oak woodland in this area is a prominent example of mature undisturbed native habitat, and is considered to be of high aesthetic value. Blue oak, live oak, and digger pine represent the dominant tree species. A large proportion of these trees are quality specimens in excess of 12 inches dbh. As well as being recognized as valuable trees because of their native status, these trees qualify as heritage trees, under Roseville's preliminary tree preservation policies.

Riparian vegetation is limited and located immediately adjacent to the intermittent watercourses. Common species found in the riparian vegetation association include willows, cottonwood, blackberries, wild rose, wild grape, and blue elderberry.

Annual grassland is the predominant vegetation association, and is dominated by introduced grasses and herbs, the most prominent of which are soft chess and filarees. Scattered throughout the grassland are isolated, open grown, blue oak with diameters in excess of 36 inches which qualify as heritage trees.



VEGETATION AND VERNAL POOL MAP | FIGURE F1

An extensive number of vernal pools has been identified in the Roseville vicinity, including occurrences within the SERSP. The realization that vernal pool habitat is becoming rare, and that many plant species are known to only occur in association with such habitat, has triggered State-wide concern for the inventory and preservation of remaining pool areas.

Field survey failed to located any vernal pools within the adopted SERSP. Information from the 1982 WESCO Vernal Pool Study indicates that two pool areas existed in the northwestern portion of this area. However, since preparation of the WESCO study, these areas have been developed to urban land uses resulting in loss of the pools.

Thirty-four (34) vernal pools were identified on the property located east of Sierra College Boulevard. The approximate distribution of these pools is presented in Figure F1. Individual pools range in size from less than 100 square feet to greater than 4000 square feet. The total surface area of all the vernal pools in the SERSP area is approximately 29,315 square feet, or .67 acres. Comparisons among pools in the plan area indicate that the most valuable pools, in terms of size and diversity, are located in the northern quarter of the site. The group of pools with the greatest number of vernal pool species occurs in a swale north of the abandoned almond orchard. The pool on the site with the greatest number of vernal plant species (25) occurs in this area. Survey of the SERSP area resulted in identification of a single occurrence of vernal pool brodiaea.

Impacts. Implementation of the proposed amendment to the SERSP will result in the same types of impacts as anticipated with development of the adopted SERSP. However, as a consequence of shifting of development densities, these impacts will be more pronounced in the area east of Sierra College Boulevard. The impacts which may be anticipated can be divided into those generated by construction activities, those which will result from the change in land use, and those which will be the result of actions by future residents of the plan area.

- During construction, many wildlife species will be temporarily displaced due to attendant noise, dust and physical disturbances created. Because construction activities are of a relatively short duration and only occur in small areas at any given time, construction impacts are not anticipated to be substantial. Wildlife will likely avoid areas where construction activities are in progress, only to return to those areas as the activity changes location.

- Of all the activities associated with development, grading, trenching, and roadway construction have the greatest potential to produce erosion and subsequent siltation of area watercourses resulting in degradation of aquatic habitat and thereby being a potentially significant impact.

- The greatest impact to wildlife within the plan area will result from the dramatic change in land use which will occur. Following construction, the change in land use will not be agreeable to some species. These species will gradually vacate the area as development continues. Species which are less sensitive to human environments will adapt to the new conditions and continue to occupy the area. Alteration of the existing vegetation and wildlife habitat conditions on the site will generally consist of construction of roadways, drainage facilities, homes, driveways, and other structures associated with urban land use.

- Development will result in removal of native vegetation and disruption of the natural communities, including vernal pools. The amount of vegetated area will be reduced and substantially altered. Domestic species of vegetation including trees, shrubs, and grasses, accompanied by a consequent change in water application, distribution, and annual pattern, will create habitat conditions which will substantially differ from existing conditions.

- From a regional perspective, blue oak woodland habitat is being destroyed throughout the foothills of the Sierra Nevada and Central Valley at an accelerating rate. The proposed specific plan designates development of single family housing, 3.1 to

3.8 units per acre, throughout the woodland area within the SERSP. Although the developer has proposed measures to protect and incorporate existing trees into the project, development of the woodland area would require removal of trees and disruption of the overall habitat. According to the biologist, the oak woodland on the site does not represent a unique habitat from that found in the region. Consequently, elimination, modification, and/or fragmentation of the woodland would not be considered biologically significant. However, it would contribute to the regional loss of the habitat type.

- Development of the specific plan area as proposed will result in the significant irreversible destruction of vernal pool habitat. The loss of vernal pools will constitute an unavoidable significant impact. Final determination as to the effectiveness of any proposed mitigation is the responsibility of the City.

Once the initial land use changes have occurred, the potential for long term wildlife impacts will continue to exist. Although areas may be set aside as open space, parks, or floodplain, irresponsible actions by future residents could compromise the value of these areas. Such potential impacts would include:

- Although extensive efforts are proposed to retain native oak trees where they exist within the plan area, overwatering and mismanagement by future residents will likely contribute to loss of some native trees.

- The use of pesticides, herbicides, and fertilizers by future residents of the area represents a potential hazard to wildlife and natural communities. Contamination of runoff would contribute to deterioration of aquatic habitat in area streams.

- The relatively constant presence of humans will render the area less desirable to sensitive species, and these species will likely be displaced to less intensely developed properties within and surrounding the plan area.

o Uncontrolled domestic pets present a direct threat to native wildlife populations. Unlike humans, who are largely unaware of wildlife presence except for occasional sightings, pets often prey upon native species and contribute to the undesirability of natural areas adjacent to residential neighborhoods as wildlife habitat.

Mitigation Measures. Measures to reduce impacts to plant and wildlife populations within the plan area have been identified on three levels, **1) Construction Mitigation** - those measures which will reduce actual construction impacts, **2) Project Design Mitigation** - measures which should be incorporated into the project design to minimize impacts associated with the proposed land use change, and **3) Long Term Mitigation** - measures which would minimize long term impacts ensuring that the plan area remains attractive for wildlife populations.

Construction Mitigation. Construction activity is a short term disturbance which has the potential to produce significant impacts if conducted in a reckless manner. Implementation of identified mitigation measures and the application of good engineering practice and common sense should ensure impacts of a less than significant magnitude. Some measures which should be implemented to minimize construction impacts are already mandated through ordinance by the City of Roseville, others will need to be identified as conditions on individual project maps. Measures to minimize construction impacts include:

o Subdivisions and development projects should strictly limit grading activities to the minimum necessary for development of the project area thus reducing the loss of natural habitat.

o Development plans for individual projects should include measures for protection and preservation of existing trees. Measures which have been recognized by the City of Roseville and specified for inclusion in this EIR include:

- Chain link fencing or similar protective barrier should be installed around the driplines of oak trees in or near impact

areas prior to project construction, to avoid damage to the trees and their root systems.

- Signs, ropes, cables, and other items should not be attached to oak trees.

- No employee vehicles, construction equipment, mobile offices, supplies, materials, or facilities should be parked, stockpiled, or located within the driplines of oak trees.

- Soil surface removal should not occur within the driplines of oak trees, and no cuts whatsoever should occur within 5 feet of their trunks.

- Earthen fill should not be placed within the driplines of oak trees, and no fill whatsoever should be placed within 5 feet of their trunks.

- If extensive cuts or fills are made near oak trees beyond the dripline, adequate drainage and/or supplemental irrigation should be provided to mitigate the adverse effects caused by elevation changes.

- No trenching whatsoever should be allowed within the driplines of oak trees. If it is absolutely necessary to install underground utilities within the dripline of oak trees, the trench should be either bored or drilled but not within 5 feet of tree trunks.

- Where soil compaction occurs within the dripline of an oak tree, measures should be taken to restore soil condition and integrity.

- Paving within the driplines of oak trees should be stringently minimized. When it is absolutely necessary, porous materials should be used with appropriate aeration.

- No artificial irrigation within the driplines of oak trees should be permitted.

- Landscaping beneath oak trees may include nonplant materials such as boulders, cobbles, wood chips, etc. The only plant species which should be planted within the driplines of oak trees are those which are tolerant of the natural semiarid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

- All tree limbs damaged during construction, or removed for other reasons, should be sawed flush to the tree trunk and painted with "tree paint".

- In the event that tree removal is necessary, based on approved plans, the applicant should plant an equal or larger number of replacement oak trees of the same species within the landscaped portions of the project and provide for their maintenance.

o Implementation of erosion control measures will reduce water quality impacts and protect aquatic habitats. Specific measures for erosion control are identified in the Geology, Seismicity, and Soils section of this report, and include such measures as restricting grading to dry seasons, implementation of velocity traps, and prompt replanting of disturbed areas.

Project Design Mitigation. Thoughtful land use planning represents the primary method of protecting natural habitats and guaranteeing continued wildlife use of the area. Measures which can be implemented early in the planning stage include the provision of undeveloped space, avoidance of development in sensitive areas, and location of compatible land uses adjacent undeveloped areas.

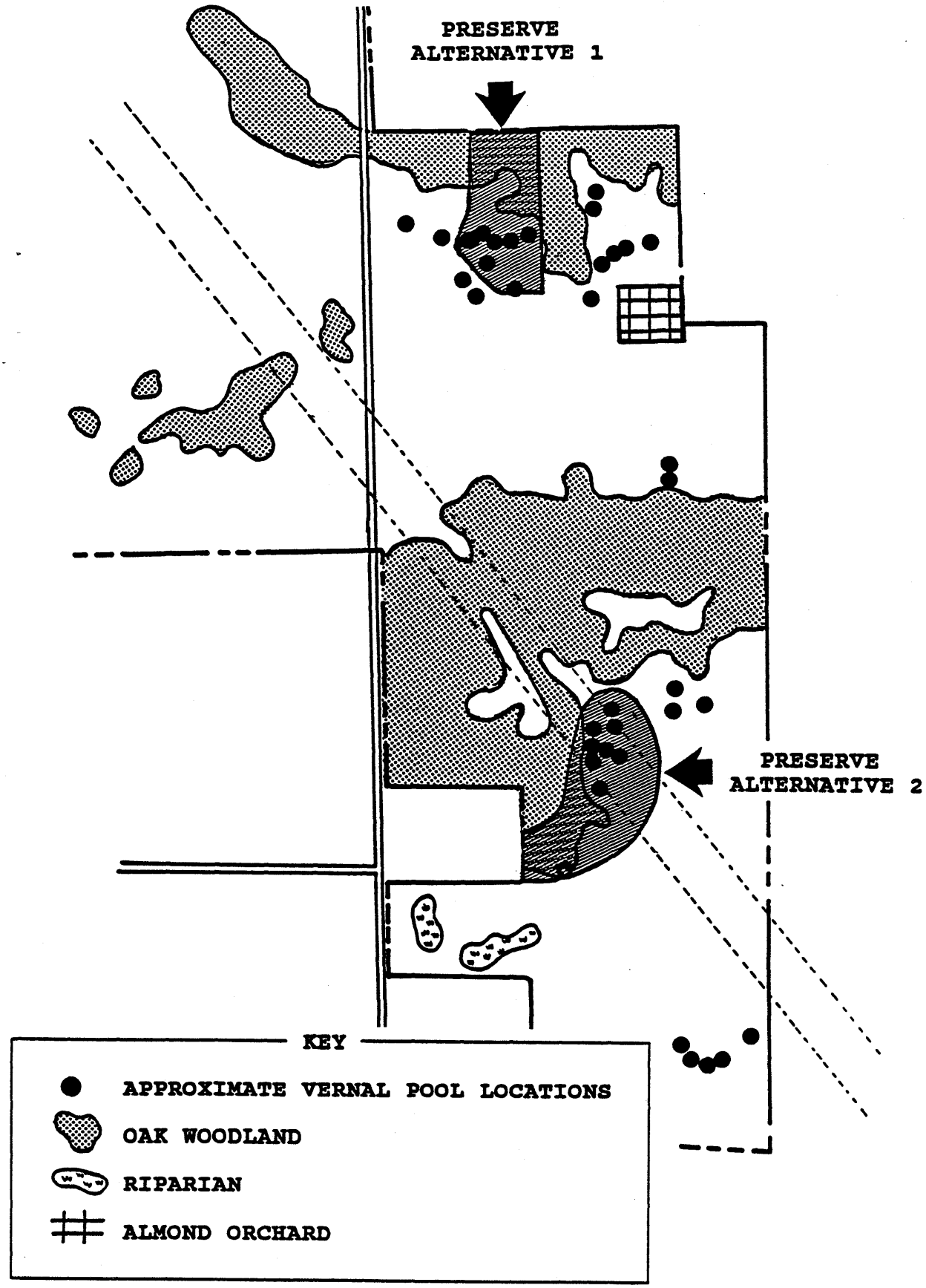
o Even though vernal pool habitat is recognized as unique, preservation of all pools within the City, regardless of their location or quality is not considered to be realistic. The proponent of this specific plan has expressed a desire to participate in a City-wide program to inventory vernal pool resources, and designate vernal pool preserves. Property owners within other developing plan areas of the City have expressed a similar desire. It is recommended that the City

initiate such a program. The extensive vernal pool studies currently being prepared for individual specific plans could provide the basis for an initial preserve selection.

