Salt Creek Ranch

Sectional Planning Area (SPA) Plan
Final Supplemental
Environmental Impact Report (EIR 91-03)

SCH #89092721

Prepared for:
City of Chula Vista
Environmental Review Coordinator
276 Fourth Ave.
Chula Vista, CA 92010

Prepared by:
ERC Environmental and Energy Services Co., Inc. (ERCE)
5510 Morehouse Drive
San Diego, CA 92121

February 1992

SALT CREEK RANCH
SECTIONAL PLANNING AREA (SPA) PLAN
DRAFT SUPPLEMENTAL EIR 91-03
RESPONSE TO COMMENTS

INTRODUCTION

The Salt Creek Ranch SPA Plan Draft Supplemental Environmental Impact Report (SEIR) was circulated for public review from December 9, 1991 to January 23, 1992. Final review through the State Clearing House ended on February 12, 1992 after the City of Chula Vista Planning Commission closed the public hearing on the proposed project.

The State Clearing House did not receive any comment letters from state agencies that received the Draft EIR for review. A total of 13 comment letters were received by the City of Chula Vista during the review period. Those comments are responded to on the following pages. Comment letters are in the following order.

- State of California Department of Transportation
- City of Chula Vista Fire Department
- Chula Vista Elementary School District (letters of December 18, 1991, December 5, 1991, April 9, 1990; and April 10, 1990)
- Sweetwater Union High School District
- EastLake Development Company
- Hillyer & Irwin (letters of January 13, 1992, January 21, 1992 and February 7, 1992)
- Shamir Ghattus, The Pyramids Incorporated
- Tim Wilson, Whitehawk Land Corporation (representing Watson-McCoy, Ltd.)

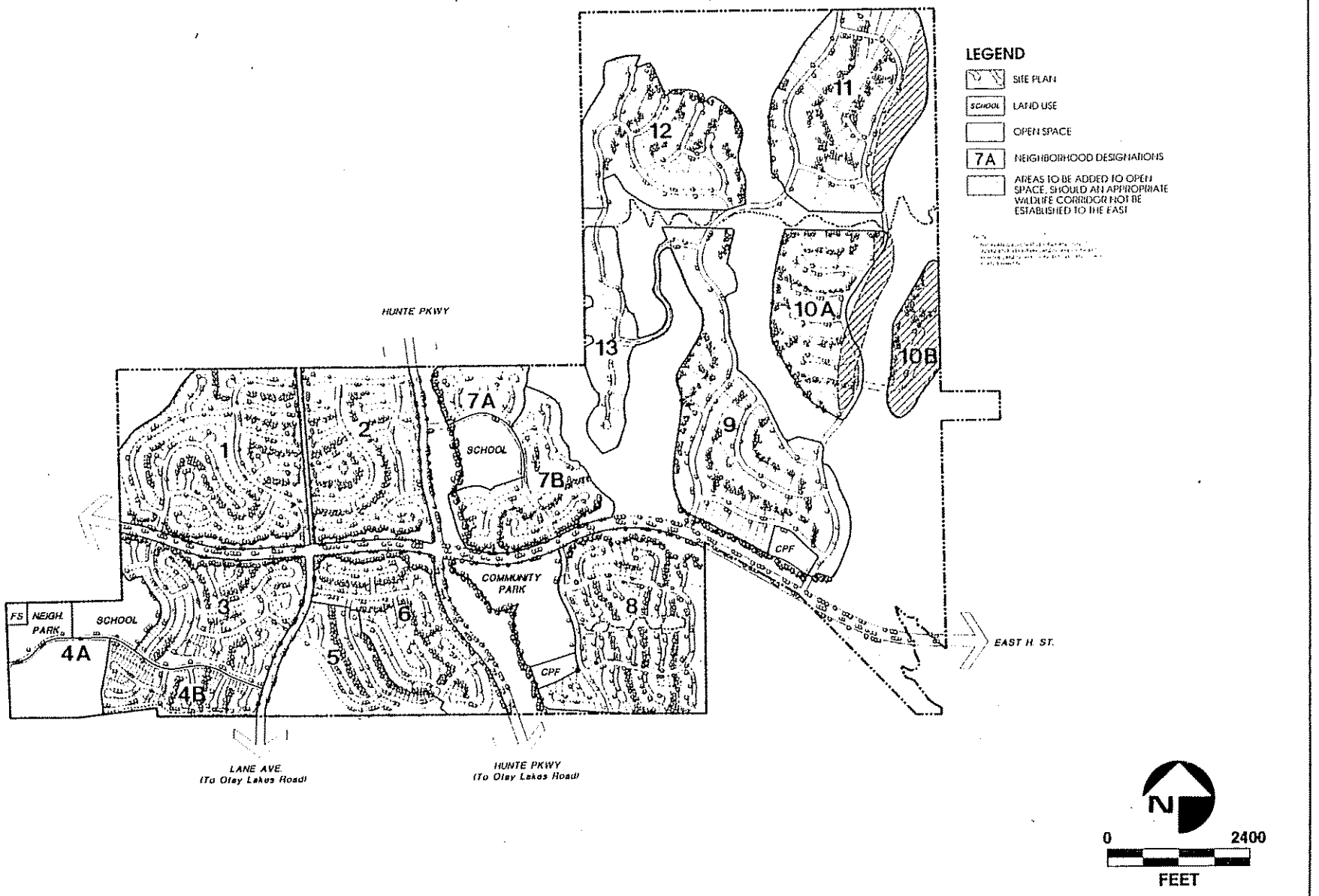
Comments on the Draft SEIR, responses thereto and the Draft EIR text with revisions comprise the Final EIR (FEIR) for the Salt Creek Ranch Sectional Planning Area Plan.

FINAL SPA PLAN DESIGN

The project proposed to be implemented is the Final SPA Plan Design Alternative discussed in Section 5.3 of the Draft EIR text. Figure R-1 depicts the Final SPA Plan and Table R-1 provides a summary of proposed land uses The Salt Creek Ranch design and final SPA document reflect numerous changes provided through extensive City involvement with the applicant and the applicant's consultants throughout preparation of the SPA Plan. Modifications included changes to the internal circulation system, ridgeline development design, and residential clustering. The modifications serve as mitigations; they do not create new issues or impacts over those issues analyzed for the proposed project discussed in Section 3 of the Draft EIR. The Final SPA Plan design is discussed below.

The Final SPA Plan design would maintain the same acreage (1,197.2) as the proposed project. However, the amount of acreage allotted for residential, open space and institutional development would be redistributed. The Final SPA Plan design includes 2,662 dwelling units which is 155 less than the proposed project. The residential density of 3.6 dwelling units per acre will not change.

The site would be divided into 3 subareas with a total of 16 neighborhoods. Each neighborhood would maintain the same physical setting, community facilities and character, as the proposed project except for neighborhoods 4a, 5 and 6 within Sub-Area 1. The overall numbers of dwelling units developed in Sub-Area 1 is 185 less for the Final SPA Plan design. The number of acres for neighborhood 5 has increased by 10.6 acres with less land (12.3 acres) being developed as townhomes and more land (22.7 acres) developed for single-family homes. This neighborhood would serve as a transition from multi-family to single family.



SOURCE: The Baldwin Company, 1991

ERCE

Site Plan for Final SPA Plan

FIGURE
R-1

Table R-1

SALT CREEK RANCH
LAND USE SUMMARY

Proposed Use	Designation	Neighborhood Number	Number of D.U.s	Gross Acreage	D.U.s/ Gross Acre
Residential Land Uses					
	GDP				
	L	7b	138	39.6	3.5
	L	8	242	76.5	3.2
	L	9	143	88.6	1.6
	L	10a	56	42.4	1.3
	L	10b	16	15.2	1.05
	L	11	85	72.7	1.2
	L	12	97	55.3	1.8
	L	13	43	20.2	2.1
Subtotal:			820	410.5	1.9
	LM	1	341	85.5	4.0
	LM	2	223	58.7	3.8
	LM	3	263	50.3	5.2
	LM	6	222	49.0	4.5
	LM	7a	58	13.1	4.4
	*LM	5	211	35.0	6.0
Subtotal:			1,318	291.6	4.5
	M	4a	390	21.7	17.9
	M	4b	134	25.9	5.2
Subtotal:			524	47.6	11.0
Residential Subtotal:			2,662	749.7	3.6
Non-Residential Land Uses					
Parks/Open Space					
	Open Space		N/A	351.1	N/A
	Neighborhood Park		N/A	7.3	N/A
	Community Park	N/A	22.0	N/A	
Subtotal:				380.4	

Table R-1 (Continued)

SALT CREEK RANCH
LAND USE SUMMARY

Proposed Use	Designation	Neighborhood Number	Number of D.U.s	Gross Acreage	D.U.s/ Gross Acre
Public Facilities:					
	Schools		N/A	23.1	N/A
	Fire Station		N/A	1.0	N/A
	Community Purpose Facility Sites		N/A	7.0	N/A
Subtotal:				31.1	
	Major Streets:			36.0	
Non-Residential Total:				447.5	
PROJECT TOTAL:			2,662	1,197.2	2.2

* LM use at highest allowable density of LM category.

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11, P.O. BOX 85406, SAN DIEGO, 92186-5406

January 21, 1992

11-SD-125
0.0/11.2

Mr. Douglas D. Reid
Environmental Review Coordinator
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 92010

Dear Mr. Reid:

Draft Supplemental EIR for the
Salt Creek Ranch SPA Plan
SCH 89092721

Caltrans District 11 comments are as follows:

R-6

1. • Page 1-4, Issue to be Resolved: A discussion of the issue of future State Route 125 (SR-125) is needed here. That discussion should clarify that all references to project coordination with SR-125 are based upon an as yet to be determined location for that highway. Moreover, it needs to be stated that potential SR-125 alignments to the east of the Sweetwater Reservoir are likely to be incompatible with the subject project.

2. • Page 3-60: The current average daily traffic (ADT) for SR-54 between Interstate 5 (I-5) and I-805 is 56,000. The other counts (paragraphs three and four) tend to be low by approximately 3,000 ADT.

3. • Tables 3-10, 3-12: Additional information needs to be provided for an analysis of mainlane levels of service (LOS) during peak periods. For example, Table 3-12 needs to be expanded to indicate that I-805 north of H Street will operate at deficient LOS F0.

4. • Page 3-106: The 2010 Transportation Concept Report (TCR) will depict SR-125 as a six lane facility between East H Street and SR-54. For additional information on the TCR, LOS's, and ADT's contact Al Cox, Planning Studies Branch, (619) 688-6003.

5. • Riparian habitat areas need to be protected from the introduction of exotic species (page 3-17). Our experience has been that habitat values are degraded by the intrusion of exotics.

6. • A wildlife management plan that includes adequate provisions for cumulative impacts and major additions to infrastructure, including SR-125, needs to be provided and implemented. We are particularly concerned that major land use decisions in the SR-125 study area could impinge upon sensitive wildlife habitats and connecting corridors. Those decisions would probably complicate and prolong environmental approval for SR-125.

1. The Draft EIR text has been revised to include this issue to be resolved (see page 1-6).

2. The Draft EIR text and the Traffic Analysis (Appendix D) have been revised to reflect these changes.

3. Comment noted. Tables 3-10 and 3-12 are intended to compare ADT volumes between Year 1995 base volumes and Scenarios 1 and 2 and were not intended to represent levels of service on these facilities.

4. Comment noted. The traffic analysis did not project to road geometrics for the year 2010.

5. Exotic weed control for riparian areas will be implemented as discussed in the Habitat Enhancement Plan (Appendix A of the EIR).

6. Comment noted. This is not within the scope of this Supplemental EIR. This issue should be addressed in the EIR for SR-125. It should be noted that the City of Chula Vista is an active participant in the preparation of the Natural Communities Conservation Plan (NCCP).

JAN-23-1992 15:54 FROM RADIO ROOM TO 9691571 P.02

- The final SEIR should be coordinated with our agency for the analyses of the projected growth threshold and the proposed construction of a portion of SR-125 as a mitigation measure for Salt Creek Ranch.

7.

Our contact person for future SR-125 in this area is Bill Ojeda, Deputy District Director, Privatization, (619) 688-3161.

Sincerely,

JESUS M. GARCIA
District Director

By

for BILL DILLON, Chief
Planning Studies Branch

7. Comment noted. The City of Chula Vista is coordinating with CalTrans with the consideration of projects in eastern Chula Vista and the project is being considered with the Eastern Chula Vista Transportation Phasing Plan.

R-7

Doug Reid

Chula Vista Fire Department
Bureau of Fire Prevention

RECEIVED
PLANNING

Draft EIR 91-03 PLAN CORRECTION SHEET

Address Salt Creek Ranch Plan File No. _____ Checker Doug Date 12/27/91

Type Constr. _____ Occupancy _____ No. Stories _____ Bldg. Area _____

The following list does not necessarily include all errors and omissions.

PROVIDE AND SHOW ON PLAN:

Pg 3-25 figure 3-8

8. Provide turn-outs for fire apparatus. Ridgetop development may exceed nationally recognized standards for fire apparatus access; i.e. Roadway Gradients exceeding 15% and extremely lengthy cul-de-sacs.

Pg 3-121

9. Hydrant pressures shall not exceed 150 psi.

10. Provide details on fuel modification program.

11. Know codes required for gated communities.

12. Fire sprinkler systems may be required for some areas.

8. Comment noted. These requirements are recommended to be conditions of project approval of the SPA Plan.

9. Comment noted. These requirements are recommended to be conditions of project approval of the SPA Plan.

10. A fuel modification plan for the proposed project has been prepared and is contained in the SPA Plan document.

11. Comment noted. These requirements are recommended to be conditions of project approval of the SPA Plan.

12. Comment noted. These requirements are recommended to be conditions of project approval of the SPA Plan.

FD-648

R-8

CHULA VISTA ELEMENTARY SCHOOL DISTRICT

84 EAST "J" STREET • CHULA VISTA, CALIFORNIA 91910 • 619 425-9600

EACH CHILD IS AN INDIVIDUAL OF GREAT WORTH

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SUPERINTENDENT

JOHN F. MCGRAN, Ph.D.

December 18, 1991

Mr. Duane Bazzel
Associate Planner
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RE: Salt Creek Ranch Draft Supplemental EIR-91-03

Dear Mr. Bazzel:

Thank you for providing a copy of the Draft Supplemental EIR for the Salt Creek Project. In an earlier letter, dated December 5, 1991, I stated it was not possible to review the Public Facilities Section dealing with schools since a copy of the Public Facilities Financing Plan was not provided. As stated previously, it is essential that we fully review this document relative to how school facilities will be provided.

13.

The Draft Supplemental EIR states that schools do not require further analysis beyond that discussed in EIR 89-3. The District had many comments on the Schools section of EIR 89-3 which are summarized on the attached copy. To my knowledge, these questions have not been resolved, nor has the very significant issue of when financing for schools must be secured. This was discussed in my December 5 letter (copy attached).

14.

The Draft Supplemental EIR states a total of 2817 dwelling units are proposed; the notice of community forum gives this number as 2662. This needs to be clarified.

15.

If you have any questions, please contact me.

Sincerely,

Kate Shurson

Kate Shurson
Director of Planning

KS:dp

cc: Tom Silva
Tom Meade
Carl Kadie

R-9

13. Comment noted. A copy of the Public Facilities has since been submitted to the Chula Vista Elementary School District.

14. These issues were addressed in the Salt Creek Ranch Annexation/General Development Plan/Pre-Zone Final Environmental Impact Report dated August 1990 on file with the City of Chula Vista Planning Department.

15. The 2,817 dwelling units were identified for the proposed project in the Draft EIR. However, the Final SPA Plan design which proposes 2,662 dwelling units is the proposed project in the Final EIR.

CHULA VISTA ELEMENTARY SCHOOL DISTRICT

84 EAST "J" STREET • CHULA VISTA, CALIFORNIA 91910 • 619 425-9600

EACH CHILD IS AN INDIVIDUAL OF GREAT WORTH

December 5, 1991

Mr. Duane Bazzel
Associate Planner
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RE: Salt Creek Ranch SPA Plan (PCH-91-04)

Dear Mr. Bazzel:

Thank you for the opportunity to review and comment on the Salt Creek Ranch SPA Plan.

Section 7.6 of the Public Facilities Section briefly mentions schools, and defers detailed discussion to the Public Facilities and Financing Plan which has not been provided at this time.

Based on the information presented, I offer the following comments:

R-10

16. The estimated number of elementary students, 719, is incorrect. The District-wide generation rate is 0.3 students per dwelling unit, or 799 students.

The report proposes two elementary school sites of approximately 10 acres each. The District's standards require ten net usable acres.

In addition, the City's Growth Management Program requires that financing for needed school sites and facilities be secured at the SPA Plan level. The District has recommended participation in a Hello-Roos Community Facilities District to provide necessary funding. These proceedings must be initiated by the project applicant. We have had no recent contact with the Baldwin Company in this regard.

I am looking forward to receiving the Public Facilities Plan, hopefully in time to permit full review so that comments may be incorporated into the report to the Planning Commission.

Sincerely,

Kate Shurson

Kate Shurson
Director of Planning

KS:dp

Tom Silva

16. Comment noted. These revisions have been incorporated in the Public Facilities Phasing Plan.

CHULA VISTA CITY SCHOOL DISTRICT

84 EAST "J" STREET • CHULA VISTA, CALIFORNIA 92010 • 619 425-9600

EACH CHILD IS AN INDIVIDUAL OF GREAT WORTH

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SUPERINTENDENT

JOHN F. VUGRIN, Ph.D.

April 10, 1990

Mr. Doug Reid
Environmental Review Coordinator
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 92010

17. RE: Case No. EIR-89-3
Salt Creek Ranch - Annexation/General Development Plan
Pre-Zone Draft EIR (ECI/CIR 89-3)

Dear Mr. Reid:

Thank you for the opportunity to review and comment on the Draft General Development Plan (GDP) and Draft EIR for Salt Creek Ranch.

In reviewing the document relative to elementary schools, I note that the data presented regarding elementary facilities is quite out of date and/or incorrect. My comments follow.

R-11

Page 3-110 - Chula Vista City School District is comprised of 32 elementary schools, not 29, with current enrollment at 17,287.

Parkview, Rogers and Kellogg, schools cited as being near the project, are nowhere near the site. All three are located south of Telegraph Canyon, and Kellogg is west of the 805. The closest existing schools are EastLake Elementary, Tiffany and Sunnyside, all of which are at capacity or projected to be prior to any construction on Salt Creek Ranch.

The new facility described as planned on Hillside Drive is nearly complete (EastLake Elementary) and scheduled to open in 1990. The District's next school is in the Terra Nova neighborhood, not in Rancho Del Rey. Its opening is anticipated in September, 1991.

The school located on Buena Vista Way is named Chula Vista Hills, and has a current enrollment of 506.

The District has added 25, not 19, new relocatable classrooms and several trailers over the past few years to accommodate growth.

The discussion on funding elementary facilities incorrectly references Sweetwater Union High School District instead of Chula Vista City School District. In addition, developer fees allowed by State law were established at $1.50 per square foot in 1987. They have been increased three times since then and are currently at $1.58. Chula Vista City School District's share is $ .70. This section is much too weak on how elementary facilities are to be financed. In numerous

17. Comment noted. These changes were incorporated into the Final EIR for the Salt Creek Ranch Annexation/General Development Plan (EIR 89-3)

correspondences, the District has stated that fees are inadequate and there are no existing facilities to serve the project. Alternative financing mechanisms, such as formation of a Mello-Roos Community Facilities District, are required in order to provide elementary facilities.

The impacts section utilizes an incorrect student generation factor. The District utilizes a .3 student/dwelling unit rate. Using this figure yields a total of 1093 elementary students at buildout, 20 percent short of two full schools. In addition, no facilities were provided for Salt Creek I, and it has been understood by the District and the developer that children from these 550 units will be accommodated at schools within Salt Creek Ranch.

The General Development Plan shows the wrong location for one of the elementary sites (Table 2-5, not 2-4 as cited). The location shown was initially proposed and rejected. Discussions with the developer are ongoing, with one school proposed to be located in the southwest area of the project, south of East H and West of Lane Avenue. The second school is proposed to be north of East H, in the residential area east of Hunte Parkway. This map appears to be very outdated. The Baldwin Company should be contacted for current information.

This document needs revision to provide correct data. It's inadequate in terms of elementary schools in its present form.

If you have any questions, please contact me.

Sincerely,

Kate Shurson

Kate Shurson
Director of Planning

KS:dp

cc: Tom Silva
Jim Harter

R-12

CHULA VISTA CITY SCHOOL DISTRICT

MEMORANDUM

DATE: April 19, 1990

TO: Doug Reid

FROM: Kate Shurson Kate

RE: Case No. EIR-89-3
Salt Creek Ranch - Annexation/General Development Plan
Pre-Zone Draft EIR (EC[illegible]R 89-3)

Please note that in my letter to you dated April 10, 1990, the third paragraph states that the ".....Chula Vista City School District is
18. comprised of 32 elementary schools, not 29, with current enrollment at 17,287." This paragraph should read ".....Chula Vista City School District is comprised of 31 elementary schools....."

I inadvertantly included one of our special education schools in the total count. Sorry for the inconvenience this might have caused you.

KS:dp

cc: Tom Silva
Jim Harter

R-13

18. Comment noted. Please refer to response #17.

Sweetwater Union High School District

ADMINISTRATION CENTER
1130 Fifth Avenue
Chula Vista, California 91911-2896
(619) 691-5500

Division of Planning and Facilities

December 16, 1991

RECEIVED
DEC 23
PLANNING

Mr.Douglas D. Reid
Environmental Coordinator
City of Chula Vista
Planning Department
276 Fourth Avenue
Chula Vista, CA 91910

Dear Mr. Reid:

Re: Salt Creek Ranch Supplemental Environmental Impact Report
EIR 90-03

R-14

Thank you for providing me with a copy of the Supplemental Environmental Impact Report for the proposed Salt Creek Ranch project. Although our concerns were made known when reviewing the Salt Creek Ranch Annexation/General Development Plan Pre-zone Environmental Impact Report (E.I.R. 89-3), it is appropriate to reiterate them at this time.

For a project of this size, approximately 772 new students should enter into district classrooms. The following is a breakdown of the student yield by grade level.

Housing Units	**High Sch. (9-12)**	**Junior High (7-8)**	**Total**
Student Yield	*0.10 Students/Unit*	*0.19 Students/Unit*	*0.29 Students/Unit*
2662 Units	266 Students	506 Students	772 Students

In reviewing the general development plans for both Salt Creek Ranch and San Miguel Ranch, the district had identified a need for a new 50 acre high school site in the northern part of the eastern territories. The Baldwin Company responded by pledging to provide classroom space in the Otay Ranch project commensurate to the need caused by the Salt Creek Ranch project.

The cost of a new high school is $37,975,000 and the cost for a new junior high is $16,688,00; of course, Salt Creek Ranch would be responsible for it's pro-rata share of the costs of the schools. Traditionally, the district has established the financing via the implementation of a Mello Roos Community Facilities District as well as requiring the developer/builder to provide the district with a prepared site. The same terms shall be applied to the Baldwin agreements.

To mitigate the impact Salt Creek Ranch will have on district classroom
19. space, I am requesting that the city condition any project approval subject to the following:

- That Baldwin's commitment to provide actual classroom space in the Otay Mesa western parcel be upheld.
- That the Salt Creek Ranch Project establish and participate in a school facility financing plan which is acceptable to the Sweetwater Union High School District.

I hope this information is of assistance to you. If you have any questions, please feel free to call me at 691-5553.

Sincerely,

Thomas Silva
Assistant Director of Planning

TS/rl
Enclosure

cc: Kate Shurson - Chula Vista City Schools

19. Comment noted. This is included in the Public Facilities Phasing Plan and will be a condition of project approval.

January 22, 1992

Mr. Doug Reid
CITY OF CHULA VISTA
P.O. Box 1087
Chula Vista, CA 91912

RE: Salt Creek Ranch EIR

Dear Mr. Reid:

We have reviewed the draft EIR for Salt Creek Ranch and appreciate the opportunity to comment. While these comments may be more appropriately addressed in the SPA Plan, we would like you to consider the following:

1. The adopted EastLake I PC District regulations allow a number of uses in the EastLake Business Center such as manufacturing, auto services, etc. Our ability to market and sell
20. the Business Center parcels should not be impacted by Salt Creek Ranch. Our land use entitlements should not be jeopardized by the proposed project. We therefore recommend the following:

   A. A sound study be conducted at the time of tentative map, but only for those areas where Salt Creek Ranch's proposed residential development abuts EastLake's approved industrial uses. The study and required mitigation will be the responsibility of the Salt Creek Ranch developer at the time either party processes a tentative map.

   B. We recommend that prior to the sale of units in neighborhoods 5 and 6, sales disclosure documents be required which identify the allowable uses in the EastLake Business Center.

2. A 20" reclaimed water line servicing EastLake Greens traverses the project. If the line must be relocated due solely to construction
21. of the Salt Creek Ranch project, then Baldwin should be responsible for the actual costs of relocating that line without interruption of service.

R-16

EASTLAKE DEVELOPMENT COMPANY

900 Lane Avenue
Suite 100
Chula Vista, CA 91914
(619) 421-0127
FAX (619) 421-1830

20. Comment noted. The City of Chula Vista through its noise ordinance (Section 19.68.0300) has established maximum permissible sound levels for a receiving land use. The sound level limit is based on hourly equivalent sound levels (Leq) and is a function of the receiving land use category and the time of day. The ordinance states that no person shall operate or cause to be operated, any source of sound at any location within the city or allow the creation of any noise on property owned, leased, or occupied or otherwise controlled by such person, which causes the noise level to exceed the environmental and/or nuisance interpretation of the applicable limits given in Table 3 of section 19.68.030. Specific sound levels are identified. It is, therefore, the responsibility of the EastLake Business Center to comply with the applicable sound level limits and exceedance of standards shall not occur beyond the Business Park property line. It is not the responsibility of Salt Creek Ranch to mitigate noise from the business center that exceed those limits.

21. Comment noted. If it becomes necessary to relocate the line, the project applicant will be responsible for the relocation of the line and insuring that service is not interrupted during the relocation effort. This requirement is recommended to be a condition of approval of the site plan.

3. At this time we have not had the opportunity to review the PFFP for the project. We must
22. reserve comments on facility-related issues pending our receipt and review of the above document.

Thank you for your consideration.

Sincerely,

EASTLAKE DEVELOPMENT COMPANY

Katy Wright

Katy Wright
Project Manager, Community Development

KW:td

cc: Ms. Claudia Troisi, The Baldwin Company
Mr. Duane Bazzel, Otay Ranch Project Office

22. Comment noted.

R-17

WILLIAM HILLYER
OSCAR F. IRWIN
NORMAN R. ALLENBY
HENRY J. KLINKER
BROWN S. SMITH
JAMES G. EHLERS
JAMES E. DRUMMOND
PETER J. IPPOLITO
GARY S. HARDKE
HOWARD A. ALLEN
ROBERT J. HANNA
KENT W. HILDRETH
JONATHAN S. DABBIERI
HOWARD E. BUSHMAN
DAVID S. HOPKINS
ROBERT L. ZAJAC
CHARLES J. INGBER
MICHAEL F. MILLERICK
[illegible] S. LEWIS
JOHN C. O'NEILL
STEVEN M. HILL
DONALD L. CUPIT
MARK G. BUDWIG

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LINDA K. HAMMACKER
LORNE R. POLGER
CRAIG A. BROWN
ROBIN H. STEMEN
DAVID B. BERGQUIST

R. DAVID MULCAHY
DIRECTOR OF ADMINISTRATION

RECEIVED
JAN 15 1992

January 13, 1992

IN REPLY REFER TO
OUR FILE
9302.1

Mr. Bob Leiter
Planning Department
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

R-18

Re: Proposed Salt Creek Ranch
Access to Property Identified by Assessor Parcel Nos. 585-091-13, 585-140-11, 585-140-17, 585-150-09 and Others North and East of Salt Creek Ranch

Dear Mr. Leiter:

This law firm represents The Pyramids, Inc. The Pyramids owns four separate parcels of property north of Salt Creek Ranch and east of the Otay Municipal Water District property.

As you know, the City of Chula Vista is processing a 1,201 acre Salt Creek Ranch General Development Plan proposal submitted by The Baldwin Company. The project is located north and south of Proctor Valley Road, and currently provides easements for access to The Pyramids' property and the property of others immediately north and east of the project site.

By letter dated June 26, 1990, to The Pyramids, Senior Planner Duane Bazzel expressed the concern of the City that access to the property immediately north and east of the project be guaranteed. Mr. Bazzel expressed the City's desire to maintain legal access and to avoid creating "a condition that would constrain appropriate size access for future potential development." The plan proposed by Baldwin does not provide adequate access to those properties to the north and east of the project site, and threatens to hamper or make impossible altogether the development of those parcels.

The Baldwin plan proposes a single access for all properties to the north located in the eastern third of their north property line. This access is adequate to serve the most northerly Pyramids parcel, parcel no. 585-091-13. However, this access is totally unsuitable for three other parcels owned by The Pyramids (parcel nos. 585-150-09, 5850140-11, and 585-140-17) and properties owned by others to the west of the proposed access. The access is inadequate for at least the following reasons:

1. Environmental Concerns. To reach the three westerly Pyramids parcels and other parcels north of the Baldwin property from the proposed Baldwin north-south access, it will be necessary to develop access in a westerly direction. Baldwin's
23. plan recognizes this. However, Baldwin's plan fails to consider the environmental problems created by the westerly access. Specifically, that access must cross a wet creek. The problems are exacerbated by the designation of part of the land over which the access to the west is planned as "open space." The Pyramids will provide separately to your department an analysis of the environmental problems which will result from that access.

2. Prescriptive Easement. The Baldwin plan fails to recognize that The Pyramids has a prescriptive easement running
24. directly south from its westerly properties. This easement is noted in grant deeds to the property. It is clearly established by the continuous use of the easement by The Pyramids and its predecessors-in-interest. Aerial photographs of the area evidence continuous and open use of the easement.

Whether or not the proposed Baldwin access is feasible from the environmental standpoint, The Pyramids has an enforceable legal right to access directly north through the Baldwin property. The Baldwin plan must allow for this access. As currently configured, it does not.

3. Inadequacy of Proposed Road. Aside from the location of the access proposed by Baldwin, the actual proposed roadway is inadequate to service the properties to the north. The Baldwin plan rests on the assumption that the 400 acres of the properties
25. north of Salt Creek Ranch would accommodate 100 units. In fact, the 186 acres owned by The Pyramids alone will accommodate approximately 100 lots. Baldwin's plan is apparently based on the erroneous premise that four-acre lots will be required on the northern properties. Conversely, Baldwin's plan envisions approximately 2.5 lots per acre in its development. Baldwin also has failed to perform a slope analysis of the northern properties, and fails to take into account additional permissible

R-19

23. The issue of access was addressed during the General Development Plan (GDP) environmental review process for the Salt Creek Ranch project. The Final EIR for the GDP was certified in September 1990. The Chula Vista City Council approved the Salt Creek Ranch GDP and certified the related Final EIR (EIR 89-3) in September 1990. The administrative record from the GDP environmental review process contains correspondence and other documents relating to access for properties north of the Salt Creek Ranch project site. In addition, the record contains the Salt Creek Ranch GDP, which includes the traffic circulation plan (Figure 36) showing the approved access points, and a slope encroachment analysis (Figure 25) illustrating onsite slope constraints affecting the access points. This slope analysis illustrates that the approved access point avoids encroachment into areas to the north which are located within a 25 percent slope area. The record also contains the Final EIR for the Salt Creek Ranch GDP. The Final EIR shows that onsite biological constraints (primarily coastal sage scrub) eliminated other reasonable or feasible alternate access points. The approved Salt Creek Ranch GDP and related Final EIR also illustrate that alternate access points to the north would now encroach into designated onsite open space areas. The Salt Creek Ranch GDP, the Final EIR and the record from the GDP environmental review process are available for public review at the City's Planning Department located at 276 Fourth Avenue, Chula Vista, California.

Based on existing available information for onsite sensitive resources and offsite conditions, the access that is identified in the SPA Plan EIR is consistent with the access analyzed in the Final EIR for the GDP and is considered to be adequate to serve the properties north of the project site. Further analysis of offsite development access will require among other things, the submission of proposed development plans (none submitted to date), the documentation of offsite constraints and independent environmental review at that time.

24. Comment noted. Possible disputes over property rights between the project applicant and surrounding property owners are beyond the scope of CEQA and this project-specific EIR. However, it is our understanding that the project applicant will address property rights issues contained in this correspondence. The applicants's correspondence will be made part of the record of this EIR.

25. The proposed 60-foot roadway in Sub-Area 3 of the Salt Creek Ranch project can accommodate project ADT as well as additional ADT that would be generated by development north of the project site. The roadway is proposed as a Class III Residential Collector Road with an individual capacity (LOS C) totalling 7,500 ADT. The total number of ADT estimated to use this roadway within the project is approximately 2,600 ADT (260 units). Therefore, the remaining capacity to serve offsite areas to the north is 4,900 ADT (490 units). Based on the existing County of San Diego General Plan designation and preliminary analysis of environmental constraints for the approximately 400 acres north of Salt Creek Ranch, this capacity is more than adequate to serve potential development north of the project site.

lots resulting from the dedication of open space on those properties.

In view of the actual number of lots that are likely to be developed on the properties north of the Baldwin property, it is clear the 60-foot wide road proposed by Baldwin is inadequate.

In summary Baldwin's plan fails to take into account the environmental problems resulting from its proposed access, ignores The Pyramids' easement by prescription for a more direct access, and proposes an access roadway design which is inadequate to serve anticipated development.

We appreciate the City's concerns regarding access to the properties north of Salt Creek Ranch. The Pyramids requests that the City critically examine the Baldwin plan in light of the issues raised in this letter.

R-20

On a related issue, The Pyramids objects to that portion of the Supplemental Environmental Impact Report for the proposed Salt Creek Ranch Sectional Planning Area Plan insofar as it incorrectly designates portions of The Pyramids' property as open space. Those erroneous designations appear on figures 1-1, 1-6, 3-1, 3-7 and 5-3 of the SEIR. Again, The Pyramids requests that it be included in the comprehensive LAFCO Sphere Plan Update for Chula Vista scheduled for initiation in 1992.

The Pyramids will provide additional information concerning these matters before and at the hearing on January 22, 1992, and will be pleased to respond to any requests for information from your department.

Very truly yours,

John C. O'Neill

JO'N:mfm

cc: Duane E. Bazzel
Richard L. Cruzen
Samir Ghattas
The Baldwin Company

WILLIAM HILLYER
OSCAR F. IRWIN
NORMAN R. ALLENBY
HENRY J. KLINKER
BROWN S. SMITH
JAMES Q. EHLERS
JAMES R. DRUMMOND
PETER J. IPPOLITO
GARY S. HARDKE
HOWARD A. ALLEN
ROBERT J. MANNA
KENT W. HILGRETH
JONATHAN S. DABNIERI
HOWARD S. BUSHMAN
DAVID B. HOPKINS
ROBERT L. ZAJAC
CHARLES J. INGBER
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NANCY J. BROYHOLT
TAD SETH PAREEN
JAMES M. CADY
ROBERT J. LOFGREN
RANDA M. TRAPP
FLYNN R. WIGGINS
TIMOTHY J. NASH
LINDA A. HAMMACHER
LORNE A. POLGER
CRAIG A. BROWN
ROBIN M. STEMEN
DAVID B. BERQUIST

R. DAVID MULCAHY
DIRECTOR OF ADMINISTRATION

January 21, 1992

IN REPLY REFER TO
OUR FILE
9302.1

Mr. Bob Leiter
Planning Department
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

R-21

Re: Proposed Salt Creek Ranch
Access to Property Identified by Assessor Parcel Nos. 585-091-13, 585-140-11, 585-140-17, 585-150-09 and Others North and East of Salt Creek Ranch

Dear Mr. Leiter:

Please consider my letter to you dated January 13, 1992, a
26. formal protest to the Environmental Impact Report submitted by The Baldwin Company for the proposed Salt Creek Ranch Sectional Planning Area Plan.

Thank you for your consideration.

Very truly yours,

HILLYER & IRWIN

John C. O'Neill

JO'N:ccl

cc: Duane E. Bazzel
Richard L. Cruzen
Samir Ghattas
The Baldwin Company

Ltr Leiter 1/21

26. Comment noted. Please refer to responses 23 - 25.

WILLIAM HILLYER
OSCAR F. IRWIN
NORMAN R. ALLENDY
HENRY J. KLINKER
BROWN B. SMITH
JAMES C. EHLERS
JAMES E. DRUMMOND
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TIMOTHY J. NASH
LINDA K. HANNACHER
LORNE R. POLDER
CRAIG A. BROWN
ROBIN M. STEMEN
DAVID B. BERQUIST

R. DAVID MULCAHY
DIRECTOR OF ADMINISTRATION

February 7, 1992

IN REPLY REFER TO
OUR FILE
9302.1

Via Telecopier

Mr. Duane E. Bazzel
Senior Planner
City of Chula Vista Planning Department
276 Fourth Avenue
Chula Vista, CA 91910

Re: Proposed Salt Creek Ranch Access

R-22

Dear Mr. Bazzel:

I am responding to your letter of February 3, 1992, on behalf of The Pyramids, Inc. Specifically, you asked for a statement of the environmental problems which will result from access originating from the Watson parcel. I have been provided the following information by The Pyramids, Inc. and its environmental consultant.

27. The access route proposed by The Baldwin Company to The Pyramids' properties is unacceptable due to its environmental impact on streams existing on the Watson-McCoy property. The USGS Quadrangle Map for the area shows two streams in blue. The designation indicates the streams are considered "waters of the United States." The streams fall under the jurisdiction of section 4.04 of the United States Clean Water Act of 1973, and section 1603 of the California Fish & Game Code. Any modification to the streams or their banks requires a federal and/or state permit.

The Baldwin proposed route to serve all affected properties angles northeast from the Baldwin property. The route follows a currently used trail leading to the northern parcel of property owned by The Pyramids. In the southeast section of the Watson-McCoy parcel, there is a wetlands which should not be disturbed. Without a cross-back to the west from the northeasterly proposed access, that access would serve only the northern parcel. To cross back to the west to gain access to the

27. Based on available technical studies for the area north of the project site (on the Watson property) and the proposed roadway connection, the proposed access to areas north of the proposed site was determined to be adequate during the GDP environmental review process. Additionally, the proposed offsite access road was realigned to avoid sensitive biological and cultural resources that were identified in additional offsite field work conducted during preparation of the Supplemental EIR for the SPA Plan. In addition, please refer to response #23.

HILLYER & IRWIN
A PROFESSIONAL CORPORATION

westerly parcels would require that at least one, and possibly two, stream beds be crossed. One of the streams that would certainly have to be crossed is steep-sided. The crossing would require substantial construction and grading, with further adverse impacts on the environment. In addition, the cost would be prohibitive.

Crossing or modifying these streams would have an adverse impact on the environment, and will likely require mitigation. The approval process will be extraordinarily expensive, and there are no assurances that approvals will be obtained. It is for many of these same reasons that the western portion of the Watson-McCoy parcel has been designated open space. It is simply not feasible to access through that portion of the parcel. In any event, the costs of mitigation and excessive construction costs should not be the responsibility of The Pyramids, when a more efficient alternative is available.

R-23

28. As stated in my letter of January 13, 1992 to Messrs. Tony Lettieri and Bob Leiter, The Pyramids has a prescriptive easement running directly south from its westerly properties. Aside from the existence of an enforceable legal right to use this access, it is the better access from an environmental standpoint. This existing direct access will not have the same adverse environmental impact because it will not require the construction of bridges or other alterations to the streams on the affected properties. Direct access will serve the western properties of the Pyramids and properties of several other owners in a far more efficient and environmentally safe manner than will the access proposed by The Baldwin Company.

I trust that the above information is responsive to your letter of February 3. Please contact either me or Mr. Ghattas of The Pyramids if we may provide further information.

Very truly yours,

John C. O'Neill

JO'N/jw
cc: (Via U.S. Mail)
Mr. Samir Ghattas
Mr. Bob Leiter
Mr. Tony Lettieri
Mr. Richard Cruzen
The Baldwin Company

28. Please refer to response #24.

THE PYRAMIDS INCORPORATED

Objections to the
Proposed Salt Creek Ranch
Sectional Planning Area Plan Seir 90-03

29. 1. The supplemental environmental impact report does not address the traffic from the northerly properties. Does the traffic analysis take into account these properties and is 60 foot wide road adequate?

29. Please refer to response #25.

2. Road Access.
30. The proposed access by Salt Creek Fig 37 of the Salt Creek Ranch, GDP depicts this access as Watson McCoy, yet there are twenty other properties to the north and west of Salt Creek Ranch.

30. Please refer to response #23.

3. This proposed access fails to consider environmental and topographical
31. problems in using this access to serve properties west of the proposed access.

31. Please refer to response #23.

4. The Baldwin plan does not take into account the Pyramids or other properties
32. prespricitve easement noted in grant deeds and clearly established by continuous use of the property owners. Aerial photographs of the area evidence continuous use of the easement.

32. Please refer to response #24.

5. The Seir on figures 1-1, 2-6, 3-1, 3-7 and 5-3 lable our property as open
33. space. City Planning Department staff admit that is a wrong lable. It should be changed to vacant land.

33. Revisions have been made to Figures 2-1, 2-6, 3-1, 3-7 and 5-3 in the Draft EIR.

R-24

5232 Jackson Drive Suite 205 • La Mesa, CA 92041 • USA
181088 BLUE SEAS • Telefax 619/466-8766 • Telephone 619/466 8700

January 22, 1992

Mr. Bob Leiter
Planning Department
City of Chula Vista
276 4th Ave.
Chula Vista, Ca. 91910

Re: Salt Creek Ranch EIR & its proposed access to property identified by parcel no. 585-120-02

Dear Mr. Leiter:

I represent the Watson McCoy Ltd. ownership of 160 acres known as Lakeview Ranch. The property is located north & east of Salt Creek Ranch.

In response to Draft Environmental Impact Report EIR-91-03, Salt Creek Ranch SPA, item #3, City Planning Commission Agenda of January 22, 1992:

Please be advised that the access proposed by the Baldwin plan is inadequate to serve the Watson McCoy parcel, not to mention the other smaller owner -

R-25

slope to the north, east & west
for the following reasons:

(1) A second access point to the Watson McCoy parcel is
34. necessary not only for safety but to divide the proposed traffic flow from our parcel as well as other parcels to the north of us.

(2) We are currently planning 165 "estate" lots and two access points would be needed
35. (at a minimum) to provide easy ingress & egress for the lady parcel to the north of us, the Pyramids.

(3) The single proposed access point on the westerly edge
36. of our parcel would not provide the needed access to several smaller parcels to the north & west of our land.

The On several occasions we have met with Baldwin and the city in an attempt to resolve the access issues.

34. A second emergency access is provided on the eastern edge of the project site within Neighborhood 11 through an easement (please refer to Figure 2-6 of the EIR). However, if prior to approval of the grading plan for Sub-area 3, an acceptable off-site regional wildlife corridor linking San Miguel Mountain with the Upper Otay reservoir has not be adopted, then the site plan for Neighborhood 11 as well as neighborhoods 10 a and 10b will require modification (please refer to Figure 1-1 of the Draft EIR in Section III). If this modification occurs, access will not be possible from the eastern edge of the property to the Watson Company parcel, and secondary access will be required to come from Proctor Valley Road, to the east.

35. Please refer to response #34.

36. Please refer response #23.

R-26

We have registered our concerns in writing at least half a dozen times. The land we own was homesteaded in 1894. It has remained in the same family for three generations. The original owners have entrusted me to develop their land and at the same time work with all the surrounding ownerships to assure that no one is left out of the process.

We have worked closely with the smaller ownerships as well with the Baldwin Company during the last three years in an attempt to assure that development in the San Miguel mountain area is orderly and functional.

I suggest that the Salt Creek SPA plan & EIR be amended as follows:

(1) An adequate access road from neighborhood 12 be created to give those ownerships to the north & west Salt Creek Ranch.

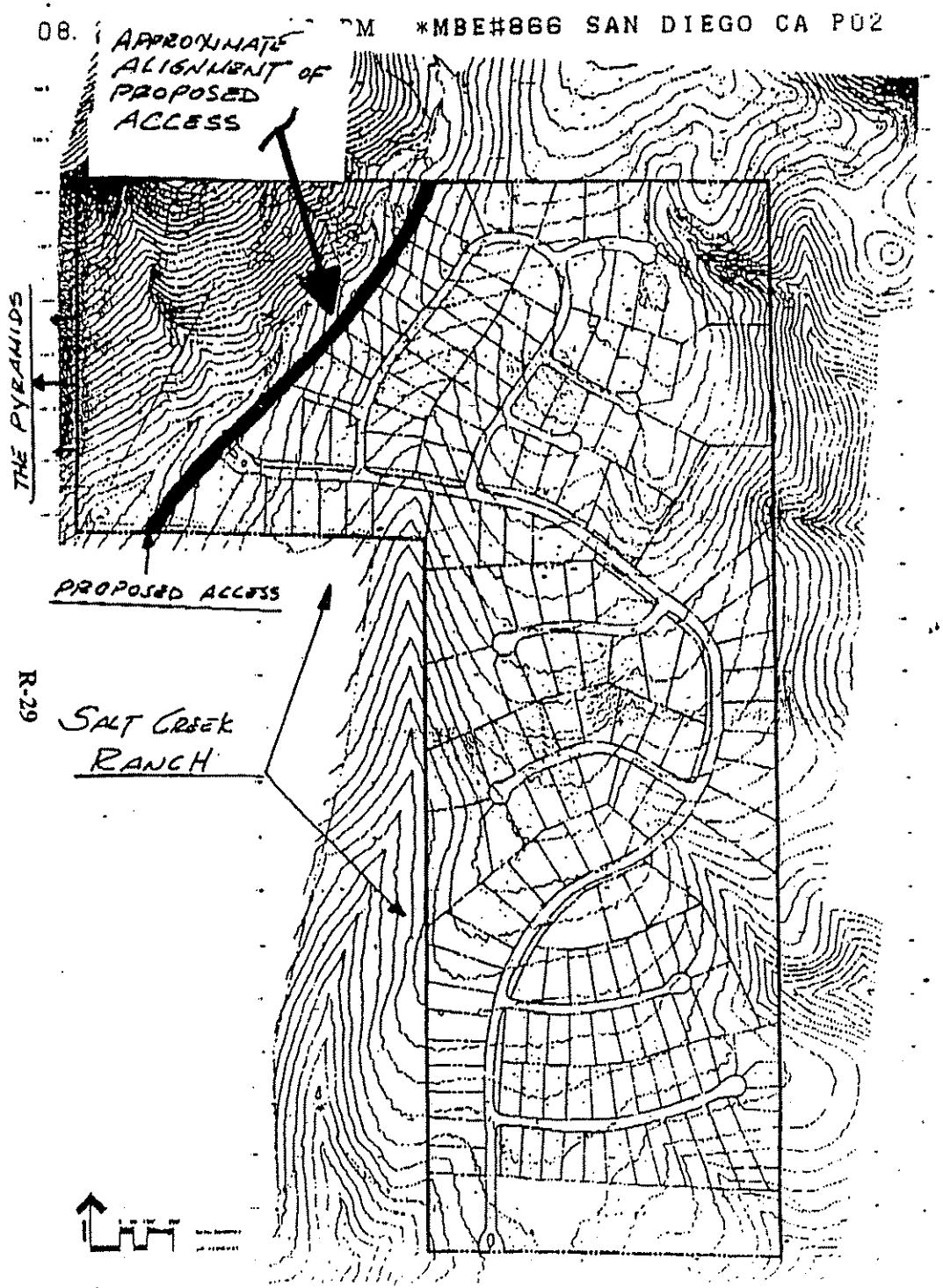
(2) A second access point ~~be limited~~

R-27

be created from neighborhood
10B to the southerly boundary
of the Watson McCoy parcel to
provide a second access point
to our land & relieve the pro-
posed traffic flow from our
parcel and the Pyramid land,
which is the 120 acres north
of the 280 acre Otay Ranch
out parcel.
(3) We believe all access issues
should be resolved prior to
the tentative map stage.
We are willing to meet with the
City of Chula Vista, the Baldwin
Company and the 20 or so other
smaller ownerships to the north,
west, and east of Salt Creek Ranch
in order to solve the access prob-
lem to the mutual benefit of
all parties concerned.
Sincerely,

Tim Wilson
President
Whitehawk Land Corporation
General Partner, Watson McCoy Ltd.

R-28


APPROXIMATE ALIGNMENT OF PROPOSED ACCESS
THE PYRAMIDS
PROPOSED ACCESS
SALT CREEK RANCH
R-29

MINUTES FROM PUBLIC HEARING ON JANUARY 22, 1992

This being the time and the place as advertised, the public hearing was opened.

Tim Wilson, 1293877 Carmel Creek Road, San Diego, representing Watson Land ownership,
37. read a letter he submitted to the Commission. He objected to the access proposed by the Baldwin plan which he felt was inadequate to serve the Watson McCoy parcel, as well as the other smaller ownerships in the north, west and east. He said they were currently planning 165 estate lots on their land and two access points would be needed to provide easy access for the large Pyramid parcel to the north as well as to theirs.

Commissioner Tugenberg asked what percentage of the Watson McCoy property had slopes in excess of 25% grade. Mr. Wilson answered 15%; most of the property was almost flat.

Samir Ghattas, 5203 Jackson, #205, La Mesa 92041, representing The Pyramids, Inc., was also concerned with access, and also gave the Commission a handout. He said the access depicted
38. on the north property line failed to give proper access. To go west from the access point to serve their property and nine other property owners, the slope would be 33%; and they would have to cross a major creek running north and south. Mr. Ghattas stated they had an easement running from Proctor Valley through the L-12 neighborhood property which had been researched but has to be determined and designed by a land surveyor and agreed to by all parties. They were willing to meet with City representatives and Baldwin to determine the property access to the Pyramids, as well as to the other properties who would depend on the Pyramids for access. The proposed easement would not provide access. Also, Figures 1-1, 2-6, 3-1, 3-7 and 5-3 were depicted as open space; it should be depicted as vacant land. He asked about the flow of traffic from the northerly properties; how was the road designed and to what capacity; how was their property designated. The Pyramids only had 30 acres of less than 25% slope on their property. They intended to leave 156 acres in open space and develop only 30 acres which had less than 25% slope.

Mike Roark, 4555 Proctor Valley Road, Bonita, at West Wind Arabian. I have had the pleasure of residing there for the last 10 years, and I have come to truly enjoy the benefits and privileges of a rural lifestyle. I live in a community I like to call the Sunnyside Ranch Equestrian

RESPONSE TO COMMENTS FROM PUBLIC HEARING ON JANUARY 22, 1992

37. Please refer to responses 33-36.

38. Please refer to responses 29-33.

39. Community. Sunnyside Ranch Equestrian Community actually begins down at Bonita Road, has an elementary school, has a regional horse park just about ready to open (garbled) completed up on top; at the other end of the lake, there's a five-star resort under construction of (garbled); at this end of the lake, there are some high quality homes that are being planned to go across the top of the hill at the north end of the lake; and as you come down across at the back of the lake, we have the regional horse trails that come up through here. One of the other areas that the City of Chula Vista has made a commitment to is connecting Bonita Valley and Otay Valley via a wild animal corridor or greenbelt corridor. A corridor allows for a natural flow of wildlife and other human--and other life forms--as well as preserving some of the live plants and things that are there. This particular plan has narrowed the corridor maybe 100 feet; has provided for a crossing for wild animals, humans, horses, dogs, coyotes, anything else that's out there; and a 12-foot-wide tunnel underneath "H" Street. No trail for horses, no trail for animals, and a creek bed also running through there. Obviously, not wide enough--obviously, not a true corridor for wildlife, for the preservation of the connection of the two corridors--the factor you need to consider and a factor you made a commitment to, and a factor that this particular project has to be considered. I think--I never had noticed that the Draft EIR. We live not 1,000 feet within the area, we received no formal notice; I did receive a courtesy notice of this particular supplemental EIR, and that's why I'm here. I received that approximately the 10th of December. I subsequently picked up the Supplemental EIR and the original EIR and the General Plan and reviewed them. I like what Baldwin Company develops as a whole; I like the quality of what they're developing; and they are an asset to have to any community and I think we should encourage their continued development of the area. I like what they have proposed along Proctor Valley Road in the lines of some of their protections for their fencing or walls; I like the concept they have of the adobe brick; I like the ranch world concept they have, but there are some shortcomings and some of these in the Draft EIR have not come totally to what I think they need to do. Baldwin Company and Salt Creek in the first phase have already has already been approved and model homes are up, and one section already has homes sold and some moved into on Proctor Valley Road. On Proctor Valley Road, it's approximately--as far as where "H" Street has been connected to Proctor Valley, Hunte I believe is the street--and I'm not sure which street it is--that--up in this area, right across, right around here--they've paved Proctor Valley Road down to servicing approximately maybe 25 homes, of which about 15 have been completed and probably 10 of them have been sold, and then five are presently being occupied. That's only 60 foot. On the other side of that, San Miguel Properties have their full proposal and you'll be looking at it if you haven't already been doing so. It needs to provide for the horse trail on the other side to be continued at least 40 feet wide on the north side of Proctor Valley Road. The County of San Diego--Mr. Wertz is the coordinator for trails for the County of San Diego--Proctor Valley Road is considered for horse--for riding and hiking as part of the County riding and hiking trail. And I'm not sure if the lines that are here are equestrian or hiking or biking trails, but the question I have for staff are these lines that are coming through here. Are those to be hiking and riding trails? They come around neighborhoods--area 3? Down through here?

39. Comment noted. The inclusion of equestrian trails and other project design features are a land use planning issue relevant to the SPA Plan document and are beyond the scope of CEQA and this project-specific EIR.

Senior Planner Bazzel: The original proposal was to have equestrian trails in the eastern subarea. Staff is leaning away from trails within that area. They'd rather concentrate on the greenbelt corridor.

Mr. Roark: I would point out that it's been my experience in 10 years of living in an area that is rural that we are in effect a buffer in a lot of ways between our homes and wildlife and the natural environmental around us, and the trees and things that we plant also attract wildlife--rabbits, squirrels. We have--we've had peacocks; we have a nesting of a family of roadrunners; we have king snakes that protect us from rattle snakes; we have the roadrunners to protect us from bugs--an interesting environment. It's an environment that is a nice buffer for any rural community, and as you go up a mountain, it's a nice buffer to protect. It's enhanced the environment of the wildlife; it enhances the environment of the people living there, human beings that have the privilege of living there; and when we designate areas, I encourage you to make the lots large enough and the permits and the privileges enough that you can have the benefit of having horses and the benefit of having larger homes, and the benefit of having an environment that is desirable. That's why Bonita has been desirable, why Rancho Santa Fe is desirable, and the concept about no sidewalks, horse trails, country trails, country walks, roads wide enough and graded just adequate to service what is necessary to service the homes along that particular road all make common sense and all enhance the area to protect the environment. I think when you get into these homes, there should be a minimum of 1 acre up to 2; it should allow the privileges for horses. I was in--had the privilege of visiting an area in Boulder, Colorado--called Boulder, in Carefree, Arizona. I looked at several of their developments; they have the envelope concept for development. The concept being that when you decide what your plans are going to be for your house, you go in and you grade only the area for your housing, and you fence the wildlife out while you build to protect wildlife. When you're finished, you pull the envelope back; you put it back to a state that is consistent with the natural environment. This is true where you put in a barn, where you put in corrals, where you put in a chicken coop area, or just put in a 4, 5, of 6,000 foot home or you put in a waterfall down the side of your hill to service or enhance your environment. These are all factors that can be protected through proper design--proper conditions, covenants and restrictions that can be enforced by the City. And I think the City of Chula Vista has an opportunity to do this, both in this project and the San Miguel Property project. You've been given a license to plan it, and you have a privilege, in my opinion, and a duty to do so it will give a maximum benefit--not only to tax dollars, not only to developers, but also to the entire environment, including the people, wildlife, the plants, and all of us that are part of this community. So I encourage you as you go through this to give that careful thought. Now, there's one other point on the short-term basis that deals directly with Proctor Valley Road. On Proctor Valley Road, at the present time, Baldwin--what I wanted to point out is I think that Proctor Valley Road is no longer part of a major corridor for transportation because you have 125 that has to come through. It is a dirt road, and it is actually a horse trail, and it should be closed until 125 is in fact in and can be put there. It should be closed until the plans can be properly processed and approved. It's a narrow, crooked road, and the place that it ends the pavement until it gets down close to our place is an invitation to people to come out on the weekends to see how fast they can drive their car in the dirt, and it would keep us from getting knocks on our door on Friday and Saturday nights to call the ambulance

because somebody has rolled their car out in the dirt road. Also, the traffic is heavy, and I'll defer that to the next speaker in regards to the construction, and the traffic in regard to construction. Thank you for listening. Thank you for extending the time.

Don Jensen (3655 Proctor Valley Road, Bonita 91908, representing Jensen Kennels): Due to the length of Mr. Roark's speech, I will cut mine short because of time concern.

Chair Fuller: For the record, would you give us your address.

Don Jensen, 3655 Proctor Valley Road. I have lived at that residence for 27 years. My wife and I have owned and operated a dog boarding kennel at that residence for the 27 years. My main complaint about the Salt Creek project and other projects up in that area is the heavy construction traffic that comes through Proctor Valley Road as a shortcut. It is very detrimental to the horse riding people that ride there regularly and, of recent, most of them have not been able to ride there regularly because of the heavy traffic, the dust, and things that go on out there. Unfortunately, we don't have a VCR to show a picture of the dust, the traffic, construction vehicles that have occurred on Proctor Valley of recent. If any of the members of the Commission would like to view this, it would be available for a showing. One other item that I have here is, we have just gone through a series of problems when the sewer line was put in on Proctor Valley Road, and construction people leave a mess. It has taken us over six weeks to get it cleaned up so it's livable again. And so, these developers, when they come in to do a job, it should be impressed upon them to take care of the neighborhood, because we're going to take care of you after everything is long gone. Thank you for your time.

40.

No one else wishing to speak, this portion of the public hearing was closed, but continued to the meeting of February 12, 1992, for the purpose of receiving comments from the State Clearinghouse.

Commissioner Tuchscher commented that he would appreciate the opportunity to discuss the issue regarding sidewalks in estate housing areas and the requirement and need for those perhaps at some future workshop meeting. From a character standpoint, he felt Mr. Roark had made a good point regarding that issue.

DIRECTOR'S REPORT

COMMISSIONERS' COMMENTS

40. Comment noted. Dust suppression mitigation measures are contained in the Final EIR for the Salt Creek Ranch General Development Plan (EIR 89-3) and will be enforced through the mitigation monitoring program for the Salt Creek Ranch project.

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SECTION 1
INTRODUCTION AND SUMMARY

1.1 PURPOSE/SCOPE/PROCEDURES

Purpose of the Supplemental EIR

This Supplemental Environmental Impact Report (SEIR) has been prepared for the City of Chula Vista to evaluate the proposed Salt Creek Ranch Sectional Planning Area (SPA) Plan. This document is a supplement to the Salt Creek Ranch Annexation/General Development Plan Pre-Zone EIR (EIR 89-3, certified in September 1990).

The California Environmental Quality Act (CEQA) of 1970 requires the preparation of an EIR or other CEQA environmental document for any discretionary action under consideration by the City of Chula Vista. The purpose of an EIR is to inform the public and the decision makers about the nature of a project being considered and the extent and kinds of impacts the project would have on the environment if the project were to be implemented.

A supplemental EIR (SEIR) is required under CEQA (Section 21166) when one or more of the following events occurs:

(a) Substantial changes are proposed on the project which will require major revisions of the EIR;

(b) Substantial changes occur with respect to circumstances under which the project is being undertaken which will require major revisions in the EIR;

(c) New information becomes available which was not known at the time of the EIR certification.

Supplemental EIRs must contain discussions of specific topics as outlined in guidelines for the implementation of CEQA prepared by the State Secretary of Resources. These guidelines are periodically updated to comply with changes in CEQA and court interpretations. The document contained herein presents information necessary to satisfy CEQA requirements for a supplemental EIR.

Scope of the SEIR

This SEIR addresses potential environmental consequences of the Salt Creek Ranch SPA Plan, currently under consideration by the City of Chula Vista. The SPA Plan is described and illustrated in Section 2 of this EIR. The SEIR covers effects on the environment which are peculiar to the current Salt Creek Ranch SPA Plan and associated offsite facilities, as well as impacts that require an updated analysis and/or were not previously addressed in detail. Final EIR 89-3 (SCH No. 89092721, certified in 1990), and the General Plan EIR (City of Chula Vista EIR 88-2), prepared for the City of Chula Vista are hereby incorporated by reference into this SEIR. Those documents may be obtained at the City of Chula Vista Planning Department. Many sections in this SEIR reference and incorporate detailed and technical information from certified EIR 89-3 for the Salt Creek Ranch General Development Plan when that information is directly applicable and current.

The City of Chula Vista's 1989 General Plan serves as the foundation for the EIR analysis. The General Plan (GP), analyzed in EIR 88-2, includes a series of community plans which focus on the general concepts and provisions of the various elements of planning areas. The Salt Creek Ranch project site is located to the east and south of the current city limits within the Eastern Territories Community Planning Area of the general plan. The project area consists of approximately 1,200 acres.

Procedures

The City of Chula Vista is the Lead Agency for the project and will be responsible for action on the project. Other responsible agencies include the City of San Diego, the County of San Diego, the California Department of Health Services, Local Area Formation Commission (LAFCO), California Department of Fish and Game, United States Fish and Wildlife Service, Otay Water District, San Diego Gas and Electric, Sweetwater High School District and Chula Vista Unified School District.

This supplemental draft environmental impact report will be available for review by the public and public agencies for a period of 45 days. Comments on the SEIR are invited and may be submitted to the City of Chula Vista Planning Department, 276 Fourth Avenue, Chula Vista, CA 92010. The Draft SEIR will be available at the planning department and the Chula Vista City Library. The planning department will consider all written comments

on the draft SEIR before making recommendations to the planning commission and city council regarding the extent and nature of the environmental impacts of the proposed project.

1.2 Scope of SEIR and Impacts Found Not To Be Significant

Environmental Issues of the Proposed Project

This Supplemental EIR addresses potential environmental impacts of the proposed Salt Creek Ranch Spa Plan, currently under consideration by the City of Chula Vista. The proposed project is described in detail in Section 2, Project Description. The SEIR contains the full range of sections required under CEQA for a Supplemental EIR: Introduction, Project Description, Impact Analysis, Alternatives Analysis, Summary of Unavoidable Significant Impacts, References and Consultant Identification.

Each of the issue areas/sections listed below were identified by the City of Chula Vista as potentially significant environmental impacts requiring an updated analysis and/or new analysis beyond that discussed in EIR 89-3. The SEIR reviews in sufficient detail these potential impacts associated with implementation of the project, constituting the scope of this SEIR:

- Land Use
- Landform/Aesthetics
- Hydrology
- Water Quality
- Biological Resources
- Cultural Resources
- Transportation and Circulation
- Noise
- Public Services and Utilities (Water and Wastewater)
- Offsite Areas of Impact

Issues Found Not to Require Further Analyses

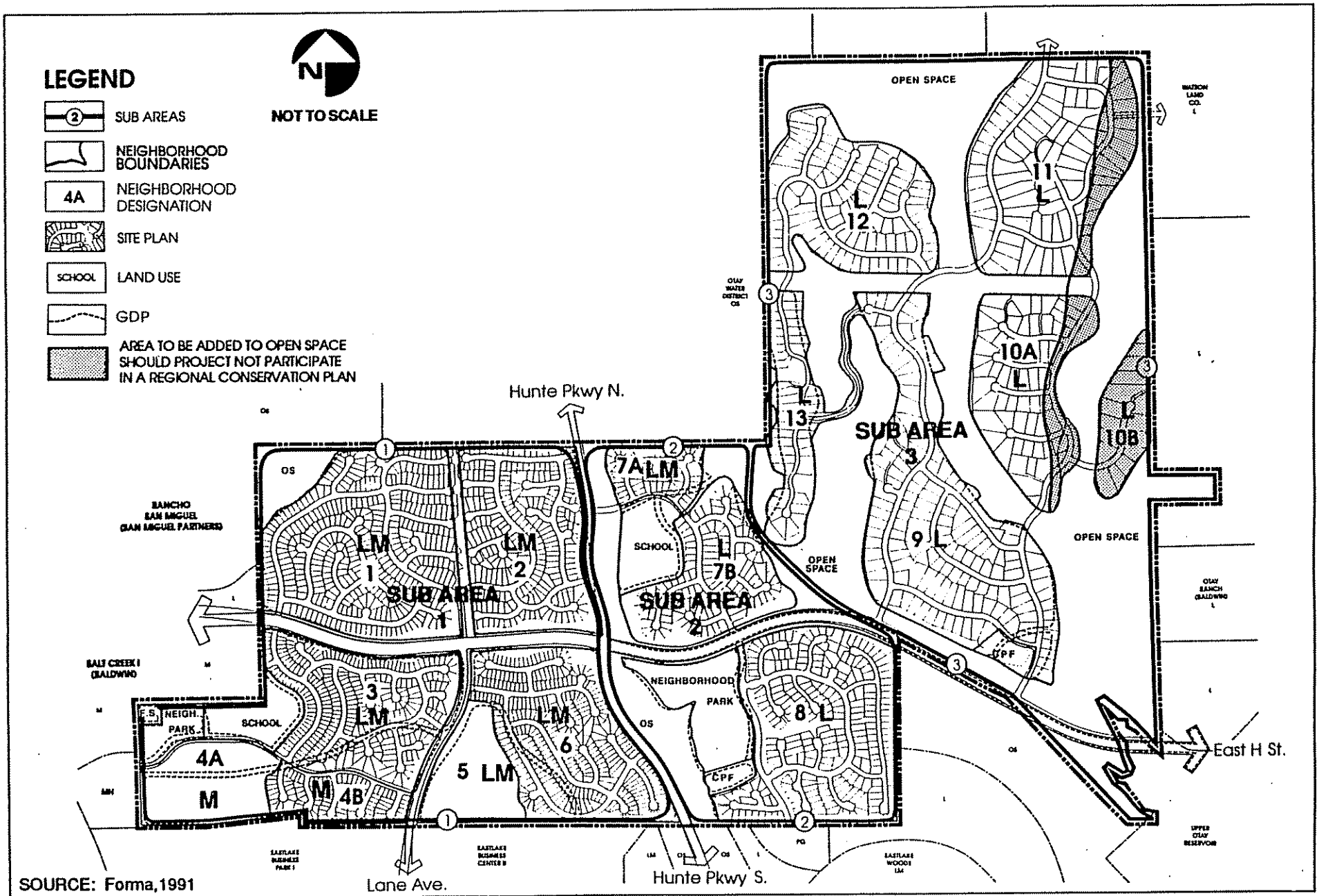
Those issues areas considered not to require further analyses beyond that discussed in EIR 89-3 by the City of Chula Vista are listed below.

- Conversion of Agricultural Lands (addressed in EIR 89-3)
- Geology/Soils (addressed in EIR 89-3)
- Air Quality (addressed in EIR 89-3)
- Fiscal Analysis (addressed in EIR 89-3)
- Public Services/Utilities (addressed in EIR 89-3)
  - Police Protection
  - Fire Protection
  - Schools
  - Parks, Recreation and Open Space
  - Gas, Electricity, Energy
  - Public Transit
  - Library Facilities
  - Solid Waste Disposal

1.3 ISSUES TO BE RESOLVED

Offsite Wildlife Corridor. The project applicant will participate in a regional multi-species costal sage scrub conservation plan. If, prior to approval of the grading plan for Sub-area 3, an acceptable off-site regional wildlife corridor linking San Miguel Mountain with the Upper Otay Reservoir has not been adopted as part of the conservation plan, then the site plan (neighborhood 10a, 10b and 11) will require modification to accommodate a wider open space area for a regional wildlife corridor. The width of the open space are shall be sufficient to ensure long-term viability of the wildlife corridor (see Figure 1-1).

Urban Runoff Protection System. The applicant is proposing to develop Salt Creek Ranch prior to the anticipated construction of the urban runoff protection system and is proposing to construct an interim system during project development. This system will need to be approved by the City of Chula Vista, City of San Diego, and the State Department of Health Services (DHS) prior to or concurrent with SPA Plan approval. The plan shall analyze the possibility of sewage system failures; effects of increased levels of nutrients salts and pesticides from landscaping and irrigation; and effects of petroleum products from surface street runoff. Additional environmental analysis may be required based on the specific drainage ditch or other plans. Design of these plans shall also consider providing additional capacity for concurrent or future development. Development of the subject property must comply with all applicable regulations established by the United States



SOURCE: Forma, 1991

ERCE

Area to be Added to Open Space

FIGURE 1-1

Environmental Protection Agency (EPA) as set forth in the National Pollution Discharge Elimination System (NPDES) permit requirements for urban runoff and stormwater discharge.

State Route 125. State Route (SR) 125 is envisioned as a north–south link between the international border crossing at Otay Mesa and I-15 north of Poway. The portion near the Salt Creek Ranch development is one of four toll revenue transportation project demonstration programs arising from California's AB 680 program. The proposed toll road would lie between the border crossing and SR-54 near Bonita. The road would initially be a 4-lane toll highway roughly 76 feet wide, with 2 northbound and 2 southbound lanes. Opening is envisioned for 1996. Ultimately, the highway would be approximately 173 feet wide, with 4 northbound and 4 southbound lanes, plus a center set of lanes for high occupancy vehicle or light rail transit.

Several alignments are being examined for the portion of SR125 near Salt Creek Ranch, some of which may directly impact the project site. An EIR for SR125 will be prepared; an exact date for environmental clearance and selection of a roadway alignment is unknown.

1.4 Summary of Impacts

The summary of impacts matrix on the following pages provides an overview of impacts under each environmental topic, measures or actions to mitigate or reduce the impact, and whether the impact can be mitigated to below a level of significance. Section 3 presents each topic's analysis in detail.

SUMMARY OF IMPACTS

Impact	Mitigation	Significance of Impact After Mitigation
Land Use		
Potential compatibility impacts would exist with adjacent properties and developments.	The SPA Plan proposes specific techniques to ensure compatibility with adjacent land uses. This EIR identifies sensitive surrounding areas and specifies mitigation to provide adequate buffer and design at those boundaries/areas to ensure compatibility.	SPA Plan guidelines and EIR recommendations will mitigate potential impacts to below a level of significance.
Inconsistencies with the General Plan involve the residential densities and the provision of affordable housing.	Measures include the provision of affordable housing as determined by the 1991 Housing Element revisions to be adopted by City Council.	As proposed, these impacts are not mitigated. Implementation of the measures would eliminate the inconsistencies and mitigate impacts to below a level of significance.
Land Form/Aesthetics		
Urbanization will permanently alter existing topography, views to the site and aesthetic character of the area.	Measures require detailed Open Space and Landscape Plans; sensitive grading; design standards; natural open space preservation; greenbelt and scenic highway view treatments; and extensive buffer treatments to be created at the SPA Plan and subsequent stages.	Measures will partially mitigate impacts. Project-specific impacts will be mitigated to an acceptable level; the project will unavoidably contribute to the cumulative adverse impact on the existing natural and rural character of the area.

