# FINAL

## Second Tier
## Environmental Impact Report
## for the
## Otay Ranch GDP Amendments/
## Village 11 Sectional Planning Area Plan,
## Conceptual Tentative Map

***EIR 01-02***

***SCH #2001031120***

# VOLUME I - EIR

Applicant:

**Brookfield Shea Otay, LLC**
12865 Pointe Del Mar
Suite 200
Del Mar, California 92014-3859

Lead Agency:

**City of Chula Vista**
276 Fourth Avenue
Chula Vista, California 91910

# SEPTEMBER 2001

## COMMENT NO. 1


# CHULA VISTA ELEMENTARY SCHOOL DISTRICT

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EACH CHILD IS AN INDIVIDUAL OF GREAT WORTH



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LIBIA S. GIL, Ph.D.


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July 20, 2001

Ms. Marisa Lundstedt
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

**RE: EIR-01-02 / Otay Ranch GDP Amendments/Village 11 SPA Plan Draft Environmental Impact Report**

Dear Ms. Lundstedt:

Thank you for the opportunity to respond to the draft environmental impact report of the SPA Plan for Otay Ranch Village Eleven (11). Please be advised that the project is located within the Chula Vista Elementary School District, which serves children from K - 6.

The District currently has two schools in the Otay Ranch area (Village 1 and Village 5.) Heritage Elementary, located in Village 1, opened this month, July 2001, and McMillin, located in Village 5, is due to open September 2001. The school site planned for Village 11 will need to conform to and meet the California Department of Education's quidelines prior to acceptance by the Chula Vista Elementary School District Board of Education. **1-A**

The District encourages developer participation in an alternative financing mechanism to help assure that facilities will be available to serve children generated by new construction. We are currently utilizing Community Facilities Districts (CFD's) as one method to help fund this shortfall. Participation in a CFD is in lieu of developer fees, with school mitigation paid by the homeowner in the form of a special tax. An alternative financing mechanism, such as participation in, or annexation to, a CFD is recommended. **1-B**

If you have any questions, please give me a call.

Sincerely,

Lowell Billings
Assistant Superintendent for
Business Services & Support

LB:lf

## RESPONSE TO COMMENT NO.1
## Chula Vista Elementary School District
## (Letter dated July 20, 2001)

**1-A** Comment noted. The applicant will coordinate with the appropriate School Districts regarding conveyance of the school sites.

**1-B** Comment noted. The School District should coordinate directly with the project applicant regarding establishment of alternative school financing mechanisms.

## COMMENT NO. 2

OTAY WATER DISTRICT
...Dedicated to Community Service
2554 SWEETWATER SPRINGS BOULEVARD, SPRING VALLEY, CALIFORNIA 91978-2096
TELEPHONE: 670-2222, AREA CODE 619

RECEIVED JUL 31 2001

July 31, 2001

W.O. 8644

Ms. Marisa Lundstedt
City of Chula Vista
276 Fourth Ave.
Chula Vista, CA 91910

Subject: Draft Environmental Impact Report, Otay Ranch GDP Amendments/Village 11 Sectional Planning Area Plan

Dear Ms. Lundstedt:

The Otay Water District (District) appreciates the opportunity to review and comment on the subject draft EIR.

The District recommends that the applicant, early in the development cycle, work with the District's Engineering Public Service Department to complete the processing of water facility plans and check on fees, required approvals, and processing times. **2-A**

If you need any information regarding water facilities or service, please call me at (619) 670-2279.

Sincerely,

Christine Craven
Engineering Technician

## RESPONSE TO COMMENT NO.2
### Otay Water District
### (Letter dated July 31, 2001)

**2-A** Comment noted.

THE CITY OF SAN DIEGO

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August 20, 2001

**COMMENT NO. 3**

Ms. Marisa Lundstedt
Environmental Projects Manager
City of Chula Vista Planning Department
276 Fourth Avenue
Chula Vista, CA 91910

Dear Ms. Lundstedt:

Subject: Public Notice of the Draft Environmental Impact Report for the Otay Ranch GDP Amendments/Village 11 Sectional Planning Area Plan in the City of Chula Vista

We have completed our review of the subject Draft Environmental Impact Report (EIR) dated July 2001. The project includes Otay Ranch General Development Plan Amendments that address the following elements: realignment and reclassification of Circulation Element roads; reconfiguration of Village boundaries; reorganization of land use designation; and amendments to the Otay Ranch Village Phasing Plan. The proposed project also includes implementation of the proposed Village 11 SPA Plan and a conceptual tentative map.