The biology study appended to the DEIR identified two alternatives which would provide area for preservation of vernal pool and oak woodland resources within the SERSP area. Each of these alternatives consists of designation of a preserve site within the plan area. Either of these alternatives is recommended as being substantial enough to reduce the impacts to vernal pools and oak woodland habitat to less than significant levels. The potential preserves, labeled as Preserve 1 and Preserve 2, are presented in Figure F2, the Vernal Pool Preservation Alternatives Map.

Preserve 1 includes establishment of an approximately 17 acre preserve in the northern portion of the area east of Sierra College Boulevard. This preserve would provide approximately six acres of vernal pool preservation area as well as eleven acres of native oak woodland habitat. This preserve would be located between the proposed commercial parcel at the intersection of Sierra College Boulevard/Eureka Road and the project entry road from Eureka Road. The majority of the site included in this recommended preserve is currently designated for development as single family housing, 3.8 units per acre. In addition, implementation of this preserve alternative would require modification of the commercial parcel which, as presently proposed, extends into the vernal pool watershed.

The second recommended preservation alternative, Preserve 2, would be located in the south-central portion of the plan area on the east side of Sierra College Boulevard. This preserve would encompass approximately 22 acres; sixteen acres of which would protect blue oak woodland habitat, and six acres which would harbor vernal pool habitat. Within the currently proposed specific plan, the majority of the area included within this preserve site is designated to be developed as single family housing at a density of approximately 3.6 dwellings per acre. Approximately one-third of this preserve site is traversed by the powerline easement and would not be developed.



PRESERVATION ALTERNATIVES MAP | FIGURE F2

As evaluated in the project biology study, implementation of either of the recommended preserves would represent an acceptable level of protection for both vernal pool and oak woodland resources within the specific plan area. From a broader perspective, Preserve 2 would have the additional advantage of including the historic barn. Similarly, from the development perspective, the developer has indicated that Preserve 2 would be the preferred of the two recommended alternatives.

- Although several of the identified vernal pools are located within a proposed park site, preservation measures have not been proposed which could protect the respective watersheds, and as a result, it is probable that even these vernal pools will be disrupted either as a direct result of development or by subsequent actions of residents.

- Even with implementation of the proposed measures to preserve individual oak trees, disruption of the woodland habitat will be inevitable. Additional measures which could be implemented to reduce impacts on the oak woodland could include designation of wooded areas as parks or preserves, or development of less intense land uses in wooded areas. Because of the extensive acreage of the plan area which supports oak woodland habitat, it is not realistic to preserve the entire woodland, and consequently some of the area will be subject to development. Examples of less intense or alternative land uses which should be considered in the wooded areas include cluster housing or planned development (PD). These types of land uses afford the developer a greater amount of flexibility in roadway placement and lot line designation. As necessary on a lot-by-lot basis, adjustments could be implemented to avoid individual trees or desirable natural characteristics. Implementation of PD measures generally results in irregularly shaped lots of varying sizes, but allows retention of a greater amount of the native vegetation. Another approach which can be implemented to reduce impacts and protect natural features would be to place development restrictions on lots within the wooded portion of the site. For example, construction on any designated lot would be restricted to a specified "building pad" zone. Zones would be selected to avoid sensitive areas

and/or to protect larger blocks of contiguous woodland area which could cover portions of several lots. These zones would be designated on the subdivision map and subsequent development restricted to them.

- The proposed Amended Southeast Specific Plan includes 155.9 acres of open space, floodway, and parks. This area includes grassland, oak woodland, vernal pools, and riparian areas.

- As dictated by existing ordinance, areas within the 100 year floodplain will be dedicated to the City and will be left in its natural state.

Long Term Mitigation. Long term measures to ensure the continued viability of natural areas within an urban area primarily include programs to educate residents, and ordinances and enforcement mechanisms to protect the area from abuse.

- In conjunction with development of a tree preservation ordinance, the City should develop a program to increase the awareness of residents to the needs of native trees.

- Long term maintenance of quality natural areas within the specific plan area will require action by the City to protect and preserve designated sites. Possible measures include restricted use of these areas for passive recreation and designation and enforcement of activities which are compatible with the natural communities.

- Operation of motorcycles, dirt bikes, etc., should be prohibited. Similarly, hunting, dumping, and the presence unleashed pets should be prohibited.

- Use of pesticides and herbicides is strictly regulated by the State of California. Misuse of household products can result in contamination of adjacent natural communities. Programs should be implemented in the City to increase citizen awareness and to provide practical means for the disposal of petroleum products, paints, chemical containers and other hazardous household wastes as is done in Sacramento County.

Climate and Air Quality

The climate of the Central Valley Region of California is heavily influenced by the presence of the surrounding mountains. The only break in this surrounding geographical barrier is the Carquinez Strait which exposes the Central Valley to the Pacific Coast weather regime. The climate of the valley is distinctly polarized between summer and winter seasons. Winters are cool and rainy while summers are hot and dry. Air stagnation due to surface and/or elevated inversion formation is common in the late summer and fall. This stagnation allows for the concentration of contaminants, subjecting persons in the region to elevated pollution levels and consequent increases in hazards to health. The Federal and State standards for ambient air quality are presented in Table G1.

As a consequence of the prevailing southwesterly winds, the ambient air quality of the Roseville area is subject to heavy influence from pollutants originating in Sacramento and areas to the south and west. Because the vicinity is so heavily impacted by pollutants from the Sacramento area, southern Placer County is included in the Sacramento Air Quality Maintenance Area (AQMA). The Sacramento AQMA is presently a nonattainment area for ozone, CO, and PM_{10}. With implementation of the Sacramento Air Quality Plan, 1987 was the year in which attainment of the ambient standards was to be achieved. Attainment was not achieved in 1987 as originally predicted, and is not anticipated in the imminent future. The three principal pollutants of primary concern in the Roseville vicinity are carbon monoxide (CO), ozone (O_3), and suspended particulate matter (PM_{10}).

Combustion of petroleum fuels, particularly automobiles, is the principal source of unusually high CO concentrations. Violation of the 8 hour CO standard has not been reported at the closest monitoring station since 1982. Localized violations of the CO standard are observed in the Sacramento area at major intersections during rush hour traffic conditions.

TABLE G1

AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Oxidant[10]	1 hour	0.10 ppm (200 ug/m³)	Ultraviolet Photometry	–	–	–
Ozone	1 hour	–	–	0.12 ppm (235 ug/m³)	Same as Primary Standard	Ethylene Chemiluminescence
Carbon Monoxide	8 hour	9.0 ppm (10 mg/m³)	Non-Dispersive Infrared Spectroscopy (NDIR)	9.0 ppm (10 mg/m³)	Same as Primary Standards	Non-Dispersive Infrared Spectroscopy (NDIR)
	1 hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
Nitrogen Dioxide	Annual Average	–	Gas Phase Chemilumi-nescence	100 ug/m³ (0.05 ppm)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 hour	0.25 ppm (470 ug/m³)		–		
Sulfur Dioxide	Annual Average	–	Ultraviolet Fluorescence	80 ug/m³ (0.03 ppm)	–	Pararosaniline
	24 hour	0.05 ppm (131 ug/m³)[9]		365 ug/m³ (0.14 ppm)	–	
	3 hour	–		–	1300 ug/m³ (0.5 ppm)	
	1 hour	0.25 ppm (655 ug/m³)		–	–	
Suspended Particulate Matter (PM_{10})	Annual Geometric Mean	30 ug/m³	PM_{10}	–	–	–
	24 hour	50 ug/m³		–	–	
Suspended Particulate Matter	Annual Geometric Mean	–	–	75 ug/m³	60 ug/m³	High Volume Sampling
	24 hour	–		260 ug/m³	150 ug/m³	
Sulfates	24 hour	25 ug/m³	Turbidimetric Barium Sulfate	–	–	–
Lead	30 day Average	1.5 ug/m³	Atomic Absorption	–	–	–
	Calendar Quarter	–	–	1.5 ug/m³	Same as Pri-mary Standard	Atomic Absorption
Hydrogen Sulfide	1 hour	0.03 ppm (42 ug/m³)	Cadmium Hydrox-ide STRactan	–	–	–
Vinyl Chloride (Chloroethene)	24 hour	0.010 ppm 26 ug/m³)	Tedlar Bag Collection, Gas Chromatography	–	–	–
Visibility Reducing Particles	1 observation	In sufficient amount to reduce the prevailing visibility[8] to less than 10 miles when the relative humidity is less than 70%		–	–	–

NOTES:

1. California standards, other than carbon monoxide, sulfur dioxide (1 hour) and particulate matter – PM_{10}, are values that are not to be equaled or exceeded. The carbon monoxide, sulfur dioxide (1 hour) and particulate matter – PM_{10} standards are not to be exceeded.

2. National standards, other than ozone and those based on annual averages or annual geometric means, are not to be exceeded more than once a year. The 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.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury. All measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of Hg (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent procedure which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health. Each state must attain the primary standards no later than three years after that state's implementation plan is approved by the Environmental Protection Agency (EPA).

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Each state must attain the secondary standards within a "reasonable time" after the implementation plan is approved by the EPA.

7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

8. Prevailing visibility is defined as the greatest visibility which is attained or surpassed aroun at least half of the horizon circle, but not necessarily in continuous sectors.

9. At locations where the state standards for oxidant and/or suspended particulate matter are violated. National standards apply elsewhere.

10. Measured as ozone.

Ozone, measured as oxidant, is a secondary pollutant which commonly results from high hydrocarbon (HC's) and NO_2 levels produced during fuel combustion, particularly motor vehicle operations. Slow moving traffic during rush hour periods is a major source of HC's and NOx which result in high NO_2 levels, which in turn result in the formation of ozone. The highest ozone concentrations are typically observed downwind of the origin of the Hc's and NO_2. Consequently, the highest ozone concentrations in the vicinity occur in southern Placer County and Folsom, downwind of the Sacramento metropolitan area. High levels of ozone are generally observed only while NO_2 levels remain high, and decline rapidly once the excessive pollutant has been depleted. Over the last five years, the number of annual days with violations of the Federal ozone standard at the closest monitoring station in Folsom have ranged from 7 to 19.

It is generally recognized that particulates of small enough size to be inhaled pose a greater health risk than larger airborne matter. Consequently, California has created an ambient standard for particulates known as PM_{10}. PM_{10} refers to particulates which are smaller than 10 microns in size. Construction, grading, farm tilling, surface mining, or other activities which expose soil and generate dust, are major contributors to PM_{10} levels. PM_{10} is reported in 24 hour occurrences and as annual geometric mean; the respective new PM_{10} standards are 50 ug/m^3 and 30 ug/m^3. As PM_{10} is a relatively recent method of reporting particulate levels, PM_{10} monitoring did not commence in the vicinity until the spring of 1986. Indications are that violation of the annual geometric mean will likely occur.

Impacts.

- The SERSP was proposed at the time of development of the Sacramento Air Quality Plan. Consequently, development of the SERSP is consistent with the growth assumptions utilized in the Air Quality Plan. Proposed amendment of the SERSP is not predicted to meaningfully alter air quality impacts from those of the adopted SERSP utilized in development of the Air Quality Plan. Nonetheless, continued development will exacerbate an

already significant nonattainment situation, and as a result, the air quality impacts associated with development of either the adopted SERSP or the amended SERSP should be considered significant.

- The greatest short term air quality impact associated with development of the plan area will be dust generation associated with grading and construction activities. The quantity of particulates generated by the SERSP is not anticipated to differ from those of similar projects, and would therefore not be considered significant in themselves. However, in anticipation of violation of the annual PM_{10} standard, development would contribute to a regional nonattainment condition, and is therefore suggested to be significant.

