CAROL

MAY RANCH
FINAL ENVIRONMENTAL IMPACT REPORT

VOLUME II OF III

May Ranch

OCTOBER 23, 1989

MAY RANCH
FINAL SPECIFIC PLAN/ENVIRONMENTAL IMPACT PLAN

CASE NO. 88-20
SCH NO. 88012503

Project Developers:

Kaufman and Broad of Southern California, Inc.
5500 East Santa Ana Canyon Road
Anaheim, California 92807

Contact Persons:
Kevin Kirk
Linda Horning

Specific Plan/EIR Prepared By:

Florian Martinez Associates
15641 Red Hill Avenue, Suite 205
Tustin, California 92680-7383

Contact Persons:
Gil Martinez
Keith Fichtner
Kathy Tong

Lead Agency:

City of Perris
101 North "D" Street
Perris, California 92370

Contact Person:
Carl Parsons

APPROVED BY CITY OF PERRIS COUNCIL DECEMBER 27, 1988

MAY RANCH
FINAL SPECIFIC PLAN/ENVIRONMENTAL IMPACT REPORT
SCH88012503
FEBRUARY, 1988

NOTE: Both the original and supplemental EIR's have been combined into this volume; please note that the Supplemental EIR is distinguished by yellow copies to assist the reader in differentiating between the two documents. Both the original and supplemental EIR's contain the following sections.

SECTION PAGE

SUPPLEMENTAL EIR
RESPONSE TO COMMENTS

May Ranch

The following agencies provided comments on the May Ranch Specific Plan and Draft EIR. Their comments and responses are included herein within this appendix:

1. State of California,
   Department of Transportation
   Caltrans District 8

2. State of California,
   Department of Parks and Recreation

3. State of California,
   Department of Transportation
   Division of Aeronautics

4. State of California,
   California Regional Water Quality Control Board
   Santa Ana Region

5. State of California,
   Department of Food and Agriculture

6. State of California,
   Department of Conservation

7. County of Riverside
   Department of Aviation

8. Farmers Fair

9. Sierra Club San Gorgonio Chapter

COUNTY OF RIVERSIDE
PARKS DEPARTMENT

4600 Crestmore Road, P.O. Box 3507, Riverside, CA 92519 • (714) 787-2551

PAUL D. ROMERO
Director

August 23, 1988

FMA
15641 Redhill Avenue, Suite 205
Tustin, CA 92680-7383

Gentlemen:

MAY RANCH S.P./EIR - SCH #88012503

Thank you for the opportunity to review the May Ranch Specific Plan/EIR. The following are this department's comments.

Parks/Recreation/Trails

1. On page 25, Fig. 11, Planning Area 7, Community Park No. 1.
   Parking should be provided by an on-site parking lot. The document states that the ballfields provided in this area will triple the current number serving the City. This will require more parking than the parallel parking is capable of handling (i.e., 24 parallel parking spaces). The conversion of landscape berms to parking area should be considered.

2. Page 25, Fig. 11, Planning Area 7.
   Revise "TOT-LOT" designation to playground and not specifically limit the users by this design/designation. A general purpose playground accommodating the handicapped will better serve a wide range of children.

3. Page 30, Fig. 16, Planning Area 12.
   Community park No. 3 should be corrected to community park No. "2". Parallel parking and "TOT-LOT" should be revised to provide for a parking lot parking area (direct head-in) and change TOT-LOT to a general playground area.

4. Page 38, Fig. 24, Planning Area 21, Community park No. 3.
   As designed, the park will accommodate family activities. This should also provide for a playground area to complement this family use/ As proposed, this element is not present.

5. Page 46, Section C, Item 1, Community Parks.
   Development standards narrative should reflect comments previously noted on items 1-4.

6. Page 46, Section C, Item 2, Linear Parks.
This section should reference standard applicable to hiking trail design and use as illustrated on page 66, figure 36. On page 57, the trail is referenced as an equestrian/hiking trail. Figures 36 and 37 should be consistent and label this as a multi-use equestrian/hiking trail as well.

As noted, this linear park area along the pipeline easement is subject to approval by the Metropolitan Water District. Should MWD not approve the linear park, mitigation should be provided for the equestrian/hiking trail and other open space/park amenities contained within this area. The worst case senario would eliminate these facilities should MWD not approved this concept. Provisions for the ccontinuance of the recreation trail needs to be addressed. (Possibly via an alternative route.)

6. Page 47, Section 3.2.3., Development standards for circulation.
7 Reference to bicycle lanes is not within the narrative. (Page 50, Fig. 32, illustrates bicycle lanes.) The design standards should provide for Class I and Class II bicycle routes. The County General Plan calls for a Class I bicycle lane along the Romona Expressway.

Cultural/Historic Resources
The History Divsion's Historic Resources Inventory does not include any information on resources that are likely to be impacted by this project. The inventory, however, contains only a preliminary survey of this particular area. If any historic reosurces surface, the History Division should be notified.

Should you have any questions regarding the aforementioned, please do not hesitate to contact Marc Brewer of this department or me.

Sincerely,

George Balteria
Chief Park Planner

GB/0535M

c: City of Perris, Susan Gray
Paul Romero, Parks Director
Sam Ford, Deputy Parks Director

RESPONSE TO COMMENTS FROM COUNTY OF RIVERSIDE PARKS DEPARTMENT
Letter Dated August 23, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow:

Comments 1 thru 5:

The comments are acknowledged and will be considered by the City of Perris during review of the final parks plans for all three community parks.

6. The trail within the linear park will be used for a combination of hiking and emergency access uses. The final specific plan will be corrected to indicate that the trail will not be used for equestrian uses. Standards for the applicability of this hiking trail are subject to MWD approval and will not be included within the specific plan at this time. Should the MWD not approve the linear park uses, the 14 acres will remain as open space within the project site. Further, in the event that the MWD does not approve the linear park use, alternative trail connections could occur along Ramona Expressway or along Rider Street. It should further be noted that the trail within the linear park system is not classified as either a primary or secondary trail within either the County or City's regional circulation system.

7. The comment is acknowledged and will be incorporated into the final street improvements plans for Ramona Expressway.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 22D COMBAT SUPPORT GROUP (SAC)
MARCH AIR FORCE BASE, CALIFORNIA 92518-5000

18 AUG 1988

REPLY TO ATTN OF: CC

SUBJECT: May Ranch Revised Specific Plan/Supplemental EIR

TO: City of Perris
Planning & Community Development
101 North "D" Street
Perris, CA 92370

1. Thank you for the opportunity to review and comment on the proposed project.

2. Subject proposal is outside of Air Installation Compatible Use Zone (AICUZ) L_{dn} 65 noise level, plotted for base flight operations, and is not considered an area where Air Force land use recommendations apply.

3. However, we recommend prospective buyers and tenants of residential properties be notified in writing of the presence of military aircraft at all hours and the potential for adverse noise affects on their quality of life.

4. If we may be of further assistance, please contact Ms Janice Hester, Base Community Planner, at (714) 655-4858.

JOHN C. PEAK, Major, USAF
Deputy Base Civil Engineer

UNITED STATES AIR FORCE

RESPONSE TO COMMENTS FROM DEPARTMENT OF THE AIR FORCE

Comments to the above referenced letter are hereby acknowledged and responses follow:

1. The comment is acknowledged.

2. The comment is acknowledged.

3. The comment is acknowledged. It is agreed that future homebuyers within May Ranch be informed in writing of the presence of military aircraft within the area.

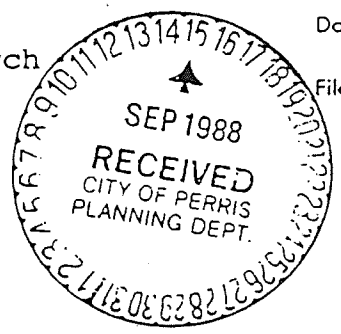
State of California

Business, Transportation and Housing Agency

Memorandum

To : State Clearinghouse
Office of Planning & Research
1400 10th Street
Sacramento, CA 95814

Attention: John Keene



Date : September 12, 1988

File No.: 08-Riv-215-31.1
SCH# 88012503

From DEPARTMENT OF TRANSPORTATION
District 8

Subject: May Ranch Specific Plan/Draft Environmental Impact Report

We have reviewed the above-mentioned plan and have found no considerable change to the circulation element. The concerns stated in our letter of July 21 (see attached letter), in response to the original document, remain unanswered at this point in time.

We would like a copy of the final document and the Conditions of Approval as soon as they are available.

If you have any questions, please contact Richard Malacoff at ATSS 670-4550 or (714) 383-4550.

Original Signed By G. Visbal

GUY G. VISBAL
Chief, Transportation Planning Branch

RM:km
bcc: GSmith, Plan Coord Unit, DOTP
JNeville

State of California

Business, Transportation and Housing Agency

Memorandum

To : State Clearinghouse
Office of Planning & Research
1400 10th Street
Sacramento, CA 95814

Attention: John Keene

Date : July 21, 1988

File No.: 08-Riv-215-31.1
SCH# 88012503

From : DEPARTMENT OF TRANSPORTATION
District 8

Subject: May Ranch Specific Plan/Draft Environmental Impact Statement

We have reviewed the above-mentioned project and have the following concerns:

According to our analysis, the traffic study was deficient in the following areas:

- The following were incomplete or omitted from this study: existing and future average daily traffic (ADT) volumes, traffic generation (including peak hour), traffic distribution, intersection capacity utilization (ICU) analysis along with intersection diagrams that include turning movements. In addition, current and projected capacities of local roads, State highways and freeways that are impacted by this project should be included.

- When analyzing the intersections, documentation should be included to support intersection volume calculations given. Also, did these values consider external to external trips or background traffic? NO

- Analysis of the regional cumulative impacts to Routes 60 and 91 and Interstates 15 and 215.

- According to page 7 of the traffic analysis, a majority of the trips will go to northern San Diego County and according to Figure 2, a majority will go north to Riverside. This inconsistency needs to be made clear in the final report. In addition, if the traffic does flow south to San Diego County, an explanation of how this was determined will be necessary.

- Evaluation is needed for the impact on Interstate 215 at the Ramona Expressway with and without the Placentia Expressway. Both alternatives are LOS F

Based on our analysis, the following facility mitigations to the State highway system are recommended for this project:

- 150 Space Park and Ride lot based on the ratio of 100 spaces per 2500 dwelling units.

- The intersections located at the State highway must have an improved level of service.
- Contribution towards the study of an alternate corridor.
- Signalization at the Interstate 215/Ramona Expressway interchange.

Appropriate mitigation for cumulative development can include both facility and demand mitigation. Specific facility mitigation can include ramp widening, additional lanes, auxiliary lanes, signalization or ramp metering. Suggested forms of demand mitigation can include staggered work hours, ridesharing or the formation of a Transit Management Association to coordinate all transit and ridesharing facilities.

It is a Caltrans Policy to support economic growth and orderly land use development, however, new development that significantly impacts State highway facilities should have mitigation measures addressed. In view of the fact that Caltrans has no funds available for infrastructure improvements, we recommend that the City of Perris take the lead in developing a fair-share mechanism in which developers would participate to fund needed improvements to the State highway system.

We would like a copy of the final document and the Conditions of Approval as soon as they are available.

If you have any questions, please contact Richard Malacoff at ATSS 670-4550 or (714) 383-4550.

Original Signed By ~~G. Visbal~~ RMalacoff
for

GUY G. VISBAL
Chief, Transportation Planning
Branch

RM:km
bcc: GSmith, Plan Coord Unit, DOTP
EStudor, Riverside County Road Department
PConnally, Development Review

RESPONSE TO COMMENTS FROM STATE DEPARTMENT OF TRANSPORTATION
Letter Dated September 12, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow:

1. The first response letter dated July 21, 1988 has been addressed and responses are included within the Final EIR for the May Ranch project. Further, comments from the State Department of Transportation were addressed in a separate letter dated September 2, 1988 from Mohle, Grover and Associates (MGA) (see attached).

MOHLE, GROVER & ASSOCIATES
901 East Imperial Highway, Suite A
La Habra, CA 90631 · (714)738-3471

RECEIVED
SEP 6 1988

September 2, 1988

Mr. Guy G. Visbal, Chief
Transportation Planning Branch
Caltrans District 8
P. O. Box 231
San Bernardino, CA 92402

Subject: Traffic Report for Revised May Ranch Specific Plan
Draft Environmental Impact Statement
Your File 08-Riv-215-31.1
Your Memorandum dated July 21, 1988 to the
State Clearing House

Dear Guy:

As a follow-up to my meeting on August 30, 1988 with Richard Malacoff of your staff, enclosed are two copies of the Traffic Analysis for the Revised Land Use Plan and Specific Plan for the May Ranch development in the City of Perris. The traffic analysis is dated August 31, 1988.

We believe the report is a very detailed assessment of not only the traffic impacts resulting from the development of the May Ranch, but also the traffic impacts resulting from cumulative development in the surrounding study area.

In reviewing this report, you will note that there is a specific section devoted to Route 215 which discusses not only existing traffic, but the implications of traffic resulting from the May Ranch development as well as cumulative development on the critical section of I-215 concerning this study which would be northerly of the Ramona Expressway interchange. The report recognizes that the freeway in the future must be widened to eight lanes and that consideration should be given to a freeway to freeway type interchange at the Ramona Expressway.

The traffic analysis has, we believe, detailed information concerning traffic generation, directional distribution, traffic assignments and analyses of predicted traffic volumes at the 27 intersections selected for study.

Specific turning movements of existing traffic were made at the Ramona Expressway interchange with Route 215 so that these volumes

have been included in the analysis. Attached to this letter is a listing of the relative saturation or ICU's for each of the traffic movements for each of the four scenarios studied for the Ramona Expressway and the Placentia Avenue interchanges at Route 215. This matrix clearly shows that the interchange will have serious congestion during total buildout of the study area.

The need for additional funding for improvements on the State highway system are fully recognized. As you will note in reading the report, the need for the study of an additional freeway parallel to I-215 and easterly of Perris is recognized. Also recognized is the need for intersections on the Ramona Expressway to be grade separated to handle future traffic volumes with a reasonable level of service.

As I mentioned to Mr. Malacoff during the August 30 meeting, the City of Perris is conducting an update of its General Plan. Part of this study involves transportation. The policy concerning requirements for developers to provide park-and-ride facilities near freeway interchanges will be considered as part of this General Plan update. It is recognized that the provision of park-and-ride lots is only a small part of the needed new facilities to handle the future traffic demands on the transport system.

Regarding the Placentia Avenue interchange, it was noted at our meeting that the construction of an interchange on I-215 at Placentia Avenue is included in the recently revised freeway agreement between the State and the City of Perris. It is the City's intent to see that this interchange is fully implemented as an integral part of the conversion of the subject section of Route 215 to interstate standards. The need for this new interchange has been documented previously in studies conducted for the City of Perris and reviewed by Caltrans District 8.

In terms of consideration of needs for an additional high traffic capacity facility in the east-west direction, the report specifically mentions the need to consider the extension of the Ramona/Cajalco Expressway into Orange County in order to provide a completely separate route to Route 91 for mobility between the Perris Valley region and Orange County. Placentia Avenue is being developed by the City of Perris as a major arterial street from the Ramona Expressway to its City Limits at Route 215. It is obvious from previous studies, and the current study, that the Placentia Avenue interchange is absolutely necessary in order to adequately handle anticipated area-wide development.

Finally, and probably most importantly, the City intends to adopt a funding mechanism that will equitably distribute the needs of additional funding for transportation facilities, along with other

community facilities, on all new development within the City of Perris. It is understood that the State will be signalizing the Route 215 at Ramona Expressway interchange at State expense with construction scheduled to be completed by July 1989.

In conclusion, we believe it is also important to say that the City of Perris is in fact actively considering, and will most probably be adopting in a short time, a fair share mechanism in which developers will participate to fund needed transportation improvements. The extent to which funding will be made available for State highway projects has not been determined.

Many thanks for your consideration of this study and these comments. Please give me a call if you have any questions or need additional information.

Best regards,

MOHLE, GROVER & ASSOCIATES

Hank

R. Henry Mohle
President

RHM:jh
Enclosures

TABLE A

LEVELS OF SATURATION (ICU)

ALONG INTERSTATE 215

INTERSECTION NUMBER	INTERSECTION NAME	MOVEMENT	SCENARIO 1		SCENARIO 2		SCENARIO 3		SCENARIO 4	
			AM	PM	AM	PM	AM	PM	AM	PM
2	CAJALCO RD @ I-215 S/B	EBT	.21	.67	.27	.75	.93	1.04	1.07	2.27
		EBR	.25	.46	.26	.44	.87	.66	.90	1.35
		SBL	.58	.70	.70	.86	1.01	2.21	1.02	2.24
		SBR	.09	.17	.08	.16	.06	.31	.06	.28
		WBT	.21	.34	.26	.40	.84	.78	.98	.91
		WBL	.46	.59	.61	.83	.89	1.08	1.15	.76
3	RAMONA EXPWY @ I-215 N/B	EBT	.24	.53	.31	.68	.92	1.02	1.25	1.50
		EBL	.72	.47	.93	.79	.93	.79	.28	.06
		WBT	.21	.33	.26	.37	.70	.83	1.66	3.41
		WBR	.81	.55	1.01	.66	1.54	.13	1.59	4.97
		NBL	.81	.81	.94	.82	.67	3.56	.57	1.05
		NBR	.37	.48	.62	.51	1.06	3.32	.60	1.06
20	PLACENTIA AVE @ I-215 S/B	EBT	.05	.05	.05	.05	.05	.05	.05	.05
		EBR	.00	.00	.00	.00	.00	.00	.00	.00
		SBL	.26	.06	.06	.08	.67	.90	.78	1.06
		SBR	.00	.00	.00	.00	.00	.00	.00	.00
		WBT	.00	.01	.00	.01	.01	.01	.01	.01
		WBL	.12	.48	.27	.49	.84	.86	.87	1.08
21	PLACENTIA AVE @ I-215 N/B	EBT	.02	.07	.02	.10	.45	.58	.69	.90
		EBL	.06	.03	.06	.06	.28	.36	.25	.06
		WBT	.11	.27	.16	.33	.41	.55	.62	.95
		WBR	.04	.22	.04	.24	.16	1.42	.75	1.06
		NBL	.14	.01	.14	.01	.02	.03	.01	.02
		NBR	.00	.09	.00	.23	1.01	1.04	.67	.95

County of Riverside

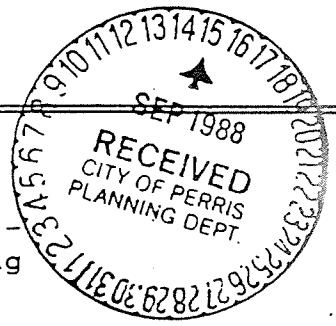
DEPARTMENT OF HEALTH

TO: CITY OF PERRIS
ATTN: Planning Dept.

DATE: 9-8-88

FROM: H. R. LUCHS, Land Use Supervisor, Environmental Health Svcs

RE: MAY RANCH



The Environmental Health Services has reviewed EIR - May Ranch Revised Supplemental and has the following comments:

WATER AND SEWER (John Silva, Public Health Engineer)

The May Ranch project as proposed, is to receive domestic water services, including sanitary sewer collection from Eastern Municipal Water District. Page 11 of the EIR states that 2.14 mgd of water and 1.07 mgd of sewage will be generated from the project. The project report identifies that Eastern Municipal Water District "can provide service to the site."

Domestic water service needs to be secured through a current will-serve letter. Sewage treatment abilities also need to be secured, due to the anticipated flow of 1.07 mgd entering the Perris Valley Water Reclamation Facility. The document does not identify what the existing flow rate into the Perris Valley facility is at this time, which is probably close to the designed capacity of 1.0 mgd. Additional flows are anticipated and expected from the prohibition area of Homeland, Romoland and Green Acres. It is obvious that the treatment plant needs to be expanded to accommodate this project. This will-serve letter from Eastern Municipal Water District needs to be specific and specify that there will be adequate sewage treatment capacity at the Perris Treatment Plant to serve the project at the time of construction.

JCS:mdt:tac

SOLID WASTE: (Richard Keagy, Senior Sanitarian)

The following are the Solid Waste Management Programs' comments on the above specific plan/supplemental EIR.

Solid waste collection, storage and disposal impacts have not been addressed in this EIR.

Solid waste generation and disposal will have a measurable impact on the Mead Valley Sanitary Landfill. This facility already exceeds its permitted maximum daily capacity.

The EIR should calculate the amount of solid waste to be generated daily or weekly by the proposed commercial center.

The EIR should address the impact and proper handling of the construction waste generated during the development of the project. The amount of construction waste which would be generated should be calculated as well.

Solid waste bin enclosures should be addressed for the commercial areas. An adequate number of permanent waste storage enclosures should be provided to promote visual aesthetics and routine cleaning and to prevent odors and propagation/harborage of vectors.

The EIR should address the types of waste collection services which will be utilized in the proposed project. The adequacy and accessibility of streets for collection vehicles also need to be addressed.

recycling of waste generated through the development of this project and for use by the residents and businesses after development, should be addressed in greater detail.

The Department of Waste Management should be consulted for the project's impacts.

Staff was unable to locate recyclable materials drop off point mentioned in the document for design review. Staff requests an opportunity to do so.

RK:tac

If you have any further questions, please contact this office at (714) 787-6543.

HRL:tac

RESPONSE TO COMMENTS FROM COUNTY OF RIVERSIDE DEPT. OF HEALTH
Letter Dated September 8, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow:

1. The comment is acknowledged. The will-serve letter from the Eastern Municipal Water District will be obtained by the developer as a condition of a approval for all tentative tract maps within the May Ranch specific plan.

2. The comment is acknowledged. Solid waste generated in the City of Perris is collected by Perris Disposal, a private company, and waste is currently disposed of in the Mead Valley landfill. However, according to the Riverside County Dept. of Health, the Mead Valley, Double View and High Grove landfills will be closed within the next five years. It was indicated that adequate solid waste capacity would be availabe at Badland and El Sobrante landfills to serve the project site.

   The proposed May Ranch specific plan will increase the amount of solid waste generated on the project site and thus increase service needs for waste haulers. The May Ranch project will generate an estimated 14.8 tonds of waste per day in 1992, increasing to an ultimate 42.2 tons per day at buildout. During development of the project, adequate capacity exists to handle all construction wastes.

   It should be noted that solid waste collection, storage and disposal impacts will be further addressed as a condition of approval at the time of tentative tract maps and development plan review for May Ranch. Within a specific plan, the actual location of solid waste bin enclosures and accessibility of streets for collection is not known at this time, however, the developer will meet all requirements and standards for solid waste pick-up and disposal in the future. The developer has agreed to contact the Department of Waste Management to address the project's impacts in conjunction with the design of the individual planning areas. Also, the specific plan has been conditioned to provide for recyclable drop-off areas within commercial areas.

State of California

Memorandum

To : Mr. John Keene
State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, California 95814

Date : September 8, 1988

Place : Sacramento

From : Department of Food and Agriculture --1220 N Street, Room 104
Sacramento, CA 95814

Subject : SCH No. 88012503--May Ranch Revised Specific Plan/
Supplemental EIR

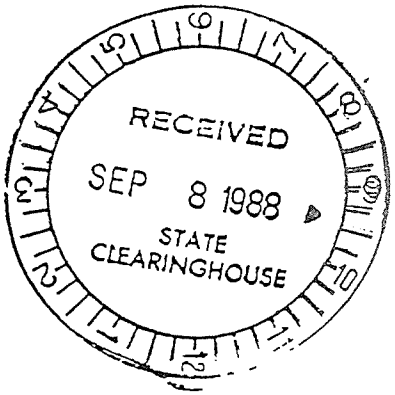
The California Department of Food and Agriculture (CDFA) has reviewed the above referenced project. Section 4.2.3 states, "The analysis of other pertinent land use plans and the agricultural resource considerations are adequate as contained in the original draft May Ranch Specific Plan/EIR".

Our letter dated July 14, 1988 addresses the CDFA's concern with the project and DEIR. We do not feel that the original DEIR contains adequate information regarding the conversion of agricultural land and we would like these concerns to be further addressed in the Final EIR. For your reference we have enclosed a copy of this response. Since the revisions do not pertain to or address the issues raised in our original response, the CDFA has no comment on the revised plan and supplemental EIR.

Martha Neuman

Martha Neuman
Research Assistant
(916) 322-5227

cc: Riverside County Agricultural Commissioner



RESPONSE TO COMMENTS FROM STATE DEPARTMENT OF FOOD AND AGRICULTURE
Letter Dated September 8, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow.

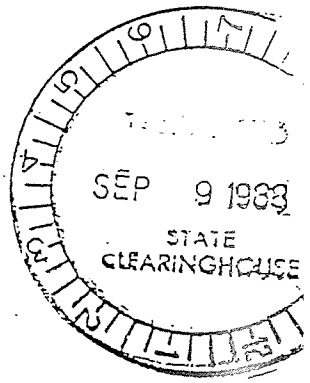
1. The responses to the original letter dated July 14, 1988 have been included in the Final EIR for May Ranch.

State of California — The Resources Agency of California

Memorandum

Date : August 31, 1988

To : Gordon F. Snow, Ph.D.
Project Coordinator
Resources Agency



From : Department of Parks and Recreation

Subject: Revised May Ranch Specific Plan
Draft Environmental Impact Report
SCH# 88012503

The Department of Parks and Recreation has reviewed the subject document. The proposed project will affect our property, Lake Perris State Recreation Area (SRA), immediately north of the project site.

We are disappointed to see that this revised document does not address any of the comments in our memo of July 8, 1988 (see attachment). All of those issues still require responses.

One of our primary concerns is about the inadequacy of park development and recreational opportunities for the growing population, and the predictable heavy user impacts on Lake Perris SRA. Unfortunately, the revised specific plan now proposes to add 400 more homes to the project without a corresponding increase in public parklands for community recreational needs. The project proponent should not consider the proximity of Lake Perris SRA as a substitute for local parks. The Revised May Ranch Specific Plan does not demonstrate responsible community planning.

Please keep us apprised of the progress of the project; we request an opportunity to review and comment on the specific tract plans within the project. Our contact is Mr. James M. Doyle, Supervisor, Environmental Review Section, P.O. Box 942896, Sacramento, CA 94296-0001, telephone (916) 324-6421.

Richard G. Rayburn, Chief
Resource Protection Division

Attachment

July 8, 1988

Gordon F. Snow, Ph.D.
Project Coordinator
Resources Agency

May Ranch Specific Plan
Draft Environmental Impact Report
SCH# 88012503

The Department of Parks and Recreation has reviewed the subject document. The proposed project will affect our property, Lake Perris State Recreation Area (LPSRA), immediately north of the project site. Our primary concerns are with the project's effects on traffic and circulation, water and sewer systems, and increased demand for park and recreation services.

Our specific comments correspond to the following sections:

3.8.3 COMMERCIAL ZONE The Specific Plan calls for a designated area for commercial development at the Ramona Expressway and LPSRA access. We believe this location is unsuitable because of traffic congestion and the problem of glare at night, both of which would affect LPSRA. We suggest another location for the commercial zone.

4.3.9.c TRAFFIC AND CIRCULATION (Mitigation Measures) The proposed highway construction and design changes at the Ramona Expressway intersection (LPSRA access) would cause a backup of traffic exiting the State Recreation Area and the fairgrounds. Changes at Center Street should occur only on the south side of the expressway.

4.3.11.2 WATER AND SEWER SERVICE If the current water source proves insufficient for the needs of the project, will the project require water from Lake Perris? The EIR should discuss this contingency and its effects on the water level of the lake relative to recreation uses. Construction of pipelines (Figure 17) at the Ramona Expressway/LPSRA access intersection will interfere with public access; this impact should be discussed.

4.3.11.4 PARKS AND RECREATION

(1) Existing Conditions The project proponent assumes that LPSRA's proximity to the City of Lake Perris helps offset the "'park deficit' situation" and provides "City residents [with] convenient access to that recreational facility" (page 117). The DEIR fails to mention that water quality is currently a major

concern and that LPSRA has had to turn away visitors at times when the unit reaches carrying capacity.

(2) Environmental Impacts The figure of a 1.3% increase in annual visits does not give a complete picture of visitor usage. In the winter, during low visitor use periods, an increase of 1.3% is negligible. During the peak summer season, however, when the SRA is near--or at--capacity, even that slight percentage represents a large number of would-be visitors. Residents of the proposed project, because of their location, would have an advantage over those who must come from a distance, and would effectively preempt their use of the SRA.

(3) Mitigation Measures The acknowledged shortfall of dedicated City park land in this project is not adequately mitigated by the proposed payment of in-lieu fees. Much of the increased demand for park and recreation opportunities will affect the existing SRA; and the project proponent does not propose any mitigation for the project's impacts on the services, facilities, and staffing of LPSRA.

We encourage the project proponent to discuss these concerns with the staff of our Los Lagos District office. Chief Ranger, J. Roggenbuck, may be reached at (714) 657-0676 or 657-5160; the mailing address is P.O. Box 926, Perris, CA 92370.

Please keep us apprised of the progress of the project. Our contact is Mr. James M. Doyle, Supervisor, Environmental Review Section, P.O. Box 942896, Sacramento, CA 94296-0001, telephone (916) 324-6421.

Richard G. Rayburn, Chief
Resource Protection Division

bcc: Southern Region
Los Lagos District

RGR:BSPorter:JRoggenbuck

file: 88012503

RESPONSE TO COMMENTS FROM STATE DEPARTMENT OF PARKS AND RECREATION
Letter Dated August 31, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow.

1. The responses to the original letter dated July 8, 1988 have been included in the Final EIR for May Ranch. Existing State law as stated within the Quimby Act permits a jurisdiction to assess a dedication requirement not to exceed two (2) acres per 1,000 population for local or neighborhood park needs. The City of Perris exceeds State law by requiring two (2) acres of park for every 100 dwelling units. The proposed project would require approximately 78 acres of dedicated park land. Based upon a total of 3,883 residential dwelling units, a combination of land contributions and dedicated park land improvements totalling $3,106,400 is proposed to meet the City's park requirement.

EIR RESPONSE TO COMMENTS

May Ranch

The following agencies provided comments on the May Ranch Specific Plan and Draft EIR. Their comments and responses are included herein within this appendix:

1. City of Perris

2. State of California,
   Department of Transportation
   Caltrans District 8

3. State of California,
   Department of Parks and Recreation

4. State of California,
   Department of Transportation
   Division of Aeronautics

5. State of California,
   California Regional Water Quality Control Board
   Santa Ana Region

6. State of California,
   Department of Food and Agriculture

7. State of California,
   Department of Conservation

8. County of Riverside
   Department of Aviation

9. Farmers Fair

10. Sierra Club San Gorgonio Chapter

NBS/LOWRY
ENGINEERS & PLANNERS

TO: Carl Parsons, Director of Planning and Community Developement.

FROM: Sue Gray, Senior Planner

DATE: June 29, 1988

SUBJECT: COMMENTS ON DRAFT EIR/SPECIFIC PLAN - MAY RANCH H71-080.577

1. Page 1 - 1.1.1. The Project
   a. Change residential categories to match minimum lot sizes, i.e., R-4000, R-4050, R-4500, R-5400, R-7000. All exhibits should be changed to be consistent with land use designations.
   b. Add density for each residential category.

2. Page 8 - 1.2.5 Biotic Resources
   a. Setting
   Second sentence- change off to of.

3. Page 10 - 1.2.9 Traffic and Circulation
   c. Mitigation measures should be clearly delineated - do not refer to another section within the document.

4. Page 11 - 1.2.11 Public Facilities and Services
   a. Police and Fire Protection
      (1) Setting - Explain if County of Riverside design criteria is for police or fire protection.

5. Page 13 - 1.2.11 Public Facilities and Services
   e. Solid Waste
      (2) Impacts - discuss impact of project generated solid waste on life of Mead Valley landfill.

6. Page 20 - 2.4.2 Lower Development Intensity Alternative

CEQA guidelines require that alternatives to the proposed project be explored, The two alternatives must be fully described including density and impacts for both alternatives discussed. Exhibits indicating level of development should be included.

b. Air Quality
Indicate whether each project alternative would be consistent with SCAG modified growth projections.

c. Noise
Indicate if either project alternative would avoid noise impacts along Ramona Expressway, major interior roads.

e. Land Use and Population
Indicate the impacts on land use and population for each alternative.

f. Traffic and Circulation
Indicate the roadway impacts for each alternative, Identify which intersections would have reduced impacts under each alternative.

g. Utilities, Public Services and Energy Resources.
Indicate impacts for each alternative, discuss impacts in terms of equipment and manpower needs for fire and police protection.
Indicate students generated and impacts on each school district for each alternative.

h. Reasons for Rejection of The Lower Development Intensity Alternative.
CEQA guidelines require the discussion shall focus on alternatives capable of eliminating any significant adverse environmental effects or reducing them to the level of insignificancy even if these alternatives would impede the attainment of the project alternatives or would be more costly. This section should discuss reasons both lower intensity alternatives were

rejected.

7. Page 23 - 3.1.1 Approach

a. The text states that the maximum allowable number of dwelling units shall be designated for each planning unit (Figure 4) but Figure 4 states Maximum allowable number of dwelling units for each residential category Not each planning unit.

b. The Specific Plan indicates 25 planning areas. Each area shall include acreage, specific project type, density, maximum number of units (or square footage) to be constructed.

b. No transfer of dwelling units between planning areas should be allowed without a Specific Plan Amendment, each planning area shall have maximum number of units permitted.

8. Figure 4 - Land Use Plan

a. Add density for each planning area.

b. Indicate access points into each planning area.

c. Change residential categories to R-4000; R-4050, etc.

d. Indicate McCanna Ranch S.P. densities.

9. Page 25 - Table 3-1 Specific Plan Summary

The Specific Plan indicates 25 Planning Areas, the summary shall provide acreage, density, maximum number of units or square footage for each planning area. Also indicate overall project density.

10. Page 25 - 3.1.3 Commercial

a. Indicate commercial approach, description and development standards.

11. Page 26 - 3.1.4 Parks/Open Space

c. Development standards

(1) Community parks are described as #1, #2, #3, but Figure 9, 10, 11, indicate Areas

7, 12, 20. No consistency - change numbers to be consistent.

12. Figure 5 - Circulation Plan
    a. Indicate access points into planning areas.

13. Page 43 - 3.5.2 Plan Description
The discharge of the southerly portion of the site is not clear. What treatment plant will serve the site, location of existing 15" trunk line?

14. Figure 15 - Master Plan Storm Drains
    a. Add size and shape of proposed drainage structures to be constructed.

15. Figure 16 - Master Plan Sewer
    a. Indicate off-site improvements required from this project to existing treatment plant.

16. Page 47 - 3.6.2 Phasing Plan Description
    a. The linear park shall be fully developed in Phase 3.

17. Page 48 - 3.6.3 Phasing Plan-Circulation
    a. Phase 2- does not include Center Street from Loop Road southerly to aqueduct.
    b. Phase 3- does not include Walnut, Placentia, unnamed Street adjacent to Park #3.

18. Figure 19 - Phasing Plan Circulation
    a. El Nido Ave is not indicated on Phase 4 development.
    b. Indicate on exhibit if full-width or half-width improvements proposed.

19. Page 51 - 3.8.1 Low-Medium-Low density Residential Standards
    a. Provide separate development standards for each residential category.
    b. Minimum lot size indicated as 5400 square-feet, but Low Density Residential category states 7000 square-feet minimum lot size. Must be consistent.
    c. Street Frontage-

60-foot achieved at front setback. 25-foot at property line.

d. Side yards-
Minimum 5 feet.

20. Page 55 - Medium and Medium High Density Residential Standards

a. Purpose and Intent states use intended primarily for one-family detached units and uses permitted states single-family detached units only. What else is the Medium and Medium-High intended for?

b. Use permitted, state single family detached but standards provide for patio homes, include all uses.

c. Provide separate development standards for each residential category.

d. Development standards state 4000 square-feet as minimum lot size.

21. Page 57 - 3.8.3 Commercial

a. Include specific commercial land use type including permitted and conditional use permits. If multi-family is proposed include density and requirement for Specific Plan Amendment.

b. Provide development standards, i.e., setbacks, lot coverage, parking, etc.

c. Delete reference to Section 19.40 of Perris Municipal Code.

22. Page 58 - 4.1.1 Project Identification

Within open space and conservation Map Inventory.

Standard: The existing system of storm channels would be suited for development of recreational trail linking different open space areas in Perris Area. The response does not identify the Specific Plan response to this standard.

23. Figure 21 - Regional Drainage

Revise exhibit for clarity

24. Page 60 - 4.1.2 Site Identification

Within Composite Hazards/Resources Map Inventory.

a. There are NO responses to the Standards. Provide responses to each standard.

25. Page 82 - 4.3.4 Mitigation Measures
a. Detailed noise studied shall be conducted prior to recordation of the final map.