The proposed project lies within the watershed of the City of San Diego's Lower Otay Reservoir. Our review of the current Draft EIR and reviews of past projects, assures the Water Department that Best Management Practices have been addressed and will be implemented. **3-A**

If you have any questions or require further information, please call me at (619) 533-5150.

Shahin Moshref, P.E.
Senior Civil Engineer

cc: Kelly Broughton, Deputy Director, Development Services
Marsi Steirer, Deputy Director, Water Department
Chris Gascon, Associate Civil Engineer, Development Services

01-121-22.04

DIVERSITY

**Land Development Review Division • Planning and Development Review**
600 B Street, Suite 800, MS 908A • San Diego, CA 92101-4502

## RESPONSE TO COMMENT NO.3
### City of San Diego
### (Letter dated August 20, 2001)

**3-A** Comment noted.

## COMMENT NO. 4

**San Diego County Water Authority**
4677 Overland Avenue • San Diego, California 92123-1233
(858) 522-6600 FAX (858) 522-6568
www.sdcwa.org

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August 22, 2001

City of Chula Vista
ATTN: Marisa Lundstedt
Planning Department
276 Fourth Avenue
Chula Vista, CA 91910

**Subject: Comments on the Draft Environmental Impact Report (EIR) for the Otay Ranch GDP Amendments/Village 11 SPA Plan (SCH No. 2001031120)**

Dear Ms. Lundstedt:

Thank you for providing the San Diego County Water Authority (Authority) with a copy of the above-referenced document. The Authority has reviewed the relevant portions of the document and offers the following concerns and comments.

**Right of Way**

As you already know, the Authority maintains a right-of-way (ROW) for the Second Aqueduct that will be traversed by the proposed development improvements. There are several topics contained within the EIR that affect the Authority ROW and require ongoing coordination between agencies and the Authority. The concerns are outlined as follows:

1) The Draft EIR on Page 3-42, paragraph 2, mentions that three streets contained within Village 11 will traverse the Authority's easement. The street alignments may require modifications to existing pipelines and will need to be addressed with the Authority. The possibility also exists for potential relocation of Authority appurtenances within the ROW due to the street alignments. Any proposed work affecting Authority right-of-way or facilities will require the prior approval of the Authority. **4-A**

2) In paragraph 3 of Page 3-42, the document references a requirement to enter into a Joint Use Agreement between SDG&E and the City of Chula Vista (City) for any trails within the easement. However, the document fails to mention that any trail alignments proposed within the Authority ROW are subject to Authority review and approval. In addition, the City would be required to enter into a Special Use Agreement with the Authority prior to the construction of the trails. **4-B**

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Comments on Draft EIR -
Otay Ranch GDP Amendments/Village 11 SPA Plan
August 22, 2001
Page 2

3) Proper improvements for each ROW crossing must be incorporated into the design to allow the Authority unobstructed access over the easement at all times. **4-C**

4) The Authority Right of Way Department is currently reviewing the proposed Village 11 Tentative Map (TM) submitted by the City of Chula Vista, dated August 1, 2001. The Village 11 TM currently under review does not match the "Conceptual Tentative Map" as shown in Figure 3-23 of the EIR document. On Page 3-52, paragraph 3, the EIR states that a total of 996 single-family dwelling units is proposed. Please verify the total number of single-family dwelling units based on the new TM design and how this may affect water demand calculations. **4-D**

5) In paragraph 1 of Page 5.13-9, the EIR states that the 680 Recycled Zone reservoir would connect to a planned recycled water transmission main within the Authority's Second Aqueduct right-of-way. It should be noted that negotiations for the placement of the 680 Recycled Zone water main within the Authority right-of-way are ongoing and approval for this alignment has not yet been granted. Please refer to the attached correspondence between the Authority and Otay Water District on this matter. **4-E**

Please contact Fred Clark of the Right of Way Department at (858) 522-6914, regarding all issues affecting Authority rights of way.