- The Urbemis 2 model was utilized to predict the production of CO, HC's, and NOx which would be produced by SERSP traffic at buildout. The contribution of the amended SERSP is predicted to be approximately 5.8 tons/day of CO, 0.5 tons/day of HC's, and 0.5 tons/day of NOx. These quantities do not perceivably differ from those which would be expected to result with development of the adopted SERSP and adjoining land uses. Actual generation rates are predicted to be typical to those of similar projects and are not in themselves significant. However, because of the nonattainment status of the AQMA, any additional contribution is suggested to be significant.

- Ozone production is strongly related to the level of hydrocarbons present in the atmosphere. The contribution of the SERSP to ozone generation is assumed to be comparable in magnitude to the estimated production of HC's, 0.5 tons/day.

- Development of the SERSP will contribute to localized CO concentrations, most notably near key intersections. Carbon monoxide concentrations at major intersections in the SERSP were predicted using the CALINE 4 model, and violation of the eight hour CO standard is predicted to occur at the modelled locations under worst case conditions.

Mitigation Measures.

- o Measures which will be implemented to reduce particulate generation during construction include:
  - Sprinkling of disturbed areas to minimize airborne dust
  - Prompt reseeding of disturbed areas.
  - Restriction of grading during periods of high winds.

- o Efficient land use planning which provides close and convenient facilities to meet the needs of future residents can be a major measure in reducing the number and length of vehicular trips, and consequently, air quality impacts. The SERSP incorporates the following land uses, all linked by a bicycle/pedestrian pathway system:
  - a neighborhood sized commercial center
  - community parks and private facilities
  - school facilities to serve the plan area.
  - daycare facilities

- o Bus stops, shelters, and turn-outs are proposed throughout the SERSP. Individual projects should be reviewed to ensure the development of transit facilities. Public transit planning area should be coordinated with a regional transit loop.

- o "Park & Ride" facilities should be developed along major roadways throughout the City. In order to ensure that adequate area is allocated for such facilities throughout the City, such facilities should be identified at the specific plan level.

- o A pedestrian and bicycle pathway network is proposed throughout the plan area to provide alternate transportation opportunities and to link residential areas with major activity centers.

- o In order to reduce vehicular emissions, the City of Roseville should aggressively enforce the its Ridesharing Ordinance. As appropriate, this ordinance should be upgraded to reflect current programs for trip reduction. In conjunction with this ordinance, a public awareness program should be initiated to promote participation in trip reduction actions.

- Design of the roadway network to provide Level of Service C or better conditions will reduce vehicular emissions and consequently air quality impacts.

- The City of Roseville should initiate a program to identify potential route alignments for extension of light rail from Sacramento. Although extension is not imminent, there is a need to identify and designate corridors before such areas are developed.

- The City should continue to pursue development of a City wide pathway system and ensure that proposed pathways can be efficiently connected to the developing City wide network.

- Motor vehicle emissions are being mitigated on a regional scale, primarily by State mandated emission controls and the motor vehicle emission inspection program. Implementation and enforcement of this program is beyond the responsibility of the proponent of the specific plan. However, the City of Roseville should support stringent enforcement of the program. In conjunction with vehicle emission reduction, the City should participate in the methanol conversion evaluation program.

- Measures which can be utilized to reduce particulate levels include minimizing exposed soil areas, frequent cleaning of streets, sidewalks, and paved areas, and planting of trees and vegetation to reduce wind.

Noise

Noise is a fundamental component of the urban environment. Outdoor ambient noise levels tend to be higher in urban settings than those typically associated with more rural land uses. These higher noise levels can be detrimental to the health and well being of residents of urban environs.

Table H1
Noise Thermometer

dB(A)	Noise Source	Subjective Description
120	Amplified Rock 'n Roll Band	Deafening
110	Commercial Jet Takeoff (@ 200 ft.)	
100		
90	Busy Urban Street	Very Loud
80		
70	Freeway Traffic (@ 50 ft.)	Loud
60	Normal Conversation (@ 6 ft.)	
50	Typical Office (Interior)	Moderate
40	Soft Radio Music	
30	Typical Residential (Interior)	Faint
20	Typical Whisper (@ 6 ft.)	
10	Human Breathing	Very Faint

SOURCE: Brown-Buntin Associates, Fair Oaks, California

The generally adopted practice for noise legislation in the United States is to identify acceptable noise levels associated with major land uses and zoning designations. Even though the acceptance of L_{dn} and C_{nel} is generally widespread, adopted noise standards for similar land uses vary.

Although specific noise standards for community land uses are not established at the State level, the California Department of

Health, Office of Noise Control, has published extensive material to assist local communities in establishing noise standards. Perhaps the most widely cited, and utilized, noise standard publication produced by the State is **Guidelines for the Preparation and Content of Noise Elements of the General Plan**, prepared by the Office of Noise Control in coordination with the Office of Planning and Research. This publication includes recommendations for C_{nel} or L_{dn} levels associated with general land use classifications. These levels are presented in Table H2, Land Use Compatibility for Community Noise Environments. The City of Roseville Noise Element utilizes the Office of Noise Control compatibility standards.

Existing noise sources within the undeveloped portion of the plan area are dominated by natural sounds generated by wind and wildlife. Background noises in the SERSP originate from motor vehicle traffic on nearby roads, residential sounds from nearby neighborhoods, or from already existing neighborhoods within the plan area. Typical existing ambient noise levels on the site vary from 40 to 50 dBA. Higher levels exist near roadways or developed areas.

Impacts.

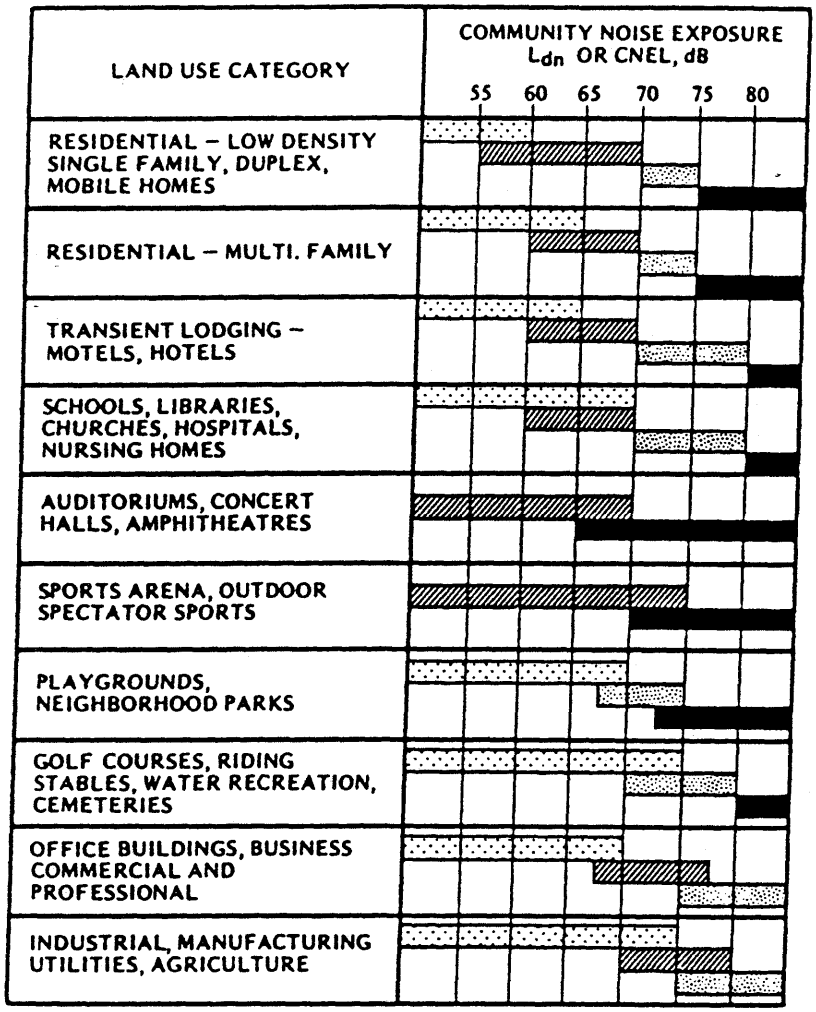
- In areas of development, the most significant initial noises will be generated by construction equipment. The noise levels will generally vary from 70 to 95 dB(A). With precautions, these activities can be performed without violation of the recognized noise standards.

- At locations where unrippable rock is encountered, blasting will be required for the installation of underground facilities. Blasting may produce noise in excess of 100 dB(A) within 50 feet of detonation.

- For the long term, dominant sounds in developed areas will include lawn mowers, stereos, and kids at play. No violations of the recognized noise levels are anticipated from these activities.

Table H2

Land Use Compatibility for Community Noise Environments



INTERPRETATION

NORMALLY ACCEPTABLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CLEARLY UNACCEPTABLE

New construction or development should generally not be undertaken.

CONSIDERATIONS IN DETERMINATION OF NOISE–COMPATIBLE LAND USE

A. NORMALIZED NOISE EXPOSURE INFORMATION DESIRED

Where sufficient data exists, evaluate land use suitability with respect to a "normalized" value of CNEL or L_{dn}. Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated value of CNEL or L_{dn}.

B. NOISE SOURCE CHARACTERISTICS

The land use-noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment. The State Aeronautics Act uses 65 dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to aircraft noise. In order to facilitate the purposes of the Act, one of which is to encourage land uses compatible with the 65 dB CNEL criterion wherever possible, and in order to facilitate the ability of airports to comply with the Act, residential uses located in Community Noise Exposure Areas greater than 65 dB should be discouraged and considered located within normally unacceptable areas.

C. SUITABLE INTERIOR ENVIRONMENTS

One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL of L_{dn}. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

D. ACCEPTABLE OUTDOOR ENVIRONMENTS

Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered "normally acceptable" for that land use category, may be appropriate.

Source: California Office of Noise Control

- The projected distances to the 60dB, 65dB, 70dB, and 75dB L_{dn} noise contours were estimated using the Federal Highway Traffic Noise Prediction Model, FHWA-RD-77-108, and traffic volume information provided by the traffic analysis for this project. Traffic volumes on major roadways within the plan area will generate noise levels adjacent to these roadways which will exceed the acceptable levels recognized in the **Noise Element** of the **Roseville General Plan.** Site specific measures are available which can be utilized to reduce this impact to a less than significant level.

Mitigation Measures.

- Construction activity will be restricted to acceptable hours as determined by the City.

- Residential type mufflers and noise suppression devices will be installed on construction equipment as appropriate.

- All blasting activity will be conducted in accordance with applicable City policies, and all reasonable safety and noise mitigation measures will be utilized.

- As individual projects are proposed, particularly commercial uses, the potential noise impacts should be reviewed in relation to the nearest residential neighborhoods.

- As specific projects are proposed for construction, they should be subjected to a noise review, including, as appropriate, an onsite noise assessment to determine the actual location of the noise contours involved. The need for such analysis will be at the discretion of the City. In situations where the predicted 60 dB(A) noise contour falls outside of the roadway right of way and within residential property, projects will be required to implement measures to reduce the noise to the recognized standards included in the **General Plan Noise Element.** Typical measures which may be implemented include sound walls, berms, or dense landscaping.

- Developers of individual residential units should be encouraged to utilize construction techniques which reduce interior noise levels. Such measures include wall insulation, double pane windows, properly sealed joints, and placement of bedrooms away from noise sources. In accordance with State standards, residential housing is required to attain interior noise levels of less than 45 dB.

- Enforcement of local noise standards can be utilized to control isolated violations which are inevitable in residential neighborhoods.