SUMMARY OF IMPACTS (Continued)

Impact	Mitigation	Significance of Impact After Mitigation
Hydrology		
The increase in impervious surface as a result of the proposed project will change drainage courses and increase flow rates downstream.	Additional hydrologic analysis is required prior to final map approval to specify facilities (size, dimension, etc.) necessary to handle onsite and downstream flows after development.	The implementation of the measures outlined in Section 3.3 will ensure mitigation of potential hydrologic impacts to below a level of significance.
Water Quality		
The proposed project would create potential water quality impacts due to short-term impacts from construction activity as well as the long term effects of urban development.	The project shall be subject to review and approval by the State DHS. The project shall implement mitigation measures as set by DHS prior to issuance of any grading permit. Other measures include the preparation and approval of a diversion ditch plan (or other acceptable plan), an onsite mitigation monitoring program, an erosion control plan, and a storm drain plan. The project applicant shall be required to obtain a NPDES construction permit from the State Water Resources Control Board and to submit pollutant control and monitoring plans to the Regional Water Quality Control Board for approval prior to the issuance of grading permits.	Implementation of measures outlined in Section 3.4 will mitigate impacts to below a level of significance.

SUMMARY OF IMPACTS (Continued)

Impact	Mitigation	Significance of Impact After Mitigation
Biological Resources		
Project development will significantly and directly impact riparian wetlands, coastal sage scrub, native grassland habitats, and the California gnatcatcher and cactus wren, both sensitive species. The additional SPA impact to riparian habitat is 0.2 acre.	To mitigate additional SPA impacts to 0.2 acre of riparian habitat, ERCE recommends creation/enhancement of riparian habitat.	The incorporation of additional riparian habitat acreage into the wetland mitigation plan would mitigate impacts to below a level of significance.
Construction practices and long-term urban activities present secondary threats to adjacent and/or sensitive non-development areas.	Secondary impact mitigation includes construction activity limitations to protect resource preservation areas; revegetation with native species in fire break and cut slope areas; clearing and trimming restrictions; fencing and landscape buffering around natural open space areas; and long-term protection of natural open space areas by dedication of a natural open space easement.	Secondary biological impacts can be mitigated to below a level of significance by implementation of the measures proposed herein.

SUMMARY OF IMPACTS (Continued)

Impact	Mitigation	Significance of Impact After Mitigation
Cultural Resources		
The potential impacts to cultural resources as a result of implementation of the SPA Plan are identical to those that would occur with implementation of the GDP. Sixteen of the eighteen important sites will be directly impacted by the project. Portions of six of those sites, and one additional site, are also at risk of indirect impacts due to development of the project. Also, the site possesses a high potential for existence of paleontological resources.	Recommended mitigation includes avoidance and/or data recovery of important cultural resources. This involves a complete data recovery program for cultural resource sites, and paleontological monitoring during grading and, if necessary, a salvage program for resources discovered.	Implementation of the measures herein will mitigate potential paleontological and cultural resource impacts to below a level of significance.
Transportation and Circulation		
The project would generate 31,290 daily vehicle trips with 2,777 trips expected during the morning peak hour and 2,986 trips expected during the afternoon peak hour. Since the project site is currently vacant, generation of these trips would be additional to those trips already on the street network.	Major improvements to the surrounding roadway networks have been identified to mitigate the traffic impact of this project. Improvements necessary as a result of implementation of the SPA Plan are outlined in Section 3.7 Mitigation.	Traffic/circulation impacts at buildout of the project will be reduced to below a level of significance with implementation of the proposed improvements.

SUMMARY OF IMPACTS (Continued)

Impact	Mitigation	Significance of Impact After Mitigation
Noise		
Traffic-generated and urban noise will result from project implementation. Onsite future noise levels due to cumulative traffic will require onsite noise attenuation along various roadways.	For the project to comply with the City of Chula Vista standards, mitigation for exterior noise impacts must be incorporated into the project design. An additional interior acoustical analysis will be required for all multi-family residences located within the 60 dBA Ldn contour.	If the specified exterior mitigation measures are implemented during project construction, impacts will be mitigated to below a level of significance.
Public Services and Utilities		
Water. The project will demand 1,531,531 gpd of potable water and 188,139 gpd of reclaimed water for a total average water demand of 1,719,670 gpd.	Impacts related to water can be adequately offset by requirements cited in Section 3.9. Regional cumulative water supply impacts can be slightly reduced by water conservation mitigation herein.	Implementation of the measures cited in Section 3.9 will mitigate impacts related to water supply and distribution to below a level of significance. The project's contribution (as with any development) to regional cumulative water supply and non-renewable energy source impacts are unmitigable and significant.
Waste water. The project will generate approximately 788,760 gpd of waste water.	Measures include the approval of a Master Plan of Sewerage for the project and the payment of waste water development fees. Ultimate capacity of the Telegraph Canyon and Salt Creek Interceptor will be determined prior to issuance of final map	Implementation of measures will reduce impacts to below a level of significance.

SUMMARY OF IMPACTS (Continued)

Impact	Mitigation	Significance of Impact After Mitigation
Offsite Areas of Impact		
Biology		
Hunte Parkway. A total of 13.8 acres of habitat would be impacted. Additional impacts from the construction corridor would total 19.7 acres. Any proposed impacts to disturbed wetlands would be considered significant.	Measures include enhancement of riparian habitat at a 1:1 ratio to any impacted wetlands. Prior to construction a 1603 Streambed Alteration Agreement must be obtained from the California Department of Fish and Game.	Impacts to coastal sage scrub are cumulatively significant and remain partially mitigated through preservation and restoration. Sensitive placement of the alignment and construction corridors will significantly reduce potential impacts to habitats and sensitive species through avoidance.
East "H" Street. Approximately 5.0 acres of high quality coastal sage scrub would be lost. Additional impacts from the construction corridor would total 6.0 acres of coastal sage scrub. Potential impacts to coast barrel cactus and California gnatcatcher are considered significant.	Measures include a strategy of avoidance, habitat enhancement, and preservation.	Implementation of recommended measures would mitigate impacts to below a level of significance.
Reservoir/Waterline. Impacts to coastal sage scrub and Cleveland's golden star are considered significant.	Measures include a combination of avoidance and habitat enhancement avoidance.	Implementation of recommended measures would mitigate impacts to below a level of significance.
Landform/Aesthetics		
Short-term visual impacts will occur during the construction of Hunte Parkway, East "H" Street, and the waterline/reservoir.	Short-term visual impacts are not significant due to their limited duration and temporary nature. No mitigation is required.	Short-term visual impacts are adverse yet insignificant.

Impact	Mitigation	Significance of Impact After Mitigation
The pad elevation of the reservoir is higher than the elevation of the project site and would be visible from most of the surrounding area.	Measures to mitigate the visual impact of the reservoir include landscaping the site and painting the tank an unobtrusive color.	Implementation of measures will mitigate impacts associated with the reservoir to below a level of significance.
Cultural Resources		
Hunte Parkway. Construction of both the proposed interceptor line and Hunte Parkway will affect portions of CA-SDi-12,037, CA-SDi-12,038, and CA-SDi-12,039 and Isolate I-314.	Mitigation of impacts to important cultural resources can be achieved through either avoidance or by conducting a data recovery program.	Implementation of recommended measures would mitigate impacts to below a level of significance.
East "H" Street. Construction of both the 10-inch pipeline and proposed East "H" Street segment will affect portions of site CA-SDi-4,530/W-643, which has been tested and determined to be important pursuant to CEQA criteria.	Mitigation of impacts to important cultural resources can be achieved through either avoidance or by conducting a data recovery program.	Implementation of recommended measures would mitigate impacts to below a level of significance.
Water Reservoir/Waterline. Both direct and indirect impacts of equipment staging and access may affect cultural resources CA-SDi-11,403 Locus F, CA-SDi-11,403 Locus G, CA-SDi-11,415, CA-SDi-12,030, CA-SDi-12,031, CA-SDi-12,032, CA-SDi-12,033, CA-SDi-12,034, CA-SDi-12,035, CA-SDi-12,036, CA-SDi-12,260, and CA-SDi-12,261.	Mitigation of impacts to important cultural resources can be achieved through either avoidance or by conducting a data recovery program.	Implementation of recommended measures would mitigate impacts to below a level of significance.

SECTION 2
PROJECT DESCRIPTION

2.1 LOCATION

The Salt Creek Ranch project includes approximately 1200 acres of land in the southern foothills of San Miguel Mountain, north of EastLake Technology Park and northwest of Upper Otay Lake (Figures 2-1, 2-2, and 2-3). The project site is located in the northern portion of the 37 square mile Eastern Territories planning area as defined by the City of Chula Vista General Plan. Salt Creek Ranch is situated on land currently under the jurisdiction of the County of San Diego, however all but 240 acres in the extreme northeastern corner of the project site are located within the City of Chula Vista's adopted sphere of influence (see Figure 2-4). Annexation of the entire project site to the City of Chula Vista is planned.

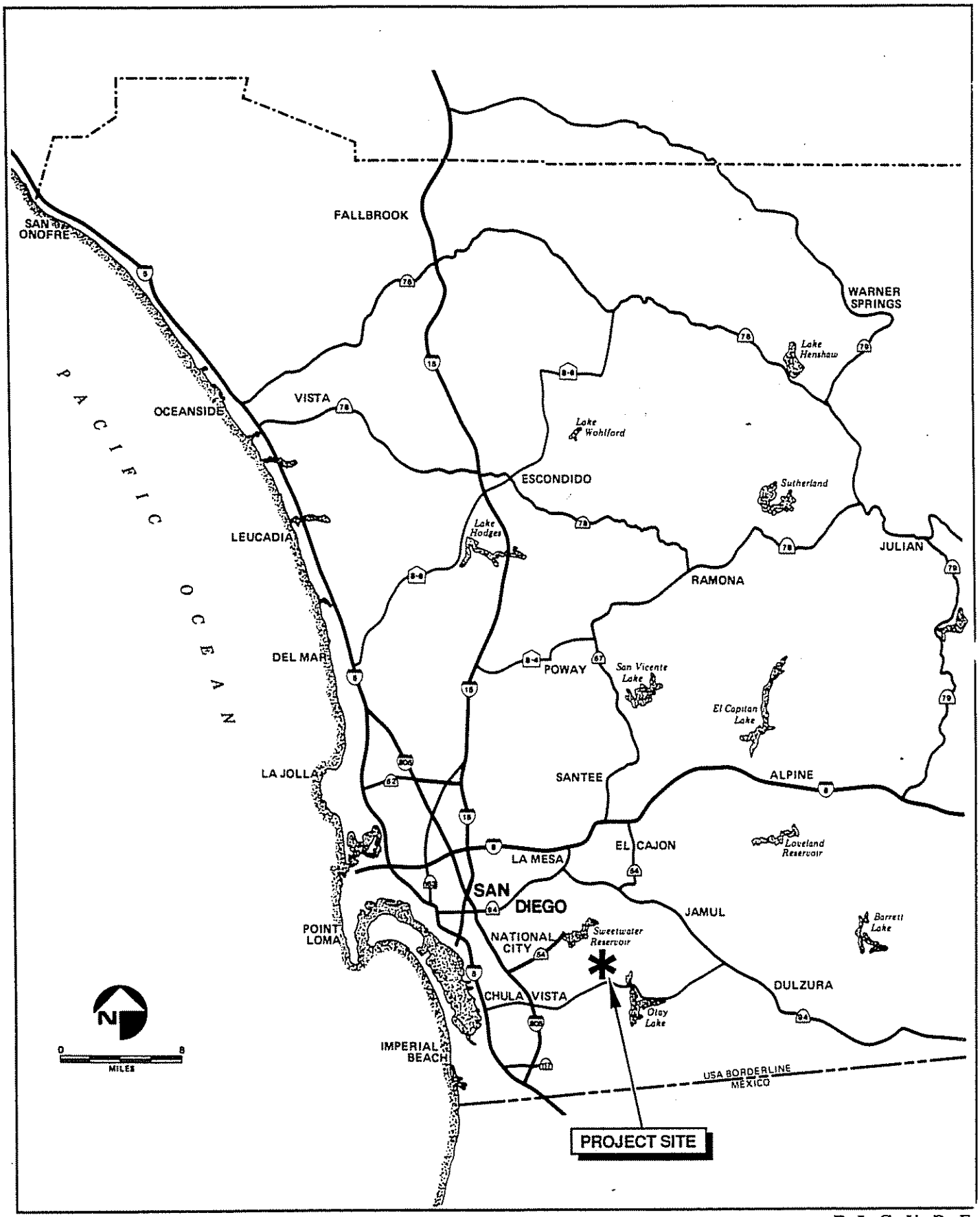
2.2 DISCRETIONARY ACTIONS

The discretionary actions currently under consideration relative to the Salt Creek Ranch project include the following:

- sphere of influence boundary change and annexation to the City of Chula Vista (LAFCO);
- sectional planning area plan (SPA plan) and associated PC Zoning regulations approval (City of Chula Vista);

Annexation to the City of Chula Vista would involve detachment of the site from most county services (i.e., detachment from the county's Rural Fire Protection District) requiring services from the city. This transfer of services typically occurs with annexation approval by LAFCO. Environmental review of the proposed annexation and sphere of influence boundary change was evaluated by the EIR for the General Development Plan which was certified in September 1990.

The Salt Creek Ranch SPA plan and subsequent plans will be prepared and processed in accordance with Sections 65450–65553 of the State of California Government Code and Sections 19.08.010-19.08.-30 of the City of Chula Vista Municipal Code. Subsequent approvals include grading and drainage plans, tentative and final subdivision maps,

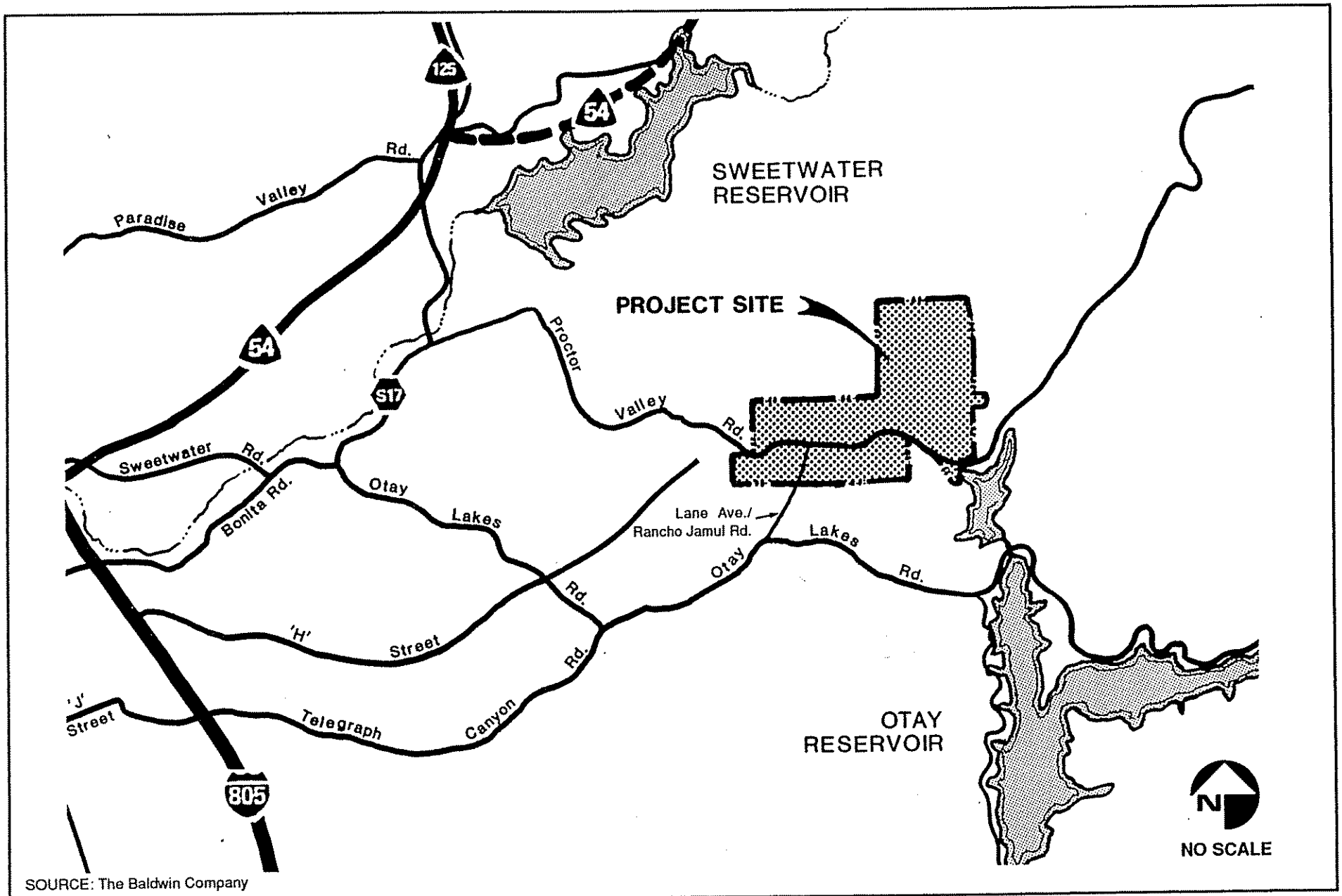


FIGURE

ERCE

Regional Location of Project Site

2-1

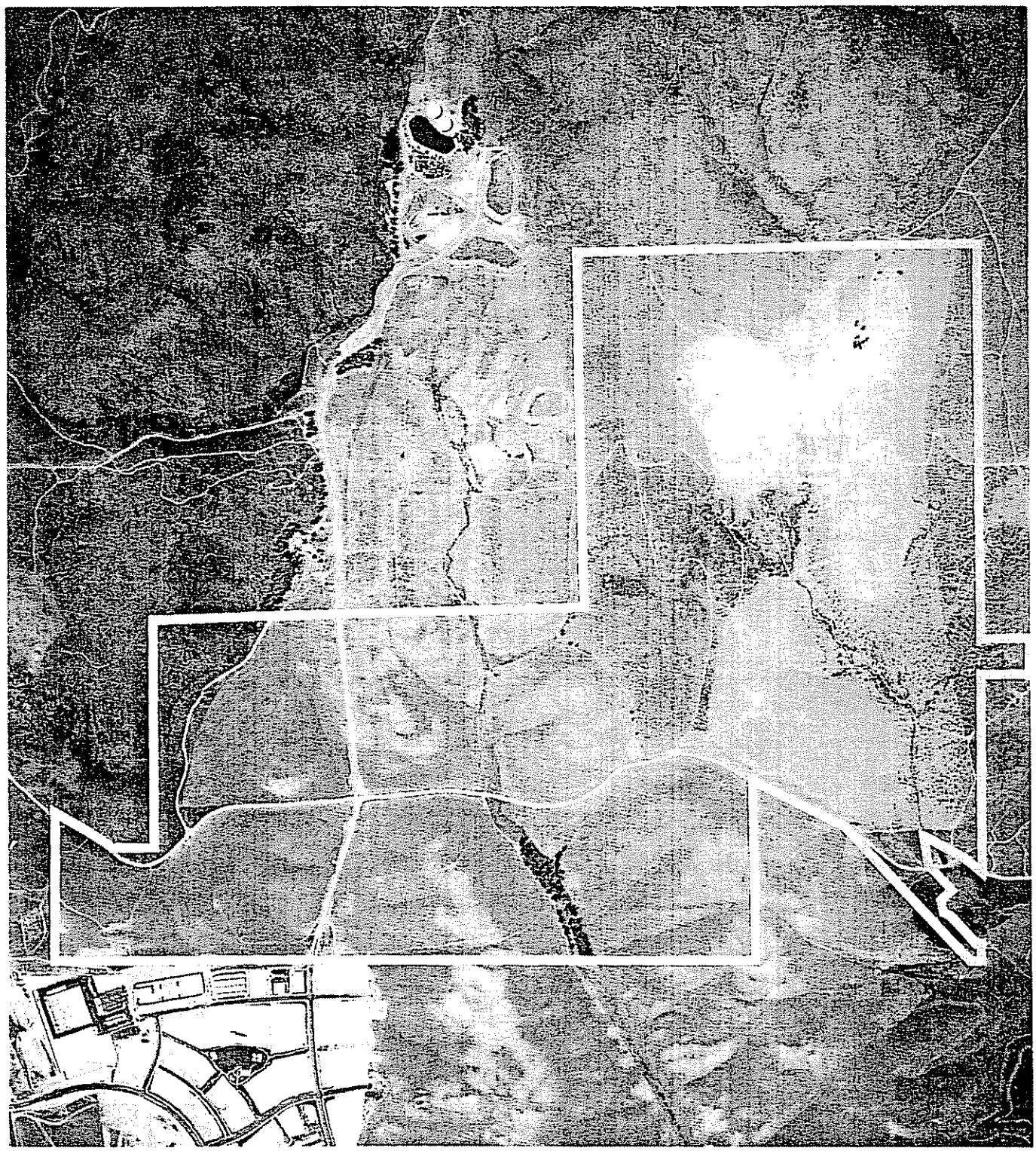


SOURCE: The Baldwin Company

FIGURE 2-2

ERCE

Vicinity Map

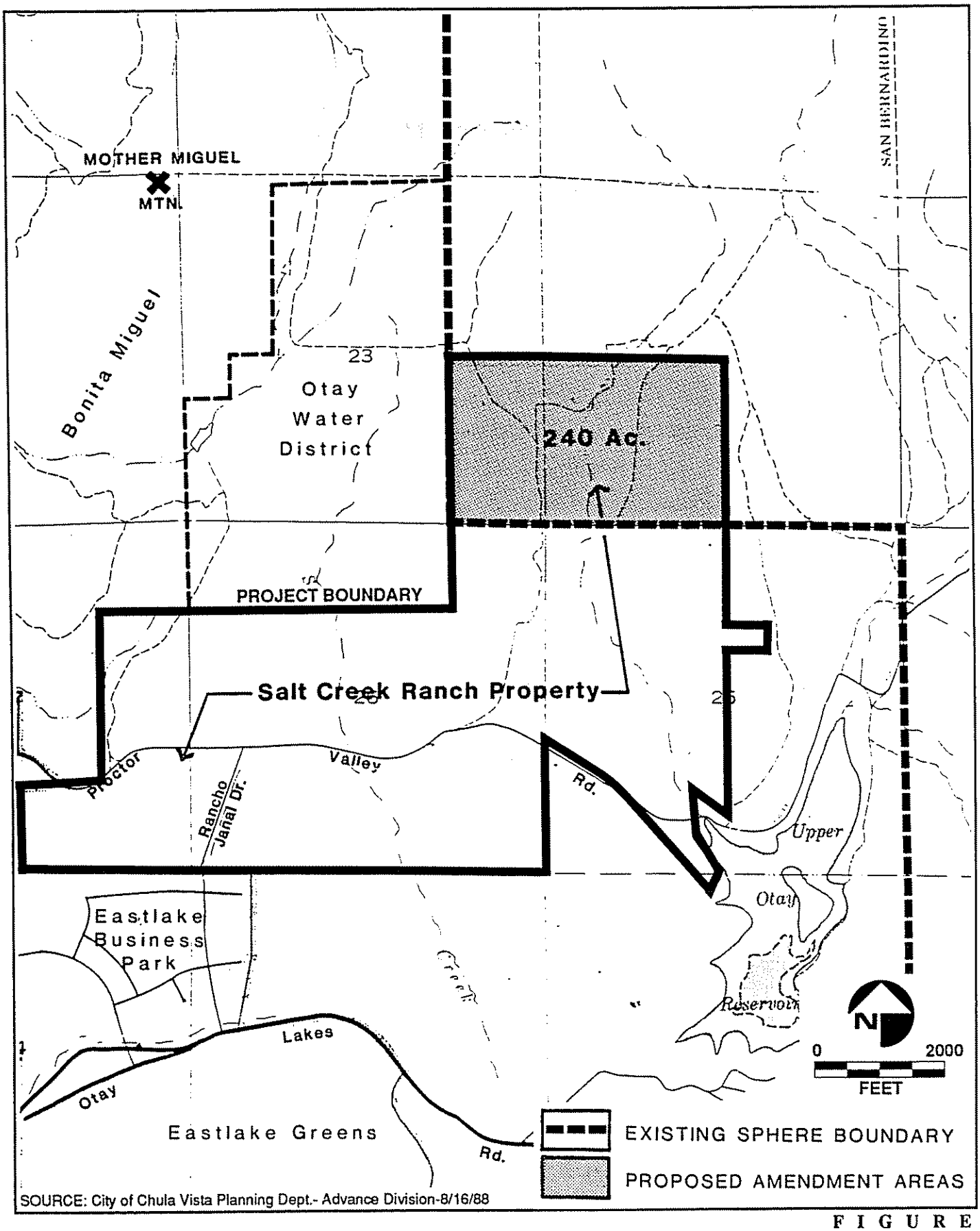


SOURCE: Robert Bein, William Frost, and Associates, 1989

FIGURE 2-3

ERCE

Aerial Photo of Salt Creek Ranch Site



SOURCE: City of Chula Vista Planning Dept.- Advance Division-8/16/88

FIGURE 2-4

ERCE

Chula Vista Sphere of Influence

property development agreement, and the resource permit process required by the U.S. Army Corps of Engineers (Section 404 process) and California Department of Fish and Game (Section 1601/1603 process).

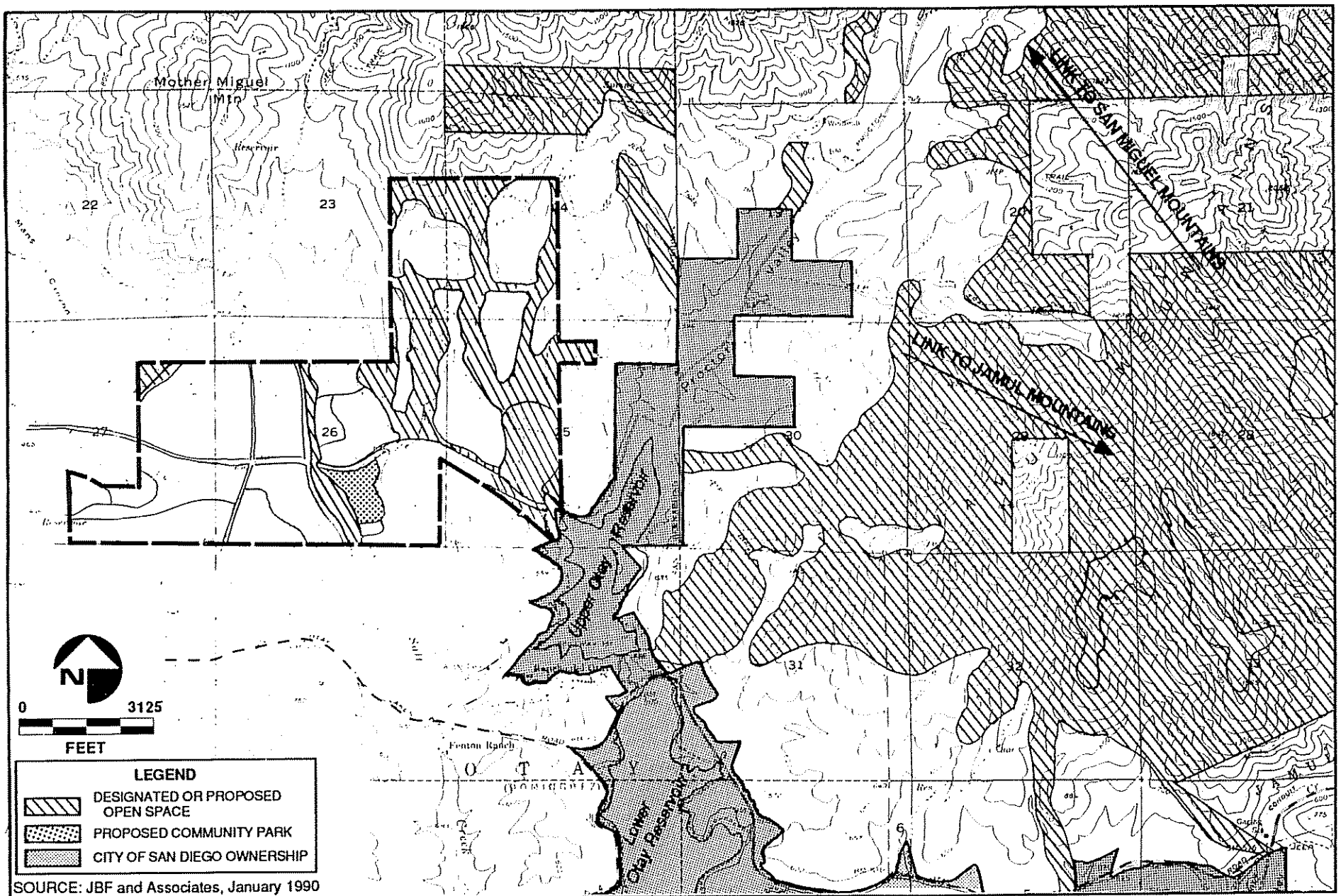
2.3 PROJECT CHARACTERISTICS

The General Development Plan (GDP) for the Salt Creek Ranch project was prepared by the applicant in accordance with the City of Chula Vista General Plan and Eastern Territories Area Plan. The GDP provided general design concepts. The SPA Plan refines this conceptual plan. The proposed development will provide transition between the higher density developments within EastLake west of SR-125 to lower density uses east of SR-125. The principal components of the Salt Creek Ranch plan includes 2,817 residential units (773.1 acres), neighborhood parks (31.0 acres), two elementary school sites (24 acres), a fire station site (1.3 acre), two community purpose facility sites (7 acres), natural open space (360.8 acres) and major roads. The project's proposed open space in relationship to surrounding open space is depicted on Figure 2-5. A habitat enhancement plan, contained in Appendix A, has been prepared for the project to mitigate impacts to biological resources as required by the EIR for the GDP and the conditions of the California Department of Fish and Game Streambed Alteration Agreement.

Proposed Land Uses

The proposed SPA Plan for the Salt Creek Ranch project is shown on Figure 2-6. A summary of proposed land uses is provided in Table 2-1. The Salt Creek Ranch project is divided into three planning sub-areas. Each sub-area would contain one or more individual neighborhoods.

Sub-area 1. This area consists of the 380-acre area west of Salt Creek, north and south of East H Street. East H Street and Lane Avenue would provide the primary access to the low medium and medium density residential areas within Sub-area 1. Residential projects include both attached and detached housing. Densities vary from 4 in the single-family neighborhoods to 15.5 dwelling units per acre in the multi-family area. Lot sizes in the single-family neighborhoods range from an average of 5,800 to 8,000 square feet. Transitional buffers would be provided between residential housing units within Sub-area 1 and the EastLake Technology Park to the south. A 10-acre school and 7-acre park site in the western portion of the sub-area would be connected to the rest of the community by a

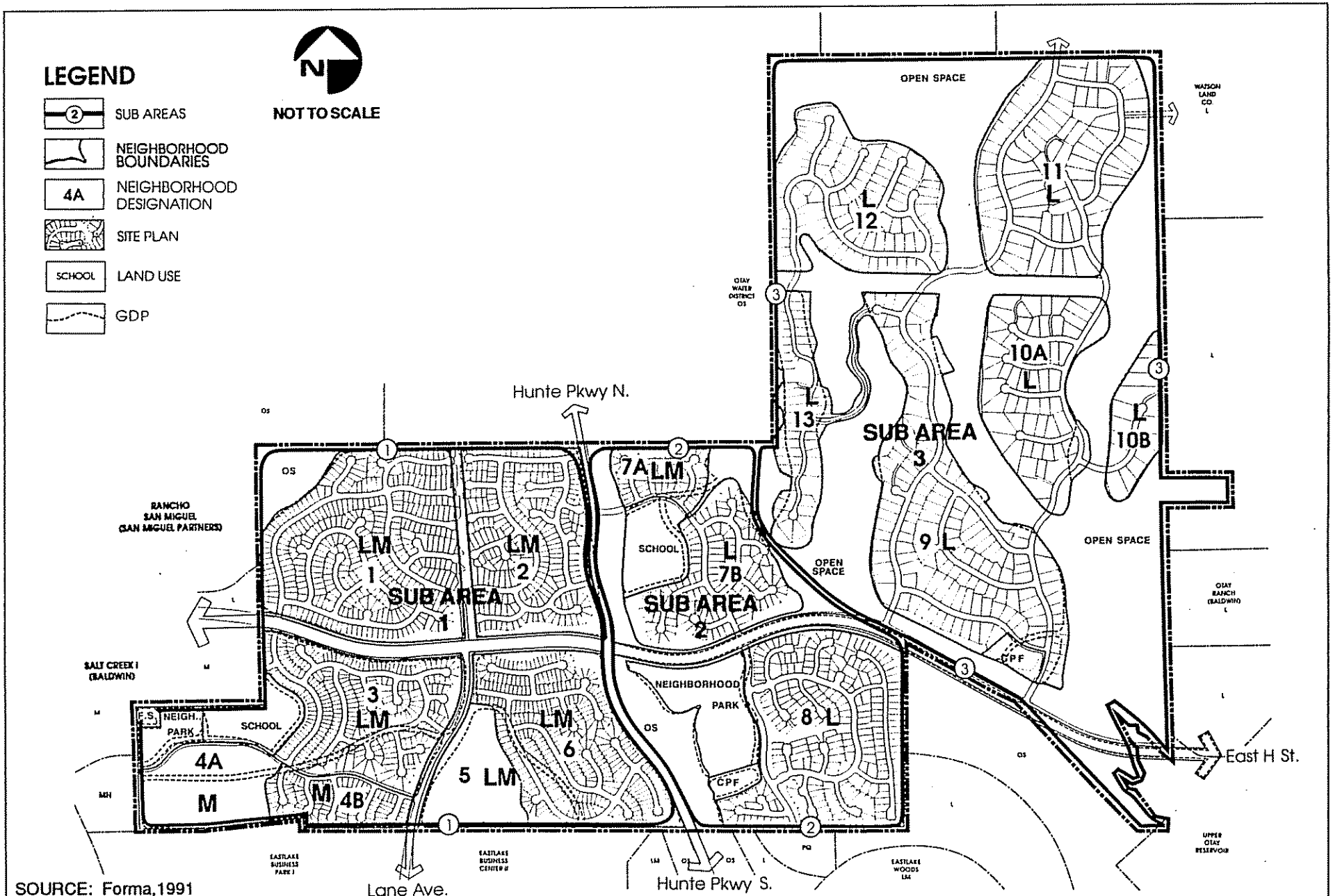


SOURCE: JBF and Associates, January 1990

FIGURE 2-5

ERCE

Surrounding Open Space Relationships



SOURCE: Forma,1991

FIGURE 2-6

Site Utilization Plan

ERCE

Table 2-1
SUMMARY OF PROPOSED LAND USES

Proposed Use	Designation	Neighborhood Number	Number of D.U.s	Gross Acreage	D.U.s/ Gross Acre
Residential Land Uses:					
	GDP				
	L	7b	120	40.8	2.9
	L	8	233	81.4	2.9
	L	9	142	87.7	1.6
	L	10a	56	40.9	1.4
	L	10b	16	17.7	0.9
	L	1	84	72.8	1.2
	L	12	97	53.8	1.8
	L	13	42	20.7	2.0
Subtotal:			790	415.8	1.9
	LM	1	385	87.4	4.4
	LM	2	250	63.9	3.9
	LM	3	287	56.0	5.1
	LM	6	313	65.3	4.8
	LM	7a	58	12.7	4.6
Subtotal			1,293	285.3	4.5
	*LM	5	211	24.4	8.6
	M	4a	428	27.7	15.5
	M	4b	95	19.9	4.8
Subtotal:			523	47.6	11.0
Residential Subtotal:			**2,817**	**773.1**	**3.6**
Non-residential Land Uses:					
Parks/Open Space:					
Natural Open Space			N/A	360.8	N/A
Neighborhood Park			N/A	8.0	N/A
Neighborhood Park			N/A	23.0	N/A
Subtotal:				391.5	
Public Facilities:					
Schools			N/A	24.0	N/A
Fire Station			N/A	1.3	N/A
Churches			N/A	7.0	N/A
Subtotal:				32.3	
PROJECT TOTAL			**2,817**	**1,197.2**	**2.4**

Source: FORMA 1991.

trail system. This trail system is incorporated into an open space greenbelt which sets Sub-area 1 back from the southerly employment area from 20 to 150 feet.

There are three neighborhoods within Sub-area 1. Neighborhood 4a will be developed with apartments in the 15.5 dwelling units per acre range. Neighborhood 5 and 6 will be developed as a townhome neighborhoods at 8.6 dwelling units per gross acre.

Sub-area 2. This area consists of the 241-acre area east of the Salt Creek and west of the Otay Lakes drainage basin. East H Street and Hunte Parkway would provide primary access to the low and low medium density residential areas located within Sub-area 2. Sub-area 2 is planned as a transitional area between higher density uses west of Salt Creek and larger lot areas in the eastern portion of the project. Sub-area 2 contains two low density neighborhoods of single family homes (Neighborhoods 7b and 8) and a low-medium density neighborhood along the northern edge (Neighborhood 7a). Sub-area 2 (neighborhoods 7b and 8) contains lot sizes which average 10,170 to 12,670 square feet. Neighbor 8 is proposed as a private-gated community. Sub-area 2 also contains the Salt Creek greenbelt, a 23-acre community park, 10-acre school site, and trails.

Sub-area 3. Sub-area 3 consists of the 584-acre area in the eastern portion of Salt Creek Ranch and contains much of the hillside and valley terrain on the property. Primary access to the low density residential areas is to be provided by East H Street. Access to properties north and east of Sub-area 3 will be provided through Neighborhood 11. Single-family detached units on large lots are proposed. The lot sizes range from 15,000 square feet to more than one acre in size. An equestrian trail would run along the eastern-most drainage.

Consistency with GDP

The GDP requires that the residential development approved in the adopted GDP and that proposed by the SPA Plan be evaluated for consistency. Table 2-2 compares and analyzes the residential development approved in the GDP and that proposed by the SPA Plan. The table indicates that the proposed residential densities and acreages are generally consistent with those of the GDP.

As shown on Figure 2-6, the neighborhood development area boundaries are generally consistent with the development boundaries of the approved GDP. The grading boundaries are also generally consistent with the GDP boundaries except in a few cases in Sub-Area

Table 2-2

GENERAL DEVELOPMENT PLAN VS. SPA PLAN

Land Use Designation GDP and SPA	Gross Acres GDP vs SPA		Total D.U.s GDP vs SPA		D.U.s/Gross Acre GDP vs SPA	
Residential						
R-L	434.6	415.8	862.0	790.0	1.9	1.9
R-LM	273.7	274.5	1,232.0	1293.0	4.5	4.7
*R-LM	35.2	35.2	211.0	211.0	6.0	4.8 to 8.6[1]
R-M	47.6	47.6	405.0	523.0[2]	8.5	11.0[3]
Open Space						
Neighborhood Parks(2)	27.0	31.0[4]	72	N/A	N/A	N/A
Open Space	351.1	360.8	35	N/A	N/A	N/A
Institutional						
Community Purpose(2) Facility Sites	7.0	7.0	N/A	N/A	N/A	N/A
Public Schools(2)	20.0	24.0	N/A	N/A	N/A	N/A
Fire Station(1)	1.0	1.3	N/A	N/A	N/A	N/A
Project Total	1,197.2	1,197.2	2,817	2,817	2.35	2.35

*LM use at the highest allowable density of LM category.

1 The LM* area contains 35 single-family units. The maximum density allowed for the LM category is 6 dwelling units per acre.

2 95 dwelling units actually laid out as single-family detached lots in the M area in Neighborhood 4b.

3 The maximum density for the M category (11) may be utilized for the whole development area.

4 Increased due to site topography.

Source: FORMA, 1991.

Three discussed below. Environmental issues associated with these boundary changes as discussed in detail in Sections 3.3.

Neighborhood 9. There are six (6) lots on the east side of the neighborhood which encroach out of the GDP boundary an average of 20 feet. The southern lot extends out the maximum of 60 feet. The encroachment is caused by the topographic constraints related to the location of the road and its crossing with East H Street. Two (2) lots on the eastern side of the northern portion of this area also encroach 30 feet due to the road alignment and topography.

Neighborhood 10a. Two (2) lots along the southern edge encroach about 30 feet due to road alignment and topography. The northern portion of this area is pulled back from the GDP line 70 feet.

Neighborhoods 10b, 11 and 12. All of these neighborhoods are within the GDP line.

Neighborhood 13. Eleven (11) lots on the eastern side of the ridgetop encroach 10 to 20 feet and 18 lots on the west side encroach from 15 to 60 feet. This is due to a very sensitive project design which has pulled back 40 feet from the ridge nose which has left two (2) large open space areas, one which is 120 x 100 feet and one which is approximately 120 x 200 feet, actually decreasing the area utilized within the GDP line by 32,300 square feet.

Site Access and Circulation

Primary access to the Salt Creek Ranch would be provided by the extension of Hunte Parkway and East H Street. Secondary north-south access would be provided by Lane Avenue, San Miguel Road and Proctor Valley Road. Telegraph Canyon Road would provide access to the project from the south. The SPA Plan includes a transportation phasing plan which establishes specific phasing of circulation improvements as required by the Growth Management Element of the general plan. The general layout of the local street system is shown on Figure 2-6. Specific internal circulation plans will be provided during the tentative map approval process. All streets within the project would be constructed to meet city standards. The Salt Creek Ranch SPA Plan incorporates pedestrian and bicycle pathways and equestrian trails within transportation corridors as recommended by the Circulation Element. Circulation is discussed in detail in Section 3.7.

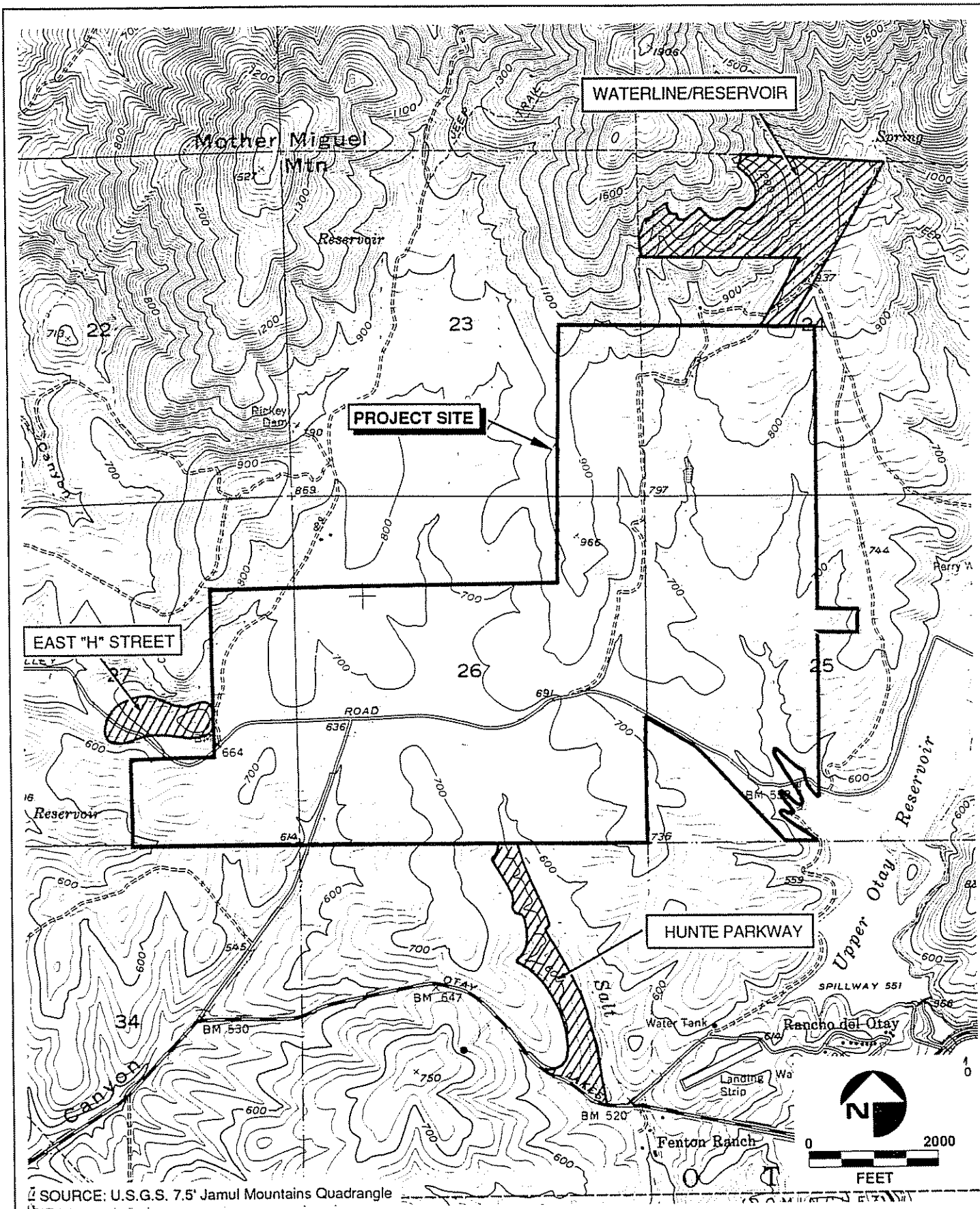
Proposed Community Facilities

Community facilities incorporated into the Salt Creek Ranch include a fire station, two elementary school sites, a neighborhood and community park, and developed open space consisting of pathways, greenbelts, trails, and pedestrian/bicycle pathways. These features are illustrated on Figure 2-6. Community facilities such as schools, parks, library, and police and fire facilities would be provided to levels required by the various applicable city threshold standards and other requirements.

Plans have been prepared in conjunction with the SPA Plan for the provision of community facilities including a water master plan addressing the location, sizing, phasing and financing of water supply facilities; a sewer master plan addressing the location, sizing, phasing and financing of wastewater collection facilities; a reclaimed water master plan addressing reclaimed water demands, existing facilities, and proposed facilities associated with providing reclaimed water service to the proposed project; and an urban runoff plan addressing the proposed diversion system and monitoring efforts. These plan also serve as mitigation measures for water-related environmental effects resulting from the SPA Plan.

Offsite Facilities

The development of Salt Creek Ranch will necessitate the construction of additional offsite facilities (i.e., water lines, sewer lines and water reservoir) in order to accommodate the future residents with adequate water and sewer services and emergency fire flows. The three offsite areas shown in Figure 2-7 include the survey boundaries used to evaluate the environmental impacts of these facilities. The Hunte Parkway parcel (approximately 46 acres) will accommodate the ultimate Hunte Parkway improvements and will contain the proposed alignment of Salt Creek Interceptor sewer line. This interceptor will temporarily tie into the Otay Valley Prison line. Ultimately, sewage flows will be collected and treated at the future Otay Ranch Water Reclamation Facility. The East "H" Street parcel (approximately 7 acres) will accommodate the extension of East "H" Street to the property and will contain a portion of the future alignment of Proctor Valley 10-inch sewer line. This proposed gravity sewer line will tie in with the existing 15-inch gravity line within the Spring Valley Sanitation District which conveys flows to the Spring Valley Outfall. The Waterline/Reservoir parcel (approximately 111 acres) will contain a proposed waterline



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Offsite Areas

FIGURE

2-7

and reservoir in order to provide water service to the 1296 pressure zone. The pad elevation of the reservoir will be approximately 1,270 feet.

Landform Alteration (Grading Plan)

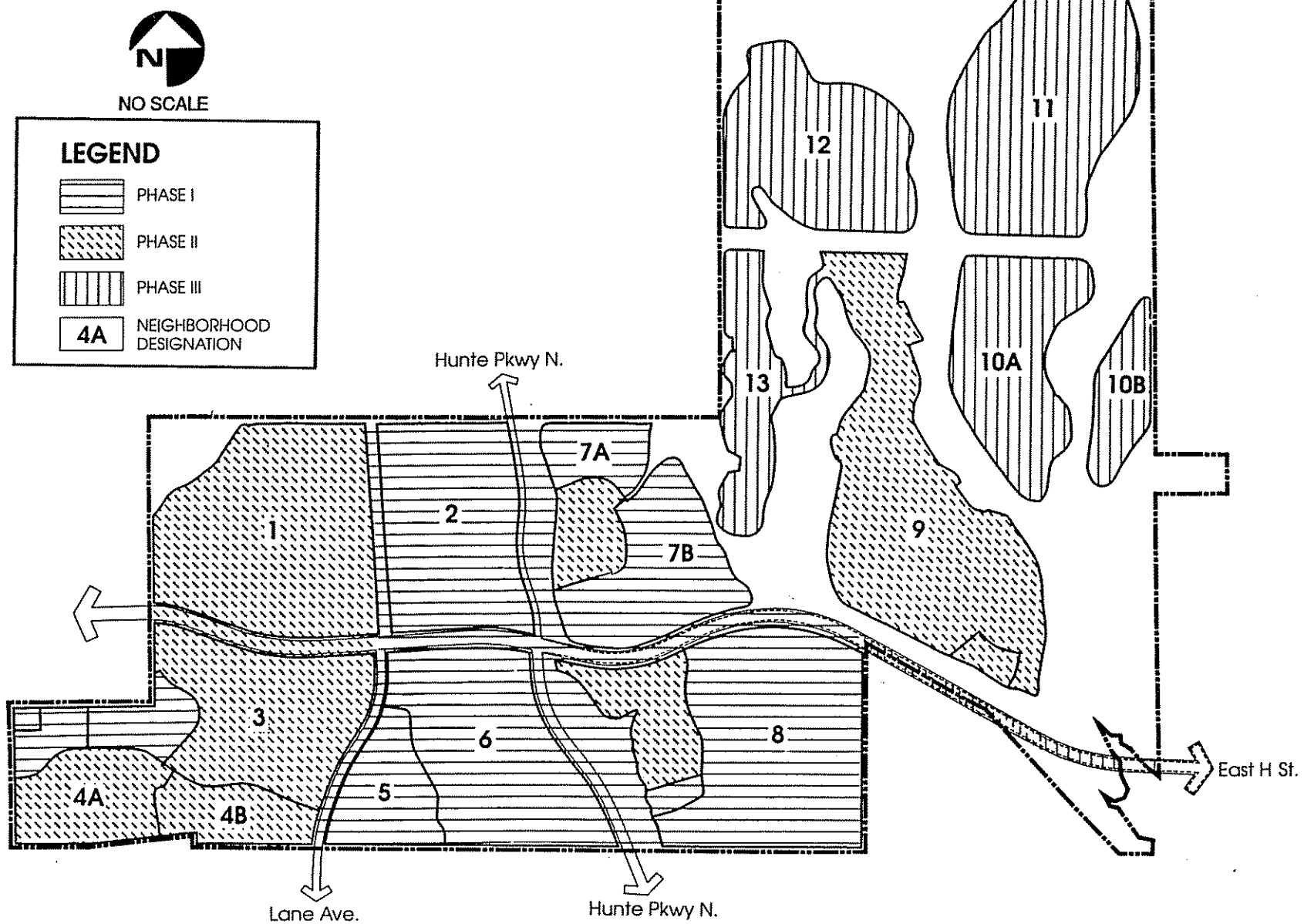
Approximately 80 percent of the project site would be graded. Slopes of 25 percent or greater would generally be preserved. Landform alteration is discussed in detail in Section 3.2.

2.4 PROJECT PHASING

The development of the Salt Creek Ranch would occur in three phases to ensure construction of the necessary infrastructure and community facilities for each residential area as the project progresses. Each phase would be accompanied by adequate on-site and off-site infrastructure including sewer and water lines, trail segments, internal roadways, drainage facilities, cable television and telephone lines as established by the Chula Vista threshold standards. The neighborhoods are numbered on Figure 2-8 to correspond with the following description.

Phase I. The first phase would begin on either side of Hunte Parkway and proceed both east and west of the parkway. West of Hunte Parkway, Neighborhoods 2, 5, 6 and 7a would include low-medium density duplexes and single-family homes. East of Hunte Parkway, Neighborhoods 7b and 8 would include single-family homes on larger lots. The Salt Creek Corridor would be improved with plantings to enhance the existing eucalyptus grove and convert this corridor into an open space park with hiking, pedestrian and biking trails. The 22.5 acre park will be partially landscaped and improved. The 7-acre neighborhood park would be developed and the adjacent school site would be graded and hydroseeded to prevent erosion. Circulation improvements to be made during Phase I include the installation of Hunte Parkway and Lane Avenue as four lane roads from the southern boundary to East H Street and the construction of East H Street as a four lane facility from Lane Avenue to the eastern edge of Neighborhood 8.

Phase II. Neighborhood 1 north of East H Street and Neighborhood 3 south of East H Street would be developed during this phase. Neighborhood 4, which is proposed for affordable multi-family dwelling units, is also planned for this phase. This phase would include lower density homes in Neighborhood 9. Open space enhancement would be



SOURCE: Forma 1991

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Phasing Plan

FIGURE 2-8

completed for those open areas adjacent to Neighborhoods 1 and 9 in accordance with the Habitat Enhancement Plan. Improvements would be made to the 22.5-acre community park, including three softball diamonds, two soccer fields, access and parking facilities. The balance of the park site would be graded and hydroseeded. The remaining elementary school site will also be graded and hydroseeded at this time. East H Street would be improved as a four lane facility from Lane Avenue west to the project boundary and from Neighborhood 8 east to the eastern access into Neighborhood 9. Phase 2 would also include urban runoff protection facilities required for water quality protection in the Otay Reservoirs.

Phase III. This last phase would complete the development of the project and would include the more sensitive areas of the site. Construction along the ridgetop in Neighborhood 13 and of the large lots in Neighborhood 10a, 10b, 11 and 12 would occur during this phase. The remainder of the open space enhancement areas would also be completed during this phase. East H Street would be constructed off-site as a four lane interim facility to connect to its western-most terminus in the EastLake development. It would also be expanded to six lanes on-site from the western project edge to the edge of Neighborhood 8 and would be extended to the eastern project boundary during this phase.

SECTION 3
ENVIRONMENTAL SETTING

3.1 LAND USE

Land use impacts associated with the General Development Plan (GDP) for Salt Creek Ranch were analyzed in detail in FEIR 89-3. The following section analyzes impacts associated with the proposed project on a more specific level.

Existing Conditions

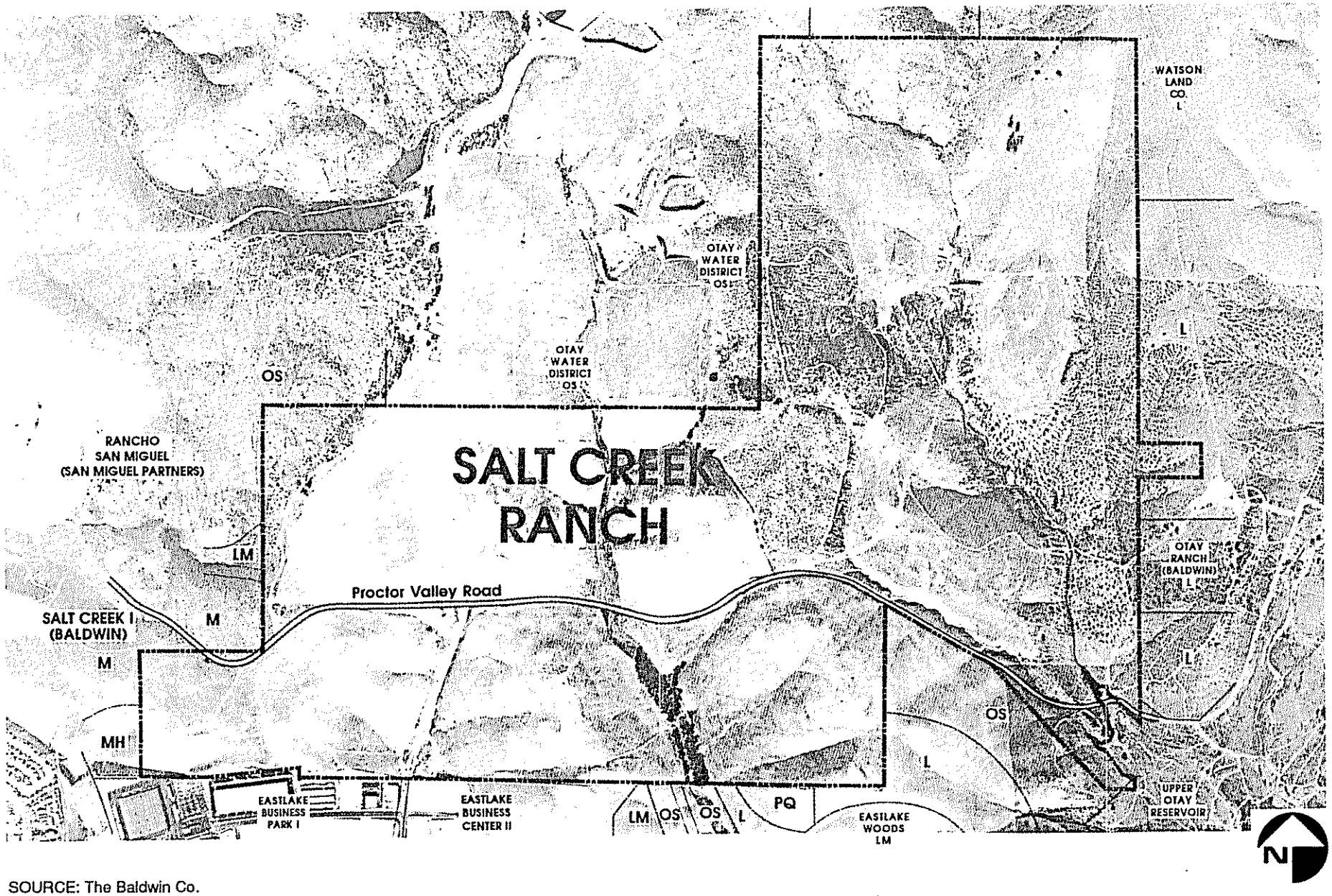
Salt Creek Ranch is located on 1,200 acres of land currently under the jurisdiction of the County of San Diego. The site is located in the northern portion of the 37 square mile Eastern Territories as defined by the City of Chula Vista. Annexation of the project site to the City of Chula Vista is presently proposed. All but 240 of the 1,200 acres of the project site are located within the City of Chula Vista's adopted Sphere of Influence.

Onsite and Surrounding Land Uses

The project site is currently undeveloped, except for a substantial acreage devoted to agricultural grazing and cultivation. Pertinent features on the site include Proctor Valley Road, an improved unpaved road, which traverses the southern portion of the site in an east–west direction. Salt Creek, the primary drainage onsite, traverses the central portion of the site in a north–south direction. The northern portion of the site (outside of the City's present Sphere of Influence boundary) is bisected east–west by a San Diego Gas and Electric (SDG&E) transmission line easement. Groves of eucalyptus and pepper trees grow along Salt Creek near the southern property boundary and approximately one-third of the site is vegetated with coastal sage scrub. The surrounding area is described in detail in EIR 89-3, Section 3.1.

Surrounding Land Use Designations

Planned land uses on surrounding areas (Figure 3-1) include low to medium-high density residential uses (0.5–15 du/acre) on the western boundary of Salt Creek Ranch within the EastLake planning area (Salt Creek I project). The project is bounded on the south by the EastLake Technology Park which includes business park uses, research, and



SOURCE: The Baldwin Co.

FIGURE 3-1

Surrounding Land Use Designations and Ownership

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manufacturing, and low to low-medium density residential development. EastLake Greens and Trails, which lies further to the south, includes residential uses ranging from low to high density and a limited amount of retail commercial uses. The property to the north is planned for residential development. Plans for properties east of Salt Creek Ranch have not been formulated, nor are these lands included in the City's Sphere of Influence.

Land Use Plans and Policies

Policies of the County of San Diego and the City of Chula Vista are discussed in detail in EIR 89-3, Section 4.1. Policies pertinent to the Salt Creek Ranch site are briefly outlined below.

City of Chula Vista General Plan: The City of Chula Vista's General Plan was comprehensively updated in 1989. As part of this update, an area plan for the Eastern Territories of the Chula Vista Planning Area was developed, and was incorporated into the overall General Plan. Policies within the General Plan Update that apply to the Salt Creek Ranch projects include the following:

- Provide for community and neighborhood commercial centers in developing areas convenient to new neighborhoods and maintain, renovate and redevelop existing centers.

- Encourage the development of a diversity of housing types and prices.

- Assure that new development meets or exceeds a standard of high quality planning and design.

- Provide for the development of multi-family housing in appropriate areas convenient to public services, facilities and circulation.

- Encourage planned developments, with a coordinated mix of urban uses, open spaces, and amenities.

- For new developments in Eastern Territories, the predominant character should be low medium density, single-family housing. Where appropriate in terms of physical setting encourage development of quality, large-lot housing.

- Plan and implement a continuous greenbelt, open space and trail system around the City. The system should begin at the Chula Vista Bayfront, extend along Otay Valley to the Lower Otay Reservoir, extend north in two corridors – the Salt Creek Canyon and the Lower and Upper Otay Reservoirs, connect to the Sweetwater Valley to the Chula Vista Bayfront. Additional open space within the general plan area should provide connections to community and neighborhood parks and schools.

- Preserve to the extent feasible natural open space areas and corridors, particularly the major canyons and valleys, as integral and functional parts of the urban pattern. Particular emphasis is placed on the canyons, stream valleys and other corridors that connect to the greenbelt system and can help to extend the greenbelt and trail system into the community.

- Refrain from development or landform alteration of the major natural features of the Otay Valley, Upper and Lower Otay Reservoirs, Mother Miguel Mountain, Sweetwater Reservoir and immediately adjacent areas.

- Provide water conservation through increased efficiency in essential uses and use of low water demand landscaping.

- Encourage, where safe and feasible, wastewater reclamation and use of reclaimed water for irrigation and other uses.

The Chula Vista General Plan defines clustering as "the aggregation of units onto a reduced land area in order to achieve a more sensitive response to the site and provide additional amenities for project residents in the form of open space and recreational amenities." The General Plan encourages clustering of residential development where such clustering accomplishes all of the following:

- Preservation of the natural landform.

- Aggregation of open space within the development for amenity and recreational purposes.

- Enhancement of land use order, visual and functional quality and livability of the project.

In accordance with these goals, the General Plan calls out the following criteria for cluster projects:

- The clustering shall result in a housing type which is consistent with those prescribed for the residential land use category in Section 4.1 of the General Plan.

- The site plan that results from clustering shall retain the same overall character as that described in the General Plan residential land use category. The introduction of some units characteristics of higher density types within the category is permitted, as long as the predominate character of the project remains the same as the underlying General Plan category.

- The number of units permitted within the gross acreage of the project shall not increase through clustering.

- The maximum net density within any residential cluster shall not exceed 4.5 units per net acre for the low density range, and 10 units per net acre for the low-medium density range.

The following objectives are stated in the Eastern Territories Area Plan, which is the community plan component of the General Plan that focuses on the project site and vicinity:

- Direct new urban development in Eastern Territories to broad mesa tops which are generally located away from environmentally sensitive areas such as flood plains, canyons and steeply sloped areas.

- Require thorough environmental reviews of all proposed conversions of vacant or agricultural land to urban areas.

- Among the areas designated in Eastern Territories for open space preservation, place the highest priority on preservation and improvement of those sections of the proposed Chula Vista Greenbelt which are located in the planning area.

These are the Otay Valley, Salt Creek and associated canyons, Upper and Lower Otay Reservoirs and the adjacent drainage areas, Mother Miguel Mountain and the Sweetwater Reservoir and the adjacent drainage area.

- Create, for the planning area as a whole, a balanced community of residential, commercial and industrial uses. To the extent that employment uses may be more difficult to establish, provide for additional designations of commercial and industrial land and encourage retention of vacant land for commercial and industrial uses.

- Assure that all new developments are provided with acceptable levels of public services. Each development should include local public facilities required to serve the development and also contribute toward construction of City-wide facilities needed by the development.

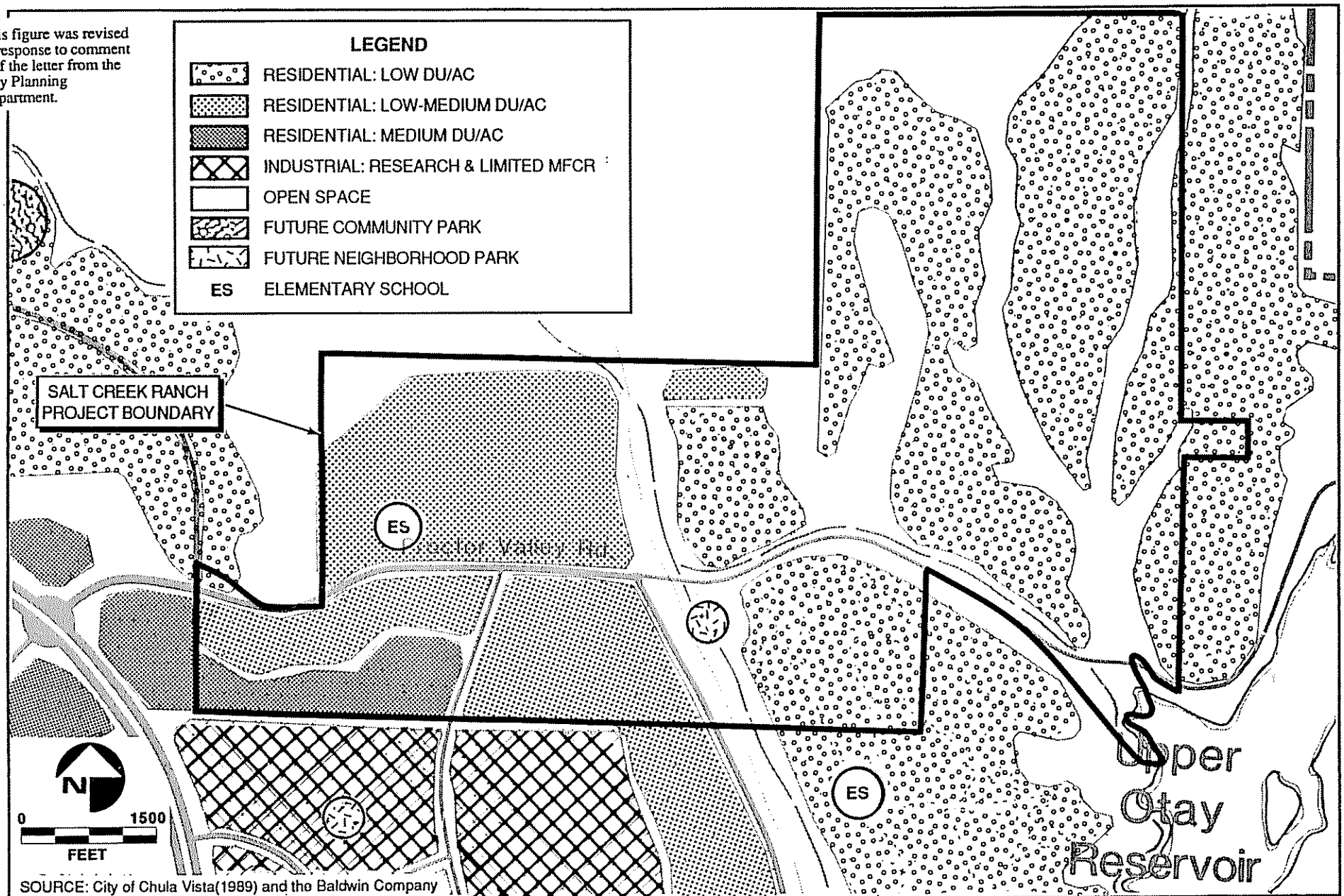
- Encourage orderly and compact patterns of development, which will make maximum use of existing public facilities and avoid "leap frog" development. In particular, encourage development phasing which will substantially build out drainage and hydrologic basins with existing public service facilities before developing new basins.

Chula Vista General Plan Land Use Designations: The City of Chula Vista General Plan Update designates Salt Creek Ranch for three residential categories: Residential Low, Residential Low-Medium and Residential Medium (Figure 3-2).

The Residential Low category includes single-family detached dwellings on large rural and estate-type lots with densities ranging from zero to three dwelling units per gross acre. This is also the appropriate residential land use for areas with variable terrain of relatively steep slopes and the areas adjacent to the proposed Greenbelt. In addition, under the concept of cluster development, single-family detached dwellings on minimum 7,000 square foot lots may be permitted.

The Residential Low-Medium category includes single-family detached dwellings on medium size lots with densities ranging from three to six dwelling units per gross acre. Although not a minimum or a standard, these areas are typically 7,000 square foot lots. In addition, under the concept of cluster development, single-family dwellings on smaller lots,

This figure was revised in response to comment 6 of the letter from the City Planning Department.



SOURCE: City of Chula Vista(1989) and the Baldwin Company

FIGURE

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City General Plan Designations

3-2

zero lot line houses, and some single-family attached units (townhouses and patio homes) could also be consistent with this designation.

The Residential Medium category includes small single-family, detached units on smaller lots, zero lot line homes, patio homes and attached units, such as duplexes and townhouses with densities ranging from six to eleven dwelling units per gross acre. This category also includes mobile home parks.

With the exception of an approximately ten-acre Residential Low-Medium area in the northern portion of the site, all of the Salt Creek Ranch property east of Salt Creek is designated for Residential Low uses. The onsite area west of Salt Creek is designated primarily for Residential Low-Medium uses with the exception of the most southwesterly corner of the property which is a designated Residential Medium on the General Plan.

Chula Vista General Plan Housing Element: The City currently expects every development with more than 50 dwelling units to explore methods to devote a minimum of 10 percent of the units to low and moderate income housing (Housing Element, Section 3.3), however, the City of Chula Vista is in the process of revising its housing element and affordable policies to require developments with greater than 50 dwelling units to devote a minimum of 10% of the units to low income housing. As proposed, there would no longer be a requirement for the provision of moderate income housing. The update of the Housing Element has been preliminarily reviewed by the State and is scheduled for Planning Commission hearing in November. The City Council is expected to adopt the undated Housing Element in early December (Batchelder 1991).

Zoning: The project site is zoned Planned Community (P.C.). This prezone was approved by the City of Chula Vista with the approval of the GDP.

GDP: The General Development Plan requires that the residential development approved in the adopted GDP be consistent with that proposed by the SPA Plan.

Impacts

The Salt Creek Ranch project proposes residential development for the mesa areas and designates open space uses for the drainage courses and for the Salt Creek corridor. The land use pattern incorporates a "graduated density" concept with the highest density located

within the western portion of the site and decreasing densities progressing east across the site.

Compatibility with Surrounding Land Uses

The uses proposed for lands surrounding the project site include residential, open space, business center, industrial (research and manufacturing) and institutional (public facilities). In general, Salt Creek Ranch residential urban uses are compatible with proposed surrounding uses, contingent upon implementation of specific development regulations where applicable as specified in the General Plan.

The GDP EIR identified five potential compatibility conflicts. The five areas are the EastLake Business Park/Salt Creek Ranch transition area, urban uses near and/or tributary to Otay Lakes reservoirs, urban uses with respect to the City of Chula Vista greenbelt, compatibility with SDG&E easements, and interface with the Otay Water District property.