**Public Facilities and Services**

Local water analysis in the Draft EIR should include water conservation requirements such as the use of low-flow fixtures, xeriscape landscaping techniques and a discussion of the potential uses of reclaimed water. Best Management Practices for water conservation should have been included as mitigation measures. Water conservation is imperative in Southern California and conservation measures should be detailed in the Draft EIR. If you have any questions about conservation measures, contact Bill Jacoby of the Water Resources Department at (858) 522-6743. **4-F**

The Authority encourages development of water reclamation and groundwater recovery projects and administers financial assistance programs for their development. For more information on the Authority's water reclamation policies and programs, call Maria Mariscal of the Water Resources Department at (858) 522-6746. **4-G**

Comments on Draft EIR -
Otay Ranch GDP Amendments/Village 11 SPA Plan
August 22, 2001
Page 3

Please retain the Authority on your mailing list to receive the Final EIR and other information concerning this project. If you have any questions, please contact me directly at (858) 522-6763.

Sincerely,

M. Kelley Gage

M. Kelley Gage
Water Resources Specialist

Attachments

Cc: Fred Clark
Michele Shumate
Bill Jacoby (without attachments)
Maria Mariscal (without attachments)

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☐ CHRON FILE
☒ PROJECT FILE

**San Diego County Water Authority**
4677 Overland Avenue • San Diego, California 92123-1233
(858) 522-6600 FAX (858) 522-6568
www.sdcwa.org

July 18, 2001

Mr. Ron Ripperger
Otay Water District
2554 Sweetwater Springs Boulevard
Spring Valley, CA 91977-7299

RE: Proposed Zone 680 Recycled Water Pipeline
SDCWA Right of Way File #99-062

Dear Mr. Ripperger:

This letter is in response to your request to modify Paragraph 6 of the Parallel Utility License Agreement in order to provide Otay Water District (District) with an eleven-year grace period for the proposed recycled water facilities within the San Diego County Water Authority's (Authority) right of way. The Authority currently has two large-diameter pipelines (69-inches and 72-inches) delivering water to its member agencies in the southern portion of San Diego County. However, the Authority and Mexican government are collaborating in a study evaluating the feasibility of increasing water reliability in the border region. If studies confirm that this project is feasible, it is likely the Authority will construct a pipeline within its existing right of way in the Eastlake community.

In the Eastlake area, limited space exists along the west side of the Authority's right of way. If the District's request were granted, it could preclude future Authority projects, including a Binational pipeline, as well as interfere with the Authority's mission to provide a safe and reliable water supply by restricting its ability to use its existing easement. At this time it is not in the Authority's best interest to grant the District's request for an eleven-year grace period. It is our goal to be of assistance to our member agencies with their projects. However, in this situation, the Authority's prior rights to the easement must be maintained for future pipeline construction and repair to existing facilities.

If you have any questions, please contact Michele Shumate at (858) 522-6910.

Sincerely,

William J. Rose

William J. Rose
Director of Right of Way

WJR/tr

cc: Thomas M. Nutt, Consultant
Fred W. Clark, Sr., SDCWA

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RIGHT OF WAY
JUN 19 2001

OTAY WATER DISTRICT ESTABLISHED 1956
...Dedicated to Community Service
2554 SWEETWATER SPRINGS BOULEVARD, SPRING VALLEY, CALIFORNIA 91978-2096
TELEPHONE: 670-2222, AREA CODE 619

June 15, 2001

W.O. 8653/9038

Mr. William J. Rose
Director of Right of Way
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

SUBJECT: Proposed Zone 680 Recycled Water Pipeline (CWA File No. 99-062)

Dear Mr. Rose:

This is in response to your letter of March 22, 2001 identifying the San Diego County Water Authority's (Authority) willingness to grant conceptual approval of the Otay Water District's (District) request to install recycled water pipelines within the Authority's existing right of way. The conceptual approval was contingent upon provisions identified in your letter and more specifically in the Parallel Utility License Agreement.