VI. EXISTING CULTURAL CONDITIONS, PROJECT IMPACTS AND MITIGATION MEASURES

Social and Economic Factors

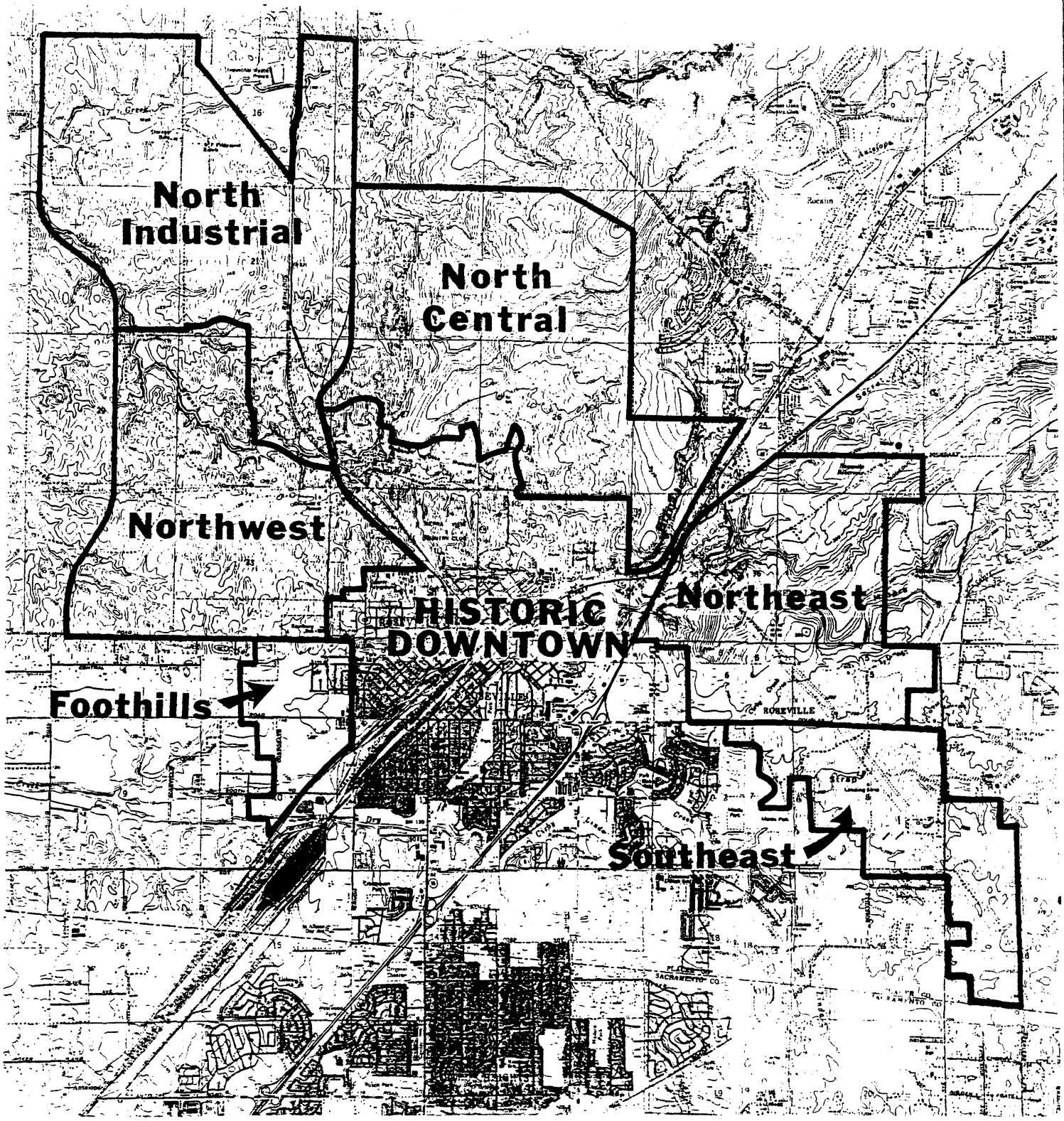
Land Use

The City of Roseville consists of a central core of commercial/ business area surrounded by newer predominantly residential areas. Figure I1, the Planning Areas Map, shows the currently recognized planning areas.

The currently adopted Southeast Roseville Specific Plan encompasses approximately 637 acres. The proposed amended plan area would include an additional 367 acres located east of Sierra College Boulevard and south of Eureka Road. The total size of the proposed amended plan area is approximately 1,004 acres. The adopted SERSP allows development of 3,798 dwellings. Existing zoning of the area east of Sierra College Boulevard allows 167 dwellings. The total dwellings allowed by existing zoning is 3,965. A comparison of the adopted land uses for the entire area included in the adopted SERSP, with the proposed land uses designated in the amended SERSP are presented in Table I1.

There are approximately 160 acres of property within the adopted SERSP which are under Williamson Act contract. The agricultural contract remains in effect until October 23, 1991. The developer has not indicated that the contract will be terminated prior to its prescribed expiration. However, the developer can elect to terminate the contract at any time, and in doing so, would be subject to the penalty fees in the terms of the contract.

Residents of the Granite Bay area of Placer County have indicated that the area should be developed to lower densities which would be more compatible with Placer County zoning. However, zoning proposed in the amended SERSP east of Sierra College Boulevard is similar to zoning for the Treelake Village project, located to the east of and immediately adjacent to the SERSP.



ROSEVILLE PLANNING AREAS MAP | FIGURE 11

Table I1
Comparison of Existing and Proposed Land Uses

	Existing		Proposed		Net Change	
	Acres	Units	Acres	Units	Acres	Units
R-1	367*	167*			-367	-167
R-3			3.3	10	3.3	10
R-4	50.7	244	310.8	1100	260.1	856
R-5			103.1	470	103.1	470
R-7	51.2	375	18	114	-33.2	-261
R-8	19.8	158	19.5	156	-.3	-2
R-10	14.1	123	11.9	114	-2.2	-9
R-12	64.6	701			-64.6	-701
R-13	36.1	650	12.7	165	-23.4	-485
R-14	9.5	126			-9.5	-126
R-15	32.9	435			-32.9	-435
R-16	44.7	583	38.6	612	-6.1	29
R-19			38.9	714	38.9	714
R-20			25.1	510	25.1	510
R-22	21.2	403			-21.2	-403
PARK	23.1		80.2		57.1	0
SCHOOL	32.8		31.7		-1.1	0
BP	106.6		106.7		.1	0
COMM	29.7		39		9.3	0
MISC	100.4		164.9		64.5	0
	1004.4	3965	1004.4	3965		

*** Area not within Existing Southeast Specific Plan, but proposed for inclusion in the amended specific plan area.**

The issue of residential development in the proximity of electrical transmission lines was specifically identified for discussion by the Planning Commission. Since recommendations and subsequent action must be based on current research, some of which is controversial, copies of the literature have been provided to the Planning Department. The Final Report of the New York Powerlines Commission studies is included in the technical appendix of this FEIR. Following is a summary of the research material reviewed for the DEIR.

In recent years, both the number and the capacity of electrical transmission lines has increased for reasons of efficiency, reliability and the need to transmit bulk power over long distances. The wide transmission corridors which traverse the landscape are constant reminders of this tremendous electrical network, and often provide natural areas of wildlife habitat, recreation space, or limited community facilities. Accepted land use planning technique often allows for development of residential uses in close but "safe" proximity to such corridors. However, traditional "safe" considerations have focused on adequate separation to prevent electrical shock.

It has long been known that electrical and magnetic fields are generated by transmission lines, household wiring, and even household appliances. The characteristics of these fields can vary depending upon thousands of independent variables such as weather, type of wiring, type of current, voltage, etc. Curiously enough, the effect of these fields on the human body is not well documented and has only relatively recently caught the attention of the public and the scientific community. In fact, research to date is severely limited, and claims that such fields cause cancer or adversely affect human growth and development may be creating undue concern. Conversely, there has been evidence that these fields may affect the human body in ways not yet fully understood, and the potential for adverse effects has not been disproven.

The first evidence of a possible connection between high voltage fields and human health was reported in the early seventies by Soviet scientists who discovered a correlation between workers at 500 KV substations and the incidence of short-term nausea and headache. Since this initial finding, subsequent research projects, mostly in the United States, have isolated additional effects which include decreased growth in seedlings and chickens, decreased in-vitro growth of embryonic tissue cells, and behavioral and physiologic changes in laboratory rats including impaired learning ability. However, these findings were created under laboratory situations involving exposure to considerably higher fields than generally occur around power lines.

Outside of the laboratory, statisically significant evidence of correlations between power lines and human health has been much more difficult to prove. The majority of "in the field" research efforts have consistently failed to identify a correlation between exposure to power lines and any adverse effects on humans. However, some investigations of behavior and brain function showed small but consistent changes in human body rhythms relating to normal sleep patterns, and pain responses. The most highly publicized findings of research efforts to date reported an increase in the incidence of cancer cases among children living in homes located near overhead distribution lines. Although a statistical relationship was isolated, no mechanism was identified which could explain the apparent correlation, and it may be surmised that other factors beyond the scope of the research project could have contributed to the findings. According to Dr. Savitz, principal researcher on the project, "There is no solid evidence that people should be worried, even if they live under a power line. The bottom line is that the evidence falls short of proving that electric or magnetic fields are a health hazard. On the other hand, questions have been raised that haven't been answered. So from a public health perspective, there is a reason for concern."

In summary, no direct relationship has been identified between the incidence of cancer and the exposure of people to high voltage transmission lines. However, there is a considerable amount of information which implies that electromagnetic fields may contribute to human illnesses in ways which are not yet understood. There is neither sufficient evidence to support the hypothesis nor to disprove the inferred relationship.

Impacts.

- The proposed amendment of the Southeast Roseville Specific Plan will increase the size of the plan area by 367 acres.

- The proposed amended specific plan will maintain the same total number of units as allowed under existing land use designations, but will decrease the acreage dedicated to these

residential uses by roughly 5% to approximately 662 acres or 66% of the plan area.

- Some areas adjacent to the existing electrical transmission corridor are proposed for residential development. This would result in individuals living in proximity of the power lines.

- Land uses within the amended plan area will change as detailed in Table I1. In summary, the principal change in residential land use entails a change in the distribution of units and densities as shown in Table I2.

Table I2
Comparison of Adopted and Proposed Distribution of Residential Units

	Existing		Proposed		Net Change	
	Units	% Plan Units	Units	% Plan Units	Units	% Plan Units
R-1 through R-5	411	10%	1580	40%	+1169	+29%
R-7 through R-15	2568	65%	549	14%	-2019	-50%
R-16 through R-20	986	25%	1836	46%	+ 850	+21%

The overall effect of this change will be a loss of units in the middle density ranges of R-7 through R-15, with a proportionate increase in the allowed number of dwellings in the lower and higher density categories. Although a change in land use will result from adoption of the proposed amended specific plan, the proposed changes utilize land use densities recognized by the City; include increased amounts of higher density housing in accordance with **General Plan** goals; and will not produce a change the overall number of dwellings developed. As such, the proposed land use changes are not considered to qualify for designation as a significant impact.

- In addition to redistribution of residential land uses, minimal other land use changes are proposed to occur. A summary of these changes is presented in Table I3.

Table I3
Comparison of Adopted and Proposed Distribution of Land Uses other than Residential

	Existing		Proposed		Net Change	
	Acres	% Plan Area	Acres	% Plan Area	Acres	%
Parks	23.1	2%	80.2	8%	+57.1	+ 6%
School Sites	32.8	3%	31.7	3%	- 1.1	0%
Commercial	29.7	3%	39.0	4%	+ 9.3	+ 1%
Business/Commercial	106.6	11%	106.7	11%	+ .1	0%
Nursery			16.0	2%	+16.0	+ 2%
Racquet Ball Center			11.9	1%	+11.9	+ 1%

Mitigation Measures.

- The proposed SERSP decreases the area allocated to residential land use, hence increases overall densities. The consequence of this change is a greater amount of park and recreation area, commercial area, and pedestrian/bicycle pathway than that designated in the adopted SERSP.

Population

For planning purposes, the City of Roseville utilizes 2.6 as the City-wide average number of persons per household. Since the number of residential dwellings is not proposed to change with amendment of the SERSP, continued use of the 2.6 figure will result in no change in the predicted population. In actuality, there is a difference in the average number of persons residing in multi family versus single family dwellings, and consequently some change is expected to result from the proposed amendment.

Impacts.

- o Under direction of City staff, the DEIR utilizes the City-wide average of 2.6 persons per household, and consequently no change in population was identified.

Mitigation Measures.

- o Since the number of dwellings is not proposed to change, and consequently, the number of persons projected to reside in the area does not change, no mitigation measures have been identified for population.

Employment

Implementation of the proposed SERSP will create additional employment opportunities. Compared to proposed growth in other areas of the City, the number of opportunities predicted within the SERSP is relatively small.

Impacts.

- o Buildout of the specific plan area is predicted to create approximately 4,198 direct jobs and 3,910 indirect jobs. Compared to predicted development in other specific plan areas of the City, the impact of increased jobs in the SERSP area is suggested to be less than significant.

Mitigation Measures.

- o As already established in the City, a monitoring program should be continued to annually assess the local job market. Since actual development will likely differ from current predictions, a "wait and see" attitude may be justified in the short term. However, long term planning should not perpetuate the concept of attracting a greater number of jobs than employable

residents. Depending on future conditions, amendment of the **General Plan** may be warranted to provide for a more equitable balance.