Potential compatibility conflicts could occur from placement of residential uses adjacent to the EastLake Business Park which borders the project site on the south. A buffer zone has been designed to mitigate potential impacts associated with the compatibility issue. This proposed buffer zone would:

- Include a slope which would vary in height (from 10 to 39 feet) and depth to provide vertical and horizontal separation between uses.
- Vary in depth from an average of 50 feet to a minimum of 30 feet along the single-family area.
- Vary in depth a minimum of 20 feet along the multi-family area.
- Be extensively landscaped with trees and shrubs to effectively screen and separate housing from adjacent industrial uses.
- Contain an 10-foot wide meandering pedestrian/bike trail linking the school/park site on the western edge to the Salt Creek Corridor.

- Contain open space connections from the single-family and multi-family areas to this trail corridor. Multi-family recreational amenities will be linked to this trail buffer.

Another potential compatibility issue with the proposed project is urban development in proximity to the Upper Otay water supply reservoir. Design modification during the GDP approval process pulled development away from the reservoir; however, urban runoff reaching the reservoir could have significant adverse impact on water quality. A diversion system is proposed. Refer to Section 3.4 for discussion of this issue. The reservoir is also part of the Chula Vista Greenbelt, thus the view from the reservoir environs to the surrounding areas is potentially significantly impacted by development. Refer to Section 3.2 for discussion of this issue.

The third area of compatibility, identified in the GDP EIR, concerns the Chula Vista Greenbelt through the Salt Creek Ranch. The General Plan depicts the Chula Vista Greenbelt traversing Salt Creek Ranch through Salt Creek Canyon and stream valley. The development's interface with the greenbelt area is important from an open space impact and continuity of use perspective. The SPA plan proposes open space for the greenbelt area including trail use and is consistent with the General Plan. Uses proposed adjacent to the Salt Creek corridor include low medium and low density residential, a school site, a neighborhood park, and a community center. Landscaping and setbacks would provide visual and spatial buffer between the greenbelt and adjacent uses.

The fourth concern involves the use of the San Diego Gas and Electric Company (SDG&E) powerline easement for private recreational facilities. A pedestrian trail is proposed to be developed within the 120-foot wide San Diego Gas and Electric (SDG&E) easement corridor within Sub-Area Three. This trail will be a minimum of five feet wide and will include a vista point at one end. It is anticipated that additional transmission lines will be added to the easement in the future. Recreational use of such easements may not always be compatible with operation and maintenance requirements of transmission facilities (or their expansion) within the easement. Recent studies have drawn attention to the possible health effects of exposure to above-average electric and magnetic fields. The biological effects have been clearly established, but a conclusive relationship between these effects and possible public health risks have not been established. Accurate risk assessments are not possible at this time (California Public Utilities Commission July 1989). Residential and recreation (trail) uses may be incompatible with the SDG&E high voltage transmission

lines. This issue is considered a significant impact until an agreement is reached between the applicant and SDG&E concerning use of the easements, trail maintenance, and accident liability.

The fifth potential compatibility conflict concerns the Otay Water District reclamation facilities. Along the northern edge of the proposed project, the property interfaces with the reclamation facilities. Since future residents would be located in close proximity to the facility's storage tanks and reclamation pond, a potential compatibility issue involves a potential visual impact on adjacent residential uses. This potential impact is discussed in Section 3.2.

Consistency with General Plan and Zoning

Consistency with the General Plan densities was determined during the GDP approval process.

The Housing Element of the City of Chula Vista General Plan establishes programs and policies that are intended to provide good quality housing to persons at all income levels. The Chula Vista Housing Element states: "The City of Chula Vista expects every developer to address the problem of housing low and moderate income families and individuals. Where proposed projects exceed fifty units, the municipality expects the involved developers to explore methods to devote a minimum of ten percent (10%) of the said units to low and moderate income housing. The program calls for the developer's exploration and investigation of Federal and State subsidy programs and other economically feasible means of reducing the cost of housing."

The Housing Element also commits the City of Chula Vista to participate in SANDAG's regional program for the fair-share allocation of lower income housing. According to SANDAG's Annual Housing Needs Performance Report for the 1985 to 1990 reporting period, the City of Chula Vista substantially exceeded its fair-share allocation lower-income housing and has provided proportionately more lower-income housing than any other jurisdiction in the San Diego region.

As discussed under existing conditions, the City of Chula Vista is in the process of revising its Housing Element and policies. The City is currently working with the applicant to develop an affordable housing program which will provide low income units as required by

the City under the new policy. Prices are projected to begin at $79,000 in 1990 dollars. Although the SPA plan does not fully present an affordable housing program as required by the GDP conditions of approval, the applicant has initiated discussions with lenders, governmental entities and non-profit housing providers. The specific Salt Creek Ranch affordable housing programs will evolve as the viability of funding options are evaluated for feasibility and development plans become more precise. The specific Salt Creek Ranch affordable housing programs will be subject to Planning Commission review and approval concurrent with approval of the SPA Plan. Complete implementation mechanisms will be determined at the time of the first Final Map. The affordable housing program will be consistent with the principals outlined in the mitigation section of this report. This issue is considered a significant impact until the program is approved.

Consistency with the GDP

The densities proposed by the SPA Plan are consistent with those proposed by the GDP. The gross acreage and proposed densities are the same, the total dwelling units proposed has decreased by 0.2.

Mitigation Measures

Implementation of the following mitigation measures would mitigate the potential land use impacts associated with the Salt Creek Ranch project.

The potential land use compatibility impacts relative to use of the SDG&E easement as a trail shall be mitigated by coordination with SDG&E during all phases of future planning. The applicant shall obtain a written agreement with SDG&E to gain permission to use the easements. The agreement shall discuss relevant issues including permissible uses, maintenance, and liability. This agreement shall be obtained prior to tentative map approval.

To mitigate potential health impacts associated with the proximity of residential and trail uses to the high voltage transmission line, the applicant shall pull houses back away from the easement by a conservative distance (no standards are available) and provide buyers of homes adjacent to the easement with a white paper informing them of the current controversy concerning electromagnetic fields, the applicant should also either move the

proposed trail away from the easement or post signs at regular intervals in both English and Spanish alerting trail users of the potential risks.

Consistency with General Plan and Zoning

With respect to the potential impacts associated with provision of affordable housing, the project applicant's affordable housing program shall be subject to review and approval by the Planning Commission concurrent with SPA plan approval.

The program shall be consistent with the following principles:

As determined by the 1991 Housing Element revisions, applicant will continue to explore various methods to devote ten percent (10%) of the Salt Creek Ranch units to affordable housing.

As provided by the Housing Element, the City of Chula Vista shall continue to assist the applicant to fulfill the Housing Element affordable housing policy through the following actions:

- Seek State and Federal subsidies for moderate and low income housing. (Chula Vista Housing Element, Part 2, page 24, 1985).

- Consider the use of density bonuses consistent with State law. (Chula Vista Housing Element, Part 2, page 24, 1985).

- Consider exploration of experimental planning, design and development techniques and standards to reduce the cost of providing affordable housing. (Chula Vista Housing Element, Part 2, 1985).

The applicant will prepare and implement an affirmative fair marketing program (Chula Vista Housing Element, Part 2, 1985), including a marketing plan to attract qualified buyers for non-market rate housing.

Should it become infeasible, impractical or inappropriate to provide affordable housing as determined by the pending housing element revisions, the applicant and the City shall

consider alternative methods of achieving affordable housing opportunities including, but not limited to the following:

- Land Set Aside: An equitable donation of a building site which could be made available to the County Housing Authority or other non-profit entity to construct affordable housing.

- Off-Site Projects: Construction of an affordable housing project at an off-site location, including consideration of renewal, rehabilitation and preservation projects, and the provision of homeless assistance program.

- In-Lieu Contributions: In-lieu contributions to be used to provide assistance to other identified affordable housing efforts. The contribution shall be evaluated to ensure its adequacy in relation to achieving assistance opportunities commensurate to the level of the original project requirement.

The applicant will actively explore the participation of South County jurisdictions in non-profit housing agencies in the development, ownership and management of affordable housing projects. The applicant will also assist these non-profit efforts to increase their ability to secure additional funding resources to develop quality affordable housing.

Analysis of Significance

The implementation of mitigation measures proposed above will reduce the potential impacts associated with the SDG&E easement and the provision of affordable housing to below a level of significance.

3.2 LANDFORM/AESTHETICS

Landform/Aesthetics impacts associated with the General Development Plan (GDP) for Salt Creek Ranch were analyzed in detail in FEIR 89-3. The following section analyzes impacts associated with the project on a more specific level.

Existing Conditions

Landform and Visual Features

The project site is located in a terrestrial transition area between the San Miguel/Mother Miguel Mountains to the north and the rolling hills, valleys and mesas of the area to the south. Elevations on the property range from approximately 550 feet above mean sea level (AMSL) in the western portion of the site to over 1100 feet AMSL in the northern portion of the property. The steepest portions of the site occur in the north central and northeastern portions of the site, although less than 10 percent of the property has slopes with gradients of 25 percent or greater. Dominant landform features on the site include Salt Creek and gently rolling hillsides in the central portion of the site. A narrow south-trending ridge dominates the eastern portion of the site. Two major drainages, separated by a rounded ridge, join to form a larger drainage which flows into the Upper Otay Reservoir at the southeast corner of the site.

Sensitive Views

The project may be visible to existing and future residents to the south and southwest of the site although intermittent topography may block offsite views from some of these areas. Pedestrians and other users of the greenbelt trail systems would view the project site and are considered sensitive. Travelers on the designated scenic roads passing through the project would also be sensitive to the views of the site.

General Plan Guidelines and Policies

The Land Use Element of the Chula Vista General Plan includes guidelines and policies affecting the design of proposed development. The specific guidelines most pertinent to this analysis include the hillside development regulations, landform grading guidelines, and the scenic highway policies.

The general plan contains guidelines for development in hillside areas to assure that there is visual compatibility and to enhance public safety. With respect to grading, guidelines specify that landform grading techniques be used to soften the appearance of cut slopes. Specifically, landform grading is a method of contour grading which creates vertical and

horizontal undulations and variations which simulate the appearance of natural terrain. Also, disturbed slopes should be replanted with native vegetation where feasible.

An important guideline established to preserve aesthetic quality is to maintain the development at a scale which is appropriate to the hillside location. The general plan also states that significant hillsides (or other unique features) should be preserved in their natural state.

The general plan also contains guidelines for scenic highways. Scenic highways are made up of the road and its right-of-way, and the scenic corridor. The scenic corridor is the visible area outside the highways right-of-way, generally described as "the view from the road". The boundaries of the scenic corridor vary with the natural characteristics of the landscape as viewed by a motorist. The general plan indicates that two proposed scenic roadways will traverse the project site. East "H" Street from the western property boundary to Hunte Parkway is one of the scenic routes. Hunte Parkway from East "H" Street southerly along Salt Creek is the other scenic route. The general plan requires the use of special design features along scenic highways such as right-of-way reservation, special landscape treatments, landform grading with varied slope ratios, and unique median treatments.

Impacts

The neighborhoods, lot size, and housing types for Salt Creek Ranch would vary, decreasing in density from west to east. The open space corridors naturally divide the site into three sub-areas (see Figure 2-6). Sub-area 1 would be composed of single-family planned development areas with low–medium density lots. Sub-area 2 would be a transition from more intense land used to a lower density with larger lot sizes. View preservation is considered to be important in this area. Sub-area 3 is proposed as a low-density/large lot area. The emphasis in this area would be on views into the natural undisturbed open spaces and orientation toward equestrian trails.

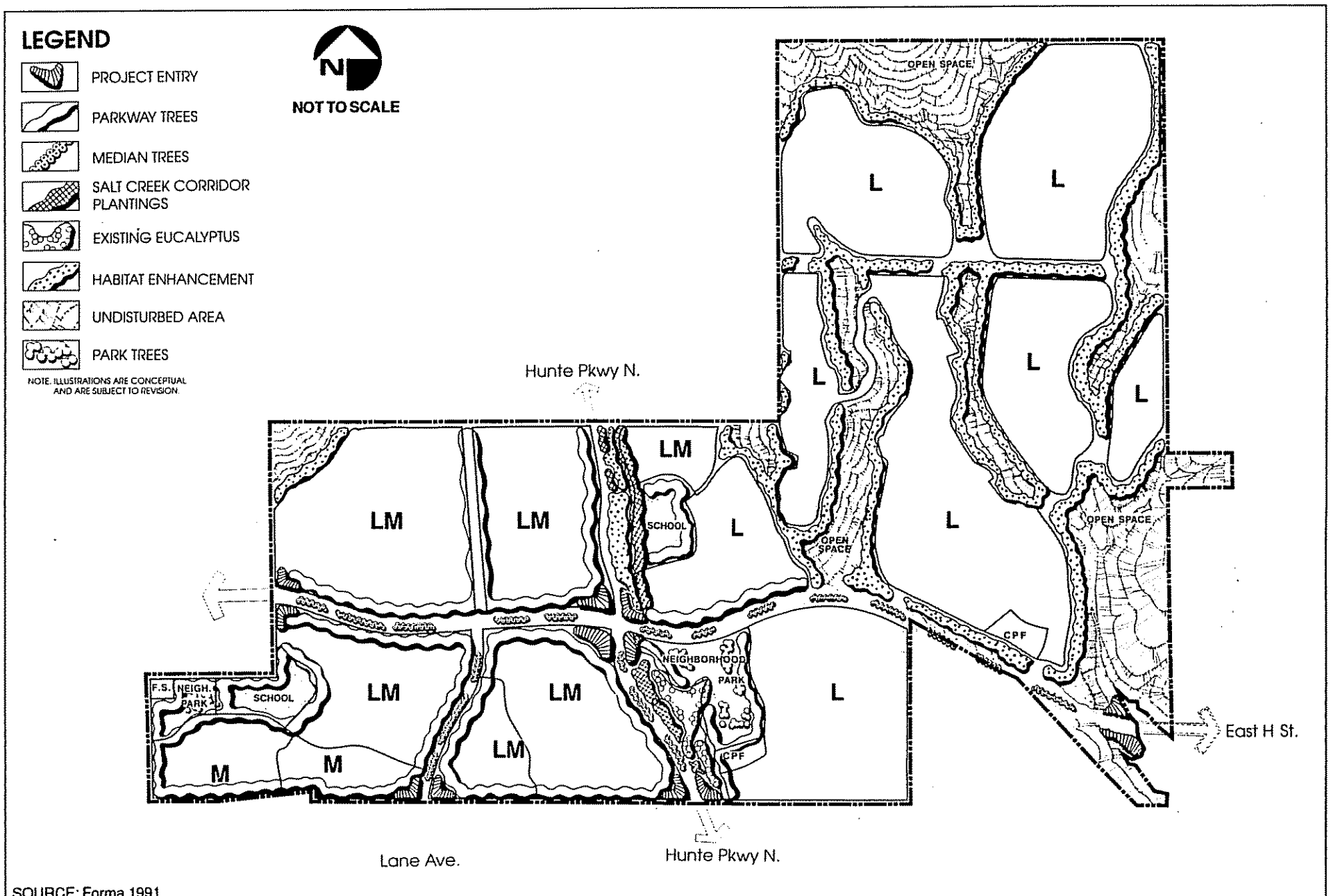
The Salt Creek Ranch SPA Plan discusses community design, landscaping, walls and fences, grading, and scenic highways. The Salt Creek Ranch community is designed with an "old mission" theme and would use "adobe" colors, a low stone wall, and low-maintenance, water-efficient plant materials. The landscape concept includes the use of consistent walls, monuments, signage, parkways, and open space areas beginning at the

project entry and continuing throughout the entire community. The planting theme expands on the mature eucalyptus grove located within the project site and the riparian planting materials found in the corridor. Shrub massing and stands of sycamores would also be used. The landscape concept is illustrated in Figure 3-3.

Community walls and fences provide screening, sound attenuation, security and containment. The "old mission" theme would be carried throughout the wall system, however, the materials change depending on the purpose of the wall. Walls would be placed along Hunte Parkway and East "H" Street, as well as along other streets at the development edges. Project edges adjacent to open space and internal walls would be constructed of masonry block such as colored sump block. Where view preservation is an issue, such as where residential areas interface open space, a wrought-iron fence would be added to the masonry wall; and Plexiglass would be used in conjunction with the masonry walls in areas where the walls must also provide sound attenuation. Equestrian fencing is proposed along scenic roadways and is intended to provide containment of the equestrian trail. Equestrian fencing would be constructed of a wood or wood-like rail/fence system. Walls and fences would be a maximum of seven feet in height. Figure 3-4 shows the location of perimeter walls and fences. The specific types of walls and fences are shown in Figure 3-5. Implementation of the proposed wall and fence plan in conjunction with the proposed landscape concept plan would minimize view obstruction and enhance views to open space areas. Therefore, no significant visual impacts are anticipated.

Landform Alteration

The Salt Creek Ranch Grading Plan is based on the conceptual grading plan in the General Development Plan. The grading plan is characterized by preservation of the Salt Creek corridor and the natural drainage areas, utilizing landform grading throughout the remainder of the site. Grading considerations for the Salt Creek Ranch project would include revegetation of slope banks in accordance with the Habitat Enhancement Plan, contour grading techniques, variable rear setbacks for homes, variable side yard separation, tilt rear grading lines, and berms along visible edges. A majority of the development would be situated atop ridgelines, while rock outcrops and intervening drainages would be retained in the eastern portion of the site. Grading in Sub-area 1 proposes 3,350,000 cubic yards of cut and 3,185,000 cubic yards of fill, with an estimated shrinkage of 165,000 cubic yards. Grading in Sub-area 2 proposes 1,425,000 cubic yards of cut and 1,355,000 cubic yards of fill, with an estimated shrinkage of 70,000 cubic yards. Grading in Sub-area 3 proposes



SOURCE: Forma 1991

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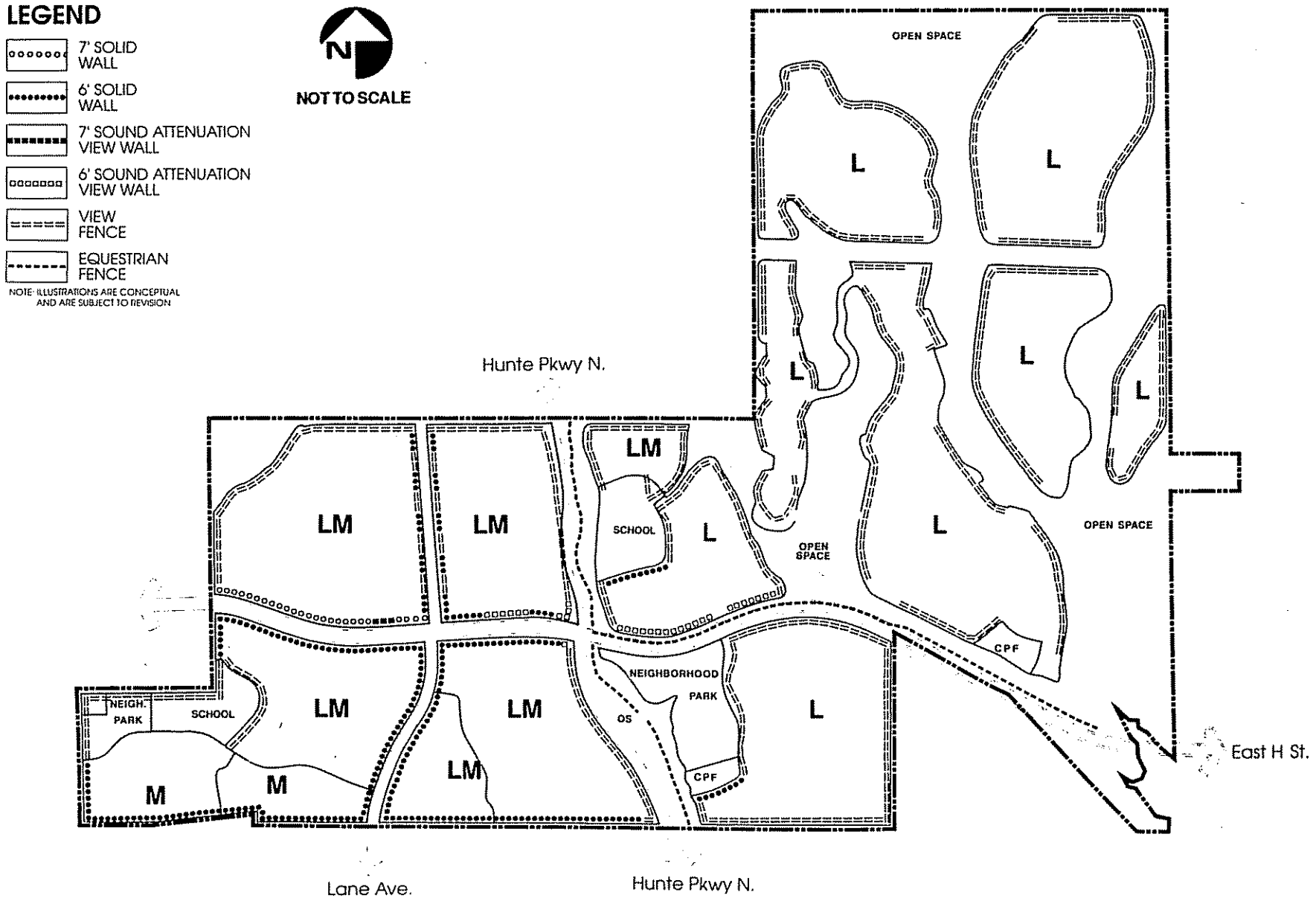
Landscape Concept Plan

FIGURE 3-3



SOURCE: Forma,1991

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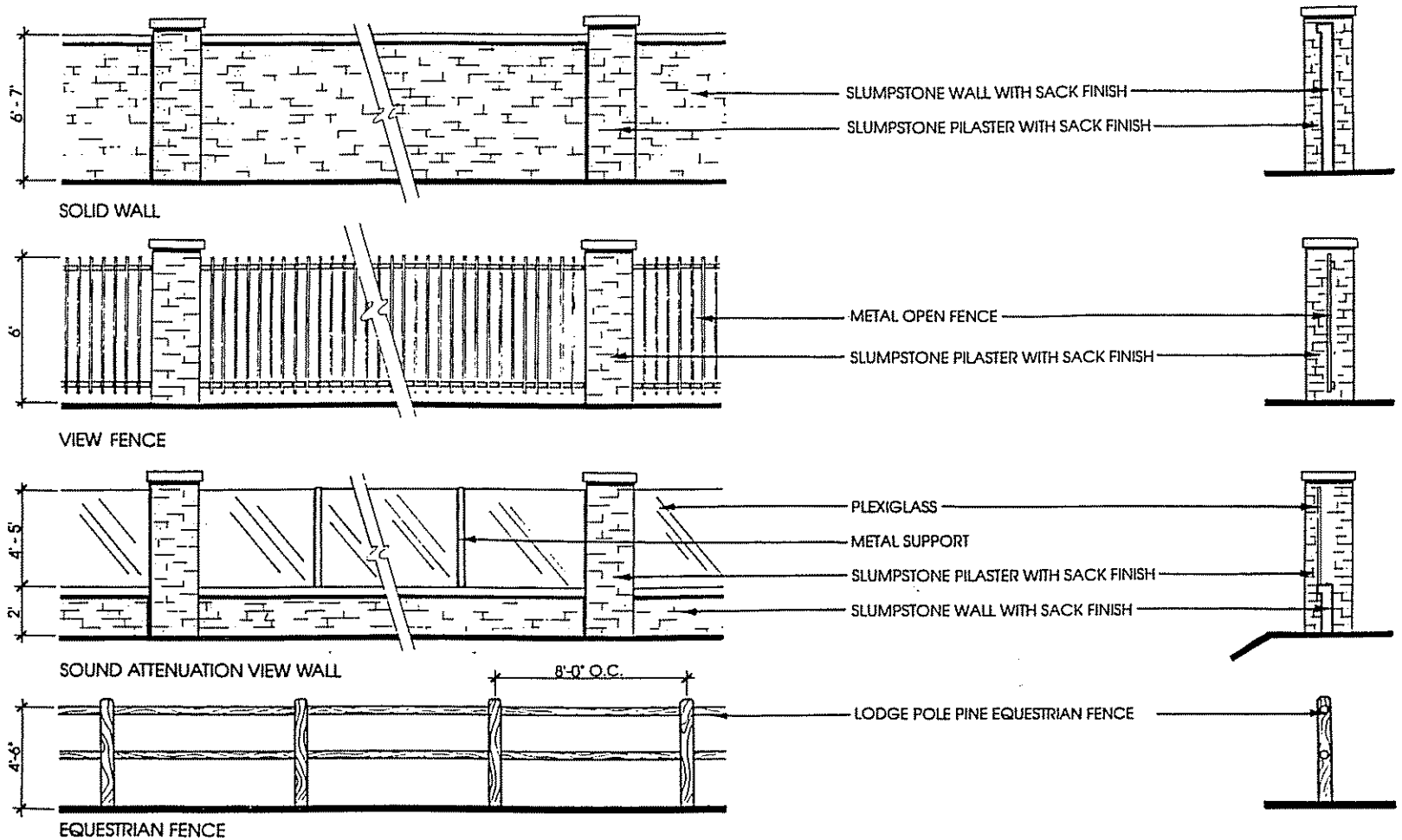
Perimeter Wall/Fencing Plan

FIGURE 3-4



SOURCE: Forma,1991

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Wall/Fencing Elevations

FIGURE 3-5

1,985,000 cubic yards of cut and 1,885,000 cubic yards of fill with an estimated shrinkage of 100,000 cubic yards (see Figure 3-6). As proposed, a balance between cut and fill numbers is maintained, thus conforming to requirement 3.1.5 of the grading guidelines outlined in Section 3 of the SPA Plan. Total grading proposed for the Salt Creek Ranch project (Sub-areas 1, 2, and 3) is approximately 6,760,000 cubic yards of cut and 6,425,000 cubic yards of fill, with an estimated shrinkage of 335,000 cubic yards. Each sub-area is discussed below. The grading plan, which is depicted on Figure 3-7, proposes to avoid manufactured slopes in excess of 30 feet in height, round manufactured slopes to blend with existing topography, and preserve of slopes greater than 25 percent in the northwest corner of the site as undisturbed open space.

Sub-area 1 – This area contains the most gradual topography within the site. Low–medium densities are planned for this area. The majority of Sub-area 1 is proposed to be graded due to the higher density of the homes. The SPA depicts a concept of landform grading to be utilized in the setback areas outside the right-of-way along East "H" Street to reinforce the parkway character of the roadway.

Sub-area 2 – This area comprises the middle portion of Salt Creek Ranch. This area contains rolling hills and the Salt Creek open space corridor. Slope banks which vary from 2:1 to 5:1 would be created in some areas of this neighborhood. Slope rounding would be utilized between differing height areas. Transitions between the school and the neighborhood park to surrounding neighborhoods is an example of this treatment. As depicted in the GDP, landform grading along both Hunte Parkway and East "H" Street, shows slopes varying from 2:1 to 5:1. Lots would be pulled back from 20 to 100 feet from the edge of the right-of-way along East "H" Street and from 20 to 40 feet along Hunte Parkway.

Sub-area 3 – Expansive open spaces, natural drainage courses and the hilly backdrop leading to the surrounding foothills characterize Sub-area 3. The SPA plan proposes larger lots. Grading within Sub-area 3 is designed to preserve existing areas of 25 percent slope. Major rock outcroppings occurring within neighborhood 13 would also be preserved in open space. Ridgeline development in neighborhood 13 presents a concept of grouped sub-neighborhoods of homes separated by open areas which correspond with major rock outcroppings (Figure 3-8). This would result in visual breaks in the skyline of the ridge as seen from East H Street. The ridge in neighborhood 13 is subject to strict design criteria to minimize visual impacts of development in this highly visible area.

LEGEND

SUB AREA "1"
TOTAL CUT 3,350,000 CYDS
TOTAL FILL 3,185,000 CYDS
165,000 CYDS (EST. SHRINKAGE)

SUB AREA "2"
TOTAL CUT 1,425,000 CYDS
TOTAL FILL 1,355,000 CYDS
70,000 CYDS (EST. SHRINKAGE)

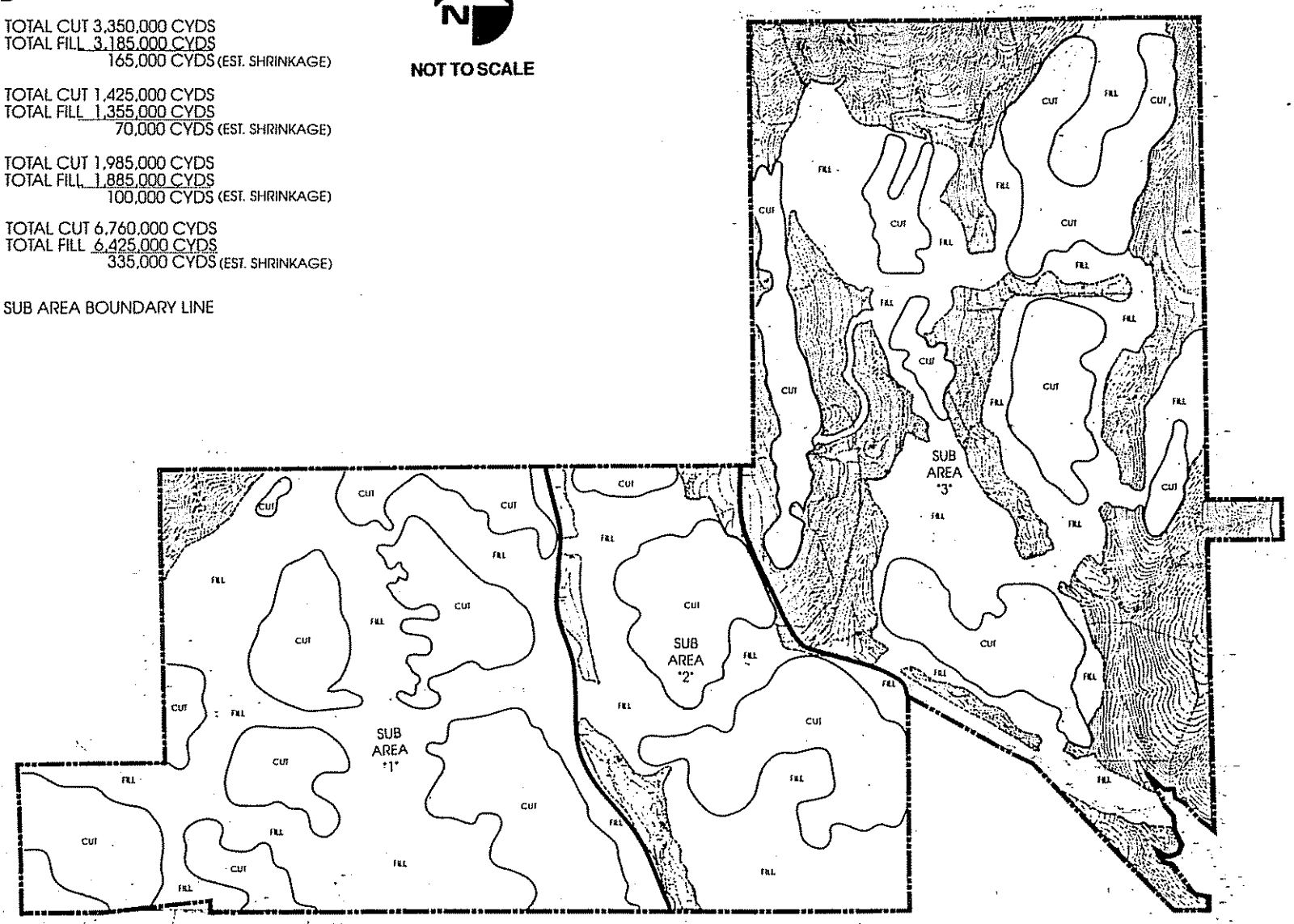
SUB AREA "3"
TOTAL CUT 1,985,000 CYDS
TOTAL FILL 1,885,000 CYDS
100,000 CYDS (EST. SHRINKAGE)

TOTAL
TOTAL CUT 6,760,000 CYDS
TOTAL FILL 6,425,000 CYDS
335,000 CYDS (EST. SHRINKAGE)

SUB AREA BOUNDARY LINE

N

NOT TO SCALE



SOURCE: Forma, 1991

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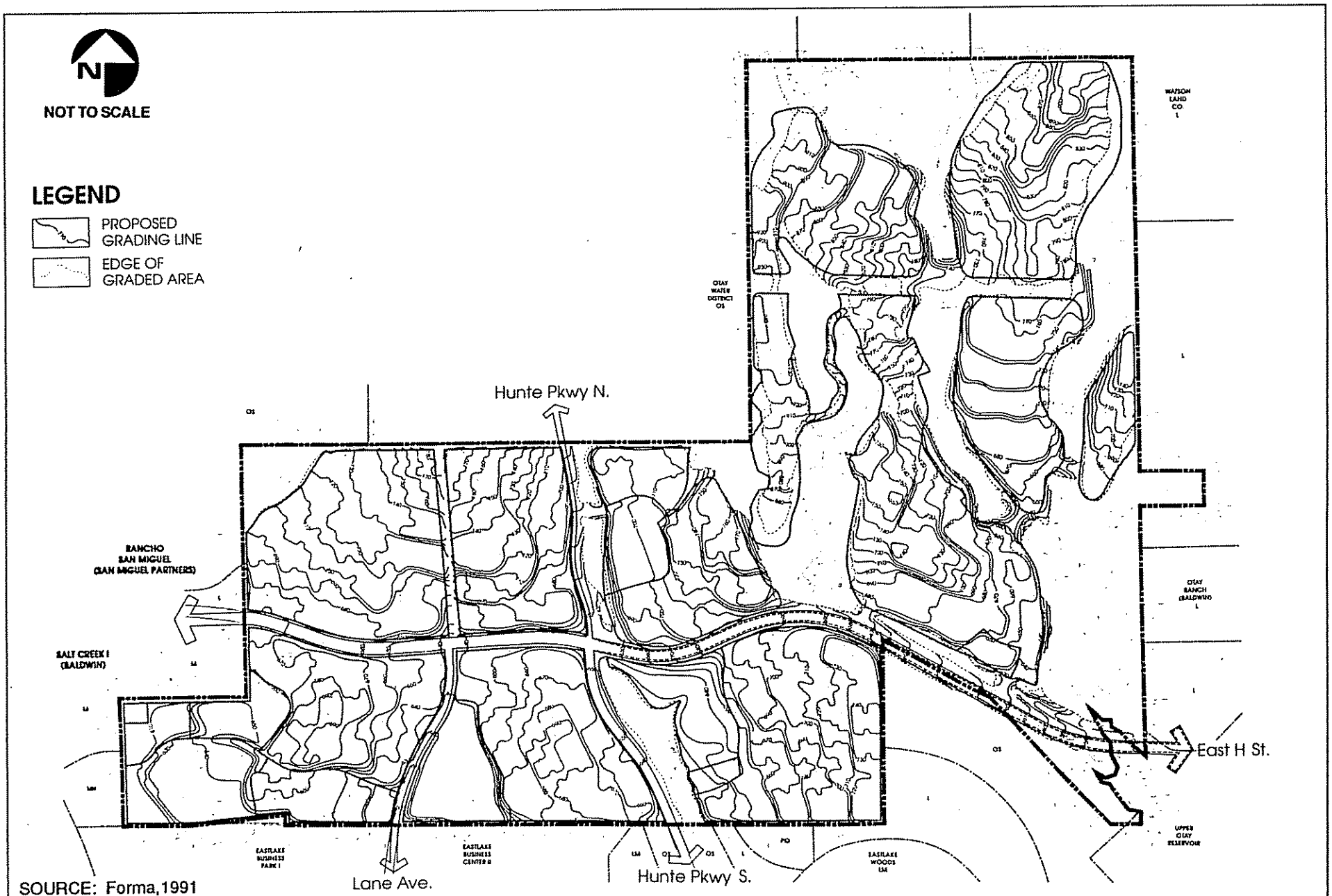
Cut and Fill Map

FIGURE 3-6



ERCE

Conceptual Grading Plan

FIGURE 3-7

Manufactured slopes would be created to construct roads, trails and allow for development of the mesa areas. Wherever these slopes occur, they would be revegetated with coastal sage scrub habitat in accordance with the Habitat Enhancement Plan. Variable slope gradients of 5:1, 4:1 and 3:1 would be incorporated throughout the area. Lots adjacent to open space canyon areas would have rear yard slopes equal to or less than the existing grade. Drainage on the lots may be split with the house and front yard draining to the street and rear yard draining to the back property line to reduce the amount of cut and fill within the graded area. Tilt rear grading lines would be used to eliminate stepped-pad edges. The plan proposes the use of berms along visible edges to assist in screening views of homes. Grade-separating of pads and roads would minimize grading. Varied building setbacks from rear and side lot lines would soften development edge.

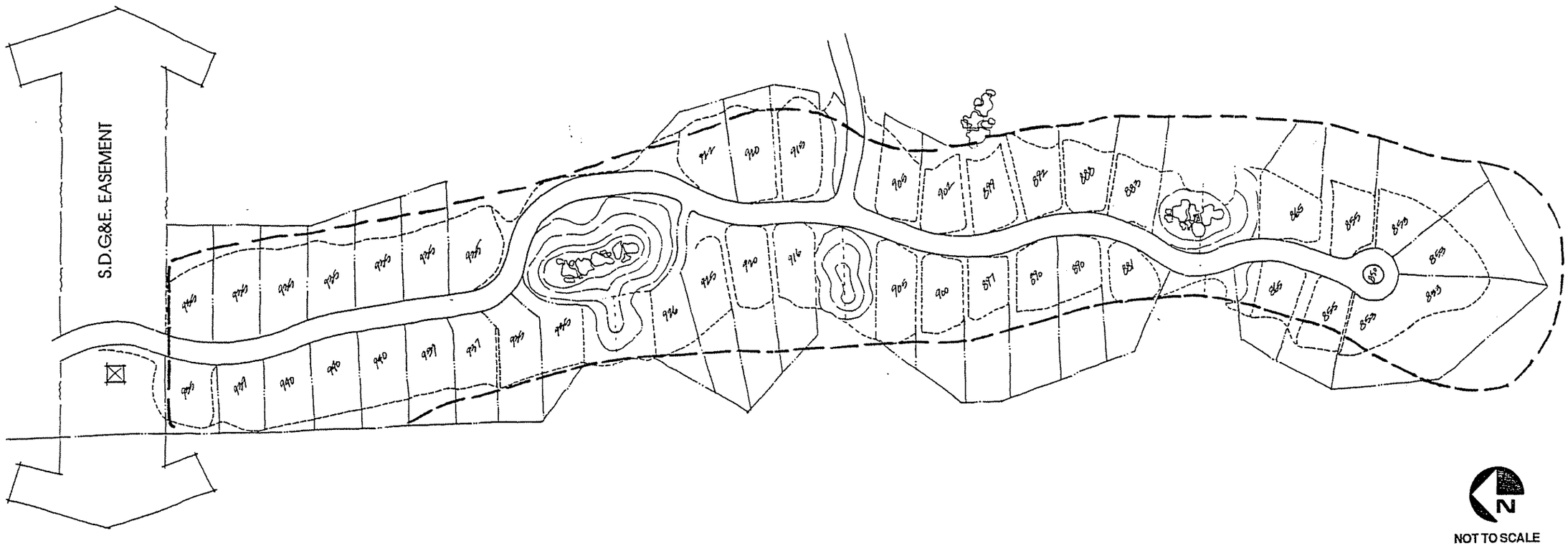
The grading limits generally conform to the conceptual grading plan approved in the GDP. In some instances, grading would extend beyond the boundaries of an approved development area (as permitted by the GDP "where necessary to implement the proposed development or construct roadways or other public facilities") (see Figure 3-9). For a detailed analysis of grading limit impacts refer to Section 3.5, Biological Resources and Section 3.6, Cultural Resources.

Visual Quality

The existing visual character of the project site would be permanently altered by the proposed development. Rural, sloping landscapes would be replaced by manufactured slopes and structures with accompanying urban hardscape, interspersed with various open space and recreational uses. Major roadways would traverse valleys and the Salt Creek drainage. Development would permanently alter existing topography, changing the aesthetic character of the site. The visual impacts of the proposed development are discussed in terms of the surrounding residents, greenbelt users, and travelers on the scenic roadways. In addition, views from the project are discussed.

Surrounding Residents. Visual impacts to residents to the south and southwest are anticipated with buildout of the SPA Plan. Impacts can be reduced to a certain extent by setbacks, site design, and landscaping.

Greenbelt Users. The project proposes low density residential use in the eastern portion of Sub-area 3. There will be some homes visible from the Upper Otay Reservoir, depending



SOURCE: Forma,1991

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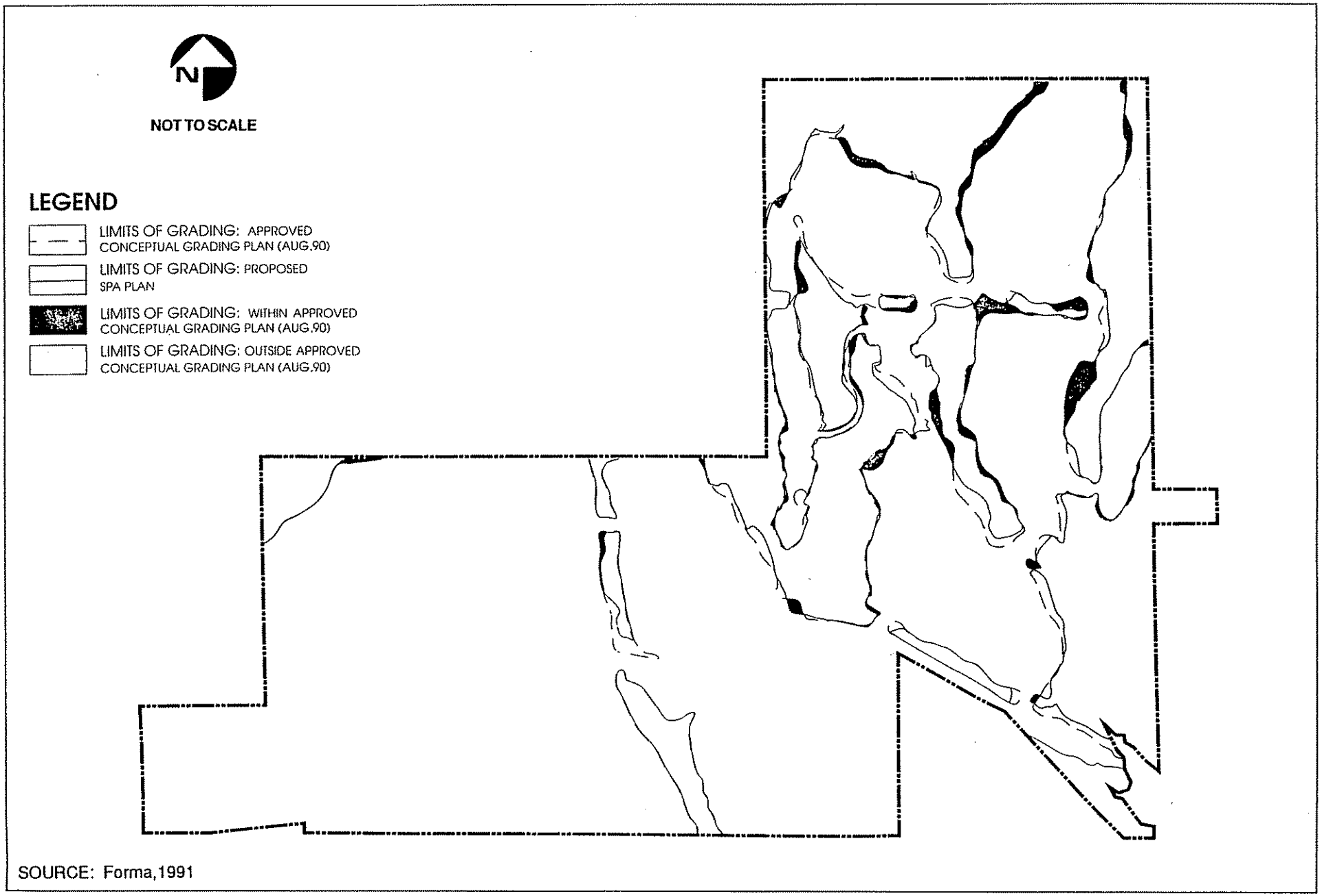
Ridgeline Estates (Neighborhood 13)
Conceptual Lotting/Grading

FIGURE
3-8



SOURCE: Forma,1991

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Limits of Grading Comparison

FIGURE 3-9

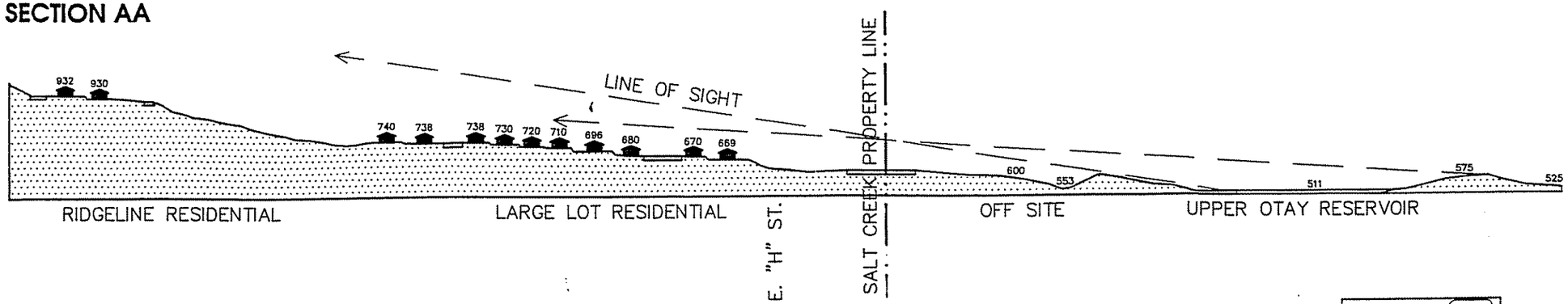
on the location of the viewer (see Figure 3-10). The Upper Otay Reservoir is located directly southeast of the proposed project and is a part of the Chula Vista Greenbelt, thus the view from the reservoir environs to the surrounding areas is potentially significantly impacted by development.

To mitigate the potentially significant visual impact associated with the reservoir, the applicant is proposing the following measures:

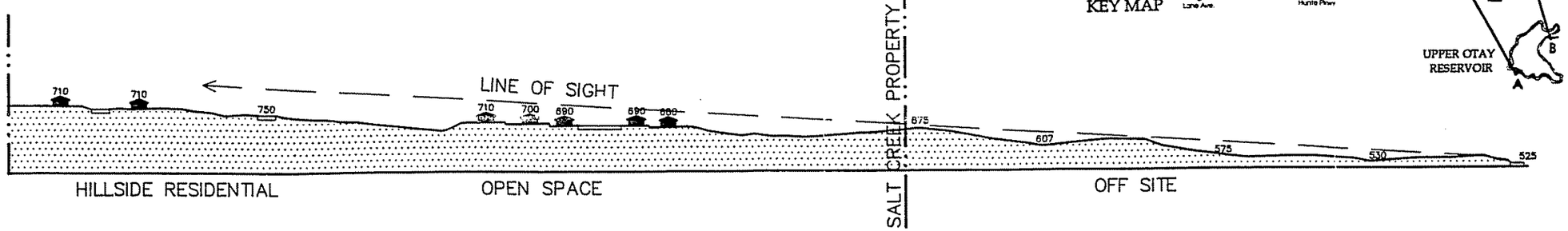
- Implementation of the Land Alteration Standards outlined in the GDP and Chapter 5 of the SPA Plan.
- Revegetation of visible slope banks with native coastal sage scrub.
- Use of contour grading techniques as shown on the conceptual grading plan.
- Minimization of grading on the eastern portion of the site.
- Variable rear setbacks for homes as shown in Chapter 5 of the SPA Plan.
- Variable side yard separation as shown on the ridge-top layout in Chapter 5 of the SPA Plan.
- Retaining natural rock outcroppings as shown in the parks, open spaces, and trails section of the SPA Plan.
- Installing landscaping as a backdrop to homes.
- Naturalize grading edges and tilt rear grading lines as shown on the Ridgeline Grading Guidelines in Chapter 5 of the SPA Plan.
- Utilize berms along visible edges as shown on the Ridgeline Grading Guidelines in Chapter 5 of the SPA Plan.

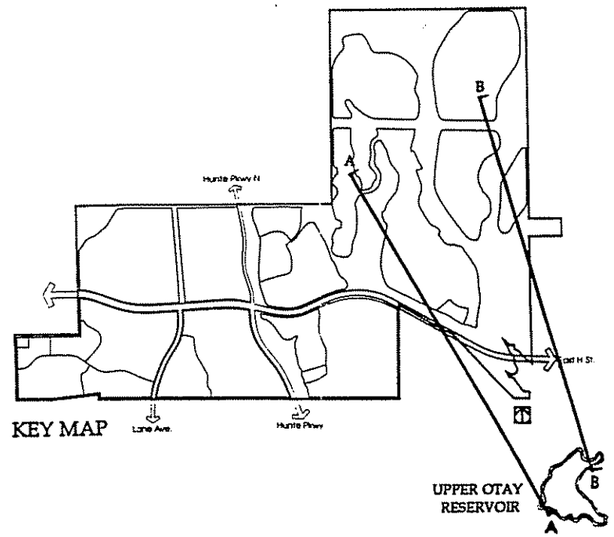
Scenic Highways – For East H Street, the applicant is proposing a 128 foot wide right-of-way with a variable setback ranging from a minimum of 20 feet to a maximum of 100 feet outside of the standard right-of-way. The design of the setback area will include a

SECTION AA



SECTION BB





SOURCE: Forma,1991

ERCE

Upper Otay Reservoir Sections

FIGURE 3-10

landscape theme situated on varying slopes of 5:1 to 2:1. Within the landscape treatment area, a system of non-vehicular uses is proposed to include a 10-foot bikeway/pedestrian path and an equestrian trail.

For Hunte Parkway, the right-of-way would average 88 feet with a landscape/setback area averaging 40 feet. The setback/landscape area would include variable contour grading variable slopes and a landscape theme. The intersection of Hunte Parkway is considered a major intersection. Development within this area would be setback a minimum of 100 feet to allow for landscape and entry monumentation treatments. Similarly, community entries would have a minimum setback of 30 feet. Roadways within the Salt Creek Ranch project would be developed according to the City of Chula Vista Scenic Highway Criteria. Landform grading is to be used in the setback areas outside the right-of-way along East "H" Street and Hunte Parkway to reinforce the parkway character of these roadways. Landscaped setbacks meet or exceed the minimum City requirement of 20 feet, going up to 100 feet at the intersections and varying from 20 to 40 feet on Hunte Parkway and averaging 50 feet on East "H" Street.

Development of the scenic roadways is anticipated to occur concurrently with adjacent development. All developments adjacent to the scenic roadways are subject to further design review and PC regulations to ensure that the projects will enhance the scenic quality of the roadway.

View from the Project – Potentially significant visual impacts are associated with EastLake Technology Park, the Otay Water District reclamation facilities, and the Upper Otay Reservoir. To mitigate the potential and visual impacts associated with the EastLake Technology Park, the applicant is proposing the following measures which will mitigate these impacts to below a level of significance:

- Provide a buffer zone along the southern edge of the property which will include a slope along both the single- and multi-family areas. The slope will vary in height (from approximately 10 to 39 feet) and width (from a minimum of 20 feet in the multi-family area and 30 feet in the single family area, to a maximum of 150 feet at its widest in the single family area).

- The buffer shall be extensively landscaped with trees and shrubs to effectively screen and separate housing from adjacent industrial uses.

- The buffer shall contain a 10-foot wide meandering pedestrian/bike trail linking the school/park site on the western edge to the Salt Creek corridor. This trail corridor shall contain open space connections from the single-family and multi-family areas, and link multi-family recreational amenities.

Along the northern and northwestern edge, the proposed project interfaces with the Otay Water District reclamation facilities. Since future Salt Creek residents would be located in close proximity to the facilities storage tanks and reclamation pond, a potentially significant visual impact exists. Figures 3-11, 12, 13 illustrate potential views from the proposed project to the reclamation facilities. To mitigate the potentially significant visual impact associated with the reclamation facilities, the applicant is proposing the following measures:

- A slope will be placed along the northern edge which would vary in height (from daylight at the edge up to 26 feet) and depth (from daylight at the edge up to 50 feet) to obstruct any views into this area.

- Utilization of grading techniques to prevent views from most of the homes into the reclamation area.

- Placement of homes to take advantage of natural off-site topography to the north which prevents views into the reclamation area.

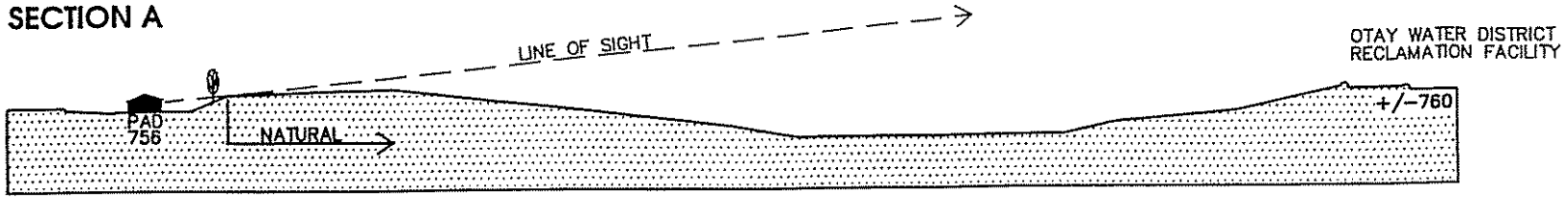
- Utilization of landscaping and adequate rear yard setbacks to minimize views into this area from neighborhoods 12 and 13.

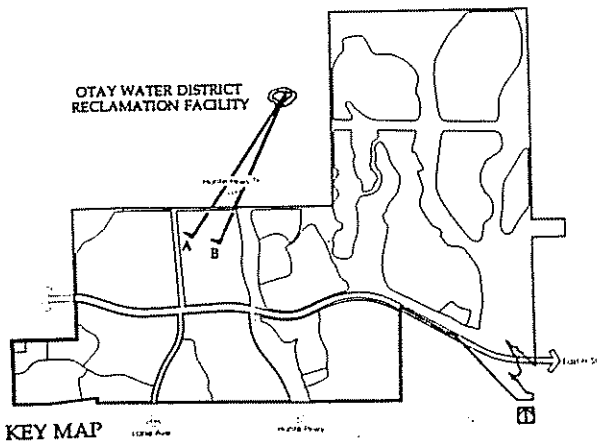
Residences situated adjacent to the SDG&E power easement in Sub-area 3 would experience visual impacts due to existing SDG&E transmission lines. Site planning measures such as proposed grading techniques, landscaping and home orientation would minimize visual impacts from the project to the facilities.

Conformance with the General Plan

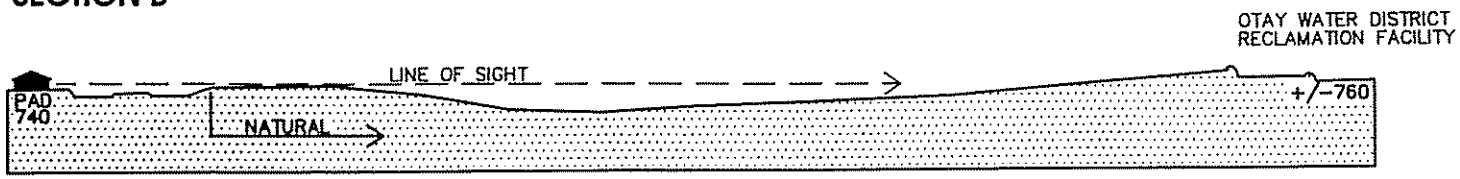
The proposed project generally conforms to the City of Chula Vista's landform grading and hillside development policies, however, due to the large amount of cut and fill proposed in

SECTION A





SECTION B



SOURCE: Forma,1991

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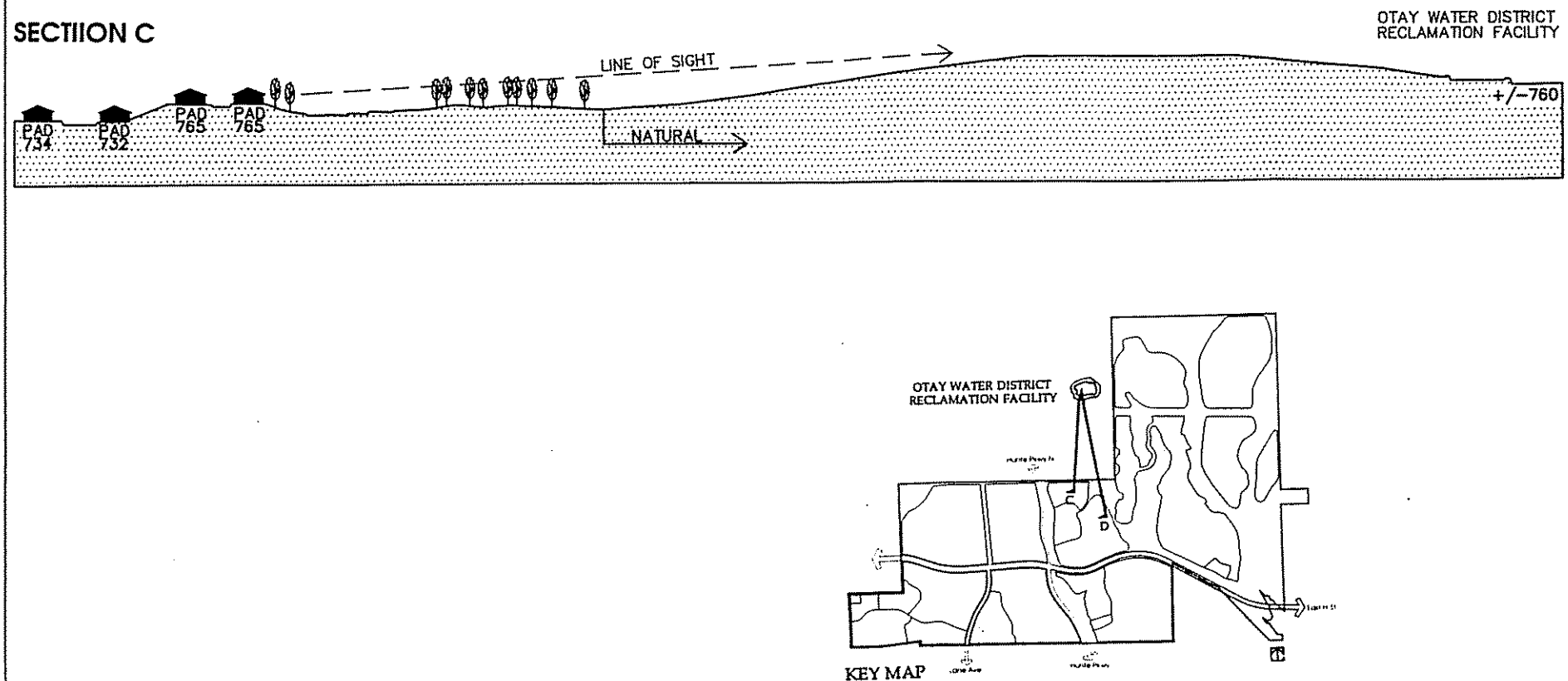
Otay Water District Sections
Line of Sight from Neighborhood 2

FIGURE
3-11



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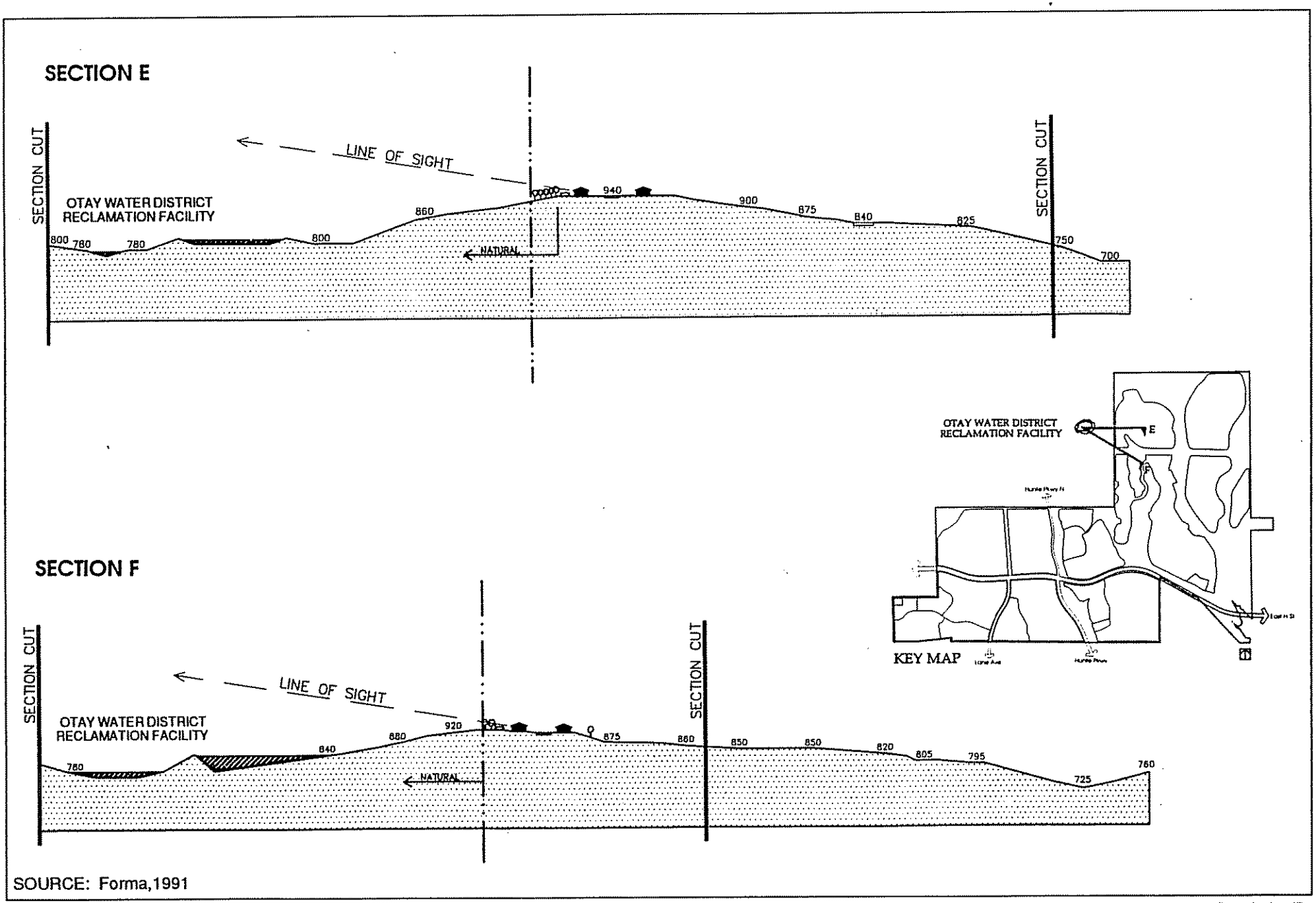
Otay Water District Sections
Line of Sight from
Neighborhoods 7A & 7B

FIGURE
3-12



SOURCE: Forma,1991

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Otay Water District Sections
Line of Sight from
Neighborhoods 9 and 12

FIGURE
3-13

Sub-area 3, there is a potential for significant impacts due to cut and fill slopes along the proposed open space areas and East H Street.

Mitigation Measures

Implementation of the proposed project would result in significant landform impacts to the project site, and visual impacts for both the project site and the project vicinity. In order to mitigate adverse impacts, specific design guidelines have been included within the SPA Plan. Project development will require the implementation of all design guidelines concurrent with the SPA Plan and subject to further review and approval by the Design Review Committee (DRC). The guidelines which are contained within the SPA Plan (Section III, Community Design Guidelines) address grading, landscaping, fencing, signing, and scenic highways. Design guidelines are summarized below:

- Grading: In addition to incorporation of the requirements of the Chula Vista Municipal Code and other applicable city policies, graded areas are to be contoured to blend with natural landform characteristics and minimize disruption of the natural topography. A balance between cut and fill shall be maintained, and all grading and drainage system plans shall be prepared under the direction of a licensed civil engineer. Final grading plans shall be reviewed by the City of Chula Planning Department to determine whether large cut and fill slopes would impact views of open space areas from residences and/or scenic highways, and areas of high sensitivity such as the ridgeline and canyons in Sub-area 3 shall be subject to further review by the DRC.

- Landscape: Plant materials shall be organized to provide buffering, transition, and slope stabilization between land uses and streets, and between development and open space areas. Manufactured slopes adjacent to habitat enhancement areas shall be landscaped with vegetation consistent with the Habitat Enhancement Plan. Landscaping and irrigation standards shall conform with the City of Chula Vista Landscaping Manual.

- Scenic Highways: In accordance with the design guidelines, all homes abutting the scenic highways (East H Street and Hunte Parkway) shall be set back from the right-of-way a variable distance and landscaping shall be intensified to buffer views of buildings. Any long distance views available from the scenic

highway shall be protected, and all signs within the viewshed of the scenic highway shall be subject to further review.

Analysis of Significance

The SPA Plan does not differ significantly from the adopted GDP in terms of landform and visual character. Development of Salt Creek Ranch would permanently alter an essentially undeveloped area of canyons and mesas to an urbanized residential area. Visual impacts associated with the development of the project are considered adverse, but are partially mitigable through strict adherence to visual quality and hillside grading guidelines contained in the General Plan, and through innovative use of site design techniques and landscaping to create a pleasing urban environment. Implementation of mitigation measures included above will reduce the project-specific impacts to a level of insignificance. Design of all phases of development must be monitored to insure continued compliance with the City's visual quality objectives. The project will unavoidably contribute to a cumulative adverse effect on the existing natural landform and aesthetic characteristics of the area, in combination with the various development projects in the Eastern Territories area.

3.3 HYDROLOGY

The following section is based on information contained in the Preliminary Hydrological Analysis prepared by the McIntire Group in November 1990. This analysis was conducted in accordance with City of Chula Vista guidelines. The entire report is contained in Appendix B.

Existing Conditions

Salt Creek Ranch is drained via four drainage basins: Otay Lake (Basin A), Salt Creek (Basin B), Telegraph Canyon (Basin C), and Proctor Valley (Basin D) (Figure 3-14). The property does not currently have any improved drainage facilities, except for a drainage crossing located on the existing alignment of Proctor Valley Road.

Basin A (Otay Lake) is the largest and most eastern of the basins and drains portions of San Miguel Mountain into Upper Otay Reservoir via a series of southeasterly tributaries. A ridge running north–south forms its western boundary and constitutes the eastern flank of Salt Creek.

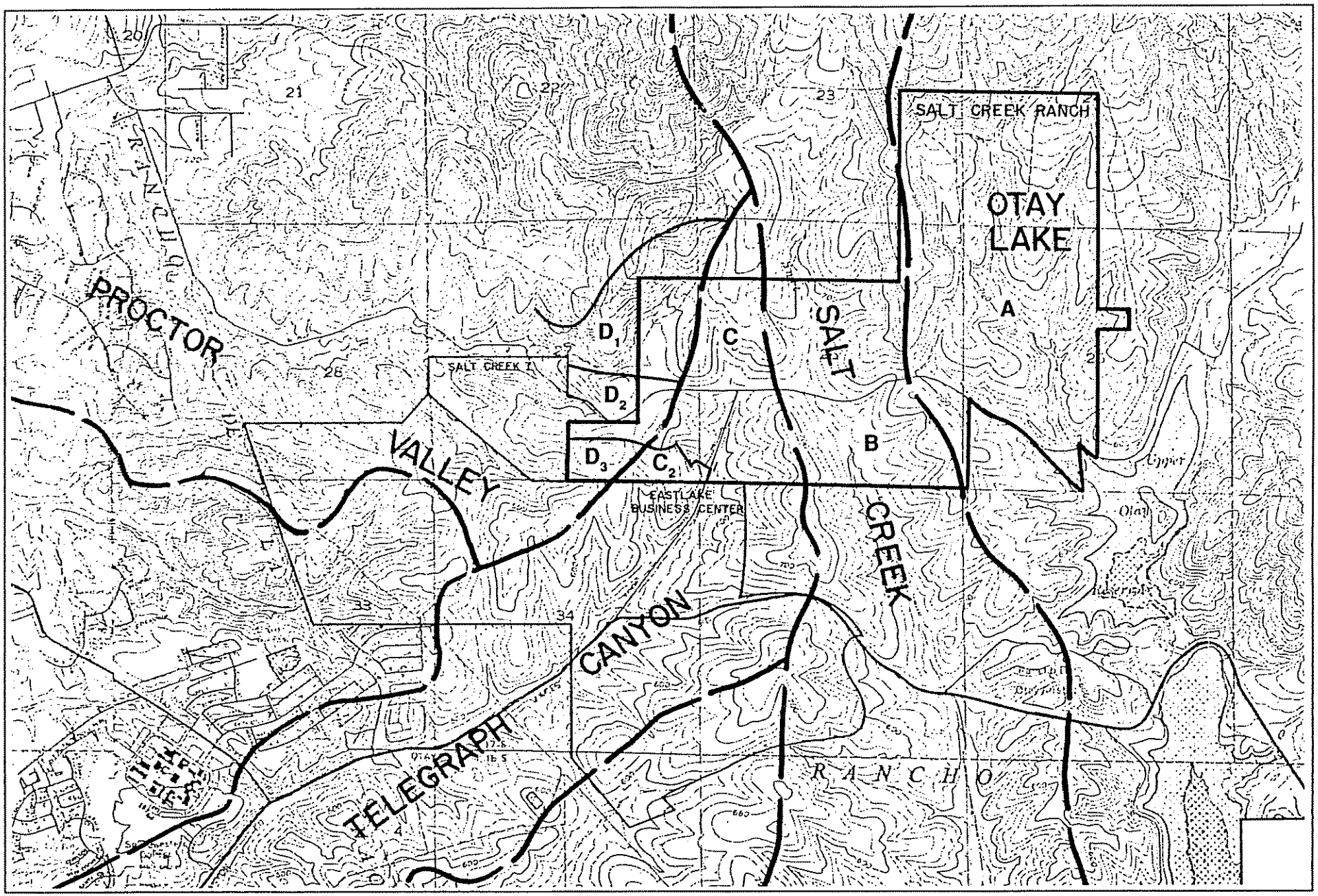

FIGURE 3-14

Drainage Basins A, B, C, D

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Drainage Basin B (Salt Creek) encompasses the central portion of the study area and drains the south westerly slopes of San Miguel Mountain. Salt Creek runs north–south through the study area and consists of a defined steam bed flanked by gently rolling slopes previously disturbed by agricultural activities.