The District is in conceptual agreement with the provisions of the license agreement. However, we request that the Authority modify Paragraph 6 in the agreement to provide the District with an eleven year "grace" period for the recycled facilities. Paragraph 6 identifies the Authority's plans for future construction within the existing pipeline right of way and the requirement that the District would be responsible for relocation of its facilities if needed.

As we understand, the Authority is in the conceptual planning stage of studying the feasibility of locating a new pipeline within the existing pipeline right of way within the EastLake community. If constructed, this pipeline would not be fully operational until 10-12 years from now. Therefore, the District requests that the Authority modify the License Agreement to add a provision allowing the recycled pipeline facilities to remain in operation within the existing right of way for ten years. This would be accomplished by granting the District an eleven-year grace period, which would include a one-year timeframe to obtain all the necessary easements, complete design and construct the recycled facilities. The grace period will provide some assurance to the District that the pipelines would not require relocation after only a short time in operation, causing disruption to our customers and immediate additional costs to the District. Of course, the District recognizes that the grace period would not apply in an emergency situation.

Mr. William J. Rose
Director of Right of Way
San Diego County Water Authority
June 15, 2001
Page -2-

If the Authority is in agreement with this request, please modify the Utility License Agreement accordingly and send to me for action.

Your consideration of this request is greatly appreciated. If you have any questions regarding this matter, I can be reached at 619-670-2279.

Sincerely,

Ronald H. Ripperger
Engineering Manager

RHR/mml

cc: Fred W. Clark, SDCWA
Thomas M. Nutt
Mary Saxton

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☐ CHRON FILE
☒ PROJECT FILE

San Diego County Water Authority
A Public Agency
3211 Fifth Avenue • San Diego, California 92103-5718
(619) 682-4100 FAX (619) 297-0511

March 22, 2001

Mr. Ron Ripperger
Otay Water District
2554 Sweetwater Springs Boulevard
Spring Valley, CA 91977-7299

RE: File No. #99-062 - Proposed Zone 680 Recycled Water Pipeline

Dear Mr. Ripperger:

This letter is in response to your request to install recycled water pipelines within the San Diego County Water Authority's (Authority) existing right of way. After reviewing the enclosed Utility License Agreement, recorded August 5, 1996, between Otay Water District and the Authority, other various submittals, meeting with you, and acknowledging that the Otay Water District (Otay) desires to commence with the design of the project, the Authority is willing to grant conceptual approval contingent on the following:

- Isolation valves outside the Authority's right of way, shall be installed where the pipeline enters and exits the Authority's right of way.
- Otay's above-ground structures or facilities shall be located no closer than 10 feet to an Authority patrol road or Authority above-ground structure.
- The recycled pipelines shall not be constructed within the Authority's Emergency Construction Limits (ECL) (see Exhibit 1A of the enclosed Board Memorandum dated November 12, 1999).
- The Authority must review and approve Otay's plans prior to entering into a Parallel Utility License Agreement.
- Otay and the Authority shall enter into a Parallel Utility License Agreement (copy enclosed).
- As discussed in our last meeting, the Authority has future plans to construct another pipeline within its existing right of way. If the recycled water pipelines are approved for construction within the Authority's right of way, this may interfere with the proposed location of the new pipeline. Therefore, please be advised that if the recycled water pipelines are approved, there is the possibility that they may need to be removed completely outside of the Authority's right of way in the future, at Otay's cost.

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Mr. Ron Ripperger
March 22, 2001
Page 2

- The Authority shall review the 50% design plans for the pipeline project. At that time, Otay will need to pothole the Authority's pipelines to determine the top of pipe elevations. We request that you shoot the flange elevations to verify if the vertical control is the same for what Otay is proposing, against the Authority's vertical control. We will make every effort to assist you in this process.