Housing

The City of Roseville continues to experience a large difference between the price of new housing and the price that residents are able to afford. This discrepancy exists in both the rental and new housing markets. Consequently, unless affordable housing is provided, lower income families in the City will be forced to relocate as affordable housing is slowly replaced with more expensive homes and apartments. In order to solve the situation, the City has adopted an affordable housing program which will require development of affordable housing to meet the needs of the City. This program is currently being developed, and the program spokesman has indicated that recommendations and policies will be released as they become available. Discussion of specific policy information by this EIR prior to completion of work by the Affordable Housing Task force would be premature. Since the City's affordable housing program is not completed at this time, the extent of affordable housing which will be required in the SERSP is unknown.

Impacts.

- The amended specific plan does not propose to change the number of units. However, as shown in Figure I2, the proposed Plan does redistribute these units to provide a greater number of high and low density dwelling at the expense of middle density housing.

- In conjunction with other proposed development in the southeast portion of the City, the number of units proposed in the SERSP are predicted to satisfy the housing allocation requirements of the **General Plan.**

Mitigation Measures.

- The developer has indicated the the SERSP will comply with the affordable housing program when it is developed, thereby mitigating impacts associated with redistribution of densities.

Jobs/Housing Balance

The **Land Use Element** of the **Roseville General Plan** identifies attainment of a jobs/housing balance as a goal of City-wide development. Based on calculations in the DEIR and in the traffic analysis, buildout of the City is projected to create an imbalance of approximately 1.9 jobs per employed resident. However, buildout of south Placer County and the foothill areas is projected to have a deficient number of jobs. Consequently, if the jobs/housing balance is viewed on a more regional perspective, the imbalance projected within the City will contribute to attaining a regional balance.

Impacts.

- Development of the SERSP will generate a surplus of roughly 3,300 jobs which will require persons from other areas to fill. This surplus in jobs would constitute 1.7 jobs for every employable resident of the SERSP. This impact is suggested to be less than significant for two reasons; 1) the number of jobs proposed within the SERSP is relatively small compared to that of other specific plan areas, and 2) long range projections indicate that a regional balance may be achieved through Roseville's provision of jobs.

- By creating an excess of jobs, the City could place undue growth inducing pressure on surrounding areas which might otherwise remain in agricultural or low density residential uses. In addition, since the immediate area would not be able to provide an adequate number of employees, future employees at local firms would have to commute from other regional communities.

Mitigation Measures.

- Since the job/housing projections may or may not occur as identified, it is difficult to prescribe measures to reduce their impacts. Potential solutions to the predicted situation would require either the reduction of job generating land uses within the plan area, or an increase in the number of dwelling units within the plan area. Since buildout is not expected to occur until sometime beyond the year 2005, and only two-thirds buildout by the year 2005, it is recommended that the job/housing balance continue to be monitored as prescribed in the **General Plan**, and that the appropriateness of individual projects be reviewed at the time of their submittal based on the most recent jobs/housing information available.

Traffic and Circulation

The City of Roseville has developed plans for a City-wide roadway network which is proposed to be implemented in conjunction with growth in the various portions of the City, including the adopted SERSP. As more specific land uses are identified throughout the City, more specific information becomes available concerning specific improvements to the ultimate roadway system. The firm of Fehr & Peers Transportation Consultants has been retained to make recommendations for design of an ultimate City-wide roadway network to serve the City at buildout. In conjunction with this task, traffic studies have been prepared for all of the Roseville specific plan areas, including the amended SERSP. The technical aspects of this work, as it relates to the SERSP, are presented in the DEIR and traffic report which is appended to that document. This section is a summary of the major issues relating to the traffic impacts associated with amendment of the SERSP as proposed.

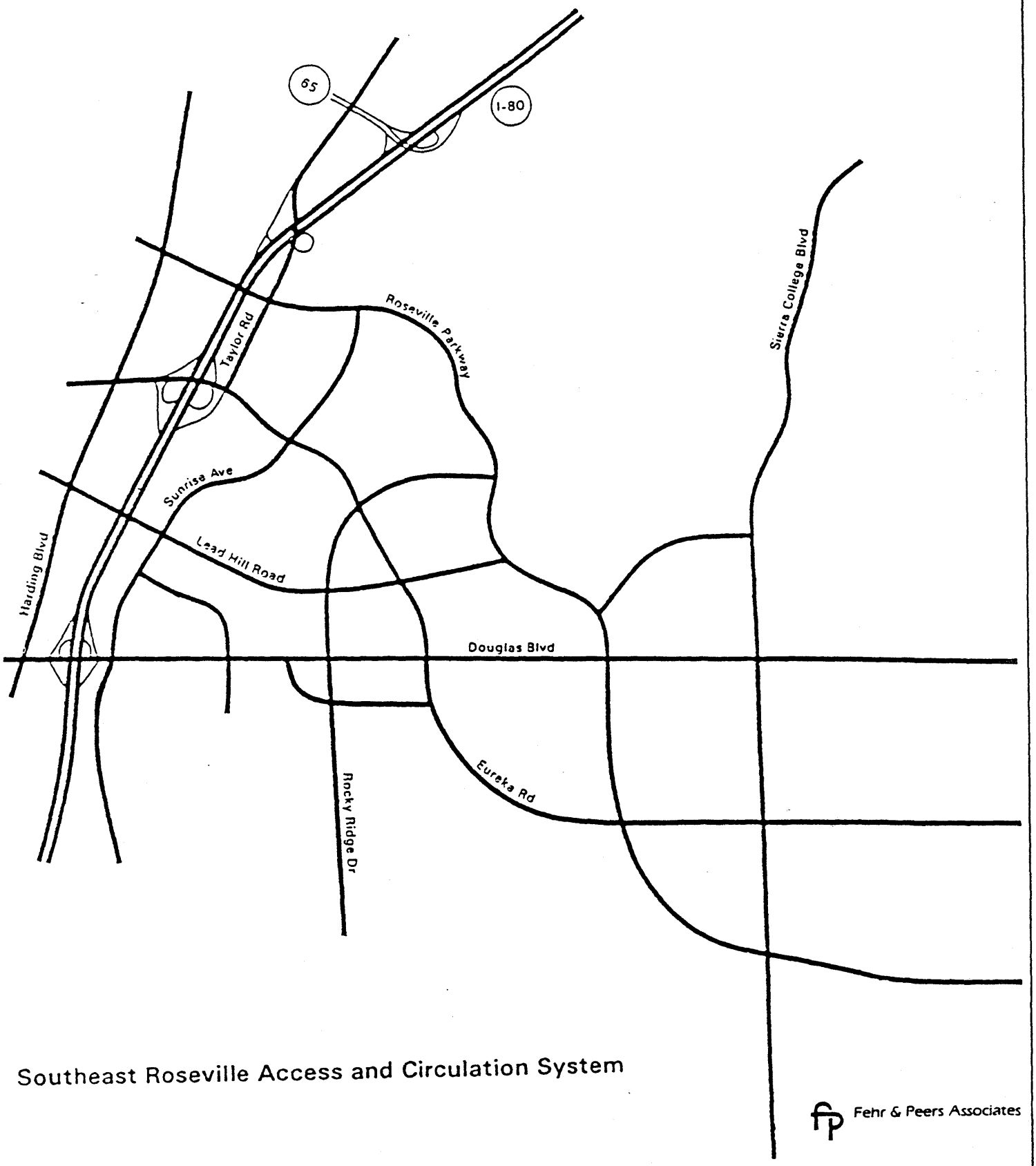
As proposed, amendment of the SERSP is not predicted to significantly alter the traffic generation characteristics from those identified for the adopted SERSP. The most notable change is anticipated to be a shift in the origin of traffic within the plan area. Increased densities east of Sierra College Boulevard will produce increased traffic volumes from that area.

Traffic modelling prepared by Fehr & Peers indicates that traffic from the SERSP will predominantly travel to the west and northwest, accessing Interstate 80 or continuing to employment centers in northern Roseville. In addition, traffic from the Granite Bay area and southern Placer County is predicted to utilize Roseville streets to similarly access I-80 and north Roseville. Consequently, the proposed roadway network within the SERSP area has been designed to provide efficient northwest/ southeast travel corridors. The most prominent of the arterial streets within the SERSP include Eureka Road and the Roseville Parkway. These roadways are key corridors proposed to extend between Placer County and north Roseville. In addition, Sierra College Boulevard and Douglas Boulevard are proposed to provide direct north-south and east-west travel corridors respectively.

Figure J1 shows the proposed roadway network southeast of I-80. The DEIR includes a detailed discussion of the development schedule, lane requirements, and intersection improvements which would be required under various development scenarios. In essence, improvements are proposed as necessary to maintain a LOS C or better.

As discussed above, design of the roadway network in this area is strongly influenced by growth and development in Placer County. In order to provide adequate corridors through the SERSP, ten lanes connecting to the County are predicted to be necessary. Depending on ultimate configuration of the County roadway network, the distribution of these lanes may be shifted between Douglas Boulevard, Eureka Road, and the Roseville Parkway. For example, Eureka Road was designated by Placer County to be widened to four lanes. Since development of the traffic model for the SERSP, the County has indicated that Eureka Road may not be widened as proposed. If Eureka Road is not widened, there may be a need to redistribute the lanes to reflect new traffic flows from the County. It is envisioned that these types of adjustments can be accommodated as development occurs. This situation exemplifies the flexibility which must be maintained in long range traffic planning in order to efficiently accommodate traffic as growth occurs.

A major issue relating to development of the City-wide traffic network concerns the maintenance of Level of Service "C" (LOS C) as required by the **General Plan.** The Roseville **General Plan** specifies that "... the Level of Service C shall be used in determining the roadway capacities and intersection delays for all freeway, arterial and collector streets." As proposed, the future roadway network is predicted to provide LOS C or better conditions on all screenlines in the City, and achieve a LOS C at all intersections in the vicinity of the SERSP with the exception of the intersection of Sunrise and Douglas Boulevards. The Planning Commission has expressed concern for future traffic impacts because LOS C is not predicted at all intersections. The traffic consultant has indicated that the **General Plan** policy refers to attainment of LOS C on screenlines, and consequently the the SERSP is consistent with the **General Plan.**



Southeast Roseville Access and Circulation System

Fehr & Peers Associates

SOUTHEAST ROSEVILLE SPECIFIC PLAN | FIGURE J3

The intersection of Sunrise and Douglas Boulevards is predicted to function at less than LOS C regardless of amendment of the SERSP, and amendment of the SERSP is not predicted to significantly impact traffic volumes at this intersection.

In response to concerns expressed by the Planning Commission, several subsequent analyses were completed by the traffic consultant which examined reducing the number of units east of Sierra College Boulevard by as much as 50%. Results of these analyses indicated that such reductions would not substantially alter the required roadway improvements.

Impacts.

- By the year 2005, the adopted SERSP is predicted to generate about 41,500 daily trips, with almost 4,500 trips generated during the p.m. peak hour. The proposed SERSP would generate over 45,000 daily trips and 4,800 p.m. peak hour trips. In essence, the proposed SERSP would generate about 9 percent more daily and peak hour traffic than would the approved SERSP at expected year 2005 levels.

- At full buildout, the adopted SERSP would generate a total of almost 66,500 average daily and 7,100 p.m. peak hour trips. The proposed SERSP at full buildout would generate almost 74,000 average daily and 7,800 p.m. peak hour trips, again representing about a 11 percent increase in trip generation over approved SERSP on a daily and peak hour basis. Although the total number of dwelling units changes only marginally between the approved and proposed SERSP, the 11% increase in trips is primarily due to the shift of housing unit types to lower densities, with consequential trip rates/DU increases as densities drop.

- The approved SERSP would generate about 7% of the year 2005 citywide total traffic. Under the proposed SERSP, a total of 478,000 primary daily trips (4,000 more than under approved SERSP) would be generated in Roseville, with the proposed SERSP representing about 7% of the total citywide traffic. Thus, on

a citywide level, the increase in traffic generation under the proposed SERSP would be negligible. With full citywide buildout, the screenlines with volumes exceeding design or maximum capacity are the same as under the approved SERSP.

Mitigation Measures.

- o Generally, implementation of either the approved or proposed SERSP includes 1) development of a roadway system within the plan area capable of handling ultimate traffic volumes while maintaining a LOS C, and 2) contribution to or development of necessary improvements outside of the plan area to maintain LOS C required as a consequence of plan implementation. The only noteworthy exception is the intersection of Sunrise and Douglas Boulevard which is predicted to continue to function at less than LOS C even with implementation of feasible mitigation. Achievement of LOS C at this location would require complete redesign of the intersection including additional right of way which is not available. The DEIR and traffic analysis include a detailed discussion of these improvements.