26. Page 85 - 4.3.6 Land Use
Other pertinent land use plans.
(1) Airport Land Use Plan
a. A Portion of the project is identified as being located in Area II, the text states that Area II is subject to land-use restrictions. Provide text discussing land use restriction, relationship to Specific Plan Land use Plan and provide map.

27. Page 95 - Relationship to Open Space and Conservation Policies
a. Detail measures which are proposed to enhance habitat value of the site.

28. Page 98 - Agricultural Resource Consideration
c. Mitigation measures. Include appropriate mitigation measures do not reference previous sections.

29. Page 105 - 4.3.9 Traffic and Circulation
a. Existing Conditions indicate Ramona Expressway as 116' Right-of-way; Rider Street as 100' right-of-way.

30. Page 119 - 4.3.11 Parks and Recreation
a. Discuss specifically the park improvements that will be constructed as part of the Specific Plan.

31. Page 132 - 4.9.2 Lower Density Alternative
The two alternatives need to be fully described including density, acreage, including exhibits. Both alternatives need to be fully discussed.

Note: Habib will review the Circulation Plan, Drainage Plan, Water and Sewer Plan, Overall Grading Plan and will provide additional comments.

se

cc: Habib M. Motlagh

RESPONSE TO COMMENTS FROM CITY OF PERRIS AND NBS/LOWRY
Letter dated June 29, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow. However, it should be noted that the letter makes comments on both the original May Ranch Specific Plan and Draft EIR. Comments made on the specific plan have been incorporated directly into the Revised Specific Plan document and, therefore, will not be discussed below.

Comment 2: 1.2.5 Biotic Resources - Page 8
a. Setting: Second sentence - change off to of.

Response: The second sentence should read, "Although the site is within the range of several species of sensitive plants and animals, all of these prefer habitats other than that found on the property.

Comment 3: 1.2.9 Traffic and Circulation - Page 10
c. Mitigation measures should be clearly delineated - do not refer to another section within the document.

Response: The above referenced mitigation measure should read:

Various improvements to the May Ranch local circulation system will be required as a result of the project and other growth occuring in the City. The overall mitigation measures are to ensure that the intersections, connecting links, and street sections are constructed as indicated within the traffic study. Further, the traffic study illustrates the intersections that will require signalization pending completion of the project. The appropriate tables and figures have been attached in the project's traffic study.

Traffic signals should be constructed at intersections as indicated in the traffic study or when traffic meets one of the accepted traffic signal warrants.

A fee assessment has been proposed as an equitable method of determining the appropriate contribution to off-site circulation improvements. The applicant's fair-share responsibility for improvements will be determined by the City during the project approval process. Credits for the regional improvements provided by the project are also to be recognized in the calculations. Further, the off-site improvements may be financed by means other than by direct developer-paid improvements.

The recommended off-street improvements are as follows:

- Signalization of the intersection of Ramona Expressway at Murrieta Road.

- Signalization of the interchange ramps at the I-215 Freeway and Ramona Expressway.

- Construction of at least one lane in each direction on the Evans Road/Center Street/Murrieta Road alignment from Placentia Avenue to Ramona Expressway. It is recognized that the portion of Center Street within the Phase I development area would be developed to ultimate standards initially.

- Installation of a traffic signal at the intersection of Placentia Avenue and Perris Boulevard.

- Construction of at least one lane in each direction on Placentia Avenue between Evans Road and Redlands Avenue.

Comment 4: 1.2.11 Public Facilities and Services - Page 11
a. Police and Fire Protection
(1) Setting - Explain if County of Riverside design criteria is for police or fire protection.

Response: The last sentence within 1.2.11.a.(1) should read, "County of Riverside design criteria suggests one fire station per 3,200 residential dwellings.

Comment 5: 1.2.11 Public Facilities and Services - Page 13
a. Solid Waste
(2) Impacts - discuss impact of project generated solid waste of life of Mead Valley landfill.

Response: The above referenced section addressing solid waste impacts should be revised as follows:

The project will generate an estimated 11.2 tons of waste per day by 1992, increasing to 37.2 tons per day ultimately. This would increase the average daily waste load at the Mead Valley Disposal site by about four (4) percent in 1992 and would slightly reduce the estimated site life.

Comment 6: 2.4.2 Lower Development Intensity Alternative - Page 20
(a) through (h). CEQA guidelines require that alternatives to the proposed project be explored. The two alternatives must be fully described including density and impacts for both alternatives discussed.

Response: A full discussion of three project alternatives has been prepared and all will be part of the Supplemental EIR. The alternatives include a "No Project" alternative, a 12% reduced

dwelling unit alternative, and a reduced developed acreage alternative from the Specific Plan. The supplemental EIR will address each of the issues, (a) through (h), as identified in comment 6 (see NBS/Lowry memo dated June 29, 1988 and incorporated herein).

Comment 22: 4.1.1 Project Identification - Page 58
Within Open Space and Conservation Map Inventory
Standard: The existing system of storm channels would be suited for development of recreational trail linking different open space areas in Perris Area. The response does not identify the Specific Plan response to this standard.

Response: Consistent with the County standard, the project does propose to improve the MWD aqueduct right-of-way with a linear park that incorporates a trail system which crosses the entire site and provides opportunities of creating linkages to other trail systems in the City and County. This linear park is subject to approval by the MWD. Although the Perris Valley Storm Drain Channel is not currently designated as a trail within the regional system, it does provide an unimproved linkage to the projects linear park/trail plan.

Comment 23: Regional Drainage
Revise exhibit for clarity.

Response: According to NBS/Lowry, there was a question with regards to the dam inundation areas shown on the exhibit. The exhibit was verified as correct with the County of Riverside Dam Inundation Areas - 100 Year Flood Plains - Area Drainage Plans map.

Comment 24: 4.1.2 Site Identification - Page 60
Within Composite Hazards/Resources Map Inventory.
a. There are no responses to the standards. Provide responses to each standard.

o Standard: Prior to the approval of any development that is proposed to be located within an identified flood hazard area, it shall be found and demonstrated that:

The proposed development will not increase the danger to human life and health.

The proposed development is justified in terms of adequate social and economic considerations in light of the probability for property loss of damage and the need for access by emergency services in the event of flooding.

Response: The project will not expose persons to additional threats to life and health over any other development scenario except the no development option. Emergency vehicle access, measures to raise construction pads at least one foot above 100 year flood levels, and extensive drainage improvements have all been incorporated into the design of the project.

- Standard: Full consideration shall be given to the potential for danger to life and property in downstream areas that may be caused by the increased flood heights, stream velocities, and debris that could result from additional construction in flood hazard zones, in determining the acceptability of such development.

Response: In consideration of the above standard, and as required by State law, those areas subject to 100 year flood hazards will be developed so that building pads are elevated one foot above anticipated flood levels. Improvements to on-site storm drain facilities are also incorporated into the project design which will carry peak flows into the regional storm drain system.

- Standard: Each proposed land subdivision and development within floodplain areas shall be reviewed as to the appropriateness of anticipated densities and land uses in light of the need for, and cost of, providing disaster relief services both during and after periods of inundation, and in view of alternate sites more suitable for such development not located in flood prone areas.

Response: Land uses and residential products are generally distributed evenly across the project site. Those areas subject to the 100 year flood will be subject to development measures which will provide reasonable protection from flood threats. Accommodations for emergency and disaster relief vehicles and personnel are considered in street and vehicle access designs. Given the Specific Plan product types and densities, there is no significant opportunities to locate development out of the floodplain area and preserve a viable project.

- Standard: In areas where the topography consists of well defined ridges and natural watercourses, an adequate area outside of natural drainage courses for building must be shown for all land divisions. Permitted development densities should be scaled depending upon the particular topographic and slope conditions that prevail on the site, and access routes must not interfere with natural drainage patterns.

Response: The landform of the project is uniformly flat with no natural significant topographic features which offer special threats or opportunities to prevent flood hazards.

- Standard: Approved developments shall not result in the diversion of storm run-off into adjacent properties, nor cause any undue alteration of natural drainage courses that cannot be handled by existing or proposed storm drainage and flood control improvements.

Response: The project drainage plan considers both off-site and on-site drainage improvements which will adequately handle peak flows anticipated for the project.

Comment 25: 4.3.4 Mitigation Measures - Page 82
a. Detailed noise studies shall be conducted prior to recordation of the final map.

Response: Mitigation Measure 2 shall be revised as follows:
For the proposed residential developments along impacted roadways detailed noise studies shall be conducted prior to recordation of the final map. The noise studies should indicate the measures necessary to meet the City's noise standard of 75 CNEL in private outdoor living areas (i.e., rear yards), and 45 CNEL in indoor living areas. These mitigation measures should be based on ultimate levels for the roadways.

Comment 26: 4.3.6 Land Use - Page 85
Other pertinent land use plans.
(1) Airport Land Use Plan
a. A portion of the project is identified as being located in Area II. The text states that Area II is subject to land-use restrictions. Provide text discussing land use restriction, relationship to Specific Plan Land Use Plan and provide map.

Response: The ALUP and the portion of the project site overlain by Area II is described on page 85 of the Draft EIR. Compatible uses allowed in Area II, according to the ALUP, are given at the top of page 84 of the Draft EIR. The relationship between the ALUP and the Specific Plan land uses is appropriately discussed in the impact section on page 94 of the Draft EIR.

Comment 27: Relationship to Open Space and Conservation Policies - Page 95
a. Detail measures which are proposed to enhance habitat value of the site.

Response: The above referenced section should read as follows:

The project site is not considered of unique quality and importance as habitat for wildlife and, therefore, no special measures have been proposed to enhance the site for wildlife after development.

Comment 28: Agricultural Resource Consideration - Page 98
c. Mitigation measures - include appropriate mitigation measures; do not reference previous sections.

Response: The above referenced section should read as follows:

Agricultural resource impacts cannot be completely mitigated, although the No Project Alternative would retain the present land use and would delay indefinitely the conversion of these lands to urban uses. Further, the May Ranch Revised Specific Plan and Supplemental EIR discusses both a Lower Density Alternative and Reduced Developed Acreage Alternative that reduce the impacts to agricultural resources. However, existing agricultural uses have been marginally economically viable and

non-renewal of former agricultural preserve contracts seems to support this. Both alterntives were rejected due to economic pressures and the demand for public housing in the Perris Valley.

Comment 29: 4.3.9 Traffic and Circulation - Page 105
a. Existing conditions indicate Ramona Expressway as 116' right-of-way; Rider Street as 100' right-of-way.

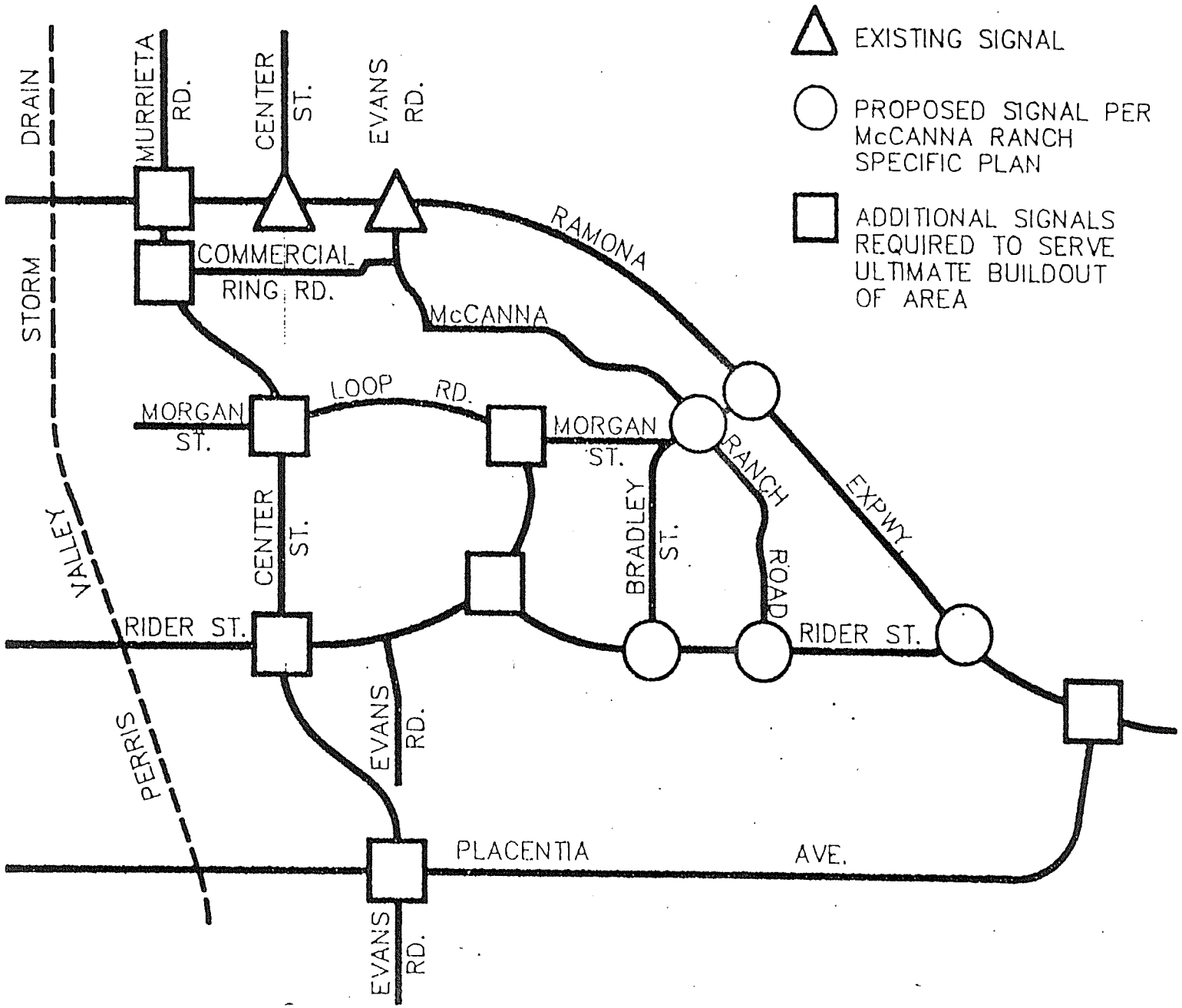
Response: The Master Plan of Arterial Highways designates the ultimate width of Rider Street as 92-feet. It was agreed by the City that the 86-foot right-of-way would be adequate as designed for May Ranch.

Comment 30: 4.3.11 Parks and Recreation - Page 119 (should be 117)
a. Discuss specifically the park improvements that will be constructed as part of the Specific Plan.

Response: Proposed improvements to parks are detailed in Sections 3.1.4-Parks/Open Space, and 3.3.3 - Development Standards, of the May Ranch Revised Specific Plan/Supplemental EIR. Improvements include multi-purpose fields for softball and soccer, tot lots, picnic areas, trails and multi-purpose hard courts.

Comment 31: 4.9.2 Lower Density Alternative - Page 132
The two alternatives need to be fully described including density, acreage, including exhibits. Both alternatives need to be fully discussed.

Response: Comment 31 repeats comment 6 and was addressed in the response to comment 6. Briefly, project alternatives are more fully described in the Supplemental EIR and include specifics information regarding densities, dwelling units and acreage.



NO SCALE

IGURE 8

ROJECT
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OCATIONS

State of California — Business, Transportation and Housing Agency

Memorandum

To : State Clearinghouse
Office of Planning & Research
1400 10th Street
Sacramento, CA 95814

Attention: John Keene

Date : July 21, 1988

File No.: 08-Riv-215-31.1
SCH# 88012503

From : DEPARTMENT OF TRANSPORTATION
District 8

Subject: May Ranch Specific Plan/Draft Environmental Impact Statement

We have reviewed the above-mentioned project and have the following concerns:

According to our analysis, the traffic study was deficient in the following areas:

- The following were incomplete or omitted from this study: existing and future average daily traffic (ADT) volumes, traffic generation (including peak hour), traffic distribution, intersection capacity utilization (ICU) analysis along with intersection diagrams that include turning movements. In addition, current and projected capacities of local roads, State highways and freeways that are impacted by this project should be included.

- When analyzing the intersections, documentation should be included to support intersection volume calculations given. Also, did these values consider external to external trips or background traffic?

- Analysis of the regional cumulative impacts to Routes 60 and 91 and Interstates 15 and 215.

- According to page 7 of the traffic analysis, a majority of the trips will go to northern San Diego County and according to Figure 2, a majority will go north to Riverside. This inconsistency needs to be made clear in the final report. In addition, if the traffic does flow south to San Diego County, an explanation of how this was determined will be necessary.

- Evaluation is needed for the impact on Interstate 215 at the Ramona Expressway with and without the Placentia Expressway.

Based on our analysis, the following facility mitigations to the State highway system are recommended for this project:

- 150 Space Park and Ride lot based on the ratio of 100

- The intersections located at the State highway must have an improved level of service.
- Contribution towards the study of an alternate corridor.
- Signalization at the Interstate 215/Ramona Expressway interchange.

Appropriate mitigation for cumulative development can include both facility and demand mitigation. Specific facility mitigation can include ramp widening, additional lanes, auxiliary lanes, signalization or ramp metering. Suggested forms of demand mitigation can include staggered work hours, ridesharing or the formation of a Transit Management Association to coordinate all transit and ridesharing facilities.

It is a Caltrans Policy to support economic growth and orderly land use development, however, new development that significantly impacts State highway facilities should have mitigation measures addressed. In view of the fact that Caltrans has no funds available for infrastructure improvements, we recommend that the City of Perris take the lead in developing a fair-share mechanism in which developers would participate to fund needed improvements to the State highway system.

We would like a copy of the final document and the Conditions of Approval as soon as they are available.

If you have any questions, please contact Richard Malacoff at ATSS 670-4550 or (714) 383-4550.

Richard L. Malacoff
for

GUY G. VISBAL
Chief, Transportation Planning
Branch

RM:km
bcc: GSmith, Plan Coord Unit, DOTP
EStudor, Riverside County Road Department
PConnally, Development Review

RESPONSE TO COMMENTS FROM STATE DEPARTMENT OF TRANSPORTATION
Letter Dated July 21, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow.

1. ADT volumes at intersections were not included because they are considered insignificant as far as traffic analysis, mitigation measures, etc., are concerned. Traffic generation was included in Table 1 in the May Ranch traffic analysis. Traffic distribution was illustrated along the periphery of Figure 2 of the traffic report (7%, 10%, etc.). ICU analysis was displayed in Tables 3 and 4 of the report within columns 3 and 4 of each. Levels of service were based on stopped delay at each intersection to remain consistent with the latest version of the Highway Capacity Manual. Caltrans may still base levels of service on saturation or "X" levels, but this method is out of date. All thru and turning movements for all 27 intersections analyzed for both A.M. and P.M. peak periods were listed in Table 2 of the traffic report.

2. Current roadway capacities within the May Ranch study area for traffic purposes are considered insignificant because most of them are not yet paved and thus not traveled. Future roadway capacities as delineated within the Circulation Element of the General Plan indicate that capacities are too insignificant to list in the traffic report. Existing turning movement counts as well as thru movements were included at the Ramona Expressway and the I-215 Freeway at both intersections. Existing counts were also taken at the Ramona Expressway and Perris Blvd. Any additional external to external trips were neglected in the traffic study because the traffic generated by the zones within the study area already causes rather significant problems alone. It should be noted that external to exteral trips do have an impact on the project site, and the capacity of Ramona Expressway. As result, the developer will be participating in a fee assessment program as an equitable method of determining the appropropriate contribution to off-site circulation improvements.

3. Impact on Routes 15, 60 and 90 were not considered because they are way outside of the traffic study area. The 33,000 vehicles expected to utilize the I-215 Freeway from the May Ranch project on a daily basis warrant mitigations shown on page 15 of the traffic report, which address off-site regional improvements.

4. This inconsistency was due to word choise used in the text of the report. Instead of the word "majority", the phrase "a large portion of" or "18 percent" should have been used.

5. With or without the Placentia Avenue interchange, the expected volume of 33,000 vehicle trips daily from May Ranch will still utilize the I-215 Freeway. This significant impact is again expected to be on the Ramona Expressway interchange only. By the time the May Ranch is builtout in approximately 1999, the I-215 is expected to be an 8-lane freeway. The peak hour capacity of an 8-lane freeway is approximately 14,000 vehicles per hour. Only 3,000 vehicles are expected to utilize the I-215 at the peak hour and thus the I-215 will not be impacted significantly. Peak hour is considered to be critical for traffic analysis as opposed to the use of ADTs.

State of California

The Resources Agency of California

Memorandum

Date : July 8, 1986

To : Gordon F. Snow, Ph.D.
Project Coordinator
Resources Agency

From : Department of Parks and Recreation

Subject: May Ranch Specific Plan
Draft Environmental Impact Report
SCH# 88012503

The Department of Parks and Recreation has reviewed the subject document. The proposed project will affect our property, Lake Perris State Recreation Area (LPSRA), immediately north of the project site. Our primary concerns are with the project's effects on traffic and circulation, water and sewer systems, and increased demand for park and recreation services.

Our specific comments correspond to the following sections:

3.8.3 COMMERCIAL ZONE The Specific Plan calls for a designated area for commercial development at the Ramona Expressway and LPSRA access. We believe this location is unsuitable because of traffic congestion and the problem of glare at night, both of which would affect LPSRA. We suggest another location for the commercial zone.

4.3.9.c TRAFFIC AND CIRCULATION (Mitigation Measures) The proposed highway construction and design changes at the Ramona Expressway intersection (LPSRA access) would cause a backup of traffic exiting the State Recreation Area and the fairgrounds. Changes at Center Street should occur only on the south side of the expressway.

4.3.11.2 WATER AND SEWER SERVICE If the current water source proves insufficient for the needs of the project, will the project require water from Lake Perris? The EIR should discuss this contingency and its effects on the water level of the lake relative to recreation uses. Construction of pipelines (Figure 17) at the Ramona Expressway/LPSRA access intersection will interfere with public access; this impact should be discussed.

4.3.11.4 PARKS AND RECREATION

(1) Existing Conditions The project proponent assumes that LPSRA's proximity to the City of Lake Perris helps offset the "'park deficit' situation" and provides "City residents [with] convenient access to that recreational facility" (page 117). The DEIR fails to mention that water quality is currently a major

concern and that LPSRA has had to turn away visitors at times when the unit reaches carrying capacity.

(2) **Environmental Impacts** The figure of a 1.3% increase in annual visits does not give a complete picture of visitor usage. In the winter, during low visitor use periods, an increase of 1.3% is negligible. During the peak summer season, however, when the SRA is near--or at--capacity, even that slight percentage represents a large number of would-be visitors. Residents of the proposed project, because of their location, would have an advantage over those who must come from a distance, and would effectively preempt their use of the SRA.

(3) **Mitigation Measures** The acknowledged shortfall of dedicated City park land in this project is not adequately mitigated by the proposed payment of in-lieu fees. Much of the increased demand for park and recreation opportunities will affect the existing SRA; and the project proponent does not propose any mitigation for the project's impacts on the services, facilities, and staffing of LPSRA.

We encourage the project proponent to discuss these concerns with the staff of our Los Lagos District office. Chief Ranger, J. Roggenbuck, may be reached at (714) 657-0676 or 657-5160; the mailing address is P.O. Box 926, Perris, CA 92370.

Please keep us apprised of the progress of the project. Our contact is Mr. James M. Doyle, Supervisor, Environmental Review Section, P.O. Box 942896, Sacramento, CA 94296-0001, telephone (916) 324-6421.

Richard G. Rayburn, Chief
Resource Protection Division

RESPONSE TO COMMENTS FROM STATE DEPARTMENT OF PARKS AND RECREATION
Letter Dated July 8, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow.

1. A detailed traffic analysis was prepared for the project site. The overall mitigation measures for the arterial system ensure that the intersections and connecting links are constructed to minimize traffic impacts in the future and especially along Ramona Expressway. May Ranch will be responsible for its fair share of off-site improvements as recommended by the traffic study. Furthermore, with regards to glare at night, outdoor lighting shall be designed and installed so that all direct rays are confined within the site and adjacent areas are protected from glare.

2. The traffic mitigation measures proposed by the developer will occur at Center Street on the southside of Ramona Expressway. All other mitigation measures proposed are considered regional off-site improvements that will be funded when the City establishes a traffic fee assessment program for equitable funding among all developers in the area.

3. According to the EMWD, there are sufficient water sources to accomodate the proposed project without utilizing Lake Perris as a water resource. Further, should construction occur at the Ramona Expressway/LPSRA access intersection, any impacts would be temporary in nature and may cause only slight inconveniences to travelers to the LPSRA.

4. The comment is acknowledged.

5. The comment is acknowledged.

6. The comment is acknowledged. It should be noted that there is no "park deficit" within the May Ranch project. The City's parkland requirements will be met by the developer through land dedications and the contribution of park development improvements within the project site. Further, additional parkland opportunities will be provided within the multi-family residential developments that propose recreational amenities such as pools and spas.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY GEORGE DEUKMEJIAN, Governor

DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS
1130 K STREET - 4th FLOOR
MAIL: P.O. BOX 942873
SACRAMENTO, CA 94273-0001
(916) 322-3090
TDD (916) 323-7665

July 20, 1988

Ms. Susan Gray
City of Perris
101 North "D" Street
Perris, CA 92343

Dear Ms. Gray:

The City of Perris' DEIR for
the May Ranch Specific Plan; SCH #88012503

The California Department of Transportation, Division of Aeronautics, has reviewed the above-referenced document as required by CEQA and we offer the following comments for your consideration.

The proposal includes 3450 residential units on 543 acres approximately three miles southeast of March Air Force Base. As the project site is outside of the 65 CNEL contour for March AFB, the proposal does not appear to be in conflict with the ALUP with respect to noise. Residents, though, will experience some aircraft noise due to the close proximity of the flight tracks.

Portions of the site, however, are within safety Area II of the Airport Land Use Commission's, March AFB, Airport Land Use Plan (ALUP). Safety areas or zones define the areas in which land use restrictions are established to protect the public's safety on the ground by minimizing the number of people exposed to aircraft crash hazards. The project proposes residential densities of up to 7.5 du/acre which is inconsistent with the ALUP which would allow 1 du/2.5 acres for safety Area II. The Division supports the ALUC findings that residential densities as currently proposed would greatly exceed the residential densities designated in the adopted ALUP.

Thank you for the opportunity to review and comment on this proposal.

Sincerely,

JACK D. KEMMERLY, Chief
Division of Aeronautics

Sandy Hesnard
Environmental Planner

cc: State Clearinghouse
Marsh AFB
Riverside County ALUC

RESPONSE TO COMMENTS FROM DEPARTMENT OF TRANSPORTATION,
DIVISION OF AERONAUTICS
Letter Dated July 20, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow.

1. The City of Perris has not adopted The Riverside County Airport Land Use Plan (ALUP) or the 1984 Air Installation Compatible Use Zones Report for March Air Force Base as either policy or through a memorandum of understanding. As such, the City of Perris does not recognize the land use limitations in either the ALUP or AICUZ. However, the purpose of the ALUP is to ensure that development does not occur within crash hazard zones, approach zones, or high noise areas. As stated within the Draft EIR, May Ranch is not affected by either noise or safety impacts from March Air Force Base.

ATE OF CALIFORNIA GEORGE DEUKMEJIAN, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION
309 INDIANA AVENUE, SUITE 200
VERSIDE, CALIFORNIA 92506
PHONE (714) 782-4130

June 30, 1988

Susan Gray
City of Perris
101 North "D" Street
Perris, CA 92343

DEIR; MAY RANCH SPECIFIC PLAN, SCH # 88012503.

Dear Ms. Gray:

We have reviewed the DEIR for the subject project and have the following comments:

We agree that assurances for the provision of adequate water and sewer service for the project must be obtained prior to approval. This is particularly imperative in view of the dramatic rate of growth in much of EMWD's service area.

Best management practices should be implemented throughout the construction phases of this project to prevent erosion and siltation which could impact downstream areas.

Sincerely,

Anne Knight
Environmental Specialist III

cc: John Keene, State Clearinghouse

RESPONSE TO COMMENTS FROM CALIFORNIA REGIONAL WATER QUALITY BOARD
Letter Dated June 30, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow.

1. The comment is acknowledged. Project approval will be contingent upon the demonstration that adequate water and wastewater services will be available to serve the project.

State of California

Memorandum

To : Mr. John Keene
State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, California 95814

Date : July 14, 1988

Place : Sacramento

From : Department of Food and Agriculture --1220 N Street, Room 104
Sacramento, CA 95814

Subject : SCH No. 88012503--May Ranch Specific Plan

The California Department of Food and Agriculture (CDFA) has reviewed the Draft Environmental Impact Report (DEIR) for the above referenced 684-acre planned community. The CDFA has the following comments:

The proposed site is within the city limits of Perris. It is designated and zoned for agricultural use. Current agricultural production includes alfalfa, sheep, and non-irrigated grains. Historical uses have included cattle grazing, potatoes, and sugar beets.

Soils on the site are classified as Prime Farmland (Class I and II soils) and Statewide Important Farmland. The summary notes that Class I and II soils are predominant while the Land Use section notes that a small portion of the site contains these soils. The Final EIR (FEIR) should clarify this information.

The DEIR states that farming on the site is no longer considered a long-term, economically viable use. However, no data is included to support this statement. Lands to the west and south are expected to remain in agricultural production. The DEIR notes that the proposed site could create development pressure on nearby agricultural lands that are viable and are not within the City. If agricultural production is not economically viable in the area, this issue should be addressed for the region as a whole, not on an individual project level.

The project site is within the city limits of the City of Perris. It is, however, three miles from downtown Perris and surrounded by Open Space and Recreation lands. It is not contiguous development. The FEIR should discuss the availability of other land within the city limits which is contiguous to existing urban developments.

The project conflicts with the General Plan goal to discourage premature expansion of urban land uses into areas that are presently devoted to large scale agricultural production. In addition, the project could influence adjacent agricultural land values through growth-inducement pressures and land uses conflicts.

The mitigation measures for the loss of agricultural land and potential land use conflicts are insufficient for a project of this scale. The Specific Plan should detail the types and sizes of buffers proposed. The CDFA encourages setbacks of 200 to 500 feet, especially when spraying activities occur on adjacent land. We encourage the City to implement a right-to-farm ordinance for the remaining agricultural operations.

Since the project is considered growth inducing, converts land designated and zoned for agricultural use, and could create development pressure on surrounding land, the CDFA prefers the No Project Alternative. If development of the project is necessary to accomodate anticipated and planned urban growth, we prefer the Lower Density Alternative which would leave land south of the Colorado River Aqueduct in agricultural use. The Aqueduct is a more logical buffer for the productive agricultural lands south of the site.

The CDFA recognizes the reality of California's growing population and the concomitant need for additional residential development. We are, however, especially concerned about the rate at which farmland is being converted to urban uses. The purpose of these comments is to register the Department's concern. Ultimate decisions regarding the project are of local concern and rest with local agencies.

Martha Neuman

Martha Neuman
Research Assistant
(916) 322-5227

cc: Riverside County Agricultural Commissioner

RESPONSE TO COMMENTS FROM THE STATE OF CALIFORNIA,
DEPARTMENT OF FOOD AND AGRICULTURE
Letter Dated July 14, 1988

Comments to the above-referenced letter are hereby acknowledged and responses follow:

1. The comment is acknowledged and is essentially a quote from the EIR.

2. There are three categories of agricultural lands onsite; prime farmland, statewide important farmland and locally important farmland. Agricultural potential of prime and statewide important farmlands are discussed in the DEIR text. Locally important farmlands consist of areas predominated by dry farming (generally either grazing or grain production) or other non-irrigated agricultural activities. These areas may contain non-irrigated prime soils.

   The proposed project site consist of approximately 50 percent statewide important farmlands (generally the western and southwest portions of the site), 30 percent locally important farmland (generally the northcentral and southeastern portion of the site) and 20 percent prime farmlands (generally the eastern and central portion of the site).

3. Several factors lead to the conclusion that agriculture is no longer considered a long-term, economically viable use on the project site. First, the site's owners have stated that there are several problems for agriculture onsite including escalating water cost, salt content of the soil, and weed problems such as nut grass. In addition, the site is in the path of growth occurring in the I-215 corridor between Rancho California and San bernardino and is within the city limits of the City of Perris. Thus, regional growth pressures and land values additionally affect the viability of agriculture onsite. Such factors also undoubtedly will affect existing agricultural operations in the growth areas, however, it is beyond the necessary scope of the environmental impact report on this specific project to study the economic viability of agriculture in the region.

4. Please see Comment #1 in response to the Sierra Club. The project development is not discontiguous and is a part of a present trend of planned developments within the city limits between the recently approved McCanna Ranch and the established urban core known as Old Perris.

5. For reasons stated in response to Comment #1 of the Sierra Club letter, urban expansion into the area in and around the proposed project site is not considered premature. Other developments have been approved or are planned within the city limits adjacent to and near the project site.

It is noted that the EIR identifies as an impact, the growth inducing pressures of the project and regional urban development on adjacent agricultural lands. The project is representative of urban expansion in the emerging growth area which spans from Rancho California to San Bernardino, and which is made possible by the I-215 highway corridor, relatively low land cost, and high demand housing in the Southern California region. These cumulative factors are contributing to the decline of agriculture in the I-215 corridor.

6. The loss of agriculture land and soil productivity is considered a significant, unavoidable impact that cannot be mitigated to a level of insignificance. The specific plan does not detail types and sizes of buffers since detailed site plans will not be prepared for each planning area at this stage of development. However, the CDFA recommended setbacks of 200 to 500 feet be implemented where feasible along any active agricultural boundary. The boundary will be completed fenced. The use of a right-to-farm ordinance was included as a mitigation measure in the EIR.

7. The comment is acknowledged. The commentor is stating a preference for an alternative and no response is required.

8. The comments are acknowledged.

State of California

THE RESOURCES AGENCY OF CALIFORNIA

Memorandum

To : Dr. Gordon F. Snow
Assistant Secretary for Resources

Ms. Susan Gray
City of Perris
101 North "D" Street
Perris, CA 92343

Date : JUL 11 1988

Subject: Draft Environmental Impact Report (DEIR) for May Ranch Specific Plan SCH# 88012503

From : **Department of Conservation—Office of the Director**

The Department of Conservation has reviewed the City of Perris' DEIR for the project referenced above. The Department is responsible for monitoring farmland conversion on a statewide basis and also administers the California Land Conservation (Williamson) Act. Because the proposal involves the loss of valuable farmland and the termination of Williamson Act contracts, the Department, in its letter of March 7, 1988, recommended that the DEIR address specific related issues. The Department now offers the following comments to the DEIR.

The May Ranch Specific Plan (SP) is a proposal for a planned community with 3,450 single family detached homes on a 684-acre site. The SP area consists of farmland that supports alfalfa, sheep, and non-irrigated grains. A portion of the SP area is fallow. The Department's 1986 Riverside County Important Farmland Map (enclosed) indicates that the SP area encompasses or is adjacent to Prime Farmlands, Farmlands of Statewide Importance, and Farmland of Local Importance.

The DEIR, in part, discusses the agricultural status of the SP area, proposes recommended mitigation measures for farmland loss, and addresses conflicting land uses as potentially-significant impacts. The Department, however, is concerned that the DEIR does not adequately address the significance of the farmland loss.

The DEIR, on page 97, addresses the loss of prime agricultural soils on the site and states:

> "The impact is not considered significant, however, since these lands were removed from agricultural preserve status in 1978 and under current circumstances do not represent a long-term, economically viable agricultural use."

The conclusions in the DEIR that the loss of 684 acres of prime agricultural land is not significant runs contrary to the California Environmental Quality Act (CEQA) guidelines. CEQA states that the loss of prime farmland should normally be

treated as a significant adverse environmental impact. Also, the DEIR must not treat the loss of 684 acres of prime farmland as a single event. The cumulative loss of farmland in California, according to a recent American Farmland Trust study, is occurring at a rate of approximately 44,000 acres annually. Thus, as part of a trend, the loss of 684 acres of a limited resource -- high quality agricultural soils -- must be considered significant.

The DEIR should also include a map of the current agricultural land uses, as well as a map showing agricultural potential, to give the reader an accurate representation of current or potential agricultural activities for the SP area.

The Department appreciates the opportunity to comment on the DEIR. We hope that the recommendations of our previous letter and the significance of prime farmland loss are given adequate consideration in the FEIR. If I can be of further assistance, please feel free to call me at (916) 322-5873.

Dennis J. O'Bryant
Environmental Program Coordinator

DJO:EK:dlw
0184q/0004q

Enclosure

cc: Stephen Oliva, Chief
Office of Land Conservation

RESPONSE TO COMMENTS FROM THE STATE OF CALIFORNIA,
DEPARTMENT OF CONSERVATION
Letter Dated July 11, 1988

Comments to the above-referenced letter are hereby acknowledged and responses follow:

1. The paragraph is essentially quoted from the EIR and reviews general statistics concerning the project and the importance of the agricultural soils onsite.