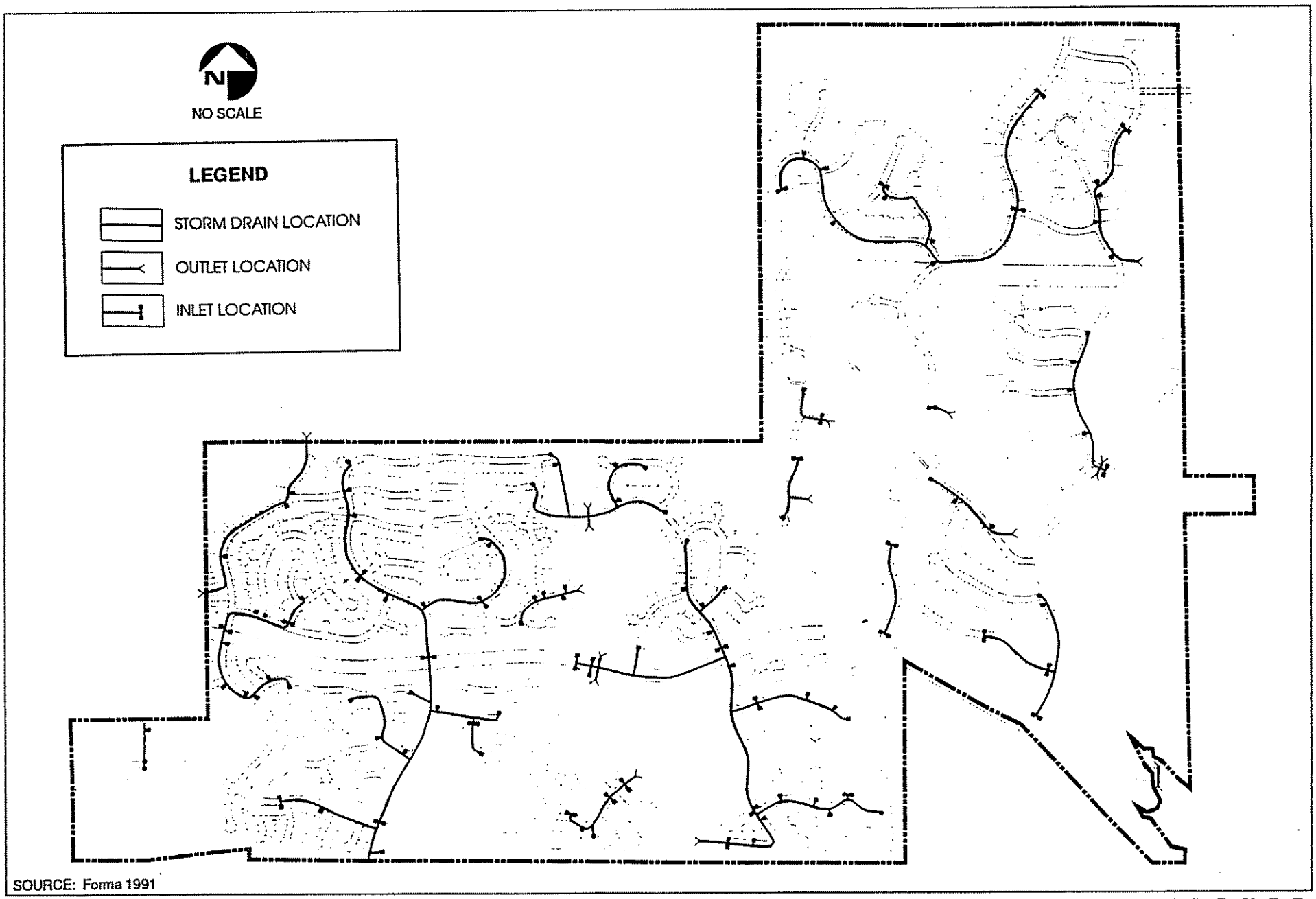
The western portion of the study area consists of the upper limits of Basin C (Telegraph Canyon). An area of approximately 169 acres drains offsite in a southerly direction (adjacent to the eastern side of Lane Avenue) into an existing 60-inch storm drain system constructed by Chula Vista Tract 84-7, Unit 1 for the improvement of Lane Avenue.

The far western portion of the project consists of the lower limits of the Proctor Valley Basin (Basin D) (portions of which are called the Sunnyside Basin in some studies). Detailed hydrology studies covering this area are on file at the City of Chula Vista for Salt Creek I and EastLake Business Center. The northwestern portion of the study area within the Proctor Valley Basin is adjacent to the southern slopes of Mother Miguel Mountain, which drains northwesterly toward the Sweetwater River.

Watersheds in the western portion of the study area have generally been disturbed by cultivation and grazing activities. The eastern drainage basin (Basin A) has also had agricultural disturbances. The steeper slopes adjacent to stream courses are generally rocky and covered with sparse coastal sage scrub due to previous fires in the area.

Impacts

Basin A (Otay Lake) – Based upon the proposed land use plan, approximately 325 acres of the total 1,415 acre basin area would be graded. Residential lot sizes for the area would average greater than one-half acre. Preliminary grading concepts indicate that these large lot pads would be contoured to the existing landform and the natural drainage courses would remain unaltered. Drainage flows are intended to utilize the proposed road crossing points for outlets into the natural channel flow. The project applicant proposes a diversion system to protect the water quality in the Otay reservoirs. Section 3.4 provides a detailed discussion of water quality. The system would divert up to 120 gpm to the Salt Creek Basin. The proposed storm drain plan is shown in Figure 3-15. The actual structure types required to convey stream flows under access roads would be determined when a



SOURCE: Forma 1991

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Proposed Storm Drain Plan

FIGURE 3-15

more detailed engineering analysis is performed. This future analysis would consider utilizing an existing dam that had been used to retain water for livestock consumption.

Future offsite development in most of the northern regions of Basin A is not anticipated due to the steepness of terrain. The development site study shows a 15-acre decrease in basin area from the existing 1,415 acres in the natural landform to 1,400 acres after development. This decrease occurs due to the proposed location of East "H" Street and the necessity to drain the proposed adjacent development into the Salt Creek Basin. It is intended that the overall drainage of this basin would remain primarily unaltered and remain within the existing natural stream channels.

Basin B (Salt Creek) – The natural drainage basin encompasses the headwaters of Salt Creek, an area of approximately 609 acres. This basin contributes 899.9 cubic feet per second (cfs) for a 50-year storm event to the southern property line of the project area. The developed condition would slightly rearrange that drainage area to 612.1 acres and increase the flow volume of a 50-year storm event incrementally to 919.6 cfs plus flow from diversion system. There would be two Salt Creek crossing points, East "H" Street and a northern access road. It is intended that the East "H" Street crossing incorporate a suitable drainage structure accommodating the proposed trail system. The northern structure would be determined with a future more detailed study. It is intended to drain developed sites via storm drain systems to outlet points adjacent to Salt Creek (see Figure 3-15). It is also intended that the overall drainage of Salt Creek remain unaltered.

Basin C (Telegraph Canyon) – Based upon the land use plan, the project site shows development of all the upper reaches of this basin. For a 50-year storm event within the natural drainage area of 169.3 acres, 249.9 cfs of runoff occurs. Preliminary site studies indicate that the basin area would increase to 177.8 acres, with site runoff calculated at 310.9 cfs. Currently, an inlet basin exists within the property at the project site's southerly boundary line. Existing natural drainage concentrated at this point is conveyed via a 60-inch reinforced concrete pipe (RCP) storm drain southerly within Lane Avenue. Research of existing facilities indicate storm drain capacity of 350 cfs which could therefore accommodate project-generated runoff. However, it would be necessary to construct a storm drain system within future Lane Avenue to convey runoff to existing facilities.

Basin C_2 (Telegraph Canyon) – This is a small tributary area annexed from the primary drainage channel by development of the EastLake Business Center. The undeveloped area

is 17.9 acres with a runoff of 32.3 cfs for a 50-year storm event. The development area, as determined from preliminary site studies, has been decreased to 15.6 acres with a 50-year storm runoff of 33.5 cfs. EastLake I development provides a 36-inch RCP storm drain system connected to the Boswell Court system to accommodate this drainage. Research of this facility indicated adequate capacity to handle project generated runoff.

Basin D (Proctor Valley Basin) – The proposed development of the Salt Creek I project required the analysis of the lower reaches of this basin. A summary of the development volumes and proposed facilities for the three contributory areas is as follows:

Area D_1 – This basin consists of the largest sub-area of approximately 212 acres. A developed 50-year storm runoff of 335.5 cfs has been determined and a 60-inch RCB storm drain is proposed to carry flows from an inlet at the northeasterly corner of Salt Creek I project within the alignment of Proctor Valley Road to an outlet point west of the site. Based upon this study and research of the proposed facilities, projected-generated runoff of the proposed inlet does not increase over existing conditions. This occurs due to the reduction of the existing slope of the natural channel to accommodate the proposed inlet structure and storm drain system.

Area D_2 – This basin is approximately 53 acres with a developed 50-year storm runoff of 90 cfs determined for the area. A 42-inch RCB storm drain is proposed to carry flows from this area, combined with additional flow entering from the west. An inlet adjacent to the easterly right-of-way line of the proposed San Miguel Road initiates this system.

Area D_3 – This basin consists of approximately 17 acres and includes portions of the borrow area delineated on the Salt Creek I grading plans. A developed 50-year storm runoff of 34.1 cfs has been determined for this area. A 24-inch RCB storm drain system is proposed to convey this an additional drainage from the west via Salt Creek I storm drain system to an outlet structure adjacent to the proposed SR125 and East "H" Street intersection.

Development of Areas D_2 and D_3 would cause a minimal increase in runoff; however, adequate facilities have been designed and approved within the Salt Creek I project to accommodate the additional runoff.

Mitigation Measures

To ensure that there are no hydrologic impacts, the following measures shall be implemented:

- For Basin A, development drainage shall be routed to road crossing points for outlet into the natural channel flow. Structure types to convey stream flows under access roads would be determined prior to Final Map approval.

- Within Basin B, there are two Salt Creek crossing points, East H Street and a northern access road. The East H Street crossing shall incorporate a suitable drainage structure which will accommodate the proposed trail system. The type and sizing of this drainage system shall be determined prior to Final Map approval. The northern structure shall be determined prior to Final Map approval. Developed areas would be drained via storm drain systems to outlet points adjacent to Salt Creek.

- A low flow pump diversion system will be constructed to transport dry weather flows out of Basin A (Upper Otay Lake Basin) and discharge them into Basin B (Salt Creek Basin). This low flow diversion system will be designed for 137 gpm.

- A storm drain system shall be constructed within future Lane Avenue to convey runoff within Basic C to existing facilities constructed by the EastLake I project. The type of sizing of this system would be determined prior to Final Map approval.

- Drainage facilities and energy dissipators shall be constructed in accordance with the approved hydraulic analysis and shall be in place and functioning prior to completion of the grading operation.

- Development of the subject project must comply with all applicable regulations established by the United States Environmental Protection Agency (EPA) as set forth in the National Pollutant Discharge Elimination System (NPDES) permit requirements for urban runoff and stormwater discharge.

Analysis of Significance

Implementation of the above measures will ensure proper mitigation of potential hydrologic impacts to below a level of significance.

3.4 WATER QUALITY

Water quality impacts associated with the General Development Plan (GDP) for Salt Creek Ranch were analyzed in FEIR 89-3. The following section analyzes impacts associated with the project on a more specific level and is based on information contained in FEIR 89-3 and in the Urban Runoff Report prepared by Wilson Engineering (Appendix C).

The issue of water quality is limited to potential impacts on the adjacent Upper and Lower Otay reservoirs. As discussed in Section 3.3 (Hydrology), Basin A (West Upper Otay Lake) drains to the reservoir. Basin B (Salt Creek Ranch) and Basin C (Telegraph Canyon) drain to the EastLake Development. Basin D (Sunnyside) drains to a natural watercourse which continues northwesterly and eventually intercepts urban development.

Existing Conditions

The Upper and Lower Otay Reservoirs are owned and operated by the City of San Diego. The reservoirs supply potable water for the southern part of the City of San Diego as well as a small portion of the cities of Imperial Beach and Coronado. The Lower Otay Reservoir has a capacity of 56,600 acre-feet (enough water to serve 100,000 homes for one year). The Upper Otay Reservoir was originally designed to hold 2800 acre-feet; however, in the late 1970s the State Division of Dam Safety concluded that the dam could not withstand an overtopping and ordered the dam to be notched to reduce its effective height and capacity. The reservoir's capacity is now 810 acre-feet; however, at that time the outlet value was damaged and left in the open position. The dam retains only a minimal amount of water, the so-called low pool, and water continuously drains to Lower Otay Reservoir. The water is filtrated at a treatment plant located immediately downstream of the Lower Otay Reservoir.

Hydraulically, the Upper Otay Reservoir functions only as a conduit to Lower Otay Reservoir; the California Department of Fish and Game (CDFG) uses the "low pool" water as a hatchery for pure-strain Florida bass. This use is ongoing and is covered in the CDFG regulations (Code No. 6.25 of Chapter 3, Article 1). The bass are shipped to several states and to Mexico.

Nutrients, organic debris and sediment carried by storm runoff from the largely undeveloped watershed, nutrients in the Colorado River water, and warm temperatures have caused algae blooms and eutrophication in the Lower Otay Reservoir. As with any natural system, the majority of the contaminants are in the sediment load. These contaminants settle on the reservoir bottom and normally do not significantly affect reservoir water quality.

The protection of potable water reservoirs is under the jurisdiction of the State Department of Health Services (DHS). As early as 1976, DHS recognized the potential impacts of urbanization of watersheds of reservoirs in the County of San Diego. In 1976, DHS sent a letter (DHS 1976) to the County of San Diego, which had land development jurisdiction over most of the watershed areas at the time, expressing their concern about the potential water quality impacts of urbanization. The DHS recommended a regulatory approach to this issue; that is, set up specific guidelines to be applied to each development to prevent dry weather surface flow or raw sewage from reaching a reservoir.

The City of San Diego has relied on the regulatory approach and has installed a diversion ditch around its Lake Murray reservoir; has a ditch under construction at its Miramar reservoir; and is planning a ditch around the Lake Hodges reservoir. The purpose of a diversion ditch is to intercept all dry weather flow and runoff resulting from up to a five-year frequency storm event and divert the flow around the reservoir. This design criteria is based on the conventional wisdom that the initial runoff (first flush) will wash the urban-landscape of contaminants and the subsequent runoff will be relatively clean.

Impacts

The Salt Creek Ranch SPA Plan proposes development in the Otay Reservoir's watershed. Public sewer lines and two sewage pump stations will be installed. The development would be located immediately adjacent to the Upper Otay Reservoir's high water level and over 2000 feet from the existing "low pool" level.

The proposed project would be expected to generally decrease surface water quality due to short-term impacts from construction activity as well as the long-term effects of urban development.

Construction-related effects pose significant potential impacts to water quality. Large-scale excavation and grading and the creation of cut and fill slopes would increase the potential for erosion and transport of material within and off the site. The movement of sedimentary materials into the onsite drainages and the Upper and Lower Otay Reservoirs could produce significant local siltation impacts. The influx of such materials would be expected to increase the quality of total solids as well as several individual mineral and inorganic constituents. Depending on the quantity and duration of siltation effects, construction-related sediment loss from the project site could contribute to the cumulative degradation of local water quality, and related resources (e.g., biological habitats) and decrease reservoir capacity.

A number of construction-related erosion controlling techniques would be included in the project design to minimize sediment movement on disturbed areas. It is imperative that the erosion-control measures be incorporated into the project design and implemented as part of initial construction activities rather than added on after an erosional problem has developed. All proposed erosion control measures would be subject to review and modification by the City of Chula Vista Engineering Department prior to project approval.

Potential long-term impacts to water quality from the proposed project include increased sediment yields from the erosion of developed areas and the general reduction in runoff quality related to urban development.

The potential long-term erosion of developed areas would result from the removal of native vegetation and topsoils, the creation of manufactured slopes, and the anticipated increase in onsite runoff. Developed areas would be especially susceptible to erosion between the need of construction and the establishment of permanent vegetation. Continued erosion would reduce local water quality directly through increased sediment loads, and indirectly through the presence of contaminants which adhere to the small diameter particles. The proposed project design incorporates a landscaping plan for disturbed areas within the site.

Development of the watershed would degrade the water quality of the runoff. Specifically, contaminants such as grease, oil, and heavy metals from automotive sources; pesticides, herbicides, and fertilizers from residential or municipal uses; and bacteria from human or animal wastes would be expected to occur in post-development runoff.

When the GDP was under consideration, DHS indicated that, based on a verbal description of the project, they would probably require a diversion ditch (City of Chula Vista 1990c). The diversion ditch would need a capacity of 410 cubic feet per second (peak flow rate during a 5-year storm) based on ultimate development of the Otay Lake and Otay Lake tributary drainage basins. Two potential alignments of the diversion ditch were identified; both would likely involve both open channels and underground conduits. The first, shorter, alignment would begin at the outlet point of the Otay Lake basin and divert the runoff into Salt Creek. The second alignment would outlet into the Otay River and could also serve the northeasterly portion of East Lake Development, the proposed Olympic Training Center and applicable portions of the future Otay Ranch development south of Proctor Valley Road. The applicant investigated alternatives to the diversion ditch system including retention basins and diversion via gravity flow and pump stations onsite and a low flow diversion system.

The applicant is proposing to develop Salt Creek Ranch prior to the anticipated construction of the urban runoff protection system and is proposing to construct a temporary system during project development. This temporary system would be designed according to criteria established for the permanent system. In addition, the applicant proposes to pay fair-share fees for construction of a permanent runoff protection system for the Otay Reservoirs when final design is determined.

The applicant is monitoring flows in three urban storm drains in the City of San Diego to estimate post-development flows from the proposed project. An onsite monitoring program is proposed as part of the mitigation monitoring program for the EIR to establish baseline data for the runoff from the project site. This monitoring program would be continued until the project applicant has built 400 units in the sub-basin.

The SPA plan recommends the construction of a low flow pumped diversion system to transport estimated peak dry weather flows out of the basin and discharge into Salt Creek Basin. The proposed diversion would occur at a culvert under East H Street adjacent to

the Upper Otay Reservoir. The concrete apron at the opening of the culvert would have a grade separation to divert 120 gpm to a pump station. The diverted flow would discharge to the Salt Creek basin. Theoretically, the diversion, with a capacity of 120 gpm, would capture all dry weather flows. The remainder of runoff flows exceeding 120 gpm would spill over the grade separation and continue through the culvert, entering the reservoir. The diversion would be monitored to verify its effectiveness.

In addition to the diversion of peak dry weather flows, Wilson Engineering is recommending that the diversion system be designed to handle peak sewage flows of 231.5 gpm with the basin. The pump that is proposed as part of the diversion system will, therefore, serve three purposes.

- Divert all dry weather urban runoff out of the basin and prevent the runoff from entering the Otay Reservoirs.

- Divert a portion of the initial runoff from a rainstorm, which is the most heavily contaminated.

- Prevent sewage spills from reaching the reservoirs.

Wilson Engineering anticipates that the diversion system would remain in place until structural controls are installed by the City of San Diego as part of a more comprehensive system to protect the entire Upper and Lower Otay Reservoirs.

If monitoring indicates that water quality is degraded even with the diversion, a modified wet detention pond would be created in the main channel to hold additional runoff flow until it could be pumped into the diversion system.

Mitigation Measures

- The project shall be subject to review and approval by the State Department of Health Services (DHS). The project shall implement mitigation measures as set by DHS prior to issuance of any grading permit.

- Prior to or concurrent with SPA Plan approval, a diversion ditch plan, or other acceptable plan to handle drainage to the Otay Drainage Basin, shall be prepared

and approved by the City of Chula Vista, City of San Diego and DHS. The plan shall analyze the possibility of sewage system failures; effects of increased levels of nutrients salts and pesticides from landscaping and irrigation; and effects of petroleum products from surface street runoff. Additional environmental analysis may be required based on the specific drainage ditch or other plans. Design of these plans shall also consider providing additional capacity for concurrent or future development.

- The project applicant shall conduct an onsite mitigation monitoring program to establish baseline data for runoff from the project site. This monitoring program will be continued until 400 units in the sub-basin have been constructed in the sub-basin.

- The project proponent shall submit a erosion control plan prepared by a registered civil engineer and a registered landscape architect in accordance with City of Chula Vista design standards. The plan shall be approved prior to issuance of grading permits and shall include placement of sandbags, temporary sediment basins, and an erosion control maintenance plan.

- The project proponent shall submit a storm drain plan prepared by a registered civil engineer in accordance with City of Chula Vista design standards. The plan must be approved prior to the issuance of grading permits and shall include permanent erosion control facilities.

- Development of the subject project must comply with all applicable regulations established by the United States Environmental Protection Agency (EPA) as set forth in the National Pollutant Discharge Elimination System (NPDES) permit requirements for urban runoff and stormwater discharge.

Analysis of Significance

Implementation of the above measures will mitigate the project's contribution to cumulative water quality impacts to a level of insignificance.

3.5 BIOLOGICAL RESOURCES

Existing Conditions

The habitats, biological resources, and sensitive species occurring onsite have been detailed in EIR 89-3. The EIR evaluated the project's General Development Plan (GDP), which was approved. This report evaluates changes in the extent of the proposed grading between the approved GDP and the Specific Plan Amendment (SPA).

Impacts

The proposed SPA is quite similar to the approved GDP. The SPA limits of grading have been altered so that they extend beyond the GDP limits in some areas. In other areas, however, the SPA limits of grading have been confined further inside the GDP limits. The amount of each habitat that would be impacted by the new grading limits is shown in Table 3-1.

Table 3-1

ADDITIONAL IMPACTS TO HABITATS FROM THE SPA GRADING LIMITS

Habitat	Additional Overall Impact	Comment
Coastal sage scrub	1.5 acres	Includes 2.7 acres retention of cactus thicket (occupied cactus wren habitat)
Riparian Habitat	0.2 acres	Mitigate as per GDP
Native Grassland*	-3.3 acres	Positive retention of sensitive plant habitat
Disturbed Grassland	1.8 acres	
Total	0.2 acres	

*Native Grassland would be impacted less under the SPA grading limits.

The additional areas of impact shown in Table 3-1 represent the sum of many small and disjunct areas of impact. Thus the 1.5 acres of impact to coastal sage scrub would be distributed throughout the site and is not a singular area or the sum of a few areas. Additional SPA impacts to coastal sage scrub are incremental and are not considered significant. The impact to California gnatcatcher is no greater than it would be under the GDP. Thus the SPA would not create any new significant impacts to California gnatcatcher. Although coastal sage scrub would be slightly more impacted overall, a 2.7 acre patch of sage scrub would be newly placed in natural open space. This patch contains a large cactus thicket and a cactus wren nest. Implementation of the SPA would not impact any cactus wren nests on the site, while the GDP would have impacted one thicket and one nest. The SPA would not create any new significant impacts to cactus wren.

The additional impact to riparian habitats is 0.2 acre. All wetland impacts require mitigation, due to the USFWS and ACOE "no net loss of wetlands" policy. Therefore, impacts to riparian habitat are considered significant.

Native grassland onsite would be impacted less than it would have been under the GDP. The increased amount of native grassland retained onsite would allow more suitable habitat for the sensitive plant species that may occur there. Species with a high potential of occurrence include Orcutt's brodiaea (*Brodiaea orcuttii*), Otay tarplant (*Hemizonia conjugens*), and San Diego County needle grass (*Stipa diegoensis*). While the SPA would reduce impacts to native grassland overall, the native grassland habitat onsite should be surveyed as recommended in the original EIR.

The SPA would impact an additional 1.8 acres of disturbed grassland habitat. The loss of this disturbed habitat is not considered significant.

Mitigation Measures

To mitigate additional impacts to 0.2 acre of riparian habitat to below the level of significance, ERCE recommends creation/enhancement of riparian habitat. At a 2:1 ratio, 0.4 acre of riparian habitat should be created or enhanced. This mitigation acreage should be added to the mitigation acreage for the Salt Creek Ranch development and incorporated into the wetland mitigation plan prepared by RECON included in Appendix A.

Analysis of Significance

The overall difference between the approved GDP and the proposed SPA totals 0.2 acre. If one only considers undisturbed native habitats, the change is 1.6 acres on the positive side. The incremental changes include a significant shift in the development boundary to protect sensitive cactus wren habitat, a positive change over the GDP.

The additional incremental impacts under the SPA would be small and therefore the analysis of significance from the original EIR would not change.

3.6 CULTURAL RESOURCES

The following archaeological/historical resources discussion is based on a confidential technical report prepared by ERCE, which was prepared as part of the EIR for the General Development Plan for Salt Creek Ranch (EIR 89-3) (Cultural Resource Testing and Evaluation of the Salt Creek Ranch Project, June 1989). The report is on file at the City of Chula Vista Planning Department.

Existing Conditions

Previous work by RECON identified 19 archaeological sites within the proposed Salt Creek Ranch project site (Wade 1988), and an additional 8 sites were located during this study. An evaluation program to determine site importance pursuant to the California Environmental Quality Act (CEQA) was conducted for these 27 historic and prehistoric sites.

Prehistoric Archaeological Resources

ERCE's testing program for prehistoric sites included site record search, literature review, survey, excavation of shovel test pits (STPs), surface collection of diagnostic artifacts, excavation of 1 x 1 meter (m) units and data analysis. In all, 19 prehistoric localities were tested, resulting in the recovery of over 8,000 artifacts. Ten of these sites have the potential to answer important research questions: CA-SDi-4,530, CA-SDi-4,531, CA-SDi-4,776, CA-SDi-6,961, CA-SDi-7,197 Locus A-1, CA-SDi-8,658, CA-SDi-10,770, CA-SDi-11,042, and CA-SDi-11,178.

The prehistoric sites fall into three categories: quarry sites, lithic scatters, and habitation sites. All of the sites appear to be part of a settlement system occupied as early as 7,000 years ago, based on the presence/absence of diagnostic artifacts. These sites contain biface tools (points/knives), milling tools (manos/metates), hammerstones, cores, scraping tools, flakes/angular waste, and faunal remains of shell and bone. A number of the prehistoric sites fall within the Bonita-Miguel Archaeological District and were previously identified by the County of San Diego, State Office of Historic Preservation, and federal agencies as important to our understanding of the early prehistoric occupation in San Diego County.

Historical Archaeological Resources

The sites within the project area that are identified as historic resources consist of historic archaeological resources rather than existing buildings or structures. These historic sites are representative of a rural community settled as early as 1886. Some of the sites were located by RECON (Wade 1988) and others were discovered by ERCE in the process of researching early maps for the evaluation program. The program also included historical research, site surveys, backhoe trenching and excavation of STPs.

Based on the results of research and testing activities, there is a potential for eight sites to contain important historic materials: CA-SDi-7,199 (W-2,204) (H-2), CA-SDi-8,657 (W-2,943) (H-13), CA-SDi-11,043 (Baldwin 3) (H-12), CA-SDi-11,044 (Baldwin 4) (H-5), CA-SDi-11,614H (H-4), CA-SDi-11,615H (H-6), CA-SDi-11,616H (H-7), and CA-SDi-11617H (H-14). Use of these sites in the late 1800s and early 1900s indicates a potential for important historic archaeological features such as privies, cisterns, and trash deposits. The sites represent a period within the regional development of San Diego County that is neither well documented nor well defined, and the sites have the potential to provide answers to important research questions addressing social, cultural or economic lifestyles and values associated with a rural setting. On the local level, these sites represent a previously unidentified component of the early history of Chula Vista.

Important Sites

The testing program for prehistoric and historical archaeological resources identified 18 sites/loci as important pursuant to CEQA criteria: CA-SDi-4,530, CA-SDi-4,531, CA-SDi-4,776, CA-SDi-6,961, CA-SDi-6,963, CA-SDi-7,197 Locus A-1, CA-SDi-7,199, CA-SDi-8,657, CA-SDi-8,658, CA-SDi-10,770, CA-SDi-11,042, CA-SDi-11,043, CA-

SDi-11,044, CA-SDi-11,178, CA-SDi-11,614H, CA-SDi-11,615H, CA-SDi-11,616H, and CA-SDi-11617H . The technical report provides detailed explanations on resource importance.

Impacts

The proposed Sectional Planning Area (SPA) Plan is similar to the General Development Plan (GDP) analyzed in City of Chula Vista EIR 89-3. Differences occur in the routing of roadways and in the limits of grading as shown on Figure 3-9. The potential impacts to cultural resources as a result of implementation of the SPA Plan are, however, identical to those that would occur with implementation of the GDP.

Two types of impacts may result from proposed site development: direct and indirect. Direct impacts are those associated with construction and development activities. Indirect impacts are those associated with increased access to an area in which cultural resources exist. This includes equipment staging areas and increased public access.

Table 3-2 lists important sites that are at risk of direct impacts, and Table 3-3 lists sites that may be indirectly affected. Portions or the entirety of 16 of the 18 important prehistoric and historic archaeological sites will be directly affected by implementation of the GDP or the SPA Plan, and portions of 6 of those sites and 1 additional site are also at risk of indirect impacts. These sites contain information which can address important research questions, possess integrity of deposit; and possess information on a poorly known period of prehistoric and historic occupation.

Sites CA-SDi-4,530, CA-SDi-4,531, CA-SDi-7,197 Locus A-1, CA-SDi-7,199, CA-SDi-8,657, CA-SDi-8,658, and CA-SDi-10,770 fall within the sensitive archaeological region identified as the Bonita-Miguel Archaeological District. This district has been defined as a potential National Register Property by the County of San Diego (Wirth 1981). The BLM has also identified the Bonita-Miguel Archaeological District as eligible to the National Register of Historic Places (Freel 1976). On the basis of the prehistoric sites, the Bonita-Miguel Archaeological District was determined a significant property by the U.S. Nuclear Regulatory Commission and the U.S. Department of the Interior (1978).

Table 3-2

SALT CREEK RANCH
IMPORTANT CULTURAL RESOURCES
AT RISK OF DIRECT IMPACTS

Site	Source of Impact	Recommendation	Comments
CA-SDi-4,530	Residential construction	Data recovery program	Within Bonita-Miguel National Register District (BMNRD)
CA-SDi-4,531	Residential and roadway construction	Data recovery program	Within BMNRD
CA-SDi-7,199	Residential construction	Data recovery program (prehistoric) Monitor (historic)*	Within BMNRD
CA-SDi-8,657	Residential construction	Data recovery program (prehistoric) Monitor (historic)*	Within BMNRD; portions of site may be indirectly affected by users of Open Space
CA-SDi-10,770	Residential construction	Data recovery program	Within BMNRD
CA-SDi-11,042	Residential construction	Data recovery program	
CA-SDi-11,043	Residential construction	Monitor for historic resources*	
CA-SDi-11,044	Residential and CPF construction	Monitor for historic resources*	Portions of site may be indirectly affected by users of neighborhood park

Table 3-2 (Continued)

SALT CREEK RANCH
IMPORTANT CULTURAL RESOURCES
AT RISK OF DIRECT IMPACTS

Site	Source of Impact	Recommendation	Comments
CA-SDi-4,776 Locus a	Residential construction	Data recovery program	
CA-SDi-6,961 Locus B	Residential construction	Data recovery program	
CA-SDi-6,963 Locus C	Residential construction	Data recovery program	Loci C, D and E may be indirectly affected by users of Open Space
CA-SDi-11,178	Residential construction	Data recovery program	
CA-SDi-11,614H	Roadway construction	Monitor during construction*	Portions of site may be indirectly affected by users of neighborhood park
CA-SDi-11,615H	Roadway construction	Monitor during construction*	Portions of site may be indirectly affected by users of neighborhood park
CA-SDi-11,616H	Residential construction	Monitor during construction*	
CA-SDi-11,617H	School construction	Monitor during construction*	

* If features are revealed during construction, a data recovery program may be necessary.

Table 3-3

IMPORTANT CULTURAL RESOURCES AT RISK OF INDIRECT IMPACTS

Site	Land Use Designation	Recommendation	Comments
CA-SDi-7,197 (Locus A-1)	Neighborhood Park	Monitor during earth moving*	Within Bonita-Miguel National Register District (BMNRD); may also be directly affected by Fire Station
CA-SDi-8,657	Open Space	If feasible, index area of site in Open Space; cap with 2 feet of fill** Monitor for historic resources*	Within BMNRD; may also be directly affected by residential construction
CA-SDi-8,658	Open Space	If feasible, index area of site in Open Space; cap with 2 feet of fill**	Within BMNRD
CA-SDi-11,044	Neighborhood Park	Monitor during earth moving*	May also be directly affected by CPF and residential construction
CA-SDi-6,963 Loci C, D and E	Open Space	If feasible, index area of site in Open Space; cap with 2 feet of fill**	Locus C may be directly affected by residential construction
CA-SDi-11,614H	Neighborhood Park	Monitor during earth moving*	May also be directly affected by road widening
CA-SDi-11,615H	Neighborhood Park	Monitor during earth moving*	May also be directly affected by road widening

* If features are revealed during earth moving, a data recovery program may be necessary.
** If not feasible, an alternative form of site protection or a data recovery program will be necessary.

CA-SDi-11,178 and CA-SDi-4,776, which are not included in the Bonita-Miguel Archaeological District, also represent important prehistoric resources. CA-SDi-11,178 will be directly affected by project development as will Loci A, B, and C of CA-SDi-4,776. CA-SDi-8,658, a Bonita-Miguel National register District site, is located within a proposed open space easement and will be indirectly impacted by project development. Loci D and E of CA-SDi-4,776 also fall into open space easements and will be indirectly affected.

Mitigation Measures

Mitigation of impacts to important cultural resources can be achieved through either avoidance or by conducting a data recovery program. Avoidance could include project redesign, or indexing the content of a site by excavating a small sample then capping the site with 2 feet of fill and incorporating these sites or portions of these sites into the Salt Creek Park system (Chula Vista Greenbelt). Recommended mitigation measures include the following:

- If avoidance of important prehistoric archaeological resources cannot be achieved, a data recovery program to mitigate development impacts shall be conducted, including, where necessary, surface collection and mapping of artifacts, a phased data recovery program, and monitoring. This phased approach shall employ a random sample in conjunction with a focused inventory for features (i.e., hearths). The data recovery program shall be in accordance with a regional approach for all prehistoric sites within Salt Creek Ranch, Salt Creek I and EastLake III, thereby allowing a comprehensive understanding for these sites. This regional understanding would also be in agreement with the Bonita-Miguel Archaeological District within which CA-SDi-4,530/W-643 falls.

- The data recovery shall follow the Advisory Council's guidelines as defined within Treatment of Archaeological Properties, A Handbook (ACHP 1980). The treatment plan shall be oriented to address local and regional research questions and clearly identify the methods to be used to address the research questions. Research questions to be addressed are listed in ERCE's June 1989 Salt Creek Ranch Cultural Resource Evaluation on file at the City of Chula Vista Planning Department.

- To ensure that potentially important historic archaeological resources assumed to be present at the eight locales listed above are not adversely affected, a program to include monitoring of grading activities with the possibility of data recovery is recommended. This program shall provide for excavation, recording and collection of resources if significant features, such as privies or trash deposits, are located during grading. This program shall include analysis of recovered artifacts in relation to an approved research design and a report of findings.

- Indirect impacts may occur to historic sites located adjacent and exterior to the project boundary (H-11, H-15, H-16, H-17). Fencing of project boundaries and strict avoidance of off-site impacts in these areas should occur. The remaining nine sites (CA-SDi-7,197A, CA-SDi-7,211, CA-SDi-8,206C, CA-SDi-9,169, CA-SDi-7,977, CA-SDi-11,045, CA-SDi-11,046, CA-SDi-11,626, and H-9) are identified as not important and, as such, need not be addressed in this document.

Analysis of Significance

Implementation of the above mitigation measures will mitigate potential project and cumulative cultural resource impacts to below the level of significance.

3.7 Transportation and Circulation

The following section is a summary of the traffic analysis report prepared by Willdan Associates in November 1991 for the Salt Creek Ranch SPA Plan. The analysis is contained in its entirety in Appendix D.

Existing Conditions

Regional access is currently provided by I-805, which is located west of the project site. Future construction of State Route 125 will play a key role in providing additional regional access for the traffic generated by this project and additional projects planned for the Eastern Territories.

The Salt Creek Ranch project area is currently traversed by Proctor Valley Road, with arterial access provided by East "H" Street, Telegraph Canyon Road, Otay Lakes Road, and Corral Canyon Road. The condition and status of these roadways is based on data provided by the City of Chula Vista and the County of San Diego.

Existing Roadway Characteristics

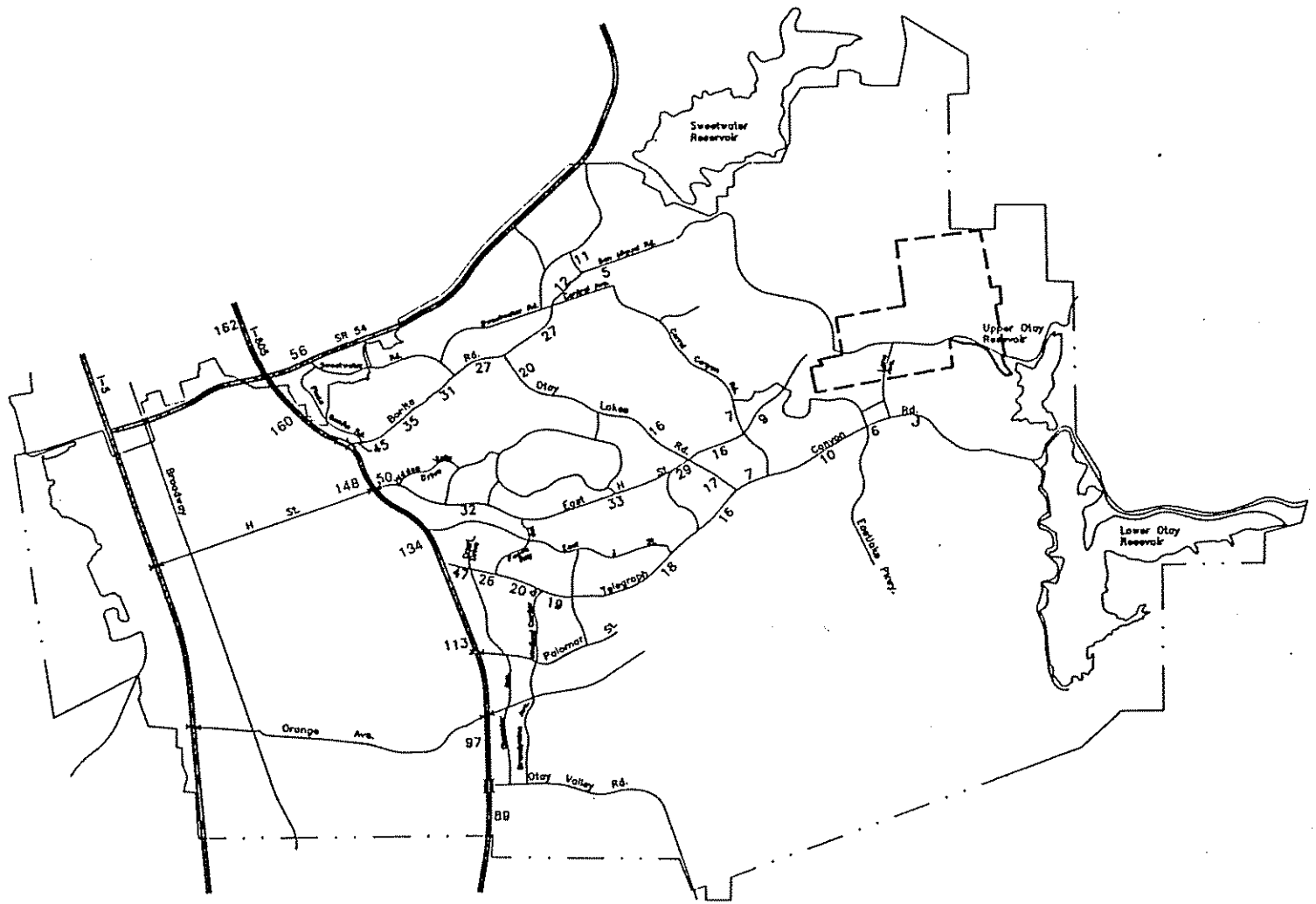
Figure 3-16 illustrates the study area and includes the most recent traffic count data available for the streets as well as the number of travel lanes and traffic control devices in the vicinity of the project. The traffic count data shown on this figure were compiled from information collected by Willdan Associates and provided by the City of Chula Vista. The following paragraphs provide a description of the roadways in the vicinity of the proposed project.

Interstate 805 is a north/south eight lane divided freeway branching off Interstate 5 just north of the Mexican border and reconnecting to Interstate 5 in Sorrento Valley. Currently Interstate 805 carries 148,000 and 134,000 Average Daily Trips (ADT) north and south, respectively of its interchange with "H" Street. North of the Bonita Road interchanges this freeway carries 160,000 ADT.

State Route 54 is a east/west freeway connecting Interstate 5 and Interstate 805, then transitioning to a four lane conventional roadway east of Interstate 805. It should be noted, that the portion between Interstate 5 and 805 was recently opened and traffic count data is not available for this section, however, east of Interstate 805 this roadway carries 56,000 ADT.

East "H" Street is designated a six lane primary arterial (6 lanes, divided) and is currently constructed to ultimate standards east of Interstate 805 to Otay Lakes Road. East "H" Street is currently carrying 32,400 and 50,400 ADT east and west of Hidden Vista Drive, respectively. West of Otay Lakes Road, East "H" Street currently carries 28,600 ADT.

East of Otay Lakes Road, East "H" Street is designated as a four lane major road and is currently constructed to ultimate standards across the EastLake Hills and Shores development to a point just west of the Salt Creek Ranch project. According to the City of



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SOURCE: Willdan Associates

ERCE

Existing Daily Traffic Volumes (in thousands)

FIGURE 3-16

Chula Vista's latest traffic counts, East "H" Street carries approximately 15,900 ADT just east of Otay Lakes Road and approximately 14,200 ADT west of Corral Canyon Road, and 9,100 ADT east of Corral Canyon Road.

Telegraph Canyon Road is an east/west facility connecting Interstate 805 with Otay Lakes Road. Telegraph Canyon Road terminates at its intersection with Otay Lakes Road where Otay Lakes Road turns and changes general direction to become an east/west facility. In the future, the east/west portion of Otay Lakes Road (east of the terminus of Telegraph Canyon Road) will be renamed Telegraph Canyon Road. Currently, this facility is constructed with six travel lanes (divided) between Interstate 805 and Paseo del Rey, five travel lanes (three lanes eastbound and two lanes westbound) between Paseo del Rey and Medical Center Drive, four travel lanes (divided) between between Medical Center Drive and Paseo Ladera, transitioning to two travel lanes from Paseo Ladera to just east of Otay Lakes Road. Just east of Otay Lakes Road, the EastLake Development company is constructing this facility to four travel lanes (divided) within a six lane primary arterial graded width through their property. The existing two lane segment between Paseo Ladera and Otay Lakes Road will be reconstructed to ultimate prime arterial standards by future assessment districts.

According to the City of Chula Vista's most recent traffic count data, Telegraph Canyon Road is carrying 46,600 ADT just east of Interstate 805 decreasing to 32,500 ADT west of Crest Drive. To the east volumes decrease from 25,800 to 15,900 just west of Otay Lakes Road.

Otay Lakes Road is a north/south facility constructed to four lane major standards between Bonita Road to just north of Telegraph Canyon Road. Ultimate plans designate Otay Lakes Road as a six lane major road between Bonita Road and Telegraph Canyon Road. The most recent traffic count data indicates that Otay Lakes Road is carrying between 16,200 and 19,600 ADT between East "H" Street and Bonita Road. South of East "H" Street current daily traffic volumes range between 12,100 and 16,500 ADT. East of Telegraph Canyon Road, Otay Lakes Road carries 9,600 ADT west of EastLake Parkway. Between EastLake Parkway and Lane Avenue this facility currently carries 5,600 ADT.

Corral Canyon Road is a north/south roadway with two lanes (one travel lane in each direction) with a two-way left turn lane. The City of Chula Vista has classified this roadway as a Class 1 collector (four lanes, undivided) from East "H" Street north to

Central Avenue. According to the City's most recent traffic count data, Corral Canyon Road carries approximately 7,400 ADT just north of East "H" Street.

Central Avenue is an east/west two lane roadway with its easterly terminus at Country Trails Lane. Central Avenue is designated as a Class 1 collector between Bonita Road and Corral Canyon Road. This facility is constructed to ultimate width from just east of Bonita Road to Frisbie Road; however, it is striped for one wide travel lane in each direction with a center two-way left turn lane. From east of Frisbie Road to Corral Canyon Road, Central Avenue consists of one travel lane in each direction. Central Avenue has signalized intersections with Bonita Road and Corral Canyon Road. Central Avenue currently carries 9,800 and 11,800 ADT east and west of Bonita Road, respectively.

Bonita Road is designated as a four lane major road just east of Interstate 805 and is constructed to ultimate standards from I-805 to just east of Otay Lakes Road. At its intersection with Otay Lakes Road, Bonita Road transitions into one travel lane in each direction (but is widened out at the intersection with Central Avenue), and turn in a northerly direction before terminates at Sweetwater Road. The City's most recent traffic count information indicates Bonita Road carries 44,600 ADT just east of Interstate 805, decreasing to 31,100 ADT east of Randy Lane. Between Allens School Road and Otay Lakes Road, this facility currently carries 26,700 ADT. Between Otay Lakes Road and Central Avenue, Bonita Road currently carries 26,000 ADT. South of Sweetwater Road to San Miguel Road, this facility carries 11,100 ADT.

Proctor Valley Road exist today as a two lane partially paved/graded dirt road in a north/south alignment just south of San Miguel Road, where it then follows an east/west alignment across the southerly portion of the Salt Creek Ranch property connecting with Campo Road/State Route 94 in Jamul. This roadway basically serves scattered agricultural uses and carries very low traffic volumes. Currently, there is no traffic count data available for this roadway. In the future, the east/west portion of Proctor Valley Road will serve as the extension of the East "H" Street across the Salt Creek Ranch property as a four lane major roadway. Portions of Proctor Valley road to the north and west of Salt Creek Ranch will serve as part of the future State Route 125 freeway alignment.

Public Transportation

Public transportation currently does not serve the Salt Creek Ranch project site. Chula Vista Transit route 705A which serves Corral Canyon Road, Central Avenue, and Bonita Road terminates at the Bayfront/E Street trolley station. Chula Vista Transit Routes 704 and 707 provide service to Southwestern College and Telegraph Canyon Road terminating at the "H" Street trolley station. From the "H" Street and Bayfront trolley stations service to downtown San Diego and transfer to the regional public transportation system is provided.

Evaluation of Existing Daily Traffic Volumes

Table 3-4 is a comparison of the daily traffic volumes shown on Figure 3-16 and the City's recommended maximum volume for level of service (LOS) C for the roadways (per functional classification). The City of Chula Vista's maximum LOS C capacity were obtained from the City of Chula Vista Draft General Plan and are included in Appendix D.

As shown on Table 3-4, it is evident that most street segments operate within the City of Chula Vista's recommended LOS C volumes. However, a number of rural two lane roadways carry double or triple the maximum recommended LOS C volumes. Telegraph Canyon Road between Paseo Ladera and Otay Lakes Road carries double the City of Chula Vista's maximum LOS C recommended volumes for a two lane roadway. However, the City is in the process of improving these sections to six lanes which will provide additional capacity.

Bonita Road between Randy Lane and Interstate 805 carries daily traffic volumes which exceed the City's maximum LOS C recommended volumes for a four lane major roadway. This roadway between Otay Lakes Road and Central Avenue carries over triple the City's maximum LOS C recommended daily traffic volumes for a two lane roadway. It should be noted the segment of Bonita Road between Otay Lakes Road and Central Avenue is in the County of San Diego's jurisdiction and a transit project is scheduled to improve this section to four lane major road standards.

Table 3-4

EXISTING STREET SEGMENT OPERATIONS IN THE PROJECT VICINITY

Street Segment	Classification[1]	Daily Volume	Rec. Max. Volume[2]	V/C
TELEGRAPH CANYON ROAD				
I-805 to Crest Drive	6P	46,600	50,000	0.93
Crest Drive to Paseo del Rey	4M	25,800	30,000	0.86
Paseo del Rey to Medical Center Dr.	4M	20,200	30,000	0.67
Medical Center Dr. to Paseo Ladera	4M	18,900	30,000	0.63
Paseo Ladera to Buena Vista Way	2CIII*	17,600	7,500	2.35
Buena Vista Way to Otay Lakes Rd.	2CIII*	15,900	7,500	2.12
OTAY LAKES ROAD				
East of Lane Avenue	2CIII*	2,500	7,500	0.33
Lane Avenue to EastLake Pkwy	4M	5,600	30,000	0.19
EastLake Pkwy to Rutgers Avenue	4M	9,600	30,000	0.32
Rutgers Avenue to Telegraph Cyn. Rd.	2CIII*	7,100	7,500	0.95
Telegraph Cyn. Rd. to East "H" Street	4M	16,500	30,000	0.55
East "H" Street to Camino Del Cerro	4M	16,400	30,000	0.55
Grande Camino Del Cerro Grande to Bonita Rd.	4M	19,600	30,000	0.65
EAST "H" STREET				
I-805 to Hidden Vista Dr.	6P	50,400	50,000	1.01
Hidden Vista Dr. to Paseo Del Rey	6P	32,400	50,000	0.65
Paseo Del Rey to Buena Vista Way	6P	32,600	50,000	0.65
Buena Vista Way to Otay Lakes Rd.	6P	28,600	50,000	0.57
Otay Lakes Rd. to Auburn Avenue	4M	15,900	30,000	0.53
Auburn Avenue to Corral Cyn. Rd.	4M	14,200	30,000	0.47
Corral Cyn. Rd. to EastLake Drive	4M	9,100	30,000	0.30
CORRAL CANYON ROAD				
East H Street to Blacksmith Road	2CII	7,400	12,000	0.62
BONITA ROAD				
I-805 to Plaza Bonita Road	4M	44,600	30,000	1.49
Plaza Bonita Road to Randy Lane	4M	35,300	30,000	1.18
Randy Lane to Willow Street	4M	31,100	30,000	1.04
Willow Street to Allen School Road	4M	27,300	30,000	0.91
Allen School Road to Otay Lakes Road	4M	26,700	30,000	0.81
Otay Lakes Road to Central Avenue	2CIII	26,700	7,500	3.56
Central Avenue to San Miguel Road	2CIII	12,200	7,500	1.63
San Miguel Road to Sweetwater Road	2CIII	11,100	7,500	1.48
SAN MIGUEL ROAD				
Bonita Road to Proctor Valley Road	2CIII	5,100	7,500	0.68

* = Roadway under construction; P = Prime; M = Major; CII = Class II Collector; CIII = Class III Collector
Source: Willdan Associates, 1991.

Evaluation of Peak Hour Conditions at Key Intersections

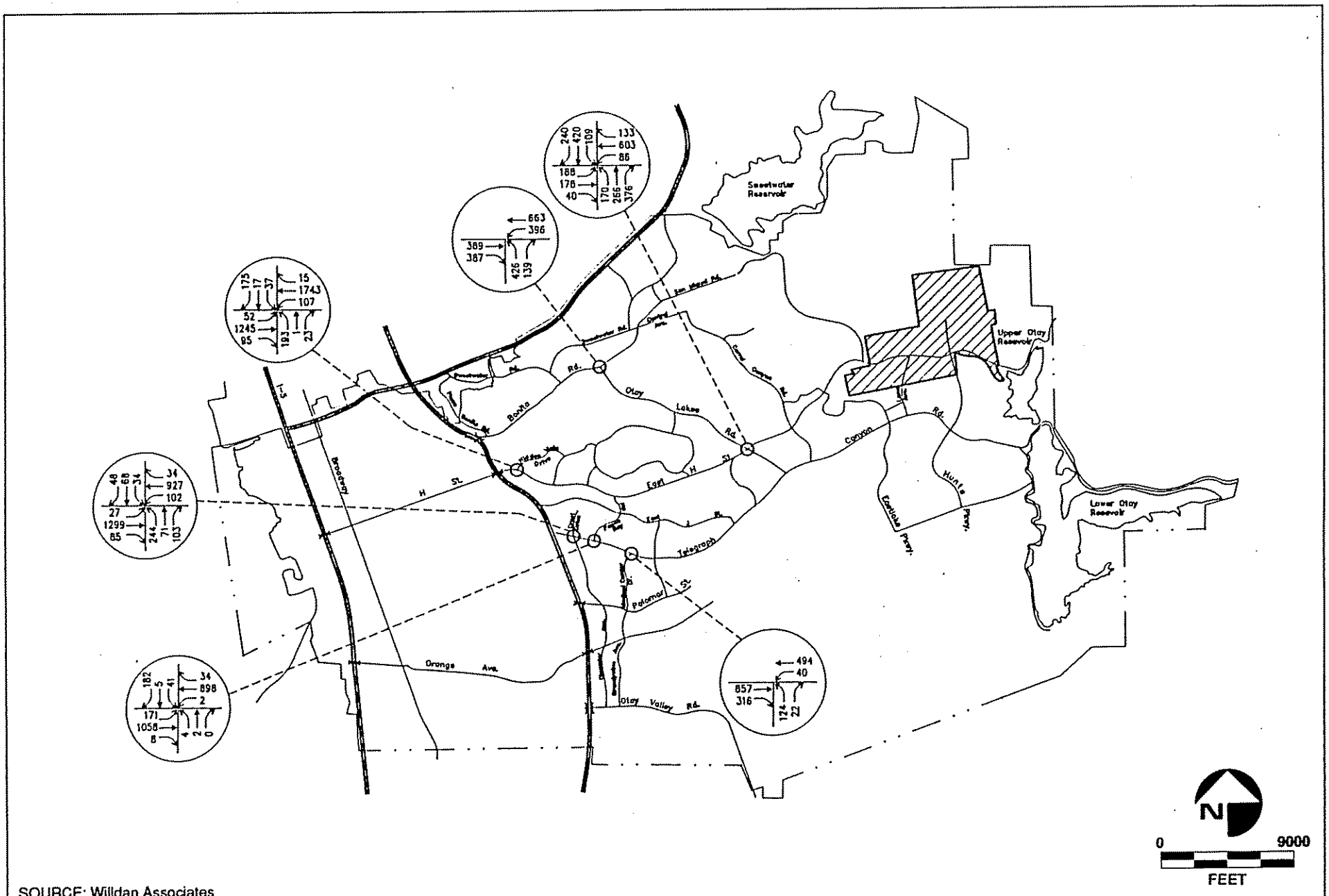
In order to document existing conditions in the project vicinity, the City of Chula Vista 1990 Growth Management Intersection Monitoring Program prepared by JHK and Associates was referenced. This annual report includes manual turning movement counts at the 109 signalized intersections within the City of Chula Vista under AM, midday, and PM peak hour conditions. Analyzing the intersections is important because, intersections tend to be the overall controlling factor on the street network.

The existing conditions at these intersections were analyzed during the commuter peak hour periods (morning and afternoon) using the information contained in the JHK report. The count summaries and calculation worksheets along with description of conditions and ranges for the various levels of service are contained in Appendix D. Figures 3-17 and 3-18 illustrate the existing morning and afternoon peak hour turning movements, respectively.

Table 3-5 summaries the analyses of the peak hour levels of service for the intersections analyzed. As shown on Table 3-5, all of the signalized intersections (except for those with freeway interchanges) operate at LOS C or better.

Impacts

To evaluate the potential impacts of the proposed Salt Creek Ranch SPA Plan, it was necessary to estimate the number of trips generated by the proposed project. These trips were then distributed and assigned to the surrounding street network (by phase) in accordance with anticipated travel patterns. Since the City of Chula Vista has already approved numerous tentative and final maps in the project vicinity, the year 1995 with "approved projects" forecast contained in the ECVTPP was used as a base for future conditions. Street segment and intersection capacities were then evaluated under future conditions along with Salt Creek Ranch phasing to determine project related impacts. Buildout impacts were evaluated utilizing the City of Chula Vista scenario #4 General Plan forecasts.

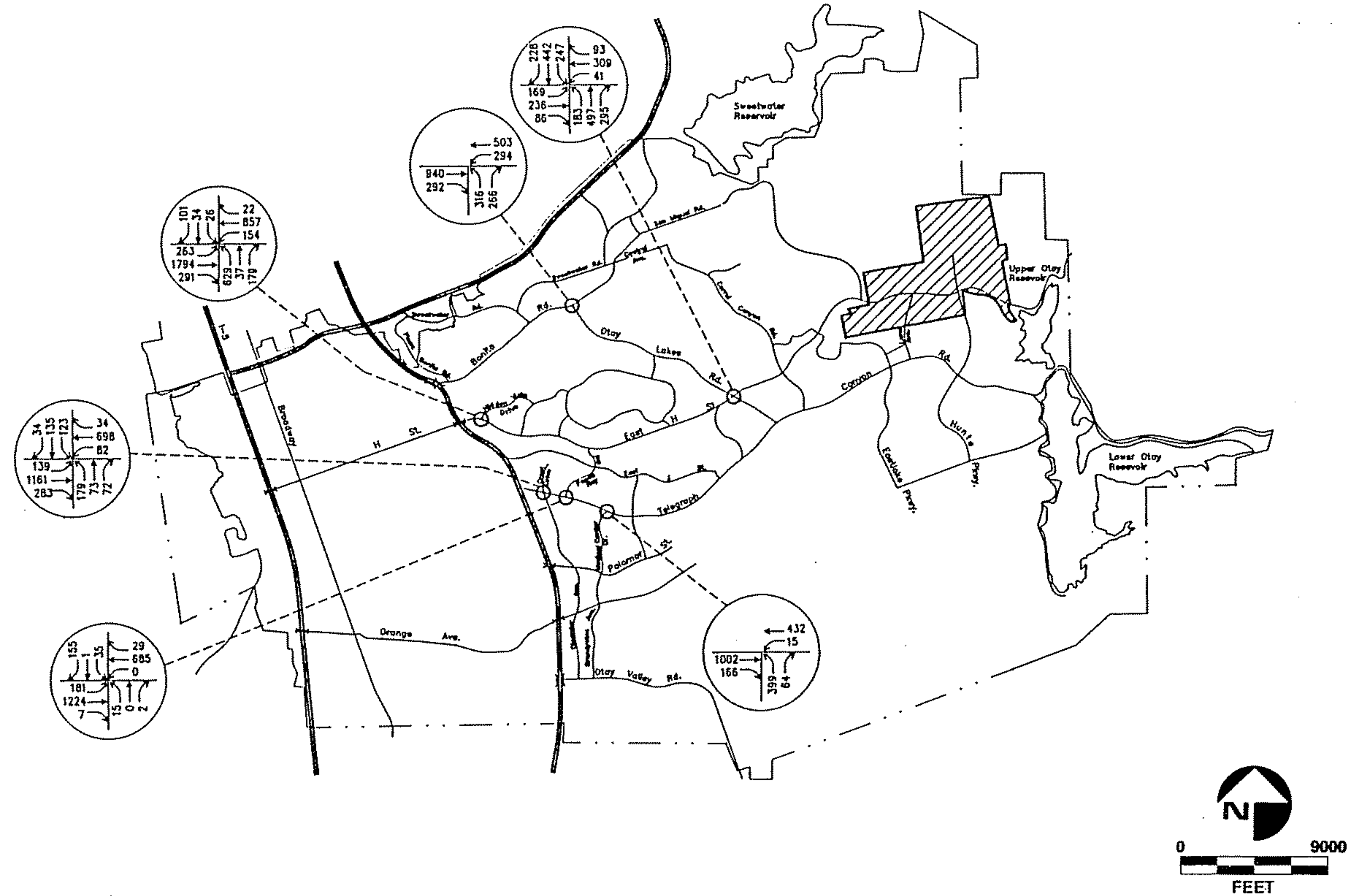


SOURCE: Willdan Associates

ERCE

Existing AM Peak Hour Turning Movements at Key Intersections

FIGURE 3-17



SOURCE: Willdan Associates

ERCE

Existing PM Peak Hour Turning Movements at Key Intersections

FIGURE 3-18

Table 3-5

EXISTING LEVELS OF SERVICE AT PROJECT VICINITY INTERSECTIONS

Intersection	AM		PM	
	ICU	LOS	ICU	LOS
Bonita Road/I-805 n/b ramps	0.67	B	0.87	D
Bonita Road/I-805 s/b ramsp	0.73	C	1.09	F
East "H" Street/I-805 n/b ramps	0.65	B	0.64	B
East "H" Street/I-805 s/b ramps	0.54	A	0.87	D
Telegraph Cyn. Road/I-805 n/b ramps	0.77	C	0.80	C
Telegraph Cyn. Road/I-805 s/b ramps	0.70	B	1.07	F
Bonita Road/Otay Lakes Road	0.78	C	0.75	C
Otay Lakes Road/Allen School Road	0.36	A	0.33	A
Otay Lakes Road/Canyon Drive	0.42	A	0.38	A
Otay Lakes Road/Bonita Point Plaza	0.39	A	0.36	A
East "H" Street/Hidden Vista Drive	0.57	C	0.78	C
East "H" Street/Paseo del Rey	0.75	C	0.79	C
East "H" Street/Buena Vista Way	0.77	C	0.79	C
East "H" Street/Southwestern College	0.57	A	0.53	A
East "H" Street/Otay Lakes Road	0.75	C	0.66	B
East "H" Street/Auburn Avenue	0.44	A	0.43	A
East "H" Street/Rutgers/Corral Cyn.	0.57	A	0.50	A
Telegraph Cyn. Rd/Halecrest Drive	0.57	A	0.65	B
Telegraph Cyn. Rd./Crest Drive	0.67	B	0.66	B
Telegraph Cyn. Rd./Paseo del Rey	0.61	B	0.56	A
Telegraph Cyn. Rd./Medical Center Dr.	0.40	A	0.49	A

Source: 1990 City of Chula Vista Growth Management Intersection Monitoring Program, JHK & Associates

Throughout this impact analysis, a distinction is made between 1995 Base Conditions, Scenario 1 Conditions, Scenario 1A Conditions, and Scenario 2 Conditions. The following is a description of each condition and the methodology and tasks undertaken in forecasting the travel demand.

1. 1995 Base Conditions. The 1995 base condition was established based on information contained in the ECVTPP. This condition assumes construction of all approved developments (see Table 3-6) and related roadway improvements as documented in the ECVTPP, except for the segment of "H" Street just west of the project site, which was assumed to consist of a two lane paved road.

2. Scenario 1 Conditions. The Scenario 1 conditions assume the completion of Phase I of the Salt Creek Ranch, in addition to the base condition described above. This condition was established as follows:

   A. Daily and peak hour trip generation rates for Phase I were developed based on SANDAG's *Traffic Generation Manual.*

   B. The Phase I traffic was assigned to the surrounding roadways and added to the base condition resulting in Scenario 1 traffic volumes. The trip distribution and assignment of the Phase I traffic was estimated based on the TRANPLAN model software.

   Scenario 1 was eliminated as a viable scenario based on the following issues: capacity analysis of the base conditions with Salt Creek Ranch Phase I and Proctor Valley Road as a two-lane paved (Scenario 1) indicate that the level of service at the intersection of Hidden Vista Drive/East "H" Street could not be mitigated to acceptable levels; the current alignment of Proctor Valley Road does not conform with the Circulation Element of the General Plan. Therefore, similar analyses were conducted with Proctor Valley Road remaining as a two-lane dirt road and with a two-lane paved roadway connecting the segment of East "H" Street between Salt Creek Ranch and Salt Creek 1 (Scenario 1A).

Table 3-6

APPROVED PROJECTS

Project	Residential Dwelling Units	Industrial Acres	Commercial Acres
Rancho del Rey I	1,310	76.2	6.6
EastLake I	16	66.0	34.2
Ladera Villas	29		
Terra Nova	86		
Woodcrest S.W.	54		
Canyon View	40		
Olympic Training Center			
Rancho del Rey II	567		
Salt Creek I	538		
EastLake Greens	2,774	19.6	
Sunbow	1,946	46.0	10.0
Village Center (E.L.I.)	405		
Montillo	353		
Rancho del Rey III	1,380		
Totals	9,498	207.8	50.8

Source: Willdan Associates, 1991.

3. Scenario 1A Conditions. Scenario 1A Conditions are similar to Scenario 1 with the exception that it assumes the construction of a two lane paved road between Salt Creek 1 and Salt Creek Ranch and Proctor Valley Road remains as a two-lane dirt road.

4. Scenario 2 Conditions. The Scenario 2 conditions assumes the ultimate development of Salt Creek Ranch and the implementation of a four-lane at-grade roadway along the State Route 125 corridor. The methodology used to establish the projected traffic volumes for this scenario is similar to Scenario 1 and 1A above, using the total traffic generated by Salt Creek Ranch.

Trip Generation

The traffic volumes which will result from the proposed project are estimated using accepted trip generation rates and peak hour factor which are based on categories of land uses. These rates have been developed by various agencies and are summarized by SANDAG in their *Traffic Generators Manual.* Table 3-7 summarizes the expected trip generation from each phase of the Salt Creek Ranch SPA.

As shown on Table 3-7, the first phase of the Salt Creek Ranch SPA is estimated to generate 14,100 daily vehicle trips with 1,209 trips (splitting 373 inbound and 896 outbound) during the morning peak hour and 1,340 trips (splitting 901 inbound and 439 outbound) during the afternoon peak hour. Phase 2 is estimated to generate 14,280 daily vehicle trips with 1,275 daily trips (splitting 374 inbound and 901 outbound) during the morning peak hour and 1,355 trips (splitting 911 inbound and 444 outbound) during the afternoon peak hour. Phase 3 is estimated to generate 2,910 daily vehicle trips with 233 trips (splitting 47 inbound and 186 outbound) during the morning peak hour and 291 trips (splitting 204 inbound and 87 outbound) during the afternoon peak hour. In summary, all three phases of the Salt Creek Ranch SPA would generate 31,290 daily vehicle trips with 2,777 trips (splitting 794 inbound and 1,983 outbound) expected during the morning peak hour and 2,986 trips (splitting 2,016 inbound and 970 outbound) expected during the afternoon peak hour. Since the project site is currently vacant, generation of these trips would be additional to those trips already on the street network.

Table 3-7

TRIP GENERATION

Land Use	Intensity	Trip Rate	ADT	AM Peak Hour %	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour %	PM Peak Hour In	PM Peak Hour Out
Phase 1:									
SFDU	1,017 units	10/DU	10,170	8	163	651	10	712	305
MFDU	240 units	8/DU	1,920	8	31	123	10	134	58
Elementary School	10 acres	100/acre	1,000	26	156	104	5	15	35
Neighborhood Park	17 acres	50/acre	850	4	17	17	8	34	34
Church	3 acres	40/acre	120	4	4	1	8	5	5
Fire Station	1 acre	40/acre	40	4	2	0	8	1	2
Subtotal: Phase 1:			14,100		373	896		901	439
Phase 2:									
SFDU	984 units	10/DU	9,840	8	157	630	10	689	295
MFDU	285 units	8/DU	2,280	8	36	146	10	160	68
Elementary School	10 acres	100/acre	1,000	26	156	104	5	15	35
Neighborhool Park	20 acres	50/acre	1,000	4	20	20	8	40	40
Church	4 acres	40/acre	160	4	5	1	8	7	6
Subtotal: Phase 2:			14,280		374	901		911	444
Phase 3:									
SFDU	291	10/DU	2,910	8	47	186	10	204	87
Subtotal: Phase 3:			2,910		47	186		204	87
Total			**31,290**		**794**			**2,016**	**970**

SFDU = Single Family Dwelling Units
MFDU = Multi-family Dwelling Units

Source: Willdan Associates, 1991

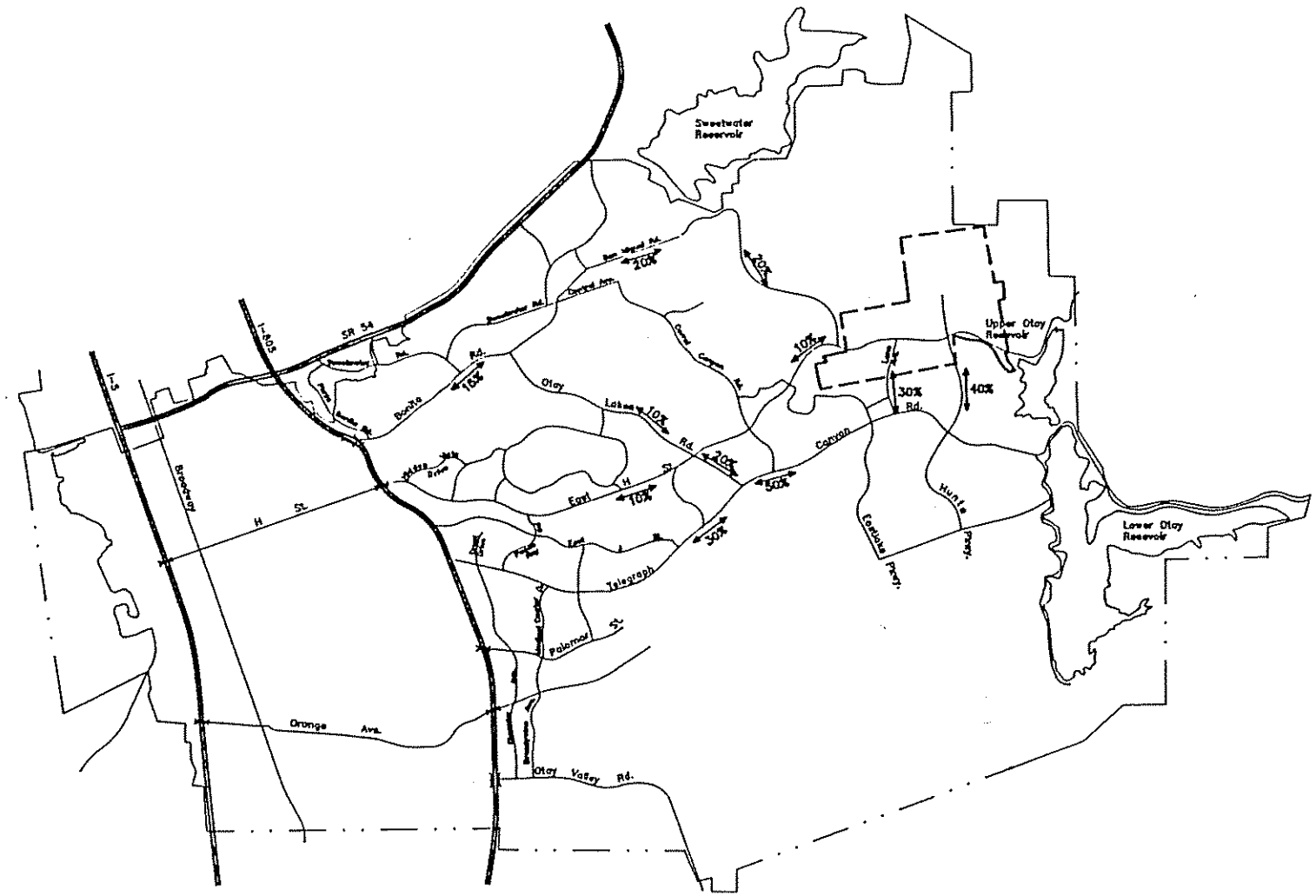
Trip Distribution and Assignment

The distribution of trips typically results from an estimate of ultimate travel destination and routes used to reach those destinations. The bases for choosing a route is the drivers consideration of time, distance, and convenience. A major element is access to the regional circulation system and the interaction between residential land uses with employment, shopping, recreation, and institutional areas. In order to determine the distribution of trips to and from the project site, the ECVTPP travel forecast model was utilized for distributing and assigning project related traffic. Figures 3-19 and 3-20 present the distribution of project traffic onto the surrounding street system under Scenario 1 and Scenario 2, respectively. As shown under Scenario 1, the majority of traffic (70 percent) will use Telegraph Canyon Road, while under Scenario 2, the majority of traffic (80 percent) will use "H" Street.