- o Traffic impacts could be reduced through the implementation of Transportation Systems Management (TSM) and transit measures. If TSM measures are implemented and aggressively applied, the predicted peak-hour traffic demands could be reduced by 5% to 10%. TSM measures which are proposed include:

  - development of bus stops, shelters, and turn-outs throughout the SERSP, and cooperation with the regional mass transit and Roseville Dial-a-Ride programs to facilitate extension of services to the plan area.

  - A pedestrian and bicycle pathway network is proposed throughout the plan area to provide alternate transportation opportunities and to link residential areas with major activity centers.

  - the roadway network within the plan area is designed to provide LOS C or better conditions.

o In order to achieve higher participation rates through TSM, the City of Roseville should:

- promote development of Park & Ride facilities along major roadways throughout the City. In order to ensure that area is allocated for such facilities throughout the City, facilities should be identified at the specific plan level.

- aggressively enforce the City Ridesharing Ordinance. As appropriate, this ordinance should be upgraded to reflect current programs for trip reduction.

- develop and aggressively promote a public awareness program to encourage participation in trip reduction activities.

- should initiate a program to identify potential route alignments for extension of light rail from Sacramento. Although extension is not imminent, there is a need to identify and designate corridors before such areas are developed.

- should continue to pursue development of a City wide pathway system and ensure that proposed pathways can be efficiently connected to the developing City wide network.

Public Services and Facilities

Water

Historically, the City of Roseville has provided water service to all areas within the corporate limit, and Sierra College Boulevard has been regarded as the unofficial boundary between the the City of Roseville and the San Juan Water District. The relatively recent annexation of area on the east side of Sierra College Boulevard by the City has created a situation where service within an area of the City may be better served by the San Juan Water District rather than the Roseville Public Works Department. Both the San Juan Water District and the City of Roseville Public Works Department agree that the most efficient means of extending water service to the plan area would utilize the San Juan Water District to serve the portion of the plan east of Sierra College Boulevard.

Impacts.

- Implementation of the project will result in the need for extension of water service to the plan area. Buildout of the amended SERSP is predicted to require approximately 5.4 million gallons per day.

Mitigation Measures.

- A master water plan to serve the respective portions of Southeast Roseville Specific Plan area will be completed prior to development of individual projects within the plan area.

- The San Juan Water District has indicated that they are capable and willing to serve the portion of the SERSP located on the east side of Sierra College Boulevard.

- The City of Roseville Public Works Department has indicated that they are capable and willing to serve the portion of the SERSP located on the west side of Sierra College Boulevard.

- The property owner(s) within the plan area will execute a revised development agreement in accordance with Ordinance No. 802. Such agreement will set forth, with specificity, the infrastructure improvements and other contributions to be made in return for guarantees by the City that certain land uses and densities in effect at the time of agreement execution will be allowed at a later date. Assessment Districts will be utilized as appropriate to facilitate development of required facilities.

Sewer

Wastewater treatment for the City of Roseville is performed at the Roseville Wastewater Treatment Plant which serves all of Roseville as well as the area served by the Southeast Placer Region Sewer System including the municipalities of Rocklin, Loomis, and a portion of the unincorporated area of the County.

The regional sewer trunkline serving the adopted SERSP is located north of the plan area. The property located east of Sierra College Boulevard is served by a different trunkline which lies south of the plan area.

Impacts.

- A total of approximately 1.9 million gallons of wastewater per day will be generated from buildout of the revised Southeast Roseville Specific Plan.

- A transfer of 783 units is proposed from the adopted plan area to the parcel located east of Sierra College Boulevard. These units plus the 167 units originally allowed results in a total of 950 units west of Sierra College Boulevard. The trunkline serving that property does not have the available capacity for the proposed increases.

Mitigation Measures.

- o A new pumping station will be built by the proponents to serve the units which would be transferred to the area to the area west of Sierra Collage Boulevard as a part of this proposal. Development of the pumping station will restore wastewater flows to the respective trunklines in accordance with preproject conditions.

- o Sewer facilities will be properly sized and stubbed out where appropriate so as to serve individual projects within the specific plan area.

- o The property owner(s) within the plan area will execute a revised development agreement in accordance with Ordinance No. 802. Such agreement will set forth, with specificity, the infrastructure improvements and other contributions to be made in return for guarantees by the City that certain land uses and densities in effect at the time of agreement execution will be allowed at a later date. Assessment Districts will be utilized as appropriate to facilitate development of facilities.

Natural Gas

Pacific Gas & Electric (PG&E), currently has natural gas distribution and transmission facilities in the proximity of the Southeast Roseville Specific Plan area. Gas mains are presently located on Sierra College Boulevard, Eureka Road, and Auburn/Folsom road. Natural gas service will be provided to the area by PG&E in accordance with standard Public Utilities Commission rules and regulations. No unusual problems are anticipated with the provision of natural gas services to the Amended Southeast Roseville Specific Plan.

Electricity

Electrical services to the specific plan area will be provided by the City of Roseville Electric Department. Amendment of the

specific plan as proposed is not anticipated to create any unusual problems in the provision of electrical services to the site.

There has been concern expressed by individuals in the community regarding potential health impacts associated with development in the proximity of the existing electrical transmission corridor. This issue is discussed in the Land Use section of this report.

Telephone

Roseville Telephone Company will provide service to the specific plan area in accordance with their filed tariffs. Telephone facilities will be constructed in conjunction with development. A possibility of line extension charges may exist, depending upon actual developmental phasing. In order to serve the area, public utility easements will be required and additional right-of-way may also be required for installation of telephone equipment. These requirements will be identified as development occurs. No unusual problems are anticipated in providing telephone service to the Amended Plan area.

Energy

Due to the relative undeveloped nature of the majority of the Plan area, energy consumption is minimal. Existing dwellings within the Plan area utilize electricity and natural gas as the principal home energy sources.

Impacts.

- o Amendment of the existing specific plan is not anticipated to substantially effect the amount of energy which will be consumed in the Plan area.

- o Electricity and natural gas are anticipated to be the major sources of energy utilized by residents within the SERSP.

Mitigation Measures.

- o Construction of well insulated quality homes with energy efficient air conditioning/heating systems will reduce the total amount of energy consumed on the site.

- o Developers should be encouraged to incorporate passive solar measures whenever feasible in their homes, and provide direction to home buyers interested in incorporating more extensive passive systems into new homes.

- o Inclusion of local commercial and professional land uses, bicycle lanes, parks, and school sites within the specific plan area will result in fuel savings from trips residents would otherwise have to make away from the area.

- o Public utilities should be encouraged to provide programs for conservation of electricity, gas, and water. Such programs typically include low-interest financing for energy conservation home improvements.

Police

The entire incorporated area of the City of Roseville is served by the Roseville Police Department. Presently, 38 sworn officers are employed at a ratio of approximately 1.3 officers per 1000 population. In the future, the City would like to achieve a higher ratio of two or more officers per 1000 population.

Impacts.

- o Buildout of the Specific plan area will require law enforcement services to an additional 3,965 dwelling units or approximately 10,309 new residents. In order to maintain the present level of service within the Police Department, approximately 13 additional officers and 3 support staff will be required to serve the plan area. This impact does not differ from that which exists with the adopted SERSP and adjoining land use.

Fire Protection

Development of the adopted or proposed SERSP will require extension of fire protection services to the area as well as development of new fire protection facilities in the vicinity.

Impacts.

- Development of the SERSP area will require the construction and operation of a station to service the area.

Mitigation Measures.

- As required, all structures will be constructed to conform to City and State Fire codes.

- A new station is proposed within the currently adopted Southeast Roseville specific plan area. Funding for the proposed fire station will come from the Fire Facilities Tax, adopted by the City of Roseville in 1984. No unusual problems are anticipated in the provision of fire and emergency services to the Amended Southeast Roseville Specific Plan area.

Solid Waste

The City of Roseville uses the Western Placer Regional Landfill for solid waste disposal. The landfill is a private enterprise which operates on fees received from respective patrons, including the City of Roseville. The site is 320 acres and located just northwest of the city. The lifetime of the landfill is projected at 40 years.

Impacts.

- The revised Southeast Specific Plan, will generate approximately 16 tons of solid waste per day. This figure is

based upon generation figures of 2.64 pounds per resident per day, and 1 pound per 100 square feet per day for commercial uses.

Mitigation Measures.

- When developed, roadways within the Specific plan area should be of adequate width to facilitate use by large trucks, including trash disposal vehicles.

- Solid Waste disposal rates will have to be sufficient in the future to generate enough revenues to finance the growth of collection systems, including the purchase of new equipment and replacement of old equipment when needed.

- The volume of solid waste generated by the proposed project could be reduced by separation and recycling of certain wastes such as paper, cardboard, aluminum and glass. Although such operations involve some inconvenience, they provide a means of utilizing valuable reusable resources. Residents of the proposed project could also reduce the quantity of solid waste generated by composting yard clippings and other organic materials for use in yards and gardens.

Hazardous Materials

"Hazardous materials" is a general classification which includes thousands of products, many of which are used daily by homeowners throughout the region. Pesticides, herbicides, swimming pool chemicals, solvents, cleaners, and thousands of other "everyday" products are considered hazardous materials.

Specific legislation exists at all levels of government which clearly defines the acceptable methods for use, storage, transport, and disposal of hazardous materials. The quantity of materials judged to be potentially dangerous varies, and may be determined on a material by material basis. As discussed below, the City of Roseville generally recognizes hazardous material

operators as those firms handling more than 500 pounds or 55 gallons of material per month.

Impacts.

- Development of the area to urban uses will include the use of hazardous materials by businesses and homeowners alike. This use will likely result in the release of some materials into the environment. However, due to the small quantities which would be utilized by such users, the potential effects of occasional misuse are not anticipated to be significant.

- Of greater significance would be the location of firms which utilize hazardous materials within the Plan area. No such firms have indicated an intent to locate within the Plan area at this time. Further, since the **Southeast Roseville Specific Plan** area does not include any industrially designated land use, it is unlikely that such operations would be able to locate within the area in the future. In light of the existing legislation, City disclosure policy, and practice of compatible land use development, no significant impacts related to use of hazardous materials are anticipated.

Mitigation Measures.

- As potential businesses indicate an interest in locating within the Plan area, adjacent land uses and utilization of hazardous materials will need to be reviewed on a case by case basis.

- The City should require a specific Hazardous Materials Management Plan for each hazardous material user prior to allowing operation within the Plan area.

- Prior to permitted use of hazardous materials within the Plan area, the nearest fire station should acquire proper equipment and training to handle emergencies involving the materials in use.

Schools

The specific plan area is within the Eureka School District which provides education for kindergarten through eighth grade students. The Roseville Joint Union High School District provides education for students in grades nine through twelve. Figure K2 shows a map of the school district boundaries within the plan area. Presently, the siting of elementary schools within the specific plan area is not finalized due to possible problems with locating schools in the proximity of powerlines.

The Eureka Union School District assesses school impact fees under Measure E, a local assessment passed by voters during the most recent election. Measure E is in place for four years, and during that period builders will be assessed a flat per unit fee. The Roseville Joint Union High School District relies on legislation included in Assembly Bill 2926. The Roseville Joint Union High School District is considering use of Mello-Roos legislation for construction of new facilities. It is possible that the Plan area could be included in a Mello-Roos District in the future.

The Roseville High School District has indicated that a high school site is not desired within the plan area. A new high school facility, which will ultimately serve the plan area, is proposed on a site northeast of the SERSP.

Impacts.

- Buildout of the Specific plan area will generate approximately 1,238 students in grades kindergarten through eight, and approximately 683 in grades 9-12.

- The Eureka School District has indicated that two elementary school sites will be required within the SERSP. The District is still in need of a junior high site. The preference is for location of the junior high facility within the Northeast specific plan area on the currently designated elementary site.

Mitigation Measures.

- o The SERSP will pay the assessed school fees.

- o Two elementary school sites have been identified which satisfy the needs of the Eureka School District.

Parks and Recreation

Adopted Roseville standards require 2.5 acres of neighborhood park per 1,000 population, 1.5 acres of community park per 1,000 population, and 5 acres of City-wide park per 1,000 population. In spite of the existing park acreage standards, the adopted Southeast Specific Plan includes only 23.5 acres of park area, all of which are within Maidu Park. Application of the park standards to existing SERSP as well as the area east of Sierra College Boulevard, indicates that approximately 92 acres of parks are required. There is an existing deficit of approximately 69 acres.

Impacts.

- o The estimated population of 10,309 residents in the proposed SERSP would generate the need for approximately 92 acres of parks to fulfill City requirements.

Mitigation Measures.