2. The commentor is correct in the assertion that the loss of agricultural productivity should be considered a significant adverse impact of the project. Please note that the Summary (Section 1.2.6) and the Unavoidable Adverse Impacts (Section 4.4) identified loss of agricultural land use as a significant adverse impact. Damage to an possible irreversible loss of agricultural soils was also identified in Section 4.6 (Significant Irreversible Environmental Changes). To bring the EIR text on page 97 into consistency with the remainder of the document, the wording is revised as follows:

   "This impact is considered significant, however, these lands were removed from agricultural preserve status in 1978, and under current circumstances do not represent a long-term, economically viable agricultural use."

   Please see response to Comment #3 of the Department of Food and Agriculture letter for additional information on the economic viability of site agricultural operations.

3. A map of existing agricultural uses onsite cannot be provided since operations have been curtailed. The existing conditions section of the DEIR described the recent and historic crops and other agricultural uses of the site. In addition, agricultural potential from the standpoint of designated soils categories is also discussed in the text (see pages 84 and 86). To reiterate from the DEIR text, site soils have low to moderate limitations for a range of truck crops, specialty crops, and field crops (as in the case of prime soils) or have a good combination of physical and chemical characteristics needed to produce food, fiber, or animals (as in the case of Statewide Important Farmland).

4. The Department of Conservation letter in response to the Notice of preparation requested that the DEIR include substantial discussion of the Williamson Act contract status, economics analysis to support cancellation of contracts, aspects of property annexation relative to contract cancellation, and government code requirements relative to cancellation including public hearings.

   The Department of Conservation should note that Williamson Act contract cancellation is not a part of the proposed action. A notice of nonrenewal of lands within the former contract area was appropriately filed in September of 1987. No government agency approvals or findings were required or are now required with respect to Williamson Act agricultural contracts.

   Per the agency's suggestion in NOP response letter, it is believed that adequate consideration to farmland conversion impacts have been given in the EIR since alternatives are considered which reduce farmland conversion, mitigation measures are proposed which could facilitate continuation of viable operations if implemented by the City and desired by farm owners/operators and farmland conversion is identified as an unavoidable significant adverse impact of the project, requiring CEQA findings upon approval of the project by the City of Perris.

DEPARTMENT OF AVIATION
County of Riverside
4164 Brockton Avenue
Riverside, CA 92501
(714) 369-9577

G. HARRY ACREE, A.A.E.
Aviation Director

July 27, 1988

Susan Gray
City of Perris
101 North "D" Street
Perris, CA 92370

Dear Ms. Gray:

Thank you for the opportunity to review May Ranch Specific Plan.

Upon review, I found the Specific Plan is located in the March Air Force Base Interim Influenced Area as designated by the Riverside County Airport Land Use Commission (ALUC). Therefore, the ALUC reviewed the proposal for compatibility with the March Air Force Base Interim Influenced Area.

The ALUC reviewed the Specific Plan during their July 21, 1988 regular meeting. The ALUC determined May Ranch Specific Plan is incompatible with the March Air Force Base Interim Influenced Area. According to ALUC Policy, residential uses in Area II must be 2-1/2 acres or greater per dwelling unit. May Ranch is proposing Medium High and Medium Low in Area II.

I would also like to point out on page 85 of the Draft EIR, it states "The ALUP is an advisory document only". The interim land use plan is pending an EIR on the plan. Once the EIR is accomplished, the plan will be an adopted plan and the proposals would be required to follow the provisions of PUC 21676.

If you have any questions on the above information, feel free to contact me.

Sincerely,

Judy M. Ross
Assistant Director

JMR/db

RESPONSE TO COMMENTS FROM COUNTY OF RIVERSIDE, DEPARTMENT OF AVIATION
Letter Dated July 27, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow.

1. The City of Perris has not adopted The Riverside County Airport Land Use Plan (ALUP) or the 1984 Air Installation Compatible Use Zones Report for March Air Force Base as either policy or through a memorandum of understanding. As such, the City of Perris does not recognize the land use limitations in either the ALUP or AICUZ. However, the purpose of the ALUP is to ensure that development does not occur within crash hazard zones, approach zones, or high noise areas. As stated within the Draft EIR, May Ranch is not affected by either noise or safety impacts from March Air Force Base.

Farmers Fair
Lake Perris Fairgrounds

16th District Agricultural Association
P.O. Box 394
Hemet, California 92343
(714) 658-2185

July 5, 1988

Carl Parsons, Director of
Planning and Community Development
City of Perris
Civic Center
101 N. "D" Street
Perris, CA 92370

SUBJECT: May Ranch Specific Plan/EIR

Dear Carl:

The District has the same concerns for this project as were expressed to you regarding the McCanna Ranch Specific Plan. More specifically - potential traffic, noise, lighting, aesthetic, and land use conflicts.

It is the intent of the District to develop the fairgrounds into an activity/events center which meets the varied needs of the communities it serves as well as compliment surrounding land uses and projects.

The District requests potential buyers of the project be notified of the fairgrounds project and its developing year-round interim use program. Notification could occur through the Department of Real Estate reports, separate notification of individual buyers, or any other documents deemed appropriate.

Should you have any questions or require additional information please feel free to contact me.

Sincerely,

Douglas W. Lofstrom
Secretary-Manager

CC: Office of Planning and Research

RESPONSE TO COMMENTS FROM FARMERS FAIR
Letter Date July 5, 1988

Comments to the above referenced letter are hereby acknowledged and responses follow.

1. It is agreed that future homebuyers within May Ranch be informed of all adjacent land uses such as Farmers Fair. Notification of the fairground project and its year-round interim use program will occur within the Department of Real Estate reports and separate homeowner notification documents.

Sierra Club
San Gorgonio Chapter

Serving Riverside and San Bernardino Counties
Tahquitz Group • Los Serranos Group
San Bernardino Mtns. Group • Mojave Group
568 N. Mountain View Ave., Suite 130
San Bernardino, CA 92401
(714) 381-5015

July 11, 1988

Susan Gray
Planning Department
City of Perris
101 North D Street
Perris, CA 92370

Re: DEIR for the May Ranch

Dear Ms Gray:

The Sierra Club has the following comments on the DEIR for May Ranch:

(1) The project is not consistent with the General Plan in that it is discontiguous urban development of lands zoned for agriculture. As such, the project plays an especially large role in causing Perris to exceed existing and draft SCAG forecasts for population growth. The project will, therefore, have a serious adverse impact on regional loss of agricultural lands, as well as on regional transportation, air quality, and jobs/housing ratio. The DEIR, however, does not offer adequate mitigation for these impacts.

One option would be for the city to approve a scaled-down version of the project such as the lower development intensity alternative. A second option would be for the City to impose air quality impact and regional traffic impact fees to use for promoting mass transit, ride-sharing, etc. At present there is insufficient mitigation for regional and cumulative impacts.

(2) At the more local level of impact, the DEIR should incorporate bike lanes or bike paths into the project design as a mitigation measure.

(3) The DEIR should identify the lower development density alternative as the environmentally superior alternative.

(4) The DEIR provides no mitigation for impacts to solid waste disposal capacity. At a minimum the project should incorporate provision for a local drop off center for newspaper, glass, and metal at the commercial center.

(5) The DEIR indicates that less than the required amount of parklands will be provided and that the deficit will be compensated for by in lieu payment of fees. We encourage this money to be used to acquire additional land for parks or natural open space within the City.

(6) The DEIR uses the County standard for fire protection LOS; however, it should be noted that this has been acknowledged as an inadequate LOS by the County. The desired LOS is 2 firefighters per station, with one station per 2000 d.u's.

Sincerely,

Bill Havert
Conservation Coordinator

RESPONSE TO COMMENTS FROM THE SIERRA CLUB SAN GORGONIO CHAPTER
Letter Dated July 11, 1988

Comments to the above-referenced letter are hereby acknowledged and responses follow:

1. The project site is in a developing area where a substantial amount of acreage between the current town nucleus (Old Perris) and the project site is in the planning stages of development. The fact that much of the land being planned for development is presently vacant perhaps leads to the perception of discontinuity of development. However, the City Council recently approved the McCanna Ranch residential project (adjacent to on the east of the proposed May Ranch) and the City recently completed flood control improvements in the area which reduces flood potential for urbanization in and around the project area. Master planning for public services and utilities including police and fire protection, water, and sewer are currently being, or recently were, completed on a city-wide basis. A new Central Business District is being developed northerly of Nuevo Road and east of Perris Boulevard, approximately 1.5 miles south of the project site. A site southwest of the Perris Valley Storm Drain at Rider Avenue has been approved for development and is about 0.25 miles from the project site. Other substantial planned developments in the project vicinity include the 1,300 unit Warmington project. For these reasons, the proposed project cannot be considered a discontiguous development, nor can such be considered an issue from an environmental impact perspective.

   The City of Perris is presently working the SCAG to define accurate population growth assumptions for the City and surroundings. If more regional growth should be allocated to the City of Perris as City planners believe, then it is expected that the growth would be allocated form other statistical areas whose projections are more optimistic. Thus, there would not necessarily be an exceedance of SCAG growth projections for the regions (or an adverse effect on regional transportation or air quality planning); rather, there would be a minor shifting or redistribution of the regional growth projection to more accurately reflect existing land use trends.

   Should the City not be successful in bringing about an adjustment of regional population distribution, then City-wide cumulative growth may exceed SCAG's recently modified projection for the Perris Valley. However, the population induced by the project itself would not exceed the projection. In this case, the City would need to mitigate for the cumulative impact by placing appropriate limits on population growth. This may be best accomplished as a function of the general plan update process which the City recently initiated. Additionally, the City will consider the commentor's suggestion of air quality and regional traffic impact fees to mitigate cumulative air quality and transportation impacts should the City's growth projections exceed SCAG's.

It should be noted that as result of the project site urbanization, the EIR identifies the loss of agricultural land use and soils as a significant adverse impact that cannot be mitigated to a level of insignificance. However, a Lower Density Alternative is included in both the EIR and Supplemental EIR.

2. Bike lanes and paths are presently part of the project design.

3. In the Supplemental EIR on the May Ranch Specific Plan, a second alternative, the Reduced Acreage Alternative, has been presented. Both the Lower Density Alternative and the Reduced Acreage Alternative are considered environmentally superior to the proposed project. However, the Reduced Acreage Alternative has the greatest effect in mitigating any adverse impact and is considered environmentally superior overall. According to the developer, this alternative is not economically viable.

4. The project will incorpoate the suggested measure as a mitigation for solid waste impact.

5. The developer proposes to dedicate land and pay in-lieu fees for park development as the specific plan develops. Therefore, the money will not be used to acquire additional lands for parks or open space within the City of Perris.

GENERAL PLAN ENVIRONMENTAL ANALYSIS

May Ranch

SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

4.0 GENERAL PLAN/SUPPLEMENTAL ENVIRONMENTAL ANALYSIS

4.1 GENERAL PLAN LAND USE DETERMINATION SYSTEM

A review of the City's Open Space and Natural Resources Policy and as it relates to the project site was fully discussed in the May Ranch Draft Specific Plan/EIR (June 2, 1988; SCH 88012503). The site was also evaluated relative to its location within the composite hazards/resources map inventory. As the analysis involved regional issues in relation to the May Ranch project, the change in actual acreage and land uses did not affect this section of the Draft EIR. Further, the appendix of the Draft EIR contains responses to comments that specifically address each of the standards within the Site Identification within Composite Hazards/Resources Map Inventory Section.

4.1.1 SUMMARY OF PROJECT PROPOSAL/SITE COMPARISON WITH APPLICABLE LAND USE CATEGORY POLICIES OR COMMUNITY PLAN

The City of Perris lists ten (10) land use categories which could be delineated for land other than open space and public facilities. The 10 categories are:

1. Rural Residential
2. Low-Density Residential
3. Medium-Density Residential
4. Professional Commercial/Mixed Use
5. Neighborhood Convenience
6. General Commercial
7. Industrial
8. Open Space
9. Commercial Recreation and Visitor Center - Industrial
10. Public Facilities

For the purpose of this Specific Plan, the only applicable land use designations are:

2. Low-Density Residential
3. Medium-Density Residential
4. Professional Commercial/Mixed Use
9. Commercial Recreation and Visitor Center - Industrial
10. Public Facilities

The following is a discussion of how the May Ranch proposed land uses are addressed relative to the City's land use classification system:

Low-Density Residential (3-7 units per acre). This designation is intended for the majority of the land area in the City that is allocated by the Plan for residential uses. Typical of the development that is consistent with this designation would be single-family home tracts as well as mobile home subdivisions.

The revised May Ranch Specific Plan provides for development of products which are consistent with the Low Density Residential category. Single-family dwelling units are proposed within the R-10,000, R-7,000, R-5,400, R-5,000 and R-4,500 residential zones, with densities that range between three and seven units per acre.

Medium-Density Residential (8-15 units per acre). This category includes multi-family developments consisting of duplex, triplex, or fourplex structures, garage style apartments as well as the zero lot line design concept.

Within the R-4,000 and multi-family residential zones, the proposed project will be consistent with the eight through fifteen dwelling units per acre density criteria of this category.

Professional Commercial/Mixed Use. This category is intended to provide an environment of residential and commercial development which would enhance the livability of the surrounding development.

The proposed project site will comply with high standards of site design and incorporate adequate buffering measures to protect residents from possible concentrated impacts of commercial and residential development. The 77 acres of commercial land uses that are proposed within the project site have been incorporated and dispersed within the boundary planning areas of the project site.

4.2 REVISED SPECIFIC PLAN ENVIRONMENTAL IMPACTS AND MITIGATION.

In compliance with Section 15163 of the California Environmental Quality Act, this Supplemental EIR has been incorporated into the revised Specific Plan to address the changes in project modifications to the original May Ranch Specific Plan. As such, this section only includes those environmental topics that have changes in impacts and/or mitigation as a result of the modifications between the original and revised Specific Plan. Therefore, the following environmental topics are included for discussion in this section: Air Quality, Noise, Land Use, Population and Housing, Traffic and Circulation, Natural and Energy Resources, and Public Facilities and Services.

In all cases, the environmental settings of the various topics have not changed and are not included within the Supplemental EIR. The May Ranch Draft EIR is incorporated by reference (SCH88012503) into this Supplemental Environmental Impact Report. A copy of the May Ranch Draft Specific Plan/EIR is available for review at the City of Perris, 101 North "D" Street, Perris, CA 92370.

4.2.1 AIR QUALITY

a. Environmental Impacts

Short-Term Impacts

The short-term impacts which result from grading and construction of the May Ranch Specific Plan do not change from the impacts presented in the original May Ranch Draft Specific Plan/EIR.

Long Term Effects

Estimates of the vehicular emissions are based on the Mohle Grover and Associates May Ranch Traffic Analysis (March 1988; revised August 1988) . The subject traffic report forecasts 71,049 external vehicular trips (average trip length 10 miles at 25 mph.) and 12,538 internal trips (average trip length 1 mile @ 15 mph). Table 4-1 below depicts the projected motor vehicle emissions from the vehicular trips.

TABLE 4-1
VEHICULAR EMISSIONS
Year 2000

Pollutant	Emissions (Tons/Day)
Carbon Monoxide	5.18
Nitrogen Oxides	0.93
Sulfur Oxides	negligible
Particulates	0.23
Hydrocarbons	0.45

All of these emissions rates are on the order of 5 to 25 percent increase over the emissions associated with original May Ranch Specific Plan (except for particulates which is equivalent). This is largely due to the change in vehicular trip data as a result of the elimination of 23 acres of commercial land uses and the addition of multi-family dwelling units.

Stationary Sources

Emissions will be generated on-site by the combustion of natural gas for space heating and water heating. Projections of emissions are presented in Table 4-2. Estimates of commercial-use square footages were made based on a floor area ratio of 0.20.

TABLE 4-2
EMISSIONS FROM THE COMBUSTION OF NATURAL GAS

Pollutant	Emissions (lbs/Day)
Carbon Monoxide	17.66
Nitrogen Oxides	73.23
Sulfur Oxides	0.00
Particulates	0.18
Hydrocarbons	4.68

These revised emissions rates are from 5 to 20 percent less than the gas emissions estimates contained in the original Specific Plan/EIR due to use of appropriate emissions factors as contained in the SCAQMD Air Quality Handbook, Revised April 1987.

Off-site emissions will be generated due to electrical usage. The generation of electrical energy by the combustion of fossil fuels results in additional emissions off-site. Emissions generated by this means are presented in Table 4-3.

TABLE 4-3
EMISSIONS GENERATED BY ELECTRICAL USAGE

Pollutant	Emissions (lbs./Day)
Carbon Monoxide	17.28
Nitrogen Oxides	99.34
Sulfur Oxides	10.36
Particulates	3.46
Hydrocarbons	0.87

These revised emissions rates are from three to five percent higher than the emissions generated by electrical usage contained in the original Specific Plan/EIR due to the reduction in commercial acreage and replacement with multiple family units, which consume proportionately greater amounts of electrical energy per unit area.

Total Emissions

The emissions generated by the revised project are compared to emissions for Riverside County in Table 4-4. The total emissions generated by the project (year 2000) are presented in the first line of the table. The Riverside County emissions for 2000 are from the 1982 Revision to the Air Quality Management Plan. The proposed project emissions are compared to the County emissions. The increases in all pollutants, when compared to Riverside County emissions, will be less than 1.13 percent, except for sulfur oxides. Since the emissions projected for the project are such a small fraction of regional emissions, it is concluded that no substantial regional air quality impacts as a result of the revised project will occur. It is noted that the revised May Ranch Plan has slightly increased total emissions when compared to the original Specific Plan. This is due to the change in vehicular travel associated with the revised plan. The emissions for Source Receptor Area 24 are also listed in Table 4-4. A comparison of the emissions generated by the May Ranch with those of Source Receptor Area 24 indicate that the project emissions are expected to be sightly more significant due to the project size.

TABLE 4-4
COMPARISON OF EMISSIONS

	CO	NO(x)	SO(x)	PART	HC
2000 Proposed Project Emissions(tons/day)	5.20	1.03	1.01	0.23	0.46
2000 Riverside County Emissions(tons/day)	504	68.4	6.34	147	222
Proposed Project as a % of County Emissions	1.03%	1.49%	0.16%	0.08%	0.21%
1987 Source Recept. Area 24 Emissions (tons/day)	47.79	4.74	N.A.*	N.A.*	2.36
Proposed Project as a % of Area 24 Emissions	10.90%	21.50%	---	---	19.50%

*N.A. - Data not available.

The AQMP is designed to accommodate growth in the basin consistent with the SCAG-82 Growth Forecasts. This growth forecasts is based essentially on the general plans adopted by the various municipalities at the time of the development of the forecast. The growth forecasts are not sufficiently detailed so that consistency of the proposed project with the SCAG-82 document can be determined directly. However, the current land use for the area is a mix of agricultural and residential land uses. The SCAG-82

forecasts are based on the adopted General Plans. Therefore, it appears that the project site will generate significantly more emissions than previously planned. Because of the inconsistencies between the SCAG-82 Growth Forecast and actual development trends, an update has been generated by SCAG, and the City of Perris is in the process of requesting modifications. The overall effect of any modifications would be to allocate more growth to the Perris Valley and reduce growth assumptions in other areas where projections have not materialized. The net effect is a shifting of growth in the region rather than accommodation of new growth. Until the growth issue is resolved, it is not possible to assess whether the project will be consistent with the current regional forecast.

b. Mitigation Measures

All mitigation measures listed in the original Draft Specific Plan/EIR are applicable to the revised project.

An additional measure to mitigate air emissions impact is for the City to impose air impact or regional traffic impact fees as a method of promoting ride-sharing and the use of public transportation.

4.2.2 NOISE

a. Environmental Impacts

The proposed development of the May Ranch will generate substantial traffic, and, as a result, will alter noise levels in surrounding areas. The traffic analysis shows the total trips associated with the revised plan are changed from the original plan and indicate an overall increase in vehicular trips. It is expected that vehicular noise levels and contours generated by the revised plan will be incrementally more than the original land use plan. However, significantly affected roadways of Ramona Expressway and Rider Street will still require the same level of mitigation to alleviate projected significant vehicular noise levels. There is no evidence that additional mitigation measures will be required on other roadways as a result of the revised plan.

b. Mitigation Measures

The short term noise impacts which result from grading and construction of the revised May Ranch Specific Plan do not change from the impacts presented in the original Draft May Ranch Specific Plan/EIR.

No new mitigation measures are required. Mitigation measures contained in the original Draft Specific Plan/EIR are still applicable.

4.2.3 LAND USE

a. Environmental Impacts

The revised on-site land use plan will have effects similar to the original plan. In adding multi-family residential uses, a greater mix of product types can be offered which will be more responsive to the needs of area buyers. The reduction in commercial acreage in the revised plan would reduce the benefit of the plan in providing employment sources in proximity to area residential uses. The imbalance of housing to local jobs is particularly acute in the Perris and Moreno Valleys. No other on-site land use effects are envisioned.

The impact of the project on surrounding land use is not changed from the original Draft Specific Plan/EIR.

The General Plan and Zoning consistency analysis contained in the original Draft Specific Plan/EIR is adequate for the revised project with the following exceptions:

Infrastructure and Public Facilities: Project relationship to schools and recreation facilities goals.

- The May Ranch Specific Plan proposes to dedicate to the City three public parks totalling approximately 27 acres in size. A linear park of 14 acres is also proposed for a total of 41 acres of park land. City standards require the provision of approximately 78 acres of parks for the proposed 3,883 dwelling units. Additional park land in-lieu fees will be required to meet the City's park standard.

Environmental Resources, Conservation and Open Space Preservation: Project relationship to recreation resources goals

- A portion of the property will be dedicated to recreational and open spaces, including 41 acres of public parks. This is less than the 78 acres required by current City ordinances (2 acres of park land per 100 units constructed). Additional park land dedication and/or the payment of in-lieu fees will be required.

- The developer will dedicate 27 acres of parkland to the City of Perris, and the parks will be owned and maintained by the City. An additional 14 acres will be provided by a linear park subject to MWD approval. Further, May Ranch park land improvements will be developed through in-lieu fees paid to the City by the developer. The combination of park land dedication and payment of in-lieu fees will serve to meet the City's park standard.

The analysis of other pertinent land use plans and the agricultural resource considerations are adequate as contained in the original Draft May Ranch Specific Plan/EIR.

b. Mitigation Measures

No additional mitigation measures are required.

4.2.4 POPULATION AND HOUSING

Environmental Impacts

Implementation of the proposed project will increase the City's housing stock by 3,508 single family dwelling units and 375 multi-family dwelling units. Total housing added is 3,883 residential units. Projected population from the development is estimated at 10,678 persons at full buildout (1999) based on 2.75 persons per dwelling unit. Project population growth by project phase is shown on Table 4-5.

TABLE 4-5
PROJECT POPULATION GROWTH BY PHASE

Phase	Year On-line	Dwelling Units	Population per Phase	Population Cumulative
1	1992	1366	3757	3757
2	1995	627	1724	5481
3	1996	783	2153	7634
4	1999	1107	3044	10678
	Totals	3883	10678	

The proposed project, as presently designed, has approximately 12.5% more inhabitants then was estimated in the original May Ranch Draft Specific Plan/EIR. This increase comes from the provision of multi-family units, the decrease of commercial acreage, and a slight increase in total single family dwellings.

The proposed project will account for a notable percentage of the population and housing units within the City. If it is assumed that a six percent City growth rate can be maintained through project buildout, the estimated 1999 City population would be approximately 50,438 persons. The project would account for about 21 percent (originally 19 percent) of the estimated population.

The City of Perris reports that it will soon exceed SCAG-82 Modified Growth Forecasts for population and housing. SCAG has revised these forecasts and the City anticipates that additional regional growth will be allocated to the City of Perris.

b. Mitigation Measures

No significant adverse impact of population growth is identified; therefore, no mitigation is required. Mitigation for the affects of population growth is addressed for other subjects as appropriate. Such areas include, at least, traffic, noise, public facilities, air quality, and related discussion.

4.2.5 TRAFFIC AND CIRCULATION

This section addresses the traffic and circulation impacts of the project resulting from the revised Specific Plan only. It is expected that trip distribution and assignment and traffic circulation considerations will remain essentially unchanged from those identified in the Draft EIR.

a. Environmental Impacts

Project implementation will increase traffic volumes both on- and off-site. An on-site circulation system will be constructed to serve anticipated traffic volumes. The traffic generated by the revised May Ranch Specific Plan is determined by applying an appropriate trip generation rate to the quantity of land use. Residential trip generation rates are expressed in terms of trip ends by phase in Table 4-6.

TABLE 4-6
RESIDENTIAL TRAFFIC BY DEVELOPMENT PHASE

PHASE	DWELLINGS	ADT's	FINAL OCCUPANCY (Est)
I	1,366 DU's	13,202 trips	Estimated final unit sales 1992
II	627 DU's	6,035 trips	Estimated final unit sales 1995
III	783 DU's	7,544 trips	Estimated final unit sales 1996
IV	1,107 DU's	10,938 trips	Estimated final unit sales 1999

Trip generation characteristics for the proposed project are based on previous research of similar projects and data contained in the Trip Generation Manual published by the Institute of Transportation Engineers. Table 4-7, Trip Generation Rates, provides a summary of trip generation characteristics, while Table 4-8, Summary of Project-Related Trip Generation, provides a summary of the project-related ultimate daily and peak hour traffic based upon the professionally accepted modeling technique.

TABLE 4-7
TRIP GENERATION RATES

Lane Use	Basis	Daily	AM Peak In	AM Peak Out	PM Peak In	PM Peak Out
Residential	Per DU	10.1	.22	.56	.65	.36
Community Commercial	/1,000 SF	*	---	---	---	---
Parks	/AC	36.6	5.47	0	0	3.33

*Rate varies with ultimate overall center size.

TABLE 4-8
SUMMARY OF PROJECT-RELATED TRIP GENERATION

Land Use	Daily	AM Peak In	AM Peak Out	PM Peak In	PM Peak Out
Residential	37,719	872	2,097	2,417	1,458
Community Commercial	44,880	731	314	1,746	1,876
Park Land	988	148	0	0	89
Total Project Traffic	83,587	1,751	2,411	4,163	3,423
Internal Circulation (15% of total project)	12,538	263	362	624	513
TOTAL EXTERNAL TRAFFIC	**71,049**	**1,488**	**2,049**	**3,539**	**2,910**

As shown in Table 4-8, Summary of Project-Related Trip Generation, the proposed project is estimated to generate 83,587 daily vehicle trip ends with 71,049 external trips. During the AM peak hour, 2,411 vehicles will leave the project area and 1,751 vehicles will enter the project area. The afternoon peak hour is expected to generate 4,163 vehicles entering the project area and 3,423 leaving. These figures are compiled from the MGA Study of May 25, 1988, and revised August 3, 1988.

b. Mitigation Measures

Although traffic impacts are expected to increase as a result of the revised Specific Plan, these impacts can be adequately mitigated with the proposed circulation improvements identified in the Draft EIR. No additional mitigation measures are proposed as a result of the revised Specific Plan.

4.2.6 NATURAL AND ENERGY RESOURCES

a. Environmental Impacts

Development of the project will utilize energy during construction on a short-term basis. The extent of short-term impact is equivalent to that described in the original Draft Specific Plan/EIR (June 2, 1988; SCH88012503). On a long-term basis, water and sewer service will be required, natural gas and electricity consumption will occur, and gasoline will be utilized by project residents.

The proposed project is estimated to consume 26,865,585 cubic feet of natural gas per month and approximately 31,528,246 kwh of electricity per year. These levels of usage are increased by from two to eight percent over levels estimated in the original Draft May Ranch Specific Plan/EIR. The input is significant but mitigable.

b. Mitigation Measures

No additional mitigation measures are proposed. All measures contained in the original Draft May Ranch Specific Plan/EIR are applicable.

4.2.7 PUBLIC FACILITIES AND SERVICES

4.2.7.1 POLICE AND FIRE PROTECTION

a. Environmental Impacts

The increase in dwelling units possible by the revised plan would not increase the original estimate that the project would generate a need for one fire station and engine company.

With respect to police services, the City standard is 1.5 police officers per 1000 population. Accordingly, 16 police officers (2 more than originally estimated) would be required ultimately to adequately serve the community. In addition, nine additional police department personnel (1 more than originally estimated) in the categories of administrative support, agents, and dispatchers would be needed. The increased police force will require adequate support equipment including weapons, communications devices and vehicles. Costs for these services are paid out of the City General Fund.

It should be noted that the City of Perris is presently conducting a Public Facilities Study to determine adequate levels of services to be provided to the public. The generation rates for police and fire services may be revised as a result of the study, which is scheduled for completion within two months.

b. Mitigation Measures

All mitigation measures contained in the original Draft May Ranch Specific Plan are still applicable. The following measures are revised to reflect new project parameters.

The City of Perris charges a one-time fire protection fee of $0.10 per square foot payable at the time building permits are issued. Based on total project building area, the applicant shall pay consistent with City policy, its fair share for police and fire services fees as established for adjacent properties.

The need for 16 police officers, 9 police personnel and support equipment is expected to be provided through expenditures from the City General Fund. First year costs are expected to be $6,274 increasing to $986,764 at build-out.

4.2.7.2 WATER AND SEWER SERVICE

a. Environmental Impacts

The revised Specific Plan will increase project site population over levels previously estimated. The Eastern Municipal Water District (EMWD) uses an average flow rate demand factor of 200 gallons per person per day. Based on a revised projected population of 10,678 persons, the average flow demand for the May Ranch would be approximately 2.14 MGD gallons of water per day ultimately (an increase of 0.24 MGD over the original estimate).

Construction of May Ranch will create a need for sewer service to the site. EMWD uses a sewage generation factor of 100 gallons per person per day. Based upon a projected population of 10,678 persons, the project will generate 1.07 MGD of sewage (or 0.12 MGD more than originally estimated).

The overall impact of the project relative to water and sewer use/ generation remains significant but mitigable.

b. Mitigation Measures

All mitigation measures included in the original Draft May Ranch Specific Plan/EIR are applicable.

4.2.7.3 SCHOOLS

a. Environmental Impacts

Students generated by project phase for the revised May Ranch Specific Plan are indicated in Table 4-9 below.

TABLE 4-9
PROJECTED STUDENT GENERATION BY PROJECT PHASE

Phase/Year	No. of Dwellings	No. of Students by Grade			Total Students
		K-5	6-8	9-12	
1 / 1992	1,366	464	205	205	874
2 / 1995	627	213	94	94	401
3 / 1996	783	266	117	117	500
4 / 1999	1,107	376	166	166	708
Totals	3,883	1,319	582	582	2,483

Student generation factors are as follows;
K-5 .34 students/D.U.
6-8 .15 students/D.U.
9-12 .15 students/D.U.

The student generation rates are equivalent to the enrollment level in approximately 2.6 elementary schools, 73 percent of a middle school and 19 percent of a high school. As both school districts showing the project site are under present conditions of impaction, this alternative has impacts (need for uses of temporary classrooms) and mitigation (school impaction fees). This impact is the same as projected for the original site plan.

b. Mitigation Measures

Mitigation measures included in the original May Ranch Draft Specific Plan/EIR are applicable to the revised plan, including school impact fees of $1.50 per square foot of residential building area.

4.2.7.4 PARKS AND RECREATION

a. Environmental Impacts

Considering the City standard of two acres of park for every 100 dwelling units, the proposed project would require approximately 78 acres of dedicated park acreage. The proposed Specific Plan provides for 27 acres

of public park land. A large linear park within the Colorado River Aqueduct easement will also be provided and will contribute 14 acres of greenbelt and trails. Since this land is the aqueduct easement, it would not be dedicated in fee. Total park acreage provided by the proposed project is 41 acres. It should be noted that the project will increase community park acreage in the City by 300% and will triple the number of active ball diamonds.

The revised Specific Plan will increase the number of dwelling units over that originally proposed. The major effect of this revision will be to increase the park mitigation fees to be assessed to the applicant (the planned park acreage remains the same as originally proposed).

b. Mitigation Measures

Based upon the City of Perris requirements for park dedication, the amount of park land and in-lieu fees used for improvement of the dedicated park land will not exceed $3,106,400. These monies meet all of the City's park requirements for the project.

4.2.7.5 SOLID WASTE

a. Environmental Impacts

The revised May Ranch Specific Plan will increase the amount of solid waste generated on the project site and thus increase service needs for waste haulers. The average solid waste generation factor for Riverside County was 7.9 pounds per person per day in 1986, based on the wastes received at County Disposal Sites and the estimated population within the County. Therefore, the proposed project would result in about 14.8 tons per day by 1992, increasing to 42.2 tons per day ultimately. This would increase the average daily waste load at the Mead Valley Disposal site by about 5.3 percent (originally 4.0 percent) in 1992 and would slightly reduce the estimated site life.

b. Mitigation Measures

The following measure is added to mitigate solid waste impacts.

To help reduce the quantities of solid wastes requiring disposal, the project incorporate provisions for a local drop-off station for newspaper, glass, and metal at the planned commercial center.

4.2.7.6 UTILITIES

a. Environmental Impacts

The addition of residential units in the revised Specific Plan and the reduction of commercial acreage results in minor differences in energy usage as calculated below. The majority of the increase in electrical

usage was due to use of a higher dwelling unit consumption rate. Energy usage also increases from original estimates due to replacement of commercial uses by multi-family, which consumes more energy per square foot.

Based upon an average monthly consumption of 6,665 cubic feet of natural gas per month per dwelling unit, the 3,883 dwelling units will require 24,920,195 cubic feet of natural gas per month. An additional 1,945,390 cubic feet of natural gas per month would be consumed ultimately by commercial acreage in the project. Based upon an average annual per dwelling unit consumption of 6,081 kilowatt hours (kwh) of electricity, electrical usage for the residential portion of the proposed project would be approximately 23,612,523 kwh per year. An additional 7,915,723 kwh per year would be consumed by the commercial acreage proposed.

b. Mitigation Measures

No additional mitigation measures are proposed.

4.3 UNAVOIDABLE ADVERSE IMPACTS

The analysis of impacts of the revised May Ranch Specific Plan contained in the previous section has not identified any new significant effects or impacts resulting from the proposed action. However, several new mitigation measures have been proposed and the specific magnitude of impacts has been adjusted to reflect the revised plan.

The unavoidable adverse impacts discussed in the original Draft May Ranch Specific Plan are appropriate with the following modifications.

4.3.1 POPULATION AND HOUSING

Implementation of the proposed project will generate 3,883 additional dwelling units and approximately 10,678 new residents to the City of Perris. This level of growth potentially exceeds SCAG-82 Modified Forecast for the RSA and has adverse implications for regional air quality and transportation planning. (See Section 4.3.7, Population and Housing of the original Draft Specific Plan/EIR.)

4.3.2 CIRCULATION

Development of the May Ranch Specific plan will necessitate construction of an on-site circulation system, as well as connections to the existing street system at Ramona Expressway and Rider Street. The project will generate an estimated 71,049 external vehicle trips per day. This will increase traffic volumes on area roads and contribute to traffic congestion at specified intersections. (See Section 4.3.9, Circulation of the original Draft Specific Plan/EIR.)

4.4 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

This CEQA-required section was addressed adequately in the original Draft Specific Plan/EIR.

4.5 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

This CEQA-required section was addressed adequately in the original Draft Specific Plan/EIR.

4.6 GROWTH INDUCING IMPACTS OF THE PROPOSED ACTION

This CEQA-required section was addressed adequately in the original Draft Specific Plan/EIR.

4.7 CUMULATIVE IMPACT OF THE PROJECT

The dwelling unit totals and commercial acreage totals contained in the revised May Ranch Specific Plan will incrementally increase the cumulative impact values calculated in the original Draft May Ranch Specific Plan/EIR. The minor increase is not numerically significant in the context of area wide cumulative impacts (the increase is about 2.4 percent of the total City population in Year 1999). However, all values have been recalculated to include project development levels currently proposed. It is noted that the City of Perris is currently preparing cumulative growth projections through Year 2010 as the basis for requesting modifications to SCAG-82 modified growth forecasts.

According to City records, there were approximately 5,800 residential units (single family units but not including mobile home and lot sale subdivisions), 350,000 square feet of commercial development, and 3,880 apartment units in-process as of 12/30/87. Based on building industry trends, it can be assumed that approximately 80 percent of these projects will eventually be built (i.e., 7,744 residential units and 280,000 square feet of commercial). Most of the projects to be built are smaller projects which could be completed within 5 years. Additionally, a development growth factor of 6 percent per year is considered for the cumulative analysis period from 6 years out to 10 years (project full buildout time frame). The cumulative project base, therefore, is assumed to consist of 10,363 residential units and 374,700 square feet of commercial development through 1999.

The revised May Ranch Specific Plan proposes 3,883 dwelling units over a 10 year buildout, commercial acreage equivalent to 670,824 square feet of floor area, as well as 41 acres of open space, parks, community facilities, etc. Adding the project development levels to the cumulative project base, the Perris community could grow by 14,246 residential units and 1,045,524

square feet of commercial area by 1999. Based on 2.75 persons per residential unit and 4.5 persons (jobs) per 1000 square feet of commercial, cumulative projects could add 39,177 persons and 4,705 jobs to the community. Added to the 1987 estimated population (11,250 persons), the Year 1999 community population could be 50,427.