Under buildout conditions, the trips distribution was estimated based on a selected zone assignment from the City of Chula vista scenario four travel forecast (SANDAG 8-13-89). The majority (60 percent) of the project trips will be oriented west along East "H" Street connecting to State Route 125 (north/south destination) and continue west for destination along "H" Street. The remainder of the project related traffic will be oriented to the south on Lane Avenue (20 percent) and Hunte Parkway (15 percent) for connection to Telegraph Canyon Road.

Based on a review of the trip generation and distribution, the following intersections were selected for detailed analysis (see Figure 3-21)

- Telegraph Canyon Road and Crest Drive
- Telegraph Canyon Road and Paseo del Rey
- Telegraph Canyon Road and Medical Center Drive
- Telegraph Canyon Road and Otay Lakes Road
- Telegraph Canyon Road and East Lake Parkway
- Telegraph Canyon Road and Hunte Parkway
- Telegraph Canyon Road and Lane Avenue
- East "H" Street and Hidden Vista Drive
- Elmhurst Drive and Otay Lakes Road

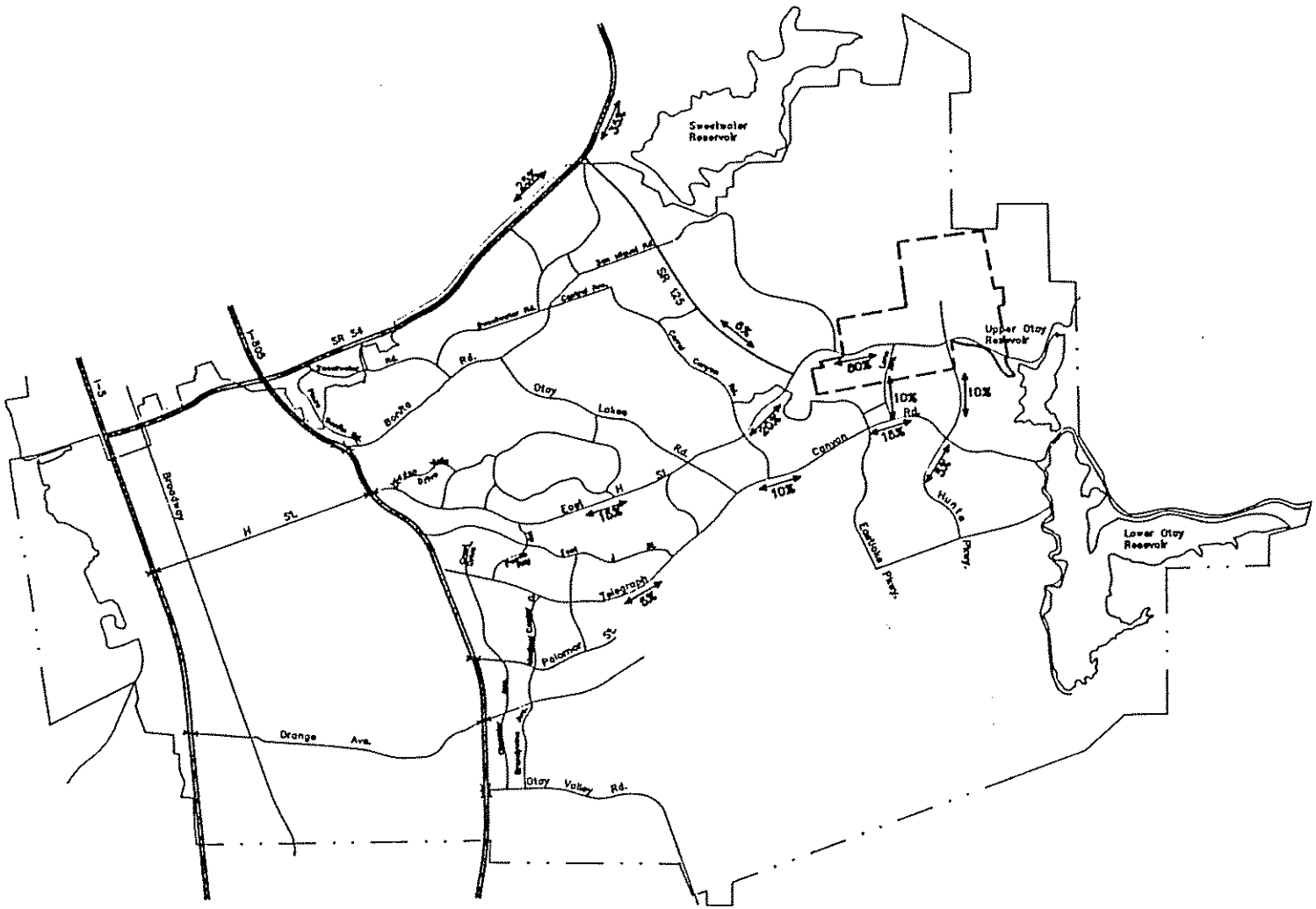


SOURCE: Willdan Associates

ERCE

Scenario No. 1
Trip Distribution

FIGURE
3-19

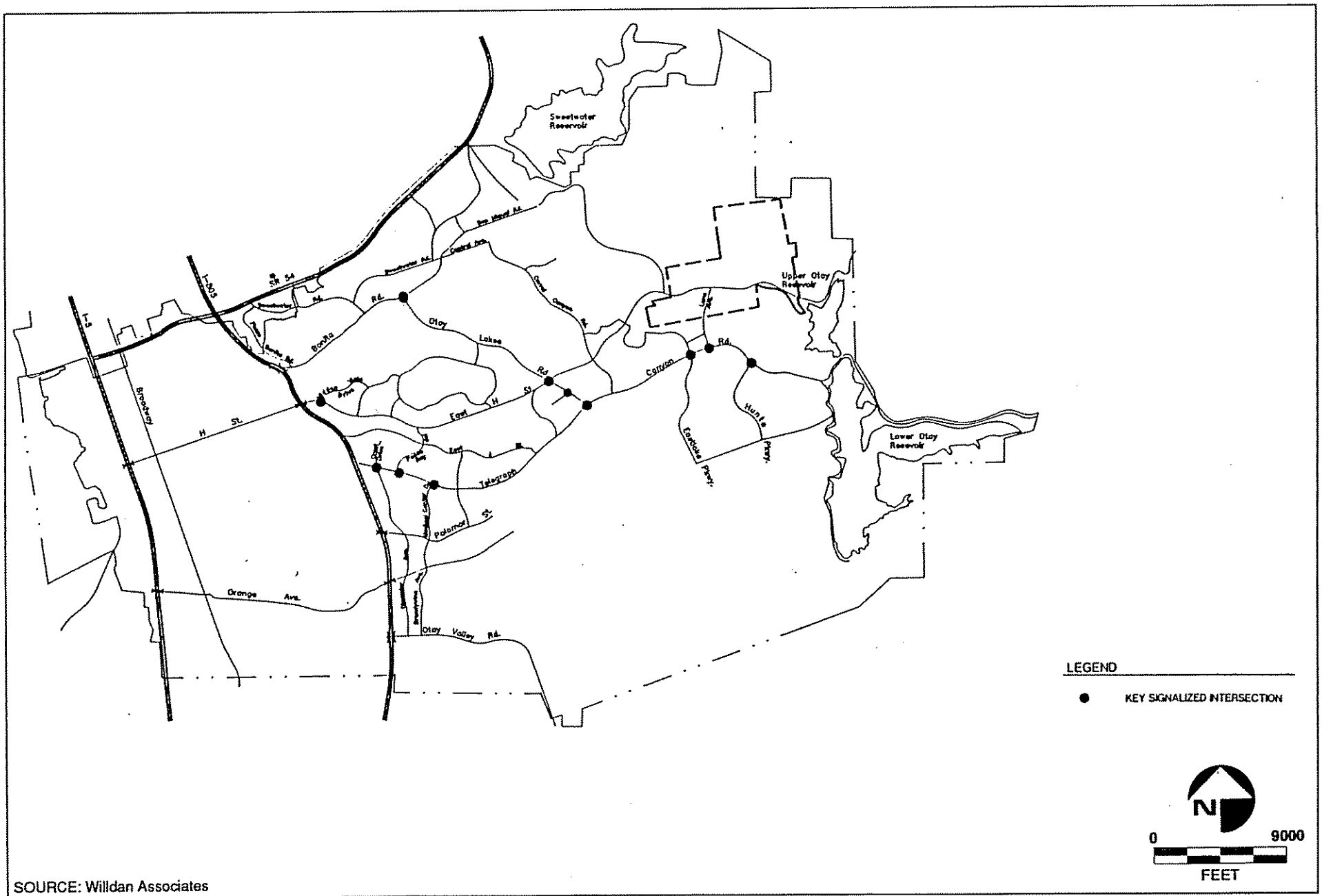


SOURCE: Willdan Associates

ERCE

Scenario No. 2
Trip Distribution

FIGURE
3-20



SOURCE: Willdan Associates

ERCE

Key Intersections

FIGURE 3-21

- East "H" Street and Otay Lakes Road
- Bonita Road and Otay Lakes Road

1995 Base Conditions Analysis

Evaluation of Daily Traffic Volumes

Table 3-8 is a comparison of the daily traffic volumes shown on Figure 3-22 and the City's recommended maximum volume for LOC C for the roadways (per functional classification). The City of Chula Vista's maximum LOS C capacity were obtained from the City of Chula Vista Draft General Plan (page 2-18) and are included in Appendix D to this EIR.

As shown on Table 3-8, the following street segments will carry volumes in excess of the City of Chula Vista's recommended LOS C volumes:

- Bonita Road - East of Interstate 805 to Otay Lakes Road
- East "H" Street - East of Interstate 805 to Hidden Vista Drive
- Otay Lakes Road - North of Telegraph Canyon Road

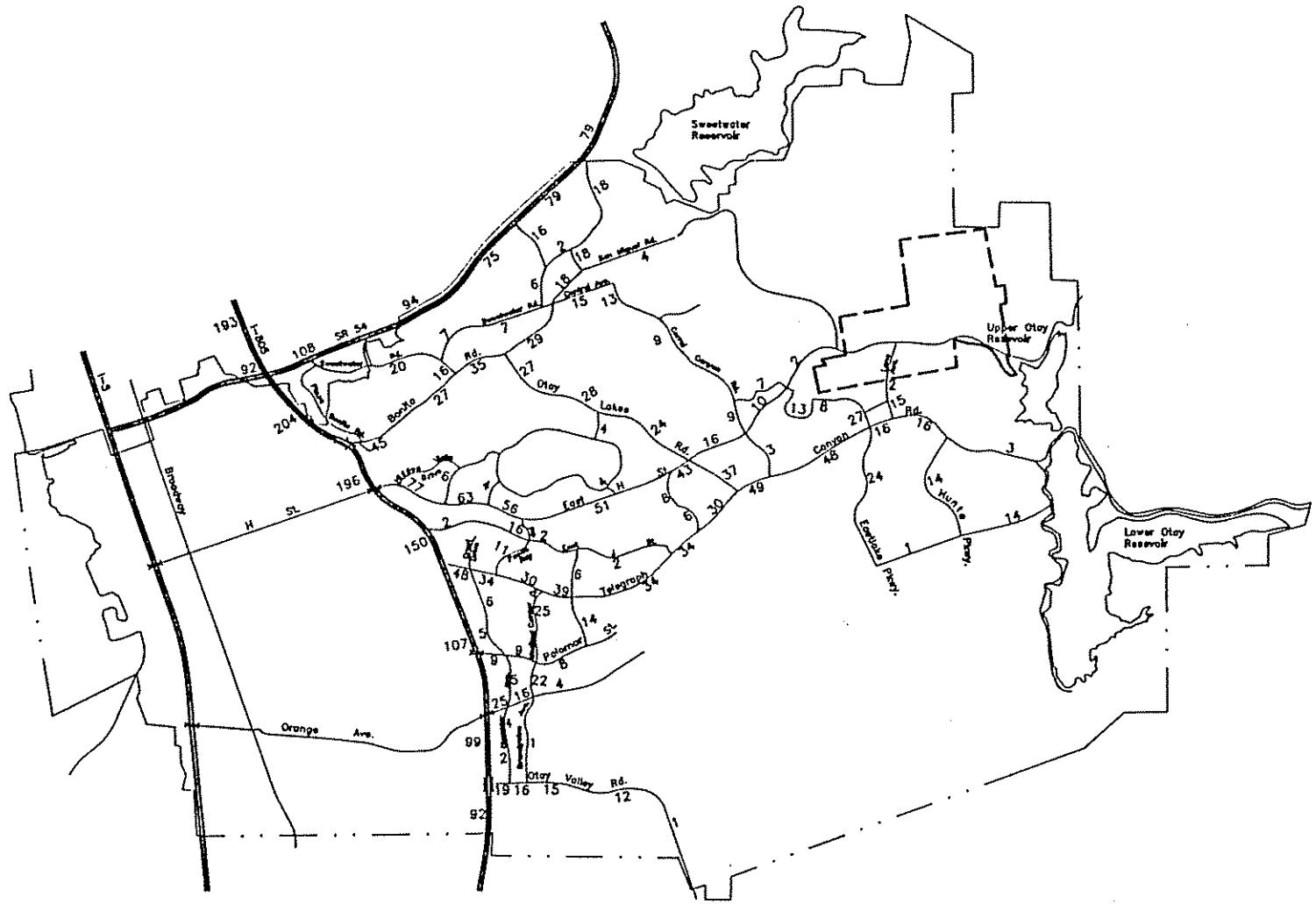
It should be noted that analysis of the daily traffic is a generalized approach and is provided for informational purposes. It is the peak hour condition which dictates improvements and thus will be the focus of the analysis.

Evaluation of Peak Hour Conditions at Key Intersections

Figures 3-23 and 3-24 illustrate the 1995 base condition AM and PM peak hour turning movements, respectively. Table 3-9 summarizes the analysis of the peak hour levels of service for the intersections analyzed. The detailed analysis is contained in Appendix D of this EIR.

As shown on Table 3-9, the following five intersections will require improvements in order to operate at an acceptable level of service.

- Telegraph Canyon Road/East Lake Parkway
- East "H" Street/Hidden Vista Drive



SOURCE: Willdan Associates

ERCE

1995 Base Conditions
Daily Forecast Traffic Volumes (In thousands)

FIGURE
3-22

Table 3-8

1995 BASE CONDITIONS STREET SEGMENT OPERATION

Roadway Segment	Functional Class[1]	1995 Base Conditions Volume	Recommended Maximum Volume[2]	V/C[3]
Bonita Road				
E/of 1-805	4M	44,700	30,000	1.49
W/of Otay Lakes Road	4M	34,500	30,000	1.15
E/of Otay Lakes Road	4M	29,000	30,000	0.97
W/of Central Avenue	4M	21,400	30,000	0.71
East "H" Street				
E/of I-805	8P	76,600	70,000	1.09
E/of Hidden Vista Drive	6P	63,000	50,000	1.26
E/of Paseo Ranchero	6P	48,900	50,000	0.98
W/of Otay Lakes Road	6P	43,200	50,000	0.86
E/of Otay Lakes Road	4M	16,400	30,000	0.55
W/of Corral Canyon Road	4M	9,800	30,000	0.33
E/of Corral Canyon Road	4M	9,900	30,000	0.33
Telegraph Canyon Road				
E/of I-805	6P	48,000	50.000	0.96
E/of Paseo del Rey	6P	29,500	50,000	0.59
W/of Paseo Ranchero	6P	33,800	50,000	0.68
E/of Paseo Ranchero	6P	33,800	50,000	0.68
E/of Otay Lakes Road	6P	49,400	50,000	0.99
W/of EastLake Parkway	6P	47,500	50,000	0.95
E/of EastLake Parkway	6P	15,900	50,000	0.32
East Orange Avenue				
E/of I-805	4M	24,500	30,000	0.82
E/of Medical Center Drive	4M	3,600	30,000	0.12

Table 3-8 (Continued)

1995 BASE CONDITIONS STREET SEGMENT OPERATION

Roadway Segment	Functional Class[1]	1995 Base Conditions Volume	Recommnended Maximum Volume[2]	V/C[3]
Otay Lakes Road				
S/of Bonita Road	4M	26,800	30,000	0.89
N/of East "H" Street	4M	20,800	30,000	0.69
N/of Telegraph Canyon Road	4M	37,000	30,000	1.23
With Improvement	6P	37,000	50,000	0.74
E/of Medical Center Drive	4M	7,800	30,000	0.26
Hunte Parkway				
N/of Telegraph Canyon Road	4M	N/A	N/A	N/A
S/of Telegraph Canyon Road	4M	13,800	30,000	0.46
EastLake Parkway				
N/of Telegraph Canyon Road	4M	26,500	30,000	0.88
S/of Telegraph Canyon Road	4M	24,400	30,000	0.81
Lane Avenue				
S/of East "H" Street	2CII	200	12,000	0.02
N/of Telegraph Canyon Road	2CII	600	12,000	0.05

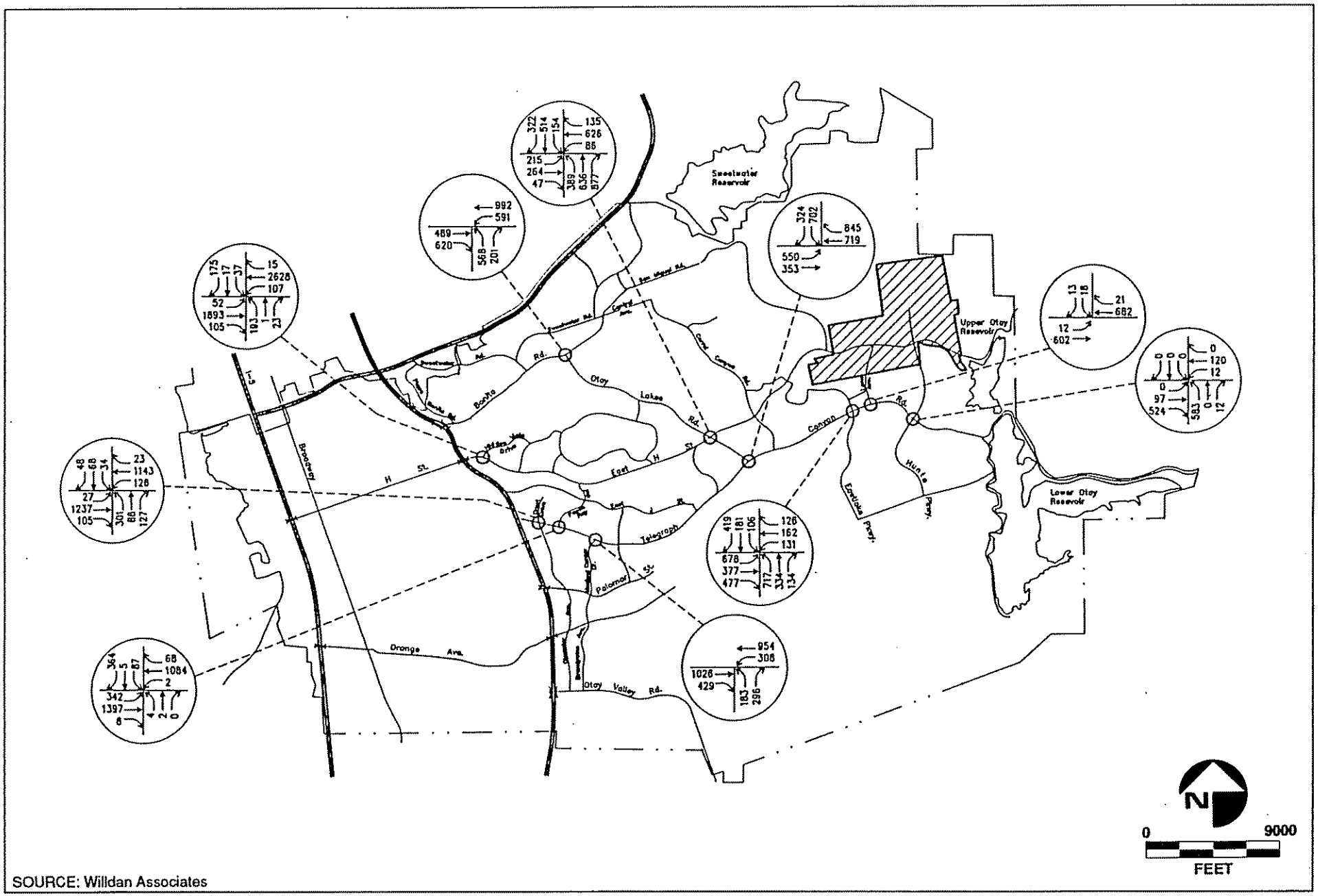
1 # = denotes number of lanes; F = Freeway; E = Expressway; P = Prime; M = Major; C = Collector

2 LOS C recommended volume from City of Chula Vista Draft Circulation Element

3 Volume to Capacity Ratio

N/A = Not Applicable

Source: Willdan Associates, 1991

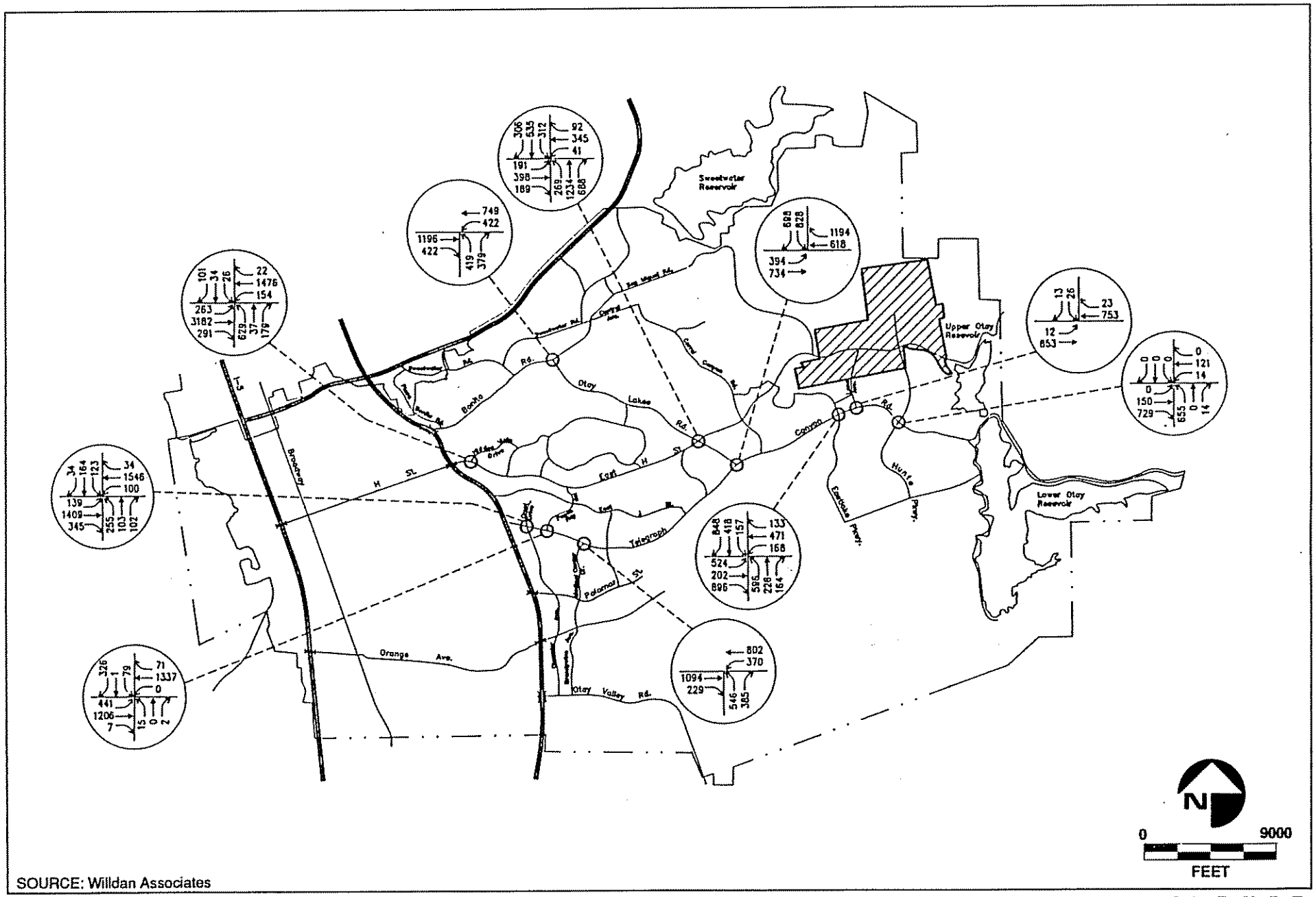


SOURCE: Willdan Associates

ERCE

1995 Base Conditions
AM Peak Hour Turning Movements at Key Intersections

FIGURE
3-23



SOURCE: Willdan Associates

1995 Base Conditions
PM Peak Hour Turning Movements at Key Intersections

FIGURE 3-24

Table 3-9

1995 BASE CONDITIONS INTERSECTION LEVELS OF SERVICE

Intersection	HCM			
	AM Peak Hour		PM Peak Hour	
	Avg. Delay Seconds/Veh.	LOS	Avg. Delay Seconds/Veh.	LOS
Telegraph Canyon Road/Crest Drive	18.2	C	27.7	D
Telegraph Canyon Road/Paseo del Rey	18.8	C	29.4	D
Telegraph Canyon Road/Medical Center Drive	14.0	B	24.1	C
Telegraph Canyon Road/Otay Lakes Road	17.5	C	16.9	C
Telegraph Canyon Road/EastLake Parkway	22.7	C	43.1	E
with improvements	22.9	C	32.1	D
Telegraph Canyon Road/Hunte Parkway	12.4	B	13.1	B
Telegraph Canyon Road/Lane Avenue	2.2	A	2.2	A
East "H" Street/Hidden Vista Drive	37.8	D	*	F
with improvements	14.8	B	28.6	D
East "H" Street/Otay Lakes Road	*	F	*	C
with improvements	24.1	C	29.1	D
Bonita Road/Otay Lakes Road	30.1	D	43.5	C
with improvements	17.8	C	19.3	C
Elmhurst Drive/Otay Lakes Road	20.3	C	*	F
with improvements	18.8	C	39.2	D

* Delays cannot be estimated when V/C exceeds 1.2.

Source: Willdan Associates, 1991.

- East "H" Street/Otay Lakes Road
- Bonita Road/Otay Lakes Road
- Elmhurst Drive/Otay Lakes Road

Capacity analysis of the 1995 base conditions (with approved projects as documented in the Eastern Chula Vista Transportation Phasing Plan (ECVTPP) dated January 1991) indicate that certain key intersections and roadway segments in the vicinity of the project site will require the following improvements in order to conform with the level of service standards.

- Optimize the traffic signal timings at all intersections to provide for an efficient traffic operation and reduce delays.

- Interconnect all traffic signals in the eastern territories and synchronize the signal timing to provide a suitable progression for through traffic along the major circulation streets. It is recommended that a centralized computer system be installed to more efficiently monitor and coordinate the traffic signal operation in the eastern territories.

- The intersection of Telegraph Canyon Road/East Lake Parkway will require the following land configuration in order to operate at level of service (LOS) D or better during the peak hours.

  - Eastbound - two left, two through, and two right
  - Westbound - one left, three through, and one right
  - Northbound - two left, one through, and one through/right
  - Southbound - one left, two through, and two right

  In addition, in conjunction with the proposed shopping center in the northwest corner, a driveway along Telegraph Canyon Road west of East Lake Parkway should be provided in order to divert a portion of the right and left turn volumes on the southbound and eastbound approach, respectively.

- The intersection of East "H" Street/Hidden Vista Drive will require the following lane configurations in order to operate at LOS D or better during the peak hours.

  - Eastbound - two left, four through, and one right
  - Westbound - two left, three through, and one through/right
  - Northbound - one left, one through/right, and one right
  - Southbound - one left, one through/right, and one right

- The intersection of East "H" Street/Otay Lakes Road will require the following lane configuration to provide LOS D or better during the peak hours.

  - Eastbound - one left, three through, and one right
  - Westbound - one left, three through, and one right
  - Northbound - two left, two through, and a free right
  - Southbound - two left, two through, and one right

- The intersection of Bonita Road/Otay Lakes Road will require the following lane configurations to provide LOS D or better during the peak hours.

  - Eastbound - two through, one right
  - Westbound - two left, two through
  - Northbound - two left, and one right

- The intersection of Elmhurst Drive/Otay Lakes Road will require the following lane configuration to provide LOS D or better during the peak hours.

  - Eastbound - one left, one through, one right
  - Westbound - one left, one through/right
  - Northbound - two left, two through, one through/right
  - Southbound - one left, three through, and one right

Widen Otay Lakes Road to provide three through lanes per direction.

The above requirements will be the responsibility of the property owners of those approved projects identified in the ECVTPP. The traffic impact analysis for Salt Creek Ranch SPA Plan assumes that the improvements will be in place at the time of project implementation.

Scenario 1 and 1A Analysis

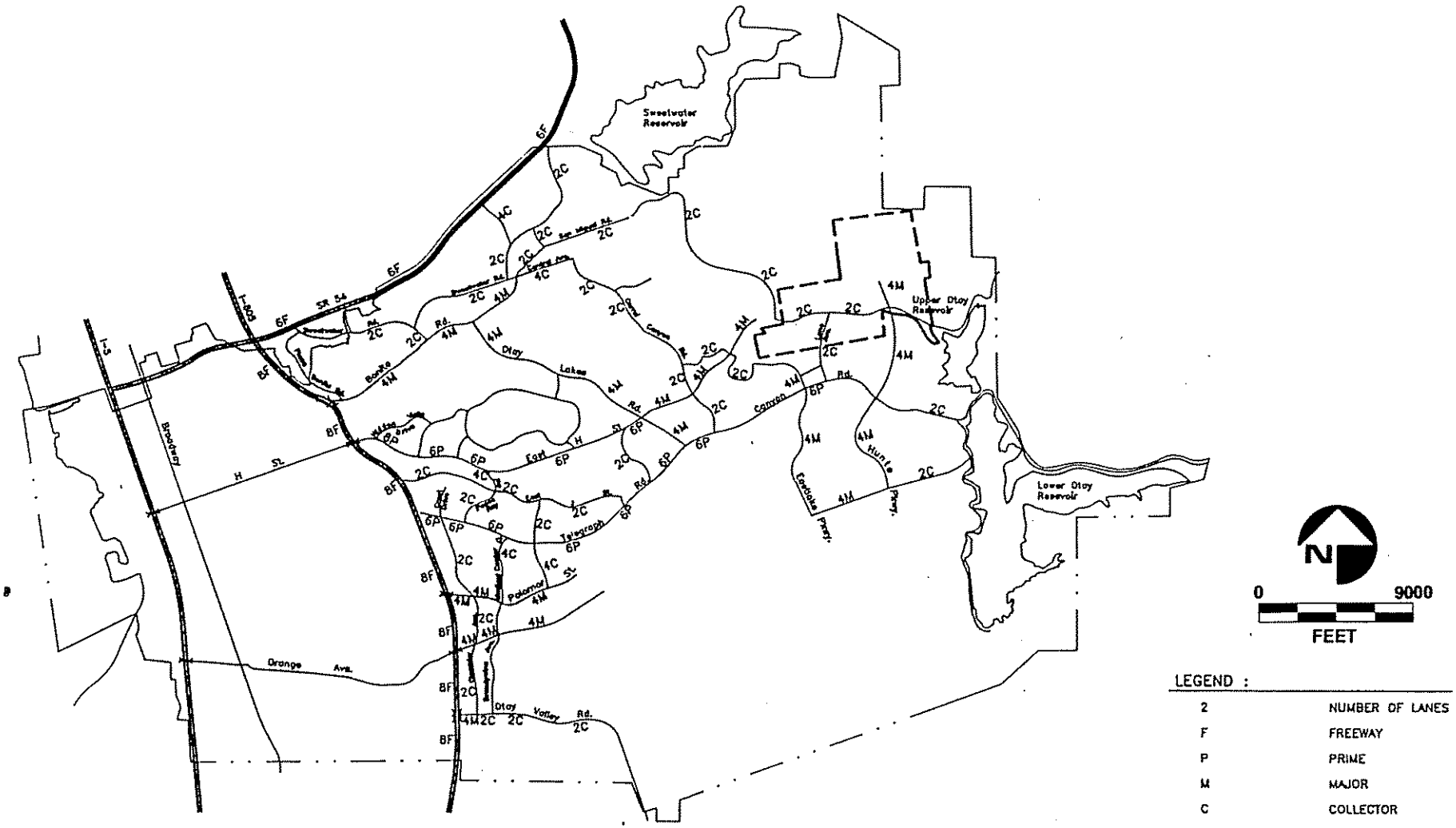
Evaluation of Existing Daily Traffic Volumes

Figures 3-25 and 3-26 depict the street network assumptions and the projected daily traffic volumes under Scenario 1. Table 3-10 provides a comparison of projected daily traffic between the 1995 base conditions and the Scenario 1 conditions. As shown, the major increases in traffic will occur along Telegraph Canyon Road (ranging between 8,600 near the project to 2,800 near Interstate 805), Hunte Parkway (7,600 VPC) and Lane Avenue (5,000 VPD).

Additional forecasts were also performed assuming the construction of a two-lane paved road between Salt Creek Ranch and Salt Creek 1 and Proctor Valley remaining as a two-lane dirt road (Scenario 1A). The results indicate that most of the traffic will use East "H" Street to access Interstate 805. Therefore, traffic conditions along Telegraph Canyon Road will improve, while remaining the same along East "H" Street west of Otay Lakes Road. The reason for this is that under Scenario 1 (East "H" Street not connected), project traffic destined to the west traveled along telegraph Canyon Road to Otay Lakes Road north and East "H" Street west. With the segment of East "H" Street paved, this same traffic will travel west on East "H" Street without burdening Telegraph Canyon Road and Otay Lakes Road. Therefore, the analysis for Scenario 1A was limited to the intersections along East "H" Street.

Evaluation of Peak Hour Conditions at Key Intersections

Figures 3-27 and 3-28 illustrate the Scenario 1 AM and PM peak hour turning movements, respectively. Table 3-11 summarizes the analysis of the peak hour levels of service for the intersections analyzed. The detailed analysis is contained in Appendix D of this report. As shown on Table 3-11, the intersection of East "H" Street/Hidden Vista Drive will operate at an unacceptable level of service.

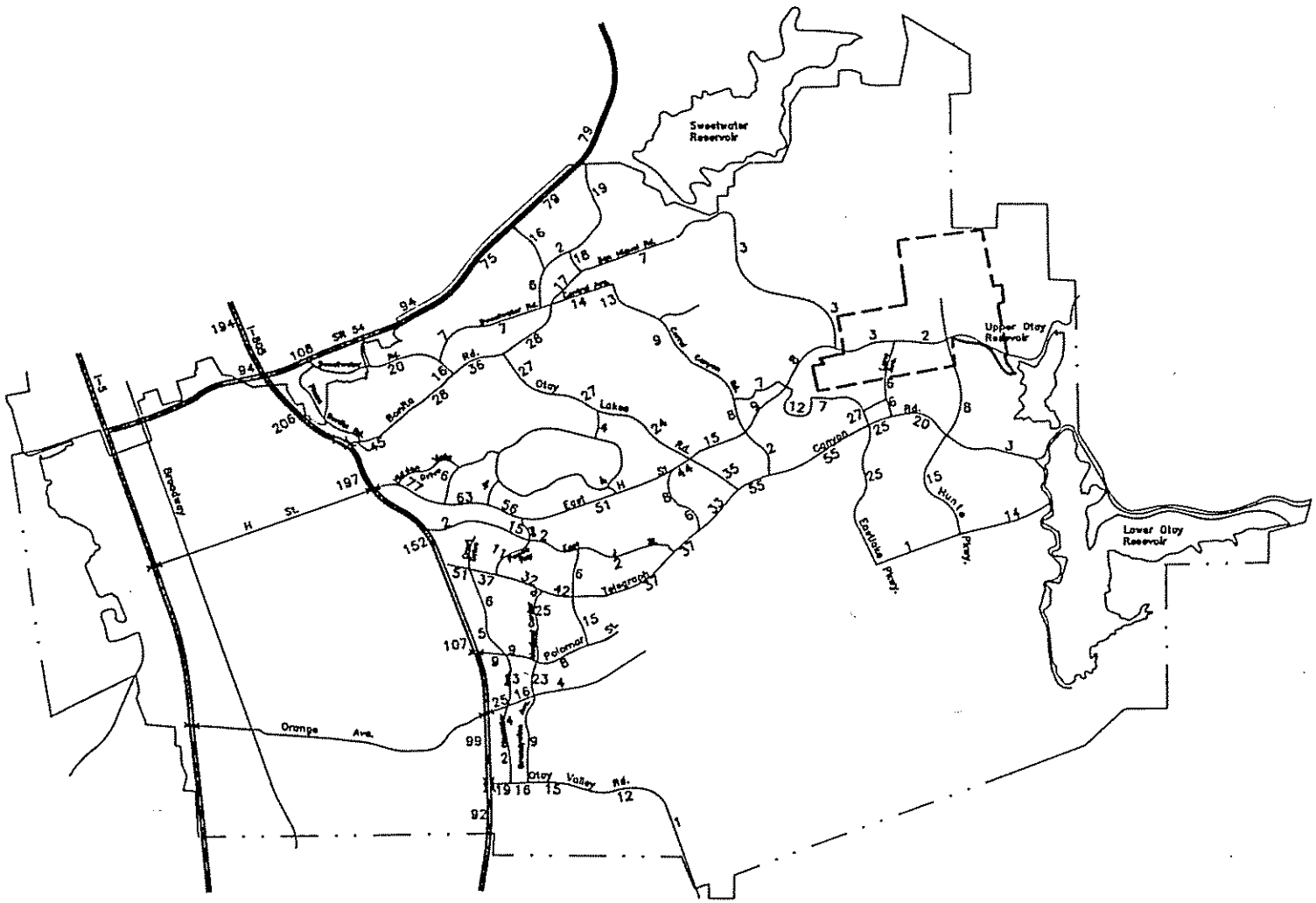


SOURCE: Willdan Associates

ERCE

Scenario No. 1
Street Network Assumptions

FIGURE
3-25



SOURCE; Willdan Associates

ERCE

Scenario No. 1
Daily Forecast Traffic Volumes (in thousands)

FIGURE
3-26

Table 3-10

COMPARISON OF 1995 BASE CONDITION ADT WITH SCENARIO 1 ADT

Roadway Segement	Functional Class[1]	1995 Base Condition	1995 Scenario 1 Volume	Difference	% Change w/Project
Interstate 805					
Otay Valley Rd/Orange Ave.	8F	98,700	98,700	0	0
Orange Ave/Telegraph Cyn. Rd.	8F	107,100	107,000	-100	0
Telegraph Cyn. Rd/East "H" Sl.	8F	149,800	151,800	+2,000	+1%
Eest "H" St/Bonita Rd	8F	195,900	197,400	+1,500	+1%
Bonita Rd/SR 54	8F	204,300	206,300	+2,000	+1%
N/of SR 54	8F	192,600	194,300	+1,700	+1%
State Route 54					
W/of 1-805	6F	93,300	94,100	+800	+1%
1-805/Reo Dr.	6F	107,900	108,200	+300	0
Reo Dr/Woodman Ave.	6F	93,500	93,500	0	0
Woodman Ave/Briarwood	6F	75,300	75,300	0	0
Briarwood/SR 125	6F	79,000	79,100	+100	0
E/of SR 125	6F	79,000	79,100	+100	0
Bonita Road					
E/of 1-805	4M	44,700	45,400	+700	+2%
W/of Otay Lakes Road	4M	34,500	36,900	+2,400	+7%
E/of Otay Lakes Road	4M	29,000	29,200	+200	+1%
W/of Central Avenue	4M	21,400	20,800	-600	-3%
East "H" Street					
E/of 1-805	8P	76,600	76,700	+100	0
E/of Hidden Vista Drive	6P	63,000	63,100	+100	0
E/of Paseo Ranchero	6P	48,900	49,200	+300	+1%
W/of Otay Lakes Road	6P	43,200	43,600	+400	+1%

Table 3-10 (Continued)

COMPARISON OF 1995 BASE CONDITION ADT WITH SCENARIO 1 ADT

Roadway Segement	Functional Class[1]	1995 Base Condition	1995 Scenario 1 Volume	Difference	% Change w/Project
E/of Otay Lakes Rond	4M	16,400	15,300	-1,100	-7%
W/of Corral Canyon Rond	4M	9,800	8,300	-1,500	-18%
E/of Corral Canyon Road	4M	9,900	9,900	0	0
Telegraph Canyon Road					
E/of 1-805	6P	48,000	50,800	+2,800	+4%
E/of Paseo del Rey	6P	29,500	32,300	+2,800	+9%
W/of Paseo Ranchero	6P	33,800	37,300	+3,500	+10%
E/of Paseo Ranchero	6P	33,800	37,300	+3,500	+10%
E/of Otay Lakes Road	6P	49,400	55,000	+5,600	+11%
W/of EastLake Parkway	6P	47,500	53,300	+5,800	+12%
E/ofEastLake Parkway	6P	15,900	24,500	+8,600	+54%
East Orange Avenue					
E/of 1-805	6P	24,500	24,800	+300	+1%
E/of Medical Center Drive	6P	3,600	3,700	+100	+3%
Otay Lakes Road					
S/of Bonita Road	4M	26,800	26,600	-200	-1%
N/of East "H" Street	4M	20,800	20,600	-200	-1%
N/of Telegraph Canyon Road	4M	37,000	39,100	+2,100	+6%
East Palomar Street					
E/of 1-805	4M	9,300	9,400	+100	+1%
E/of Medical Center Drive	4M	7,800	7,700	-100	-1%

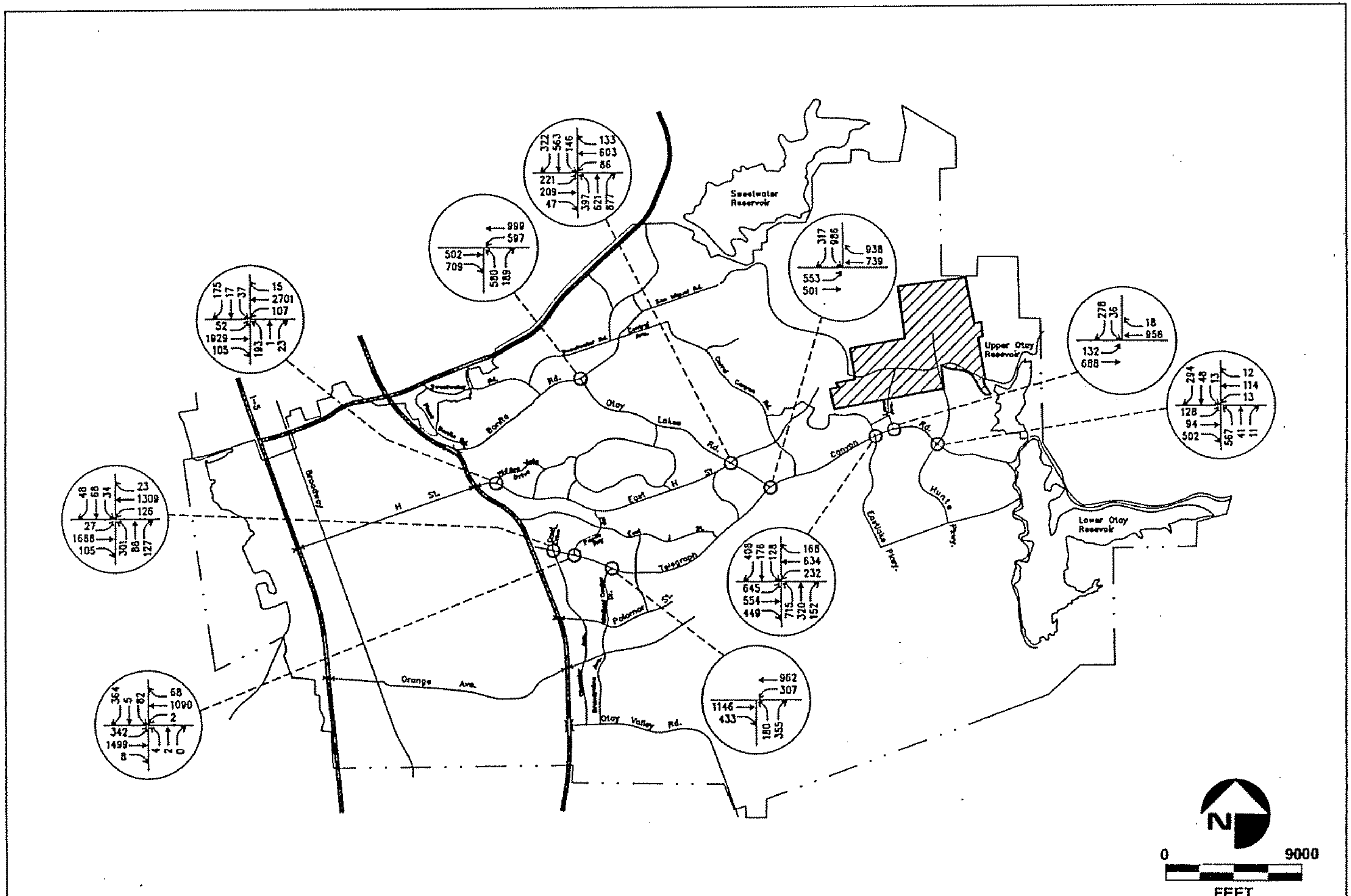
Table 3-10 (Continued)

COMPARISON OF 1995 BASE CONDITION ADT WITH SCENARIO 1 ADT

Roadway Segement	Functional Class[1]	1995 Base Condition	1995 Scenario 1 Volume	Difference	% Change w/Project
Hunte Parkway					
N/of Telegraph Canyon Road	4M	N/A	7,600	+7,600	N/A
S/of Telegraph Canyon Road	4M	13,800	14,600	+800	+6%
EastLake Parkway					
N/of Telegraph Canyon Road	4M	26,500	26,500	0	0
S/of Telegraph Canyon Road	4M	24,400	24,500	+100	
Lane Avenue					
S/of East "H" Street	2CII	200	1,800	+1,600	+900%
N/of Telegraph Canyon Road	2CII	600	600	5,000	+933%

[1] # = denotes number of lanes; F=Freeway; E=Expressway; P=Prime; M=Major; C=Collector
N/A = Not Applicable

Source: Willdan Associates, 1991

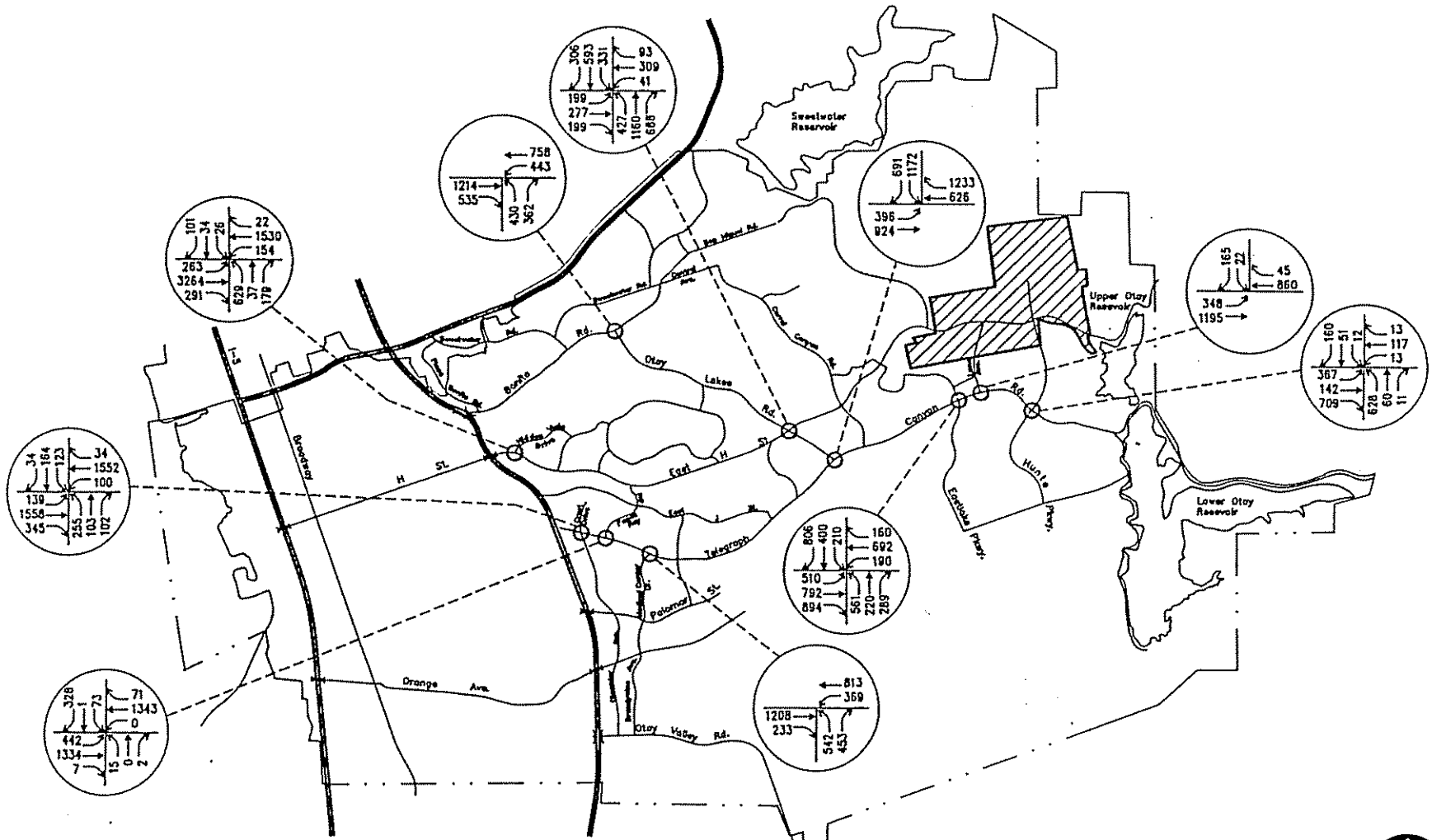


SOURCE: Willdan Associates

ERCE

Scenario No. 1
AM Peak Hour Turning Movements at Key Intersections

FIGURE **3-27**



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SOURCE: Willdan Associates

ERCE

Scenario No. 1
PM Peak Hour Turning Movements at Key Intersections

FIGURE

3-28

Table 3-11

SCENARIO 1 INTERSECTION LEVEL OF SERVICE

Intersection	HCM			
	AM Peak Hour		PM Peak Hour	
	Avg. Delay Seconds/Veh.	LOS	Avg. Delay Seconds/Veh.	LOS
Telegraph Canyon Road/Crest Drive	39.2	D	39.7	D
Telegraph Canyon Road/Paseo del Rey	19.0	C	30.4	D
Telegraph Canyon Road/Medical Center Drive	15.0	B	31.0	D
Telegraph Canyon Road/Otay Lakes Road	18.0	C	17.6	C
Telegraph Canyon Road/EastLake Parkway	30.4	D	33.1	D
Scenario 1A	23.2	C	38.8	D
Telegraph Canyon Road/Hunte Parkway	12.7	B	10.5	B
Telegraph Canyon Road/Lane Avenue	8.3	B	8.0	B
East "H" Street/Hidden Vista Drive	15.5	C	41.1	D
Scenario 1A	15.3	C	38.9	D
East "H" Street/Otay Lakes Road	25.0	C	26.6	D
Scenario 1A	28.0	D	30.9	D
Bonita Road/Otay Lakes Road	17.4	C	18.8	C

Source: Willdan Associates, 1991

Scenario 2 Analysis

Evaluation of Daily Traffic Volumes

Figures 3-29 and 3-30 depicts the street network assumptions and projected daily traffic volumes under Scenario 1. Table 3-12 provides a comparison of projected daily traffic between the 1995 base condition and the Scenario 2 conditions. As shown the construction of State Route 125 as a four-lane at grade roadway will have the following impacts on the street network in the eastern territories:

1. Interstate 805, Bonita Road, East "H" Street (west of Otay Lakes Road), Telegraph Canyon Road (west of Paseo del Rey and east of Otay Lakes Road), Otay Lakes Road, and East Lake Parkway will experience a decrease in traffic.

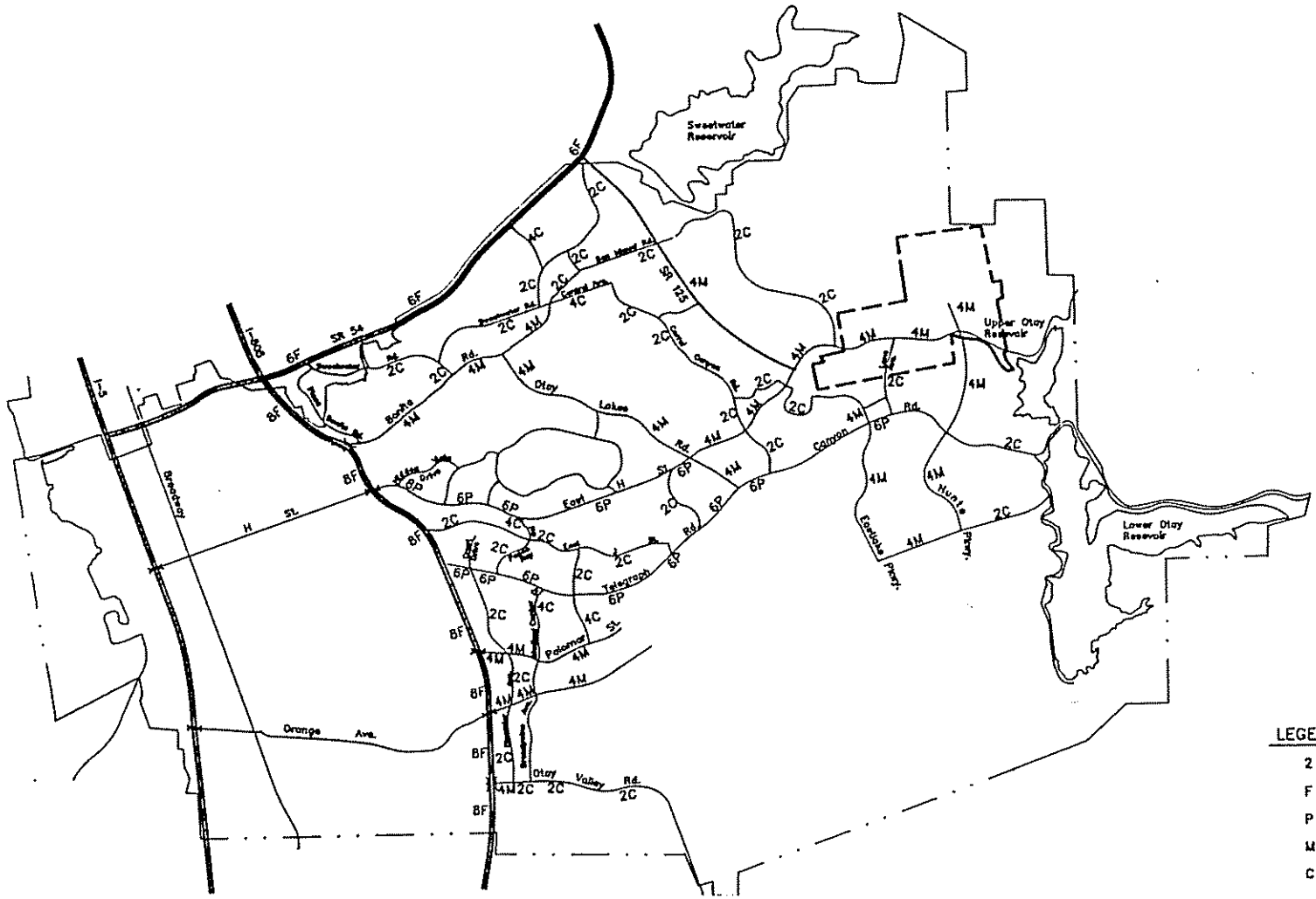
2. State Route 54, East "H" Street (east of Otay Lakes Road), Telegraph Canyon Road (between Paseo Ranchero and Otay Lakes Road, Hunte Parkway, and Lane Avenue will experience an increase in traffic.

Evaluation of Peak Hour Conditions at Key Intersections

Figures 3-31 and 3-32 illustrate Scenario 2 AM and PM peak hour turning movements respectively. As shown in Table 3-13, all intersections will operate at acceptable levels of service (LOS D or better).

During preparation of the traffic analysis report prepared for this project (Appendix D), it was determined that additional traffic circulation system capacity exists prior to the need for SR 125, assuming existing and full buildout of "approved" projects (see Table 3-6). As a result, additional capacity analysis and traffic forecasts were performed to determine the amount of development that could be accommodated on the existing circulation system without extraordinary roadway or intersection improvements at Hidden Vista Drive and East H Street. The results of this additional traffic analysis are incorporated herein as Scenario 1A.

In Scenario 1A, it is assumed that the project could be allocated the additional traffic circulation system capacity to accommodate completion of Phase 1 of Salt Creek Ranch

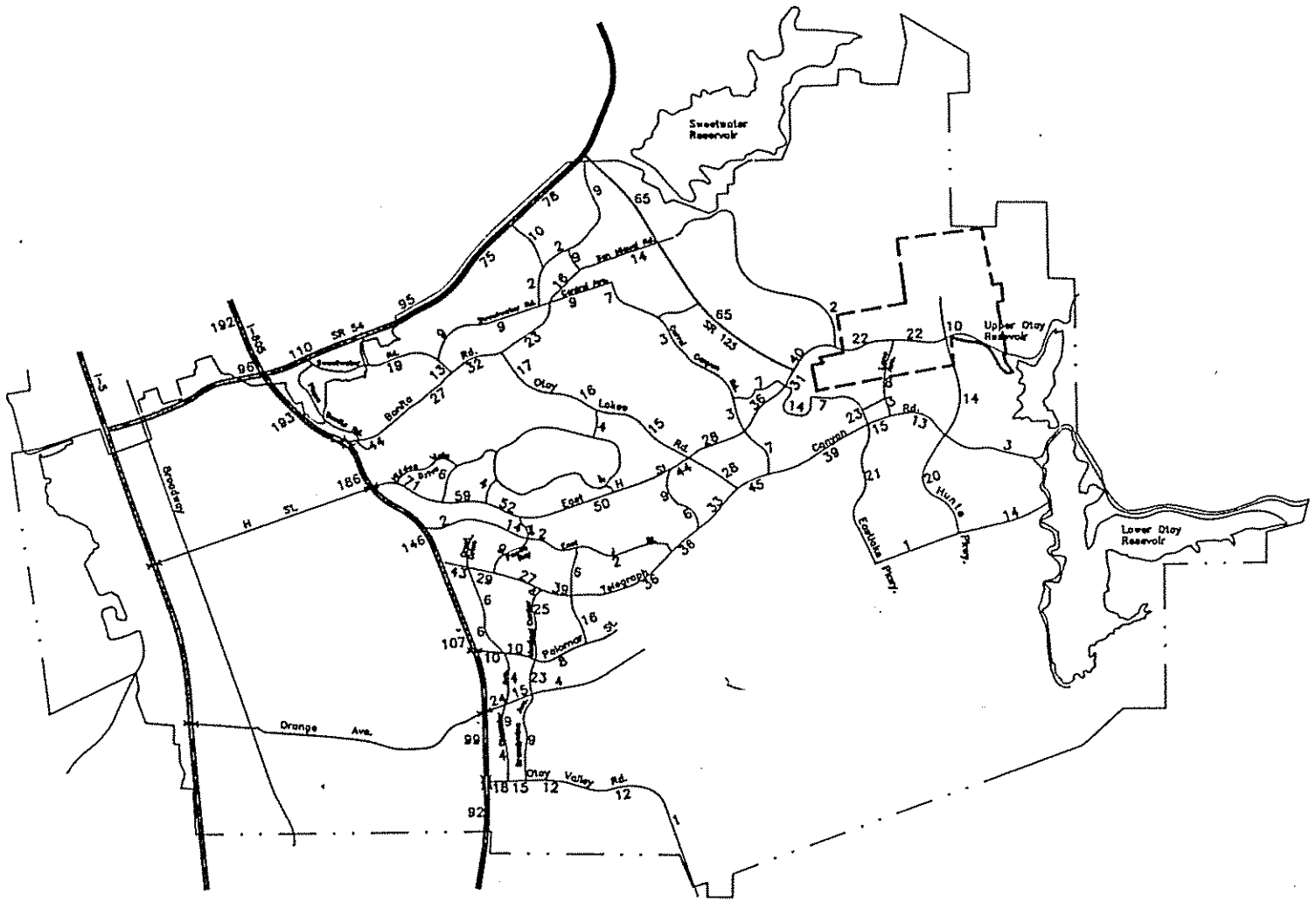


SOURCE: Willdan Associates

ERCE

Scenario No. 2
Street Network Assumptions

FIGURE
3-29



SOURCE: Willdan Associates

ERCE

Scenario No. 2
Daily Forecast Traffic Volumes (in thousands)

FIGURE
3-30

Table 3-12

COMPARISON OF 1995 BASE CONDITION ADT WITH SCENARIO 2 ADT

Roadway Segment	Functional Class[1]	1995 Volume w/Approved Projects	1995 Volume w/Approved Projects + SCR Buildout	Difference w/SCR Phase 1	% Change w/Project
Interstate 805					
Otay Valley Rd/Orange Ave.	8F	98,700	98,600	-100	0
Orange Ave/Telegraph Cyn. Rd.	8F	107,100	106,500	-600	-1%
Telegraph Cyn. Rd/East "H" St.	8F	149,800	146,100	-3,700	-3%
East "H" St/Bonita Rd	8F	195,900	186,000	-9,900	-5%
Bonita Rd/SR 54	8F	204,300	193,400	-10,900	-6%
N/of SR 54	8F	192,600	192,100	-500	0
State Route 54					
W/of I-805	6F	93,300	95,500	2,200	+2%
I-805/Reo Dr.	6F	107,900	109,700	1,800	+2%
Reo Dr/Woodman Ave.	6F	93,500	94,900	1,400	+1%
Woodman Ave/Briarwood	6F	75,300	77,900	2,600	+3%
Briarwood/SR 125	6F	79,000	78,200	-800	-1%
E/of SR 125	6F	79,000	78,200	-800	-1%
Bonita Road					
E/of I-805	4M	44,700	44,400	-300	-1%
W/of Otay Lakes Road	4M	34,500	33,500	-1,000	-6%
E/of Otay Lakes Road	4M	29,000	23,200	-5,800	-20%
W/of Central Avenue	4M	21,400	16,400	-5,000	-30%
East "H" Street					
E/of I-805	8P	76,600	70,700	-5,900	-8%
E/of Hidden Vista Drive	6P	63,000	58,700	-4,300	-7%
E/of Paseo Ranchero	6P	48,900	48,100	-800	-2%
W/of Otay Lakes Road	6P	43,200	44,300	1,100	+3%
E/of Otay Lakes Road	4M	16,400	28,200	11,800	+72%
W/of Corral Canyon Road	4M	9,800	26,400	16,600	+269%

Table 3-12 (Continued)

COMPARISON OF 1995 BASE CONDITION ADT WITH SCENARIO 2 ADT

Roadway Segment	Functional Class[1]	1995 Volume w/Approved Projects	1995 Volume w/Approved Projets + SCR Buildout	Difference w/SCR Phase 1	% Change w/Project
E/of Corral Canyon Road	4M	9,900	31,400	21,500	+317%
Telegraph Canyon Road					
E/of I-805	6P	48,000	43,400	-4,600	-11%
E/of Paseo del Rey	6P	29,500	26,600	-2,900	-11%
W/of Paseo Ranchero	6P	33,800	36,300	2,500	+7%
E/of Paseo Ranchero	6P	33,800	36,300	2,500	+7%
E/of Otay Lakes Road	6P	49,400	45,000	-4,400	-10%
W/of EastLake Parkway	6P	47,500	37,800	-9,700	-26%
E/of EastLake Parkway	6P	15,900	13,400	-2,500	-19 %
East Orange Avenue					
E/of I-805	6P	24,500	23,900	-600	-3%
E/of Medical Center Drive	6P	3,600	3,700	100	+3%
Otay Lakes Road					
S/of Bonita Road	4M	26,800	16,200	-10,600	-65%
N/of East "H" Street	4M	20,800	13,500	-7,300	-54%
N/of Telegraph Canyon Road	4M	37,000	28,300	-8,700	-31%
East Palomar Street					
E/of I-805	4M	9,300	10,200	900	+ 10%
E/of Medical Center Drive	4M	7,800	7,800	0	0
Hunte Parkway					
N/of Telegraph Canyon Road	4M	N/A	13,800	13,800	N/A
S/of Telegraph Canyon Road	4M	13,800	19,800	6,000	+43%
EastLake Parkway					
N/of Telegraph Canyon Road	4M	23,200	26,500	3,300	-14%

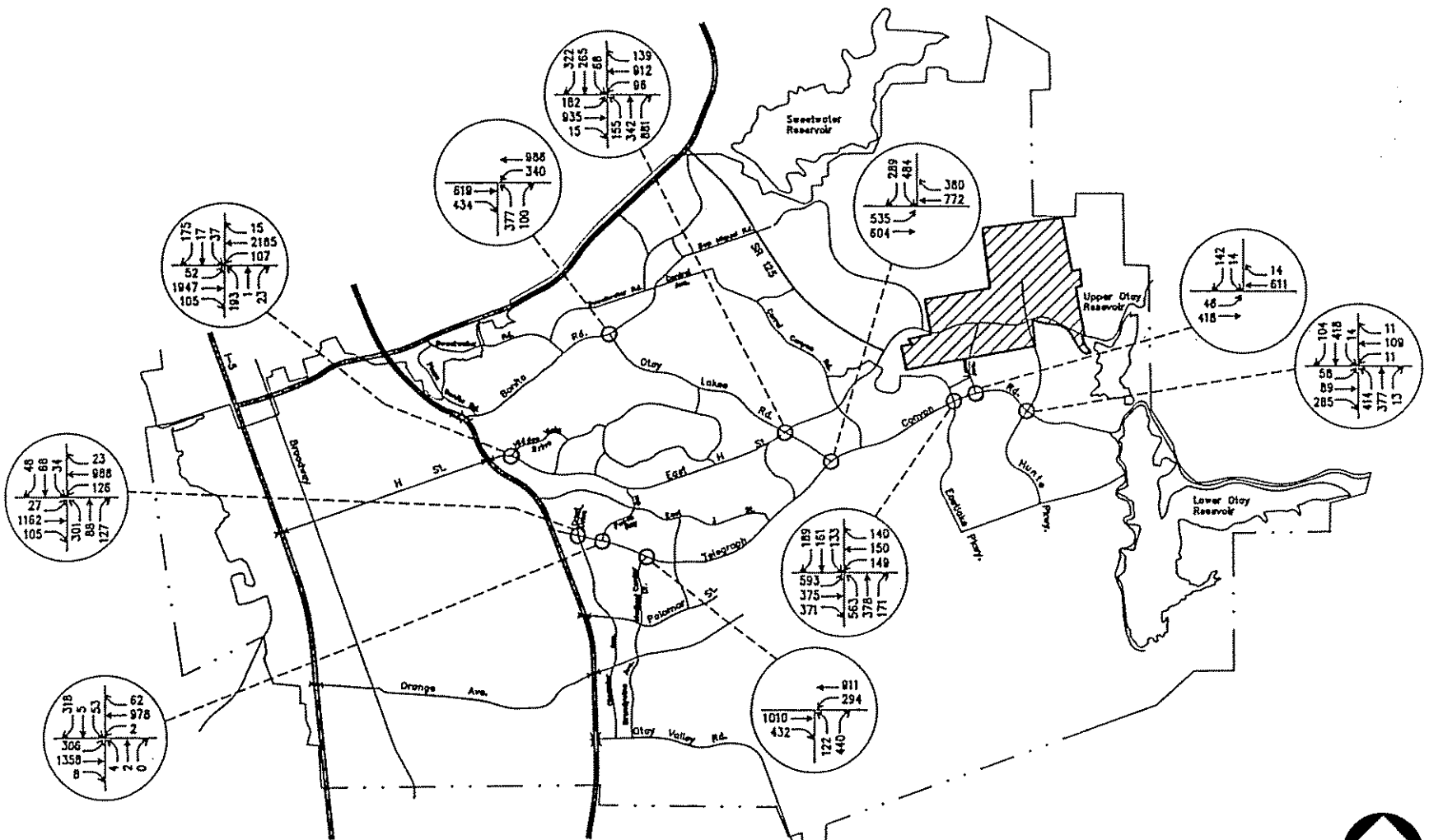
Table 3-12 (Continued)

COMPARISON OF 1995 BASE CONDITION ADT WITH SCENARIO 2 ADT

Roadway Segment	Functional Class[1]	1995 Volume w/Approved Projects	1995 Volume w/Approved Projets + SCR Buildout	Difference w/SCR Phase 1	% Change w/Project
S/of Telegraph Canyon Road	4M	21,400	24,500	3,100	-14%
Lane Avenue					
S/of East "H" Street	2CII	200	8,400	8,200	+4,200%
N/of Telegraph Canyon Road	2CII	600	2,700	2,100	+450%

[1] # = denotes number of lanes; F=Freeway; E=Expressway; P=Prime; M=Major; C=Collector
N/A = Not Applicable

Source: Willdan Associates, 1991

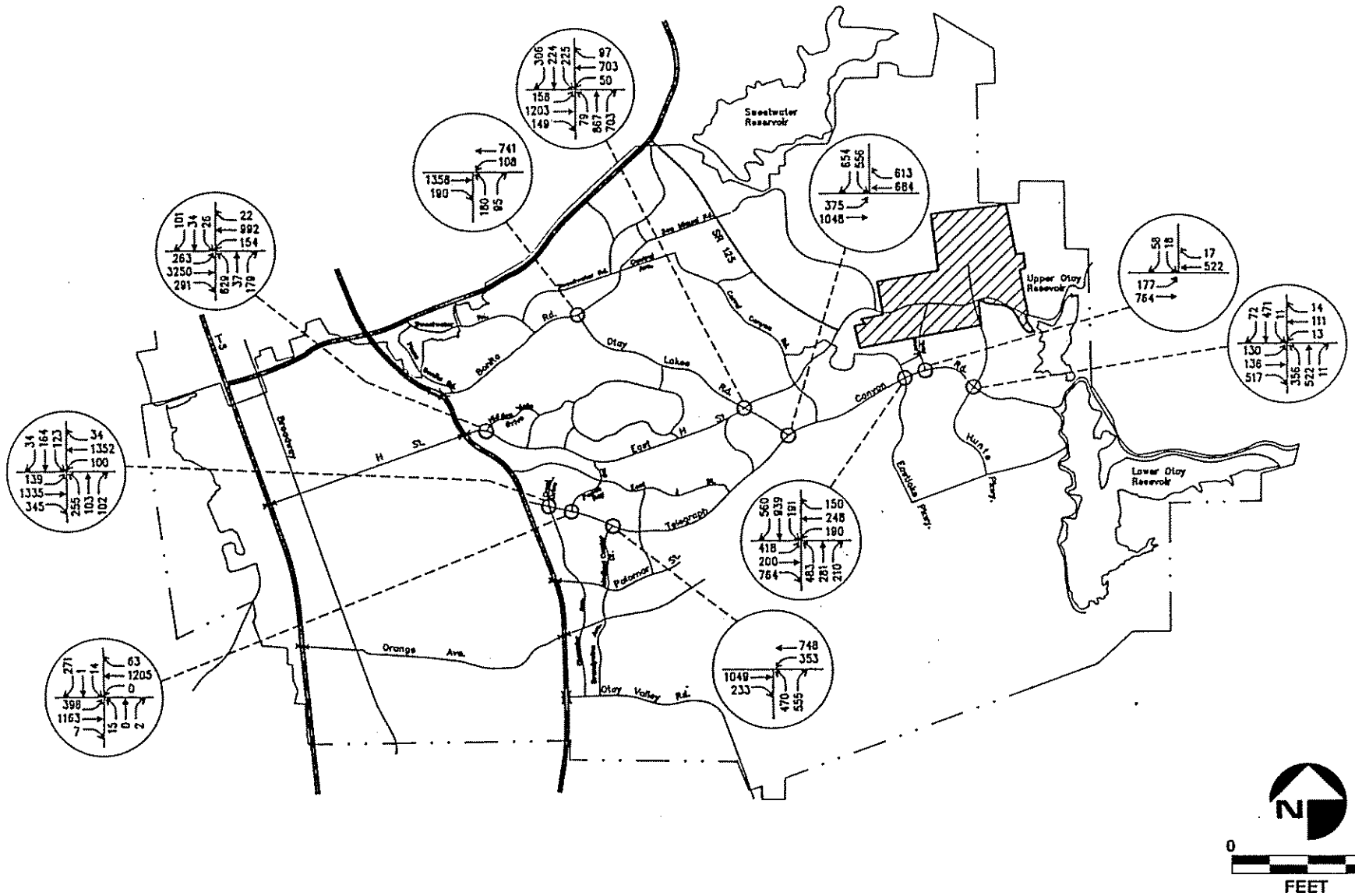


SOURCE: Willdan Associates

ERCE

Scenario No. 2
AM Peak Hour Turning Movements at Key Intersections

FIGURE
3-31



SOURCE: Willdan Associates

ERCE

Scenario No. 2
PM Peak Hour Turning Movements at Key Intersections

FIGURE
3-32

Table 3-13

SCENARIO 2 INTERSECTION LEVELS OF SERVICE

Intersection	HCM			
	AM Peak Hour		PM Peak Hour	
	Avg. Delay Seconds/Veh.	LOS	Avg. Delay Seconds/Veh.	LOS
Telegraph Canyon Road/Crest Drive	14.0	B	18.1	C
Telegraph Canyon Road/Paseo del Rey	20.0	C	23.8	C
Telegraph Canyon Road/Medical Center Drive	13.6	B	17.5	C
Telegraph Canyon Road/Otay Lakes Road	14.4	B	21.3	C
Telegraph Canyon Road/EastLake Parkway	22.8	C	27.1	D
Telegraph Canyon Road/Hunte Parkway	25.4	D	11.7	B
Telegraph Canyon Road/Lane Avenue	6.1	B	0.9	A
East "H" Street/Hidden Vista Drive	13.7	B	35.7	D
East "H" Street/Otay Lakes Road	24.6	C	28.4	D
Bonita Road/Otay Lakes Road	10.8	B	12.6	B

Source: Wilson Associates, 1991

(prior to the need for SR 125). It should be understood, however, that there are other planned proposed projects in the vicinity of the Salt Creek Ranch site (see Cumulative Impacts Summary, 4.1) that may be allocated all or a portion of the additional traffic capacity. A decision on which project or projects will be allocated the additional circulation system capacity beyond the existing and "approved" projects (see Table 3-6) will need to be made by the Chula Vista Council prior to the approval of any Tentative Subdivision Maps for these competing projects. The City Council is expected to make a decision on capacity allocation after the results of a financing study for an interim SR 125 facility is completed. The completion of this study is expected in early 1992.