- o The location and composition of park sites to meet the City park policy requirements have not been fully developed at this time. The project proponents are working with the Planning Department and Park and Recreation Department to develop an acceptable park proposal. Since an acceptable proposal must be identified before the SERSP can be adopted, the potential impacts to parks and recreation are suggested to be less than significant.

- In addition to the area which will be required as parks, the SERSP includes a bicycle/pedestrian pathway network.

- Although proposed as a private enterprise, area has been designated for a racquet club within the Plan area. It is recognized that this type of facility does not compete with, but rather complements public facilities in the vicinity. Development of this facility as a private sector venture will provide benefits not typically available at public sites, such as professional instruction and training programs, ability for court reservations, and facility support including lockers and showering facilities.

- The specific plan includes approximately 76 acres of Open space and floodplain. Since much of this area is unsuitable for development, it cannot be formally counted as park land. However, it is available for passive recreational use. Traditionally this type of area has been utilized for nature study, walking paths and/or bicycle trails throughout the City, and will provide such opportunities in this Plan area.

Visual and Aesthetic Resources

The visual character of the site will change from an undeveloped to a developed site. This impact will be viewed as positively by some people and negatively by others.

Impacts.

- As discussed in the DEIR, the visual environment of the SERSP area will be altered from one of an undeveloped area dominated by vegetation to one of a more urban environment.

- The impact of proposed amendment of the SERSP will be to increase residential densities, and consequently the visual impacts, in the area east of Sierra College Boulevard. This area includes an oak woodland of high aesthetic value, and development of higher densities than are currently designated in this woodland would be the most significant visual impact associated with addition of this area to the SERSP.

Mitigation Measures.

- As required by ordinance, areas within the 100 year flood plain will be dedicated to the City. This area includes all of the riparian habitat within the SERSP.

- Extension tree preservation measures are proposed to protect native trees within the Plan area. As much as is feasible, native trees will be incorporated into projects.

- Although details have yet to be resolved, it is apparent that some native oak woodland and vernal pool habitat will be included in parks, and consequently preserved.

- Alternative development configurations for areas of native oak woodland should be considered. Such configurations could include Planned Development (PD), or designation of non structure zones.

Fiscal

The firm of Analytics, Inc. was retained to perform an economic analysis for this project. The **Fiscal Impact Analysis of the Southeast Roseville Development** is appended to DEIR.

Impacts.

- As shown in Table M1, development of the Plan area as proposed is predicted to provide the City with a net annual surplus of approximately $23,900. The principal revenue sources identified include property taxes totaling approximately $1,043,900 per year including residential, commercial and unsecured property taxes and penalties, sales tax totaling $1,005,600 annually for the new population, and motor vehicle and trailer coach in lieu fees of $294,700 annually.

- Principal additional costs incurred by the City are presented in greater detail in Table M2 and include net annual outlays of $721,200 for police patrols and related activities, $537,000 for operation of a new fire station in the southeast area of the City, $431,300 for street and highway maintenance, and $462,200 for maintenance and operation of new parks and recreation programming. Utilities, transportation services, and other miscellaneous functions are self-supporting funds because of special tax districts or other revenue sources.

- In addition to annual revenues and expenditures, the City will receive revenue from one time developer fees which will be assessed individual projects within the Plan area. Although some development fees are uncertain or unknown at this time, the sum of known fees exceeds $40 million. The largest items are traffic circulation fees ($4.06 million), school and fire impact fees ($13.0 and $2.03 million respectively), and strong motion taxes ($2.3 million). Additionally, building permits and related fees and permits which offset City operations total approximately $3.0 million, and water and sewer connection fees are estimated to be in excess of $14.1 million. Developers fees are presented in Table M3.

Table M1
Projected Annual Revenues and Expenditures from Development of the Amended Southeast Roseville Specific Plan

	$ Thousand
Revenues	
Property Tax	
Residential	$ 720.2
Commercial	297.0
Unsecured	25.4
Penalties	1.3
Sales and Use Tax	1,005.6
Utilities Users' Tax	318.6
Hotel-Motel Tax	55.5
Franchises	25.7
Property Transfer Tax	23.0
Business License Tax	34.1
Motor Vehicle In-Lieu	286.5
Trailer Coach In-Lieu	8.2
Other Miscellaneous Revenues	8.5
Total Annual Revenues	2,809.6
Expenditures	
General Government	421.0
Public Safety	
Police	721.2
Fire	537.0
Other Public Safety	23.5
Streets and Highways	431.3
Library	189.5
Parks and Recreation	462.2
Total Annual Expenditures	2,785.7
Annual Net Revenues	23.9

Source: Analytics Company

Table M2
Predicted Annual Increases in General Government Expenditures Resulting from Development of the Amended Southeast Roseville Specific Plan

CATV (Cable TV Programming)	$ 6,900
City Clerk	20,000
Licensing	6,600
General Accounting	18,700
Independent Auditing	2,800
City Attorney	31,300
Planning	53,000
Energy Conservation	31,600
Housing Authority	22,400
Load Management Operations	6,400
Energy Finance Program	7,700
Personnel	43,200
Building Maintenance	79,900
Purchasing/Stores	23,700
Community Promotions	19,300
City Council	4,700
City Manager	15,100
Finance Administration	12,300
Bonds	5,400
Load Monitoring	5,700
Elections	4,100
Total	$421,000

Table M3
Summary of Development Fees Associated with Implementation
of the Amended Southeast Roseville Specific Plan

	Commercial	Residential	Total
Building Permit	$174,600	$1,527,700	$1,702,300
Plan Check Fee	113,500	993,000	1,106,500
Energy Plan Check Fee	56,700	66,600	123,300
Sewer Connection Fee	1,635,500	11,895,000	13,530,500
Water Connection Fee	unknown	589,200+	589,200+
Traffic Circulation Fee	834,500	3,225,800	4,060,300
Fire Tax Fee	417,300	n/a	417,300
Fire Services Contract Fee	n/a	1,612,900	1,612,900
Parking Fee	112,400	45,000	157,400
Strong Motion Tax	584,200	1,684,500	2,268,700
School Mitigation Fee			
Roseville High School Dist.	163,000	3,420,600	3,583,600
Eureka Elem. School Dist.	244,600	9,150,300	9,394,900
Home Improvement Fee	180,100	n/a	180,100
Park Tax Fee	n/a	1,382,700	1,382,700
Electrical Underground Fee	n/a	unknown	unknown
Electric Street Light Fee	unknown	n/a	unknown
Encroachment Permit	unknown	n/a	unknown
Grading Permit Fee	unknown	n/a	unknown
Tentative Subdivision Map	n/a	3,500+	3,500+
Final Subdivision Map	n/a	2,100+	2,100+
Traffic Signal Equip. Fee	n/a	39,500	39,500
Taxes/Fees (Developer)	$4,336,300	$35,818,500	$40,154,800

+ Indicates additional fees unidentified at this time.

Source: Analytics Company

Total commercial fees identified at this time are $4.3 million and residential fees thus far have been identified totaling $35.8 million. Fees which are still unknown or not completely calculated at this time include water connection fees, electrical underground fees, electric street light fees, encroachment and grading permits, and subdivision map fees. Based on the final designation of commercial property, additional refinement of all fees must be completed.

Mitigation Measures.

- Development of the Plan area as proposed is predicted to produce net revenues to the City and therefore, no mitigation measures are necessary.

Archaeology and History

The firm of Foothill Archaeological Services was retained to prepare a complete archaeological survey of the plan area, and their report is appended to the DEIR.

Prior to field investigation of the specific plan area, a complete records search was performed by the North Central Information Center of the California Archaeological Inventory. All official site maps and archives were consulted, as were the standard published references-- The National Register of Historic Places (1985), California Inventory of Historic Resources (1976), California Historical Landmarks (1979), Gold Districts of California (1979), California Gold Camps (1975), California Place Names (1969) and Historic Spots in California (1966).

The project vicinity is rich in cultural resources. At least nine recorded sites occur within a 1.5 mile radius. Two prehistoric sites had been previously recorded within the plan area, and are listed as CA-Pla-106 and CA-Pla-215. The first of these sites, CA-Pla-106, was located in 1965 and was described as a thin midden deposit. Petrified wood chips were reported at this location. Subsequent surveys have been unable to relocate the site. The second site, CA-Pla-215, consists of a native quarry and workshop area for the gathering and reduction of petrified wood. This material outcrops in the form of silicous rock with a chalky white cortex, and was utilized for the production of cutting tools and weapons.

Numerous historic features were identified within the plan area. These included ditches, pits, small mounds and low terraces which exhibit evidence of historic mining operations in North Branch Linda Creek. These mining features are not the result of mechanical dredgers, which laid waste to so many acres of American River land. Rather, they represent an earlier, more labor intensive method of ground sluicing that was carried out beginning in the 1850's and periodically thereafter into the 20th century. Although approximately 20 acres of these features were identified in the plan area, no artifacts which could shed light on the ethnicity of the diggers or the operation, and therefore,

the site was only recorded as a historic feature rather than a historic site.

In addition to the mining features, more contemporary trash dumps were located at various locations within the plan area. These heaps typically include bailing wire, solder top cans, screw top bottles, scrap wood, discarded fruit bins, car parts, and tires.

A five acre nut orchard surrounded by a wooden fence is situated within the plan areas. Based on the age of the trees, this is not an old feature.

A qualified historian was retained to evaluate the barn with is located within the amended SERSP and determine if the structure is of historic significance. In summary, mortise and tenon, the technique used in building the barn, has been common in Europe since the medieval period. It was extensively utilized by the English, German, and Scandinavian countries. Mortise and tenon peg barns and structures exist in greater numbers on the east coast, midwest, and in Canada as the early immigrants who settled these areas transported familiar construction methods. By the time California was being populated in the 1850's, the more time consuming mortise and tenon was lost to the speedier butt joint method. The result is that there are very few mortise and tenon pegged barns or structures in California. The historian is aware of only three other such barns in northern California, all of which are in State ownership. There are undoubtably other such structures which exist, but their numbers are few which adds to the significance of the barn in the Southeast Roseville Specific Plan area.

Impacts.

- Development of the area will undoubtably result in the disturbance of the known historic features and prehistoric site. Disturbance of the historic features is not considered significant. However, the petrified wood quarry has the potential to contain valuable artifacts and will require additional investigation prior to development of the site.

- Development will also have the potential to disrupt unknown sites which may exist within the plan area.

- Development of the plan area will increase the number of residents in the vicinity, and therefore increase the potential for disturbance of known and unknown sites in the vicinity.

- Destruction of the historic barn would represent a significant impact.

Mitigation Measures.

- In accordance with the recommendations of the archaeological report, no development will be allowed on the prehistoric site until appropriate mitigation has been conducted. Mitigation may take the form of a conservation easement or similar protection for the site. However, since it is recognized that the public value of such a site is extremely limited, the archaeology report identifies additional investigation and excavation as adequate mitigation to allow subsequent urban development of the site.

- A copy of the archaeological study will be filed with the Planning Department, Department of Public Works, developers and landowners to assure that proper mitigation is implemented at the time that Tentative maps are filed.

- Should additional items of historical or archaeological significance be discovered during project construction, a qualified archaeologist or historian will be called to evaluate the find and to recommend the proper disposition. The Native American Heritage Commission will also be notified as appropriate.

- As discussed in the Recreation section of this EIR, the developer is working with Planning Department and the PArks and Recreation Department to develop an acceptable park proposal. Preliminary proposals include incorporation of the the historic barn in a park area. The Park and Recreation Department has

expressed interest in acquiring the barn. Regardless of the ultimate solution, the City has indicated that preservation of the barn is essential to adoption of the SERSP, and consequently, impacts to the barn are suggested to be less than significant.

VII. GROWTH INDUCING IMPACTS

Development of the amended SERSP will contribute to economic and population growth within the City of Roseville. However, this contribution is not expected to substantially differ from that which would occur under the existing land use designations.

Since extensive land use planning has occurred throughout the City of Roseville, Rocklin and nearby Placer County, and projects have already been proposed for undeveloped property in the SERSP vicinity, the growth inducing impacts associated with development of the SERSP are suggested to be less than significant.

The commercial land use within the plan area will provide jobs and make the area more attractive for residential development. The number of jobs which are predicted to be created within the plan area are expected to exceed the number of new employees will reside within the plan area. Consequently, development of the plan area will contribute to the need for an increased number of employees in the vicinity. This coupled with a more dramatic excess of jobs in the North Central Specific Plan area could generate growth inducing impacts on other areas outside of the City.