4.7.1 SEISMIC SAFETY, SLOPES AND EROSION

The text contained in the original Draft Specific Plan/EIR is adequate.

4.7.2 HYDROLOGY AND WATER QUALITY

The text contained in the original Draft Specific Plan/EIR is adequate.

4.7.3 CLIMATE AND AIR QUALITY

The text contained in the original Draft Specific Plan/EIR is adequate.

4.7.4 NOISE

The text contained in the original Draft Specific Plan/EIR is adequate.

4.7.5 BIOTIC RESOURCES

The text contained in the original Draft Specific Plan/EIR is adequate.

4.7.6 LAND USE

The text contained in the original Draft Specific Plan/EIR is adequate.

4.7.7 HOUSING AND POPULATION

The potential 14,246 dwelling units occurring cumulatively will generate an anticipated population of 39,177 (2.75 persons per dwelling unit). A population of 11,250 was estimated for 1987 for the City of Perris, which had a 1984 population of 8,288. The 39,177 persons generated by the cumulative projects represents a growth rate of more than 12 percent per year between 1987 and 1999. Therefore, the projects may exceed the limits of anticipated growth for Perris, as presented in the current General Plan. A General Plan Amendment is required to accommodate the proposed May Ranch Specific Plan and will be required to accommodate other cumulative developments. Cumulative commercial developments could result in employment opportunity for 4,705 persons.

The City of Perris should work with SCAG to develop realistic population growth projections for the area. The upcoming General Plan revision provides an opportunity to establish accurate population and land use absorbitant projections. Commercial development proposals should be accompanied by fiscal and economic documentation at the time application for development is made.

4.7.8 HISTORIC AND PREHISTORIC RESOURCES

The text contained in the original Draft Specific Plan/EIR is adequate.

4.7.9 TRAFFIC CIRCULATION

Ultimate development of 14,246 dwelling units and 1,045,524 square feet of commercial space will significantly increase trip generation and local traffic volumes. Mohle, Grover and Associates estimate that by Year 2000, some 300,000 vehicle trips will be generated citywide. Traffic generated by the developments will impact existing roadways, necessitating the expansion and improvement of the existing circulation system and the construction of new regional roadway networks in accordance with the City of Perris General Plan Circulation Element. Within developments, it will be necessary to install circulation systems with sufficient capacity to accommodate traffic generated, in coordination with the regional roadway system.

While the cumulative impact of these projects may be viewed as an increase that will necessitate expansion and improvement of the existing road network, it is important to reiterate that City of Perris planning goals reflected in their Master Plan of Highways include programming major roads in the Perris area for incremental widening and/or extension to serve expected growth in surrounding areas. Mohle, Grover and Associates cautions that potential developments based on zoning will create some level of service problems at City intersections. The City should consider a fee assessment as a way to equitably distribute the costs of circulation system improvements.

4.7.10 POLICE AND FIRE PROTECTION

The text contained in the original Draft Specific Plan/EIR is adequate.

4.7.11 WATER AND SEWER SERVICE

Increased development in the project area will increase the demand from the Eastern Municipal Water District for water and sewer service. Approximately 7.8 million gallons per day of water (originally 7.6 MGD) would be required to serve cumulative levels of development. Approximately

3.9 million gallons per day of wastewater (originally 3.8 MGD) would be generated. Additional lines and facilities will be required to provide this service effectively to all developments in the area.

Water and sewer service fees charged on a per unit basis will be applied to all units built. These fees should cover the costs of needed expansion. The EMWD is currently proposing to require dual water systems in all developments to accommodate treated waste water for irrigation purposes. When implemented, this will result in significant savings of potable water for human consumption purposes.

The City should also provide literature to residents on water conservation methods including xeriscape techniques for landscaping and irrigation. A comprehensive water reclamation reuse plan should be formulated and implemented locally.

4.7.12 SCHOOLS AND PARKS

Construction of cumulative developments will increase area population, and therefore, the demand on school and park facilities. The anticipated 14,246 dwelling units will generate a population of approximately 9,117 students attending Grades K-12 (originally 8,840 students). New schools will be required to accommodate these students. It will be necessary for each development to cooperate with local school districts so that sufficient facilities are collectively provided to accommodate students generated.

Mitigation measures include the payment of fees of $1.50 per square foot of residential building area, $0.25 per square foot of commercial area, or dedication of land for school sites.

Cumulative projects will result in the need for some 285 additional acres (originally 276 acres) of community parks. The May Ranch Specific Plan proposes approximately 41 acres of open space, community parks and recreation facilities, including three public parks. These park facilities will partially satisfy City of Perris cumulative requirements for park lands. The payment of in-lieu fees can also be used to meet park acreage standards.

4.7.13 SOLID WASTE

The cumulative projects will increase the amount of solid waste generated in the area and thus increase service needs for waste haulers. The average solid waste generation factor for Riverside County was 7.9 pounds per person per day in 1986, based on the wastes received at County disposal sites and the estimated population within the County. Therefore, the cumulative population of 39,177 persons would generate about 150 tons per day by 1999. The Mead Valley Disposal site is expected to be full in 1999. It is anticipated that a new disposal site will be required some time prior to 1999.

The Riverside County Solid Waste Management Plan (CoSWMP), may need to be amended to consider the anticipated solid waste disposal needs of the Perris Valley. Also, the City of Perris should implement recycling programs to reduce the amount of solid waste requiring disposal.

4.7.14 ELECTRICITY AND NATURAL GAS ENERGY USAGE

The addition of 14,246 dwelling units to the area will create a need for additional electricity and natural gas service. Southern California Edison and the South Coast Air Quality Management District (SCAQMD) utilize an estimated residential demand rate of 6,081 kwh/unit/year. Considering the estimated cumulative total of dwelling units in the project area, the ultimate residential demand for electricity may increase by 86,629,926 kwh/year (originally 80,640,295 kwh/year).

The Southern California Gas Company and the SCAQMD generally utilize a residential rate of 6,665 cubic feet/d.u./month. Considering the estimated cumulative dwelling unit total, approximately 94,949,590 cubic feet per month of natural gas (originally 92,063,645) could be consumed by these additional dwelling units. Additional Southern California Gas lines, as well as Southern California Edison lines, would be required to provide these services to the area.

4.8 ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with State EIR Guidelines, a Supplemental EIR must present alternatives which are capable of eliminating significant environmental impacts, and state why they were rejected for the proposed project. The emphasis of the alternatives analysis is on reducing adverse effects of the proposed action. Included in this section are discussions addressing the "No Project" Alternative, a Lower Development Intensity Alternative, and a Reduced Developed Acreage Alternative. The City of Perris, as lead agency, must weigh the merits of each alternative in comparison to the proposed action.

4.8.1 "NO PROJECT" ALTERNATIVE

a. Environmental Effects

The "No Project" Alternative would retain the site in its present undeveloped condition, and would support the continuation of limited agricultural use of the site. This alternative maintains the existing environmental conditions of the subject property as previously discussed in the various subsections of Section 4.3 of the original May Ranch Draft Specific Plan/EIR. The "No Project" Alternative is considered the environmentally superior alternative for the following reasons:

(1) Elimination of all grading impacts and associated impacts upon agricultural soils.

(2) Reduction in traffic and associated air quality and noise impacts over development scenarios associated with the project proposal, or other alternatives considered herein.

(3) Retention of on-site open space.

The "No Project" Alternative would retain the site's existing general plan and zoning designations.

b. Reasons for Rejection of "No Project" Alternative

This alternative would negate any benefits of the project relative to provision of a wide range of housing types within a homogenous planned community setting. In addition, the benefits of expanding the community's employment base would be negated. The project, as proposed, is designed to meet the public demand by providing affordable detached single family and multi-family dwelling units and providing local employment opportunities that will be marketable within the region. For these reasons, the "No Project" Alternative was rejected.

4.8.2 LOWER DEVELOPMENT DENSITY ALTERNATIVE

The objective of the Lower Development Density Alternative is to provide additional mitigation for the significant adverse impacts identified for the proposed action, and allow the project to proceed at a reduced level. A scenario for the Lower Development Density Alternative includes development of residential, commercial, and park uses on the entire 744 acre parcel. A conceptual definition of land uses for this alternative is provided below.

	Dwelling Units	Acres
Residential		
Medium High Density	1,456	
Medium Density	980	
Medium Low Density	654	
Low Density	380	
	3,450	603
Commercial		100
Community Parks		27
Linear Park		14
TOTAL	3,450	744

This alternative includes all single-family dwellings with an overall density on the site of approximately 4.6 dwelling units per acre. This is about a 12.5 percent reduction from the proposed land use plan density. Though the exact densities for each parcel of the project site have not been defined in this alternative, the concept includes providing additional low density residential acreage south of aqueduct easement compared to the

proposed project plan, while densities north of the aqueduct easement would remain similar to those currently proposed.

The environmental impacts of the Lower Development Density Alternative are described in the sections which follow.

Earth Resources, Hydrology, Cultural Resources

It can be anticipated that impacts resulting from the Lower Development Density Alternative for Earth Resources, Seismicity, Hydrology, and Cultural Resources would be similar in magnitude and scope to those associated with the proposed May Ranch Specific Plan. These impacts are briefly summarized below:

Topography, Geology, and Soils

Grading for the project will involve cut and fill operations which will alter the existing landform. However, due to the generally flat nature of the site, this alteration will not be significantly less than that which will occur with the proposed plan. Ground surfaces which are temporarily exposed during grading may be eroded, thus erosion control measures will be required.

Seismicity

Due to the presence of regional faults, the potential exists for ground shaking at the project site. This, in turn, creates the potential for structural damage as a result of earthquake activity regardless of development density.

Hydrology

Project grading will permanently alter the natural runoff pattern by channeling drainage through pipelines and channels to the Perris Valley Storm Drain. Storm flow rates on-site will increase due to the creation of impervious surfaces. The velocity and composition of runoff will also be altered, but this alteration will not be significantly different from that which will occur with the proposed plan. Housing units would still be constructed within the Perris Reservoir Dam inundation area, however, this alternative would reduce the potential exposure by about 12.5 percent.

Cultural Resources

No adverse impacts will result from implementation of this alternative since the results of the archaeological and historical surveys show that the project area contains no prehistoric cultural resources and no significant historic resources. The site includes no areas likely to contain subsurface manifestations of such resources.

Air Quality

The lower density alternative will result in lower operational and air pollutant emissions compared to the proposed project. The levels of pollutant emissions resulting from operations associated with full buildout of this alternative are as follows:

	Lower Density Alternative
Carbon Monoxide	4.35 tons/day
Nitrogen Oxides	0.88 tons/day
Sulfur Oxides	0.15 tons/day
Particulates	0.17 tons/day
Hydrocarbons	0.39 tons/day

Such reduced emissions are more in line with regional air quality improvement strategies, however, they still may not correspond with the AQMP which is based on existing general plan land uses. The City of Perris is requesting from SCAG a modification to the regional growth projection which would allocate more population and air emissions to the Perris Valley area. Should the proposed modification be accepted, then growth associated with this and other projects in the City (and the corresponding air emissions) would be deemed consistent with the AQMP, although mitigation measures to institute regional transportation strategies to reduce air pollutant emissions are still proposed with this alternative.

Noise

Any reduction in dwelling units will have a concomitant reduction in traffic volumes which would incrementally decrease on-site and off-site noise levels as presented for the proposed plan. This alternative impacts the residences along Ramona Expressway to the extent that noise barriers will be required. Generally, homes along interior roadways will not be exposed to noise levels greater than 60 CNEL. Noise levels along Rider Street are expected to require mitigation. Per the proposed plan, this alternative would require that additional noise studies be conducted prior to recordation of the final tract map and mitigation measures be incorporated into the final project design.

Wildlife and Vegetation

Development of the site with the uses proposed by the Lower Development Density Alternative would affect the same amount of area as the proposed plan. Since the existing vegetative communities are agricultural and ruderal/disturbed, loss of habitat is not a significant biological impact with either the proposed action or this alternative.

Land Use and Population

Utilizing the development scenario for this alternative described above, the projected population is estimated at 9,488 persons based on 2.75 persons per dwelling unit. This alternative will account for about 19 percent of the estimated Year 2000 City population of 49,250. This alternative by itself would not exceed SCAG projections for the project area, however, like the proposed plan, it will contribute population that City-wide will exceed the exiting SCAG forecast (i.e., SCAG projects 33,000 to 53,000 persons by Year 2010 whereas the City projects upwards of 80,000). As mentioned above, the City is requesting SCAG to allocate additional population growth to the Perris Valley area to be more consistent with experienced levels of population growth of the past several years and current projections. SCAG has indicated that they are open to the request and will be considering it over the next several months.

This alternative does not lessen the impact of the proposed plan relative to agricultural soils.

Traffic and Circulation

This alternative will generate approximately 67,855 external vehicle trips, which is less than the proposed plan. However, based on areawide traffic conditions, this alternative will not significantly relieve problem intersections as described for the proposed plan. All circulation system improvements described for the proposed plan would be required of this alternative as well.

Utilities, Public Services, and Energy Resources

This alternative would result in fewer emergency calls than the proposed plan. Using generation factors contained in the Supplemental EIR text, this alternative would ultimately require 14 police officers and 8 additional police department personnel. This alternative would also require one fire station and engine company ultimately.

Incremental decreases in the amount of water and sewer service requirements will occur with this alternative. This alternative would have an average flow demand of 1.9 million gallons of water per day. Based upon a project population of 9,948 persons, this alternative will generate 948,800 gallons per day of wastewater. These reduced levels of water and sewer service are considered beneficial in relation to the proposed plan.

In terms of impacts to schools, this alternative would reduce the number of public school students compared to the proposed plan. A total of 2,207 students would be generated by this alternative, consisting of 1,173 K-5 students, 517 6-8 students, and 517 9-12 students. As both school districts serving the project site are under present conditions of impaction, this alternative has impacts (need for use of temporary classrooms) and mitigation (school impaction fees) similar to the proposed plan.

From the standpoint of parks and recreation facilities, this alternative would generate less demand for parks and put less pressure on other recreation facilities in the area. This alternative provides the same amount of park land for 12.5 percent fewer residents which is a positive aspect of this alternative. However, this would result in less monies available to improve the dedicated park lands when basing in-lieu fees on population factors.

This alternative would generate about 11.2 tons per day of solid waste by 1992, increasing to 37.5 tons per day ultimately. This would reduce the average daily waste load of the project to 4.0 percent of the Mead Valley Landfill capacity in 1992.

This alternative reduces the estimated natural gas and electrical usage of the proposed plan. Residential units under this alternative will consume 22,994,250 cubic feet of natural gas while the commercial area will consume an additional 1,742,400 cubic feet of natural gas. Electricity usage for the residential units would be about 20,141,000 kwh with an additional 10,628,640 kwh consumed by the commercial acreage.

Reasons For Rejection Of The Lower Development Density Alternative

The Lower Development Density Alternative contains incrementally reduced impacts in the areas of traffic, noise, air quality, public services, and utilities and is considered environmentally superior to the proposed plan. No significant adverse impacts were avoided by the Lower Development Density Alternative although some of those mentioned above were only incrementally reduced when compared to the proposed project. This alternative, however, precludes some of the marketing objectives of the project, which include providing a homogeneous community to serve the needs of the entry-level buyer, the move-up buyer, the large family, and singles. A high percentage of the housing in this alternative will meet the housing affordability goal of SCAG and the County of Riverside.

The economic pressures and public demand for housing appears to have improved the development potential of the subject site. Existing agricultural uses have been marginally economically viable. The project site is in a high growth area and in the path of growth occurring outward from the City of Perris and Moreno Valley. It appears that the highest and best use of the site is urban use. Non-renewal of former agricultural preserve contract seems to support this.

For these reasons, the Lower Development Density Alternative was rejected.

4.8.3 REDUCED DEVELOPED ACREAGE ALTERNATIVE

The objective of the Reduced Developed Acreage Alternative is to provide a land use concept that could avoid significant impacts identified for the proposed plan. A scenario for the Reduced Acreage Alternative includes development of residential, commercial, and park uses on the portion of the site north of the Colorado River Aqueduct easement, which amounts to about

424 acres. The portion of the applicant's ownership south of the aqueduct would not be developed for residential, commercial, or industrial uses. A conceptual definition of land uses for this alternative includes 1,654 single-family residential units, 55 acres of commercial uses, 17 acres of parks, and 320 acres of undeveloped agricultural open space south of the aqueduct easement.

This alternative amounts to about a 43 percent reduction from the proposed land use plan density.

The environmental impacts of the Reduced Acreage Alternative are described in the sections which follow.

Earth Resources

Grading for the project will involve cut and fill operations which will alter the existing landform. Significantly less earth movement will occur with this alternative compared to the proposed plan. Ground surfaces which are temporarily exposed during grading may be eroded, thus erosion control measures will be required.

Due to the presence of regional faults, the potential exists for ground shaking at the project site. This, in turn, creates the potential for structural damage as a result of earthquake activity regardless of acreage developed.

Hydrology

Project grading will permanently alter the natural runoff pattern by channeling drainage through pipelines and channels to the Perris Valley Storm Drain. Storm flow rates on-site will increase due to the creation of impervious surfaces. For each developed acre, the runoff volume increases approximately 10 percent over undeveloped conditions. As this alternative develops the least acreage of the project alternatives, its runoff velocity and composition will be significantly reduced over that which will occur with the proposed plan or lower density alternative. Housing units would still be constructed within the Perris Reservoir Dam inundation area, however, this alternative would reduce the potential exposure by about 135 percent.

Air Quality

A reduced acreage alternative will result in lower operational and construction air pollutant emissions compared to the proposed project and the Lower Development Density Alternative. The levels of pollutant emissions resulting from operations associated with full buildout of this alternative are as follows:

Carbon Monoxide	2.66 tons/day
Nitrogen Oxides	0.54 tons/day
Sulfur Oxides	0.09 tons/day
Particulates	0.10 tons/day
Hydrocarbons	0.24 tons/day

Such reduced emissions are more in line with regional air quality improvement strategies, however, they still may not correspond with the AQMP which is based on existing general plan land uses. The City of Perris is requesting from SCAG a modification to the regional growth projection which would allocate more population and air emissions to the Perris Valley area. Should the proposed modification be accepted, then growth associated with this an other projects in the City (and the corresponding air emissions) would be deemed consistent with the AQMP, although mitigation measures to institute regional transportation strategies to reduce air pollutant emissions are still proposed with this alternative.

Noise

Any reduction in dwelling units will have a concomitant reduction in traffic volumes which would incrementally decrease on-site and off-site noise levels as presented for the proposed plan. This is particularly true with respect to Rider Street. Significant impacts due to the proposed plan would not occur under this alternative. The reduced acreage provided by this alternative will not change the significance of impacts the residences along Ramona Expressway since noise barriers will still be required. Generally, homes along interior roadways will not be exposed to noise levels greater than 60 CNEL. Mitigation will be needed for homes exposed to 75 CNEL or greater to achieve acceptable noise levels. As per the proposed plan, this alternative would require that additional noise studies be conducted prior to recordation of the final tract map and mitigation measures be incorporated into final project design.

Wildlife and Vegetation

Development of the site with the uses proposed by the Reduced Development Acreage Alternative would leave 320 acres open and available as forage area for wildlife, particularly raptors. Loss of habitat is not considered a significant biological impact with either the proposed action or this alternative.

Land Use and Population

Utilizing the development scenario for this alternative described above, the projected population is estimated at 4,466 persons based on 2.75 persons per dwelling unit. This alternative will account for about 10 percent of the estimated Year 2000 City population of 44,000. This alternative by itself would not exceed SCAG projections for the project area, however, like the proposed plan, it will contribute population City-wide that will exceed the existing SCAG forecast (i.e., SCAG forecasts 33,000 to 53,000 persons by Year 2010 whereas the City projects upwards of 80,000). As mentioned previously above, the City is requesting SCAG to allocate additional population growth to the Perris Valley area to be more consistent with experienced levels of population growth of the past several years and current projections. SCAG has indicated that they are open to the request and will be considering it over the next several months.

This alternative would conserve a significant amount of agricultural soils and would eliminate the significant adverse effect associated with the loss. Rather than lose 744 acres of agricultural soils to urbanization, this alternative would result in the loss of about 424 acres. Since agricultural crops have proven economically questionable on-site, the main benefit of the impact is in conservation of agricultural soil resources.

Cultural Resources

No adverse impacts will result from implementation of this alternative since the results of the archaeological and historical surveys show that the project area contains no prehistoric cultural resources and no significant historic resources. The site includes no areas likely to contain subsurface manifestations of such resources.

Traffic and Circulation

This alternative will generate approximately 41,525 external vehicle trips, which is approximately 40 percent less trips ends than the lower density alternative. Based on regional traffic projections for the proposed project, the following intersections in the project vicinity are expected to experience Level of Service (LOS) E or F capacity and will be used by project site traffic:

Ramona and Murrieta
Murrieta and Dawes
Center and Loop Road
Rider and Center
Placentia and Evans

Of these intersections, the reduced acreage alternative has the potential to improve LOS at the Ramona and Murrieta intersection from LOS E to LOS D and improve LOS at Placentia and Evans from LOS F to LOS E. All circulation system improvements described for the proposed plan with the exception of Rider Street improvements would be required of this alternative as well.

Utilities, Public Services, and Energy Resources

This alternative would result in fewer emergency calls than the proposed plan. Using generation factors contained in the Supplemental EIR text, this alternative would ultimately require 7 police officers and additional police department personnel. This alternative would also require one fire station and engine company ultimately, based on distance from existing facilities.

Incremental decreases in the amount of water and sewer service requirements will occur with this alternative. This alternative would have an average flow demand of 893,000 gallons of water per day. Based upon a project population of 4,466 persons, this alternative will generate 446,600 gallons per day of wastewater. These reduced levels of water and sewer service compared to the proposed plan are significant.

In terms of impacts to schools, this alternative would reduce the number of public school students compared to the proposed plan. A total of 1,060 students would be generated by this alternative, consisting of 562 K-5 students, 248 6-8 students and 248 9-12 students. As both school districts serving the project site are under present conditions of impaction, this alternative has impacts (need for use of temporary classrooms) and mitigation (school impaction fees) similar to the proposed plan.

From the standpoint of parks and recreation facilities, this alternative would generate less demand for parks and put less pressure on other recreation facilities in the area than the proposed plan. This alternative would require 33 acres of park land based on City standards. The 17 acres provided is short by approximately 50 percent. However, the open space provided by not developing the southern half of the property will more than compensate for this shortfall.

This alternative would generate about 17.64 tons per day of solid waste ultimately. This would reduce the average daily waste load of the project to about 2.0 percent of the Mead Valley Landfill capacity in 1992. This alternative however will not significantly expand the life of the landfill.

This alternative reduces the estimated natural gas and electrical usage of the proposed plan. Residential units under this alternative will consume 11,023,910 cubic feet of natural gas while the commercial area will consume and additional 958,320 cubic feet of natural gas. Electricity usage for the residential units would about 9,656,052 kwh with an additional 5,845,752 consumed by the commercial acreage. This usage is significantly reduced from the proposed plan.

Reasons For Rejection Of The Reduced Development Acreage Alternative

The Reduced Development Acreage Alternative contains significantly reduced impacts in the areas of traffic, air quality, public services, utilities and conversion of agricultural land. This alternative is considered environmentally superior to the proposed plan. However, this alternative meets

only a portion of the marketing objectives of the project, and results in a lower amount of affordable housing being made available to meet the Southern California housing demand compared to the proposed action.

As with the Lower Development Density Alternative, the economic pressures and public demand for housing appears to have improved the development potential of the subject site. Existing agricultural uses have been marginally economically viable. The project site is in a high growth areas and in the path of growth occurring outward from the City of Perris and Moreno Valley. It appears that the highest and best use of the site is urban use. Cancellation of former agricultural preserve contracts seems to support this and development pressure for any undeveloped portions will remain high.

For these reasons, the Reduced Development Acreage Alternative was rejected.

4.9 EFFECTS FOUND NOT TO BE SIGNIFICANT

This CEQA-required section was addressed adequately in the original Draft Specific Plan/EIR.

4.10 ORGANIZATIONS AND PERSONS CONSULTED

4.10.1 SUPPLEMENTAL EIR PREPARERS

The May Ranch Revised Specific Plan Supplemental/EIR was prepared for the City of Perris (lead agency) with environmental data collected, analyzed and compiled by Florian Martinez Associates, with support from other engineers and analysts. Major contributors are as follows:

City of Perris

Carl Parsons	Director of Planning
Lewis Mazei	Associate Planner
Carol Miller	Assistant Planner

Florian Martinez Associates

Gil Martinez	Executive Vice President
Keith Fichtner	Project Director
Kathy Tong	Project Planner
Thomas Ryan	Environmental Technical Support
Debbie Butz	Graphic Artist
Gary Bye	Associate Landscape Architect

Mohle Grover Associates

Hank Mohle	Traffic Engineering
Ed Norris	Traffic Engineering

ORIGINAL DRAFT ENVIRONMENTAL IMPACT REPORT

4.0 GENERAL PLAN/ENVIRONMENTAL IMPACT ANALYSIS

4.1 GENERAL PLAN LAND USE DETERMINATION SYSTEM (STEPS 1-4)

4.1.1 PROJECT IDENTIFICATION WITHIN OPEN SPACE AND CONSERVATION MAP INVENTORY

A review of the City's Open Space and Natural Resources Policy indicates that the project site is currently designated agriculture, open space, and flood plain. The subject property, as discussed in Section 2.1 above seeks to amend the Open Space and Natural Resources Policy. The Open Space and Natural Resources Policy addresses the need for eventual designation in the General Plan for the location of residential, commercial, and industrial development to accommodate the projected population and economic growth within the City and surrounding areas. Discussion in Sections 4.1.1 through 4.1.4 not only provides for determination of appropriate land use on the site, but also clarifies the application of the City's Open Space and Natural Resources Policy to the site.

- Standard: Much of the vacant and undeveloped land will be designated for the location of residential, commercial, and industrial development.

  This development is proposed as a project necessary to accommodate the projected population and economic growth within the City.

- Standard: Publicly owned Perris Valley Storm Drain Channel should be considered for open space designation.

  The proposed project takes the policy into consideration and provides for no development within the storm drain area.

- Standard: The existing system of storm channels would be suited for development of recreational trails linking different open space areas in the Perris Area.

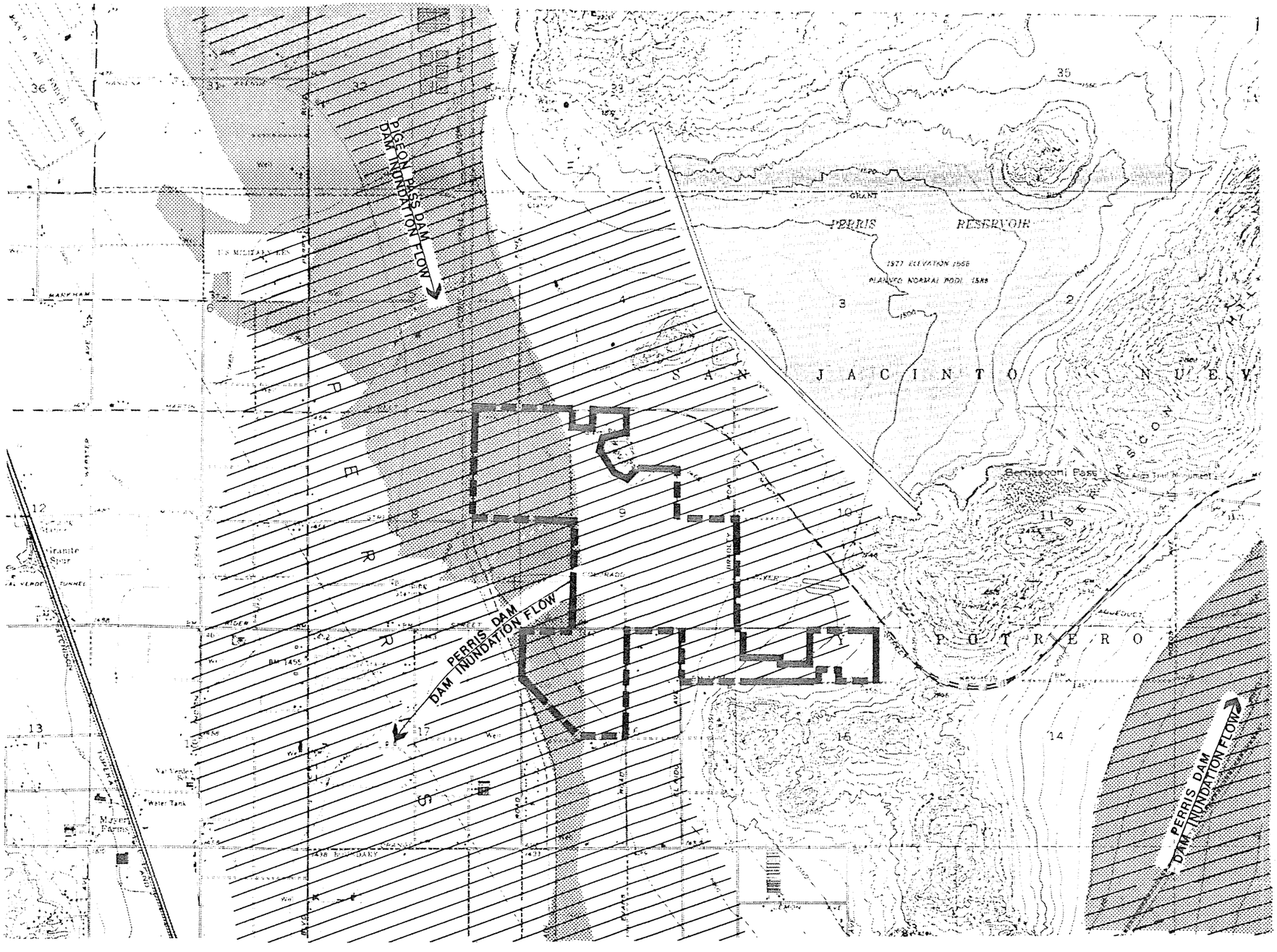
  The proposed plan addresses identified environmental hazards and resources.

4.1.2 SITE IDENTIFICATION WITHIN COMPOSITE HAZARDS/RESOURCES MAP INVENTORY

As shown in Figure 21 Regional Drainage, the project is subject to flooding.

- Standard: All proposed development within identified flood hazard areas, including floodways, 100-year flood plains, and areas subject to shallow flooding will be required to comply with the provisions of the Floodplain Management Ordinance Number 492, and the criteria of the Federal Flood Insurance Program.

REGIONAL DRAINAGE



100 YR. FLOOD

DAM INUNDATION FLOW

FIGURE: 21

FLORIAN MARTINEZ ASSOCIATES

May Ranch

- o Standard: Prior to the approval of any development that is proposed to be located within an identified flood hazard area, it shall be found and demonstrated that:

  The proposed development will not increase the danger to human life and health.

  The proposed development is justified in terms of adequate social and economic considerations in light of the probability for property loss of damage and the need for access by emergency services in the event of flooding.

- o Standard: Full consideration shall be given to the potential for danger to life and property in downstream areas that may be caused by the increased flood heights, stream velocities, and debris that could result from additional construction in flood hazard zones, in determining the acceptability of such development.

- o Standard: Each proposed land subdivision and development within floodplain areas shall be reviewed as to the appropriateness of anticipated densities and land uses in light of the need for, and cost of, providing disaster relief services both during and after periods of inundation, and in view of alternate sites more suitable for such development not located in flood prone areas.

- o Standard: In areas where the topography consists of well defined ridges and natural watercourses, an adequate area outside of natural drainage courses for building must be shown for all land divisions. Permitted development densities should be scaled depending upon the particular topographic and slope conditions that prevail on the site, and access routes must not interfere with natural drainage patterns.

- o Standard: Approved developments shall not result in the diversion of storm run-off into adjacent properties, nor cause any undue alteration of natural drainage courses that cannot be handled by existing or proposed storm drainage and flood control improvements.

4.1.3 LAND USE AREA PROFILE AND COMMUNITY POLICY AREA IDENTIFICATION FOR PROJECT SITE

4.1.4 SUMMARY OF PROJECT PROPOSAL/SITE COMPARISON WITH APPLICABLE LAND USE CATEGORY POLICIES OR COMMUNITY PLAN

The City of Perris lists ten (10) land use categories which could be delineated for land other than open space and public facilities. The 10 categories are:

1. Rural Residential
2. Low-Density Residential
3. Medium-Density Residential
4. Professional Commercial/Mixed Use
5. Neighborhood Convenience

6. General Commercial
7. Industrial
8. Open Space
9. Commercial Recreation and Visitor Center - Industrial
10. Public Facilities

For the purpose of this Specific Plan, the only applicable land use designations are:

2. Low-Density Residential
3. Medium-Density Residential
4. Professional Commercial/Mixed Use
9. Commercial Recreation and Visitor Center - Industrial
10. Public Facilities

Low-Density Residential (3-7 units per acre.) This designation is intended for the majority of the land area in the City that is allocated by the Plan for residential uses. Typical of the development that is consistent with this designation would be single-family home tracts as well as mobile home subdivisions.

The proposed project site provides for a product of development which fits the criteria of this category.

Medium-Density Residential (8-15 units per acre). This category includes multi-family developments consisting of duplex, triplex, or fourplex structures, garage style apartments as well as the zero lot line design concept.

The proposed project site provides for a project which utilizes the density criteria of this category. The project provides for the density development within a single-family dwelling product.

Professional Commercial/Mixed Use. This category is intended to provide an environment of residential and commercial development which would enhance the livability of the surrounding development.

The proposed project site will provide projects which comply with high standards of site design and incorporate adequate buffering measures to protect residents from possible concentrated impacts of commercial and residential development.

4.2 LAND USE ELEMENT

4.2.1 LAND USE PLANNING POLICY ANALYSIS

The May Ranch site is situated in the northeasterly portion of the City of Perris, approximately two miles east of Interstate 215, immediately southwest of Lake Perris, and approximately three miles northeasterly of the City of Perris "Old Town" Civic Center and Business District.

The land use categories of the City of Perris are meant to provide a means for allocating the land areas within the City of Perris to the various types of development that are desirable in the community's future growth pattern. Any proposed development on any site must meet all of the Plan's policies and specific development criteria relating to the type, density, and location of such development.

The proposed May Ranch project is consistent with more than one land use category. The project provides the characteristic design criteria which are consistent with the established General Plan Land Use Policies.

4.2.2 COMMUNITY POLICY AREA ANALYSIS

4.2.3 LAND USE CATEGORY POLICY ANALYSIS

The project request is to amend the Perris General Plan to adopt a Specific Plan. Discussion of applicable land use category policies are provided in Section 4.1.3. Subsequent requests will include zone change and tentative tract map, which will facilitate the Specific Plan.

The General Plan identifies the major policies associated with projects under which the Specific Plan is guided. These relate to Flooding, Noise, Slope and Geologic Hazards, Fire Protection and Safety, Infrastructure and Public Services, Police and Fire Service, Schools and Recreational Facilities, and Storm Drainage Flood Control Facilities and Land Use Compatibility.

a. **Flooding:** The site is located in the Perris Dam Flood Inundation area and specific considerations are made in Section 4.3.2.

b. **Noise:** The General Plan considerations are discussed in Section 4.3.3.

c. **Slope and Geologic Hazards:** While slope is not a problem on this proposed site, seismic considerations are discussed in Section 4.3.1.

d. **Fire Protection and Safety, Infrastructure and Public Services** are discussed in Section 4.4.

4.3 SPECIFIC PLAN ENVIRONMENTAL IMPACTS AND MITIGATION

4.3.1 EARTH RESOURCES

The specific geotechnical recommendations contained in this section of the EIR were taken from a report entitled, "Geotechnical Feasibility Investigation, May Company Parcel - 1000 acres Perris, California", dated November 4, 1987 and contained in Appendix 5.2.

a. Existing Conditions

Topography

Elevations on the proposed project site range from approximately 1,410 feet above mean sea level (MSL) in the northwestern corner of the property at the intersection of the Perris Valley Storm Drain and Ramona Expressway, to approximately 1,560 feet MSL in the extreme southeastern corner near the terminus of Walnut Avenue. Relief over the project site is gently upsloping from west to east. Predominant drainage is to the southwest. A large granitic hill feature occurs on the northern boundary of property. An area of steeper topography occurs generally east and southeast of the project site.

Regional Geology

This discussion incorporates by reference Section 4.1, Regional Geology from the McCanna Ranch Final EIR (SCH87011910).

The project site is situated on the Perris Block which is a portion of the Peninsular Ranges Geomorphic Province. The site is underlain by granitic and metamorphic rocks which have been alternately deeply eroded and filled with stream deposits during Pliocene and Pleistocene geologic epochs.