Mitigation Measures

Major improvements to the surrounding roadway networks have been identified to mitigate the traffic impact of this project and other approved projects in the area and to improve existing operational conditions as well. Improvements necessary for the 1995 Base Conditions were discussed previously and are not a part of this project. Improvements necessary as a result of implementation of the Salt Creek Ranch SPA Plan include:

Scenario 1A (with Phase I and Proctor Valley Road Unpaved)

1. The project applicant will construct East "H" Street through the project (Phase I boundaries) to ultimate four-lane major street standards, consistent with the City of Chula Vista design criteria.

2. The project applicant will construct Hunte Parkway to ultimate four-lane major street standards through the project and offsite south to Telegraph Canyon Road, consistent with the City of Chula Vista design criteria.

3. The project applicant will construct Lane Avenue as a Class II collector from East "H" Street to meet existing improvements at its current terminals in the East Lake Business Park, consistent with the City of Chula Vista's design criteria.

4. At the discretion of the City Traffic Engineer, the project applicant will install traffic signals or bond for future installation at the following intersections:

- East "H" Street/Lane Avenue
- East "H" Street/Hunte Parkway
- Lane Avenue/Telegraph Canyon Road
- Hunte Parkway/Telegraph Canyon Road

5. The project applicant will implement transportation demand management strategies, including provisions of transit service and bus stops in order to reduce the peak hour demand on the street network.

6. Reduce the development potential of Phase 1 by 120 dwelling units. This reduction will result in an acceptable level of service (LOS D) of the intersection of East "H" Street and Hidden Vista Drive.

7. The project applicant will construct a two-lane roadway between Salt Creek 1 and Salt Creek Ranch to connect East "H" Street.

Scenario 2 (with Phase I, II, and III and State Route 125)

1. The project applicant will implement all the measures described under Scenario 1 previously.

2. The project applicant will construct State Route 125 as a four-lane roadway between East "H" Street and State Route 54 with enhanced geometrics at the intersections.

Analysis of Significance

Traffic/circulation impacts will be reduced to below a level of significance with implementation of the proposed improvements.

3.8 NOISE

This acoustical analysis examines the potential noise impacts associated with project buildout and identifies appropriate mitigation measures for noise levels exceeding the standards of the City of Chula Vista.

Existing Conditions

Background

Noise is generally defined as unwanted sound. Airborne sound is a small scale fluctuation of instantaneous air pressure above and below the local barometric pressure. Sound levels are usually measured and expressed in decibels (dB). Most of the sounds which we hear in the environment do not consist of a single frequency, but rather a mixture of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate sound. The method commonly used to quantify environmental sounds consists of evaluating all of the frequencies of a sound in accordance with a weighting system that reflects the decreased sensitivity of human hearing at low frequencies and at extremely high frequencies relative to the mid-range frequencies. This is called "A" weighting, and the decibel level measured is called the A-weighted sound level (dBA). In practice, the level of a sound source is conveniently measured using a sound level meter that includes a filter corresponding to the dBA curve.

Although the A-weighted sound level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noises from distant sources which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors L_{10}, L_{50}, and L_{90}, are commonly used. They are the noise levels equaled or exceeded during 10 percent, 50 percent, and 90 percent of a stated period of time. A single descriptor called the L_{eq}, (equivalent sound level) is also used. L_{eq} is the energy mean A-weighted sound level during a stated measured time interval.

L_{dn} is the "A" weighted average sound level for a 24-hour day. It is calculated by adding a 10 decibel penalty to sound levels at night (10:00 p.m. to 7:00 a.m.). In general, the peak hour L_{eq} will fall within one decibel of the L_{dn}. Table 3-14 defines additional acoustical terminology. A table of familiar noise sources and their measured noise levels (in decibels), is provided in Table 3-15.

Table 3-14

DEFINITIONS OF FREQUENTLY USED NOISE TERMS

Term	Definition
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
A-Weighted Sound Level, dB(A)	The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter network. The A-weighting filter deemphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
Community Noise Equivalent Level, CNEL	CNEL is the average sound level during a 24-hour day and it is calculated by adding 5 decibels (dB) to sound levels in the evening (7 p.m. to 10 p.m.) and adding 10 dB to sound levels in the night (10 p.m. to 7 a.m.).
L_{dn}	Similar to CNEL, however, there is no penalty for sound levels in the evening (7:00 p.m. to 10:00 p.m.). There is approximately a 1 decibel difference between Ldn and CNEL.
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
Equivalent Noise Level, L_{eq}	The energy mean A-weighted sound level during the measured time interval
L_{10}	The L_{10} is the sound level exceeded 10 percent of the time and corresponds to the peaks of noise.
L_{50}	L_{50} is the sound level exceeded 50 percent of the time and corresponds to the average noise.
L_{90}	L_{90} is the sound level exceeded 90 percent of the time and corresponds to the residual noise.
L_{min}	The lowest A-weighted sound level measured during a designated time.
L_{max}	The greatest A-weighted sound level measured during a designated time.

Table 3-15

SOUND LEVELS OF TYPICAL NOISE SOURCES AND NOISE ENVIRONMENTS

(A-Weighted Sound Levels)

Noise Source (at a Given Distance)	A-Weighted Sound Level in Decibels	Noise Environment	Human Judgement of Noise Loudness *Relative to a Reference Loudness of 70 Decibels
	140		
Military Jet Take-off with After-burner (50 ft) Civil Defense Siren (100 ft)	130	Carrier Flight Deck	
Commercial Jet Take-off (200 ft)	120		Threshold of Pain *32 times as loud
Pile Driver (50 ft)	110	Rock Music Concert	*16 times as loud
Ambulance Siren (100 ft) Newspaper Press (5 ft) Power Lawn Mower (3 ft)	100		Very Loud *8 times as loud
Motorcycle (25 ft) Propeller Plane Flyover (1000 ft) Diesel Truck, 40 mph (50 ft)	90	Boiler Room Printing Press Plant	*4 times as loud
Garbage Disposal (3 ft) Passenger Car, 65 mph (25 ft)	80	High Urban Ambient Sound	*2 times as loud
Living Room Stereo (15 ft) Vacuum Cleaner (3 ft) Electronic Typewriter (10 ft)	70		Moderately Loud *70 dB (Reference Loudness)
Normal Conversation (5 ft) Air Conditioning Unit (100 ft)	60	Data Processing Center Department Store	*1/2 as loud
Light Traffic (100 ft)	50	Private Business Office	*1/4 as loud
Bird Calls (distant)	40	Lower Limit of Urban Ambient Sound	Quiet *1/8 as loud
Soft Whisper (5 ft)	30	Quiet Bedroom	
	20	Recording Studio	Just Audible
	10		Threshold of Hearing
	0		

City Noise Standards

The City of Chula Vista has adopted the National Goals for Noise Reduction as set forth by the U.S. Environmental Protection Agency for their noise regulatory criteria as stated in the noise control ordinance (Chula Vista Municipal Code, Chapter 19.68.010). The Chula Vista Planning Department has adopted these criteria for residential land use which establishes a maximum noise exposure level of 65 dBA L_{dn} at any residential property. The California Administrative Code, Title 24, Noise Insulation Standards (Title 24) requires that the interior noise level of all new multifamily residences must be 45 dBA L_{dn} or below. In addition, if the exterior sound level is greater than 60 dBA L_{dn}, Title 24 requires the preparation of an acoustical analysis showing that the proposed design will limit interior noise to less than 45 dBA L_{dn}.

Existing Site Conditions

The site is currently undeveloped rugged terrain vegetated primarily by degraded grasslands with some pockets of coastal sage scrub and chaparral. Proctor Valley Road is a dirt road that traverses the center of the project site with occasional through traffic from San Miguel Road to Melody Road. Proctor Valley Road west of Melody Road has an Average Daily Traffic volume (ADT) of 1,523 vehicles per day (San Diego County, 1990). Rancho Janal Drive (also known as Lane Avenue) intersects Proctor Valley Road in the southwest portion of the project. Traffic counts are not available for Rancho Janal Drive, however, traffic is very light and does not pose a significant impact on the project area. Sound generated by current traffic volumes on Proctor Valley Road does not pose a significant impact on the project area.

Noise Monitoring

Existing noise levels were measured at five locations throughout the project area using a calibrated Larson-Davis Model 700 sound level meter which meets the American National Standards Institute (ANSI) requirements for a Type 2 integrating sound level meter. The sound level meter was positioned 5 feet above ground elevation to simulate the height of the human ear. Five one-hour sound level measurements were taken on the site; one during the period of peak traffic at a point along Proctor Valley Road and four others during daytime hours at representative points throughout the site. Hourly sound levels ranged from

49.3 dBA to 53.6 dBA L_{eq} and are summarized in Table 3-16. The existing sound levels on the site are low and do not exceed the City of Chula Vista exterior noise standard.

An industrial and business park is located immediately south of the site along Lane Avenue. No specific noise generators were identified although some noise is generated by the limited truck traffic that accesses the industrial and business park.

Impacts

Noise Modeling of Future Conditions

The future noise environment was considered under two conditions: 1995 Base Conditions and the ultimate Buildout Conditions. The potential noise impacts of the two conditions are evaluated below.

L_{dn} noise levels were calculated, based on traffic volumes along East "H" Street (former Proctor Valley Road), Lane Avenue, and Hunte Parkway, using the Federal Highway Administration's Stamina 2.0 computer noise prediction model. The model input included traffic volumes, vehicle mix, average vehicle speeds, proposed topography, hard-site conditions, and proposed roadway elevations. Receiver elevations reflect the pad elevation plus 5-feet to approximate the height of the human ear.

The analysis assumes that Hunte Parkway south of East "H" Street and East "H" Street west of Hunte Parkway will be classified as 4-lane major roadways with a vehicle mix of 94 percent cars, 4 percent medium trucks, and 2 percent heavy trucks; and will have an average vehicle speed of 50 mph. The analysis also assumes that Lane Avenue south of East "H" Street and East "H" Street east of Hunte Parkway will be classified as a 2-lane collector roadways with a vehicle mix of 97 percent cars, 2 percent medium trucks, and 1 percent heavy trucks; and will have an average vehicle speed of 40 mph (City of Chula Vista, 1990).

- 1995 Base Conditions

  The ADT is expected to be 2,000 vehicles for East "H" Street and 2,000 vehicles for Lane Avenue south of East "H" Street (Willdan, 1991). Noise modeling of the 1995 Base conditions indicate that noise levels will exceed

Table 3-16

MEASURED AMBIENT NOISE LEVELS (dBA)*

Measurement Location+	L_{eq}	L_{90}	L_{50}	L_{10}	L_{max}	L_{min}	Time of Measurement
1	51.1	37.5	44.5	53.5	67.0	34.5	7:30 – 8:30 am
2	49.3	38.5	43.0	49.5	69.0	35.5	8:40 – 9:40 am
3	49.6	36.5	44.5	54.0	65.0	32.5	11:05 – 12:05 am
4	53.6	40.0	50.0	57.0	67.5	32.5	12:25 – 1:25 pm
5	53.6	41.5	48.5	57.0	70.0	36.5	2:00 – 3:00 pm

Measurement location 1 was 35 feet north of the intersection of Proctor Valley Road and Lane Avenue.

Measurement location 2 was in the Salt Creek wash along the future location of Hunte Parkway, 500 feet north of Proctor Valley Road.

Measurement location 3 was atop the hill east of Hunte Parkway and just north of Proctor Valley Road (Elevation 725 feet).

Measurement location 4 was atop the hill in the far northeast corner of the project site (Elevation 850 feet).

Measurement location 5 was 100 feet south of the Otay Water District access road in the far northwest corner of the project site.

Maximum sound levels at all locations were caused by either vehicle pass-by or overhead aircraft.

* Each monitoring period was 60 minutes.

\+ The location of measurement sites 1–5 are depicted on Figure 3-33.

60 dBA L_{dn} in some portions of the proposed project but will not exceed the 65 dBA L_{dn} standard. Figure 3-33 depicts the estimated locations of the 60 dBA L_{dn} contour.

- Buildout Conditions

  The ADT for East "H" Street is expected to be 22,000 vehicles west of Hunte Parkway and 10,000 vehicles east of Hunte Parkway; 8,000 vehicles for Lane Avenue south of East "H" Street; and 14,000 vehicles for Hunte Parkway south of East "H" Street (Willdan, 1991). Noise modeling of the buildout conditions indicates that noise levels will exceed 70 dBA L_{dn} in some portions of the proposed project and will exceed the 65 dBA L_{dn} standard in several areas. Figure 3-34 depicts the estimated locations of the 60, 65, and 70 dBA L_{dn} contours. If left unmitigated, the noise levels in excess of 65 dBA L_{dn} in the outdoor living spaces would create a significant impact on future residents of the development. In addition, any future multi-family residences located in an area on the project site where the future exterior noise level is expected to exceed 60 dBA L_{dn} will require an interior acoustical analysis.

Noise generated by the industrial and business park immediately south of the project site on Lane Avenue has the potential to impact the residents adjacent to this land use. The potential noise generating activities associated with the industrial and business land uses must comply with the City's noise ordinance to avoid creating a significant impact.

Mitigation Measures

Stamina 2.0 was used to evaluate the effectiveness of a noise barrier to mitigate the exterior noise levels for residences that will be located along East "H" Street in the project area. Under buildout conditions these residences will be significantly impacted by noise levels in excess of the 65 dBA L_{dn} standard.

The noise impact on the residences along these roadway segments shall be mitigated by the placement of a solid wall or a wall/berm combination on the building pads at the top of the slopes adjacent to East "H" Street. The walls must be of solid masonry construction with a material weight of at least 3.5 pounds per square foot which would not allow any air spaces along their entire length.

Each noise wall or wall/berm combination shall be placed on the building pads at the top of the slope between the residences and the roadway and shall be 5 feet high. The end of each noise wall must wrap around the building pad enough to block the line of sight from all points in the exterior living space to any portion of the impacting roadway. Figure 3-35 depicts the proposed locations of the noise walls or wall/berm combinations. If the walls or wall/berm combinations are incorporated into the project design, exterior noise levels would be reduced to below a level of significance.

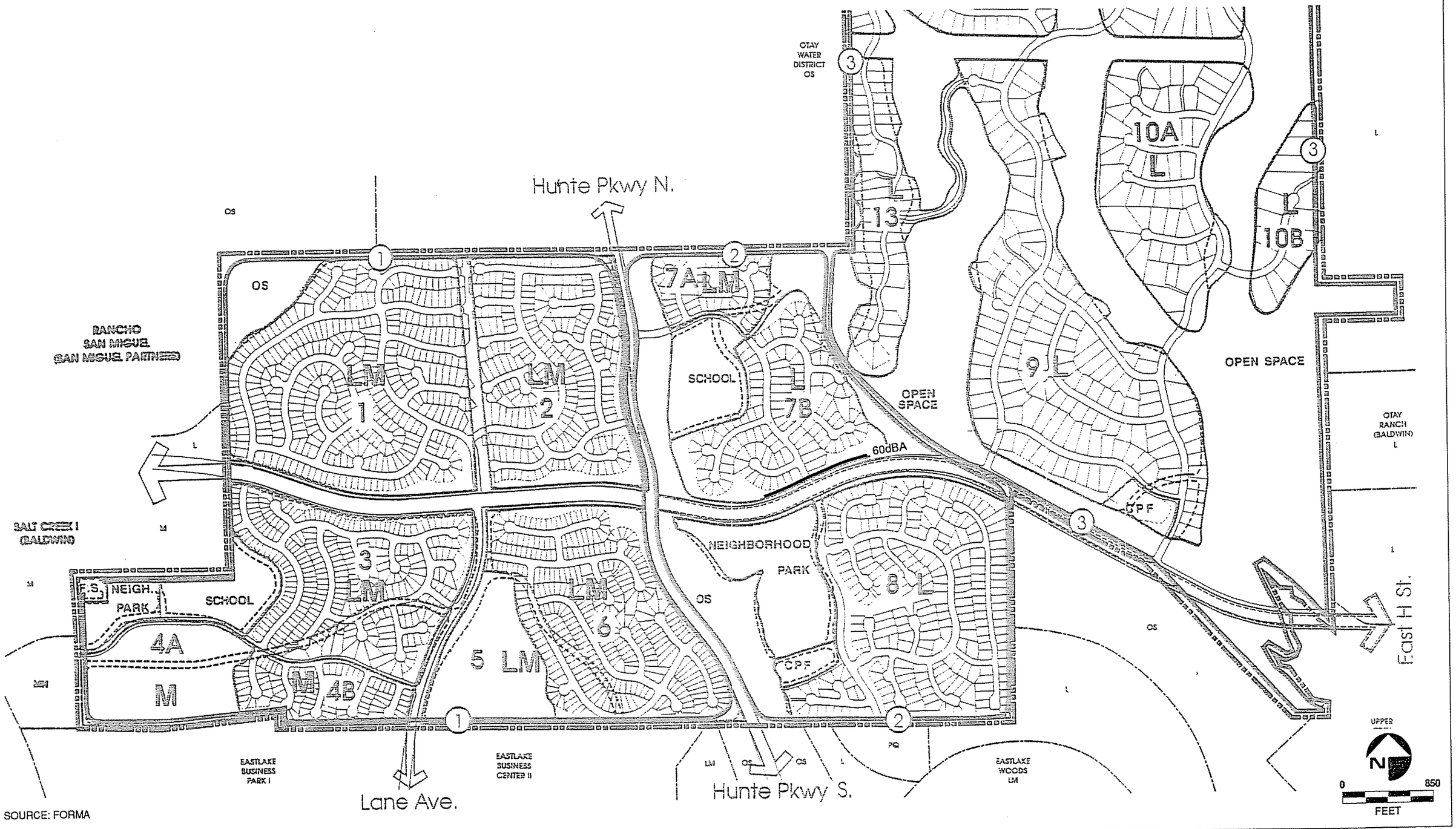
Even with the incorporation of the above mitigation measures, exterior noise level under buildout conditions will continue to exceed 60 dBA Ldn on portions of the project site. Therefore, in accordance with the standards set by Title 24, an interior acoustical study will be required for all multi-family units proposed for the site. Possible mitigation measures to reduce interior noise levels below the 45 dBA Ldn interior noise standard may include, but are not restricted to, mechanical ventilation and closed window conditions.

Analysis of Significance

Noise from future traffic volumes under buildout conditions will exceed the city standards in the exterior living space of many proposed residences of the project and therefore, constitutes a significant noise impact. For the project to comply with the city standards, mitigation for exterior noise impacts must be incorporated into the project design. An additional interior acoustical analysis will be required for all multi-family residences located within the 60 dBA Ldn contour to determine appropriate interior noise mitigation measures. If the above specified exterior mitigation measures are implemented during the project construction, exterior noise levels will be mitigated to below a level of significance.

3.9 Public Services and Utilities

In the following section impacts to water and wastewater are discussed. Impacts to the remainder of public services and utilities issues are analyzed in detail in EIR 89-3, Section 3.13.



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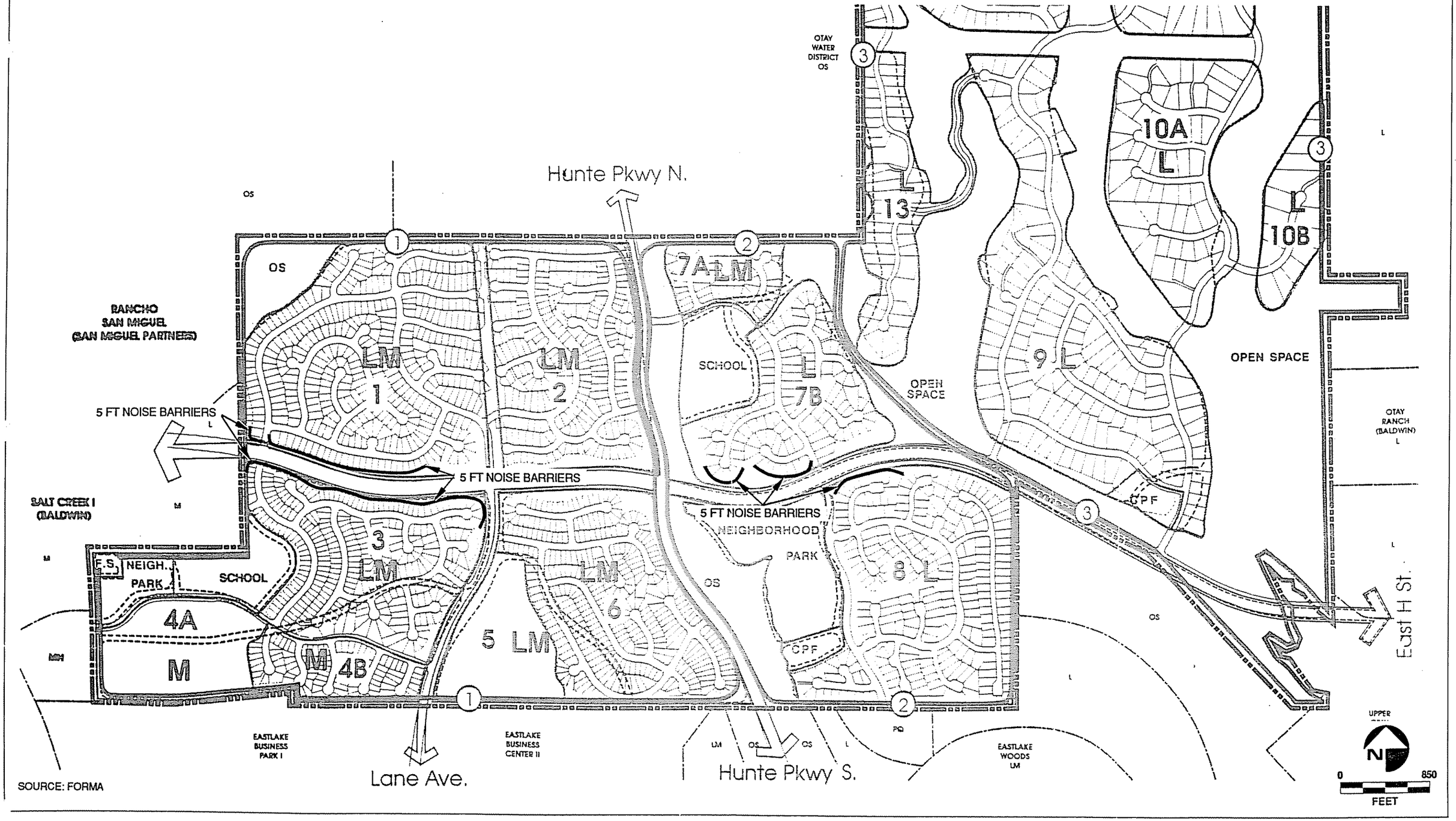
Approximate Location of the L_{dn} Noise Contours under the 1995 Base Conditions

FIGURE 3-33



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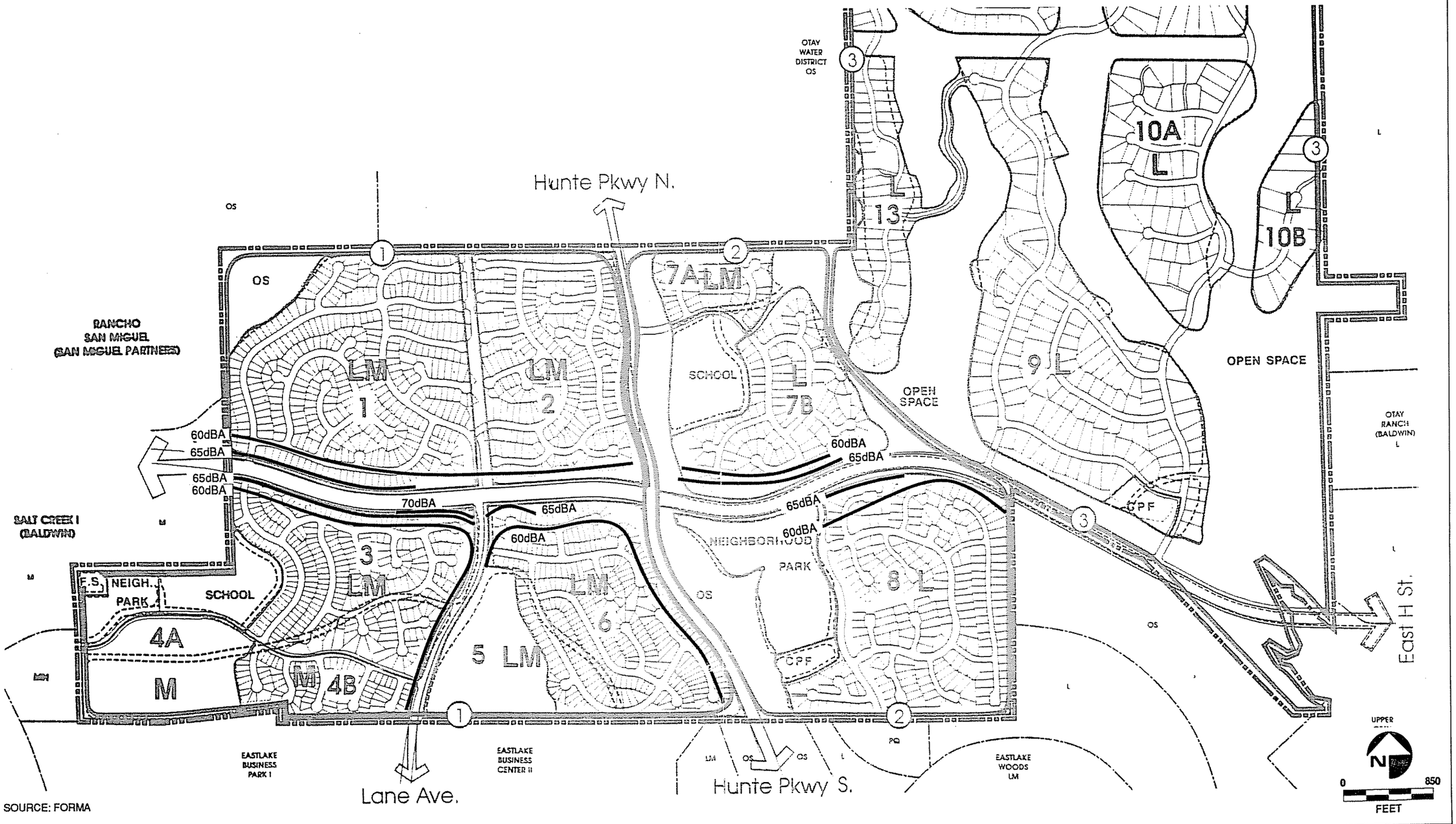
Location of Mitigation Noise Barriers

FIGURE 3-35



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Approximate Location of the L_{dn} Noise Contours under Buildout Conditions

FIGURE 3-34

3.9.1 Water

Information regarding water supply and distribution was obtained from the Master Plan of Water for Salt Creek Ranch prepared by Wilson Engineering in March 1991 (Appendix E).

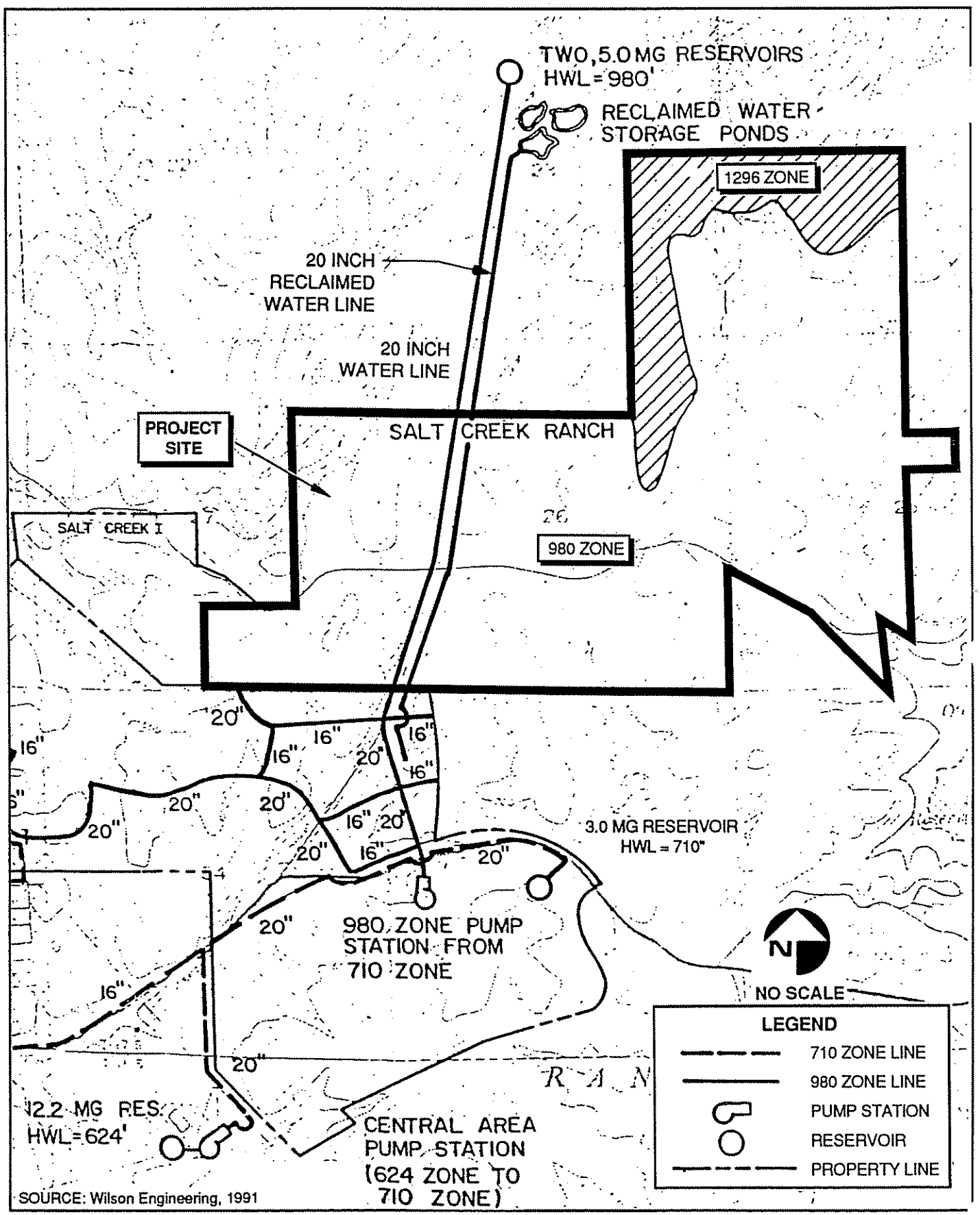
Existing Conditions

The project site is located within the service area of the Otay Water District (OWD), one of 24 member agencies of the San Diego County Water Authority (CWA). The CWA receives water from the Metropolitan Water District Facilities via Colorado River and California Aqueduct sources. Water supply to the project site is currently provided by a connection to the CWA Aqueduct Pipeline 3.

The project site falls within the 980 and 1296 service zones of the OWD. Figure 3-36 illustrates the boundaries of the Salt Creek Ranch property and the existing water facilities in the immediate vicinity. The existing water facilities adjacent to the Salt Creek Ranch development consist of 980 Zone facilities and lower zone facilities (624 Zone to 710 Zone). A water booster pump station located at the southeastern corner of Lane Avenue and Otay Lakes Road takes water from the 710 Zone and pumps it to the 980 Zone reservoirs. At the present time there are no facilities to serve the 1296 Zone.

Existing water lines in the vicinity of the Salt Creek Ranch project are primarily located in the EastLake Business park immediately to the south. A 20-inch transmission pipeline is located in Lane Avenue and extends through the project site to the 980 Zone reservoirs (see Figure 3-36). A 16-inch transmission pipeline is located in East "H" Street approximately 5,000 feet west of the project; 16-inch pipelines are also located in Miller Drive and Boswell Street. The major water distribution lines have been sized for ultimate buildout of the 980 Zone based on a water system master plan coordinated by the OWD (this plan is discussed below). Therefore, paralleling of existing water lines will not be necessary in order to provide service to areas beyond the EastLake development. The EastLake development currently exerts a demand of 2,000 gallons per minute (gpm) in the 980 Zone.

There are two existing 5 million gallon reservoirs in the 980 Zone system; both are located on the OWD Reclamation Property. The OWD has determined that the existing 10 million



FIGURE

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Existing Water Service Zones and Facilities

3-36

gallons of reservoir storage capacity is adequate for buildout of the 980 Zone. This reservoir storage capacity is for operational storage and fire protection storage only, and does not include emergency storage capacity.

The Otay Water District has a conceptual master plan of ultimate facilities for the 980 Zone water system (OWD Central Area Master Plan Update 1987). The OWD has anticipated development of Salt Creek Ranch in this plan. Analysis for the master plan included all of that portion of the property below elevation 840 at an average density of 5 dwelling units per acre. Property above elevation 840 lies within the 1296 Zone, which was not analyzed. This Master Plan identifies the facilities necessary to provide ultimate service to the 980 Zone, but does not address the timing of the required improvements. The OWD anticipates that the timing and rate of development will dictate the need for construction of the master planned facilities. Proposed facilities for the 980 Zone include distribution and transmission lines, upgrading of an existing water booster station, and a second water booster station. A subarea master plan is currently being prepared by the OWD for the Salt Creek Ranch area. This report will more specifically outline the ultimate facility requirements for the 980 Zone, and will include an analysis of the 1296 Zone.

Reclaimed Water

The use of reclaimed water is being proposed in the project area, where possible, to offset domestic water demands. Figure 3-36 shows the location of the OWD reclaimed water storage ponds. The OWD has nine reclaimed water storage ponds on its Reclamation Property. These ponds are filled with secondary effluent pumped from the Otay Water District's Jamacha Wastewater Reclamation Facility. From these ponds, a 20-inch reclaimed water line travels south through the Salt Creek Ranch property and ties into Lane Avenue. The 20-inch reclaimed water line traverses the Salt Creek Ranch property, and was built by the EastLake Development Company to deliver irrigation water to its future golf course.

Impacts

Correspondence with the OWD (March 1989; Appendix F) indicates that development of the Salt Creek Ranch property would require either annexation to Improvement District No. 22 or establishment of a new district to obtain water service.

Based on water demand rates and land use allocations given in Table 3-17, the Salt Creek Ranch development would demand about 1,719,670 gallons of water per day (gpd). The estimated average demand in the 980 Zone is 1,635,502 gpd and the estimated average demand for the 1296 Zone is 84,168 gpd. Note that 188,139 gpd of the total demand may be met by using reclaimed water.

A water master plan was prepared by Wilson Engineering for the Salt Creek Ranch development in accordance with mitigation measures detailed in EIR 89-3, Section 3.13. The purpose of the master plan is to develop a water distribution system that will be adequate to meet the ultimate needs of future development in the area. The plan describes the water facilities that will be needed to serve the project site while maintaining compatibility with the intentions of the OWD for that area. The criteria utilized in the master plan were established in accordance with the standards presently being utilized for the preparation of the OWD Water Master Plan.

The water facilities required for the Salt Creek Ranch project are divided between two water service zones. The majority of the project falls within the 980 Zone. Approximately 110 residential units are above the upper service boundary of the 980 Zone (at 840 feet); these lots will require service from the 1296 Zone. The proposed facilities and service zones are illustrated in Figure 3-37. The two zones will be discussed separately.

Required water facilities to serve that portion of the Salt Creek Ranch project within the 980 Zone include:

- Connection of the onsite water distribution system to existing mains in the EastLake development. The system will also tie into the existing 20-inch pipeline that crosses the project site; depending on development planning this pipeline may need to be relocated into a street or dedicated open space easement.

- Upgrading of the existing pump station by the addition of a third 4,000 gallon per minute (gpm) pump to increase the station's firm pumping capacity to 8,000 gpm.

The OWD master plan for the 980 Zone determined that no additional operational or fire fighting storage is required beyond the 10 million gallons of storage already in service. Emergency storage is not included as part of the existing storage volume.

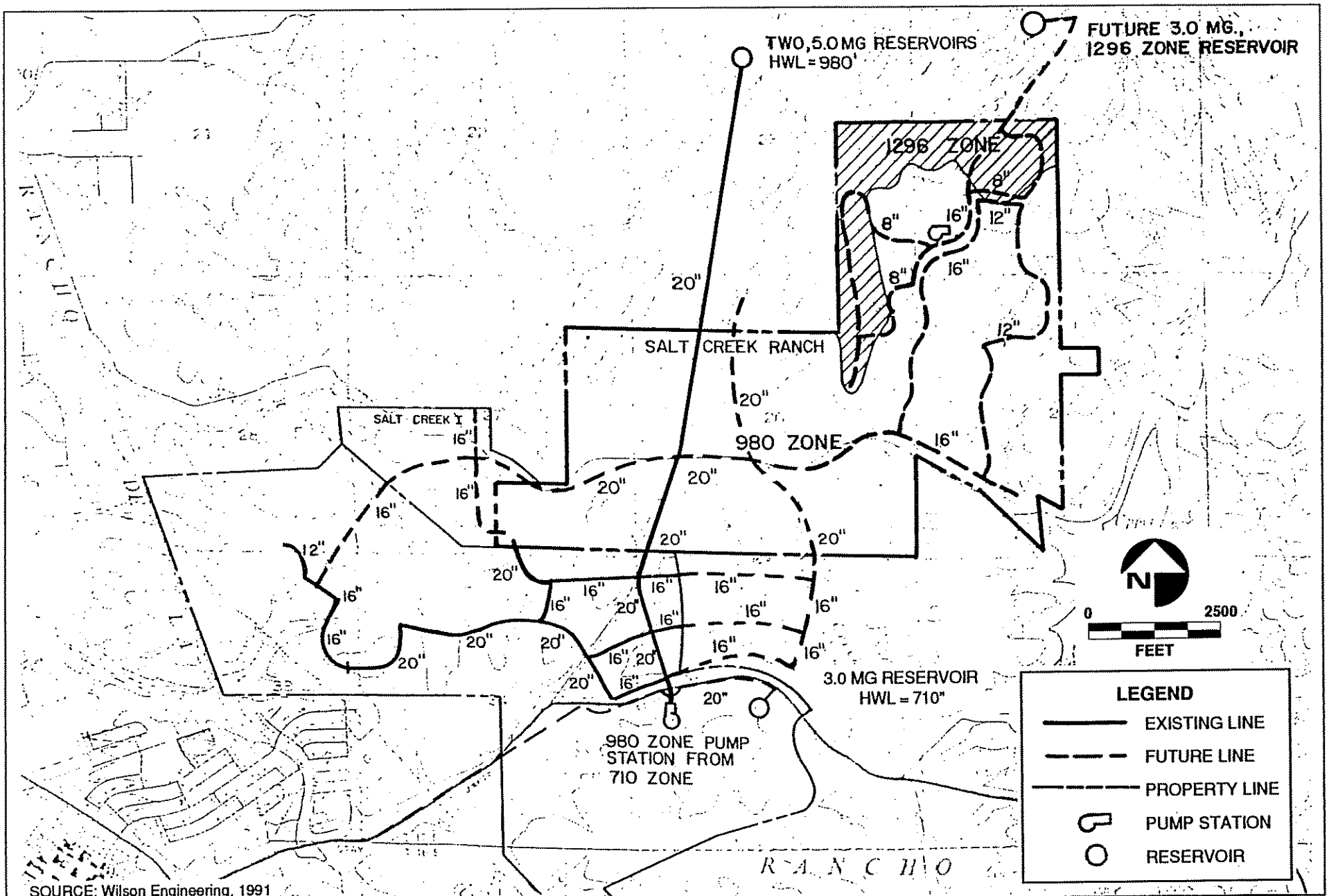
Table 3-17

SALT CREEK RANCH WATER DEMAND BY PRESSURE ZONE

Type of Development	Area of Development (acres)	Number of Dwelling Units	Development Water Duty Factor	Development Water Demand (gpd)(1)	% of Area to be Irrigated	Amount of Land to be Irrigated (acres)	Irrigation Water Duty Factor (gpd/ac)	Irrigation Water Demand (gpd)	Total Average Water Demand (gpd)
980 ZONE									
Residential									
Low	342.0	680	525 gpd/du(3)	357,000	10	34.2	3,570	122,094	479,094
Low-Medium	305.0	1,388	450 gpd/du	624,600	10	30.5	3,570	108,885	733,485
Low-Medium(2)	24.4	211	375 gpd/du	79,125	15	3.7	3,570	13,209*	87,693
Medium	27.7	428	225 gpd/du	96,300	15	4.2	3,570	14,994*	111,294
Schools	24.0		2,000 gpd/ac(4)	48,000	20	4.8	3,570	17,136*	65,136
Churches	7.0		2,000 gpd/ac	14,000	20	1.4	3,570	4,998*	18,998
Fire Station	1.0		2,000 gpd/ac	2,000	10	0.1	3,570	357*	2,357
Parks	31.0				100	31.0	3,570	110,670*	110,670
Parkway Landscaping	7.5				100	7.5	3,570	26,775*	26,775
Subtotal	769.6	2,707		1,221,025		117.4		414,477	1,635,502
1296 ZONE									
Residential									
Low	74.0	110	525 gpd/du	57,750	10	7.4	3,570	26,418	84,168
Subtotal	74.0	110		57,750		7.4		26,418	84,168
Total	843.6	2,817		1,278,775		124.8		440,895	
							Total Potable Water Demand		**1,531,531**
							Total Reclaimed Water Demand		**188,139**
							Total Average Water Demand		**1,719,670**

(1) gpd: gallons per day
(2) Low-Medium use at highest allowable density of Low-Medium category.
(3) du: dwelling units
(4) ac: acres
* Areas proposed to be irrigated with reclaimed water.

Source: Wilson Engineering 1991



SOURCE: Wilson Engineering, 1991

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Proposed Water Facilities

FIGURE 3-37

Water facilities required to serve that portion of the project site within the 1296 Zone include:

- A water distribution system consisting of water lines to provide domestic and fire protection service, and a transmission pipeline to a proposed 1296 Zone reservoir.

- A new pump station is required to boost water from the 980 Zone to the 1296 Zone. The OWD master plan identifies an ultimate maximum day demand of 2,000 gpm for the 1296 Zone. Construction of the pump station would occur in phases since ultimate capacity would not have to be available immediately. The exact location of the pump station has not been determined.

- A new 3.0 million gallon reservoir will be required to provide service to the 1296 Zone. The Salt Creek Ranch project will be required to build the storage reservoir if it is the first to need water service in the 1296 Zone. The pad elevation of the reservoir should be approximately 1,270 feet, therefore, an offsite location will have to be obtained for this reservoir. A specific reservoir site has not been established.

The proposed water facilities are adequate to serve the Salt Creek Ranch project. However, several issues remain unresolved, and the impacts are considered to be potentially significant.

Emergency Storage

Emergency storage for the 980 Zone, the future 1296 Zone and other pressure zones served from the San Diego County Water Authority aqueduct connection and the Central Area Pump Station is part of a district-wide project. Presently, there are plans for a large storage reservoir, on the order of 50 to 100 million gallons, near the Central Area pump station and the aqueduct connection. The exact size and location of this reservoir has not yet been determined.

The intent of the Otay Water District is to provide emergency storage equivalent to five days average demand. For the Salt Creek Ranch project, the required volume of emergency

storage is approximately 7.7 million gallons. The Salt Creek Ranch project could comply with the emergency storage requirement by paying the Central Area Service Zone Terminal Reservoir Construction Fee. For a project the size of Salt Creek Ranch, payment of fees would be more appropriate than building a small amount of emergency storage. The Otay Water District would prefer to build terminal reservoir storage in large volume increments.

Reclaimed Water

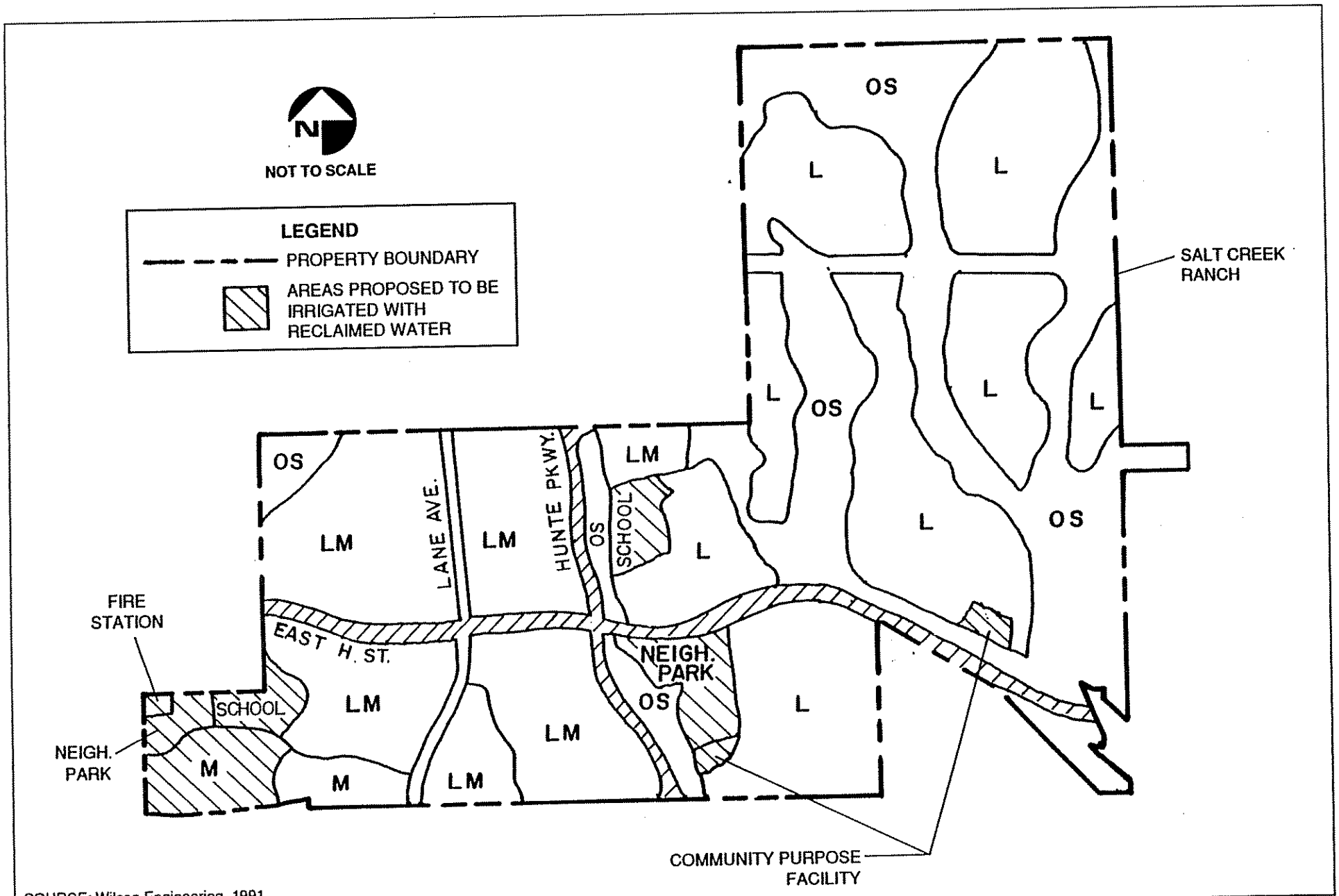
A reclaimed water master plan was prepared by Wilson Engineering for the Salt Creek Ranch project (Appendix F). The criteria outlined in the master plan are in accordance with the Water Reclamation and Reuse Conceptual Master Plan prepared for the Clean Water Program for greater San Diego, July 1989.

The use of reclaimed water is acceptable to the San Diego Regional Water Quality Control Board within the westerly 60 percent of the property. The drainage basins in the eastern portion of the property drain into the Otay Lake Reservoir, and the use of reclaimed water is not allowed in that area.

For the Salt Creek Ranch project it is expected that reclaimed water will be used to irrigate the landscaped portions of multi-family residential units, schools, churches, fire station, and street parkway landscaping. The parks and parkway landscaping are expected to be 100 percent irrigated with reclaimed water.

Figure 3-38 identifies potential reclaimed water use areas. Areas on the project proposed to be irrigated with reclaimed water range in elevation from approximately 575 feet to 700 feet. For this reason, reclaimed water service can be provided to the project from the 980 Zone. Table 3-18 presents the projected reclaimed water demand for Salt Creek Ranch. The estimated average reclaimed water demand for the project is 188,139 gallons per day. Approximately 52.7 acres of the project site are proposed to be irrigated with reclaimed water.

Figure 3-39 presents the proposed reclaimed water facilities for the Salt Creek Ranch project. To deliver reclaimed water to the project site, a 16-inch reclaimed water transmission main will need to be installed in East "H" Street and connected to the existing 20-inch reclaimed water line in Lane Avenue. Additional 8-inch and 16-inch lines will need



SOURCE: Wilson Engineering, 1991

FIGURE 3-38

Potential Reclaimed Water Use Areas

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Table 3-18

SALT CREEK RANCH AVERAGE RECLAIMED WATER DEMAND

Land Use	Area (Acres)	% of Area to be Irrigated	Area of Irrigation (Acres)	Irrigation Water Duty Factor (gpd/acre)	Total Reclaimed Water Demand (gpd)
Multi-family Residential	52.1	15	7.9	3,570	28,203
Schools	24.0	20	4.8	3,570	17,136
Churches	7.0	20	1.4	3,570	4,998
Fire Station	1.0	10	0.1	3,570	357
Parks	31.0	100	31.0	3,750	110,670
Parkway Landscaping	7.5	100	7.5	3,750	26,775
TOTAL	**122.6**		**52.7**		**118,139**

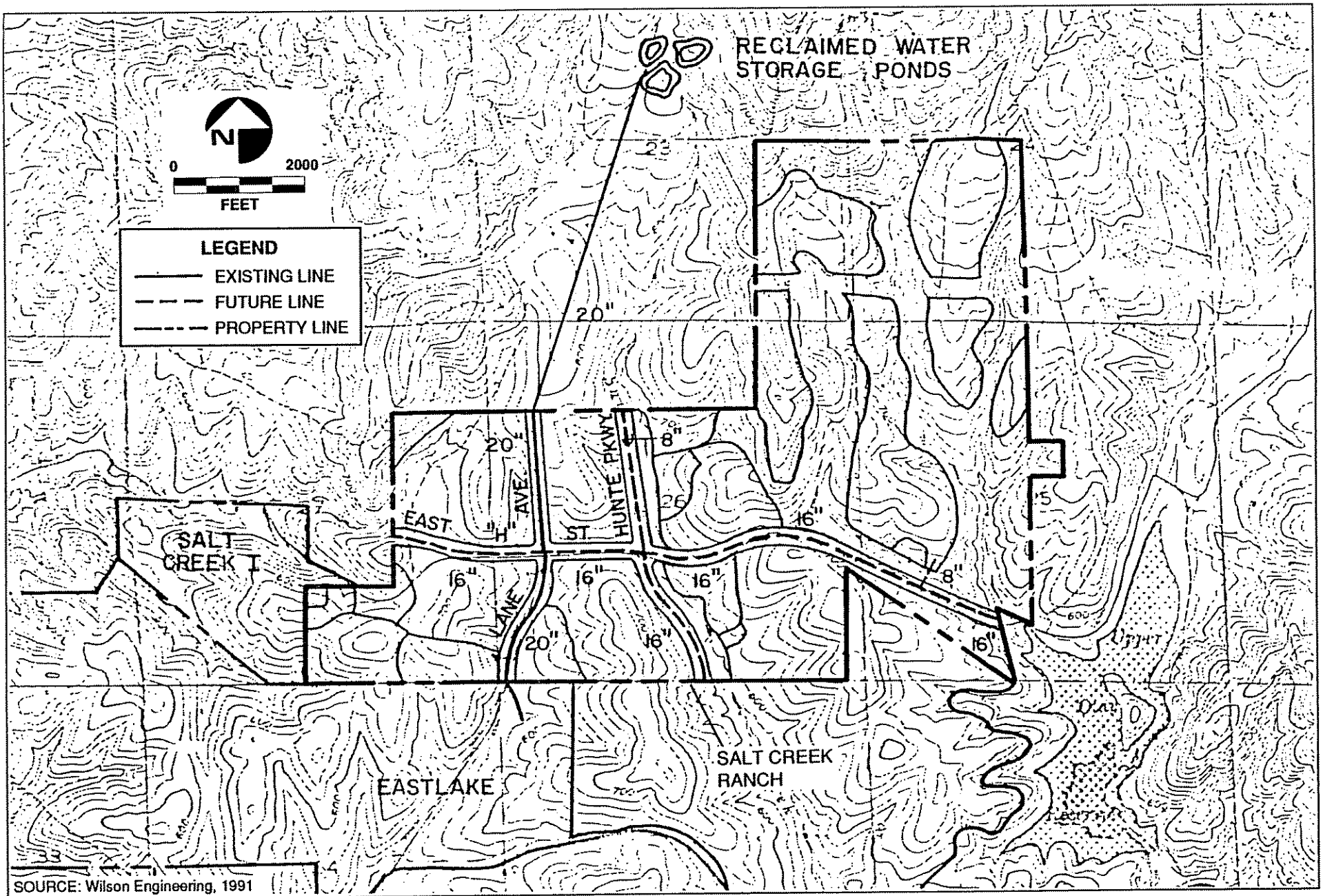

FIGURE 3-39

Proposed Reclaimed Water Facilities

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to be installed in Hunte Parkway to provide service to the proposed school site and street parkway landscaping.

Availability of reclaimed water depends on the demand for reclaimed water versus the ability of the Otay Water District to produce sufficient volume at its Jamacha Reclamation Plant. Presently, the District can produce one million gallons per day of reclaimed water.

Mitigation Measures

- Prior to approval of final map, the Master Plan of Water for Salt Creek Ranch shall be approved by the City Engineer and OWD. Further, this plan shall be revised to include a discussion of implementation and phasing, and participation in the water allocation program and TSF financing for this project and other projects in the OWD Master Plan service area.

- The exact locations for the proposed pump station and 3 million gallon reservoir to serve the 1296 Zone shall be determined prior to approval of final grading plans.

The following is incorporated from EIR 89-3:

- Prior to issuance of building permits, the project site shall either be annexed by the OWD into Improvement District No. 22, or a new improvement district shall be established for the project area. In addition, the project developer shall obtain written verification from OWD at each phase of development that the tract or parcel will be provided adequate water service.

- The project proponents shall, if feasible, negotiate an agreement with OWD to commit to use of reclaimed water at the earliest possible date so that OWD can ensure that an adequate supply is available. If such an agreement is pursued, all documentation shall be subject to site-specific environmental analysis, and shall conform to the applicable regulations of the City of Chula Vista, Regional Water Quality Control Board and the State Department of Health.

- Water conservation measures for onsite landscaping and for maintenance of roadside vegetation shall be created and implemented by the project proponent,

in coordination with the City Public Works Department and in consultation with OWD or other qualified water agency/organization. Conservation measures are recommended by the State Resources Agency Department of Water Resources, and include but are not limited to planting of drought tolerant vegetation and the use of irrigation systems which minimize runoff and evaporation loss (see also following measure).

- The following water conservation measures should be provided; implementation shall be approved prior to issuance of certificates of use and occupancy;

  a) Low-flush toilets (Section 17921.3, Health and Safety code).

  b) Low-flush showers and faucets (California Administrative Code, Title 24, Par 6, Article 1, T20-1406F).

  c) Insulation of hot water lines in water recirculating systems (California Energy Commission).

Analysis of Significance

Implementation of the above mitigation measures will reduce impacts related to water supply and distribution to a level of insignificance.

3.9.2 Waste Water

Information regarding sewer service was obtained from the Master Plan of Sewerage for Salt Creek Ranch prepared by Wilson Engineering, March 1991 (Appendix F).

Existing Conditions

Sewer service in the project vicinity is provided by the City of Chula Vista. The City operates and maintains its own sanitary sewer system with connections to the City of San Diego Metropolitan Sewer System (METRO). Waste water is treated by the Metro System Point Loma Treatment Plant. The City's daily waste water flow into the system in 1990 was 12.8 million gallons per day (mgd); the 1991 average is approximately 11.2 mgd due to current water conservation efforts (Swanson 1992). The City's capacity reservation

with METRO is 19.2 mgd. Based on projected population growth within the City, it may be 12 to 15 years before the actual average daily wastewater flow reaches the available capacity of 19.2 mgd.

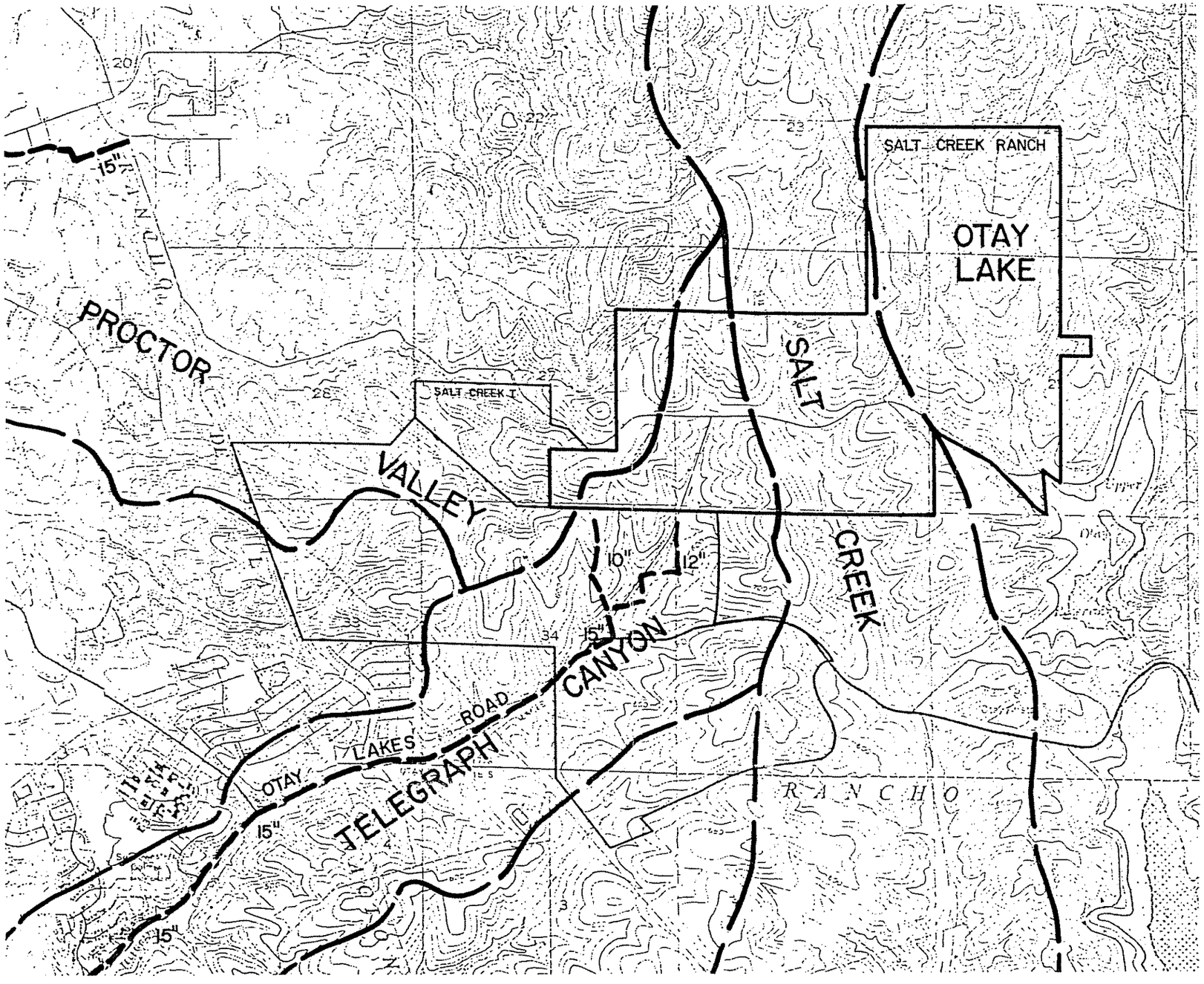
All gravity sewers in the City have been designed to convey peak wet weather flows. For pipes with a diameter of 12 inches and smaller, the sewers have been designed to convey this flow when flowing half full. For pipes with a diameter of 12 inches and larger, the sewers have been designed to convey peak wet weather flow when flowing three-fourths full by depth. When analyzing existing gravity sewer lines, a replacement size will be recommended only when peak flows are projected to exceed three-fourths full by depth for any size line.

The Salt Creek Ranch project site is drained by four basins: Proctor Valley, Telegraph Canyon, Salt Creek, and Otay Lake (Figure 3-40). Sewer facilities in the area are also illustrated in Figure 3-40, and are described below according to drainage basin.

Proctor Valley Basin – The Proctor Valley Basin covers approximately 5 percent of the Salt Creek Ranch property. There are no existing facilities near the property in this basin which would allow gravity flow from the project (Figure 3-40). The nearest facility within this basin is a 15 inch sewer main located south of the intersection of San Miguel Road and Proctor Valley Road to the northwest of the project site. This main conveys flow to the Spring Valley Outfall, and is part of the County's Spring Valley Sanitation District sewerage system.

Telegraph Canyon Basin – The Telegraph Canyon Basin covers approximately 30 percent of the Salt Creek Ranch property. The sewer facilities in this basin are the closest to the project site, following Otay Lakes Road east to EastLake Parkway, and extending to the site's southern boundary. Facilities include 10-inch and 12-inch sewer stubs which ultimately deliver flow via a 15-inch main to the 90-inch Metropolitan Interceptor Sewer west of Interstate 5 (Figure 3-40). The Telegraph Canyon facilities are currently operating below capacity for the entire length of the system. Several developments which are not in the Telegraph Canyon Basin are proposed to be served by Telegraph Canyon sewage facilities.

Salt Creek Basin – The Salt Creek Basin covers approximately 25 percent of the Salt Creek Ranch property. There are no existing facilities near the property in this basin which would



SOURCE: Wilson Engineering, 1991

ERCE

Existing Sewer Facilities

FIGURE 3-40

allow gravity flow from the project (Figure 3-40). The nearest Salt Creek Basin facility is a gravity line approximately 5 miles to the southwest of the property at Nirvana Avenue in Otay Valley Road.

Otay Lake Basin. – The Otay Lake Basin covers approximately 40 percent of the Salt Creek Ranch property. Within this basin gravity flows terminate at the Upper Otay Reservoir. This makes a gravity sewer system infeasible and necessitates the need for a pump/forcemain system in order to protect the potable water supply in Otay Lakes from contamination.

Impacts

A sewage master plan was prepared by Wilson Engineering for the Salt Creek Ranch development in accordance with mitigation measures detailed in EIR 89-3, Section 3.13. The purpose of the master plan is to design and develop sewage facilities needed to serve the project. To achieve this goal the plan describes the recommended offsite collection system, determines the offsite facilities required to convey flows from Salt Creek Ranch, and analyzes existing and proposed offsite facilities to determine if there is sufficient capacity to handle ultimate peak flows.

The sewage generation factor used to project average residential sewage flows from new developments is 80 gallons per day per capita. A population density of 3.5 persons per dwelling unit was used to calculate sewage generation. Table 3-19 presents the projected sewage flow by drainage basin for the Salt Creek Ranch project. Based on 2,817 units, the total average daily flow projected from the development is estimated at 788,760 gallons per day (gpd). These flows can be accommodated without impact provided that required facilities are financed and implemented in a timely manner.

Figure 3-41 presents the recommended sewerage conveyance system to accommodate ultimate flows from Salt Creek Ranch and offsite tributary areas. The onsite collection system consists of 8- and 10-inch gravity sewer lines and one lift station. The alignment of the recommended gravity sewer lines is based on the proposed street alignments taken from the preliminary grading plan for the project. All gravity sewers and the lift station have been designed to convey peak wet weather flow.

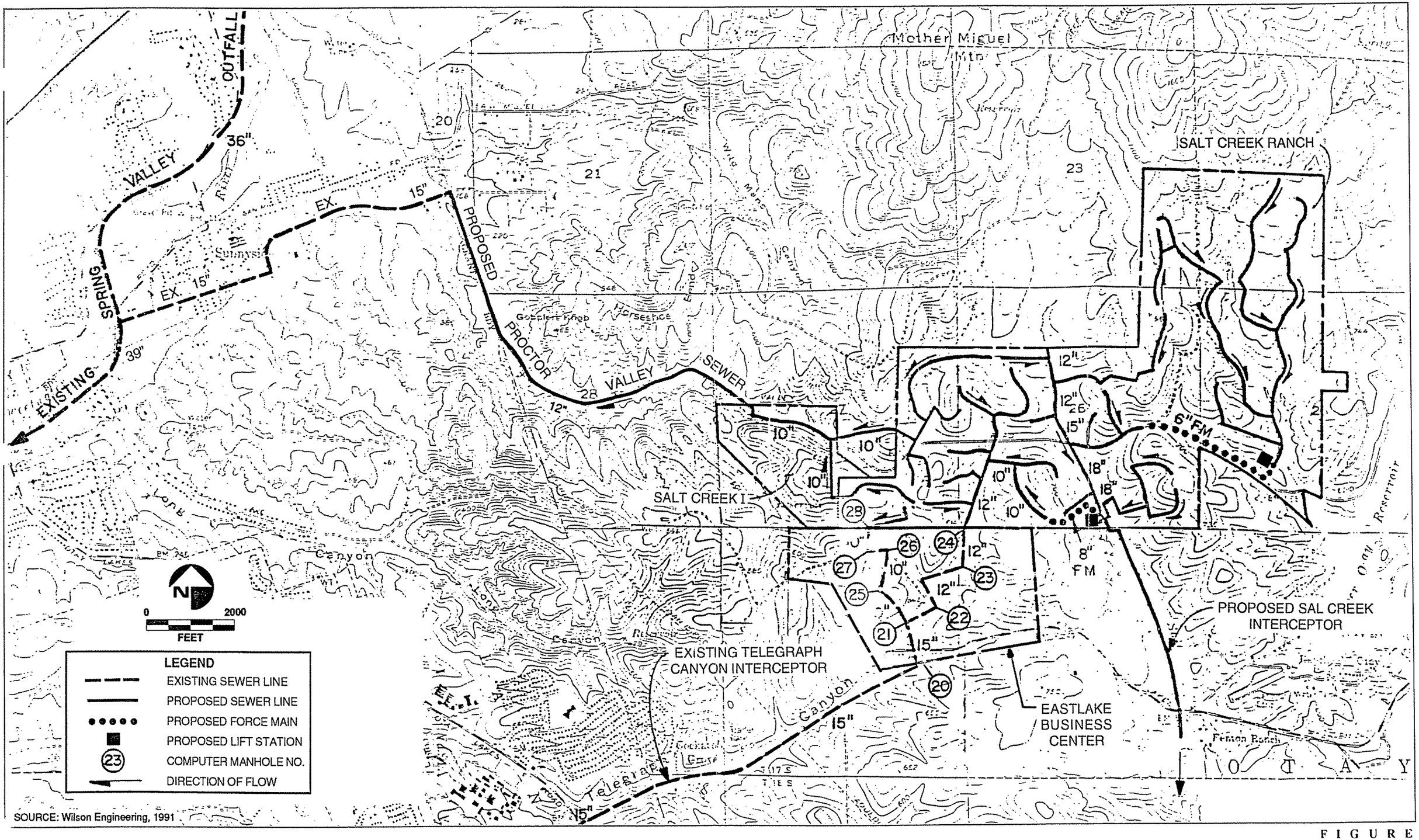
The recommended onsite collection system has been oversized to handle 87,360 gpd of additional flows from offsite tributary areas (Table 3-20). The estimated number of dwelling units was established from the Sweetwater Community Plan and Otay Subregional Planning Area maps. An increase in the offsite densities could overtax the system beyond design capacity.