VIII. ALTERNATIVES TO THE PROPOSED ACTION

The most obvious alternative to the proposed Amended Southeast Roseville Specific Plan is the "no action" alternative. In this instance, the result of taking no action would produce largely the same impacts as those identified with implementation of the proposed specific plan. This results from the relatively unique situation where the proposed Plan contains the same overall number of residential dwellings, and similar business/ professional/commercial land uses, as the currently adopted specific plan. However, since the proposed specific plan includes the transfer of densities between parcels in order to increase the number of high density (10+ per acre) and low density dwellings (5 or less per acre), fewer such dwellings would be constructed as a result of the "no action" alternative.

A second "no project" alternative could be implemented which would preclude further development of the plan area for an undetermined length of time. Such an alternative would require action by the City Council including possible amendment of the **General Plan.** Although not proposed as a "moratorium" on development, such action would provide the City an opportunity to slow down the rate of development, and allow more time to evaluate the long range development goals of the City. Such an action could have serious implications including legal action by potential developers. However, considering the recent push for development of several specific plans simultaneously, and expressed concern that the latest amendment of the **City General Plan** may have been excessive in establishing new upper limits for growth, this action represents an unpopular but viable alternative.

Development of the property to a lower density than proposed is not a realistic alternative, largely due to the constraints presented in the **Land Use Element** of the **General Plan.** The City of Roseville has determined that an increased amount of higher density housing is an appropriate and necessary goal, and has initiated several policies to facilitate this type of growth. Development of the plan area to substantially lower densities would likely result in noncompliance with the **General Plan** which specifies an allotment of housing to be developed at higher densities. Although not likely to occur, such an alternative could be implemented through amendment of the **General Plan.** A reduction in densities would produce a proportionate reduction in the magnitude of impacts associated with development of the plan area. Assuming that residential land use remained the prominent land use, the types of impacts would not be expected to substantially change, only the magnitude of these impacts. The most obvious and noteworthy advantages of such an action would be a greater opportunity to preserve native vegetation and vernal pools, reduce traffic and air quality impacts, and reduce the demand for public utilities and services. The major disadvantage to such an alternative would be the relative unavailability of less expensive dwellings in the area, and probable inconsistency with the affordable housing program currently under development.

Development of the plan area to an overall higher density is a possible alternative which could be pursued. As discussed, constraints presented by the **General Plan**, and by the limited sewer capacity preclude realistic consideration of development of a greater number of dwellings. However, development of higher density housing, while maintaining the same total number of units, represents a possible alternative which would be in conformance with infrastructure and **General Plan** constraints. Implementation of a "Planned Unit Development" type of community would produce approximately the same cultural impacts as the proposed specific plan, but could substantially reduce impacts to natural communities on the site. A PUD could provide a greater amount of undeveloped area, open space, or park and recreation facilities, amenities which are clearly deficient in the already adopted specific plan. Similarly, increased area in natural vegetation would decrease vegetation, wildlife, and hydrologic impacts.

In summary, considering the limit on the number of dwellings established by the regional sewer system, coupled with City policy advocating increased amounts of higher density dwellings, development of a Plan which includes a substantially greater or less number of dwellings than proposed does not seem realistic. The most likely alternative to the proposed specific plan is presently represented by the adopted specific plan and the **General Plan** land use designations in the area. However, an unlimited number of variations which would differ from the proposed Plan in land use configuration, project design, and/or roadway layout could be proposed as viable alternatives. Since the overall land use would not substantially differ from the proposed Plan, the overall magnitude of the impacts would also remain constant, and detailed analysis would be required to identify specific advantages or disadvantages.

IX. CUMULATIVE IMPACTS

Cumulative impacts, while discussed in the specific context of each section as appropriate, are summarized and placed in a regional perspective in this section. For the cumulative analysis, individual impacts of the Specific Plan were considered with buildout conditions of the **Roseville Specific Plan**, and as appropriate, with impacts associated with anticipated development of a larger regional area.

As required by CEQA, cumulative impacts have been evaluated with inclusion of the proposed projects, however, in no instances were impacts of the proposed specific plan identified as the ultimate contribution which would turn an otherwise less than significant impact into a significant finding. In some situations, hydrology and air quality most notably, the significance of the project contribution is suggested to be significant even though the quantifiable contribution of the specific plan is relatively small. This finding of significance results from a situation where unacceptable conditions already exist, and any contribution, no matter how small, will aggravate efforts to correct the already unacceptable condition.

Impacts of the project which, when considered with other potential growth within the region, will result in significant cumulative impacts include traffic, hydrology, vegetation/ wildlife, air quality, and archaeology/history.

Geology and Soils

Less than Significant

Continued development of the region is not expected to alter the geologic or soils characteristics of the region. Development will substantially increase the number of people and value of property subject to earthquake damage, but this impact is considered mitigated through proper building techniques, public awareness, and emergency preparedness programs.

Hydrology.

Significant

The City of Roseville has recently had a hydrologic analysis completed. As discussed in the hydrology section of the DEIR, increases in flow anticipated with buildout of the City to **General Plan** densities are not predicted to be significant, and will not, in most cases, produce a perceivable change in water surface elevations downstream of the City. However, as also discussed in the hydrology section, severe flooding conditions have occurred near the confluence of the American, Feather, and Sacramento Rivers. This area is protected by an extensive network of agricultural levees and dikes. Continuing urban development in upstream watersheds has resulted in steadily increasing flows which threaten the dike and levee system during spring storms. Although the City of Roseville's contribution to this situation may be small, the combined impacts of many small increases throughout the watersheds could produce significant flooding problems in the downstream watersheds.

Vegetation & Wildlife.

Significant

Continued growth throughout the region will reduce the amount of undisturbed habitat available for wildlife. As urban land use progresses wildlife species which are incompatible with the urban environment will be continually displaced. It is recognized that complete mitigation of this impact is not feasible as long as development continues. Mitigation to reduce the magnitude of this land use change is discussed in the body of the DEIR and generally consists of providing habitat within the identified floodplain. Regionally, efforts should be initiated to provide continuous habitat corridors which would be more effective for wildlife than isolated areas. Similarly, stringent enforcement of leash laws and public education as to the needs of local wildlife populations can further reduce impacts.

Of particular concern is the preservation of vernal pools. As discussed in the vegetation and wildlife section of the DEIR,

such pools represent a relatively rare and rapidly disappearing natural community. Development throughout the Central Valley has extirpated thousands of pools, and proposed growth in the Roseville vicinity has the potential to essentially destroy the remaining pools in the vicinity. The SERSP includes measures to protect some pools. It has been suggested that a City-wide program be initiated to identify and preserve the most high quality pool areas. Although intent is good, preservation to date has been on a project by project basis, and the City of Roseville has not formally initiated a City wide program to facilitate preservation of these areas.

Air Quality

Significant

The Urbemis #2 model, developed by the California Air Resources Board, was utilized to estimate emissions from the proposed project, and are presented in the body of this report. The Sacramento AQMA, which includes southern Placer County, is designated as nonattainment area for ozone, and Sacramento County experiences localized violations of the CO standards. Compliance with either of these standards is not predicted by the end of 1987 as mandated by the Environmental Protection Agency. Since continued development in the region, including the proposed project, will contribute to an already existing unacceptable condition, and will further exacerbate efforts to attain the federal standards, the incremental impact of this project will be significant. As discussed in the DEIR, measures have been identified which could be utilized to reduce both project and regional air quality impacts.

Noise

Less than Significant

Although development of the region will substantially alter the noise environment, most municipalities have legislation which specifies acceptable noise levels. Measures are available to reduce unacceptable noise to acceptable standards. Because mitigation is generally readily implementable, cumulative noise impacts are judged to be less than significant.

Land Use

Less than Significant

Continued regional growth will alter the character and existing land uses, probably to a more urban setting. However, since all regional municipalities have adopted General Plans and supporting zoning ordinances, it is assumed that future change to land use will be in accordance with local legislation, and as such, is considered less than significant.

Traffic.

Significant

The traffic analysis prepared by Fehr & Peers Associates contains a detailed analysis of cumulative traffic conditions projected to result with buildout of the City of Roseville to **General Plan** densities. Although the predicted Level of Service (LOS) across the major screenlines within the City will be maintained at "C" or better, there are several intersections in the City which are expected to function at less than LOS "C". Regional traffic conditions are predicted to worsen as outlying areas surrounding the Sacramento metropolitan area continue to develop into "bedroom communities". Roadways which function as commuter routes, such as Highway 50, Interstate 80, Interstate 5, Interstate 99 and Highway 65 already experience congested conditions during daily commute periods. Continued growth of the commuter areas, including Roseville, are anticipated to exacerbate this situation. Presently, solutions to the predicted traffic conditions have not been identified. It is likely that the ultimate solution will include a combination of measures including increased use of regional transit, light rail, park and ride, flex time and extended work shifts, and construction of the proposed beltway or other regional arterials.

Utilities

Less than Significant

As individual projects are proposed for development, concerned agencies are requested to assess their "ability to serve" the proposed development. If utilities and public services cannot

be made available to a given project, it is assumed that it would not be approved for development. All concerned providers of utilities have indicated an ability to serve the proposed SERSP. On a regional scale, there are unquestionably existing problems with the delivery of water. However, the difficulty apparently stems from inadequate transportation facilities and not lack of water supply. Upgrading of facilities is assumed to correct existing deficiencies in the system. Continued development will increase the demand for resources. Techniques and methods of providing utilities have continually evolved to be more efficient, and it is likely that future facilities will continue to better utilize resources and provide services with less impact.

Visual and Aesthetic Resources

Less than Significant

The aesthetic resources of the region will change from rural to a more urban environment. This change will be interpreted by some as being negative and by others as positive. Most municipalities require dedication of floodways, parkland, and open space, as well as preservation of native trees and vegetation. Further, it is becoming common for local homeowners associations to establish architectural guidelines for future development, and for developments to include landscaped pedestrian corridors and easements. Such amenities are not intended to mitigate the loss of the natural character of an undeveloped site, but they do serve to make the urban environments which replace the natural communities attractive and aesthetically pleasing.

Archaeology and History

Significant

Archaeological and historical resources are present throughout the region. Many sites are presently unknown, others are known and protected, and others have been discovered and vandalized. Mitigation is routinely developed at the project level. Therefore, it must be assumed that everything which can feasibly be done to preserve, protect, and record sites is in

fact being implemented. However, regardless of ongoing mitigation, development of the region will slowly result in the discovery, disturbance, mitigation, and eventual disappearance of most archaeologic and historic sites. This is an unmitgatable impact associated with land use change and development.

X. THE RELATIONSHIP BETWEEN LOCAL SHORT TERM USES OF THE HUMAN ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG TERM PRODUCTIVITY.

The cumulative and long term effect of the proposed specific plan will be to introduce a residential, industrial, and commercial environment into an area which is currently in a natural condition. This change will involve a substantial alteration of both the natural and the cultural environment of the plan area. Considering that encroaching urban development has already surrounded much of the plan area, and additional development is proposed in the vicinity, development of the area appears to be the logical long term use of the area. However, as discussed in the DEIR, development of areas which support vernal pools prior to identification of mitigation could be short sighted and result in an overall loss of the inherent long term value of these habitats. The resulting impacts and potential mitigation measures are discussed at length in the various sections of the DEIR. Implementation of the mitigation measures described remains the major means available to assure the maintenance and enhancement of long term productivity for the site and affected area.

XI. ANY SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED.

The major irreversible change which will result from the proposed project will be the long term commitment of the resources of the property to the proposed uses. Off site irreversible changes will also result. These changes are described in detail in the appropriate sections and components of this EIR, and are summarized in Table B3 of the DEIR. The most notable irreversible environmental changes will include those typically associated with conversion of undeveloped area to an urban setting. Changes to the existing vegetation and wildlife communities within the plan area, loss of vernal pool habitat, the introduction of additional pollutants into the environment, and increased traffic volumes, constitute the major irreversible

impacts associated with development of the specific plan area. These irreversible impacts are largely unavoidable and will continue to occur regionally whether or not this specific plan area is implemented as described herein.

XII. OPPOSITION TO THE PROJECT.

No organizations have expressed opposition to the project, however, the Specific Plan has yet to be presented for public review. Several individual residents, most notably from the Granite Bay area, have indicated that they are opposed to the proposed increase in residential density east of Sierra College Boulevard.

XIII. PROPOSED ENVIRONMENTAL MONITORING PROGRAMS.

No monitoring programs have been proposed which are not already implemented as a result of City policies. However, a program is proposed, which may include monitoring, to identify preservation measures for, vernal pools throughout the City.

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