Site Geology

The site lies predominantly on alluvium characteristic of that encompassing the greater Perris Valley floodplain. Soils encountered during the field investigation generally consist of dense Silty and Clayey Sand and Sand with occasional Silt and Clay interbeds. No areas of fill were noted. Soils depths encountered during exploratory testing ranged from 3 feet to 20 feet. Alluvial soils are probably 40 to 50 feet thick beneath the majority of the site with much thinner alluvium in the vicinity of the granitic feature.

Regional Seismicity

Seismic risk in Southern California is a well recognized factor, and is directly related to geologic fault activity. Seismic damage potential depends of the proximity to active or potentially active fault zones, and on the type of geologic structure. In relative terms, seismic damage is generally less intense in consolidated formations, i.e. bedrock, than in unconsolidated materials, such as alluvium.

In Southern California, most of the seismic damage to man-made structures results from ground shaking and, to a lesser degree, from liquefaction and ground rupture caused by earthquakes along active fault zones. In general, the greater the magnitude of the earthquake, the greater the potential damage.

Seismic hazards at the proposed project site are attributed to ground shaking as a result of an earthquake epicentered on an active fault in the surrounding Southern California area (Figure 22). No evidence of active faulting was encountered on-site during the field survey phase of the geotechnical investigation. The regional faults with the greatest potential to affect the site over the life of the project include the San Andreas Fault, the San Jacinto Fault, the Whittier-Elsinore Fault, the Cucamonga Fault and the Newport-Inglewood Fault. The closest of these faults is the San Jacinto Fault located about five miles northeast of the site. Table 4.1 provides pertinent information about these faults including distance from site, historical movements of importance, maximum probable magnitudes and horizontal accelerations affecting the project site.

b. Environmental Impacts

Topography

The extent of topographic alteration of the site required to accommodate development is considered minor in magnitude, given the already flat nature of the project site. Figure 20 illustrates the grading concept plan for the proposed project. No extensive cuts or fills are required, and it is the objective to attempt to balance the earthwork on site. No significant impacts on topography will occur.

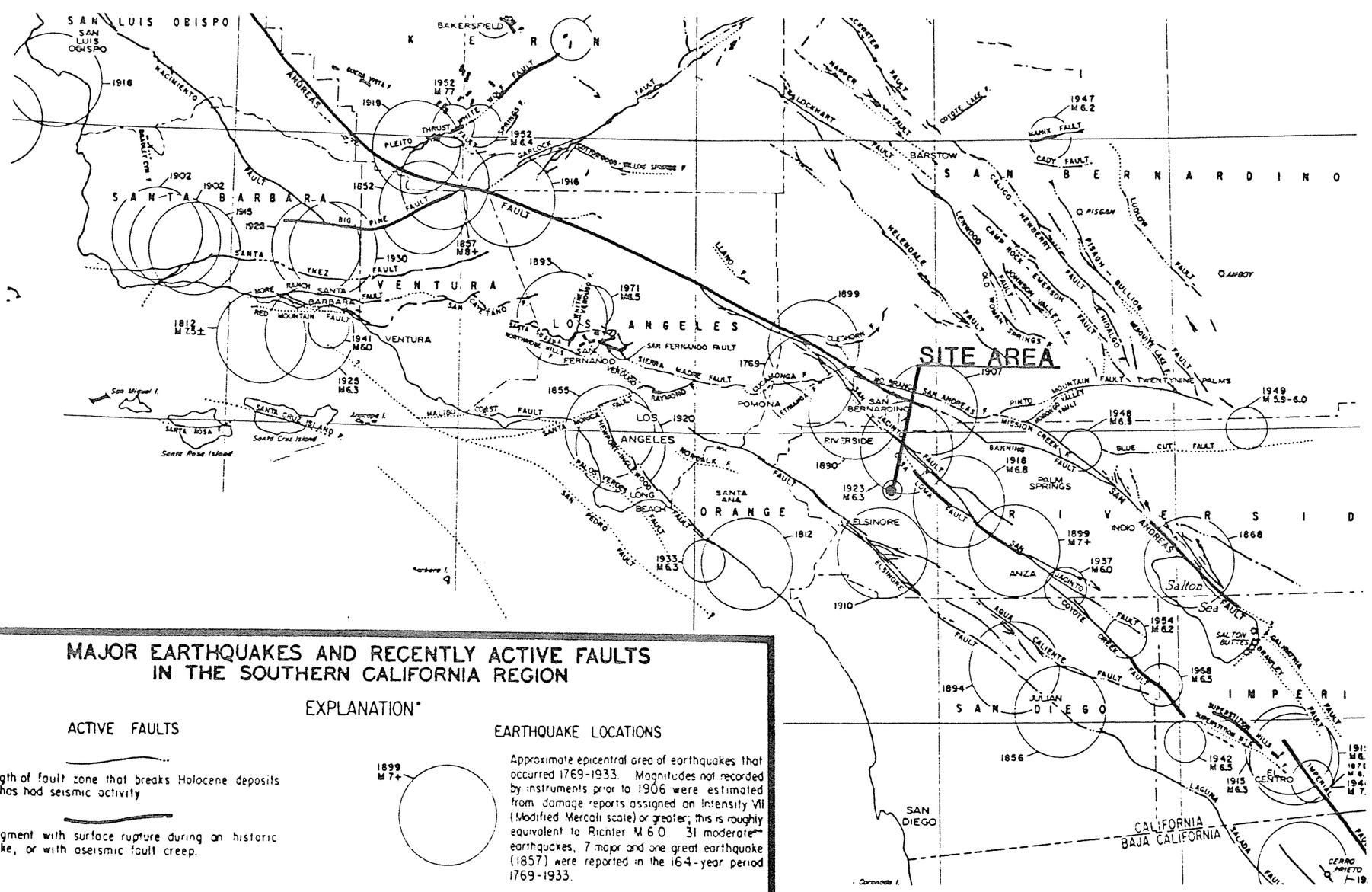
Site Geology

The Geotechnical Feasibility Investigation of the proposed project has concluded that the site is suitable for the proposed development from a geotechnical standpoint. However, site soils exhibit several characteristics that must be compensated for during grading and preparation for foundations in order to avoid adverse impact on the developed site and structures. Specific recommendations are contained in the geotechnical report contained in Appendix 5.2.

The major soil characteristics that could affect the proposed development are summarized below.

(1) Excavating conditions - Excavation of on-site materials may be accomplished with standard earthmoving or trenching equipment. No hard rock was encountered which would require blasting. Due to depth to groundwater, dewatering during excavation is not anticipated.

FAULT LOCATION EXHIBIT



MAJOR EARTHQUAKES AND RECENTLY ACTIVE FAULTS IN THE SOUTHERN CALIFORNIA REGION

EXPLANATION*

ACTIVE FAULTS

Total length of fault zone that breaks Holocene deposits or that has had seismic activity

Fault segment with surface rupture during an historic earthquake, or with aseismic fault creep.

- Holocene volcanic activity (Amboy, Pisgah, Cerro Prieto and Salton Buttes)

EARTHQUAKE LOCATIONS

1899 M 7+

Approximate epicentral area of earthquakes that occurred 1769-1933. Magnitudes not recorded by instruments prior to 1906 were estimated from damage reports assigned an intensity VII (Modified Mercalli scale) or greater; this is roughly equivalent to Richter M 6.0. 31 moderate** earthquakes, 7 major and one great earthquake (1857) were reported in the 164-year period 1769-1933.

1952 M 7.7

Earthquake epicenters since 1933, plotted from improved instruments. 29 moderate** and three major earthquakes were recorded in the 40-year period 1933-1973.

* See Lamar, Merrifield, Proctor paper herein for additional explanation of map.

** Code recommendations by the Structural Engineers Association of California define a great earthquake as one that has a Richter Magnitude of 7 3/4 or greater, a major earthquake 7 to 7 3/4; a moderate earthquake 6 to 7.

Compiled by Richard J. Proctor mainly from published and unpublished data of the *California Division of Mines and Geology*, *California Department of Water Resources Bulletin 116-2* (1964); selections from bulletins of the *Geological* and *Seismological Societies of America*; from C. F. Richter, *Elementary Seismology* (1958); and the *National Atlas*, p. 66.

FIGURE: 22

FLORIAN MARTINEZ ASSOCIATES

SOURCE: G.A NICOLL & ASSOCIATES
NOVEMBER, 1987

May Ranch

TABLE 4-1
SEISMIC PARAMETERS

POTENTIAL CAUSATIVE EARTHQUAKE FAULT	CLOSEST DISTANCE FAULT TO SITE (miles)	HISTORY OF EARTHQUAKES OVER 6 RICHTER MAGNITUDE WITHIN 70 MILE RADIUS			MAXIMUM PROBABLE EARTHQUAKE			
		DATE	RICHTER MAGNITUDE	DISTANCE FROM SITE (miles)	RICHTER MAGNITUDE	PEAK HORIZONTAL BEDROCK ACCELERATION AT SITE (gravities)	*MAXIMUM REPEATABLE GROUND ACCELERATION (gravities)	DURATION OF STRONG SHAKING (seconds)
SAN ANDREAS FAULT (SOUTH OF GARLOCK FAULT)	18W	12/24/48	6.5	47	8.25	.34	.22	36
SAN JACINTO FAULT	5SW	4/21/18 7/23/23	6.8 6.3	14 11	7.2	.53	.34	26
WHITTIER-ELSINORE FAULT	15NE	5/15/10 10/1/87	6.0 6.1	14 48	6.5	.23	.15	18
CUCAMONGA FAULT	28SW				6.75	.13		21
NEWPORT-INGLEWOOD FAULT	39NE	3/11/33	6.3	49	6.5	.07	.13	18

* THE REPEATABLE HIGH GROUND ACCELERATION TAKEN AS 65% OF THE PEAK ACCELERATION FOR SITES WITHIN 20 MILES OF THE EPICENTER (AFTER PLOESSEL AND SLOSSON, 1974), MAY BE MORE APPLICABLE FOR DESIGN ANALYSIS

FLORIAN MARTINEZ ASSOCIATES

SOURCE: G.A. NICOLL & ASSOCIATES NOVEMBER, 1987

May Ranch

(2) Processing of Soils - The existing soils are generally not considered adequate as foundation material without densification. Soils can, and should be, over-excavated and reworked within the foundation zone to achieve adequate densification. Soils are considered adequate for reuse in the construction of on-site fills if the organic content does not exceed 3 percent.

(3) Shrinkage - Existing on-site materials are expected to exhibit shrinkage on the order of 5 to 10 percent by volume.

(4) Expansion Potential - Expansivity of existing site soils is expected to range from Low to Moderate.

(5) Sulfate Content - The sulfate content of representative site soils are less than 0.2 percent, which typifies a sulfate condition. Such a condition allows for conventional building practices.

Seismicity and Seismic Hazards

The Whittier-Elsinore Fault and the San Jacinto Fault have the greatest potential for causing groundshaking at the project site. As shown in Table 4.1, a Magnitude 7.2 earthquake on the San Jacinto Fault could produce maximum repeatable ground acceleration of .34g at the site. The duration of strong ground motion could last 26 seconds. Such an earthquake could cause substantial damage at the project site and is considered a potentially significant adverse effect. Design measures are proposed in the Mitigation Measures section, however, to reduce this impact to a level of insignificance.

Potential secondary seismic hazards have been considered and include such occurrences as earthquake-induced landslides, seismic settlement, liquefaction, ground lurching and cracking, and seismic seiche. Due to the dense nature of the soil cover, such hazards as settlement and ground lurching though possible, have a low probability of occurrence. Similarly, the relatively flat topography on-site and intact bedrock condition of surrounding hilly terrain result in low probability of impact from earthquake-induced landslides.

Perched groundwater was encountered on-site at depths of from 35 to 41 feet below the surface. Due to the relatively great depths to the groundwater, the potential for soil liquefaction is considered negligible.

Seiching in Perris Reservoir may occur. The possibility of seiches overtopping the dam and/or collapse of the dam resulting in flooding of the site is considered low (City of Perris, 1987).

c. Mitigation Measures

Site Geology

The Geotechnical Feasibility Investigation for the subject project site (Appendix 5.2) contains specific recommendations to overcome adverse soil

conditions which exist on-site. All grading and earthwork will be accomplished in accordance with standards and guidelines acceptable in the industry. In certain instances, the Geotechnical Feasibility Investigation requires that additional investigations and evaluations be made during final design and during project construction. These existing and future geotechnical studies will sufficiently mitigate to insignificance all potential geotechnical impacts identified above.

Seismicity

In accordance with the recommendations of the Geotechnical Feasibility Investigation, buildings should be designed to resist seismic lateral loading as prescribed by the Uniform Building Code.

4.3.2 HYDROLOGY/WATER QUALITY

a. Existing Conditions

The project site is essentially flat, with sheet flow drainage at a low gradient generally towards the southwest. Minor drainage improvements presently exist on the site and consist of shallow culverts at intersections and earth ditches along some roadways. The Perris Valley Storm Drain borders the site on the west and is the principal storm water conveyance facility serving the Perris Valley. The Perris Valley Storm Drain is tributary to the San Jacinto River.

The project site is situated three-quarters of a mile southwesterly of Lake Perris and is located within the Lake Perris Dam Inundation Area. The area of inundation in the event of a dam failure is shown on Figure 23, and encompasses all but about 20 acres of the site on the extreme southeastern corner. Though a catastrophic earthquake could cause a failure of the earthen dam structure, recent engineering studies of the dam show it to be in a safe and stable condition (State of California, 1982). According to the recent engineering review, the dam is considered to be capable of withstanding a Magnitude 8.0 earthquake originating at a distance of 10 miles from the dam. It was also determined that a major seismic event would not cause impact from seiches or surges in the reservoir. The maximum seiche action would be approximately two feet, whereas the reservoir normally has at least 12 feet of freeboard.

On the western portion of the project site, the Federal Insurance Administration has designated a 100-year flood hazard zone. This flood area is depicted on Flood Insurance Rate Map No. 060245-1405A and is illustrated on Figure 22.

The Perris Valley Area Master Drainage Plan encompasses the project site. Drainage fees amounting to $5,083 per gross acre of the Specific Plan can be assessed by the City.

FLOOD PLAIN EXHIBIT

100 YEAR FLOOD

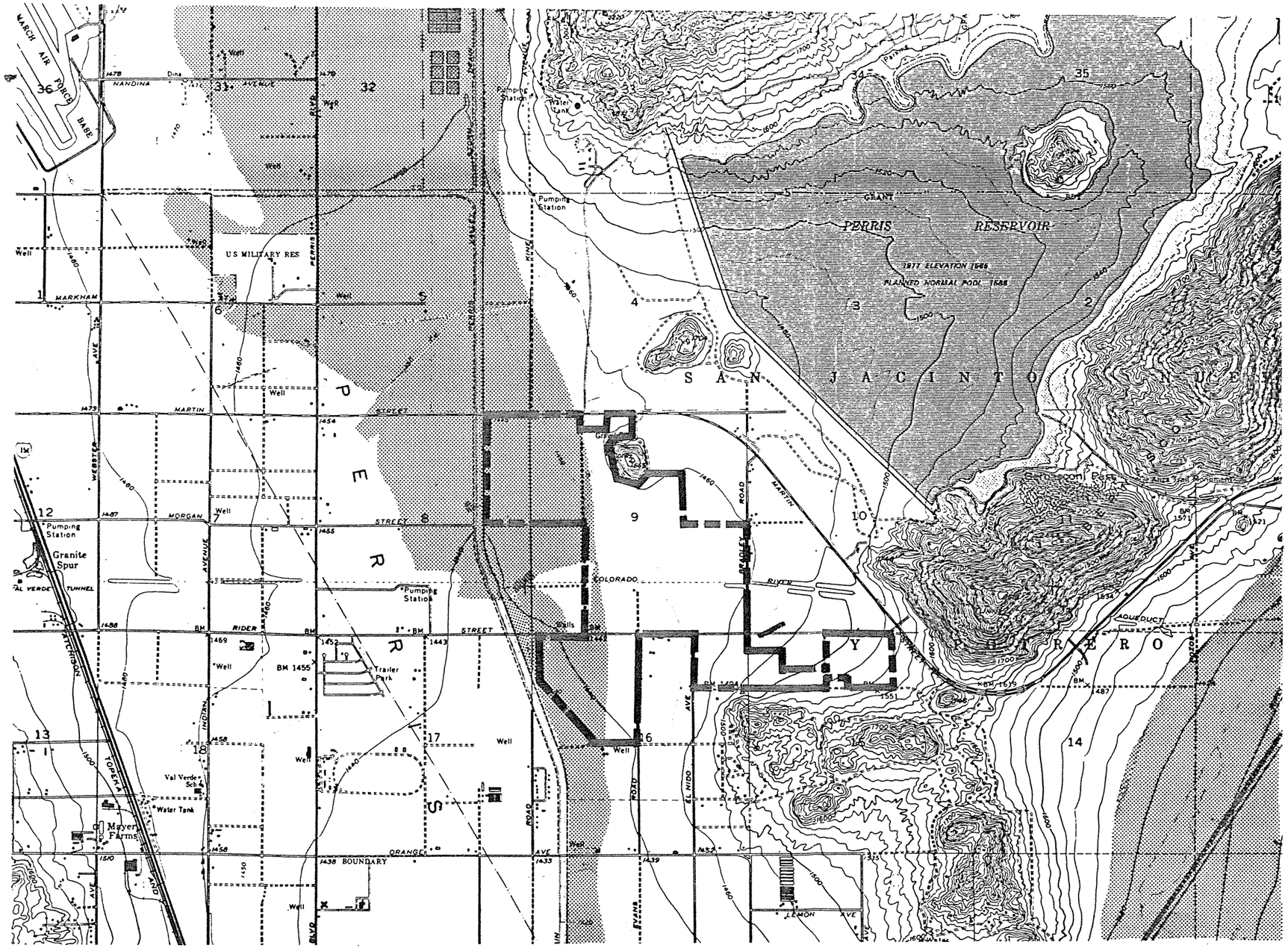


FIGURE: 23

FLORIAN MARTINEZ ASSOCIATES

May Ranch

Perched groundwater was encountered on-site at depths ranging from 35 to 41 feet below the surface. Based on data published in the U.S.G.S. Open-file Report 79-1256, the static groundwater level beneath the site is probably on the order of 180 to 200 feet deep (City of Perris, 1987).

b. Environmental Impacts

Development of the project site will alter the existing drainage patterns of the site. Site runoff will be increased in volume by approximately 10 percent from existing conditions due to construction of streets, sidewalks, dwellings and other impervious surfaces. Runoff will be channeled to a system of on-site drainage facilities which will convey the runoff to the Perris Valley Storm Drain. The proposed drainage facilities, which are shown on Figure 15 are based on runoff from a 100-year intensity storm event and modify the facilities shown on the Perris Valley Master Drainage Plan. These modifications are required due to changes in street alignments which affect major drainage facilities. With the proposed drainage features in-place, there will be no significant impact to the project from surface runoff.

From a regional perspective, site runoff will generally follow existing patterns, i.e. it will flow southwesterly to the San Jacinto River. As the Master Drainage Plan has assumed a fully developed condition of the Perris Valley Drainage Area, ultimate downstream facilities should be adequate to handle the increased flows from the project site.

The velocity and composition of runoff will be altered by grading of the site and by permanent developments. During grading, the potential for soil erosion by both wind and water is substantial and is considered a potentially significant impact. Runoff from developed areas will contain minor amounts of typical urban pollutants such as pesticides, fertilizers, oil and rubber residues, detergents, trace metals and hydrocarbon particles. These pollutants will be added to the existing levels of these substances in the Perris Valley Storm Drain and be contributed downstream to the San Jacinto River.

Virtually the entire site would be located in the inundation area of Lake Perris should the dam fail. Based upon recent engineering studies, it is concluded that the potential for such an occurrence is remote and does not represent a significant hazard to future inhabitants.

A further result of project development is an unquantified reduction in groundwater recharge from the site. It is assumed that recharge opportunities exist downstream such that the net reduction in contribution to the basin would be insignificant.

c. Mitigation Measures

On-site drainage facilities have been designed to accommodate capacities specified in the Perris Valley Master Drainage Plan. All facilities will conform to requirements established by Riverside County Flood Control District and Water Conservation District and the City of Perris.

During project construction, efforts will be made to limit wind and water erosion of exposed soils. Erosion control measures to be implemented include, but are not limited to, scheduling major grading activities during the dry season, revegetation of graded areas where possible, use of site watering or dust blankets to control fugitive dust and utilization of temporary drainage and sediment control devices.

Though the potential for failure of Lake Perris Dam is remote, final subdivision maps should note that the proposed project lies in a potential inundation zone.

The project applicant will contribute fees for drainage improvements to the appropriate agency amounting to $5,083 per acre. These fees are offset by the regional drainage improvements provided on-site and are to be used for regional drainage improvement projects.

The California Department of Water Resources has recommended the following measures to mitigate impacts relative to hydrology;

(1) Grade slopes so that drainage from runoff of surface water is minimized.

(2) Use pervious paving materials whenever feasible to reduce surface runoff.

(3) Use mulch extensively in landscaped areas as a means of improving the water-holding capacity of the soil.

4.3.3 AIR QUALITY

The subject discussion has been prepared in conformance with the guidelines of the South Coast Air Quality Management District and the analytical methodology outlined in the South Coast Air Quality Management District's, Air Quality Handbook for Environmental Impact Reports, revised April 1987. This discussion also incorporates by reference the Mestre Greve Associates (August 1987) "Air Quality Analysis For McCanna Ranch at Lake Perris EIR," SCH87011910.

a. Existing Conditions

The climate around May Ranch, as with all of Southern California, is controlled largely by the strength and position of the subtropical high pressure cell over the Pacific Ocean. It maintains moderate temperatures and comfortable humidities, and limits precipitation to a few storms during the winter. Temperatures are normally mild with rare extremes above 100 degrees F or below freezing. Daily and seasonal variations about the annual mean temperature of 62 degrees F are small.

Winds in the project area are typically driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime on-shore sea breezes. At night the wind generally slows and reverses direction traveling towards the sea. Wind direction will be altered by

local canyons, with wind tending to flow parallel to the canyons. During the transition period from one wind pattern to the other, the dominant wind direction rotates into the south and causes a minor wind direction maximum from the south. The frequency of calm winds (less than 2 miles per hour) is less than 15 percent. Therefore, there is little stagnation in the project vicinity, especially during busy daytime traffic hours.

Southern California frequently has temperature inversions which inhibit the dispersion of pollutants. Inversions may be either ground based or elevated. Ground based inversions, sometimes referred to as radiation inversions, are most severe during clear cold early winter mornings. Under conditions of a ground based inversion, very little mixing or turbulence occurs, and high concentrations of primary pollutants may occur near major roadways. Elevated inversions can be generated by a variety of meteorological phenomena. Elevated inversions act as a lid or upper boundary and restrict vertical mixing. Below the elevated inversion, dispersion is not restricted. Mixing heights for elevated inversions are lower in the summer and more persistent. This low summer inversion puts a lid over the South Coast Air Basin and is responsible for the high levels of ozone observed during summer months in the air basin.

Air Quality Management

The proposed project is located in the South Coast Air Basin and, jurisdictionally, is the responsibility of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD sets and enforces regulations for stationary sources in the basin. The CARB is charged with controlling motor vehicle emissions.

The SCAQMD, in coordination with the Southern California Association of Governments (SCAG), has developed an Air Quality Management Plan (AQMP) for the air basin. The South Coast Air Basin has been designated a non-attainment area for ozone, carbon monoxide, nitrogen dioxide, total suspended particulate matter, and lead. The AQMP mandated achieving healthful levels of air quality by 1987. Included in the plan are new stationary and mobile source controls; car-pooling, van-pooling, and other ride-sharing programs, and energy conservation measures. The AQMP is designed to accommodate a moderate amount of new development and growth throughout the basin. The AQMP projections and mitigations are based on the SCAG-82 Growth Forecasts.

Within the AQMP is a list of strategies designed to improve the transportation system throughout the region. This package of measures explores the feasible limits for long-range solutions to systemwide air quality concerns. Measures included in the AQMP can be divided into five broad categories: transportation control measures, mobile technological controls, energy conservation, land use, and stationary source controls. The land use strategies focus on land use measures that could help reduce the number and length of automobile trips made. The underlying premise for the land use measures is that trip making and mode choices are not only a function of the transportation system, but also of such factors as housing density, the relative location of land uses, and the way land uses relate to

the transportation system. Improvements in the transportation system recommended include: bus system expansion, high occupancy vehicle lanes, traffic signal synchronization, and traffic pattern optimization.

Monitored Air Quality

Air quality at any site is dependent on the regional air quality and local pollutants sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates for the South Coast Air Basin have been made for existing emissions ("Final Air Quality Management Plan, 1982 Revision," October 1982). The data indicates that mobile sources are the major source of regional emissions. Motor vehicles (i.e., on-road mobile sources) account for 50 percent of reactive hydrocarbon emissions, 58 percent of nitrogen oxide emissions, and 85 percent of carbon monoxide emissions.

The nearest air monitoring station operated by the SCAQMD is in Perris. The data collected at this station is considered to be representative of the air quality experienced in the vicinity of the project area. Air quality data for 1984 through 1986 for the Perris station is provided in Table 4.2.

TABLE 4-2
AIR QUALITY LEVELS MEASURED AT THE PERRIS
AMBIENT AIR MONITORING STATION

Pollutant	California Standard	National Standard	Year	Maximum Level	Days State St. Exceeded
Ozone	0.1 ppm for 1 hr.	0.12 ppm for 1 hr.	1984	0.22	137
			1985	0.29	146
			1986	0.22	133
Part. matter	150 ug/m3 for 24 hr.	260 ug/m3 for 24 hr.	1984	(2) NM	NM
			1985	NM	NM
			1986	215	8
Sulfate	25 ug/m3 for 24 hr.	No Std.	1984	15.9	0
			1985	14.1	0
			1986	14.0	0

NM = Not Measured
NOTES

1. Standards for sulfur dioxide and lead were not exceeded.
2. Standards for particulate matter changed in 1984. Data reported in terms of PM10.
3. Carbon monoxide and nitrogen dioxide are not monitored at the Perris station.

The air quality data indicates that ozone is the air pollutant of primary concern in the project area. The ozone standard is exceeded over one out of every three days. Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of the chemical reactions of other pollutants, most importantly hydrocarbons and nitrogen dioxide, in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in Perris. All areas of the South Coast Air Basin contribute to the ozone levels experienced at Perris, with the more significant areas being those directly upwind in Los Angeles and Orange Counties.

Particulate concentrations monitored at the Perris station should be representative of the levels currently experienced at the project site. Particulate matter levels in the area are due to natural sources, grading operations, and motor vehicles.

b. Environmental Impacts

Air quality impacts are usually divided into short term and long term. Short term impacts are usually the result of construction or grading operations. Long term impacts are associated with the built-out condition.

Short Term Impacts

Temporary impacts will result from project construction activities. Air pollutants will be emitted by construction equipment and dust will be generated during grading and site preparation. Construction activities for large development projects are estimated by the U.S. Environmental Protection Agency ("Compilation of Air Pollutant Emission Factors") to add 1.2 tons of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust as required by SCAQMD Rule 403, the emissions can be reduced by up to 50 percent. Applying the above factors to the approximately 684 acres of the project, a two month grading cycle, and a ten year total project buildout, results in an estimate of 0.45 tons per day of particulate emissions released. This is a small amount compared to the 116 tons per day of particulate matter currently released in Riverside County. Dust generated by such activities usually becomes more of a local nuisance than a serious health problem. In later development phases, grading may be near existing development. Care should be taken to minimize the generation of dust by watering prior to and during grading.

Heavy duty equipment emissions are difficult to quantify because of day to day variability in construction activities and equipment used. Typical emission rates for a diesel powered scraper is provided in Table 4.3, and were obtained from the SCAQMD Air Quality Handbook. A diesel powered scraper is the most common equipment used for grading operations. For this type of project 12 to 15 pieces of heavy equipment may be expected to operate at one time. If all of the equipment operated for eight hours per day the following emissions would result: 120 pounds per day of carbon monoxide, 520 pounds per day of nitrogen oxides, 50 pounds per day of hydrocarbons, 35 pounds per day of sulfur oxides, and approximately 35

pounds per day of particulate matter. The emissions generated by construction equipment are very minor.

TABLE 4-3
EMISSION RATES FOR GRADING SCRAPER
(Grams per hour)

Pollutant	Emission Rate
Carbon monoxide	660
Nitrogen oxides	2,820
Hydrocarbons	284
Sulfur oxides	210
Particulates	184

Long Term Effects

Estimates of the vehicular emissions are based on the Mohle Grover and Associates (March 1988) May Ranch Traffic Analysis, as contained herein. The subject traffic report forecasts 67,855 total vehicular trips per day resulting from the Specific Plan completion, with an average trip length of 10 miles. An average vehicle speed of 25 miles per hour was assumed. Table 4.4 below depicts the projected motor vehicle emissions.

TABLE 4-4
VEHICULAR EMISSIONS

Pollutant	Emissions (Tons/Day)
Carbon Monoxide	4.33
Nitrogen Oxides	0.79
Sulfur Oxides	0.14
Particulates	0.17
Hydrocarbons	0.39

Stationary Sources

Emissions will be generated on-site by the combustion of natural gas for space heating and Water heating. Projections of emissions are presented in Table 4.5. Estimates of commercial-use square footages were made based on a floor area ratio of 0.20.

TABLE 4-5
EMISSIONS FROM THE COMBUSTION OF NATURAL GAS

Pollutant	Emissions (Lbs/Day)
Carbon Monoxide	22.08
Nitrogen Oxides	88.34
Sulfur Oxides	0.00
Particulates	0.17
Hydrocarbons	5.84

Off-site emissions will be generated due to electrical usage. The generation of electrical energy by the combustion of fossil fuels results in additional emissions off-site. Emissions generated by this means are presented in Table 4.6.

TABLE 4-6
EMISSIONS GENERATED BY ELECTRICAL USAGE

Pollutant	Emissions (Lbs./Day)
Carbon Monoxide	16.73
Nitrogen Oxides	96.29
Sulfur Oxides	10.05
Particulates	3.34
Hydrocarbons	0.83

Total Emissions

The additional emissions generated by the project are compared to emissions for Riverside County in Table 4.7. The total emissions generated by the project (year 2000) are presented in the first line of the table. The Riverside County emissions for 2000 are from the 1982 Revision to the Air Quality Management Plan. The proposed project emissions are compared to the County emissions. The increases in all pollutants, when compared to Riverside County emissions, will be less than 1.3 percent, except for sulfur oxides. Since the emissions projected for the project are such a small fraction of regional emissions, it is concluded that no significant regional air quality impacts as a result of the proposed project will occur. The emissions for Source Receptor Area 24 are also listed in Table 4.7. Comparison of the emissions generated by the May Ranch with those of Source Receptor Area 24 indicate that the project emissions expectedly begin to be more significant due to the project size.

TABLE 4-7
COMPARISON OF EMISSIONS

	CO	NO(x)	SO(x)	PART	HC
2000 Proposed Project Emissions(tons/day)	4.35	0.88	0.15	0.17	0.39
2000 Riverside County Emissions(tons/day)	504	68.4	6.34	147	222
Proposed Project as a % of County Emissions	0.86%	1.29%	2.37%	0.12%	0.18%
1987 Source Recept. Area 24 Emissions (tons/day)	47.79	4.74	N.A.*	N.A.*	2.36
Proposed Project as a % of Area 24 Emissions	9.10%	18.57%	---	---	16.53%

*N.A. - Data not available.

The AQMP is designed to accommodate growth in the basin consistent with the SCAG-82 Growth Forecasts. This growth forecasts is based essentially on the general plans adopted by the various municipalities at the time of the development of the forecast. The growth forecasts are not sufficiently detailed so that consistency of the proposed project with the SCAG-82 document can be determined directly. However, the current land use for the area is a mix of agricultural and residential land uses. The SCAG-82 forecasts are based on the adopted General Plans. Therefore, it appears that it will generate significantly more emissions than previously planned. Because of the inconsistencies between the SCAG-82 Growth Forecast and actual development trends, an update is being generated at this time by SCAG.

c. Mitigation measures

Short-term Impact Measures

In order to minimize short-term air quality impacts, SCAQMD Rule 403 should be adhered to during grading operations to minimize dust generation, which will require watering during earth moving operations.

Long-term Impact Measures

Support and compliance with the AQMP for the basin is the most important measure to achieve to eliminate regional air quality impacts. Compliance with the AQMP will require implementing one of the following three options in response to the apparent inconsistency:

(1) The project could be modified to become consistent with the AQMP.

(2) A general plan amendment could be prepared, subject to the requirement of state planning laws.

(3) An EIR could be certified for an inconsistent project if a Finding is so made and a Statement of Overriding Considerations is included.

Because most of the project-related air pollution emissions are generated by automobiles, there is very limited potential for any effective mitigation on the part of any single developer. The incorporation of commercial land uses and public parks in the project designs assists in reducing vehicle miles, as does the inclusion of sidewalks and bicycle trails throughout the community. The applicant should assist the city in implementing measures detailed in the AQMP and regional transportation plan relative to reducing vehicle travel.

4.3.4 NOISE

a. Existing Conditions

This discussion incorporates by reference Section 4.10, Existing Conditions from the McCanna Ranch Final EIR (SCH87011910). Noise contouring analysis for the May Ranch has been provided by Acoustical Impacts International, Dr. Otto Bixler.

The California Department of Health has established guidelines for assessing the compatibility of community noise environments and land uses. The guidelines rank noise and land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

In addition, the California Noise Insulation Standards require that new multi-family residential construction should be noise insulated so that the interior noise levels do exceed 45 CNEL. Most cities have adopted this standard for both single and multi-family developments along with a 65 CNEL standard for private outdoor living areas (e.g., rear yards and patio areas). These standards, 45 CNEL indoors and 65 CNEL outdoors, will be used to evaluate the potential noise impact on surrounding residential uses.

Traffic Noise

An estimate of traffic noise levels in terms of CNEL was computed for the roadways in the vicinity of the project. The Highway Noise Model published by the Federal Highway Administration (FHWA Highway Traffic Noise Prediction Model, "FHWA-RD-77-108," December, 1978) was utilized. Estimates of existing traffic volumes, estimated speeds, and truck volumes were used with

the FHWA Model to estimate existing noise levels in terms of CNEL. Existing traffic volumes were obtained from the traffic study prepared for the McCanna Ranch Final EIR. The distances to the CNEL contours for the roadways in the vicinity of the project site are given in Table 4.8, Existing Traffic Noise Levels. These represent the distance from the centerline of the road to the contour value shown. Note that the values given do not take into account the effect of any noise barriers that may affect ambient noise levels.

TABLE 4-8
EXISTING TRAFFIC NOISE LEVELS
Distance to CNEL Contour from Centerline of Roadway (Feet)

Roadway	57 CNEL	60 CNEL	65 CNEL	70 CNEL
RAMONA EXPRESSWAY				
I-215 to Indian	409	206	69	32
Indian to Perris	427	215	72	33
Perris to Center	565	284	93	38
Center to Bradley	301	151	50	21
Bradley to Rider	301	151	50	21
RIDER STREET				
Perris to Center	7	6	6	6
Center to Ramona Expressway	7	6	6	6
PERRIS BOULEVARD				
N/O Ramona	259	130	41	14
Ramona to Rider	201	101	32	12
Rider to Orange	197	99	32	12
S/O Orange	206	103	33	12

Source: Acoustical Impacts International, 1988

Aircraft Noise Sources

March Air Force Base is over three miles northwest of the project site. Based on the 1984 Air Installation Compatible Use Zone (AICUZ) Report for the March Air Force Base, the western boundary of the project site is located adjacent to the 65 CNEL contour (Figure 24). Through extrapolation, the aircraft noise levels at the project site are approximated to be between 65 and 50 CNEL.

b. Environmental Impacts

Potential noise impacts may arise from construction activities and traffic impacts on surrounding land uses. Each of these activities is addressed below.