Proctor Valley Basin – The Salt Creek Ranch project proposes approximately 885 residential dwelling units that are within the Proctor Valley Basin. The average day flow from these units is estimated at 247,800 gpd. The offsite tributary area will generate an average flow of 7,000 gpd. As shown on Figure 3-41, the onsite collection system for the Proctor Valley Basin will convey flow to the proposed Salt Creek I collection system, and then to the proposed 12-inch gravity sewer line in Proctor Valley Road. The 12-inch sizing recommendation is based on flows from the Salt Creek Ranch and Salt Creek I projects only. This proposed gravity sewer line will tie into the existing 15-inch gravity line within the Spring Valley Sanitation District which conveys flow to the Spring Valley Outfall.

The design capacity for the proposed Proctor Valley Sewer was established in a report prepared by Wilson Engineering in January 1991 titled "Proctor Valley Basin Gravity Sewer Analysis for the Salt Creek I Project." Construction of this proposed 12-inch sewer line will provide enough capacity to convey Salt Creek Ranch flows in the Proctor Valley Basin to the Spring Valley Outfall. The existing 15-inch line that links these two systems will have adequate capacity to handle ultimate flows from the Salt Creek Ranch and Salt Creek I projects (Burbrink 1991).

Telegraph Canyon Basin – The Salt Creek Ranch project proposes approximately 647 residential dwelling units that are within the Telegraph Canyon Basin. The average day flow from these units is estimated at 181,160 gpd. The offsite tributary area will generate an average day flow of 1,400 gpd. Telegraph Canyon Basin flows will be collected and conveyed offsite to the existing gravity lines in the adjacent EastLake Business Center. As shown on Figure 3-41, the gravity sewer lines proposed in the Telegraph Canyon Basin have been sized as 8-inch and 10-inch. The existing 12-inch lines in the EastLake Business Center convey flow to the 15-inch Telegraph Canyon Interceptor.

A study is currently being prepared by Willdan Associates as a requirement of EastLake Development Corporation to determine interim and ultimate capacity in the Telegraph



SOURCE: Wilson Engineering, 1991

ERCE

Proposed Sewer Facilities

FIGURE 3-41

Table 3-19
SALT CREEK RANCH SEWAGE FLOWS BY BASIN

Drainage Basin	Estimated Number of Units (1)	Average Flow (gpd) (2)
Proctor Valley	885	247,800
Telegraph Canyon	647	181,160
Salt Creek	885	247,800
Otay Lake	400	112,000
TOTAL	**2,817**	**788,760**

(1) These estimates are based on the preliminary grading plan for the Salt Creek Ranch property and may increase or decrease through final planning.

(2) gpd: gallons per day

Table 3-20
OFFSITE SEWAGE FLOWS BY BASIN

Drainage Basin	Area (acres)	Density (DU/AC)	Estimated Number of Units (1)	Average Flow (gpd) (2)
Proctor Valley	91	0.28	25	7,000
Telegraph Canyon	15	0.28	5	1,400
Salt Creek	650	0.28	182	50,960
Otay Lake	400	0.25	100	28,000
TOTAL	**1,156**		**312**	**87,360**

(1) Established from the Sweetwater Community Plan and Otay Subregional Planning Area Maps.

(2) gpd: gallons per day

Canyon Interceptor. Offsite improvements to the Telegraph Canyon Interceptor required of Salt Creek Ranch will be finalized when the Willdan Associates Study is completed.

Otay Lake Basin – The Salt Creek Ranch project proposes approximately 400 residential dwelling units that are within the Otay Lake Basin. The average day flow from these units is estimated at 112,000 gpd. The offsite tributary area will generate an average flow of 28,000 gpd.

As mentioned previously, flows from within this basin naturally drain to the Upper Otay Reservoir. Sewage flows must be diverted from the Otay Lake Basin to protect the reservoir from contamination, therefore, the Salt Creek Ranch project will need a permanent lift station to pump sewage flows to the Salt Creek Basin. Based on the preliminary grading plan, sewage flows from approximately 400 units onsite and 100 units offsite will require pumping. A 10-horsepower lift station and 6-inch force main, 2,800 feet in length, will adequately pump this onsite and offsite sewage flow. The approximate location of the lift station and force main is shown in Figure 3-41.

Development within the Otay Lake Basin could lead to contamination of the Upper and Lower Otay reservoirs in the event of a sewer system malfunction or overflow. Protection of the reservoirs from potential sewage spills is discussed in Section 3-4, Water Quality.

Salt Creek Basin – The Salt Creek Ranch project proposes approximately 885 residential dwelling units that are within the Salt Creek Basin. The average day flow from these units is estimated at 247,800 gpd. The offsite tributary area will generate an estimated 50,960 gpd. As discussed in the previous paragraph, flows from the Otay Lake Basin will be pumped to allow gravity flow through the Salt Creek Basin. The recommended collection system for the Salt Creek Basin has been sized to handle these additional flows.

Sewage from the Salt Creek Basin will ultimately flow down the proposed Salt Creek Interceptor. Ultimate sizing of the Salt Creek Interceptor has not been determined at this time. Figure 3-41 presents the proposed alignment of the north section of this interceptor. Sewage flows will be delivered via the interceptor to the future Otay Valley Reclamation Plant, which is scheduled to begin operation in 1998 (Swanson 1992). This plant will initially have a capacity of 6 mgd with the capability of expanding to 12 mgd in the future. There will be capacity at this plant to treat Salt Creek Ranch flows.

The City will need to have a study prepared to determine the cost distribution for each of the major developments that will utilize the Salt Creek Interceptor. At the request of landowners in the area, a preliminary analysis was conducted to determine the appropriate sizing and cost of the Salt Creek Interceptor. From this work, the initial cost estimates indicate that the Salt Creek Ranch share of funding this interceptor will be approximately $800,000.

The proposed sewage facilities are adequate to serve the Salt Creek Ranch project. However, several issues remain unresolved, and the impacts are considered to be potentially significant.

Mitigation Measures

- Prior to approval of final map, the Master Plan of Sewerage for Salt Creek Ranch shall be approved by the City Engineer. Further, this plan shall be revised to include a discussion of funding and implementation/phasing in relation to this project and other associated project's phasing in the area.

- Interim and ultimate capacity in the Telegraph Canyon Interceptor shall be determined prior to approval of final map.

- Ultimate capacity of the Salt Creek Interceptor shall be determined prior to approval of final map.

- A storm water diversion plan shall be prepared that will protect the Upper and Lower Otay reservoirs from sewage contamination, as discussed in Section 3.4, Water Quality.

The following is incorporated from EIR 89-3:

- The project shall be subject to payment of waste water development fees (to fund trunk sewer and other upgrades) or equivalent proportionate facility financing mechanism identified by the City, when adopted. Payment shall occur prior to issuance of building permits or earlier.

Analysis of Significance

With implementation of the above mitigation measures, impacts to waste water will be reduced to below a level of significance.

3.10 OFFSITE AREAS OF IMPACT

The development of Salt Creek Ranch would necessitate the construction of additional offsite facilities (i.e., water lines, sewer lines and water reservoir) in order to accommodate the future residents with adequate water and sewer services. Three offsite areas directly adjacent to the project site would house these facilities. The location of these parcels is shown in Figure 2-9 and discussed below:

Hunte Parkway – This 46-acre parcel would contain the proposed alignment of Hunte Parkway and the Salt Creek Interceptor line. Both improvements are proposed along approximately the same alignment which has not yet been determined. Ultimately, sewage flows will be collected and treated at the future Otay Valley Water Reclamation Facility.

East "H" Street – This 7.3-acre parcel would contain a portion of the future alignment of East "H" Street and the Proctor Valley 10-inch sewer line. Both improvements are proposed along approximately the same alignment which has not yet been determined. This proposed gravity sewer line would tie in with the existing 15-inch gravity line within the Spring Valley Sanitation District which conveys flow to the Spring Valley Outfall.

Waterline/Reservoir – This 111-acre parcel would contain a proposed waterline, access road, and reservoir in order to provide water service to Zone 1296. The pad elevation of the reservoir should be approximately 1,270 feet. A specific reservoir site has not been established.

The environmental issues potentially affected by development of these three areas include: biological resources, landform/aesthetics, and cultural resources. Since the precise alignment for Hunte Parkway and East "H" Street have not yet been determined, the impact analysis for these two offsite areas is general in nature. Further analysis may be necessary when engineering drawings have been completed. These issues are addressed in the following section.

3.10.1 Biological Resources

Existing Conditions

Offsite areas of impact were field checked on January 31, 1991. An additional field survey was conducted on April 21, 1991 at the Waterline/Reservoir site. Information from that field visit along with previous data for these areas where available is the basis of the following description of existing conditions.

Hunte Parkway

Vegetation. This offsite area along the Salt Creek drainage totaling about 45.6 acres is agricultural land, historically dry-farmed or grazed. It is almost completely surrounded by agricultural lands with graded lands to the south. A grove of large eucalyptus is present in the drainage immediately to the north within the boundary of Salt Creek Ranch. The Salt Creek drainage itself is highly disturbed with introduced grasses and scattered nonnative tamarisk along the creek bed. No functional native upland or wetland habitats are present in this area.

Wildlife. The area may be utilized by various raptors as foraging habitat. A ferruginous hawk (*Buteo regalis*) was observed overhead during the field visit. This species is an uncommon winter visitor to the region and could be expected to roost in the large eucalyptus trees to the north. Other common raptors such as red-tailed hawk (observed), red-shouldered hawk, American kestrel, black-shouldered kite and golden eagle could be expected over the site on occasion. All are recorded from the general area.

The Salt Creek drainage within this area is not a key link as a wildlife corridor due to the surrounding open disturbed lands.

Sensitive Species/Habitats. The area is not expected to support any sensitive plant or animals recorded for Salt Creek Ranch or the general area due to lack of habitat.

The creek bed is considered "waters of the United States" and alterations of the creek bed would be considered in the overall permitting of the project by the Corps of Engineers, U.S. Fish and Wildlife Service and California Department of Fish and Game.

East "H" Street

All or portions of this area were previously surveyed by WESTEC Services (1979), PSBS (1989) and ERCE (1990).

Vegetation. This offsite area totaling about 7.3 acres between Salt Creek I and Salt Creek Ranch is covered by good quality Diegan coastal sage scrub. Dominant species include California sagebrush (*Artemisia californica*), flat-top buckwheat (*Eriogonum fasciculatum*), and viguiera (*Viguiera laciniata*) with an admixture of cholla and prickly pear (*Opuntia* spp.), toyon (*Heteromeles arbutifolia*), lemonadeberry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*). The area is partially grazed. The habitat west of Proctor Valley Road is disturbed.

Wildlife. The area currently is connected to undeveloped natural open space to the north and east and would be expected to support a contingent of common wildlife species normally associated with coastal scrub habitats. The area is relatively open and would be expected to attract raptors. Red-tailed hawk (*Buteo jamaicensis*) and great horned owl (*Bubo virginianus*) were observed onsite.

Sensitive Species/Habitats. Sensitive plant species observed onsite include viguiera (*Viguiera laciniata*), a large number (>1000 individuals) of coast barrel cactus (*Ferocactus viridescens*), and mesa clubmoss (*Selaginella cinerascens*). Additional sensitive plant species previously recorded for this area include Otay tarweed (*Hemizonia conjugens*) and variegated dudleya (*Dudleya variegata*) and Munz's sage (*Salvia munzii*) (WESTEC Services 1979; pgs 1989).

Sensitive animals species observed include a nesting pair of California gnatcatcher (*Polioptila californica*). This pair was previously recorded during the fieldwork associated with Salt Creek I in April 1990 (ERCE 1990).

Diegan coastal sage scrub is considered a sensitive habitat within the City of Chula Vista.

Reservoir/Waterline

Vegetation. This offsite area adjacent to and north of Salt Creek Ranch totals about 111 acres. With the exception of a few acres which were apparently brushed within the

past 10 years adjacent to Salt Creek Ranch and some dirt roads, the area remains natural. Although utilized for grazing, the area normally supports Diegan coastal sage scrub. However, this entire habitat was bermed in the last few years and vegetative recovery has been slow, probably due in part to the current drought conditions. The sparse scrub representing a typical post-fire successional stage consists of a mixture of California sagebrush (*Artemisia californica*), flat-top buckwheat (*Eriogonum fasciculatum*), viguiera (*Viguiera laciniata*), deerweed (*Lotus scoparius*), purple needlegrass (*Stipa pulchra*), bush mallow (*Malacothamnus californicus*), and laurel sumac (*Malosma laurina*).

The main drainage onsite wetland vegetation dominated by spiny rush (*Juncus acutus*) and San Diego marsh elder (*Iva hayesiana.*) No woody riparian or canopy structure is present along the onsite drainage. Chaparral habitat occurs on the steep north-east facing slope in the western portion of the site. The dominant plant species is Ramona lilac (*Ceanothus tomentosus* ssp. *olivaceus*).

Wildlife. This area is contiguous with large tracts of natural open space and with planned open space corridors on Salt Creek Ranch. It thus in part provides wildlife support and functional continuity to planned natural open space on Salt Creek Ranch. The area could be expected to support some use by deer and be utilized as foraging habitat by raptors.

Sensitive Species/Habitats. The area currently does not support California gnatcatcher (*Polioptila californica*) due to the lack of cover, but it would be expected to support this species after recovery from the fire based on vegetation and presence of the species on adjacent lands. Cactus wren habitat (cholla thicket) is not present in the area and grasshopper sparrows, present on Salt Creek Ranch to the south, would not be expected other than on an interim basis due to lack of open grassland habitat. Other sensitive species expected include San Diego horned lizard and orange-throated whiptail.

The natural drainage onsite with wetland habitat is considered sensitive and any alteration would precipitate close review by reviewing as well as resource agencies. Diegan coastal sage scrub, albeit burned is also considered sensitive.

The area does support *Viguiera laciniata* as a common constituent of the low scrub cover. This sensitive plant species is scattered throughout the area. Spiny rush (*Juncus acutus*), listed as a sensitive species by the California Native Plant Society is present in the onsite drainage. Cleveland's golden star (*Muilla clevelandii*) occurs on the slope located east of

the drainage, and *stipa diegoensis* exists high on the steep hill in the western portion of the site. Other sensitive plant species recorded for Salt Creek Ranch and neighboring properties may also be present but would have to be searched for during the spring due to their herbaceous character. These may include *Hemizonia conjugens, Dudleya variegata,* and *Stipa diegoensis.*

Impacts

Each of the offsite areas would be impacted by road construction. The following discussion details the amount of impact from both the roadway surface and the construction corridor. The latter includes equipment staging areas, cut/fill slopes, and general construction traffic. The construction corridor width used for calculating impacts is 100 feet on each side of the roadway, for a total of 200 feet.

Hunte Parkway

Given an impact area approximately 140 feet wide for the 4300 foot long road extension, a total of 13.8 acres of habitat would be impacted. Additional impacts from the construction corridor would total 19.7 acres. The exact amount of impact to each habitat is unknown, because a detailed alignment has not yet been determined.

Impacts to disturbed wetlands could occur if the new roadway crosses or otherwise impacts the Salt Creek drainage. The California Department of Fish and Game (CDFG) and United States Army Corps of Engineers (ACOE) have a no net loss policy for all wetlands and thus require mitigation for all wetland impacts. Any proposed impacts to disturbed wetlands would be considered significant, due to the resource agencies' policy.

At most, 33.5 acres of non-native grassland would be impacted. The loss of this disturbed habitat is not considered significant. Similarly, 33.5 acres of raptor foraging habitat would be impacted. This incremental impact to raptors is not considered significant, due to the small amount of impact.

East "H" Street

Given an impact area approximately 168 feet wide for the 1300 foot long road , 5.0 acres of high quality coastal sage scrub would be lost. Additional impacts from the construction

corridor would total 6.0 acres of coastal sage scrub. The road would continue onto the approved Salt Creek I project. Coastal sage scrub is considered a sensitive resource by the County of San Diego and the City of Chula Vista. The sage scrub onsite supports one breeding pair of California gnatcatcher. This habitat also contains three sensitive plant species. Sensitive herpetofauna such as the San Diego horned lizard and orange-throated whiptail may also occur. Impacts to coastal sage scrub are considered significant, due to the sensitivity of the habitat and those species inhabiting the scrub onsite.

The proposed roadway would potentially impact viguiera, San Diego coast barrel cactus, and mesa clubmoss. Of these, coast barrel cactus is the most sensitive as it is a candidate for federal listing (Category 2). There are more than 1000 barrel cactus onsite. This species would also be impacted within the Salt Creek Ranch development, as all 200+ individuals occurring there would be lost. Impacts to coast barrel cactus are considered significant, due to the sensitivity of the species and the large number of individuals that would be lost. Impacts to viguiera and mesa clubmoss are not considered significant, because of the lower sensitivity of these species.

Additional sensitive plant species known from the site include the state-listed Otay tarplant and variegated dudleya. A population of Otay tarplant has been documented in the northern portion of the site. Impacts to Otay tarplant would be considered significant, due to the sensitivity of the species. Variegated dudleya is a lower sensitivity species, and small incremental impacts to it are not considered significant.

A total of 11.0 acres of California gnatcatcher habitat would potentially be impacted. This species is currently under consideration for federal listing. Recent studies have found that breeding territories for this species average 20.5 acres (ERCE 1991). It has been estimated that a breeding territory would become non-functional if it were to be reduced by more than 30 percent, or 6.2 acres for the average sized territory. Impacts to California gnatcatcher are considered significant, because the amount of habitat potentially impacted is greater than 6.2 acres and due to the sensitivity of the species.

Reservoir/Waterline

A total of 30.7 acres of burned coastal sage scrub would be affected. This includes 7.1 acres for the 5150 foot long access road, and 23.6 acres within the construction corridor. No California gnatcatchers were found onsite; however, they may inhabit the site in a few

years once the scrub habitat recovers from fire. Impacts to coastal sage scrub over 5 acres are considered significant (City of Chula Vista 1989), due to the rarity of the resource.

The access road would cross an intermittent drainage in two locations. The total impact would be estimated at about 0.1 acre to "waters of the United States." Impacts to waters of the United States are not considered significant, due to the small amount of impact and the lack of wetland habitat.

The access road would cross a hillside where San Diego golden star (*Muilla clevelandii*) occurs. This species is a candidate (C2) for listing by the USFWS. Impacts to Cleveland's golden star are considered significant, due to the sensitivity of the species.

A total of 2.7 acres of Chaparral habitat would be lost at the water tank site. This habitat contains no sensitive species and its loss is not considered significant.

Mitigation Measures

Hunte Parkway

To mitigate potential impacts to disturbed wetlands to below the level of significance, ERCE recommends enhancement of riparian habitat at a 1:1 ratio to any impacted wetlands. This mitigation acreage should be added to the mitigation acreage for the Salt Creek Ranch development and incorporated into the wetland mitigation plan (RECON 1991). Prior to construction, a 1603 Streambed Alteration Agreement must be obtained from the California Department of Fish and Game.

East "H" Street

To mitigate the loss of 11.0 acres of coastal sage scrub and impacts to California gnatcatcher to below the level of significance, ERCE recommends a strategy of avoidance and habitat enhancement. To avoid impacting the full 11 acres, the construction corridor could be restricted down from 100 feet on each side of the roadway to a smaller area. The avoidance should reduce impacts to the gnatcatcher territory to below 6.2 acres. This would retain the territory and reduce the impact to the gnatcatcher to a level of non-significance. All remaining impacts would require enhancement of coastal sage scrub at a ratio of 1:1. The mitigation site should be at a nearby location and connected to a larger

area of planned open space. The mitigation acreage should be added to the mitigation acreage for the Salt Creek Ranch development and incorporated into their coastal sage scrub mitigation plan (RECON 1991).

To mitigate impacts to coast barrel cactus to below the level of significance, ERCE recommends a strategy of avoidance and preservation. To avoid impacts to as many individuals as possible, the construction corridor could be restricted. The remaining individuals that would be impacted should be preserved via transplantation into open space. A detailed preservation plan should be designed by a qualified biologist/horticulturist, who would assist in site selection, implement a 5-year monitoring plan, and submit regularly scheduled reports to the City of Chula Vista.

To mitigate impacts to Otay tarplant to below the level of significance, ERCE recommends avoidance of the population to greatest extent feasible. The alignment of the roadway should avoid the northernmost portion of the site and the construction corridor should be restricted in this area.

Reservoir/Waterline

To mitigate the loss of 30.7 acres of burned coastal sage scrub to below the level of significance, ERCE recommends a combination of avoidance and habitat enhancement. To avoid impacts to the full 30.7 acres, the construction corridor could be restricted. All remaining impacts would require habitat enhancement of nearby burned coastal sage scrub at a ratio of 1:1. This mitigation acreage should be added to the mitigation acreage for the Salt Creek Ranch development and incorporated into their coastal sage scrub mitigation plan (RECON 1991).

To mitigate impacts to San Diego golden star to below the level of significance, ERCE recommends avoidance of the population to the greatest degree feasible. The alignment should remain in the currently proposed position and the construction corridor should be restricted in the area where the population occurs.

Analysis of Significance

The offsite improvements will incrementally add to the impacts detailed in the Salt Creek Ranch GDP EIR (ERCE 1990). Impacts to coastal sage scrub are cumulatively significant

and remain partially mitigated through preservation and restoration. Sensitive placement of the alignment and constriction of construction corridors will significantly reduce potential impacts to habitats and sensitive species through avoidance. If a large population of San Diego coast barrel cactus cannot be avoided, a mitigation program to include relocation should be initiated.

3.10.2 Landform/Aesthetics

Existing Conditions

Hunte Parkway

This 46-acre parcel is located offsite along the Salt Creek Drainage immediately south of the project site. The parcel is almost completely surrounded by agricultural lands, with graded lands to the south (EastLake). The topography on this parcel is characterized by gently rolling hills with an average elevation of 600 feet.

East "H" Street

This 7.3 acre parcel is located between Salt Creek 1 and Salt Creek Ranch on the Rancho San Miguel project site. The area is currently disturbed by grading. The topography is characterized by rolling hills increasing in elevation to the north.

Waterline/Reservoir

This 111-acre parcel is located adjacent to and north of Salt Creek Ranch. The offsite area is undisturbed and characterized by steep hills. Elevations range from approximately 900 feet in the southern portion of the site to 1450 feet in the north central portion of the site.

Impacts

Hunte Parkway

The Hunte Parkway parcel would accommodate the ultimate Hunte Parkway improvements and would contain the proposed alignment of Salt Creek Interceptor sewerline.

The Salt Creek Ranch GDP classifies Hunte Parkway as a four lane major arterial and scenic highway. Although no specific offsite road alignment information is available at this time, the Salt Creek Interceptor would follow the alignment of Hunte Parkway, and temporarily tie into the Otay Valley prison line. Ultimately, sewage flows would be collected and treated at the future Otay Ranch Water Reclamation Facility.

The area of impact for construction of the interceptor is approximately 140 feet. Due to associated grading, temporary short-term land form and visual impacts may occur during the construction of Hunte Parkway and the concurrent installation of the sewerline. Short-term visual impacts are considered adverse yet not significant, due to their limited duration and temporary nature. No significant impacts are anticipated.

East "H" Street

This offsite area would contain a portion of the future alignment of East "H" Street and the Proctor Valley 10-inch sewer line.

The Salt Creek Ranch GDP classifies East "H" Street as a six-lane primary arterial and scenic highway. Although no specific offsite road alignment information is available at this time, the proposed gravity sewer line would follow the alignment of East "H" Street and would tie in with the existing 15-inch gravity line within the Spring Valley Sanitation District. The Spring Valley Sanitation District conveys flow to the Spring Valley outfall.

The area of impact for construction of the interceptor is approximately 170 feet. Due to associated grading, temporary short-term land form and aesthetic impacts may occur during the construction of East "H" Street and the concurrent alignment of the gravity line. Short-term visual impacts are considered adverse yet not significant, due to their limited duration and temporary nature. No significant impacts are anticipated.

Waterline/Reservoir

The project would require one offsite tank for potable water storage. This 111-acre offsite parcel would contain a proposed waterline and reservoir which would be necessary to provide water service to the 1296 pressure zone. The waterline would be underground and would not produce permanent visual impacts, although short-term construction-related

visual impacts would occur. The pad elevation of the reservoir would be approximately 1,270 feet, which is an elevation higher than the project site itself, and would be visible from most of the surrounding area. Since this area is already impacted with views of the two existing 5 million gallon reservoirs located approximately 2500 feet to the west of the proposed reservoir, the addition of the proposed tank would not be as significant as if the ridgeline were currently undeveloped. This potentially significant impact can be mitigated by the combination of landscaping the site and painting the tank an unobtrusive color.

Mitigation Measures

Hunte Parkway

Final alignment of the roadway and the interceptor will be subject to review and approval by the City. Any potential visual impacts would be short-term and construction-related, and would be considered nuisance-level impacts. No mitigation is necessary.

East "H" Street

Final alignment of the roadway and the sewer line will be subject to review and approval by the City. Any potential visual impacts would be short-term and construction-related, and would be considered nuisance-level impacts. No mitigation is necessary.

Waterline/Reservoir

Visual impacts associated with the construction of the waterline are short-term, and would be considered nuisance-level impacts. No mitigation is necessary.

Potentially significant impacts associated with the water storage tank can be mitigated to below a level of significance by the following mitigation measures.

- Landscaping shall be planted around the tank to shield views of the tank.
- The water tank shall be painted an unobtrusive color.

Analysis of Significance

Short-term visual impacts associated with the construction of the roadways and pipelines are considered adverse yet insignificant.

Visual impacts associated with the water reservoir are considered significant. Implementation of the above measures will mitigate impacts to below a level of significance.

3.10.3 Cultural Resources

A confidential cultural resource review and testing program of three offsite parcels for the Salt Creek Ranch development was conducted by ERCE in January and August 1991. The review/ program included a records and literature search, survey and testing program to identify areas of cultural resource sensitivity within the parcels. The results are summarized below.

Existing Conditions

Results of Records and Literature Search

An archaeological literature review, site records search, and historic map check were conducted for three parcels for the Salt Creek Ranch development of the Hunte Parkway, East "H" Street, and a water reservoir/water line. The archaeological literature review and site records check included a thorough examination of pertinent record data from the South Coastal Information Center at San Diego State University and the San Diego Museum of Man. The records search indicated that 77 prehistoric and historic cultural resources are recorded within a 1-mile radius of the 3 parcels and provided an indication of the density of prehistoric human occupation of the area. Prehistoric resources include both Early and Late Period temporary camps and lithic scatters, and Late Period bedrock milling stations; the focus of occupation appears to be the Early Period. Historic sites include historic house locations older than 50 years before present. The search of early maps indicated that no historic structures exist within the three parcels.

The review of previous surveys indicated that the East "H" Street parcel has been surveyed for cultural resources, and that the single cultural resource located within this parcel (CA-

SDi-4,530/W-643) was tested and determined to qualify as important pursuant to CEQA (Davis and Hector 1989). CA-SDi-4,530/W-643 is a large Early Period habitation site. The Hunte Parkway parcel was surveyed for cultural resources in 1980 (APC 1980) with negative results. Due to visibility constraints at the time the survey was conducted, the survey was inadequate to identify the presence of cultural resources within the Hunte Parkway parcel.

The northern portion of the water reservoir/water line parcel was surveyed for cultural resources by Ritz and Bull (1990), who identified three cultural resources (CA-SDi-11,403/ W-4,207 Locus E; CA-SDi-11,403/W-4,207 Locus F; and CA-SDi-11,415/W-4,220 Loci A–D). Sites CA-SDi-11,403/W-4,207 Locus E and CA-SDi-11,403/W-4,207 Locus F are lithic scatters and quarries. CA-SDi-11,415/W-4,220 Loci A–D refers to a series of cultural resource loci including a rock pile, a bedrock milling slick, and a light lithic scatter. The lower portion of the water reservoir/water line parcel was not previously surveyed for cultural resources.

Results of ERCE's Survey

Field surveys of the Hunte Parkway parcel, the unsurveyed southern portion of the water reservoir/water line parcel and a resurvey of the northern portion of the water reservoir/water line parcel were conducted as part of the present evaluation. Within the Hunte Parkway parcel, three cultural resources (CA-SDi-12,037, CA-SDi-12,038, and CA-SDi-12,039) were identified as small prehistoric temporary camps, and one isolate consisting of two large metavolcanic secondary flakes was also located (I-314).

Twelve cultural resource sites (CA-SDi-11,403 Locus F, CA-SDi-11,403 Locus G, CA-SDi-11,415A-D, CA-SDi-12,030, CA-SDi-12,031, CA-SDi-12,032, CA-SDi-12,033, CA-SDi-12,034, CA-SDi-12,035, CA-SDi-12,036, CA-SDi-12,260 and CA-SDi-12,261) and four isolated artifacts (SC-I-1, SC-I-2, SC-I-3, and SC-I-4) were located in the water reservoir/water line parcel. Nine of the sites are lithic scatters or small temporary camps, two are bedrock milling stations with associated habitation debris, and one is a quarry.

Results of ERCE's Testing

The cultural resources within the Hunte Parkway parcel and the water reservoir/water line parcel were tested and evaluated pursuant to CEQA guidelines. Testing was conducted at

12 sites (CA-SDi-11,403 Locus F, CA-SDi-11,415, CA-SDi-12,030, CA-SDi-12,031, CA-SDi-12,032, CA-SDi-12,033, CA-SDi-12,034, CA-SDi-12,035, CA-SDi-12,036, CA-SDi-12,037, CA-SDi-12,038, and CA-SDi-12,039). Sites CA-SDi-12,260, CA-SDi-12,261, CA-SDi-11,403 Locus E, and CA-SDi-11,403 Locus G) were not tested or evaluated at this time. Locus CA-SDi-11,403 Locus E was determined to be outside the potential impact area, while sites CA-SDi-12,260, CA-SDi-12,261, and CA-SDi-11,403 Locus G were not tested because they were located during the final stage of survey. Testing indicated that sites CA-SDi-11,403 Locus F, CA-SDi-11,415, CA-SDi-12,031, CA-SDi-12,032, CA-SDi-12,034, CA-SDi-12,035, and CA-SDi-12,03 qualify as important cultural resources pursuant to CEQA criteria and sites CA-SDi-12,030, CA-SDi-12,033, CA-SDi-12,036, CA-SDi-12,037, and CA-SDi-12,039 do not qualify as important cultural resources.

Full descriptions of these sites and the results of testing are provided in the Cultural Resources Technical Reports prepared for the Salt Creek Ranch SPA EIR. This report contains confidential and sensitive information and is therefore not attached to this EIR. It is available for review by qualified persons at the City of Chula Vista Planning Department.

Summary

In summary, the East "H" Street parcel contains a single cultural resource, CA-SDi-4,530/W-643, which has been tested and determined important under CEQA. The offsite Hunte Parkway parcel contains three cultural resource sites (CA-SDi-12,037, CA-SDi-12,038, and CA-SDi-12,039) and a single isolate (I-314). All of these resources have been evaluated for importance under CEQA.

The offsite water reservoir/water line parcel contains seven cultural resources (CA-SDi-12,030, CA-SDi-12,031, CA-SDi-12,032, CA-SDi-12,033, CA-SDi-12,034, CA-SDi-12,035, and CA-SDi-12,036) that were identified during the present investigation in the southern (water line only) section of the parcel and six cultural resources (CA-SDi-11,403/W-4,207 Locus E, CA-SDi-11,403/W-4,207 Locus F, CA-SDi11/403/W-4,207 Locus 6, CA-SDi-11,415/W-4,220 Loci A–D, CA-SDi-12,260, and CA-sdi-12,261) and four isolated artifacts (SC-I-1, SC-I-2, SC-I-3, and SC-I-4)) that were identified during an earlier survey of the northern portion of the parcel. One of the cultural resources within the off-site water reservoir/water line parcel (CA-SDi-11,403 Locus E) was determined to be outside the potential impact area, three cultural resources were not tested (CA-SDi-12,260,

CA-SDi-12,261, and CA-SDi-11,403 Locus G), and nine cultural resources were tested and evaluated under CEQA (CA-SDi-11,403 Locus F, CA-SDi-11,415, CA-SDi-12,030, CA-SDi-12,031, CA-SDi-12,032, CA-SDi-12,033, CA-SDi-12,034, CA-SDi-12,035, and CA-SDi-12,036).

Impacts

Three types of impacts may result from proposed development: direct, indirect and cumulative. Direct impacts are those associated with construction and development activities. Indirect impacts are those associated with increased access to an area in which cultural resources exist, and include staging areas and increased public access. Each type is addressed below.

Hunte Parkway

Impacts to the Hunte Parkway parcel include the construction of Hunte Parkway and a proposed sewer interceptor line. Both developments are proposed along approximately the same alignment. Impacts relating to the proposed interceptor line are anticipated along a 100-foot wide pipeline construction corridor and grading and fill impacts related to Hunte Parkway are anticipated to be restricted to a 134-foot wide corridor. Construction of both the proposed interceptor line and Hunte Parkway will affect portions of CA-SDi-12,037, CA-SDi-12,038, and CA-SDi-12,039 and Isolate I-314.

East "H" Street

A 10-inch pipeline and a segment of East "H" Street are proposed for the East "H" Street parcel. Trenching and clearing as necessary is anticipated along the 100-foot wide pipeline construction corridor proposed along the northern side of this parcel. Impacts related to the construction of East "H" Street are anticipated to be restricted to a 170-foot wide corridor along the existing Proctor Valley Road alignment and include grading and fill operations. Construction of both the 10-inch pipeline and proposed East "H" Street segment will affect portions of site CA-SDi-4,530/W-643, which has been tested and determined to be important pursuant to CEQA criteria.

Water Reservoir/Water Line

Impacts to the offsite water reservoir/water line parcel include trenching and grading along a 100-foot wide corridor and construction of a water-storage facility. Both direct and indirect impacts of equipment staging and access may affect cultural resources CA-SDi-11,403 Locus F, CA-SDi-11,403 Locus G, CA-SDi-11,415, CA-SDi-12,030, CA-SDi-12,031, CA-SDi-12,032, CA-SDi-12,033, CA-SDi-12,034, CA-SDi-12,035, CA-SDi-12,036, CA-SDi-12,260, and CA-SDi-12,261. Locus E of site CA-SDi-11,403 is beyond the potential impact area and will not be effected by project development as it is currently planned.

Mitigation Measures

The California Environmental Quality Act (CEQA) require mitigation of impacts to important cultural resources. Sites CA-SDi-11,403 Locus F, CA-SDI-11,415, CA-SDi-12,031, CA-SDi-12,032, CA-SDi-12,034, and CA-SDi-12,035 within the water reservoir/water line parcel and CA-SDi-12,038 within the Hunte Parkway parcel were determined to qualify as important cultural resources by testing pursuant to CEQA, and mitigation of impacts to these cultural resources is required. Site CA-SDi-4,530/W-643 within the "H" Street parcel has been previously tested and determined important under CEQA, and mitigation measures are necessary to address impacts to that site. Site CA-SDi-4,530/W-643 also falls within the Bonita-Miguel Archaeological District which requires evaluation under federal criteria.

Sites CA-SDi-12,030, CA-SDi-12,033, CA-SDi-12,036, CA-SDi-12,037, and CA-SDi-12,039 and isolates I-314, SC-I-1, SC-I-2, SC-I-3, and SC-I-4 were determined to not qualify as important cultural resources, and therefore no additional archaeological work for these resources is necessary. Cultural resources CA-SDi-12,260, CA-SDi-12,261 and CA-SDi-11,403 Locus G were not tested or evaluated at this time. Evaluation for determination of importance under CEQA through a cultural resource testing program is necessary at these sites.

Mitigation of impacts to important cultural resources can be achieved through either avoidance or by conducting a data recovery program. Avoidance could include capping sites with 2 feet of fill or redesign of project components. Recommended mitigation measures include the following:

If avoidance of archaeological resources cannot be achieved, a data recovery program to mitigate development impacts to important cultural resource sites shall be conducted, including, where necessary, surface collection and mapping of artifacts, a phased data recovery program, and monitoring during facility or other construction. This phased approach shall employ a random sample in conjunction with a focused inventory for features (e.g., hearths). The data recovery program shall be in accordance with a regional approach for all prehistoric sites within Salt Creek Ranch, Salt Creek I and EastLake III, thereby allowing a comprehensive understanding for these sites. This regional program is in agreement with the Bonita-Miguel Archaeological District.

The data recovery program shall follow the Advisory Council's guidelines as defined within Treatment of Archaeological Properties, A Handbook (ACHP 1980). The treatment plan shall be oriented to address local and regional research questions and clearly identify the methods to be used to address the research questions. Research questions to be should be addressed are provided in ERCE's June 1989 Salt Creek Ranch Cultural Resource Evaluation, on file at the City of Chula Vista Planning Department.

Analysis of Significance

Implementation of the above mitigation measures will mitigate potential project and cumulative cultural resource impacts to below the level of significance.

SECTION 4
REQUIRED CEQA SECTIONS

4.1 CUMULATIVE IMPACTS SUMMARY

The following discussion is a summary of the project-related impacts which may be significant on a cumulative basis, i.e., when combined with other existing, approved, and reasonably foreseeable future projects. A more detailed impacts analysis for each issue is included in Section 3 of this EIR; the reader is referred to the appropriate subsection for the complete analysis.

Projects planned or proposed near the Salt Creek Ranch site (Figure 4-1) are:

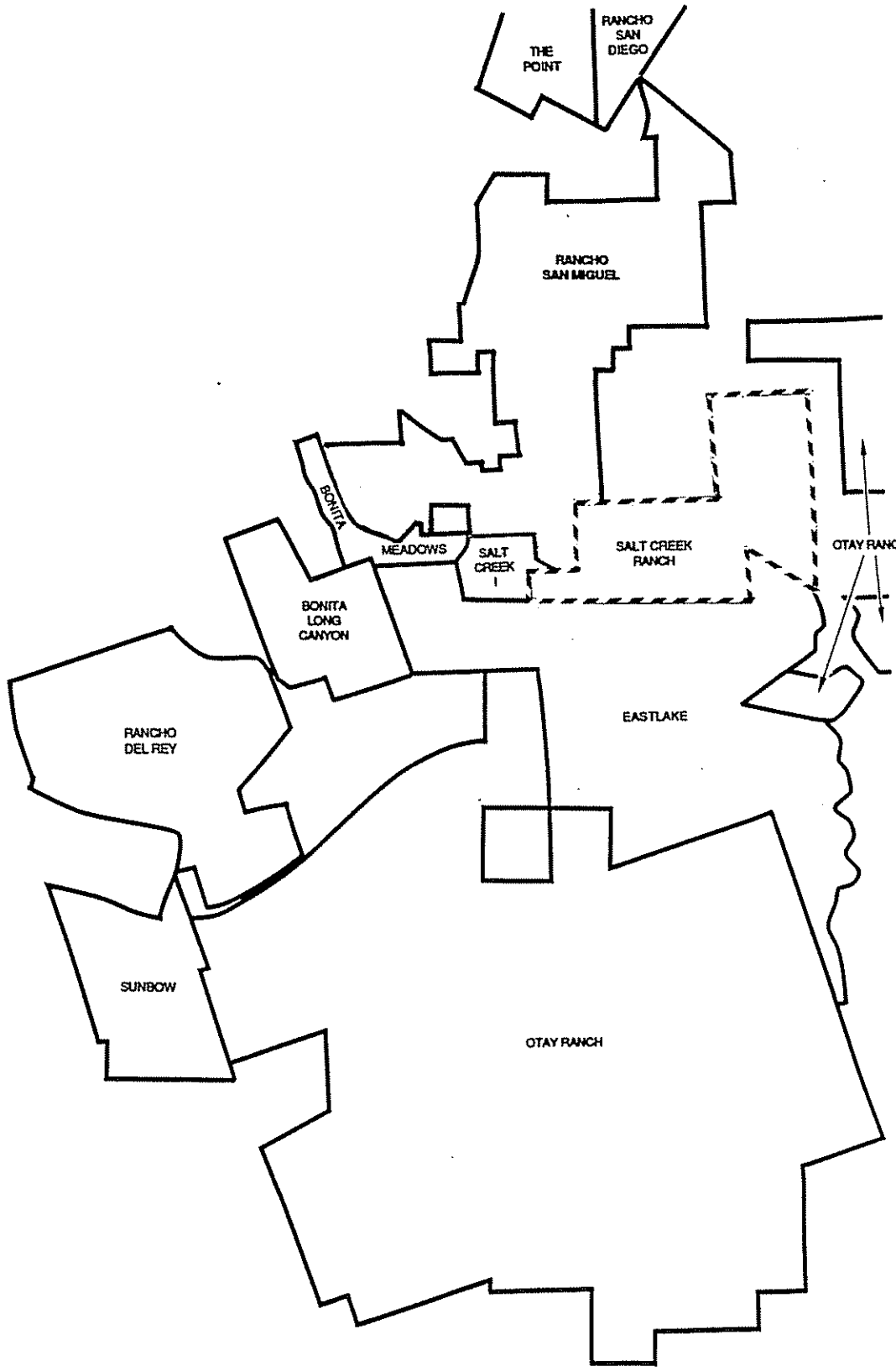
- The Pointe
- Ranch San Miguel
- Salt Creek I
- Otay Ranch
- EastLake Planned Community
- Rancho del Rey Development
- Sunbow Planned Community
- Bonita Long Canyon
- Bonita Meadows
- Eastlake 1 SPA Plan Amendment and Kaiser Hospital

Land Use

The project, in conjunction with other projects, would convert open space and rural land in the Eastern Territories to low-density urban land uses.

Landform and Aesthetics

The project in conjunction with other development in the area would result in urbanization of an existing natural area. Visual resources and views would be permanently changed. Project grading and development would contribute to an unavoidable, unmitigable adverse cumulative impact on the area's visual quality. Grading would be substantial at all of the project sites, and landform would be considerably altered.



ERCE

Projects Located Near the Salt Creek Ranch

FIGURE 4-1

- At Rancho del Rey, implementation of the grading plan will entail cutting most of the ridge areas onsite and filling in the lower elevations, including many of the finger canyons. A total of 9,500,000 cubic yards of cut and fill will be required. Cut slopes will range from 40 to 100 feet in height, and manufactured slopes will be visible from a variety of nearby areas.

- At Sunbow, grading will result in substantial modification of the existing terrain. The topography will change from rolling hills to generally flat graded pads. Virtually all views over the site and to the east will be blocked by landscaping and structures.

- The EastLake development will alter the original topography of the project site and the appearance of the surrounding landscape. Considerable grading will be conducted, including cut slopes of up to 70 feet in height, the leveling of several hills, and the filling of several interior drainages.

- Rancho San Miguel (not yet approved) proposes substantial mass grading of the southwest hills of Mother Miguel Mountain.

Development of all of these projects will add to significant night-sky illumination impacts occurring in the San Diego region.

Hydrology/Water Quality

Development of the project site, in conjunction with other projects in the area, would increase the amount of impervious surfaces, decrease ground water replenishment, aggravate existing downstream drainage and flooding problems, and contribute to water quality degradation downstream and in the Upper Otay Reservoir. As a condition of the Salt Creek Ranch development, engineering and design features would be required that water quality in the Otay reservoirs is maintained.

Water Supply

Development of the project site, in combination with other projects in the area, would contribute to cumulative impacts to the regional water supply. The cumulative impacts are

unavoidable and unmitigable, as the state is currently unable to meet its existing water needs due to drought conditions which have persisted for this past 5 years.

Biological Resources

The project's resulting loss of habitat and impact on various sensitive species would contribute to a cumulative impact on biological resources in the region in conjunction with ongoing development in the area.

Despite mitigation measures taken to preserve biological resources in each of the project areas, the cumulative impact of these developments on sensitive species and habitats is adverse and significant. The projects will significantly reduce the amount of certain sensitive habitats such as wetlands, San Diegan coastal sage scrub, and non-native grasslands; lead to significant impacts to numerous state and federally listed sensitive plants; impinge upon regionally significant wildlife corridors; and eliminate some of the best California gnatcatcher habitat identified.

- The EastLake project will destroy some freshwater marsh and riparian habitat, rendering the area less attractive for least Bell's vireo, yellow warbler, and two-striped garter snakes.

- The Sunbow project will significantly affect vernal pools, the cactus wren, Otay tarplant, and San Diegan sage scrub.

- The Rancho Del Rey project will have a significant impact on wetlands, riparian, and coastal sage scrub habitats and, consequently, on black-tailed gnatcatcher populations.

- The proposed Rancho San Miguel project would have significant biological impacts including direct impacts to 467 acres of coastal sage scrub, 11 acres of wetlands, six sensitive plants including coast barrel cactus (6,300 individuals) and three sensitive wildlife species including cactus wren, golden eagle, and California gnatcatcher.

Revegetation efforts and offsite habitat preservation programs can offset some of these impacts, but these projects would nevertheless contribute to an incremental cumulative loss of quality biological habitats in the region as a whole.

Transportation and Circulation

The effects of project traffic in combination with ultimate development of the surrounding vicinity, as discussed in Section 3.7, were evaluated in the traffic analysis completed for this project. The local cumulative impacts were considered in that study, and circulation improvements necessary to accommodate total traffic generation were identified. The improvements which would be required as conditions of project development are indicated in Section 3.7 mitigation measures. The project would contribute to the overall increase of traffic volumes in the City of Chula Vista and the entire San Diego region. Some areas of the circulation system are projected to operate below acceptable levels in the future, due to cumulative traffic generated by development throughout the City. The project would participate in the Eastern Chula Vista Transportation Phasing Plan, and would contribute to transportation improvement necessary to support development onsite and in the area.

4.2 GROWTH INDUCEMENT

Growth-Regulating Documents and Controls

The Salt Creek Ranch GDP was subject to a detailed evaluation of growth inducing impacts. Growth inducing considerations are critical in the CEQA process at initial project approvals because those first approvals (i.e., General Plan and Zoning) provide for future, subsequent entitlement and project implementation. In other words, the decision to convert the land has been made once an urban general plan land use designation is established. It is appropriate and necessary to evaluate in depth the growth inducement at that stage of planning. Residential land uses on the project site were included in the July 1989 adopted City of Chula Vista General Plan (GP) and analyzed in the GP EIR 88-2 and EIR 89-3, thereby incorporating the concept of residential use on the project site (see Land Use Section 3.1). The Growth Inducing Impacts section of the General Plan Update EIR 88-2 and EIR 89-3 are hereby incorporated by reference, serving to document the long-term growth inducing impacts of site development at the general plan level and in previous environmental documentation.

The County of San Diego Regional Land Use Element and Map (August 1984) contains several goals regarding urban growth. The thrust of these goals is to manage urban growth so that balanced communities are planned appropriately with facilities and urban levels of service. The Land Use Element also states that future urban growth should be located contiguous to existing urban areas while the rural character of nonurban lands should be retained (County of San Diego 1984:11-2).

The City of Chula Vista recently finalized a comprehensive Growth Management Program to manage future growth within the jurisdiction (City of Chula Vista 1991). The primary focus of the program is the area east of I-805 where most of the remaining vacant land is located. The intent of the program is to direct growth in and around the city in an orderly fashion, to avoid leapfrog development, and to protect and preserve the city's amenities. The Growth Management Program implements the Growth Management Element of the General Plan, and provides a more specific approach to the direction of growth. The city's policy is intended to promote incremental growth, but to remain flexible to allow consideration of topographic, economic, social, and other factors relative to new development when necessary. Provision of public facilities concurrent with growth is considered an important guide, as is the idea of urban in-filling as opposed to "leapfrog" development. Preservation of open space and greenbelts by methods such as dedication of land, purchasing of development rights, clustering, and zoning practices is recommended as part of growth management in Chula Vista.

The population in the Eastern Territories is expected to increase by approximately 50,000 individuals at buildout of the General Plan. Growth may be restricted through 1994 in portions of the Eastern Territories due to the water allocation policy of the Otay Water District (OWD). The OWD policy limits the number of permits that can be obtained throughout the district to 700 to 1,000 dwelling units per year. By 1994–95 it is expected that new pipelines will be completed and new terminal water storage facilities will be available (City of Chula Vista 1991).

Proposed Project Potential Growth Inducing Characteristics

The proposed project consists primarily of residential uses, and recreational and public facilities. Land to the north, east and northwest of the site is largely undeveloped. The closest major development is the EastLake Business Park to the southwest. The development of the Salt Creek Ranch SPA Plan calls for a maximum of 2,817 dwelling

units resulting in approximately 7,606 residents (based on SANDAG's 2.7 residents/unit used for population projections).

In assessing growth inducement, a major factor is the potential growth inducing effects of new services and facilities (required of a project) on the surrounding area if it is undeveloped. The project and resulting population would require infrastructure improvements, and extensions of facilities to provide urban levels of service including water, sewer, educational facilities, circulation/roads, law enforcement and fire protection. The development plans for Salt Creek Ranch call for the construction of residences, two elementary schools, fire station, and additional public and private recreational facilities. The extension of utilities and services to the property, and the presence of a school, recreational facilities and urban levels of police and fire protection could encourage or accelerate growth of adjacent undeveloped areas. Roadways (i.e., Hunte Parkway and East "H" Street) are proposed to be extended through the project site to the north and east, respectively. Therefore, growth inducement must be further analyzed.

The proposed project incorporates some of the city's growth management measures. The public facilities are planned to be provided concurrently with need. As required under the City's growth management policies, the proponent has committed to provision and construction of public facilities on a schedule dictated in concept by the city threshold standards, and established in detail by the project's Public Facilities Financing Program and Development Agreement. Section 2.4 herein describes the conceptual project phasing. The project is participating in the Eastern Chula Vista Transportation Phasing Plan (ECVPP), which dictates the area's roadway improvements based on identified cumulative growth and need (refer to Section 3.7). The proposed elementary school will serve project students, and will be constructed in accordance with a schedule based on both the project development schedule and school district needs. A fire station site will be located onsite. An open space and park system is proposed. An onsite circulation system, including pedestrian, bicycle and equestrian trails connecting various portions of the community, is also planned. All of these project components are to be coordinated with the city's growth management policies.

Even in consideration of the above, implementation of the proposed Salt Creek Ranch SPA Plan could have secondary growth inducing impacts on undeveloped land in the project vicinity. This impact would not effect whether or not adjacent properties are designated for urban uses, but could effect the timing and character of development of urban designated

land. For example, approval of the project and associated extension of Hunte Parkway and other utilities and improvements may encourage any potential urban designated adjacent developments to occur sooner than would otherwise take place without the Salt Creek Ranch project. Also, the project's character could effect adjacent projects' design.

Properties to the south and west consist of the EastLake Community neighborhoods which are already planned; property to the north consists of the Mother Miguel Mountain designated open space and Otay Water District property; land to the east lies within the County Jamul Mountains area. Also, the Otay Ranch property lies to the east, northeast and southeast. The Salt Creek Ranch project could potentially influence the timing and design of potential development to the north and east, constituting a secondary effect.

Annexation of the project site would not induce growth that has not previously been planned for, as the majority of the site is a part of the city's sphere of influence and has been included in planning and development forecasting by the City of Chula Vista. Annexation may encourage development to occur more rapidly as result of the provision of public services (as described above) that are more readily available within the City boundaries. Primary growth inducement as a result of annexation and the subsequent extension of services would not occur.

4.3 The Relationship Between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

The proposed use of the project site environment would involve the elimination of agricultural land uses and the development of a permanent, residential urban community. While agricultural opportunities would thereby be precluded, the project's acreage does not represent a project-specific significant impact to potential resources. The project would result in an increased housing stock for the City of Chula Vista and in a net gain of public use funds. This development would, however, have certain other long-term effects on the environment. These long-term, cumulative effects are summarized in Section 4.1.

The project is assessed by community planning efforts of the City of Chula Vista which, on a comprehensive basis dictated in the General Plan and other regulating documents, strive for a balance in community land uses, enhancement of the long-term productivity of the City and region, as well as maintenance and conservation of valuable resources. The city

by adoption of the General Plan Update in July 1989, approved in concept (general plan designations) residential and open space uses on the project site. If the proposed SPA Plan is approved by the city, this project will be found in conformance with those long-term goals.

SECTION 5
ALTERNATIVES TO THE PROJECT

The California Environmental Quality Act (CEQA) requires that an EIR include a discussion of reasonable project alternatives, including a no project alternative. This discussion must describe a range of reasonable alternatives to the proposed project, or to its location, which could feasibly attain the basic objectives of the project, and evaluate the comparative merits of the alternatives. This discussion must focus on alternatives "capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance" (CEQA Guidelines, Section 15126(d)(3)). This supplemental EIR has analyzed potential impacts of the proposed Salt Creek Ranch SPA Plan and related discretionary actions. The EIR prepared in 1990 for the Salt Creek Ranch GDP examined several alternatives: 1) intensive agricultural use; 2) reduced residential acreage alternative; 3) design alternative A; and 4) alternative site analysis. The alternatives section of Final EIR 89-3 is herein incorporated by reference. Design alternative A was resubmitted to the City as the revised General Development Plan in response to comments from the United States Fish and Wildlife Service and the City of Chula Vista, and to partially mitigate environmental impacts identified in Final EIR 89-3. The revised GDP (previously design alternative A) proposed a mix of land uses similar to the original GDP, with refinements in land use acreages and reconfiguration of residential development and open space to conserve sensitive biological resources. The revised GDP further identified specific locations for public facilities and institutional uses which were not identified in the original GDP. Pages R-2 through R-8 of Final EIR 89-3 are herein incorporated by reference.

This EIR examines a total of three onsite alternatives to the proposed project: 1) the no project alternative, 2) first iteration of Salt Creek Ranch SPA Plan, and 3) Final SPA Plan Design alternative. These alternatives, in combination with previously explored alternatives (discussed above), have been reviewed to identify potential project alternatives which could reduce to a level below significance the impacts identified in this SEIR. However, Alternative 2 would result in impacts greater than the proposed project for reasons discussed below.

5.1 NO PROJECT ALTERNATIVE

Under the no project alternative, the site would remain in its present open space and agricultural condition and no development would occur. In addition, the site would remain as unincorporated county land instead of being annexed to the City of Chula Vista.

The no project alternative would not require the discretionary actions related to the project as proposed, including the annexation and prezoning of county land into the City of Chula Vista and adoption of the SPA. This alternative would not be consistent with the General Plan, which designates residential and open space uses onsite. No agricultural land use impacts, land use compatibility impacts or aesthetic impacts would occur under this project alternative.

Several roads currently proposed for the area would not be constructed under a no project alternative. This would not be a significant impact, however, because the project-related ADT would not be generated. Cumulative traffic impacts in the area would be reduced under this alternative. There would also be no need for the extension of public transit routes under a no project alternative.

Similar to public transit, no extension of public services or utilities to the site would be necessary with implementation of a no project alternative, although improvements to onsite water facilities may still be necessary if surrounding lands are developed. Sewer improvements in the area could be delayed until surrounding lands are developed, as could the extension of natural gas and electrical lines and the construction of additional fire stations or branch libraries.

The no project alternative would reduce the number of public parks and schools in the project vicinity. The loss of potential parks and schools would not be significant because the proposed parks and school would primarily be used by future residents of the Salt Creek Ranch residential neighborhoods. Recreational trails (i.e., bicycle, equestrian) onsite would not be created.

The site would remain as it is with no disturbance to subsurface soils or geologic features. Also, the site would maintain its present drainage pattern, with no change in the amounts or quality of existing runoff. Erosion would continue to occur at its present rate due to continued agricultural activity on the site. Biological resource impacts of the project

identified in this EIR and EIR 89-3 would essentially be eliminated; natural habitat and sensitive species could remain unimpacted if no future development was permitted. Cultural and paleontological resources would also not be impacted.

Noise impacts would be greatly reduced by the no project alternative. Noise levels on the site would be reduced from levels forecasted for the project at proposed buildout.

In summary, many impacts associated with the project would be reduced or eliminated under the no project alternative. However, the no project alternative does not support the goals and objectives of the Chula Vista General Plan, which anticipates residential/ recreational and public facilities' development on the project site.

5.2 First Iteration of Salt Creek Ranch SPA Plan

The Salt Creek Ranch design and SPA document reflect numerous changes provided through extensive City involvement with the applicant and the applicant's consultants throughout the preparation of the SPA Plan. The project applicant submitted the first version of the Salt Creek Ranch SPA Plan to the City of Chula Vista in December 1990. The SPA Plan submitted in March 1991, which is the proposed project addressed in this EIR, incorporated changes recommended by city staff after reviewing the first SPA Plan submittal. Revisions included changes to the internal circulation system, ridgeline development design, and residential clustering.

The first iteration of the Salt Creek Ranch SPA Plan, herein referred to as the First SPA Plan, is analyzed in this section as an alternative to the proposed project. The Site Utilization Plan for the First SPA Plan is shown in Figure 5-1. The total number of dwelling units (2,817) are the same as the proposed project, however, the number of dwelling units within each neighborhood are slightly redistributed (Table 5-1). The First SPA Plan proposes 20.9 acres more for residential development than the proposed project. The residential density for both designs is the same at 3.6 dwelling units per acre. Open space acreage is 16.3 acres less with the First SPA Plan design, although the total grading amount is the same with both designs. Public facilities acreage is 4.3 acres less with the First SPA Plan.

The Salt Creek Ranch design is defined by sixteen neighborhoods within three sub-areas as illustrated in Figure 5-1. The purpose of reconfiguring residential neighborhoods under the

proposed project was to encourage residential clustering in order to maintain consistency with the sub-area concept. This was accomplished by increasing development within areas designated for higher density uses, and decreasing development in areas designated for lower density uses.

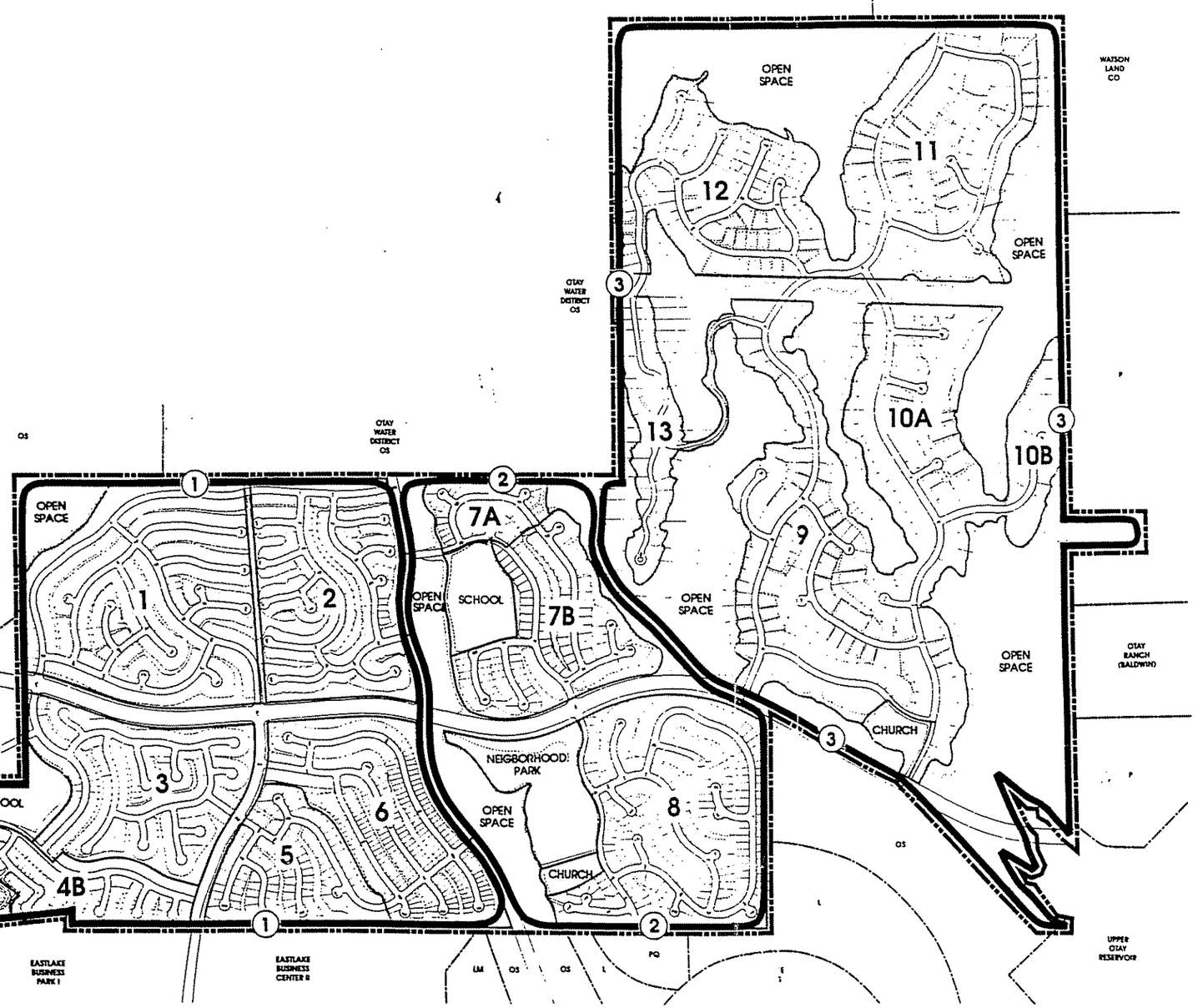
Sub-Area One is essentially the same under the First SPA Plan as for the proposed project, although the number of dwelling units is 60 units less with the First SPA Plan. Sub-Area One is designated by both designs for higher density development. Under the First SPA Plan, the number of dwelling units and acres to be developed are greater for Sub-Areas Two and Three than the proposed project designated for these areas, although these neighborhoods are envisioned by both designs for lower density development. Also, with the First SPA Plan, open space acreage for Sub-Areas Two and Three is less than that designated by the proposed project.

While residential clustering is a consideration under the First SPA Plan, the proposed project further encourages this concept by reconfiguring the residential neighborhoods to increase the number of dwelling units in Sub-Area One, decrease the number of dwelling units in Sub-Areas Two and Three, and increase open space acreage in Sub-Areas Two and Three. Therefore, the First SPA Plan does not meet the residential clustering objectives of the Chula Vista General Plan, and the impacts are slightly greater than the proposed project.

Land use compatibility impacts are slightly greater with the First SPA Plan design. The buffer area between the EastLake Business Park and the multi-family residential area in Sub-Area One is 10 feet less than the proposed project.

Visual impacts due to ridgeline development are slightly greater with the First SPA Plan design, especially in neighborhood 13. The lot layout for neighborhood 13 does not allow for visual breaks in the skyline of the ridge which would provide views into the open space area to the northwest of the project. The proposed project incorporates visual breaks in this area, and as such, the visual impacts are reduced.

Traffic and circulation impacts are greater with the First SPA Plan design, especially in neighborhoods One and Two. The internal road rework under the First SPA Plan is such that a more direct route from East H Street to Hunte Parkway North was provided through neighborhoods One and Two, along residential and open space uses. This would encourage motorists to travel through the neighborhoods in an effort to reduce travel times,



NOT TO SCALE

LEGEND

(2)	SUB AREAS
	NEIGHBORHOOD BOUNDARIES
4A	NEIGHBOORHOOD DESIGNATION
	SITE PLAN
SCHOOL	LAND USE

SOURCE: FORMA 1990

ERCE

First Iteration of Salt Creek Ranch SPA Plan

FIGURE 5-1

Table 5-1

COMPARISON OF DWELLING UNIT AND ACREAGE DISTRIBUTION

Land Use	First SPA Plan			Proposed Project		
	Number of Dwelling Units	Gross Acres	Dwelling Units Per Acre	Number of Dwelling Units	Gross Acres	Dwelling Units Per Acre
Sub-Area One						
Neighborhood 1	378	87.4	4.3	385	87.4	4.4
Neighborhood 2	275	63.9	4.2	250	63.9	3.9
Neighborhood 3	257	58.0	4.6	287	56.0	4.1
Neighborhood 4a	300	13.8	22.0	428	27.7	15.5
Neighborhood 4b	175	33.8	5.2	95	19.9	4.8
Neighborhood 5	210	35.0	6.0	211	24.4	8.6
Neighborhood 6	314	54.7	7.3	313	65.3	4.8
Subtotal	**1,909**	**346.6**	**5.5[1]**	**1,969**	**344.6**	**5.7[1]**
Sub-Area Two						
Neighborhood 7a	57	11.8	4.0	58	12.7	4.6
Neighborhood 7b	137	46.9	2.9	120	40.8	2.9
Neighborhood 8	272	81.4	3.3	233	81.4	2.9
Subtotal	**466**	**140.1**	**3.3[1]**	**411**	**134.9**	**3.0**
Sub-Area Three						
Neighborhood 9	146	88.5	1.7	141	87.7	1.6
Neighborhood 10a	63	53.1	1.2	56	40.9	1.4
Neighborhood 10b	16	17.7	0.9	16	17.7	0.9
Neighborhood 11	83	71.8	1.3	84	72.8	1.2
Neighborhood 12	98	54.3	1.8	97	53.8	1.8
Neighborhood 13	37	21.9	1.8	43	20.7	2.0
Subtotal	**443**	**307.3**	**1.4[1]**	**437**	**293.6**	**1.5[1]**
Total Residential	**2,817**	**794.0**	**3.6[2]**	**2,817**	**773.1**	**3.6[2]**

Table 5-1 (Continued)

COMPARISON OF DWELLING UNIT AND ACREAGE DISTRIBUTION

Land Use	First SPA Plan			Proposed Project		
	Number of Dwelling Units	Gross Acres	Dwelling Units Per Acre	Number of Dwelling Units	Gross Acres	Dwelling Units Per Acre
Parks/Open Space						
Open Space	N/A	346.7	N/A	N/A	360.8	N/A
Neighborhood Park	N/A	7.0	N/A	N/A	8.0	N/A
Neighborhood Park	N/A	21.5	N/A	N/A	23.0	N/A
Subtotal	**466**	**140.1**	**3.3[1]**	**411**	**134.9**	**3.0**
Public Facilities						
Schools	N/A	20.0	N/A	N/A	24.0	N/A
Fire Station	N/A	1.0	N/A	N/A	1.3	N/A
Community Purpose Facilities	N/A	7.0	N/A	N/A	7.0	N/A
Subtotal		**28.0**			**32.3**	**1.5[1]**
Total Non-Residential		**403.2**			**423.8**	
PROJECT TOTAL	**2,817**	**1197.2**	**2.35**	**2,817**	**1197.2**	**2.35**

(1) Average per neighborhood
(2) Average for all neighborhoods

potentially resulting in speeding through residential neighborhoods. The road network is reconfigured under the proposed project to eliminate this direct route. Also, the use of cul-de-sacs in this area will further serve to reduce traffic flow. Internal circulation for the Salt Creek Ranch project is safer with the proposed project than with the First SPA Plan.

In summary, impacts to land use, visual resources and traffic/circulation are greater with this alternative. Impacts to biological resources, hydrology, water quality, cultural resources, noise, and public services and utilities are the same with both designs.

5.3 Final SPA Plan Design Alternative

The Final SPA Plan design would maintain the same total land use acreage (1,197.2) as the proposed project. However, the amount of acreage allotted for residential, open space and institutional development would be redistributed. The total number of dwelling units (2,662) would be less than the proposed project by 155 dwelling units (Table 5-2). The residential density for both designs is the same at 3.6 dwelling units per acre. Open space acreage is 11.4 acres less with the Final SPA Plan. Public facilities acreage is slightly less than the proposed project by 1.2 acres. The Site Utilization Plan for the Final SPA Plan is shown in Figure 5-2.

The site would be divided into 16 neighborhoods. Each neighborhood would maintain the same physical setting, community facilities and character, as the proposed project except for neighborhoods 4a, 5 and 6 within Sub-Area 1. The overall number of dwelling units developed in Sub-Area 1 is 185 units less for the Final SPA Plan. The number of acres for neighborhood 5 has increased by 10.6 acres with less land (12.3 acres) being developed as townhomes and more land (22.7) developed for single-family homes. This neighborhood would serve as a transition from multi-family to single-family.

The Final SPA Plan would differ from the proposed project by developing neighborhoods 4 and 5 as multi-family neighborhoods instead of clustered neighborhoods. Neighborhood 6 would change from a clustered development to a traditional single-family neighborhood with an average lot size of 6,280 square feet. This neighborhood is enhanced by 7.6 acres of additional open space.