NOISE CONTOUR EXIBIT

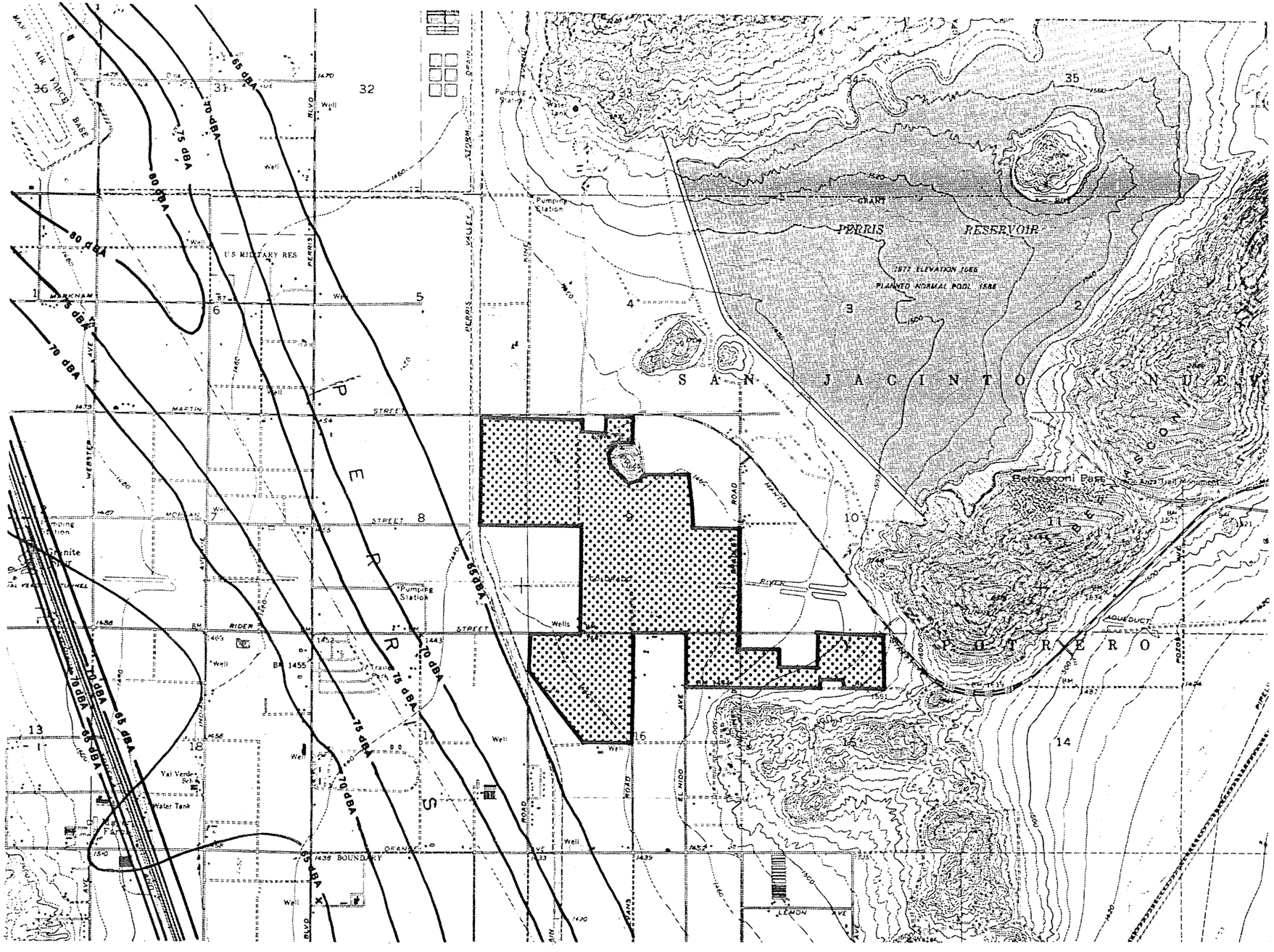


FIGURE: 24

FLORIAN MARTINEZ ASSOCIATES

May Ranch

Construction Activities

Construction noise represents a short-term impact on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators, can reach high levels. Construction equipment noise comes under the control of the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations). Presently, air compressors are the only equipment under strict regulation, and no new regulations are currently under consideration. Noise levels for equipment which might be used for the excavation and construction of the proposed project range from approximately 65 to 105 dBA at a distance of 50 feet. The noise levels decrease at a rate of approximately 6 dBA per doubling of the distance. Therefore, at 100 feet the noise levels will be about 6 dBA less. Similarly, at 200 feet the noise levels would be 12 dBA less. Intervening structures or topography will act as a noise barrier, and reduce noise levels further.

Traffic Noise

The proposed development of the May Ranch will generate substantial traffic, and, as a result, will alter noise levels in surrounding areas. To assess the impact of the proposed project on land uses adjacent to streets that will serve the project, the roadway noise along these streets were determined. The roadways were modeled for existing traffic conditions and for existing plus project traffic conditions. The existing plus project CNEL noise levels are presented in Table 4.9. Distances to contour from center lines assume no intervening structures or noise attenuating features.

TABLE 4-9
EXISTING PLUS PROJECT NOISE LEVELS
Distance to CNEL Contour from
Centerline of Roadway (Feet)

ROADWAY	57 CNEL	60 CNEL	65 CNEL	70 CNEL
RAMONA EXPRESSWAY				
I-215	1192	598	191	65
Indian to Perris	1407	705	224	75
Perris to Center	2743	1375	435	140
Center to Bradley	685	344	111	42
Bradley to Rider	432	217	70	26
RIDER STREET				
Perris to Center	468	236	81	40
Center to Ramona	55	28	11	7

PERRIS BOULEVARD				
N/O Ramona	671	337	111	47
Ramona to Rider	437	221	77	40
Rider to Orange	295	151	57	36
S/O Orange	295	151	57	36
CENTER STREET				
Ramona to Placentia	635	315	155	70

Source: Acoustical Impacts International, 1988
Riverside County General Plan, 1986

The results in Table 4.9 indicate that the residences along the Ramona Expressway will be impacted by traffic noise unless mitigated by use of walls or barriers. Noise levels along Rider Street will also increase and may require mitigations. For the other roadways within the project site, the noise levels should be acceptable. Generally homes along the interior roadways will not be exposed to noise levels greater than 60 CNEL. Mitigation will be needed for homes exposed to 57 CNEL or greater to achieve acceptable noise levels.

Aircraft Noise Sources

The noise levels generated by March Air Force Base are anticipated to remain constant in future years. Therefore, the project site will continue to experience aircraft noise levels less than 65 CNEL. The proposed residential development is compatible with aircraft noise environment and mitigation will not be needed.

c. Mitigation Measures

The following mitigation measures are proposed:

1. Construction activities near residential areas should be limited to daytime hours (7 a.m. to 7 p.m.) on weekdays.

2. For the proposed residential developments along impacted roadways detailed noise studies should be conducted prior to the issuance of building permits when grading and architectural plans become available. The noise studies should indicate the measures necessary to achieve a noise level of 65 CNEL in private outdoor living areas (i.e., rear yards), and 45 CNEL in indoor living areas. These mitigation measures should be based on ultimate traffic levels for the roadways.

4.3.5 BIOTIC RESOURCES

a. Existing Conditions

The 684-acre property consists entirely of farmland, with active production of alfalfa, sheep, and non-irrigated grains. No native plant community or undisturbed habitat is present.

Although no native plant communities are present, the fallow fields are occupied by non-native grassland. (The original vegetation of the site was probably grassland and sparse sage scrub.) With the exception of a few Peruvian pepper trees at the old homesites, the only trees on the site are a row of large eucalyptus trees which borders Rider Street.

Because of the active cultivation, few ground-dwelling birds, mammals, or reptiles inhabit the site. However, the large expanse of open space, of which May Ranch is a part, attracts a variety of birds of prey, especially in the winter. Its proximity to Lake Perris and the San Jacinto Wildlife Area increases the open space and habitat value of the site and the surrounding area. The region is well-known for its large populations of wintering hawks, eagles, and owls. In addition to the habitation and use of the site and environs by the several raptor species, the agricultural lands also support thousands of wintering shorebirds, blackbirds, and songbirds. Although several mammals were also detected on the subject property, the lack of significant groundcover does make the site less desirable for many of the species of mammals.

Several species of plants and animals considered to be sensitive by resource agencies and conservation organizations were identified as occurring or potentially occurring on May Ranch. These species include two reptiles, one mammal, and three plants. The Stephens kangaroo rat was not trapped and is absent on the property while the probability of occurrence is considered low for the San Diego horned lizard and the Orange-throated whiptail (i.e., site is within the known range of the species but habitat on the site is rarely used by the species). The three plant species reportedly in the environs (Payson's caulanthus, thread-leaved brodiaea, and prostrate spineflower) prefer habitats different from that on the subject property.

Because the site is within the range identified by the County of Riverside for the Stephens kangaroo rat, a State and federally listed species, a trapping survey of the property most likely to be inhabited by that species, was undertaken. However, only four deer mice were captured. Based on the results of the trapping study, it was determined that the site does not provide habitat for kangaroo rats or other rodents because of the active cultivation.

Many birds of prey were noted, both in field observations and through other documentation, to occur on the site. The site supports wintering populations of many species of predatory birds, including ospreys, the great horned owl, long-eared owl, burrowing owl, and barn owl. Other species which may use the site are the golden eagle, black-shouldered kite, prairie falcon, ferruginous hawk, and northern harrier. In addition, bald eagles are occasionally sighted in the winter near Lake Perris and in the San Jacinto Valley; this endangered species may fly over the site, on occasion.

The numbers of nesting predatory birds are much fewer. One nest of a red-tailed hawk was observed off-site in a eucalyptus tree near Evans Road. A hollow stump of a Peruvian pepper tree at an old homestead was also believed to contain a nesting site for a pair of great horned owls. The red-tailed hawks are seen daily using the wooden power poles for perches and golden

eagles may nest in the Bernasconi Hills or on Mount Russell; this latter species is often sighted in the area surrounding May Ranch.

b. Environmental Impact

Because the site is no longer a natural habitat, biological impacts (i.e., impacts occurring to wildlife and vegetation, including habitats) are less than if undisturbed lands were being converted to more intense uses for the first time. The major impact resulting from project implementation is the loss of a large area of open space, one which is now contiguous with other large open space parcels. At this time, the biological impact of the proposed specific plan of development represents an incremental contribution to the loss of open space in the general region. Because several thousand acres of open space are still available, this impact is not significant when considered by itself. However, as urbanization of private lands continues in the Perris and San Jacinto Valleys, development will cumulatively become very significant for the substantial populations of migratory birds now present in the region. No threatened or endangered species of plants and/or animals will be impacted by project implementation. Likewise, no essential habitat for threatened or endangered species will be removed.

c. Mitigation Measures

Mitigation is not required under this category of examination.

4.3.6 LAND USE

a. Existing Conditions

On-site Land Use

The entire property consists of farmland, with active production of alfalfa, sheep, and non-irrigated grains. A portion of the site is fallow. As discussed in Section 2.2, agricultural use of the property is predominant in recent history. Prior agricultural uses in the area and perhaps the project site have included cattle grazing, the growing of potatoes and sugar beets and the growing of alfalfa.

There are presently no structures on the site.

Surrounding Land Uses

The immediate surrounding land uses include the Lake Perris Recreation Area to the north and agricultural lands to the west and south. Immediately on the east, the McCanna Ranch Specific Plan has been approved which will result in the construction of approximately 1387 residential units on 250+ acres. Further west lies Lake Perris Dam and Reservoir. Several individual farm dwellings and structures are located on properties adjacent to the proposed site.

All of the subject property north of Rider Street is presently within the city limits of the City of Perris. The subject property south of Rider

Street is currently proposed for annexation to the City of Perris. Other land uses of interest in the surrounding area include the City of Perris "Old Town" Civic Center and Business District (approximately three miles southwest of the site), and March Air Force Base (approximately 4.5 miles north of the site). The Farmers Fair project is to be located on a parcel of land at the northeast corner of Ramona Expressway and Center Street. The "Fair" is currently scheduled for two weeks continuous operation per year, though it may ultimately become a year around operation.

Area Development Trends

Existing and future development trends are discussed in Section 2.3.5 of this Specific Plan/EIR.

General Plan Policies and Zoning Designations

The current zoning for the property is Agriculture. This zoning carried over from the County land use plan upon annexation of the project site to the City of Perris. The land use element of the City's general plan is in a policy format and provides for a continuation of agricultural, open space and flood plain uses.

An analysis of the proposed project's relationship to general plan policies is contained in Section 4.3.6.b.

Other Pertinent Land Use Plans

(1) Airport Land Use Plan - The Riverside County Airport Land Use Commission has adopted an Airport Land Use Plan (ALUP) and has established an Interim Influenced Area for March Air Force Base. The Interim Influenced Area defines the compatible land uses for areas around the base affected by aircraft operations. Three Areas are defined. Area I is defined as imaginary approach surfaces and clear zones in the runway vicinity and extending beyond on the runway centerline. This is the area with the most restricted land use criteria. Area II encompasses the area where significant safety concerns are evident due to aircraft maneuvering about the flight pattern. Land use restrictions are moderate in this area. Area III is the outer boundary of the influenced area. No specific land use restrictions occur in this area. <u>The ALUP is an advisory document only</u>.

A portion of the proposed project site, consisting of about 160 acres bounded by the Perris Valley Storm Drain, Ramona Expressway, Morgan Street and a line coinciding with a hypothetical extension of Center Street, is within Area II of the March Air Force Base Influenced Area. Also in Area II is the portion of the project site southerly of Rider Street and west of Evans Road and consisting of about 147 acres. Compatible uses in Area II,

according to the ALUP are commercial, industrial and agricultural. Residential uses must be minimum 2.5 acre lots per dwelling unit.

The remainder of the site lies within Area III and is not subject to any ALUP restrictions.

(2) 1984 Air Installation Compatible Use Zones Report, March Air Force Base - The Air Installation Compatible Use Zone (AICUZ) Report was prepared by the U.S. Air Force to promote orderly and compatible use of land around March Air Force Base. Basic land use compatibility determinations are based on the establishment of clear zones, accident potential zones (APZ 1 and APZ 2), and noise impact zones defined by DNL noise contours. For obvious reasons, very few land uses are acceptable in the clear zones adjacent to and off the end of the runways. In the accident potential zones, the objective is to restrict people-intensive uses. In APZ 1, compatible uses are industrial, transportation, utilities, wholesale trade, open space and agriculture. In APZ 2, compatible uses include APZ 1 uses plus other low intensity uses (including low density residential). With respect to noise, residential uses located in areas below Ldn 65 are considered compatible. The study also states that there is an accident risk outside of the APZ area within a 10 nautical mile radius of the base, however, the risk is not significant enough to warrant special attention.

None of the clear zones, APZ's or noise contours of March Air Force Base intersect the project site. The Ldn 65 noise contour lies right at the property's western boundary as shown on Figure 23 in the Noise section.

Agricultural Resource Considerations

The project site soils are characteristic of productive farmland. Agricultural capability classifications include both Class I and Class II soils. Such soils have low to moderate limitations for a range of truck crops, specialty crops, and field crops.

The Riverside County General Plan identifies two classifications of agricultural land occurring on-site. A small portion of the site consists of Prime Farmland which, as previously mentioned, has physical characteristics conducive to the production of a wide range of agricultural products. The majority of the site is classified as Statewide Important Farmland. This designation is for land other than prime farmland that has a good combination of physical and chemical characteristics needed to produce food, fiber, or animals.

Agricultural lands which make up the project site were formerly subject to agricultural use contracts under the Williamson Act. However, a non-renewal of this preserve was filed in September of 1978. The contract expiration date is August 1988.

b. Environmental Impacts

On-site Land Use

Approval of the proposed Specific Plan will initiate a phased conversion of site land use from the existing agricultural operation to an urbanized use consisting of residential, commercial and park uses. A direct effect of this conversion will be the physical changes which take place on-site to implement the project. Indirectly, the project will attract residents and businesses, create demands for additional business and community services, and utilities. The land use change will alter the tax revenues available to the local governments and will establish long-term demands for supporting natural resources such as water and energy.

Surrounding Land Use

Implementation of the project could encourage surrounding undeveloped or agricultural uses to urbanize. Causative factors include extension of major utilities, creation of assessment districts and other taxing mechanisms, urban/agricultural land use conflicts (see Agricultural Resource Considerations, below) and an attractive environment. Induced projects are subject to the same review and approval process as the proposed action, however.

Other surrounding land uses such as the Farmers Fair and the Lake Perris Recreation Area are generally compatible with the proposed residential and commercial uses. Certain use conflicts, such as increased traffic, may arise in conjunction with major events or due to seasonal factors. Project landscaping concepts will serve to buffer the site from these surrounding land uses.

General Plan and Zoning Considerations

Approval of the proposed Specific Plan would allow a more intense development of the site than is allowed under existing zoning. While individual aspects of the Specific Plan vary from existing zoning regulations and the project proposes distinctive development standards, there are two major aspects of the project which conform to key provisions of the existing zoning regulations. Lot sizes for the single family residential units will range from 4,000 square feet to 7,000 square feet which conforms to Ordinance Number 641 of the City Council of the City of Perris. Also, all commercial development will occur in compliance with Chapter 19.40 of the City of Perris Zoning Ordinance.

The Specific Plan has been formulated to be generally consistent with the overall City General Plan. The project's relationship to the applicable City General Plan goals and policies is discussed below.

OVERALL GENERAL PLAN GOALS

(1) To encourage an orderly, contiguous development pattern sufficient to handle the City's expected population growth, in a manner that will preserve the City's fiscal capacity to provide the expanded public services that will be required by both its present and future residents.

(2) To assure equal opportunity for the availability of decent, affordable and sound housing units for all economic segments of the community without regard to ethnic, racial or religious background. Ensure that sufficient buildable land area, accessible to public utilities and City services, will be available for the construction of housing units needed by low- and moderate-income households expected to reside within the City.

Project Relationship to Overall General Plan Goals

(1) The project site is located approximately three miles from downtown Perris and is currently surrounded by open space and agricultural uses. Therefore, it cannot be said that project follows a contiguous development pattern. However, project development will occur in an orderly manner and will provide additional housing to handle the City's expected population growth. A fiscal impact report has been prepared that assesses the fiscal capacity of the City to provide the public services that will be required.

(2) As stated in Section 1.1.3, Market Characteristics, it is a goal of the project to reflect anticipated marketing needs and public demand by providing a homogenous community for the first-time homebuyer as well as the move-up buyer, the large family as well as singles. Target home prices are intended to start in the low $80,000s.

LAND USE DEVELOPMENT POLICIES

The General Plan section of Development Policies is intended to provide specific guidelines that relate to the design of all major development projects in conformance with the overall goals of the General Plan. These guidelines, and the project's relationship to them, are discussed below:

NATURAL HAZARDS AND PUBLIC SAFETY

(1) Flooding Goals

(a) Encourage a comprehensive approach to drainage problems in large areas that are prone to sheet-flows and shallow flooding.

(b) Approved developments shall not result in the diversion of storm runoff into adjacent properties, nor cause any undue

alteration of natural drainage courses that cannot be handled by existing or proposed storm drainage and flood control improvements. Compliance with the recommendations and conditions of the Riverside County Department of Flood Control and Water Conservation shall be required prior to development approval.

Project Relationship to Flooding Goals

(a) Storm drainage facilities will be designed to accommodate 100-year storm flows.

(b) The project will not result in diversion of storm runoff into adjacent properties.

(2) Noise Goals

(a) Interior - Developments that are proposed within intensified impact zones along highways, arterial or collector streets, and rail facilities shall be required to incorporate measures to reduce traffic noise impacts to acceptable levels, especially higher density residential uses. Such measures may include walls, earth berms, landscape buffers, and architectural insulation features sufficient to reduce interior noise levels to Ldn 45 dB(A).

(b) Exterior - Residential construction shall be strongly discouraged in those areas where exterior noise levels exceed Ldn 70 db(A), especially within the March Air Force Base aircraft noise impact contours as depicted in the AICUZ Report dated October 1979. This report should be used as a guide in determining the appropriate type of land uses as well as appropriate noise mitigation measures to be used within these impact zones.

Project Relationship to Noise Goals

(a) Development will be constructed to all applicable jurisdictional standards and regulations.

(b) The majority of the development is not located in an area where existing or projected future exterior noise levels exceed 65 db(A), although residences proposed along Ramona Expressway will be exposed to noise levels that may reach 65 CNEL. Mitigation to achieve an interior noise level of 45 CNEL and an exterior noise level of 65 CNEL is normally required. The 65 Ldn noise contour associated with March Air Force Base does not affect the site. (See Section 4.3.4, Noise.)

(3) Slope and Geologic Hazards

As the site contains no slopes exceeding 10 percent, none of the General Plan policies are applicable to the site. (See Section 4.3.1, Earth Resources.)

(4) Fire Protection and Safety Goals

(a) All development proposals should demonstrate an adequate fire response time and capability based upon the scale, intensity and proposed densities of the particular project.

(b) May Ranch development must prove the existence of a sufficient water supply and pressure level adequate for the suppression of structural fires. Required water lines and fire hydrants must be installed in accordance with the standards of the County of Riverside Fire Department.

(c) All residences and other structures must have address numbers that are clearly visible from the public street. Driveway entrances may not exceed a 15 percent grade, in order to provide reasonable access for fire fighting and other emergency vehicles.

Project Relationship to Fire Protection and Safety Goals

(a) The City of Perris is conducting a comprehensive public safety study to determine the levels of service, funding for those levels, and capital facilities needs for adequate community-wide fire protection. The study will provide to the City recommendations involving the location of fire stations and equipment needs to serve the community including the proposed project site and surrounding areas. The applicant has contributed $15,000 to the City as its share of study costs, credited against any future fees. The study will be completed in late summer of 1988; thus approval of the proposed project will be conditioned to provide fire protection capital and manpower in accordance with recommendations in the public safety study.

Based on County fire standards, one engine company should be provided for each 3200 dwelling units. Considering this standard, the May Ranch Specific Plan would generate the need for a fire station and one engine company at buildout. The City's current one-time fire protection fee of $0.10 per square foot would result in the generation of $1,749,000 which would cover the probable capital costs of the facilities required using County standards.

Regarding the phasing of project development with the provision of fire facilities and services, the applicant and the City will agree to a funding plan that provides fire

facilities as they are needed. Included in such a plan could be provisions to provide fire protection coverage from facilities that are either existing; planned (i.e., the possible new station at Placentia and Redlands); temporary; or, implementation of funding mechanisms such as a Mello-Roos District.

(b) Eastern Municipal Water District (EMWD) has indicated that there is an adequate supply and pressure of water to meet fire flow requirements. All water mains and hydrants will be constructed to all applicable jurisdictional standards and regulations.

(c) All residences will have addresses that are clearly visible from the street and driveway entrances will not exceed a 15 percent grade.

INFRASTRUCTURE AND PUBLIC FACILITIES

(1) Water Supply and Sewage Disposal Goals

(a) All proposed land divisions shall have available a potable water supply and adequate provision for sewage disposal prior to the approval of occupancy.

(b) The capacity of existing water storage facilities to provide an adequate reserve supply and pressure for fire fighting needs shall be taken into consideration when reviewing development proposals. Mitigating measures to be provided at the developer's expense may be required when needed based on proposed development uses and densities.

(c) All provisions for sewage disposal within any approved land division or development project within the City of Perris shall meet the standards of the Riverside County Department of Health and the Regional Water Quality Control Board.

Project Relationship to Water Supply and Sewage Disposal Goals

(a) Eastern Municipal Water District (EMWD) has indicated their ability to provide potable water and sewer service to the May Ranch site.

(b) EMWD has indicated that a new water storage tank may be required to meet fire flow requirements for the development.

(c) The EMWD has master planned a gravity sewer main in Morgan Street from the Ramona Expressway to an existing eight-inch force main located on Redlands Avenue. The planned improvements will be constructed to meet all applicable jurisdictional standards and regulations.

(2) Circulation Standards Goals

(a) Improved street access shall be provided to all new parcels in accordance with the standards of the Circulation Element and applicable sections of the Subdivision Ordinance.

(b) Local street patterns shall be logically related to the overall network of arterial and collector streets as provided for in the Circulation Network. Driveway entrances onto surrounding arterial, secondary and major streets should be restricted in all possible instances, and through traffic on interior residential streets should be minimized.

(c) Successive land developments should occur in a contiguous manner, so as not to be dependent on the possible future extensions of important roads through intervening land areas or properties.

(d) Easements for through-access by pedestrians should be provided where appropriate, especially to provide access from developments to neighborhood shopping facilities, schools and local park and recreation facilities.

Relationship to Circulation Standards Goals

(a) A well-balanced transportation network has been designed for the project that is adequately sized for safe and efficient movement of people and goods. A street system consisting of major public arterials, secondary roads, collector streets and local streets is planned. Where required, the project will integrate transit facilities, such as benches or shelters and turnouts into the project design.

(b) Residential neighborhoods will be accessed by local streets and will not be traversed by heavy through-traffic. Residential driveways will not enter onto arterial and major secondary streets.

(c) Although the proposed development is not occurring contiguous to existing land development, the project site's circulation needs will be adequately served by the Ramona Expressway and Center Street access routes and by extensions of various streets on-site. (See Section 4.3.9, Circulation.)

(d) A pedestrian walkway system is proposed throughout the project site, connecting all residential areas with the proposed park and open space facilities on-site. All interior streets will be provided with sidewalks.

(3) Police and Fire Service Goals

(a) All new developments should be located within an adequate response distance for police, fire and emergency services. Response time should not exceed five minutes for low to high density land use categories.

(b) Developments that are proposed in areas where these criteria cannot be met may be required to mitigate such hazards through provision of emergency access routes, reserve water storage capacity, sprinkling systems or provision of fire fighting equipment.

(c) Proposed developments should be designed with the concept of crime prevention, such as "defensible space" kept in mind. The police department should be afforded the opportunity to review proposed site plans for incorporating such criteria, as well as advising on the adequacy of existing staff levels to protect and serve any future developments.

Project Relationship to Police and Fire Service Goals

(a) The proposed project site may be in excess of five minutes response time for fire services but is generally within five minutes response time for police protection. The City of Perris is conducting a comprehensive public safety study to determine the levels of service, funding for those levels, and capital facilities needs for adequate community-wide fire and police protection. The study will provide to the City recommendations involving the location of fire stations and equipment needs to serve the community including the proposed project site and surrounding areas. The study will also recommend appropriate per capita police personnel ratios. The applicant has contributed $15,000 to the City as its share of study costs, to be credited toward future fees if any.

(b) The Public Safety Study will be completed in late summer of 1988; thus, approval of the proposed project will be conditioned to provide police and fire protection capital and manpower in accordance with recommendations in the public safety study. (See Section 4.3.11, Paragraph a).

(c) City standards for lighting of public areas will be integrated with project design. The police department will be afforded the opportunity to review site plans during the regular City plan review process.

(4) Schools and Recreational Facilities Goals

(a) Adequate enrollment capacity in the local school districts that is sufficient to accommodate the projected residents of

a proposed development should be demonstrated prior to project approval. Where such capacity does not exist at the present time, the developer shall offer appropriate mitigating measures, such as dedicating land for school purposes, or providing temporary school buildings.

(b) The City Council can require the assessment of a per-unit fee on all new residential development provided any local school district makes a finding that its facilities are seriously overcrowded.

(c) The City should encourage the provision of adequate park lands and recreational facilities. Larger scale developments should provide such land and facilities within the total project design as much as possible.

Project Relationship to Schools and Recreational Facilities Goals

(a) With extensive use of relocatable classrooms, the Perris Union High School and the Val Verde Elementary School Districts have capacity to serve students generated by the proposed project. (See Section 4.3.15, Schools.)

(b) A developers fee is required before building permits are taken out. These fees may not exceed the state mandated maximum amounts of $1.50 per square foot of building in residential areas.

(c) The May Ranch Specific Plan proposes to dedicate to the City three public parks totalling approximately 27 acres in size. A linear park of 14 acres is also proposed for a total of 41 acres of park land. However, City standards require the provision of approximately 69.0 acres of parks for the proposed 3,450 dwelling units. Additional park land dedication or the payment of in-lieu fees will be required. (See Section 4.3.14, Parks and Recreation.) The in-lieu fees paid to the City will be used toward the improvement of the three public park sites within the Specific Plan or the purchase of the park land.

ENVIRONMENTAL RESOURCES, CONSERVATION AND OPEN SPACE PRESERVATION

(1) Open Space and Conservation Policies

(a) The City shall seek to preserve and maintain those land areas that are of a unique quality and importance as habitats for wildlife and the rare and endangered species that are characteristic of the region.

Project Relationship to Open Space and Conservation Policies

(a) The project site is not considered of unique quality and importance as habitat for wildlife. However, measures have been proposed to enhance the habitat value of the site after development.

(2) Agricultural Preservation Goals

(a) The continued viability of agricultural uses within the City shall be enhanced by discouraging the premature expansion of urban land uses into areas that are presently devoted to large scale agricultural production, and that are beyond the present range of urban infrastructure such as sewer collection facilities and improved roads. Future residential and urban growth should occur in a logical and contiguous pattern, so as not to exert an undue influence on agricultural land values or operations.

Project Relationship to Agricultural Preservation Goals

(a) Although the project area is presently devoted to agricultural activities, the site is not beyond the range of sewer collection facilities and improved roads. The project could potentially influence adjacent agricultural land values through growth-inducement pressures and land uses conflicts.

(3) Recreational Resources Goals

(a) Encourage the development of a system of community parks and recreational facilities for a recreational and open space resource for the residents of the Perris Valley Region.

(b) Means should be found by which open space and natural areas within the City can be linked in order to form a system of recreational trails as well as provide a scenic backdrop to the City's physical form of projected urban growth.

(c) The City should consider requiring developers to make dedication of parkland or pay in-lieu park fees based on the number of residential units, as a condition of subdivision map approval.

Project Relationship to Recreational Resources Goals

(a) A significant portion of the property will be dedicated to recreational and open spaces, including 41 acres of public parks. This is less than the 69 acres required by current City ordinances (2 acres of park land per 100 units constructed). Additional park land dedication and/or the payment of in-lieu fees will be required.

(b) The May Ranch Specific Plan proposes a 14-acre linear shaped park along the Metropolitan Water District's Colorado River Aqueduct right-of-way subject to the approval of the MWD. As this right-of-way traverses other portions of the City, it could potentially be developed as a park system throughout the City.

(c) The developer will dedicate 27 acres of parkland to the City of Perris, and the parks will be owned and maintained by the City. An additional 14 acres will be provided by a linear park subject to MWD approval. An additional 28 acres of park land dedication, or the payment of in-lieu fees will be required to satisfy current City ordinances.

HISTORIC, COMMUNITY AND SCENIC RESOURCES

(1) Historic Structures and Districts Goals

(a) Efforts shall be made to identify and preserve any significant archaeological resources on, or surrounding, the site of proposed development. Based on existing inventories of archaeologically significant areas, a site survey by qualified archaeological professionals may be required as a part of the environmental assessment of a development proposal.

Relationship to Historic Structures and Districts Goals

(a) The developer has retained a qualified archaeological professional to survey the site as part of the environmental planning process. Survey results indicate no identified archaeological or historical resources on or immediately adjacent to the proposed project site. (See Section 4.3.8, Cultural Resources.)

(2) Community Design and Scenic Highway Routes Goals

(a) A high quality of aesthetic design should be encouraged in the development of the City's residential areas. Effective landscaping treatment should be required as part of all new developments.

(b) The City is in the process of adopting a Scenic Highways Ordinance which designates the Ramona Expressway as a "Scenic Highway."

Relationship to Community Design and Scenic Highway Routes Goals

(1) A licensed landscape architect, retained by the project developer, is working as an integral part of the May Ranch design team to insure that overall project design will be coordinated and cohesive through its landscaping program.

(2) The project's relationship to the City's proposed Scenic Highways ordinance is discussed in Section 4.3.9.

Other Pertinent Land Use Plans

The density of development proposed on the westernmost portion of the site is in apparent conflict with the Airport Land Use Plan prepared by the Riverside County Airport Land Use Commission. Several areas of residential units at densities up to 7.5 units per acre occur on a portion of the site overlain by the Interim Influenced Area II of March Air Force Base. The ALUP specifies a density of one unit per 2.5 acres this acreage. It is noted that there are no project site or development density land use conflicts identified in the 1984 AICUZ Report prepared by March Air Force Base. Based on the 1984 AICUZ Report, establishment of ALUP residential densities of one unit per 2.5 acres on the project site appears overly restrictive and not justified by base flight operations or noise contours.

In addition, the City of Perris General Plan states that the AICUZ Report, ..."should be used as a guide in determining the appropriate type of land uses as well as the appropriate noise mitigation measures to be used within these impact zones."

Agricultural Resource Considerations

Implementation of the proposed project will eliminate agricultural uses on the 684-acre project site. Prime agricultural soils will be removed from production which will contribute to their decline in the County and the Perris Valley. The impact is not considered significant, however, since these lands were removed from agricultural preserve status in 1978 and under current circumstances do not represent a long-term, economically viable agricultural use.

A number of factors or trends in the area point toward the eventual conversion of these lands to urban use. In addition to being removed from contract status under the Williamson Act in 1978, the project site is within the city limits of the City of Perris (a small part is the subject of a current annexation action). Long term viability of agriculture in this area is questionable due to urbanization pressures within the City, unfavorable farming economics, and the increased cost of utilities and water.
An unfavorable result of the proposed action could be the creation of development pressure on nearby agricultural lands that are viable and are not within the City. Such pressures can be exerted through the creation of land use conflicts, such as annoyances and complaints of new residents during spraying of pesticides and application of fertilizers, complaints about agricultural odors and insects, traffic conflicts between farm

vehicles and other vehicles and crop vandalism. This impact is considered potentially significant.

c. Mitigation Measures

On-site and Surrounding Land Use

The proposed Specific Plan presents a coordinated approach to the development of the site which enhances land use feasibility. Project design elements and development standards within the Specific Plan address on-site amenities and the relationship to surrounding uses including landscape buffers and setbacks.

Agricultural Resource Considerations

As mitigation for agricultural resource impacts a reduced intensity alternative is considered in Section 2.9.

It is further suggested that the City of Perris consider including an ordinance that substantiates the continuation of agricultural use on appropriate lands. Such ordinances are sometimes known as right-to-farm ordinances and can be considered a form of agricultural easement.

To the extent possible, the City could assist applicants in making agricultural contracts under the Williamson Act.

4.3.7 POPULATION AND HOUSING

a. Existing Conditions

This discussion incorporates by reference Section 4.6, Existing Conditions from the McCanna Ranch Final EIR (SCH07011910).

The population of the City of Perris was 8,288 persons on January 1, 1984, and consisted of 2,891 households. By 1987, the population had increased by 36 percent to about 11,250 persons. The projected City population for year 1989 is 14,606 persons consisting of 5,114 households. The City of Perris has a greater percentage of persons 65 years and older when compared to the State-wide average. The City has a lower percentage of persons aged 35 through 54 compared to the State-wide average.

Lower cost of housing, which results in lower mortgage and rent payments, is a major factor attracting population to western Riverside County and the City of Perris.

The SCAG 82 Forecast predicts that the number of jobs in the Perris Valley subregion is expected to increase by 345.5 percent by the Year 2000. The employment growth rate in Riverside County for the same period is expected to be 150 percent. The Perris Valley region will absorb a significant increase in population due to migration from more heavily urbanized areas

and a much greater proportion of this growth is expected to consist of families with employed household heads. As population grows, the proportion of 65 and older population will decrease.

b. Environmental Impacts

Implementation of the proposed project will increase the City's housing stock by 3,450 single family dwelling units. Projected population from the development is estimated at 9,490 persons at full buildout (1999) based on 2.75 persons per dwelling unit. The projected dwelling unit occupancy rate is a City Planning Department estimate based on a review of census tract information. Project population growth by project phase is shown on Table 4-10.

TABLE 4-10
PROJECT POPULATION GROWTH BY PHASE

Phase	Year On-line	Dwelling Units	Population per Phase	Population Cumulative
1	1992	1098	3020	3020
2	1995	579	1593	4613
3	1996	887	2440	7053
4	1999	886	2437	9490
	Totals	3450	9490	

The proposed project will account for a notable percentage of the population and housing units within the City. If it is assumed that a six percent City growth rate can be maintained through project buildout, the estimated 1999 City population would be approximately 49,250 persons. The project would account for about 19 percent of the estimated population.

The SCAG-82 Growth Forecast is used to determine regional population density for regional planning strategies such as air quality management plans and transportation plans. SCAG-82 Forecasts are based on existing general plan and zoning designations. The proposed project would be developed to densities greater than presently allowed under the site's agricultural zoning and possibly exceeds SCAG-82 forecasts.

In addition, the City of Perris reports that it will soon exceed SCAG-82 Modified Growth Forecasts for population and housing. SCAG is in the process of revising these forecasts at the request of the City and it is anticipated that additional regional growth will be allocated to the City of Perris.

c. Mitigation Measures

No significant adverse impact of population growth, by itself, is identified.

Mitigation for the affects of population growth is addressed for other subjects as appropriate. Such areas include, at least, traffic, noise, public facilities, air quality, and related discussion.

4.3.8 CULTURAL RESOURCES

The firm of Scientific Resource Surveys (SRS), Inc., conducted both background research and a records search to determine if the project area had been previously surveyed and if it contained any previously identified historic or prehistoric sites. In addition, an intensive site survey of the 684-acre property was undertaken to determine the presence or absence of any historic and/or prehistoric resources. The results of this work are summarized below while the Riverside County Archaeological Assessment form and accompanying information has been included in this document as Technical Appendix 5.3.

In addition, SRS, Inc., conducted a similar study on the adjacent McCanna Ranch Specific Plan property located north of the subject site. The information regarding historic and prehistoric resources and documented in the Draft EIR for that project (SCH87011910) has been summarized in the assessment presented below and is incorporated into this document by reference.

a. Existing Conditions

A records search for the adjacent McCanna Ranch indicated that no cultural resources had been documented previously in the project area. As a result of this study, that project site was determined to possess a low potential to contain cultural resources, based on site location trends derived from previous studies and the patterns reflected by sites in the immediate vicinity. The records search and field investigation conducted for the McCanna Ranch revealed that no prehistoric cultural resources were located there. Further, the project site survey similarly found that no significant historic cultural resources existed, although five non-significant historic localities which contained structures or remnants of structures did exist on the McCanna Ranch. The impact analysis included in the Draft EIR for that project concluded that no significant impacts would occur to cultural resources if the project was implemented.

Research previously conducted for the McCanna Ranch indicated that although historic development of portions of the Perris Valley began prior to 1900, concentrated settlement in the project environs started 30 to 40 years later. From that time to the present, farming and ranching have comprised the foci of uses in the areas. An historic overview which documents the sequence of historical occupation within the Lake Perris area is contained in Technical Appendix 5.3.

The records search and subsequent field survey also revealed the absence of any significant cultural and/or historic resources on the 684-acre May Ranch. The records search was obtained from the California Archaeological Inventory, Eastern Information Center, University of California, Riverside, and it indicated that no historic or prehistoric sites had previously been

recorded within the limits of the subject property. A review of pertinent literature and turn-of-the-century U.S.G.S. maps also indicated that no historic sites or structures were located on the property at that time.

b. Environmental Impact

Although implementation of the proposed project will result in landform alteration, the absence of historic and/or prehistoric resources as documented by the records search and field investigation suggests that such modification of the existing environment will result in no impacts to cultural resources.

c. Mitigation Measures

Despite the low probability of encountering undetected cultural resources during construction, a program outlining their treatment should be developed in the event that resources are encountered during grading and/or construction. This program should include adjustments and procedures to provide for the recovery of cultural resources during grading operations.

4.3.9 TRAFFIC AND CIRCULATION

This report has been prepared using guidelines provided by the County of Riverside and in format consistent with that developed for the adjacent McCanna Ranch Specific Plan. Additionally, the McCanna Ranch Specific Plan EIR (SCH87011910) is incorporated by reference and recognized under cumulative effects.

a. Existing Conditions

Regional access to and from the project site will be provided via I-215 Freeway, Ramona Expressway, and Perris Boulevard. Local circulation to and from the project site will be provided via Rider Street, Bradley Road, Center Street, and Evans Road. Figure 25, Existing Circulation System, presents the roadway characteristics of the surrounding local and regional circulation system.

Interstate 215 (I-215) is a controlled and uncontrolled freeway connecting Riverside and San Diego. The roadway is presently improved with two travel lanes in each direction and a median. In the immediate vicinity of the project, the intersection of Ramona Expressway with I-215 is improved with a full access controlled diamond interchange. The California Department of Transportation (Caltrans) has this facility designated to ultimately be improved as a full access controlled freeway.

Ramona Expressway is an east/west arterial located on the north side of the project site and provides primary access to and from the project. This roadway is presently improved to provide a four lane divided highway between I-215 and Center Street (Lake Perris Recreation Area access). Easterly of Center Street, the roadway is improved to provide two travel lanes and improved shoulders.

EXISTING CIRCULATION SYSTEM

LEGEND

4LD - 4 LANE DIVIDED

2L - 2 LANE IMPROVED

2U - 2 LANE UNIMPROVED

● TRAFFIC SIGNAL CONTROL

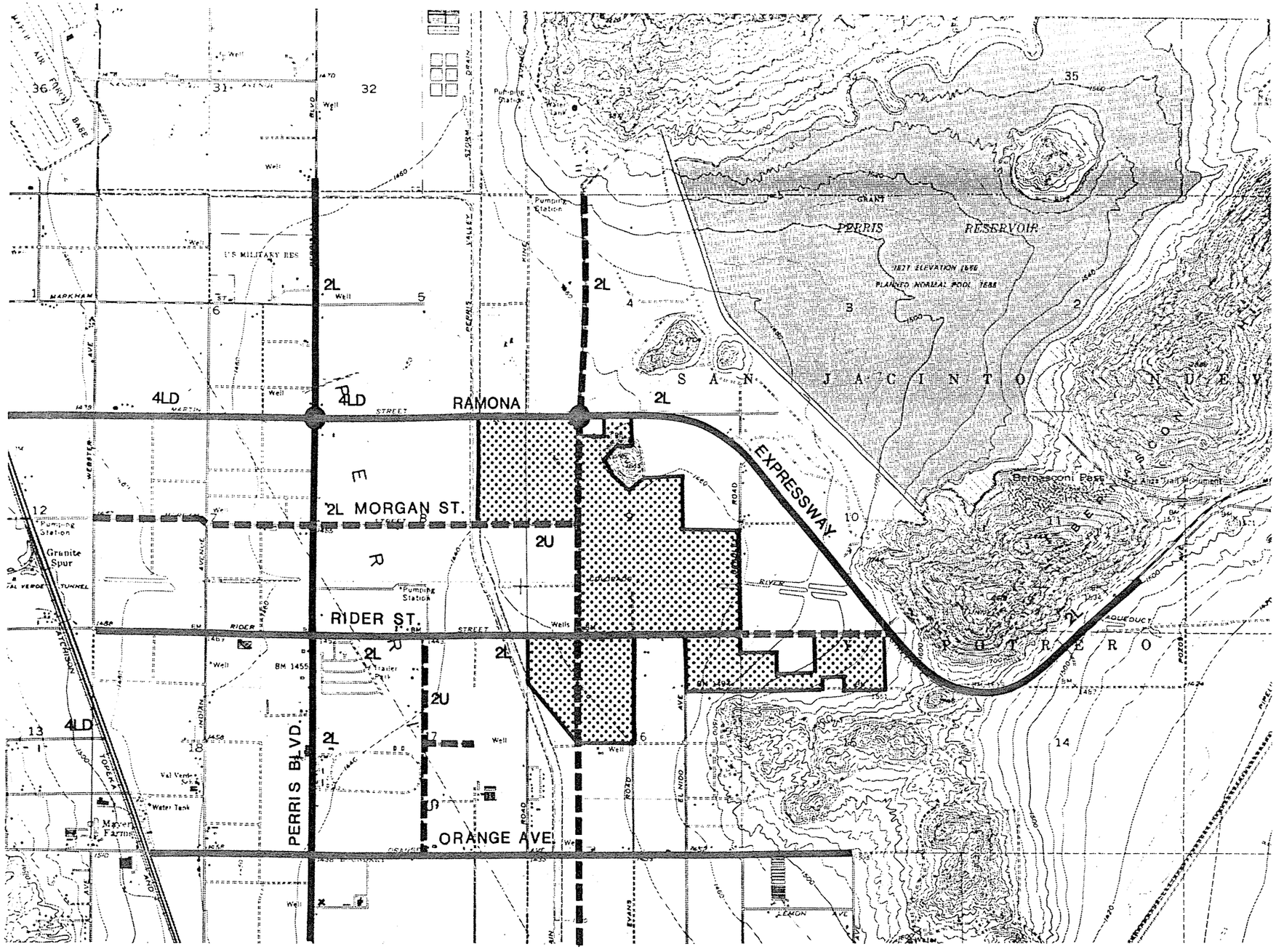


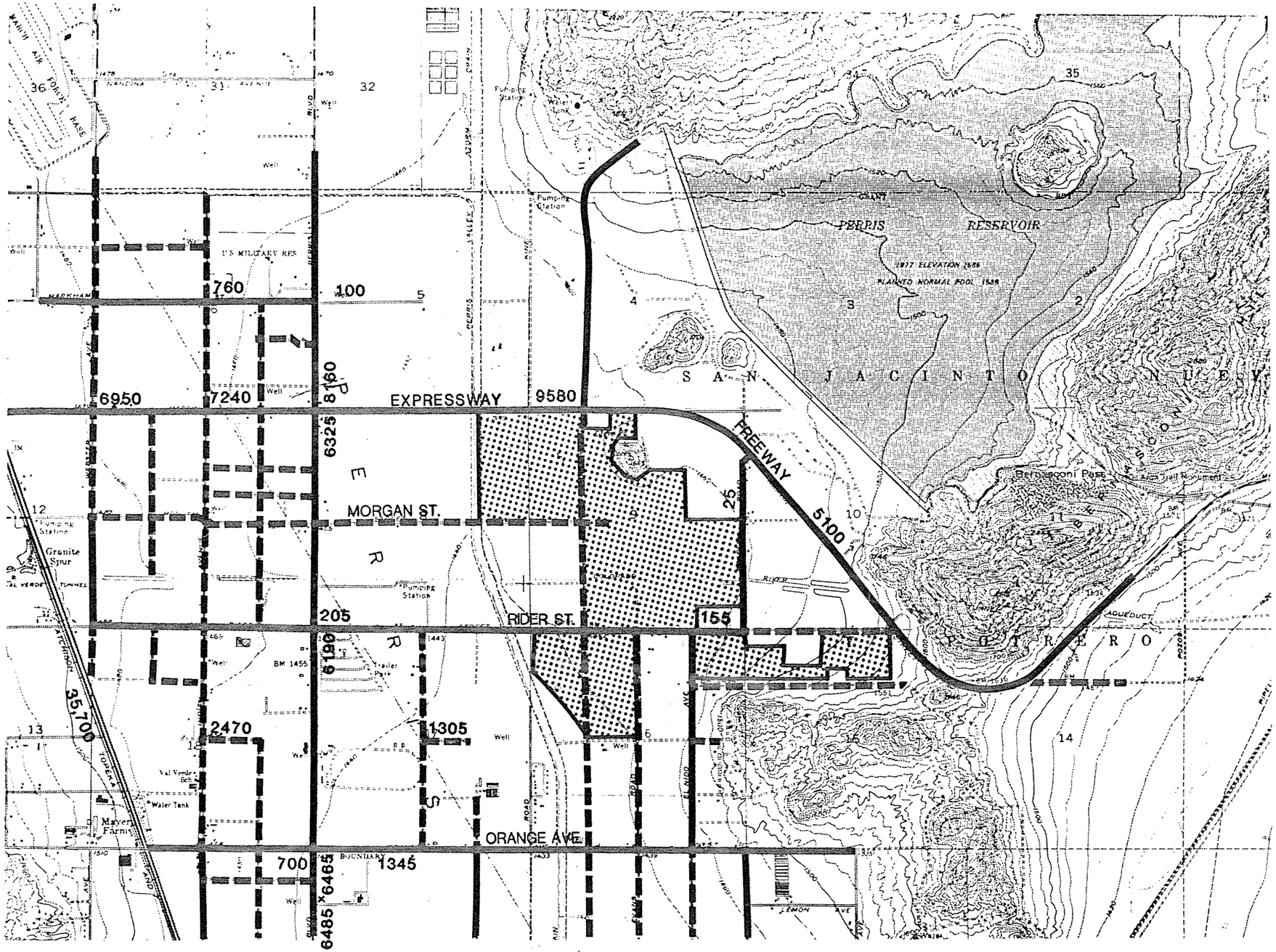
FIGURE: 25

SOURCE: McCANNA RANCH EIR

FLORIAN MARTINEZ ASSOCIATES

May Ranch

EXISTING TRAFFIC VOLUMES



LEGEND

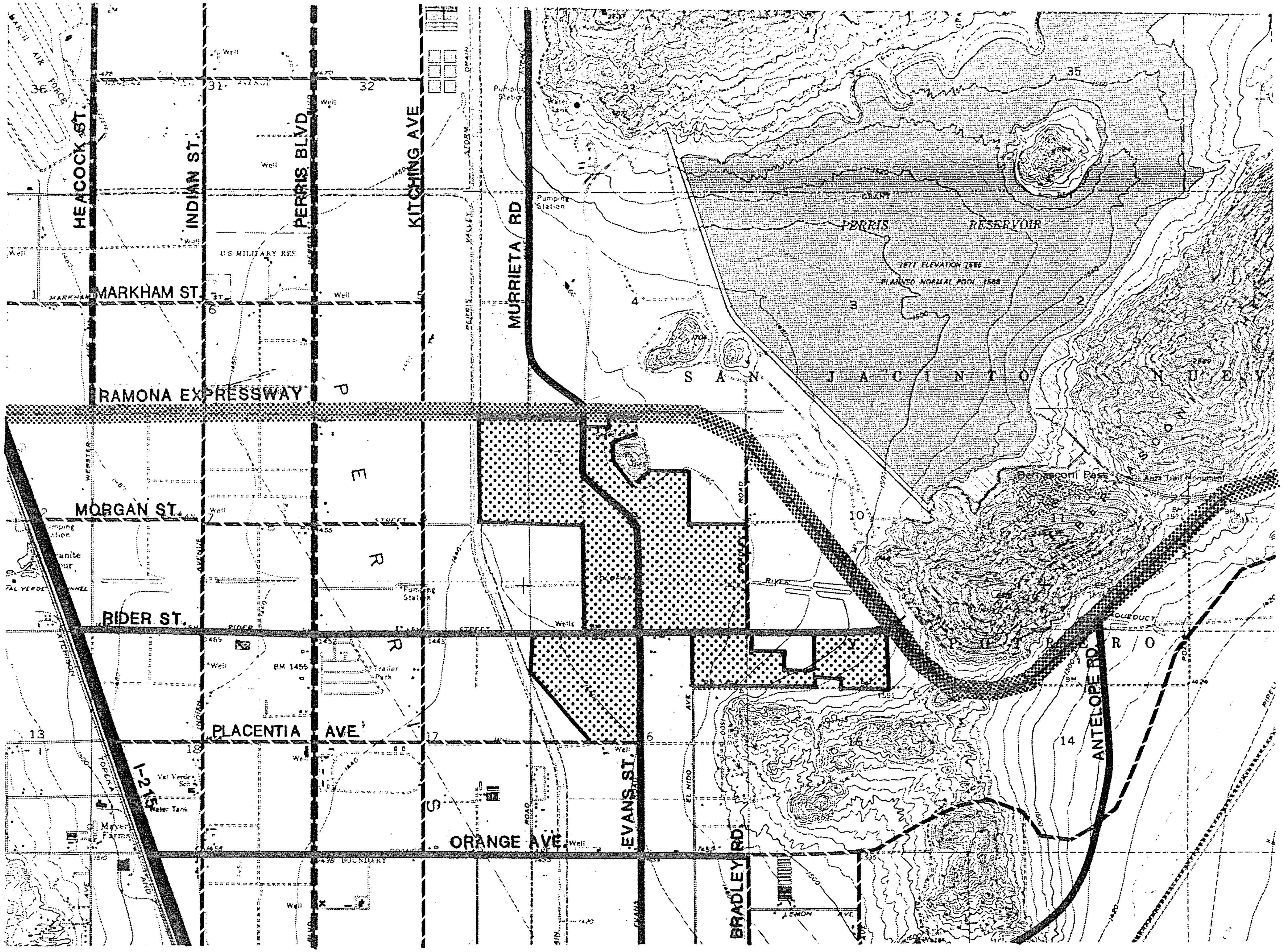
XXXX-DAILY TRAFFIC VOLUME

FIGURE: 26

FLORUM MARTINEZ ASSOCIATES

ESTIMATED BY
McCANNA RANCH EIR & ADJUSTED
2% FOR GROWTH FACTOR

May Ranch



MASTER PLAN OF HIGHWAYS

FIGURE: 27

SOURCE: CITY OF PERRIS
RIVERSIDE COUNTY ROAD DEPARTMENT

FLORIAN MARTINEZ ASSOCIATES

May Ranch

Perris Boulevard is a north/south roadway providing access between the City of Perris (located to the south) and the City of Moreno Valley and March Air Force Base to the north.

Rider Street is a two-lane paved roadway traversing the southerly side of the project site. Rider Street west of Bradley Road is improved to provide two paved lanes and graded shoulders. Easterly of Bradley Road, Rider Street is a two-lane graded roadway to Ramona Expressway.

Existing daily traffic volumes on roadways within the vicinity of the project site are presented on Figure 26, Existing Traffic Volumes, representing 1985 and 1986 count data collected from the City of Perris, County of Riverside, and Caltrans. Also presented in Figure 26 are traffic volumes estimated by Basmaciyan-Darnell, Inc., (BDI) and reported in the referenced McCanna Ranch EIR, but increased by two percent to adjust for growth.

Traffic control within the immediate area primarily consists of stop control at the side streets entering Ramona Expressway and Perris Boulevard. At I-215 and Ramona Expressway, the on- and off-ramps are stop controlled.

Traffic signal control is provided at the Ramona Expressway intersection of Perris Boulevard and Center Street, near the primary site access point. The traffic signal control provides left-turn phasing for east-west Ramona Expressway traffic at each intersection.

The Master Plan of Highways (MPAH) for the area is presented on Figure 27, Master Plan of Highways. The MPAH shows the conceptually proposed long-range circulation system for the area. In the immediate vicinity of the project, Ramona Expressway, Evans, Bradley Road, and Rider Street are MPAH roadways that will have an impact on the project. On the MPAH, Ramona Expressway is designated as an expressway; Bradley Road is a secondary (88 foot right-of-way); while, Rider Street is a major roadway (92 foot right-of-way).

b. Environmental Impacts

Project implementation will increase traffic volumes both on- and off-site. An on-site circulation system will be constructed to serve anticipated traffic volumes. (See Figure 5, Master Circulation Plan.) Further, the site plan has been iteratively adjusted to provide for the north-south extension of the Evans-Marrietta Road extension. The traffic generated by the project is determined by applying an appropriate trip generation rate to the quantity of land use. Trip generation rates are expressed in terms of trip ends per dwelling unit, acre, or thousand square feet. Residential trip generation by project phase is shown on Table 4.11.

TABLE 4-11
RESIDENTIAL TRAFFIC BY DEVELOPMENT PHASE

PHASE	DWELLINGS	ADT's	FINAL OCCUPANCY (Est)
I	1,098 DU's	11,090 trips	Estimated final unit sales 1992
II	579 DU's	5,848 trips	Estimated final unit sales 1995
III	887 DU's	8,959 trips	Estimated final unit sales 1996
IV	886 DU's	8,949 trips	Estimated final unit sales 1999

Trip generation characteristics for the proposed project are based on previous research of similar projects and data contained in the Trip Generation Manual published by the Institute of Transportation Engineers. Table 4.12, Trip Generation Rates, provides a summary of trip generation characteristics, while Table 4.13, Summary of Project-Related Trip Generation, provides a summary of the project-related ultimate daily and peak hour traffic based upon the professionally accepted modeling technique.

TABLE 4-12
TRIP GENERATION RATES

Lane Use	Basis	Daily	AM Peak In	AM Peak Out	PM Peak In	PM Peak Out
Single-Family Res.	Per DU	10.1	.22	.56	.65	.36
Community Commercial	/1,000 SF	40.4*	---	---	---	- - -
Parks	/AC	36.6	5.47	0	0	3.33

*Rate varies with ultimate overall center size.

TABLE 4-13
SUMMARY OF PROJECT-RELATED TRIP GENERATION

Land Use	Daily	AM Peak In	AM Peak Out	PM Peak In	PM Peak Out
Single-Family Residential	34,845	689	1,900	2,207	1,277
Community Commercial	43,996	707	296	1,706	1,884
Park Land	988	148	0	0	89
Total Project Traffic	79,829	1,544	2,196	3,913	3,250
Internal Circulation (15% of total project)	11,974	232	330	587	488
TOTAL EXTERNAL TRAFFIC	67,855	1,312	1,866	3,326	2,762

As shown in Table 4.13, Summary of Project-Related Trip Generation, the proposed project is estimated to generate 79,829 daily vehicle trip ends with 67,855 external trips. During the AM peak hour, 1,312 vehicles will leave the project area and 1,866 vehicles will enter the project area. The afternoon peak hour is expected to generate 3,326 vehicles entering the project area and 2,762 leaving. These figures are compiled from the MGA Study of May 25, 1988 based on 3,450 dwellings and 1,089,000 square feet of retail commercial uses.

Trip Distribution and Assignment

Trip making characteristics to/from the project are estimated taking into account regional travel patterns and the spatial orientation of origin and destination locations. The residential makeup of the project will create a higher concentration of trip making to the west and north and south, followed by local trip making within the project area. Estimated travel orientations have been developed by Mohle Grover Associates (MGA) from regional traffic modeling. Based on this information, traffic to and from the project was allocated to the existing and proposed street systems. The resulting project-related PM peak hour traffic volumes are shown on Table 4-14 below and have been extrapolated from the earlier noted MGA study.

The loads which project-related traffic may be expected to impose on the adjacent street system are considered significant at certain locations when compared to existing traffic volumes, which reflect only partial build-out of that area. Table 4-14 shows the comparison of project-related PM peak hour traffic to existing volumes.

TABLE 4-14
COMPARISON OF EXISTING HOUR PM'S DAILY TRAFFIC TO PROJECT PEAK
(Extrapolated from MGA Study, April 1988)

LOCATION	Existing Daily Traffic	Project-Related PMPH Traffic	PMPH as % of Existing Daily Total
Ramona Expressway:			
E/O I-215	6,935	1,113	13.8%
W/O Perris Blvd	7,240	1,111	13.3%
E/O Perris Blvd	9,590	837	8.0%
E/O Center Street	5,100	1,231	19.4%
E/O Rider Street	5,100	909	15.1%
Perris Boulevard:			
N/O Ramona	8,160	941	10.3%
S/O Ramona	6,325	584	8.4%
S/O Rider	6,070	446	6.8%
N/O Placentia	6,190	1,768	22.2%
S/O Placentia	6,465	1,505	18.8%
Rider Street:			
E/O Perris Blvd	N/A	769	---
W/O Perris Blvd	N/A	25	---

Traffic Circulation Considerations

Mohle, Grover and Associates, has prepared a sequence of four (4) separate traffic analyses for the proposed project between January 20 and May 25, 1988 focusing on future peak hour operating conditions at key intersections in the local circulation network, including citywide cumulative growth assumptions. A number of circulation system improvements are also considered in the development of the level of service estimates which are discussed in the detailed traffic report contained in Appendix 5.4. However, the general approach involved determination of trip making characteristics considering full development within the city, development of traffic analysis zones for creation of origin/destination assumptions, distribution of the traffic onto the existing partially completed street system, and calculation of a.m. and p.m. peak hour level of service characteristics for selected intersections. It is pointed out that the analysis focused on intersection level of service during peak hour operations. Average daily traffic volumes on roadways were not directly focused upon by the study.

Level of service determinations for p.m. peak hour traffic at twenty-seven (27) selected intersections are shown in Table 4-15. The p.m. peak is considered the worst-case, as it is the period of maximum traffic demand. Also shown is the percentage of the traffic that is attributable to the proposed project. Level of service "D" is considered acceptable while levels of service "E" and "F" are typically considered unacceptable (Mohle, Grover and Associates, 1988).

As can be seen, citywide traffic growth (including the proposed project) will result in traffic impacts at several intersections examined in the traffic study. Significant impacts occur at level of service "E" and "F" intersections listed on Table 4-15.

Considering the May Ranch traffic, significance can be determined by a 25 percent or greater contribution of traffic at a level of service "E" or "F" intersection. Consequently, the proposed project will have significant traffic impact at the intersections listed below.

Ramona and Murrieta
Murrieta and Dawes
Center and "A" Street
Rider and Center
Placentia and Evans

It should be noted that while forecast at an adverse level of service, the Perris/Placentia and Perris/Citrus intersections are not significantly impacted by the May Ranch. Further, those locations which are significantly impacted are internal to the project site along the Murrieta-Evans backbone alignment. While internal to the project, volumes on this link are predominantly "through" traffic generated outside of the subject site, and are attracted to this roadway due to its regional travel orientation. The future possible adverse service levels reflect cumulative development patterns on a regional scale, presumed in the traffic analysis, which may or may not materialize.

INTERSECTION VOLUME ANALYSIS
TABLE 4-15

Intersection Name	Total Peak Hour Intersection Volume From Whole Study	May Ranch PMPH Volume	Percent of May Ranch of Total	Level of Service
Perris at Marham	3,132	-0-	0.00	B
Cajalco at I-215 S/B	8,272	725	8.70	B
Ramona at I-215 N/B	10,448	1,015	9.70	C
Ramona at Perris	8,793	2,052	23.30	C
Ramona at Redlands	7,865	2,702	34.30	C
Ramona at Murrietta	10,766	4,850	45.00	E
Ramona at Evans	3,243	324	10.00	A
Ramona at Bradley	3,033	267	8.80	A
Murrieta at Dawes	6,850	5,038	73.50	F
Center at Street "A"	7,207	5,581	77.40	F
Morgan at Street "A"	1,248	1,248	100.00	B
Perris at Rider	4,817	135	2.80	B
Rider at Redlands	4,568	1,311	28.60	D
Rider at Center	7,425	5,101	68.70	F
Rider at Evans	368	69	18.70	B
Rider at Street "A"	351	72	20.50	C
Rider at Bradley	520	520	100.00	C
Ramona at Rider	1,987	624	31.40	B
Ramona at Placentia	1,582	52	3.20	B
Placentia at I-215 N/B	6,207	1,582	25.40	C
Placentia at I-215 S/B	3,277	1,257	38.30	A
Perris at Placentia	9,311	2,328	24.90	F
Placentia at Redlands	8,790	4,314	49.00	B
Placentia at Evans	9,033	4,710	52.10	F
Perris at Orange	3,638	-0-	0.00	C
Perris at Nuevo	10,620	1,400	13.10	B

c. Mitigation Measures

To mitigate the project's impacts on Ramona Expressway, it is recommended that Ramona Expressway be widened to provide two travel lanes in each direction between Center Street and Evans Road. This improvement will increase level of service capacity of Ramona Expressway from 13,000 vehicles to 30,000 vehicles per day for a four lane highway. This improvement will necessitate that at the Ramona Expressway intersection of Center Street (Lake Perris Recreation Area access), minor intersection improvements be made to facilitate two westbound lanes and the free right turn lane from the Lake Perris Recreation Area to westbound Ramona Expressway.

In addition to the measure described above and the onsite traffic and roadway improvements proposed as part of the Specific Plan (detailed in Section 3.2), the traffic study recommends numerous measures required in a regional context to improve levels of service on streets in and around the project site. These measures are listed below:

- Rider Avenue and Placentia Avenue need to be extended and improved to serve the project site.

- Special improvements may be needed at the Perris Boulevard intersections at the Ramona Expressway and Placentia Avenues.

- A double right turn for traffic movements eastbound to southbound will be needed at the Ramona Expressway intersection of Street "A."

In addition, it is recommended that the City establish a traffic fee assessment program to provide an equitable means of funding needed offsite regional improvements. Such a fee program could provide funds for improvements such as signalization of the interchange ramps on the Ramona Expressway at the I-215 Freeway, special intersection modifications and improvements, bridge crossings of the Perris Valley Storm Drain and other improvements such as grade separated intersections if these are determined to be feasible. The applicant's contribution to such a fee program would be considered as mitigation for the project contribution to offsite traffic impacted areas.

4.3.10 NATURAL AND ENERGY RESOURCES

a. Existing Conditions

No significant amounts of natural resources or energy are presently utilized on the project site, though well water is pumped for irrigation of on-site agricultural use. The 684-acre project site is presently open space in agricultural use, which is considered a natural resource.

b. Environmental Impacts

Development of the May Ranch project site as proposed will reduce the amount of open space by 684 acres and prevent any future use of the site for agricultural activities, resulting in the loss of the site as an open space resource. Project grading will permanently alter the natural topography of the site. Due to the agricultural use of the site, no natural biotic resources of significance remain.

Development of the project will utilize energy during construction on a short-term basis. On a long-term basis, water and sewer service will be required, natural gas and electricity consumption will occur, and gasoline will be utilized by project residents. The proposed project is estimated to consume 24,696,660 cubic feet of natural gas per month and approximately 30,734,712 kwh of electricity per year.

c. Mitigation Measures

The use of natural gas and energy shall be reduced by the following mitigation measures:

(1) Install thermal insulation in walls and ceilings which meets or exceeds standards established by the State of California or the Department of Building & Safety.

(2) Construct all buildings in conformance with Title 24, of the California Administrative Code.

(3) Consult with the Southern California Gas Company and Southern California Edison Company for other methods of energy conservation.

(4) The architectural and mechanical plans for commercial developments should be carefully checked to verify that the lowest energy rated mechanical and electrical equipment are being used.

(5) The retail buildings will be designed for optimum energy efficiency in accordance with Energy Conservation Standards for non-residential buildings which represent state-of-the-art design.

4.3.11 PUBLIC FACILITIES AND SERVICES

a. Police and Fire Protection

(1) Existing Conditions

This discussion incorporates by reference Section 4.14.1 of the McCanna Ranch Specific Plan Final EIR (SCH87011910).

Fire protection to the project site is currently provided by the Riverside County Fire Department. There is one fire station in the City of Perris and another existing fire station west of the project site near the intersection of Old Elsinore Road and Cajalco Road. The City is considering a potential fire station in the northern portion of town near the intersection of Placentia and Redlands Avenue.

The project site is currently within the jurisdiction of the City of Perris Police Department. Prior to annexation, the site was served by the Riverside County Sheriffs Department. Due to lack of population on the site, police calls to the area are infrequent.

(2) Environmental Impacts

Implementation of the proposed project will create additional demands for fire protection services. General plan policies stipulate that an adequate response time to the project site should not exceed five minutes. Existing fire services may not be able to respond within the stipulated time frame. Existing fire services may be inadequate to serve the proposed development.

County fire standards for a Category II urban project require that a fire station be located within three miles of the site. The City of Perris fire station is approximately three miles away which is marginal for the project. The County Fire Impact Mitigation Program seeks to provide one fire station and one engine company to provide fire protection services for every 3,200 dwelling units. Under such policy, 3,450 single family dwelling units would need one fire station and engine company for service.

Implementation of the proposed project will create additional demands for City police protection services. The City standard is 1.5 police officers per 1000 population. Accordingly, 14 police officers would be required ultimately to adequately serve the community. In addition, eight additional police department personnel in the categories of administrative support, agents, and dispatchers would be needed. The increased police force will require adequate support equipment including weapons, communications devices and vehicles. Costs for these services are paid out of the City General Fund.

It should be noted that the City of Perris is presently conducting a Public Facilities Study to determine adequate levels of services to be provided to the public. The generation rates for police and fire services may be revised as a result of the study.

(3) Mitigation Measures

The City of Perris changes a one-time fire protection fee of $0.10 per square foot payable at the time building permits are issued. Based on total project building area, which is 174.9 million square feet, fire protection fees of $1,749,000 would be generated. This level of fees would cover the capital costs of a fire station which has been estimated at approximately $1,000,000.

The project build-out period of ten years will result in staged collection of the City's fire protection fees. This may result in a delay in receiving sufficient revenues by the time the fire station and its associated apparatus and equipment are required. The developer and City should agree to a process (perhaps through inclusion of fire protection in the proposed Mello-Roos Public

Facilities District) to assure availability of funds for the fire facilities as they are needed to serve the development. The City has previously utilized a standard which requires full fire protection services after 300 units are occupied.

Eastern Municipal Water District has indicated that there is an adequate supply of water to meet fire flow requirements. Pressure requirements in a portion of the development will require construction of a one million gallon storage tank. All water mains and hydrants will be provided to specifications of the applicable jurisdictional standards and regulations.

Specific fire water protection needs of commercial developments will be assessed on a case-by-case basis when the type of business is known. However, the building plans must incorporate provisions to maximize internal fire safety including use of fire retardant building materials, specification of critical hydrant spacing, and requirements for use of fire sprinkler systems or alternatives in the commercial structures.

Overall, the fire protection system will be designed in accordance with the standards contained in the Insurance Services Office Fire Suppression Schedule.

The need for 14 police officers, 8 police personnel and support equipment is expected to be provided through expenditures from the City General Fund. First year costs are expected to be $5,043 increasing to $868,352 at build-out.

b. Water and Sewer Service

(1) Existing Conditions

Water on the project site is currently provided by area water wells. The May Ranch Specific Plan project area is provided water service by Eastern Municipal Water District (EMWD). EMWD currently obtains the majority of its water supply from groundwater sources and from the Metropolitan Water District (MWD). Water supply is currently available to the site, with 12" trunk lines existing in the Ramona Expressway and Bradley Road that are supplied by a 24" main in Murrieta Road and a 21" main within the MWD'S Colorado River Aqueduct right-of-way. Although the easement containing the aqueduct does not provide water directly to the site, adequate water supplies can be delivered to the project site via the existing system.

Currently, the project site and the surrounding properties operate with septic sewage disposal systems. There are no sewers serving the site. The Eastern Municipal Water District (EMWD) is the agency responsible for providing sewer service to the project area. The project site is situated between two existing wastewater treatment plants. To the north and approximately

three miles distance is the Sunnymead Wastewater Reclamation Facility (WRF). To the south approximately four miles is the Perris Valley WRF. To reach Perris Valley WRF, sewage could flow by gravity main.

The Sunnymead WRF currently has a capacity of 5.0 MGD. However, the District plans to expand the facility to 10 MGD in 1989. The Perris Valley WRF will be expanded from 1 MGD to 2 MGD in 1989.

(2) Environmental Impacts

The Master Water Plan for May Ranch is presented in Figure 15, Master Water Plan. The water system has been designed to meet the domestic flows as required by the proposed project as well as fire flow requirements. The only off-site water system component required is a one MG water storage tank for the purpose of improving emergency fire storage to approximately 100 acres of the project site. The District uses an average flow rate demand factor of 200 gallons per person per day. Based on a projected population of 9,488 persons, the average flow demand for the May Ranch would be approximately 1.9 MGD gallons of water per day ultimately.

The Master Sewer Plan for the project is presented in Figure 16, Master Sewer plan. The on-site collection system is divided into two areas, separated by the MWD's Colorado River Aqueduct. The portion of the project site to the north of the aqueduct will have a collection system discharging to a 18-inch trunk sewer line in Morgan Street. The southern portion of the project may also have a collection system consisting of 12-inch, 10-inch, and 8-inch collector lines, that will discharge to the existing 15-inch trunk sewer line in Wilson Avenue.

Construction of May Ranch will create a need for sewer service to the site. EMWD uses a sewage generation factor of 100 gallons per person per day. Based upon a projected population of 9,488 persons the project will generate 948,800 gallons of sewage per day.

(3) Mitigation Measures

Assurance for provision of adequate water and sewer service is required prior to approval of a subdivision map, in accordance with the State Subdivision Map Act. The payment of fees to the EMWD will prevent any negative fiscal impacts to the proposed development. The applicant will continue to work with the EMWD to find a workable solution to the conveyance of wastewater flows from the project.

Drought-resistant, native vegetation should be planted, where feasible, in developed areas. Efficient landscape irrigation systems should be developed, minimizing excess runoff and the

watering of streets and sidewalks. Use of reclaimed water for irrigation of greenbelts and park lands will be considered to minimize water use for landscape irrigation, in accordance with EMWD requirements.
In addition, the State of California Department of Water Resources provided the following list of State laws requiring water-efficient plumbing fixtures in structures:

(a) Health and Safety Code Section 17921.3 requires low-flush toilets and urinals.

(b) Title 20, California Administrative Code Section 1604(f) (Appliance Efficiency Standards) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, and sink faucets.

(c) Title 20, California Administrative Code 1606(b) prohibits the sale of fixtures that do not comply with regulations.

(d) Title 24 of the California Administrative Code Section 2-5307(b) prohibits the installation of fixtures unless the manufacturer has certified to the CEC compliance with the flow rate Standards.

(e) Title 24, California Administrative Code, Sections 2-5352(i) and (j) address pipe insulation requirements. Insulation of water-heating systems is also required.

c. Schools

(1) Existing Conditions

This discussion incorporates by reference Section 4.14.2, Existing Conditions, of the McCanna Ranch Specific Plan Final EIR (SCH87011910).

The project site is located in the Perris Union High School District and the Val Verde Elementary School District. Both districts are operating under conditions of impaction from population growth. In addition to the existing school facilities, a new elementary school is under construction, a new middle school opened in 1987, and a site for a new high school has been approved west of the project site.

(2) Environmental Impacts

Students generated by project phase are indicated in Table 4-16.

TABLE 4.16
PROJECTED STUDENT GENERATION BY PROJECT PHASE

Phase/Year	No. of Dwellings	No. of Students by Grade			Total Students
		K-5	6-8	9-12	
1 / 1992	1098	373	165	165	703
2 / 1995	579	197	86	86	369
3 / 1996	887	302	133	133	568
4 / 1999	886	301	133	133	567
Totals	3450	1173	517	517	2207

Student generation factors are as follows;
K-5 .34 students/D.U.
6-8 .15 students/D.U.
9-12 .15 students/D.U.

The student generation rates are equivalent to the enrollment level in approximately two elementary schools, 65 percent of a middle school and 17 percent of a high school. Consequently, the project will have an adverse impact on elementary and middle school enrollment and an adverse, but not significant impact, on high school enrollment.

(3) Mitigation Measures

The applicant is negotiating with the school districts to provide mitigation in the form of school impaction fees and/or dedication of an elementary school site. School impaction fees may not exceed the state mandated limit of $1.50 per square foot of building area in residential areas and $0.25 per square foot of commercial building area.