The Final SPA Plan would maintain Sub-Area 2 for lower-density development although the number of dwelling units would increase by 27 units while the amount of residential

Table 5-2

COMPARISON OF DWELLING UNIT AND ACREAGE DISTRIBUTION FOR FINAL SPA PLAN AND PROPOSED PROJECT

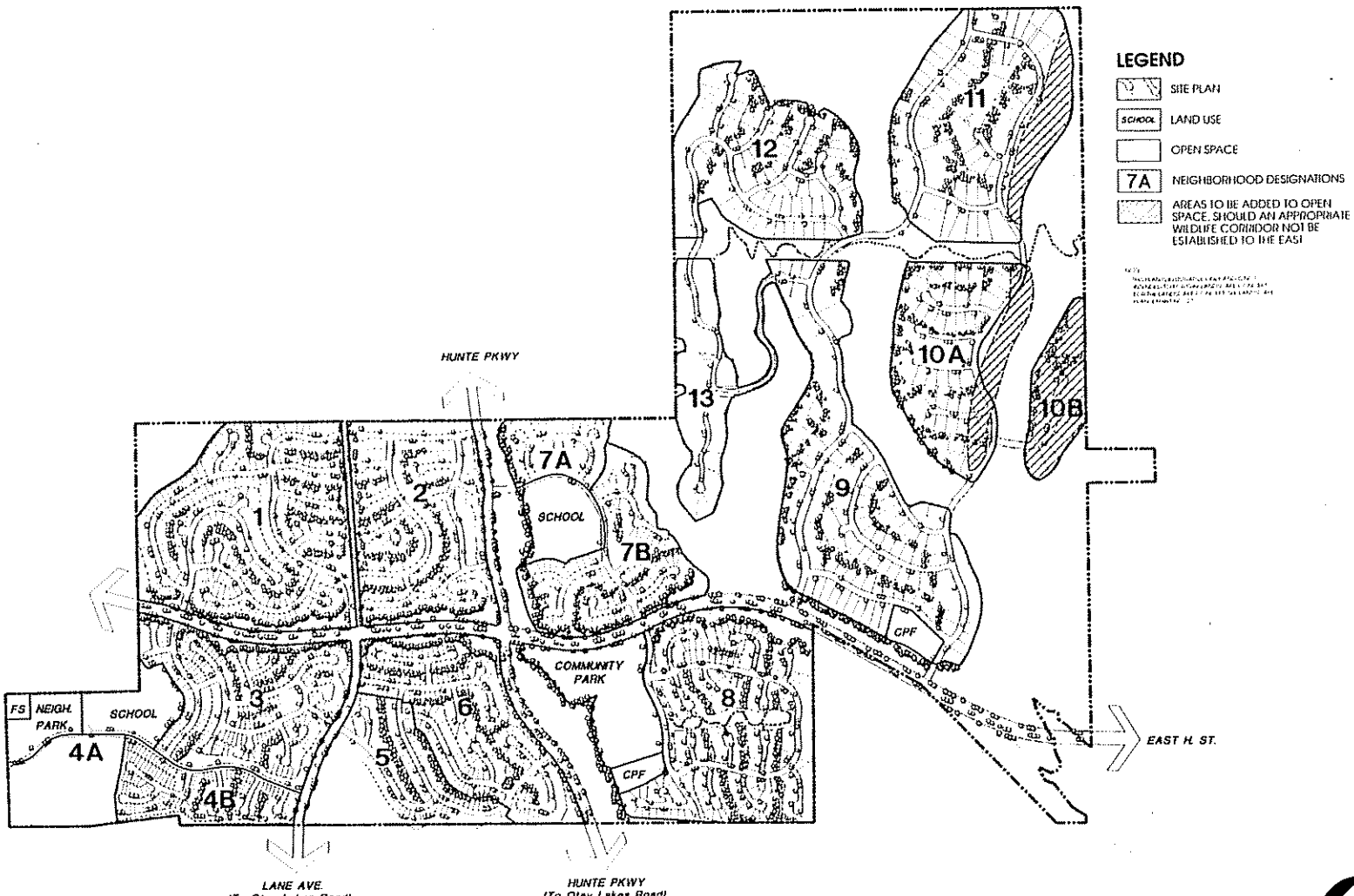
Land Use	Final SPA Plan			Proposed Project		
	Number of Dwelling Units	Gross Acres	Dwelling Units Per Acre	Number of Dwelling Units	Gross Acres	Dwelling Units Per Acre
Sub-Area One						
Neighborhood 1	341	85.5	4.0	385	87.4	4.4
Neighborhood 2	223	58.7	3.8	250	63.9	3.9
Neighborhood 3	263	50.3	5.2	287	56.0	4.1
Neighborhood 4a	390	21.7	17.9	428	27.7	15.5
Neighborhood 4b	134	25.9	5.2	95	19.9	4.8
Neighborhood 5	211	35.0	6.0	211	24.4	8.6
Neighborhood 6	222	49.0	4.5	313	65.3	4.8
Subtotal	**1,784**	**326.1**	**5.7[1]**	**1,969**	**344.6**	**5.7[1]**
Sub-Area Two						
Neighborhood 7a	58	13.1	4.4	58	12.7	4.6
Neighborhood 7b	138	39.6	3.5	120	40.8	2.9
Neighborhood 8	242	76.5	3.2	233	81.4	2.9
Subtotal	**438**	**129.2**	**3.2[1]**	**411**	**134.9**	**3.0**
Sub-Area Three						
Neighborhood 9	143	88.6	1.6	141	87.7	1.6
Neighborhood 10a	56	42.4	1.3	56	40.9	1.4
Neighborhood 10b	16	15.2	1.05	16	17.7	0.9
Neighborhood 11	85	72.7	1.2	84	72.8	1.2
Neighborhood 12	97	55.3	1.8	97	53.8	1.8
Neighborhood 13	43	20.2	2.1	43	20.7	2.0
Subtotal	**440**	**294.4**	**1.5[1]**	**437**	**293.6**	**1.5[1]**
Total Residential	**2,662**	**749.7**	**3.6[2]**	**2,817**	**773.1**	**3.6[2]**

Table 5-2 (Continued)

COMPARISON OF DWELLING UNIT AND ACREAGE DISTRIBUTION FOR FINAL SPA PLAN AND PROPOSED PROJECT

Land Use	Final SPA Plan			Proposed Project		
	Number of Dwelling Units	Gross Acres	Dwelling Units Per Acre	Number of Dwelling Units	Gross Acres	Dwelling Units Per Acre
Parks/Open Space						
Open Space	N/A	351.1	N/A	N/A	360.8	N/A
Neighborhood Park	N/A	7.3	N/A	N/A	8.0	N/A
Neighborhood Park	N/A	22.0[3]	N/A	N/A	23.0	N/A
Subtotal		**380.4**	**3.3[1]**	**411**	**391.8**	**3.0**
Public Facilities						
Schools	N/A	23.1	N/A	N/A	24.0	N/A
Fire Station	N/A	1.0	N/A	N/A	1.3	N/A
Community Purpose Facilities	N/A	7.0	N/A	N/A	7.0	N/A
Subtotal		**31.1**			**32.3**	**1.5[1]**
Major Streets		36.0				
Total Non-Residential		**447.5**			**424.1**	
PROJECT TOTAL	**2,662**	**1197.2**	**2.2**	**2,817**	**1197.2**	**2.35**

(1) Average per neighborhood
(2) Average for all neighborhoods
(3) Designated as community park in Final SPA Plan.



SOURCE: The Baldwin Company, 1991

ERCE

Site Plan for Final SPA Plan

FIGURE 5-2

acreage would decrease by 5.7 acres. Low density cluster neighborhoods of single-family homes would be retained by the Final SPA Plan. However, the lot sizes would be less than the proposed project ranging from a minimum of 7,000 square feet to a maximum of 10,800 square feet. Neighborhood 7b is surrounded by open space on all sides and each cul-de-sac abuts this open space. Neighborhood 8 is proposed to be gated, with an internal open space corridor/trail, accessible from a number of cul-de-sacs and leads to the community park on the west. A widened parkway is proposed on the road which loops through the neighborhood. A wide, open space corridor is provided north along East H Street to provide views of open space from the roadway into the neighborhood.

Development of low-density lots in Sub-Area 3 would be the same as the proposed project. The number of dwellings and acres would increase by 3 dwelling units and 0.8 acres, respectively. The Final SPA Plan proposes several different levels of single-family residential development in Sub-Area 3. In order to minimize grading impacts and maintain existing natural contours and views, flag lots are sited in various areas of the plan, with the number of lots on flags ranging from 1 to 4. Flat lot area minimums are the same as proposed for other lots in Sub-Area 3, with a minimum of twenty (20) feet per access lot proposed for access drive width. Where more than one flag lot is proposed, driveways are widened to 28 feet for guest parking, where possible. Where not feasible, a two-car guest parking area will be reserved on the lot at the time of Tract Map approval. Flag lots proposed within the single-family estate (SFE) designations are designed to enhance the rural character of the neighborhood. Most of the flag lots are surrounded by adjacent natural open space with views to the south and east. All rear lot edges will be contour graded to match adjacent natural slope ratios. The location of rear yard structures will be limited to prevent visual intrusion into the open space. Transitions from natural to ornamental landscaping will be required. These requirements will be established in covenants and enforced by a homeowners association with landscape design review authority.

The overall changes for developable area between the two plans would be 1) a decrease of 5.3 gross acres for Low Density due to landform grading and habitat constraints and 2) a decrease of 18 gross acres for low-medium density, as shown in Table 5-3. These residential acreages also decreased due to the exclusion of major roads. The amount of developable acreages for the medium density category would remain the same as the proposed project, at 47.6 gross acres. The park gross acreage decreased slightly by

Table 5-3
FINAL SPA PLAN VS. PROPOSED PROJECT

Land Use Designation Final SPA Plan and Proposed Project	Gross Acres Final SPA Plan vs Proposed Project		Total D.U.s Final SPA Plan vs Proposed Project		D.U.s/Gross Acre Final SPA Plan vs Proposed Project	
Residential						
R-L	410.5	415.8	820.0	790.0	1.9	1.9
R-LM	256.6	274.5	1107.0	1258.0	4.3	4.5
R-LM*	35.0	35.2	211.0	236.0	6.0[1]	4.8 to 8.6[2]
R-M	47.6	47.6	524.0	523.0[3]	11.0[4]	11.0[5]
Open Space						
Neighborhood						
Park[(2)]	29.3	31.0[6]	72	N/A	N/A	N/A
Open Space	351.1	360.8	35	N/A	N/A	N/A
Institutional						
Community Purpose[(2)]						
Facility Sites	7.0	7.0	N/A	N/A	N/A	N/A
Public Schools[(2)]	23.1	24.0	N/A	N/A	N/A	N/A
Fire Station[(1)]	1.0	1.3	N/A	N/A	N/A	N/A
Project Total	1,197.2	1,197.2	2662.0	2817.0	2.2	2.4

* LM use at the highest allowable density of LM category.

1. The LM* area for the Final SPA Plan contains 100 single-family units. The single-family portion is at 4.4. Townhouse area within this LM* is at 9.25 dwelling units per acre. The maximum gross density permitted within LM* of 6 du/ac is not exceeded (11/12/91).
2. The LM* area for the proposed project contains 35 single-family units. The single-family portion is at 4.8. Town house area (Neighborhood 5) is at 8.6. When clustering is utilized, maximum density of M category (11) may be utilized.
3. 95 dwelling units actually laid out as single-family detached lots in the M area in Neighborhood 4b.
4. Single-family portion within M area is at 5.2 and apartment area is at 17.9. maximum gross density within M category of 11 du/ac is not exceeded (11/12/91).
5. Single-family portion within M area is at 4.8 and apartment area is at 15.5. When clustering is utilized, maximum density of M category (11) may be utilized.
6. Increased due to site topography.

Source: FORMA, 1991.

1.7 gross acres and the amount of gross acreage for the school site also decreased by 0.9 acres.

Land Use

The land use pattern for the Final SPA Plan incorporates the same similar graduated density concept with the highest density located within the western portion of the site and decreasing densities progressing east across the site. The plan would provide two transitional zones. The western edge would provide a transition from the adjacent multi-family development in Salt Creek I to townhomes and single-family units in the project site. The southern edge would transition from business uses located south in the EastLake Business Park to townhomes and small lot single-family units within the site, which then transitions to traditional single-family homes.

Land use conflicts associated with the placement of residential uses adjacent to the EastLake Business Park would be the same as the proposed project. However, the Final SPA Plan would provide for greater buffer zone areas, further reducing land use compatibility impacts. The slope proposed between the transitional area would vary in height from 5 to 39 feet, instead of 10 to 39 feet in the proposed project. The width between the multi- and single-family homes would be greater than the proposed project since it would vary from a minimum of 30 feet in the multi-family area and 60 feet in the single-family area, to a maximum of 170 feet at its widest in the single-family area.

The proposed pedestrian/bike trail linking the school and park site would change to a recreational trail maintaining the same configuration and width of 10 feet as the proposed project. The pedestrian trail proposed within the 120-foot wide San Diego Gas and Electric (SDG&E) easement in Sub-Area 3 would be retained by the Final SPA Plan. The residential and recreation trail uses may not be compatible with the SDG&E high voltage transmission lines, and would result in a significant impact, as identified under the proposed project. Measures prescribed under the proposed project would be the same for the Final SPA Plan.

The project applicant would be required to develop an affordable housing program for this Final SPA Plan as required by the City of Chula Vista General Plan. The applicant has pursued negotiations with the City of Chula Vista concerning the inclusion of affordable

housing within the adjacent Salt Creek I project. This would allow the provision of affordable housing within Salt Creek Ranch for the Salt Creek I project.

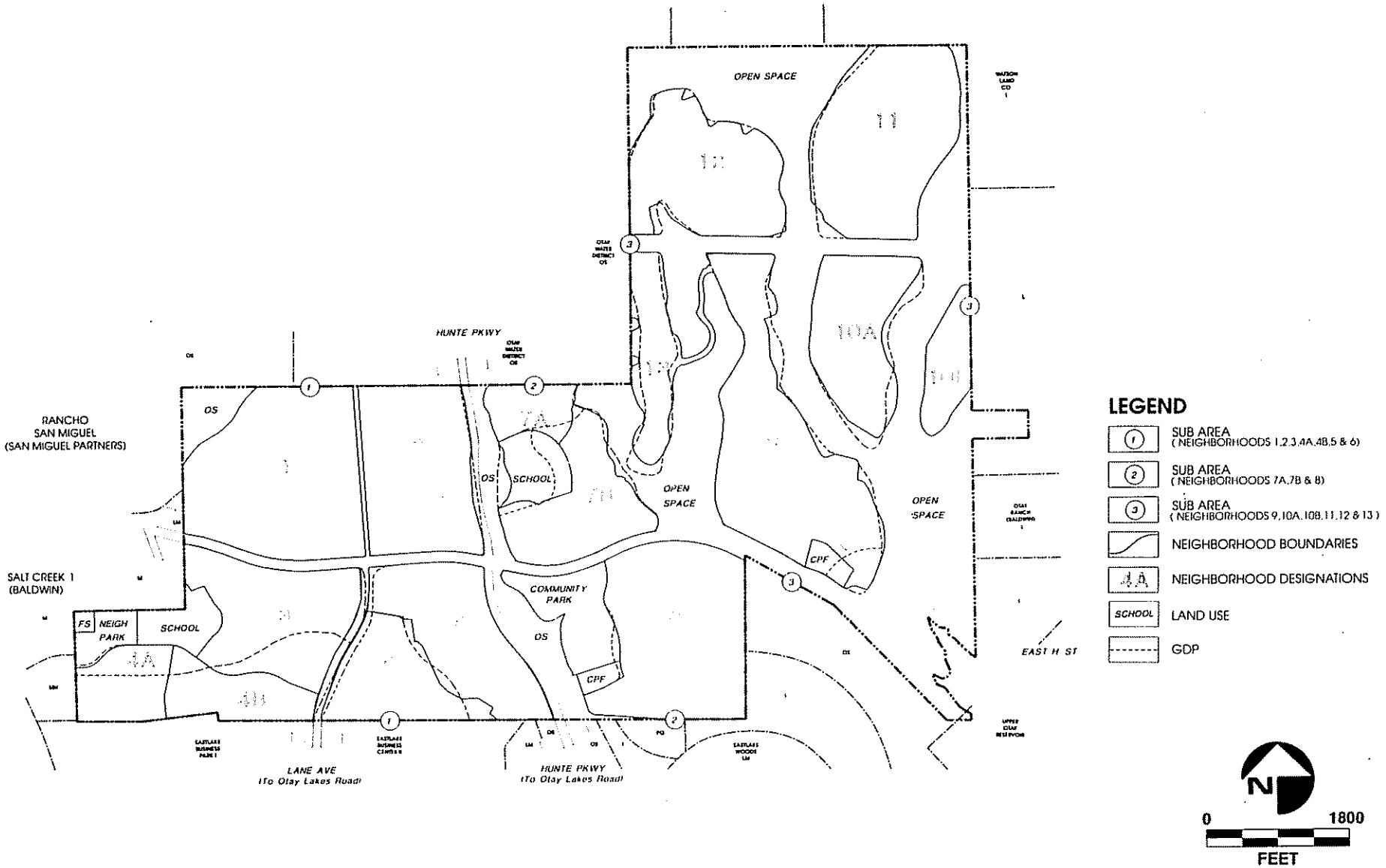
The project under the Final SPA Plan, would be required to provide the amount and type of affordable housing as determined by the 1991 Housing Element revision to be adopted by the City Council. The affordable housing program issue is considered a significant impact for both plans until the program is approved. The Final SPA Plan would follow the same principals outlined under the mitigation section for the proposed project.

Neighborhood development areas for both the Final SPA Plan and the proposed project would be generally consistent with the development boundaries of the approved GDP. Reconfiguration of the GDP boundary for neighborhoods 1 through 8, under the Final SPA plan, would be similar to the proposed project (Figure 5-3).

Grading boundary inconsistencies with the GDP boundaries occur within Sub-Area 3 of the Final SPA plan, similar to the proposed project (Figure 5-4). The number of lots (6) which encroach out of the GDP boundary in neighborhood 9 are similar to the proposed project. Two lots in the northeast edge encroach into the open space area by 60 to 90 feet, which is more than the area encroached by the proposed project.

Encroachment conditions in neighborhood 10 are the same as the proposed project. A small grading encroachment into open space would occur along the southeast edge where the road connects to neighborhood 10b. The northern portion of this area is also pulled back from the GDP development boundary by 70 feet, similar to the proposed project. The GDP boundaries for neighborhood 11 and 12 are not followed as closely in the Final SPA Plan as they are in the proposed project. Minimal grading and small lot encroachments occur outside of the GDP boundary due to required road location, combined with the need to contour grade with variable ratios to match existing adjacent grades.

Along the western and eastern edge of neighborhood 13, 41 lots encroach across the GDP line, which is 12 lots more than the proposed project. Encroachment by lots outside of the GDP area is 1.98 acres. A total of 4.0 acres of open space would be provided within the GDP area to offset the encroachment of the lots over the GDP boundary. This would result in a net gain of 2.82 acres of ungraded open space within the GDP boundary.

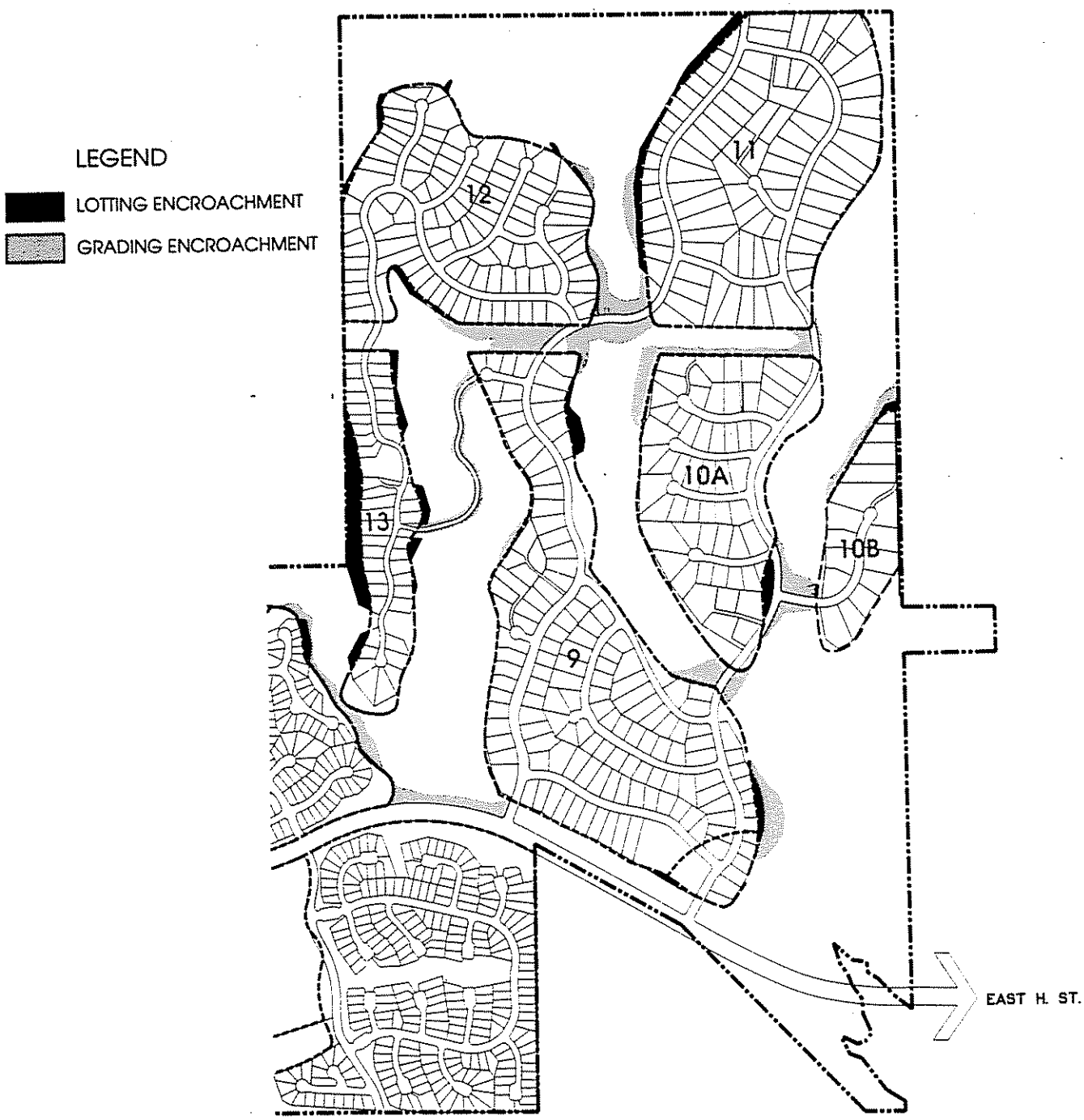


SOURCE: The Baldwin Company, 1991

ERCE

GDP Boundary Comparison for Final SPA Plan

FIGURE
5-3



SOURCE: The Baldwin Company, 1991

ERCE

GDP Encroachment Areas for Final SPA Plan

FIGURE 5-4

Landform/Aesthetics

Landform. Grading in Sub-Area 1 would be less than the proposed project with 3,325,000 cubic yards of cut and 3,115,000 cubic yards of fill instead of 3,350,000 cubic yards of cut and 3,185,000 cubic yards of fill that would occur under the proposed project. Estimated shrinkage for Sub-Area 1 under the Final SPA Plan would be 210,000 cubic yards (Figure 5-5).

Grading in Sub-Area 2 under the Final SPA Plan would be greater than the proposed project with 1,835,000 cubic yards of cut and 1,905,000 cubic yards of fill instead of 1,425,000 cubic yards of cut and 1,355,000 cubic yards of fill. Estimated shrinkage would be the same (70,000 cubic yards) as the proposed project.

Grading for Sub-Area 3 under the Final SPA Plan would also be greater than the proposed project with 2,480,000 cubic yards of cut and 2,246,000 cubic yards of fill instead of 1,985,000 cubic yards of cut and 1,885,000 cubic yards of fill. Estimated shrinkage under the Final SPA Plan would be 374,000 cubic yards.

Aesthetics: Visual impacts would be reduced due to less intense development of the site proposed for the Final SPA Plan. Sub-Area 1 would be composed of single-family planned development areas with low–medium density lots, similar to the proposed project. However the southwest portion of Sub-Area 1 would include both single- and multi-family dwellings, as well as clustering of multi-family and townhome dwelling units along the southern edge. This lot configuration is proposed for Sub-Area 2 instead of Sub-Area 1 under the proposed project.

Clustering of residential development would continue to occur within Sub-Area 2 for the Final SPA Plan. The plan would however, provide an open space corridor between neighborhoods 7a and 7b. The plan would also provide a widened parkway area east of the school; and vertical separations between "sub-neighborhoods."

Sub-Area 3 would be developed as a low-density/large lot area under the Final SPA Plan as in the proposed project. The emphasis in this area is to continue providing views into the natural undisturbed open spaces, and orientation towards the hills and lakes, instead of equestrian trails.

LEGEND

- SUB AREA "1": TOTAL CUT 3,325,000 CYDS; TOTAL FILL 3,115,000 CYDS; 210,000 CYDS (EST. SHRINKAGE)
- SUB AREA "2": TOTAL CUT 1,835,000 CYDS; TOTAL FILL 1,905,000 CYDS; 70,000 CYDS (EST. SHRINKAGE)
- SUB AREA "3": TOTAL CUT 2,480,000 CYDS; TOTAL FILL 2,246,000 CYDS; 234,000 CYDS (EST. SHRINKAGE)
- TOTAL: TOTAL CUT 7,640,000 CYDS; TOTAL FILL 7,266,000 CYDS; 374,000 CYDS (EST. SHRINKAGE)
- SUB AREA BOUNDARY LINE
- UNGRADED AREA

N

0 1800

FEET

SOURCE: The Baldwin Company, 1991

ERCE

Cut and Fill Map for Final SPA Plan

FIGURE 5-5

Visual impacts to residents located to the south and southwest would be slightly less than the proposed project because fewer dwelling units would be built under the Final SPA Plan. Views from Greenbelt users would also result in fewer visual impacts. However, measures to reduce significant visual impacts associated with the reservoir would still be required for this alternative plan. Mitigation measures will include implementation of the measures discussed in Section 3.2.

The Final SPA Plan would incorporate a similar community design, landscaping, walls and fences as the proposed project. Material used for project edges and internal walls would be different; they would be constructed of colored slump stone instead of masonry blocks. A tubular steel fence would be used instead of a wrought iron fence. Plexiglass would still be used. Fencing for the equestrian trail would be constructed of lodgepole pine instead of a wood-like rail/fence system. The landscaping measures and wall plans would slightly differ from the proposed project, however either plan would minimize view obstruction and enhance views to open space areas.

Hydrology

Impacts to Basin A (Otay Lake) under the Final SPA Plan would be the same as the proposed project since site development would decrease the basin area from the existing 1,415 acres in the natural landform to 1,400 acres after development. The 50-year storm runoff rate would be decreased from existing conditions to approximately 89.5 CFS. This decrease would occur due to the creation of flatter grades and longer reaches with the Final SPA Plan design.

Developed conditions of the site under both plans would slightly rearrange the drainage area for Basin B from 609 acres to 612.1 acres. The increase in flow volume (908.5 CFS) however, would be reduced by 11.1 CFS with the Final SPA Plan. This is an increase of approximately 1 percent over existing conditions (899.9 CFS) and therefore impacts to Basin A's 50-year flow would not be significant under the Final SPA Plan. The Final SPA Plan would also drain developed sites via storm drain systems to outlet points adjacent to Salt Creek.

Impacts to Basin C_1 (Telegraph Canyon) would be similar to the proposed project since both plans would alter the same amount of acreage and increase site runoff by 310.9 CFS. Construction of storm drain facilities within future Lane Avenue would not occur under the

Final SPA Plan. Basin C_2 has 17.9 acres and a runoff rate of 33.5 CFS for a 50-year storm. The Final SPA Plan would decrease the drainage basin to 15.6 acres and slightly decrease storm runoff rates to 33.3 CFS. These conditions are the same for the proposed project. No impacts to the downstream drainage system is expected.

Development of Area D_1 of Basin D (Proctor Valley) would result in a 50-year storm runoff of 335.5 CFS, similar to the proposed project. Both plans would require construction of a 60-inch RCP storm drain to carry flows from an inlet at the northeasterly corner of Salt Creek I project to an outlet point west of the site. The Final SPA Plan design would decrease the 50-year runoff rate of Basin D_2 to 90 CFS and increase the runoff rate of Basin D_3 to 34.1 CFS, similar to the proposed project.

The drainage plan designed for the proposed project to mitigate hydrological impacts would be the same for the Final SPA Plan since alterations to the affected drainage basins and changes to 50-year runoff rates are similar under both designs.

Water Quality

Development of the Final SPA Plan would result in similar water quality impacts as the proposed project. These significant impacts consist of construction-related effects, long-term impacts due to increased sediment yield, and reduction in runoff quality related to urban runoff.

Long-term erosion impacts would be similar due to the removal of native vegetation and topsoil, creation of manufactured slopes and expected increase in onsite runoff. The temporary diversion system discussed for the proposed project (Section 3.4) would be applicable to the Final SPA Plan, except for the inclusion of a modified wet pond which would not be part of the temporary system under the Final SPA Plan.

Biological Resources

The Final SPA Plan's limits of grading would extend beyond the GDP limits in some areas. In other areas, however, the plan's limits of grading would be confined further inside the GDP limits. A total of 23.8 acres would be graded outside the GDP's limits of grading boundary and a total of 31.5 acres within the GDP boundary would not be graded at all. This would result in a net decrease of graded area of 7.7 acres. The Final SPA Plan

would grade slightly more area (.86 acres) outside the GDP limits of grading boundary and 7.15 acres of land more than the proposed project which would not be graded within the GDP's boundary. This would result in slightly less impacts to biological resources than the proposed project, since more open space area within the GDP boundary would be retained.

As stated in the proposed project (Section 3.5) the loss of wetland habitat is considered a significant impact which requires replacement at a 2:1 mitigation ratio. The loss of 1.88 acres of wetland habitat would be replaced by 3.76 acres of new wetland habitat. Actual riparian restoration proposed by the Habitat Enhancement Plan is 7.56 acres (plus or minus depending on final grading and road configuration) which is 3.8 acres above the minimum mitigation required.

Approximately 48 acres of manufactured slope areas would be restored in the Final SPA Plan, to coastal sage scrub using topsoil stockpile/replacement techniques combined with hydroseed applications and container plantings of locally native coastal sage species.

Cultural Resources

Impacts to important cultural resources would be similar to the proposed project since the Final SPA Plan would develop the same area as the proposed project.

Differences between the Final SPA Plan and the proposed project include the decrease of dwelling units, routing of roadways and in the limits of grading. Potential impacts to cultural resources would occur under the Final SPA Plan design. Mitigation measures discussed for the proposed project (Section 3.6) would be applicable to this plan.

Transportation and Circulation

The proposed circulation system for the Final SPA Plan would be similar to the proposed project except for changes to access from neighborhood 2 to Hunte Parkway. This reconfiguration provides a through access from the cul-de-sac in neighborhood 2 to line up with the loop road which wraps around the proposed school site in neighborhood 7. The northernmost access road will be closed and the area north of the 4-way intersection will be shown as a separate lot for dedication to the City of Chula Vista or the Otay Water District. If this area is not accepted for dedication within 5 years, it will then become a part of the

Salt Creek Open Space Corridor. The roadway will only be built to the 4-way intersection, north of this will be left as natural open space. This reconfiguration will be made in these neighborhoods at the Tentative Map stage.

A private road system is proposed in neighborhoods 8, 12 and 13, and a modified road section is also proposed in a portion of 10 of the Salt Creek Ranch project. Because of the hilly terrain and sensitive landforms, the intent is to provide limited, yet safe access. This is consistent with the need to minimize grading and related development impacts in these areas. Neighborhoods 8, 12 and 13 are proposed as communities with gated access only, so streets will be maintained by a Homeowner's Association. In neighborhood 8, the loop street cross-section is widened by 2 feet, providing a parkway and the cul-de-sac width is narrowed by 9 feet. In neighborhood 12, the standard residential road cross-section is proposed even though the street is private. In neighborhood 13, the local street width is decreased by 4 feet and the cul-de-sacs by 16 feet. In neighborhood 10a, the cross-section is modified to eliminate the landscaped strip on the northern edge and the sidewalk narrowed to 3 feet because of a downslope condition of these two single-loaded streets. This design will eliminate the need for the Open Space Maintenance District to maintain that small strip, yet retain the existing local street paved width. Neighborhoods 4A and 5 which contain multiple family dwelling units will also have private street systems as determined at the time of Site Plan review.

The Final SPA Plan would result in slightly less traffic impacts than the proposed project since 2,662 dwelling units would be built as compared to 2,817 units with the proposed project.

Improvements called forth in the proposed project would still be required for the Final SPA Plan. All mitigation measures discussed in Section 3.9 would be applicable to the Final SPA Plan.

Noise

Since fewer vehicle trips (due to the decrease in dwelling units) would be generated by the Final SPA Plan, project residents would be exposed to slightly lower noise levels than the proposed project. However, the amount of traffic generated by development of the 2,662 dwelling units would still warrant mitigation measures discussed for the proposed project to reduce noise impacts to below levels of significance (Section 3.8).

Public Services and Utilities

Water. Information regarding water supply and distribution was obtained from the Master Plan of Water for Salt Creek Ranch prepared by Wilson Engineering in October 1991 (Appendix G).

Development of the site under the Final SPA Plan would require less water consumption than the proposed project. Overall water consumption for the Final SPA Plan would be 1,484,951 gpd which is 234,719 gpd less than the proposed project. Estimated water consumption for 980 Zone would be 1,382,408 gpd which is 253,094 gpd less than the proposed project and water consumption for 1296 Zone would be 102,543 gpd. More water (18,375 gdp) would be consumed in the 1296 Zone than the proposed project.

Required water facilities to serve the Salt Creek Ranch discussed under the proposed project would be applicable to the Final SPA Plan. These facilities would adequately serve the project's maximum daily water demand of 2,268 gpm for the 980 Zone.

Water facilities designed to serve the 1296 Zone under the proposed project would be similar for the Final SPA Plan. Construction of the 1296 Zone pump station would serve the projected maximum daily demand of 116 gpm for Salt Creek Ranch. As with the proposed project, the Final SPA Plan design wil require a new 3.0-million gallon reservoir to serve the 1296 Zone.

Under the Final SPA Plan the required volume of emergency storage has increased from 7.7 million gallons to 14.3 mg.

Water Conservation. An analysis of cost versus benefit was performed to determine water conservation measures that should be incorporated into the planning and design of the Salt Creek Ranch project. Because the project consists of primarily residential development, the emphasis of the discussion is on urban water control devices. The Water Conservation Plan for Salt Creek Ranch, prepared by Wilson Engineering in October 1991, analyzes the feasibility of several water conservation devices for the project (Appendix G). Several indoor and outdoor measures were discussed and analyzed. Water conservation devices produce additional benefits such as reduced sewage volume and energy savings.

Of the indoor and outdoor measures discussed, the following water conservation measures will be utilized:

- Ultra low flow toilets
- Ultra low flow showerheads
- Faucet aerators
- Water conservation guide
- Drought-resistant plants in common landscaped areas
- Efficient irrigation systems such as soil moisture sensors or drip irrigation

Reclaimed Water. The estimated average reclaimed water demand under the Final SPA Plan would be 274,890 gallons per day (gpd) which is 86,751 gpd more than the amount required by the proposed project.

The Otay Water District owns and operates the 1.2 mgd Jamacha Wastewater Reclamation Facility which fills the storage ponds. This facility is currently being upgraded to provide tertiary treatment. An expansion capability study was prepared which stated that the plant could initially be expanded to 2.6 mgd and ultimately to 4.5 mgd. The future Otay Valley Reclamation plant is scheduled to have an ultimate capacity of 14.0 mgd with an initial 6.0 mgd phase by 1997. It is anticipated that initial reclaimed water service will be from Otay Water District and future services from the Otay Valley facilities.

Measures discussed for the proposed project to deliver reclaimed water to the site would be similar for the Final SPA Plan. Additionally, the Final SPA Plan would include an 8-inch line loop along the western and southern property boundary to irrigate common areas and manufactured slopes within the high-density residential areas.

Waste Water. Based on 2,662 units, the total average daily flow projected for the Final SPA Plan would be 780,910 gpd which is 7,850 gpd less flow than the proposed project. Table 5-4 shows the project sewage flow by drainage basin under the Final SPA Plan. As indicated in the proposed project, this increased flow could be accommodated without impact provided that required facilities are financed and implemented in a timely manner.

Table 5-4

SALT CREEK RANCH SEWAGE FLOWS BY BASIN FOR THE FINAL SPA PLAN

Drainage Basin	Estimated Number of Units[1]	Average Flow (gpd)[2]
Proctor Valley	831	243,345
Telegraph Canyon	746	208,880
Salt Creek	680	211,785
Otay Lake	405	116,900
TOTAL	**2,662**	**780,910**

(1) These estimates are based on the preliminary grading plan for the Salt Creek Ranch property and may increase or decrease through final planning.

(2) gpd: gallons per day

The sewage master plan prepared for the Final SPA Plan by Wilson Engineering (Appendix G) describes the sewage facilities needed to serve the project site if developed according to the Final SPA Plan. The plan also determines offsite facilities required to convey flows from Salt Creek Ranch. It indicates that the Salt Creek Basin Sewer System would be designed to include a fail-safe capacity of 1.2 mgd peak flow from the Jamacha Reclamation Plant, north of the project site.

The onsite collection system designed to serve both the Salt Creek Ranch and offsite tributary areas would include a system ranging from 8- to 18-inch gravity sewer lines, two lift stations and force mains. A permanent lift station is proposed for the Otay Lake Basin to pump sewage westerly to the Salt Creek Basin. The second lift station, located at the southern end of the project, is to be constructed for phasing reasons, so that on an interim basis, sewage from the Salt Creek Basin can be pumped to the Telegraph Canyon Basin and flow down the existing Telegraph Canyon Interceptor. Once the Salt Creek Interceptor is constructed, this pump station can be abandoned and this sewage will flow down the Salt Creek Interceptor.

Proctor Valley Basin

The onsite collection system for the Proctor Valley Basin of Salt Creek Ranch under the Final SPA Plan would convey a flow to the proposed Salt Creek I collection system and to the existing gravity sewer line in Proctor Valley Road. This sewer line ranges in size from 10 to 15 inches and is based on ultimate flows from the entire Proctor Valley Basin. This gravity sewer line ties into the existing 15-inch gravity line within the Spring Valley Sanitation District which conveys flow to the Spring Valley Outfall.

The offsite sewer line sizes for the proposed Proctor Valley Sewer were established in a report entitled "Proctor Valley Basin Gravity Sewer Analysis for the Salt Creek I Project" prepared by Wilson Engineering in January 1991 on file with the City of Chula Vista Planning Department.

Telegraph Canyon Basin

Portions of gravity sewer lines have been sized as 10-inch and 12-inch pipes to handle flows during the interim period when Salt Creek and Otay Lake Basin flows are pumped and conveyed through the Telegraph Canyon Basin Sewer System. It was determined that, during the interim period of time, when flows from the Telegraph Canyon, Salt Creek and Otay Lake Basins flow through the EastLake Business Center Sewer System, one length of existing 12-inch pipe adjacent to Lane Avenue would reach its capacity and require replacement.

The City of Chula Vista is considering the preparation of a study that would establish a fee basis to fund the oversizing caused by pumping Salt Creek and Otay Lake Basin sewage flows into the Telegraph Canyon Interceptor.

Otay Lake Basin

Based upon the preliminary grading plan, flow from approximately 405 onsite units, a church, and 100 offsite units will require pumping. Based on 505 units and a church, the required pumping capacity will be 228 gpm at a total dynamic head of 105 feet. A 10-horsepower lift station and 6-inch force main, 2,800 feet in length will adequately pump this onsite and offsite sewage flow.

Salt Creek Basin

As discussed previously, an interim lift station will pump flows from the Salt Creek and Otay Lake Basins to the Telegraph Canyon Basin. This will involve the pumping of approximately 1,085 onsite units, a school, a park, a church, and 282 units offsite. Based on this expected development, the required pumping capacity will be 581 gpm at a total dynamic head of 110 feet. To handle these onsite and offsite sewage flows, a 25-horsepower lift station and 8-inch force main, 1,800 feet in length, will be required.

Sewage from the Salt Creek Basin will ultimately flow down the proposed Salt Creek Interceptor. This interceptor will deliver sewage flows to the future Otay Ranch Reclamation Plant which is scheduled to begin operation in 1997. This plant will initially have a capacity of 6 mgd with the capability of expanding to 14 mgd in the future.

The total amount of sewage flow generated by the Final SPA Plan would be less than the proposed project. The proposed sewage facilities would be adequate to serve the proposed project under this plan. However, the unresolved issues discussed under the proposed project would be the same for this alternative plan. This is considered to be a potentially significant impact. Measures identified for the proposed project would be applicable to this plan.

Offsite Areas of Impact

The impacts to the three offsite parcels, East "H" Street, Hunte Parkway and the Reservoir/Waterline parcels, will be the same as the proposed project.

In summary, implementation of the Final SPA Plan Alternative would result in reduced impacts to land use, visual resources, biological resources, transportation/circulation, noise and public services/utilities; and, similar impacts to landform alteration, hydrology and cultural resources.

SECTION 6
INVENTORY OF MITIGATION MEASURES

6.1 LAND USE

Implementation of the following mitigation measures would mitigate the potential land use impacts associated with the Salt Creek Ranch project.

With respect to the potential land use compatibility impacts relative to use of the SDG&E easement as a trail shall be mitigated by coordination with SDG&E during all phases of future planning. The applicant shall obtain a written agreement with SDG&E to gain permission to use the easements. The agreement shall discuss relevant issues including permissible uses, maintenance, and liability. This agreement shall be obtained prior to tentative map approval.

To mitigate potential health impacts associated with the proximity of residential and trail uses to the high voltage transmission line, the applicant shall pull houses back away from the easement by a conservative distance (no standards are available) and provide buyers of homes adjacent to the easement with a white paper informing them of the current controversy concerning electromagnetic fields, the applicant should also either move the proposed trail away from the easement or post signs at regular intervals in both English and Spanish alerting trail users of the potential risks.

Consistency with General Plan and Zoning

With respect to the potential impacts associated with provision of affordable housing, the project applicant's affordable housing program shall be subject to review and approval by the Planning Commission concurrent with SPA plan approval.

The program shall be consistent with the following principles:

As determined by the 1991 Housing Element revisions, applicant will continue to explore various methods to devote ten percent (10%) of the Salt Creek Ranch units to affordable housing.

As provided by the Housing Element, the City of Chula Vista shall continue to assist the applicant to fulfill the Housing Element affordable housing policy through the following actions:

- Seek State and Federal subsidies for moderate and low income housing. (Chula Vista Housing Element, Part 2, page 24, 1985).

- Consider the use of density bonuses consistent with State law. (Chula Vista Housing Element, Part 2, page 24, 1985).

- Consider exploration of experimental planning, design and development techniques and standards to reduce the cost of providing affordable housing. (Chula Vista Housing Element, Part 2, 1985).

The applicant will prepare and implement an affirmative fair marketing program (Chula Vista Housing Element, Part 2, 1985), including a marketing plan to attract qualified buyers for non-market rate housing.

Should it become infeasible, impractical or inappropriate to provide affordable housing as determined by the pending Housing Element revisions, the applicant and the City shall consider alternative methods of achieving affordable housing opportunities including, but not limited to the following:

- Land Set Aside: An equitable donation of a building site which could be made available to the County Housing Authority or other non-profit entity to construct affordable housing.

- Off-Site Projects: Construction of an affordable housing project at an off-site location, including consideration of renewal, rehabilitation and preservation projects, and the provision of homeless assistance program.

- In-Lieu Contributions: In-lieu contributions to be used to provide assistance to other identified affordable housing efforts. The contribution shall be evaluated to ensure its adequacy in relation to achieving assistance opportunities commensurate to the level of the original project requirement.

The applicant will actively explore the participation of South County jurisdictions in non-profit housing agencies in the development, ownership and management of affordable housing projects. The applicant will also assist these non-profit efforts to increase their ability to secure additional funding resources to develop quality affordable housing.

6.2 LANDFORM/AESTHETICS

Implementation of the proposed project would result in significant landform impacts to the project site, and visual impacts for both the project site and the project vicinity. In order to mitigate adverse impacts, specific design guidelines have been included within the SPA Plan. Project development will require the implementation of all design guidelines concurrent with the SPA Plan and subject to further review and approval by the Design Review Committee (DRC). The guidelines which are contained within the SPA Plan (Section III, Community Design Guidelines) address grading, landscaping, fencing, signing, and scenic highways. Design guidelines are summarized below:

- Grading: In addition to incorporation of the requirements of the Chula Vista Municipal Code and other applicable city policies, graded areas are to be contoured to blend with natural landform characteristics and minimize disruption of the natural topography. A balance between cut and fill shall be maintained, and all grading and drainage system plans shall be prepared under the direction of a licensed civil engineer. Final grading plans shall be reviewed by the City of Chula Vista Planning Department to determine whether large cut and fill slopes would impact views of open space areas from residences and/or scenic highways, and areas of high sensitivity such as the ridgeline and canyons in Sub-area 3 shall be subject to further review by the DRC.

- Landscape: Plant materials shall be organized to provide buffering, transition, and slope stabilization between land uses and streets, and between development and open space areas. Manufactured slopes adjacent to habitat enhancement areas shall be landscaped with vegetation consistent with the Habitat Enhancement Plan. Landscaping and irrigation standards shall conform with the City of Chula Vista Landscaping Manual.

- Scenic Highways: In accordance with the design guidelines, all homes abutting the scenic highways (East H Street and Hunte Parkway) shall be set back from

the right-of-way a variable distance and landscaping shall be intensified to buffer views of buildings. Any long distance views available from the scenic highway shall be protected, and all signs within the viewshed of the scenic highway shall be subject to further review.

6.3 HYDROLOGY

To ensure that there are no hydrologic impacts, the following measures shall be implemented:

- For Basin A, development drainage shall be routed to road crossing points for outlet into the natural channel flow. Structure types to convey stream flows under access roads would be determined prior to Final Map approval.

- Within Basin B, there are two Salt Creek crossing points, East H Street and a northern access road. The East H Street crossing shall incorporate a suitable drainage structure which will accommodate the proposed trail system. The type and sizing of this drainage system shall be determined prior to Final Map approval. The northern structure shall be determined prior to Final Map approval. Developed areas would be drained via storm drain systems to outlet points adjacent to Salt Creek.

- A low flow pump diversion system will be constructed to transport dry weather flows out of Basin A (Upper Otay Lake Basin) and discharge them into Basin B (Salt Creek Basin). This low flow diversion system will be designed for 120 gpm.

- A storm drain system shall be constructed within future Lane Avenue to convey runoff within Basic C to existing facilities constructed by the EastLake I project. The type of sizing of this system would be determined prior to Final Map approval.

- Drainage facilities and energy dissipators shall be constructed in accordance with the approved hydraulic analysis and shall be in place and functioning prior to completion of the grading operation.

- Development of the subject project and the Eastlake III project, in general, must comply with all applicable regulations established by the United States Environmental Protection Agency (EPA) as set forth in the National Pollutant Discharge Elimination System (NPDES) permit requirements for urban runoff and stormwater discharge.

6.4 WATER QUALITY

- The project shall be subject to review and approval by the State Department of Health Services (DHS). The project shall implement mitigation measures as set by DHS prior to issuance of any grading permit.

- Prior to or concurrent with SPA Plan approval, a diversion ditch plan, or other acceptable plan to handle drainage to the Otay Drainage Basin, shall be prepared and approved by the City of Chula Vista, City of San Diego and DHS. The plan shall analyze the possibility of sewage system failures; effects of increased levels of nutrients salts and pesticides from landscaping and irrigation; and effects of petroleum products from surface street runoff. Additional environmental analysis may be required based on the specific drainage ditch or other plans. Design of these plans shall also consider providing additional capacity for concurrent or future development.

- The project applicant shall conduct an onsite mitigation monitoring program to establish baseline data for runoff from the project site. This monitoring program will be continued until 400 units in the sub-basin have been constructed in the sub-basin.

- The project proponent shall submit a erosion control plan prepared by a registered civil engineer and a registered landscape architect in accordance with City of Chula Vista design standards. The plan shall be approved prior to issuance of grading permits and shall include placement of sandbags, temporary sediment basins, and an erosion control maintenance plan.

- The project proponent shall submit a storm drain plan prepared by a registered civil engineer in accordance with City of Chula Vista design standards. The

plan must be approved prior to the issuance of grading permits and shall include permanent erosion control facilities.

- Development of the subject project and the Eastlake III project, in general, must comply with all applicable regulations established by the United States Environmental Protection Agency (EPA) as set forth in the National Pollutant Discharge Elimination System (NPDES) permit requirements for urban runoff and stormwater discharge.

6.5 Biological Resources

To mitigate additional impacts to 0.2 acre of riparian habitat to below the level of significance, ERCE recommends creation/enhancement of riparian habitat. At a 2:1 ratio, 0.4 acre of riparian habitat should be created or enhanced. This mitigation acreage should be added to the mitigation acreage for the Salt Creek Ranch development and incorporated into the wetland mitigation plan (RECON 1991).

6.6 Cultural Resources

Mitigation of impacts to important cultural resources can be achieved through either avoidance or by conducting a data recovery program. Avoidance could include project redesign, or indexing the content of a site by excavating a small sample then capping the site with 2 feet of fill and incorporating these sites or portions of these sites into the Salt Creek Park system (Chula Vista Greenbelt). Recommended mitigation measures include the following:

- If avoidance of important prehistoric archaeological resources cannot be achieved, a data recovery program to mitigate development impacts shall be conducted, including, where necessary, surface collection and mapping of artifacts, a phased data recovery program, and monitoring. This phased approach shall employ a random sample in conjunction with a focused inventory for features (i.e., hearths). The data recovery program shall be in accordance with a regional approach for all prehistoric sites within Salt Creek Ranch, Salt Creek I and EastLake III, thereby allowing a comprehensive understanding for these sites. This regional understanding would also be in

agreement with the Bonita-Miguel Archaeological District within which CA-SDi-4,530/W-643 falls.

- The data recovery shall follow the Advisory Council's guidelines as defined within Treatment of Archaeological Properties, A Handbook (ACHP 1980). The treatment plan shall be oriented to address local and regional research questions and clearly identify the methods to be used to address the research questions. Research questions to be addressed are listed in ERCE's June 1989 Salt Creek Ranch Cultural Resource Evaluation on file at the City of Chula Vista Planning Department.

- To ensure that potentially important historic archaeological resources assumed to be present at the eight locales listed above are not adversely affected, a program to include monitoring of grading activities with the possibility of data recovery is recommended. This program shall provide for excavation, recording and collection of resources if significant features, such as privies or trash deposits, are located during grading. This program shall include analysis of recovered artifacts in relation to an approved research design and a report of findings.

- Indirect impacts may occur to historic sites located adjacent and exterior to the project boundary (H-11, H-15, H-16, H-17). Fencing of project boundaries and strict avoidance of off-site impacts in these areas should occur. The remaining nine sites (CA-SDi-7,197A, CA-SDi-7,211, CA-SDi-8,206C, CA-SDi-9,169, CA-SDi-7,977, CA-SDi-11,045, CA-SDi-11,046, CA-SDi-11,626, and H-9) are identified as not important and, as such, need not be addressed in this document.

6.7 TRANSPORTATION AND CIRCULATION

Major improvements to the surrounding roadway networks have been identified to mitigate the traffic impact of this project and other approved projects in the area and to improve existing operational conditions as well. Improvements necessary for the 1995 Base Conditions were discussed previously and are not a part of this project. Improvements necessary as a result of implementation of the Salt Creek Ranch SPA Plan include:

Scenario 1A (with Phase 1 and Procter Valley Road Unpaved)

1. The project applicant will construct East "H" Street through the project to ultimate four-lane major street standards, consistent with the City of Chula Vista design criteria.

2. The project applicant will construct Hunte Parkway to ultimate four-lane major street standards through the project and offsite south to Telegraph Canyon Road, consistent with the City of Chula Vista design criteria.

3. The project applicant will construct Lane Avenue as a Class II collector from East "H" Street to meet existing improvements at its current terminals in the East Lake Business Park, consistent with the City of Chula Vista's design criteria.

4. At the discretion of the City Traffic Engineer, the project applicant will install traffic signals or bond for future installation at the following intersections:

   - East "H" Street/Lane Avenue
   - East "H" Street/Hunte Parkway
   - Lane Avenue/Telegraph Canyon Road
   - Hunte Parkway/Telegraph Canyon Road

5. The project applicant will implement transportation demand management strategies, including provisions of transit service and bus stops in order to reduce the peak hour demand on the street network.

6. Reduce the development potential of Phase 1 by 120 dwelling units. This reduction will result in an acceptable level of service (LOS D) of the intersection of East "H" Street and Hidden Vista Drive.

7. The project applicant will construct a two-lane roadway between Salt Creek 1 and Salt Creek Ranch to connect East "H" Street.

Scenario 2 (with Phase I, II, and III and State Route 125)

1. The project applicant will implement all the measures described under Scenario 1 previously.

2. The project applicant will construct State Route 125 as a four-lane roadway between East "H" Street and State Route 54 with enhanced geometrics at the intersections.

6.8 NOISE

Stamina 2.0 was used to evaluate the effectiveness of a noise barrier to mitigate the exterior noise levels for residences that will be located along East "H" Street in the project area. Under buildout conditions these residences will be significantly impacted by noise levels in excess of the 65 dBA L_{dn} standard.

The noise impact on the residences along these roadway segments shall be mitigated by the placement of a solid wall or a wall/berm combination on the building pads at the top of the slopes adjacent to East "H" Street. The walls must be of solid masonry construction with a material weight of at least 3.5 pounds per square foot which would not allow any air spaces along their entire length.

Each noise wall or wall/berm combination shall be placed on the building pads at the top of the slope between the residences and the roadway and shall be 5 feet high. The end of each noise wall must wrap around the building pad enough to block the line of sight from all points in the exterior living space to any portion of the impacting roadway. Figure 3.8-3 depicts the proposed locations of the noise walls or wall/berm combinations. If the walls or wall/berm combinations are incorporated into the project design, exterior noise levels would be reduced to below a level of significance.

Even with the incorporation of the above mitigation measures, exterior noise level under buildout conditions will continue to exceed 60 dBA Ldn on portions of the project site. Therefore, in accordance with the standards set by Title 24, an interior acoustical study will be required for all multi-family units proposed for the site. Possible mitigation measures to reduce interior noise levels below the 45 dBA Ldn interior noise standard may include, but are not restricted to, mechanical ventilation and closed window conditions.

6.9 PUBLIC SERVICES/UTILITIES

6.9.1 Water

- Prior to approval of final grading plans, the Master Plan of Water for Salt Creek Ranch shall be approved by the City Engineer and OWD. Further, this plan shall be revised to include a discussion of implementation and phasing, and participation in the water allocation program and TSF financing for this project and other projects in the OWD Master Plan service area.

- The exact locations for the proposed pump station and 3 million gallon reservoir to serve the 1296 Zone shall be determined prior to approval of final grading plans.

The following is incorporated from EIR 89-3:

- Prior to issuance of building permits, the project site shall either be annexed by the OWD into Improvement District No. 22, or a new improvement district shall be established for the project area. In addition, the project developer shall obtain written verification from OWD at each phase of development that the tract or parcel will be provided adequate water service.

- The project proponents shall, if feasible, negotiate an agreement with OWD to commit to use of reclaimed water at the earliest possible date so that OWD can ensure that an adequate supply is available. If such an agreement is pursued, all documentation shall be subject to site-specific environmental analysis, and shall conform to the applicable regulations of the City of Chula Vista, Regional Water Quality Control Board and the State Department of Health.

- Water conservation measures for onsite landscaping and for maintenance of roadside vegetation shall be created and implemented by the project proponent, in coordination with the City Public Works Department and in consultation with OWD or other qualified water agency/organization. Conservation measures are recommended by the State Resources Agency Department of Water Resources, and include but are not limited to planting of drought tolerant vegetation and the

use of irrigation systems which minimize runoff and evaporation loss (see also following measure).

- The following water conservation measures should be provided; implementation shall be approved prior to issuance of certificates of use and occupancy;

  a) Low-flush toilets (Section 17921.3, Health and Safety code).

  b) Low-flush showers and faucets (California Administrative Code, Title 24, Par 6, Article 1, T20-1406F).

  c) Insulation of hot water lines in water recirculating systems (California Energy Commission).

6.9.2 Waste Water

- Prior to approval of final grading plans, the Master Plan of Sewerage for Salt Creek Ranch shall be approved by the City Engineer. Further, this plan shall be revised to include a discussion of funding and implementation/phasing in relation to this project and other associated project's phasing in the area.

- Interim and ultimate capacity in the Telegraph Canyon Interceptor shall be determined prior to approval of final grading plans.

- Ultimate capacity of the Salt Creek Interceptor shall be determined prior to approval of final grading plans.

- A storm water diversion plan shall be prepared that will protect the Upper and Lower Otay reservoirs from sewage contamination, as discussed in Section 3.4, Water Quality.

The following is incorporated from EIR 89-3:

- The project shall be subject to payment of waste water development fees (to fund trunk sewer and other upgrades) or equivalent proportionate facility

financing mechanism identified by the City, when adopted. Payment shall occur prior to issuance of building permits or earlier.

6.10 OFFSITE AREAS OF IMPACT

6.10.1 Biological Resources

Hunte Parkway

To mitigate potential impacts to disturbed wetlands to below the level of significance, ERCE recommends enhancement of riparian habitat at a 1:1 ratio to any impacted wetlands. This mitigation acreage should be added to the mitigation acreage for the Salt Creek Ranch development and incorporated into the wetland mitigation plan (RECON 1991). Prior to construction, a 1603 Streambed Alteration Agreement must be obtained from the California Department of Fish and Game.

East "H" Street

To mitigate the loss of 11.0 acres of coastal sage scrub and impacts to California gnatcatcher to below the level of significance, ERCE recommends a strategy of avoidance and habitat enhancement. To avoid impacting the full 11 acres, the construction corridor could be restricted down from 100 feet on each side of the roadway to a smaller area. The avoidance should reduce impacts to the gnatcatcher territory to below 6.2 acres. This would retain the territory and reduce the impact to the gnatcatcher to a level of non-significance. All remaining impacts would require enhancement of coastal sage scrub at a ratio of 1:1. The mitigation site should be at a nearby location and connected to a larger area of planned open space. The mitigation acreage should be added to the mitigation acreage for the Salt Creek Ranch development and incorporated into their coastal sage scrub mitigation plan (RECON 1991).

To mitigate impacts to coast barrel cactus to below the level of significance, ERCE recommends a strategy of avoidance and preservation. To avoid impacts to as many individuals as possible, the construction corridor could be restricted. The remaining individuals that would be impacted should be preserved via transplantation into open space. A detailed preservation plan should be designed by a qualified biologist/horticulturist, who

would assist in site selection, implement a 5-year monitoring plan, and submit regularly scheduled reports to the City of Chula Vista.

To mitigate impacts to Otay tarplant to below the level of significance, ERCE recommends avoidance of the population to greatest extent feasible. The alignment of the roadway should avoid the northernmost portion of the site and the construction corridor should be restricted in this area.

Reservoir/Water line

To mitigate the loss of 30.7 acres of burned coastal sage scrub to below the level of significance, ERCE recommends a combination of avoidance and habitat enhancement. To avoid impacts to the full 30.7 acres, the construction corridor could be restricted. All remaining impacts would require habitat enhancement of nearby burned coastal sage scrub at a ratio of 1:1. This mitigation acreage should be added to the mitigation acreage for the Salt Creek Ranch development and incorporated into their coastal sage scrub mitigation plan (RECON 1991).

To mitigate impacts to San Diego golden star to below the level of significance, ERCE recommends avoidance of the population to the greatest degree feasible. The alignment should remain in the currently proposed position and the construction corridor should be restricted in the area where the population occurs.

6.10.2 Landform/Aesthetics

Hunte Parkway

Final alignment of the roadway and the interceptor will be subject to review and approval by the City. Any potential visual impacts would be short-term and construction-related, and would be considered nuisance-level impacts. No mitigation is necessary.

East "H" Street

Final alignment of the roadway and the sewer line will be subject to review and approval by the City. Any potential visual impacts would be short-term and construction-related, and would be considered nuisance-level impacts. No mitigation is necessary.

Waterline/Reservoir

Visual impacts associated with the construction of the waterline are short-term, and would be considered nuisance-level impacts. No mitigation is necessary.

Potentially significant impacts associated with the water storage tank can be mitigated to below a level of significance by the following mitigation measures.

- Landscaping shall be planted around the tank to shield views of the tank.
- The water tank shall be painted an unobtrusive color.

6.10.3 Cultural Resources

The California Environmental Quality Act (CEQA) require mitigation of impacts to important cultural resources. Sites CA-SDi-11,403 Locus F, CA-SDI-11,415, CA-SDi-12,031, CA-SDi-12,032, CA-SDi-12,034, and CA-SDi-12,035 within the water reservoir/water line parcel and CA-SDi-12,038 within the Hunte Parkway parcel were determined to qualify as important cultural resources by testing pursuant to CEQA, and mitigation of impacts to these cultural resources is required. Site CA-SDi-4,530/W-643 within the "H" Street parcel has been previously tested and determined important under CEQA, and mitigation measures are necessary to address impacts to that site. Site CA-SDi-4,530/W-643 also falls within the Bonita-Miguel Archaeological District which requires evaluation under federal criteria.

Sites CA-SDi-12,030, CA-SDi-12,033, CA-SDi-12,036, CA-SDi-12,037, and CA-SDi-12,039 and isolates I-314, SC-I-1, SC-I-2, SC-I-3, and SC-I-4 were determined to not qualify as important cultural resources, and therefore no additional archaeological work for these resources is necessary. Cultural resources CA-SDi-12,260, CA-SDi-12,261 and CA-SDi-11,403 Locus G were not tested or evaluated at this time. Evaluation for determination of importance under CEQA through a cultural resource testing program is necessary at these sites.

Mitigation of impacts to important cultural resources can be achieved through either avoidance or by conducting a data recovery program. Avoidance could include capping

sites with 2 feet of fill or redesign of project components. Recommended mitigation measures include the following:

If avoidance of archaeological resources cannot be achieved, a data recovery program to mitigate development impacts to important cultural resource sites shall be conducted, including, where necessary, surface collection and mapping of artifacts, a phased data recovery program, and monitoring during facility or other construction. This phased approach shall employ a random sample in conjunction with a focused inventory for features (e.g., hearths). The data recovery program shall be in accordance with a regional approach for all prehistoric sites within Salt Creek Ranch, Salt Creek I and EastLake III, thereby allowing a comprehensive understanding for these sites. This regional program is in agreement with the Bonita-Miguel Archaeological District.

The data recovery program shall follow the Advisory Council's guidelines as defined within Treatment of Archaeological Properties, A Handbook (ACHP 1980). The treatment plan shall be oriented to address local and regional research questions and clearly identify the methods to be used to address the research questions. Research questions to be should be addressed are provided in ERCE's June 1989 Salt Creek Ranch Cultural Resource Evaluation, on file at the City of Chula Vista Planning Department.

SECTION 7
REFERENCES

Advisory Council on Historic Preservation (ACHP). 1980. Treatment of Archaeological Properties: A Handbook. Federal Register 45 FR78808.

American Ornithologists' Union. 1983. Checklist of North American Birds. 6th Edition. American Ornithological Union [Washington, D.C.].

Archaeological Planning Collaborative (APC). 1980. An Archaeological Record Search and Field Survey of the Janal Ranch Property San Diego County, California, Report on file at the South Coastal Information Center, San Diego State University.

Atwood, J. 1980. The United States distribution of the California black-tailed gnatcatcher. Western Birds 11:65–78.

Atwood, J.L. 1988. Speciation and geographic variation in black-tailed gnatcatchers. Ornithological Monograph 42. 72 p.

Basmaciyan-Darnell, Inc. 1989. Traffic Study for Salt Creek Ranch, City of Chula Vista. Revised January 22, 1990.

Batchelder, Ed. 1991. City of Chula Vista Planning Department. Personal communication, October 15.

Bauder, E.T. 1986. San Diego Vernal Pools, recent and projected losses; their conditions; and threats to their existence 1979–1990. U.S. Fish and Wildlife Service, Office of Endangered Species.

Beauchamp, R.M. 1986. A flora of San Diego County. Sweetwater River Press. 241 pp.

California Administrative Code, Title 24, Chapter I, Subchapter I, Article 4.

California Administrative Code, Title 24, Par 6, Article 1, T20-1406F.

California Department of Fish and Game. 1965. California Fish and Wildlife Plan. The Resources Agency, Volume 3(c):908.

California Department of Fish and Game. 1985. Designated endangered or rare plants The Resources Agency, June 19.

California Department of Health Services (DHS). 1976. Letter addressed to County of San Diego.

California, State of. 1988. Title 24, Noise Insulation Standards, December.

Chula Vista, City of. 1974. Noise Element of the General Plan; June.

Chula Vista, City of. 1974. Scenic Highway Element of the Chula Vista General Plan.

Chula Vista, City of. 1982. Chula Vista General Plan, EastLake Policy Plan, City Council Resolution No. 10996, September 7.

Chula Vista, City of. 1982. Housing Element.

Chula Vista, City of. 1988. Noise Element of General Plan.

Chula Vista, City of. 1989. Municipal Code.

Chula Vista, City of. 1989. Planning Department, Cultural Resources Testing and Evaluation of the Salt Creek Ranch Project, June.

Chula Vista, City of. 1989a. General Plan Update. March.

Chula Vista, City of. 1989b. General Plan Update EIR 88-2. March.

Chula Vista, City of. 1990. Salt Creek Ranch Annexation/General Development Plan/ Pre-Zone Final Environmental Impact Report (ECI/EIR 89-3). August.

Cowardin, L.J., F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, U.S. Department of Interior, December.

Davis, McMillan and Susan M. Hector. 1989. Cultural Resource Survey and Archaeological Testing of a 20-Acre Portion of the Rancho San Miguel Property, Bonita, California. Ms. on file at the South Coastal Information Center San Diego State University. San Diego, California.

Dennis Gallegos, Andrew Pigniolo, and Roxana Phillips. 1988. A Cultural Resource Testing and Evaluation for the Salt Creek Ranch Project, Chula Vista, California. Report on file with the City of Chula Vista.

ERCE Environmental and Energy Services Company. Noise Modeling for EastLake III.

ERCE. 1989. Phase 1 Report, Amber Ridge California gnatcatcher study. Prepared for Weingarten, Siegel, Fletcher Group, Inc.

ERCE. 1991. Technical Appendix for the California Gnatcatcher Sweetwater River Habitat Conservation Plan. Prepared for San Diego Association of Governments. April 1991. 87 pp.

Everett, W.T. 1979. Threatened, declining and sensitive bird species in San Diego County. San Diego Audubon Society, Sketches, June.

F&G Regulations (Code No. 6.26 of Chapter 3, Article 1)

Federal Highway Administration's Stamina 2.0 Noise Prediction Model.

Federal Highway Administration. 1978. Highway Traffic Noise Prediction Model (FHWA-RD-77-108), December.

Federal Highway Traffic Noise Prediction Model, FHWA-RD-77-108.

Freel, Richard. 1976. Letter from Richard Freel (BLM Riverside District Manager) to Russell L. Kaldenberg. August 3, 1976. Letter on file with Russell Kaldenberg, USDI, BLM, Palm Spring Area Office, Palm Springs, California.

Grinnel, J. and A.H. Miller. 1944. The distribution of the birds of California. Pacific Coast Avifauna 27.

Harris, Cyril M. 1979. *Handbook of Noise Control.* 2nd eds. McGraw-Hill, Inc.

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, California Department of Fish and Game.

Jones, J.K., Jr., D.C. Carter, H.H. Genoways, R.S. Hoffman, and D.W. Rice. 1982. Revised checklist of North American mammals north of Mexico. Occasional Papers of the Museum Texas Tech. University 80:1–22.

Kuper, T.H. 1977. Reconnaissance of the marine sedimentary rocks of southwestern San Diego County, Plates 1–4; in G.T. Farrand (ed.), Geology of southwestern San Diego County and northwestern Baja California. Guidebook, San Diego Association of Geologists.

McIntire Group, The. 1990. Preliminary Hydrological Analysis for Salt Creek Ranch.

Mestre Greve Associates. 1989. Noise Analysis for Salt Creek 1, March.

Munz, P.A. 1974. A flora of southern California. University of California Press, Berkeley. 1086 pp.

Oberbauer, T.A. 1979a. Distribution and dynamics of San Diego County grasslands. Unpublished M.A. theses, San Diego State University, San Diego.

Otay Water District Central Area Master Update. 1987.

Pacific Southwest Biological Services (PSBS). 1981.

Pacific Southwest Biological Services (PSBS). 1982.

Pacific Southwest Biological Services (PSBS). 1989. Report of a biological assessment of the Rancho San Miguel Property, San Diego County, California. San Miguel Partners, San Diego, California. 56 pp.

Rea, A.M. 1986. Cactus Wren. In A.R. Philips (ed.), Known Birds of North Middle American. Part 1. Denver Museum of Natural History. p. 119.

RECON. 1987. Home range, nest site, and territory parameters of the black-tailed gnatcatcher population on the Rancho Santa Fe Highlands study area. September.

RECON. 1988. Survey of Biological Resources on the Baldwin Property. January.

RECON. 1991. Habitat Enhancement Plan for Salt Creek Ranch. Prepared for the Baldwin Company. March. 19 pp.

Reinen, R.H. 1978. Notice of exercise of Section 404 jurisdiction over certain streams and wetlands in California. Los Angeles District, Corps of Engineers. July 15.

Remsen, V. 1978. The species of special concern list: an annotated list of declining or vulnerable birds in California. Western Field Ornithologist, Museum of Vertebrate Zoology, University of California, Berkeley.

Ritz, Frank et al. 1989. Otay Ranch Archaeological Survey: San Ysidro Mountains Parcel, Proctor Valley Parcel, Otay River Parcel. Ms on file at ERC Environmental and Energy Services Company.

San Diego Association of Governments (SANDAG). 1985. Final Series 6 Regional Growth Forecasts, 1980–2000.

San Diego Association of Governments (SANDAG). 1987. Draft Series 6 Regional Growth Forecasts.

San Diego Association of Governments (SANDAG). 1988. Traffic Generators Manual, July.

San Diego, County of. 1983. Conservation Element (Part X) of the County General Plan. Planning Department, GPA-80-61.

San Diego County Traffic Engineering. 1990. Telephone Conversation with John Puskas and Larry Hurt. December. ADT for Proctor Valley Road west of Melody Road counted in June, 1989.

SDHS (San Diego Herpetological Society). 1980. Survey and status of endangered and threatened species of reptiles natively occurring in San Diego County. Prepared for Fish and Wildlife Committee, San Diego Department of Agriculture, 33 pp.

Smith, J.P. and R. York. 1984. Inventory of rare and endangered vascular plants of California. California Native Plant Society, Special Publication No. 1, 3rd edition.

Smith, J.P. and K. Berg. 1988. Inventory of rare and endangered vascular plants of California. California Native Plant Society, Special Publication No. 1, 4th edition.

Swanson, Clifford. Deputy Public Works Director. City of Chula Vista. Written communication. 1992.

Tate, J., Jr. 1986. The Blue List of 1986. American Birds 40:227–236.

Tate, J., Jr., and D.J. Tate. 1982. The Blue List for 1982. American Birds 35(1):3–10.

U.S. Nuclear Regulatory Commission and U.S. Department of the Interior. 1978. Final Site Environmental Statement, Sundesert Nuclear Plant Units 1 and 2, Report on file with SDG&E, San Diego, California.

United States Army Corps of Engineers. 1986. Corps of Engineers wetland delineation manual. Environmental Laboratory, Waterways Experiment Station, Vicksburg, MI. Technical report, pp. 9–86.

United States Environmental Protection Agency, *Compilation of Air Pollution Emission Factors*. AP-42, Supplement 7.

United States Fish and Wildlife Service. 1985a. Endangered and threatened wildlife and plants: Review of plant taxa for listing as endangered or threatened species; Notice of review; Federal Register, 50(188):39526–39527, September 27.

Wade, Sue A. 1988. Archaeological Survey of Baldwin 1200-Acre Property. Letter report on file at ERC Environmental and Energy Services Company, San Diego, California.

WESTEC Services, Inc. 1981. EastLake EIR, Appendix A. Biological survey report, prepared for the City of Chula Vista.

WESTEC Services, Inc. 1982. EastLake Final Environmental Impact Report, prepared for the City of Chula Vista, February.

WESTEC Services, Inc. 1985. EastLake I Sectional Planning Area (SPA) Plan final Environmental Impact Report, prepared for the City of Chula Vista, January.

Wier Biological. 1983. Biological survey report and planning constraints for the Alva-R-4S Ranch, prepared for PRC Engineering, San Diego.

Wier, H.A. 1986. Biological survey report of the Singing Hills Specific Plan, McGinty Mountain, San Diego, California. Prepared for McGinty Ranch General Plan Partnership, San Diego, California.

Willdan Associates. 1991. Traffic Impact Study for Salt Creek Ranch.

Wilson Engineering. 1991. Master Plan of Reclaimed Water for Salt Creek Ranch.

Wilson Engineering. 1991. Master Plan of Sewerage for Salt Creek Ranch.

Wilson Engineering. 1991. Master Plan of Water for Salt Creek Ranch.

Wilson Engineering. 1991. Urban Runoff Report for Salt Creek Ranch.

Wirth Associates, Inc. 1981. Site Survey and Analysis, Miguel to Mountain Springs Grade (Jade), Archaeological Survey Report, Volume 1. Report prepared by, and on file with Wirth Associates Inc., San Diego, California.

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SECTION 9
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This report was prepared by ERC Environmental and Energy Services Co., of San Diego, California, in consultation with Willdan Associates, Inc. Wilson Engineering, and the McIntire Group. Members of ERCE's professional staff and consultants contributing to the report are listed below:

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I hereby affirm that to the best of our knowledge and belief, the statements and information herein contained are in all respects true and correct and that all known information concerning the potentially significant environmental effects of the project has been included and fully evaluated in this EIR.

Julie McCall
Project Manager