The project applicant will cooperate with both school districts to advise of expected student loading at the time of tentative tract map submittals to insure that school facilities are available to serve the project and the community.

d. Parks and Recreation

This discussion incorporates by reference Section 4.14.3, Existing Conditions, from the McCanna Ranch Specific Plan Final EIR (SCH87011910).

(1) Existing Conditions

The project site is located immediately south of the Lake Perris State Recreation Area (SRA). This 8,200-acre park facility provides opportunities for boating, swimming, fishing, hunting, hiking, bicycling, horseback riding, picnicking, rock climbing and overnight camping. According to the Area Manager for Lake Perris, the SRA has the capacity to accommodate between 2,200 and 2,250 vehicles per day. An estimated 2,000,000 visitors utilize Lake Perris annually. Lake Perris itself is the southern terminus of the State Water Project. It has nine miles of shoreline and a water surface area of 2,318 acres. Perris Dam, located at the west end of the lake, is 128 feet high and 2.2 miles long.

Additional recreational opportunities in the City include the 640-acre Roy Kabian Regional Park, the Perris Valley Parachuting Center, a 3-acre firing range, the 5-acre Bob Long Memorial Park, the 3.15-acre Russel Stewert Park, and the 2.5-acre Banta Beatty Park.

The Farmer's Fairground has traditionally been held in Hemet; however, the fair moved to Lake Perris, across the Ramona Expressway from the project site.

In order to determine if the City is presently in a "park deficit" situation, a number of assumptions were made. The City presently requires two acres of park land for every 100 dwelling units constructed. In 1984, there were a total of 2,891 dwelling units within the City. Applying the above park land requirement to these 2,981 units would result in the need for 57.82 acres of park land. The three City-operated parks total less than eleven acres in size. When the 640-acre Roy Kabian Regional Park is considered, the City has a total of 651 acres of park land. Also, due to the proximity of the City to the Lake Perris State Recreation Area, City residents have convenient access to that recreational facility.

However, in terms of City provided park acreage, it appears that additional park land would be of benefit to City residents. The City especially needs more ballfields and soccer fields. At the present time, there is only one ball park with two diamonds in the City.

(2) Environmental Impacts

The additional residents attracted to the city by the proposed project will generate additional demand for local and regional recreational facilities in the Perris Valley.

Considering the City standard of two acres of park for every 100 dwelling units, the proposed project would require approximately 69 acres of dedicated park acreage. The proposed Specific Plan provides for 27 acres of public park land. A large linear park along the Colorado River Aqueduct easement will also be provided and will contribute 14 acres of greenbelt and trails. Since this land is the aqueduct easement, it would not be dedicated in fee. Total park acreage provided by the proposed project is 41 acres, leaving a deficit of 28 acres. It should be noted that the project will increase community park acreage in the City by 300% and will triple the number of active ball diamonds.

Due to the close proximity of the site to the Lake Perris State Recreation Area (SRA), project residents will undoubtedly frequent this facility as well. In order to estimate the quantitative impact that the May Ranch Specific Plan will have on the Lake Perris SRA, a number of assumptions were made. As previously discussed under "Existing Conditions", an estimated 2,000,000 visitors utilize the SRA annually. Riverside County as a whole had a 1984 population of 757,465 according to SCAG. Assuming a 3% annual growth rate for 1985 and 1986, it is projected that the County had a 1986 population of approximately 803,600 persons.

Therefore, the average County resident visited Lake Perris 2.5 times per year. As a populations of 10,676 is projected to result from the May Ranch Specific Plan, it can be anticipated that 26,700 additional visits to Lake Perris would result. This is an increase of 1.3% compared to existing levels. This figure should be considered a "worst case" assessment, as residents of nearby San Bernardino, Los Angeles, Orange and San Diego Counties also utilize Lake Perris' recreational facilities, which would reduce the number of visits attributed to each Riverside County resident. These additional SRA visitors will increase demand and competition for the finite recreational resources of Lake Perris, as well as increase traffic congestion at Park entrances. As the Perris Valley and the adjacent Moreno Valley areas are experiencing rapid population growth, the project will contribute to the cumulative demand for the resources of Lake Perris.

(3) Mitigation Measures

Based upon the City of Perris requirements for park dedication, the amount of park land proposed by this project falls short by approximately 28.0 acres. The 41 acres proposed is equal to the City requirement for approximately 2050 units. Therefore, compensation must be made for the remaining 1394 units proposed by this project. The deficiency will be compensated by payment of in-lieu fees of $800 per unit for the remaining 1,400 units. The in-lieu fees should be used for improvement of the dedicated park land or aquisition of additional land.

e. Solid Waste

(1) Existing Conditions

Solid waste generated in the City of Perris is collected by Perris Disposal, a private company, and is disposed of in the Mead Valley landfill. The Mead Valley landfill is expected to operate until 1999 according to the Riverside County Solid Waste Management Plan. This landfill received an average of 275 tons of solid waste per day in 1986.

(2) Environmental Impacts

The proposed May Ranch Specific Plan will increase the amount of solid waste generated on the project site and thus increase service needs for waste haulers. The average solid waste generation factor for Riverside County was 7.9 pounds per person per day in 1986, based on the wastes received at County Disposal Sites and the estimated population within the County. Therefore, the proposed 3,450 SFD units would result in about 11.2 tons per day by 1992, increasing to 37.5 tons per day ultimately. This would increase the average daily waste load at the Mead Valley Disposal site by about 4.0 percent in 1992 and would slightly reduce the estimated site life.

The Riverside County Solid Waste Management Plan (CoSWMP), contains projections for reasonable growth within each disposal site service area as provided by the Riverside County Planning Department in 1980 and 1981. However, the current rate of development exceeds the earlier projections. The CoSWMP growth projections are for the regional service area. No specific project is in conformance or non-conformance with the CoSWMP.

(3) Mitigation Measures

No mitigation for the generation of solid waste is proposed.

f. Utilities

(1) Existing Conditions

Electricity is provided by the Southern California Edison Company (SCE). Five KV, 12 KV and 33 KV overhead utility lines are found above the Ramona Expressway and on Bradley Road. The 12 KV line is currently available to serve the site.

The project site is within the service area of the Southern California Gas Company (SCG). The closest line is at the intersection of Evans Road and Sinclair Street.

Telephone service is provided by General Telephone. An underground telephone line is located in Ramona Expressway.

(2) Environmental Impacts

Project implementation will result in an increased demand for natural gas and electricity. Based upon an average monthly consumption of 6,665 cubic feet of natural gas per month per dwelling unit, the 3,450 SFD units project will require 22,994,250 cubic feet of natural gas per month. An additional 1,742,400 cubic feet of natural gas per month would be consumed ultimately by commercial acreage in the project. Based upon an average annual per dwelling unit consumption of 5,838 kilowatt hours (kwh) of electricity, electrical usage for the residential portion of the proposed project would be approximately 20,141,000 kwh per year. An additional 10,628,640 kwh per year would be consumed by the commercial acreage proposed.

The Southern California Gas Company and the Southern California Edison Company will provide their respective utility services to the proposed May Ranch in accordance with policies and rules for extension of services on file with the California Public Utilities Commission.

The project will create the need for extended telephone service from lines within Ramona Expressway. While the proposed project will place additional demand upon telephone services, these demands are well within the service parameters of the General Telephone Company.

(3) Mitigation Measures

The Southern California Gas Company and Southern California Edison Company can provide assistance in selection of effective energy conservation techniques, as well as assistance in infrastructure construction. The use of solar energy and waste heat recovery should be encouraged wherever feasible.

New utility lines to be installed underground to serve the proposed project will be connected into the existing network of lines servicing the project.

4.4 UNAVOIDABLE ADVERSE IMPACTS

Unavoidable adverse environmental effects are those which cannot be eliminated or sufficiently mitigated through design measures to render them insignificant. These are, therefore, inevitable consequences inherent in the project and its ultimate construction. The probable adverse impacts resulting from implementation of the project are common to most residential developments. These impacts have been discussed previously in Sections 4.3, therefore, they will only be summarized here.

4.4.1 EARTH RESOURCES

Grading for the 684-acre project will involve cut and fill operations which will alter the existing landform. Ground surfaces which are temporarily exposed during grading may be eroded.

Due to the presence of regional faults, anticipated ground shaking intensities over all of the site could possibly become high during the life of the project and cause damage to project structures. Though unavoidable, the impact is typical of all of Southern California. (See Section 4.3.1, Earth Resources.)

4.4.2 HYDROLOGY AND WATER QUALITY

The volume and peak flow of surface runoff generated on-site will increase as a result of the creation of impervious surfaces such as roadways, driveways and other urban uses. Run-off entering the storm drain system will contain pollutants typical of urban use. Groundwater recharge may be somewhat reduced by project development. (See Section 4.3.2 Hydrology and Water Quality.)

4.4.3 AIR QUALITY

Air quality in the project area will be temporarily degraded during construction activity, and the quality of the regional air cell will be incrementally degraded by pollutants from increased traffic and energy consumption. Population growth in the Perris Valley is occurring at a rate faster than the growth rate required to achieve regional air quality improvement goals. (See Section 4.3.3, Air Quality).

4.4.4 NOISE

Short-term noise from construction activities may temporarily impact areas on the project site and in proximity to the project site. Noise related to future daily traffic volumes and general urban activities on the project site will increase local and on-site acoustical levels, affecting the project site and surrounding areas. (See Section 4.3.4, Noise.)

4.4.5 BIOTIC RESOURCES

Construction of the May Ranch will necessitate the removal of existing agricultural and ruderal vegetation and limited wildlife habitats. Due to the highly altered and/or non-native nature of existing vegetation, however, these losses will not be significantly adverse. (See Section 4.3.5, Biotic Resources.)

4.4.6 LAND USE

Implementation of the proposed project will result in long-term or permanent commitment of the land to the proposed uses. Currently, the site contains agricultural use and its development with residential and commercial communities will continue the trend toward urbanization of the Perris area. In addition to the loss of agricultural production in the County of Riverside, Class I and Class II agricultural soils will be lost to urbanization. Adjacent agricultural lands may experience growth pressures as a result of project development. (See Section 4.3.6, Land Use.)

4.4.7 POPULATION AND HOUSING

Implementation of the proposed project will generate 3,450 additional SFD dwelling units and approximately 9,488 new residents to the City of Perris. This level of growth potentially exceeds SCAG-82 Modified Forecast for the RSA and has adverse implications for regional air quality and transportation planning. (See Section 4.3.7, Population and Housing.)

4.4.8 CULTURAL RESOURCES

The potential for disturbance or destruction of possible unknown archaeological, and historical resources during earthwork and grading exists. (See Section 4.3.8, Cultural Resources.)

4.4.9 CIRCULATION

Development of the May Ranch Specific plan will necessitate construction of an on-site circulation system, as well as connections to the existing street system at Ramona Expressway and Rider Street. The project will generate an estimated 67,855 external vehicle trips per day. This will increase traffic volumes on area roads. (See Section 4.3.9, Circulation.)

4.4.10 ENERGY RESOURCES

Implementation of the proposed project will increase the long-term demand for energy resources in the project area. Energy consumption will increase on both a temporary and long-term basis through short-term consumption of energy during project construction and long-term operation and maintenance of the project site. (See Section 4.3.10, Energy Resources.)

4.4.11 PUBLIC FACILITIES AND SERVICES

The demand for public utilities and services will be incrementally increased as a result of project implementation. These demands may result in the expansion or extension of existing facilities to serve the project site. The particularly critical services which require definitive solution are fire protection and schools.

4.5 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The project site is currently undeveloped, supporting limited agricultural use. If the May Ranch Specific Plan is approved and constructed, a variety of short-term and long-term impacts will occur on a local basis. During construction, portions of surrounding lands would be temporarily impacted by dust and noise over the anticipated ten-year project build-out. During later phases of the project, such impacts could affect already built phases of the project. During construction, impacts could occur from erosion of soils during grading. There also will be an increase in air pollution, mainly dust generation, caused by grading and construction activities. These disruptions, however, are temporary and can be mitigated to a large degree.

The long-term effect of the proposed development is the gradual conversion of the site from agricultural uses into residential and commercial uses. In relation to this process, the characteristics of the physical, biological, cultural, aesthetic and human environment will be impacted. Consequences of this urbanization include: increased traffic volumes, incremental degradation of the regional air cell, additional noise created by traffic generated by inhabitants of the proposed residential uses, incremental increased demands for public services and utilities and increased energy and natural resource consumption.

Ultimate development of the May Ranch Specific Plan would create long-term environmental consequences that are connected with any form of urbanization. However, the proposed project has been designed to benefit the community and population by providing increased housing in an attractive environmental setting. The proposed project will ultimately provide for a form of long-term productivity which appears compatible with human needs in the area and with City of Perris goals for planned growth.

The project will provide for employment opportunities through provisions of commercial office and retail space. Approximately 3,920 jobs may be created in the approximate 1,089,000 gross square feet of commercial area provided in the specific plan. The provision of employment opportunity in the local area enhances long-term productivity by shortening commute distance, conserving energy resources, and reducing regional air pollution.

4.6 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

Construction of the proposed project would result in the following primary irreversible environmental changes.

- Permanent commitment of land which will be physically altered to create access roads, home sites, etc.
- Removal of 684 acres of agricultural open space.
- Damage to or possible irreversible loss of agricultural soils.
- Alteration of the human environment as a consequence of the development process. The project continues the trend toward urbanization in the project area.
- Increased requirements for public services and utilities represents a permanent commitment of these resources.
- Utilization of various new materials, such as lumber, sand and gravel for construction.

4.7 GROWTH INDUCING IMPACTS OF THE PROPOSED ACTION

The area in the immediate vicinity of the project is currently in agricultural uses and has recently been annexed (part is still proposed to be annexed) into the City of Perris. In general, the Perris Valley, which includes the City of Perris and the communities of Homeland and Romoland, has experienced growth resulting in a 64% increase in population between 1970 and 1980. The City of Perris itself has experienced a 36% growth in population between 1984 and 1987. Residential development is expected to continue in the Moreno Valley and Perris Valley areas. Residential development within the City of Perris is expected to expand over the next five years along the Perris Boulevard and Ramona Expressway corridors, and to the east and west of Interstate 215. The project site is located approximately three miles north of downtown Perris, where most development has occurred to date.

New residents of the proposed project will incrementally increase demands for public services and utilities, and will contribute to the need for educational and recreational facilities. Increased use of commercial establishments will occur, contributing to the demand for larger new retail commercial services, such as regional shopping centers in the project area. The proposed project's contribution to demand for these

services should be considered as a growth-inducement to these systems. However, it is not anticipated that the increase in demand will reduce or impair any existing or future levels of utility services, either locally or regionally, as costs for increases in utilities and services will be met through cooperative agreements between the applicants and servicing agencies.

Project-related employment opportunities and project generated tax revenues will contribute to expansion of the economic base of Perris Valley and City of Perris. These factors will also contribute to growth inducement.

Though project phasing is expected to help regulate the rate of growth, the extension of utilities to the project site may contribute to growth in adjacent lands. Although water is currently available to the project area through 12" trunk lines existing in the Ramona Expressway and Bradley Road, sewer service is not presently available. However, the extension of sewer service to the adjacent McCanna Ranch project site and the proposed project site may induce growth in other currently undeveloped lands by removing a major constraint to development.

The location of the project in a semi-rural but steadily developing area could result in conversion of adjoining agricultural lands to similar uses. However, a Non-Renewal application has been filed on certain Agricultural Preserve lands in the area, indicating that discontinuance of agricultural use was anticipated years ago independent of the proposed action.

4.8 CUMULATIVE IMPACT OF THE PROJECT

This discussion assesses the impacts caused by implementation of the proposed project in combination with other reasonably foreseeable projects that may occur in the area. For purposes of this analysis, the City's compilation of projects in-process was used to estimate the magnitude of projects which may be implemented during a similar time frame as the proposed project. The City's records include tentative tract maps filed, final tract maps approved and/or recorded, apartment projects pending, and commercial projects pending.

According to City records, there were approximately 5800 residential units (single family units but not including mobile home and lot sale subdivisions), 350,000 square feet of commercial development, and 3880 apartment units in-process as of 12/30/87. Based on building industry trends, it can be assumed that approximately 80 percent of these projects will eventually be built (i.e 7744 residential units and 280,000 square feet of commercial). Most of the projects to be built are smaller projects which could be completed within 5 years. Additionally, a development growth factor of 6 percent per year is considered for the cumulative analysis period from 6 years out to 10 years (project full buildout time frame). The cumulative project base, therefore, is assumed to consist of 10,363 residential units and 374,700 square feet of commercial development through 1999.

The May Ranch Specific Plan proposes 3,450 SFD units over a 10 year buildout, commercial acreage equivalent to 1,089,000 square feet of floor area, as well as 41 acres of open space, parks, community facilities, etc. Adding the project development levels to the cumulative project base, the Perris community could grow by 13,813 residential units and 1,245,700 square feet of commercial area by 1999. Based on 2.75 persons per residential unit and 4.5 persons (jobs) per 1000 square feet of commercial, cumulative projects could add 37,986 persons and 5600 jobs to the community. Added to the 1987 estimated population (11,250 persons), the Year 1999 community population could be 49,250.

4.8.1 SEISMIC SAFETY, SLOPES AND EROSION

Impacts resulting from grading for construction of these 13,813 dwelling units and the development of commercial areas will alter the topography of the sites. Cut and fill operations will be necessary to prepare street grades,lots and pads for development. A large portion of the Perris Valley, especially in the immediate vicinity of the project site, is composed of relatively flat, agricultural land which will not require extensive cut and fill operations and which minimizes the impact upon landform in the immediate area. Grading activities, however, increase the potential for erosion of soils from the area. Limiting soil erosion has water quality benefits as well as facilitates the operation and maintenance of regional flood control facilities. Due to the presence of regional faults, the potential exists for impacts from strong groundshaking associated with a seismic episode.

As mitigation, the City could develop a model grading ordinance as a means of protecting the area's valuable soil resources. Grading concepts presented in the earth resources mitigation measures section can be used in the formulation of the ordinance. Other landform and seismic impacts are mitigated on a site specific basis through the requirement for geotechnical and soils investigations during project design and construction.

4.8.2 HYDROLOGY AND WATER QUALITY

Drainage patterns and the quality, velocity and composition of runoff will be altered by large scale areas planned for construction. Developments will create impervious surfaces (such as roadways, driveways, parking lots, etc.) which can reduce groundwater basin recharge. Runoff entering streams will contain minor amounts of pollutants typical of urban use, thereby impacting the downstream water quality. Downstream uses which are sensitive to water quality impacts include the San Jacinto River Canyon Lake and Lake Elsinore. A large portion of the Perris Valley is subject to flooding and/or is within inundation areas of a dam failure at Lake Perris.

Mitigation of these impacts includes continuation of the existing drainage improvement program for the San Jacinto River and the continued collection of development fees to implement regional drainage improvements. It is anticipated that storm drain systems of individual projects will be constructed in accordance with the City of Perris and the RCFCD requirements in order to mitigate impacts on local drainage patterns.

4.8.3 CLIMATE AND AIR QUALITY

Construction of these projects will cumulatively impact air quality in the vicinity. Air quality will be temporarily degraded during construction activities which occur separately or simultaneously. However, the greatest cumulative impact on the quality of the regional air cell will be incremental addition of pollutants from increased traffic in the area and increased consumption of energy by inhabitants of the various new projects.

The City of Perris should take an active role in implementing regional transportation strategies contained in the AQMP aimed at reducing vehicle travel.

4.8.4 NOISE

Noise during construction activities will impact noise conditions in the region on a short-term basis. It is not expected that cumulative construction noise impact would be significant since proposed projects are physically separate or can be phased so they do not occur simultaneously within a concentrated area. The major significant cumulative noise impact in the area would result from the increased traffic volume in the vicinity. This is particularly important for existing noise sensitive land uses near I-215, within or near the 65 Ldn contour of March AFB, uses near the railroad or near designated arterial highways. For the already noise impacted uses, a relatively small noise increase may be realized. The local standard of 70 Ldn will likely not be exceeded.

As mitigation, State and local standards are established to require noise attenuation in dwellings impacted by noise. Additionally, the City could establish noise zones where proposed projects within the zones could be required to provide special noise attenuation techniques on-site as well as to clearly impacted off-site areas.

4.8.5 BIOTIC RESOURCES

Developments in the Perris Valley will require grading and clearing of a substantial amount of existing vegetation. Due to the disturbed (or nonnative) nature of much of the valley, losses of vegetation will not be significant. Of significance is the loss of open space available to wildlife. Loss of open space in the region could adversely affect use of the area by wildlife in general, and specifically, could adversely affect use by wintering raptors and other avian species, including the bald and golden eagles. The Perris valley also contains a large area designated as habitat for the state and federal listed Stephens kangaroo rat which could be affected by cumulative projects. Other sensitive or protected plant and animal species are known to occur in the area as discussed in Section 4.3.5.a of this EIR.

4.8.6 LAND USE

It can be anticipated that development of cumulative projects would influence the present atmosphere of passive rural open space and scattered development which typifies the outlying areas of Perris. These development projects have the potential for inducing growth within neighboring areas, and may encourage removal of lands from agricultural use. In addition, General Plan Amendments and Zone Changes may be necessary to accommodate the proposed urban uses.

The General Plan of the City of Perris will be revised in the near future. The land use goals and policies, as well as the policies in other elements of the plan will reflect the magnitude of growth potential of the area. No other mitigation is proposed at this time.

4.8.7 HOUSING AND POPULATION

The potential 13,813 dwelling units occurring cumulatively will generate an anticipated population of 37,986 (2.75 persons per dwelling unit). A population of 11,250 was estimated for 1987 for the City of Perris, which had a 1984 population of 8,288. The 37,986 persons generated by the cumulative projects represents a growth rate of about 12 percent per year between 1987 and 1999. Therefore, the projects may exceed the limits of anticipated growth for Perris, as presented in the current General Plan. A General Plan Amendment is required to accommodate the proposed May Ranch Specific Plan and will be required to accommodate other cumulative developments. Cumulative commercial developments could result in employment opportunity for 5600 persons. This appears to be a significant amount of commercial development and it is not known whether the valley could support this level of commercial development.

The City of Perris should work with SCAG to develop realistic population growth projections for the area. The upcoming general plan revision provides an opportunity to establish accurate population and land use consumption projections. Commercial development proposals should be accompanied by fiscal and economic documentation at the time application for development is made.

4.8.8 HISTORIC AND PREHISTORIC RESOURCES

Development in the area will not disturb any archaeological, paleontological and historical resources, due to grading and excavation activity. However, if a qualified historian analyzes any potentially significant structures and if certified archaeologists and paleontologists are present, where necessary, during grading operations, these impacts may be largely mitigated. The impacts could be considered positive impacts, due to the discovery of resources which would not otherwise have been evaluated or

uncovered. It is possible that grading and excavation in the area will uncover archaeological and paleontological resources which would contribute to knowledge of the history of the Perris Valley.

4.8.9 TRAFFIC CIRCULATION

Ultimate development of 13,813 dwelling units and 1,245,700 square feet of commercial space will significantly increase trip generation and local traffic volumes. Mohle, Grover and Associates estimate that by Year 2000, some 300,000 vehicle trips will be generated citywide. Traffic generated by the developments will impact existing roadways, necessitating the expansion and improvement of the existing circulation system and the construction of new regional roadway networks in accordance with the City of Perris Master Plan of Highways. Within developments, it will be necessary to install circulation systems with sufficient capacity to accommodate traffic generated, in coordination with the regional roadway system.

While the cumulative impact of these projects may be viewed as an increase that will necessitate expansion and improvement of the existing road network, it is important to reiterate that City of Perris planning goals reflected in their Master Plan of Highways include programming major roads in the Perris area for incremental widening and/or extension to serve expected growth in surrounding areas. Mohle, Grover and Associates cautions that potential developments based on zoning will create some level of service problems at City intersections (see Table 4-15). The City should consider a fee assessment as a way to equitably distribute the costs of circulation system improvements.

4.8.10 UTILITIES, SERVICES AND ENERGY USE

Increased development in the City of Perris will incrementally increase the demand for public utilities and services, including water and sewer service; electricity and natural gas service; telephone and cable television services; police and fire protection; school and park facilities; public transportation; and solid waste disposal service.

4.8.10.1 POLICE AND FIRE PROTECTION

Growth in the project area will increase the demand for fire and police services provided by the County of Riverside Fire Department and the City of Perris Police Department. The level of growth envisioned could result in the need for additional fire stations and/or engine companies and additional police officers.

It is expected that the project applicants will cooperate with local jurisdictions to assure that sufficient effective services are provided to serve each project, thereby insuring a safe environment throughout the area. The principal means that this can be accomplished is through mitigation fees and or dedication of property for location of emergency services facilities.

4.8.10.2 WATER AND SEWER SERVICE

Increased expansion in the project area will increase the demand from the Eastern Municipal Water District for water and sewer service. Approximately 7.6 million gallons per day of water would be required to serve cumulative levels of development. Approximately 3.8 million gallons per day of wastewater would be generated. Additional lines and facilities will be required to provide this service effectively to all developments in the area.

Water and sewer service fees charged on a per unit basis will be applied to all units built. These fees should cover the costs of needed expansion. In that water supplies are limited in the local area and regionally, it is proposed that City of Perris adopt a water conservation ordinance that implements strict standards for water consumption throughout the community. The City should provide literature to residents on water conservation methods including xeriscape techniques for landscaping and irrigation. A comprehensive water reclamation reuse plan should formulated and implemented locally.

4.8.10.3 SCHOOLS AND PARKS

Construction of cumulative developments will increase area population, and therefore, the demand on school and park facilities. The anticipated 13,813 dwelling units will generate a population of approximately 8840 students attending Grades K-12. Additional schools will be required to accommodate these students. It will be necessary for each development to cooperate with local school districts so that sufficient facilities are collectively provided to accommodate students generated.

Mitigation measures could include the payment of fees of $1.50 per square foot of building area, or dedication of land for school sites.

Cumulative projects will result in the need for some 276 additional acres of community parks. The May Ranch Specific Plan proposes approximately 41 acres of open space, community parks and recreation facilities, including three public parks. These park facilities will partially satisfy City of Perris cumulative requirements for park lands. The payment of in-lieu fees can also be used to meet park acreage standards.

4.8.10.4 SOLID WASTE

The cumulative projects will increase the amount of solid waste generated in the area and thus increase service needs for waste haulers. The average solid waste generation factor for Riverside County was 7.9 pounds per person per day in 1986, based on the wastes received at County Disposal Sites and the estimated population within the County. Therefore, the cumulative population of 37,985 persons would generate about 150 tons per day by 1999. The Mead Valley Disposal site is expected to be full in 1999. It is anticipated that a new disposal site will be required some time prior to 1999.

The Riverside County Solid Waste Management Plan (CoSWMP), may need to be amended to consider the anticipated solid waste disposal needs of the Perris Valley.

4.8.10.5 ELECTRICITY AND NATURAL GAS SERVICE

The addition of 13,813 dwelling units to the area will create a need for additional electricity and natural gas service. Southern California Edison and the South Coast Air Quality Management District (SCAQMD) utilize an estimated residential demand rate of 5,838 Kwh/unit/year. Considering the estimated cumulative total of dwelling units in the project area, the ultimate residential demand for electricity may increase by 80,640,295 kwh/year.

The Southern California Gas Company and the SCAQMD generally utilize a residential rate of 6,665 cubic feet/d.u./month. Considering the estimated cumulative dwelling unit total, approximately 92,063,645 cubic feet per month of natural gas could be consumed by these additional dwelling units. Additional Southern California Gas lines, as well as Southern California Edison lines, would be required to provide these services to the area.

4.9 ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with State EIR Guidelines, an EIR must present alternatives which are capable of eliminating significant environmental impacts, and state why they were rejected for the proposed project. The emphasis of the alternatives analysis is on reducing adverse effects of the proposed action. Included in this section are discussions addressing the "No Project" Alternative and a Lower Development Intensity Alternative. The City of Perris, as lead agency, must weight the merits of each alternative in comparison to the proposed action.

4.9.1 "NO PROJECT" ALTERNATIVE

a. Environmental Effects

The "No Project" Alternative would retain the site in its present undeveloped condition, and would support the continuation of limited agricultural use of the site. This alternative maintains the existing environmental conditions of the subject property as discussed in the various subsections of Section 4.3 of this EIR. The "No Project" Alternative is considered the environmentally superior alternative for the following reasons:

(1) Elimination of all grading impacts and associated impacts upon agricultural soils.

(2) Reduction in traffic and associated air quality and noise impacts over development scenarios associated with the project proposal, or other alternatives considered herein.

(3) Retention of on-site open space.

The "No Project" Alternative would retain the site's existing general plan and zoning designations.

b. Reasons for Rejection of "No Project" Alternative

This alternative would negate any benefits of the project relative to provision of a wide range of housing types within a homogenous planned community setting. In addition, the benefits of expanding the community's employment base would be negated. The project, as proposed, is designed to meet the public demand by providing affordable detached single family dwelling units and providing local employment opportunities that will be marketable within the region. For these reasons, the "No Project" Alternative was rejected.

4.9.2 LOWER DEVELOPMENT INTENSITY ALTERNATIVE

The objective of a Lower Development Intensity Alternative is to provide for fuller mitigation of the more significant adverse impacts, yet allow the project to proceed at a reduced level. A description of the reduced density alternative is guided by the kinds of impacts that require avoidance or reduction. Specific suggestions for the lower density alternative are given in each section. For general purposes of this alternative, however, two scenarios for a lower intensity development are devised. One scenario would be to develop on the portion of the property north of the Colorado River Aqueduct. This would leave the southern portion open for possible continued agricultural use. A second scenario would be to develop the entire parcel at a reduced density.

a. Earth Resources; Hydrology; Cultural Resources

It can be anticipated that impacts resulting from the Lower Development Intensity Alternative for Earth Resources, Hydrology, and Cultural Resources, would be similar in nature and scope to those associated with the proposed May Ranch Specific Plan. These impacts are briefly summarized below:

(1) Topography, Geology and Soils

Grading for the project will involve cut and fill operations which will alter the existing landform. However, due to the generally flat nature of the site, this alteration will not be significant. Ground surfaces which are temporarily exposed during grading may be eroded.

(2) Seismicity

Due to the presence of regional faults, the potential exists for ground shaking at the project site. This, in turn, creates the potential for structural damage as a result of earthquake activity regardless of development intensity.

(3) Hydrology

Project grading will permanently alter the natural runoff pattern by channeling drainage through pipelines to the Perris Valley Storm Drain. Storm flow rates on-site will increase due to the creation of impervious surfaces. The velocity and composition of runoff will also be altered, but reduced from the proposed project. Housing units would still be constructed within the dam inundation area of Perris Dam, however, the 100-year flood area could possibly be avoided.

(4) Cultural Resources

No adverse impacts will result from implementation of the alternative since the results of the archaeological and historical surveys shows that the project area contains no prehistoric cultural resources and no significant historic resources. The site includes no areas likely to contain subsurface manifestations of such resources.

b. Air Quality

A reduced intensity of development alternative would result in lower air pollutant emissions compared to the proposed project. Such reduced emissions may be more in line with regional air quality improvement and regional transportation strategies. However, SCAG is in the process of revising population projections for Perris Valley which may allow a higher level of growth than SCAG Modified Growth Levels.

c. Noise

Any reduction in dwelling units will have a concomitant reduction in traffic volumes which would incrementally decrease on-site and off-site noise levels associated with the project. Projected noise impacts along Rider Street could be avoided by this alternative.

d. Wildlife and Vegetation

Development of the site with the uses proposed by the Lower Development Intensity Alternative could eliminate less vegetation compared to the proposed project. Since the existing vegetative communities are agricultural and ruderal/disturbed, loss of habitat and resulting loss of limited wildlife resources is not a significant biological impact with the proposed project, nor would any preservation of vegetation under a low intensity alternative have a significant wildlife benefit.

e. Land Use and Population

Utilizing the scenario of only developing the upper portion of the project site, the alternative could involve the development of 1,654 residential units, 55 acres of commercial use, and 17 acres of parks. Accordingly, population generation would be about 4,550 persons for the alternative. Significantly, the alternative could conserve agricultural soils on approximately 300 acres of the site. The aqueduct could serve as a buffer of these lands from the development to the north. This alternative, however, could not guarantee viability of agricultural uses.

Utilizing the scenario of developing the entire parcel at a reduced density would not lessen impact on agricultural soils.

f. Traffic and Circulation

Development to reduce level of 1,654 residential units and 55 acres of commercial acreage would generate approximately 36,063 vehicle trips, or slightly less than half the trips generated by the proposed action. It is possible that the reduced density alternative would defer the time that LOS problems occur on local roadways affected by project traffic.

g. Utilities, Public Services, and Energy Resources

A low intensity project would result in fewer emergency calls than the proposed project. Though fewer emergency calls would result, the distance between existing police and fire stations and the site may still result in the need for additional facilities. In terms of impacts to schools, the Lower Development Intensity Alternative would generate fewer students than the current project proposal. However, additional students generated by this Alternative would still require additional relocatables or perhaps new facilities. In terms of parks and recreational facilities, the lower population generated by this Alternative would generate less demand for parks and put less pressure on other recreational facilities in the area, such as the Lake Perris State Recreation Area. Water demand and sewage treatment demands would be less than one-half of the proposed project demand.

h. Reasons For Rejection Of The Lower Development Intensity Alternative

The Lower Development Intensity Alternative contains incrementally reduced impacts in the areas of traffic, noise, air quality and public facilities and utilities and may be considered environmentally superior to the current development proposal. This alternative, however, precludes some of the marketing objectives of the project, including to provide a homogeneous community to serve the needs of the entry-level buyer, the move-up buyer, the large family and singles.

The economic pressures and public demand for housing appears to have improved the development potential of the subject site. Existing agricultural uses have been marginally economically viable. The project site is in a high growth area and in the path of growth occurring outward from the City of Perris and Moreno Valley. It appears that the highest and best use of the site is urban use. Cancellation of former agricultural preserve contracts seems to support this.

For these reasons, the Lower Development Intensity Alternative was rejected.

4.10 EFFECTS FOUND NOT TO BE SIGNIFICANT

The scope of the environmental issues assessed in this EIR has been determined through preparation of the requisite Initial Study. Also, a Notice of Preparation, containing the Initial Study, was circulated for review locally and through the State Clearinghouse. Agency responses to the NOP further refined the scope of issues discussed in the EIR. The Initial Study, Notice of Preparation and agency responses are contained in Appendix 5.1.

Based on the Initial Study and NOP responses, certain environmental issues were determined to be insignificant and are not covered in the EIR. These issues include the following;

a. Human health and toxic substances handling and disposal- No known toxic wastes will be handled or encountered during project development. Potential public safety impacts due to failure of Perris Dam are discussed in the Hydrology section of the EIR.

b. Mineral Resources - There are no significant mineral resources on-site. Impact on agricultural soils is discussed under Land Use.

c. Groundwater quantity and quality - The project will have no direct or purposeful recharge of groundwater.

d. Aesthetics and Light and Glare - The project's urban design elements as embodied in the Specific Plan address visual aesthetics of the site with respect to the surrounding areas. Individual environmental aspects which have an impact on the aesthetics of the area are addressed in separate sections and include noise, traffic, and land use compatibility.

e. Public Services relative to libraries, health services, and airports- These items have been determined by the City to not be significantly impacted by the proposed project.

4.11 ORGANIZATIONS AND PERSONS CONSULTED

4.11.1 EIR PREPARERS

The Specific Plan/EIR was prepared for the City of Perris (lead agency) with environmental data collected, analyzed and compiled by Florian Martinez Associates, with support from other engineers and analysts. Major contributors are as follows:

City of Perris

Carl Parson	Director of Planning
Susan Gray	Acting Planning Director
Lewis Mazei	Associate Planner
Carol Miller	Assistant Planner

Florian Martinez Associates

Gil Martinez	Executive Vice President
James Norton	Project Director
Richard Goacher	Environmental Technical Support
Donna McCormick	Environmental Research
Thomas Ryan	Environmental Planner
Norman Canchola	Researcher
Debbie Butz	Graphic Artist
Alvin Johnson	Associate Landscape Arch

Psomas Associates

John Vann	Infrastructure Engineering/Grading

Mohle Grover Associates

Hank Mohle	Traffic Engineering
Ed Norris	Traffic Engineering

Environmental Perspectives

Keeton Kreitzer	Environmental Coordination

Tierra Madre Consultants

Lawrence LaPre, Ph.D	Biologist

Scientific Resource Surveys, Inc.

Melinda Horne	Cultural Resources

Christensen and Wallace, Inc.

Fred Christensen	Fiscal Assessment

Acoustical Impacts International

Otto Bixler	Noise Contour Calculation

4.11.2 Contacts During Preparation of the EIR

A list of persons, agencies and organizations contacted during preparation of the EIR is attached to the Initial Study contained in Appendix 5.1.