- Underlying fee owners shall give approval to the project, and Otay must acquire appropriate rights.

- Otay will pay the appraised value of the rights taken.

I have enclosed a copy of the Authority's Board of Director's memorandum dated November 12, 1999 for your review. Also enclosed is a copy of the Guidelines for Parallel Encroachments, however, please note that the copy states it is a draft. While the document was a draft at the time it went before the Board, it is final at this time.

It is our goal to be of assistance to our member agencies with their projects. However, the Authority's prior rights to the easement must be maintained for future pipeline construction and repair to existing facilities. If you have any questions or need further assistance, please contact Michele Shumate at (858) 522-6910.

Sincerely,

William J. Rose

William J. Rose
Director of Right of Way

FWC/mbm/tr
Enclosures

cc: Thomas M. Nutt
Fred W. Clark, (SDCWA)

RIGHT OF WAY
OCT 04 2000

...Dedicated to Community Service
2554 SWEETWATER SPRINGS BOULEVARD, SPRING VALLEY, CALIFORNIA 91978-2096
TELEPHONE: 670-2222, AREA CODE 619

October 2, 2000

W.O. 8653/9038

Mr. Fred Clark
Acting Director of Right of Way
San Diego County Water Authority
3211 Fifth Avenue
San Diego, CA 92103-5718

SUBJECT: Request for Easements for 680 and 950 Zone Recycled Water Pipelines

Dear Mr. Clark:

The Otay Water District (District) requests the San Diego County Water Authority's (CWA) approval to obtain temporary construction and permanent pipeline easements within the right-of-way for Pipeline Nos. 3 and 4 in the EastLake area (See attached exhibits). Approval of the easements is consistent with CWA's guidelines for parallel encroachment and will allow two (2) District recycled pipelines to be located within the right-of-way. The District also requests that CWA process a Joint Use Agreement allowing the parallel encroachment of the recycled pipelines.

In a letter dated June 7, 1999, the District requested that CWA review the feasibility of granting easements for recycled water pipelines within CWA's right-of-way. This letter was sent by the consulting firm of Robert Bein, William Frost & Associates (RBF) in the District's behalf. Included with the letter were four (4) cross sections identifying the required easements by reach from Otay Lakes Road southerly to Olympic Parkway. The cross sections identified existing utilities in CWA's right-of-way and showed the location of the District's two (2) proposed recycled water pipelines. Attached is an aerial photo along with updated reaches and cross sections for your review. Because of an existing slope condition in CWA's right-of-way, the District has realigned the pipeline alignments to within the EastLake High School property. Other than this change, everything else remains the same from RBF's original cross sections with the exception of adding temporary construction easements.

Mr. Fred Clark
Acting Director of Right of Way
San Diego County Water Authority
October 2, 2000
Page -2-

In a letter dated December 17, 1999, CWA gave tentative approval to the District for parallel encroachment of the proposed 680 and 950 recycled water pipelines. Complete approval was contingent on CWA's review and approval of the District's pipeline design, agreement to terms and conditions of a Joint Use Agreement, and agreement to a fee for diminution of value. The District believes the updated cross sections that are included with this letter comply with CWA's parallel encroachment guidelines.

The District conducted an extensive siting study that recommended locating the reservoir and pump station in the EastLake Neighborhood Sports Park. The City of Chula Vista (City) along with area developers participated in the siting study and all agreed that the park site was the best location for the District's recycled facilities. The District and the City recently entered into a joint use agreement to locate the facilities in the park. The proposed easements are critical to both the District's 680 Reservoir and 980 Pump Station projects. The easements will allow transmission mains from each facility in the park to connect to the north in Otay Lakes Road and EastLake Parkway with existing recycled water mains and to the south with future recycled water mains in Olympic Parkway.

The District also reviewed alternative alignments for the recycled pipelines from the park site to Otay Lakes Road and Olympic Parkway. The alternatives included locating the pipelines in South Greensview Drive, Hunte Parkway and EastLake Parkway. The preferred alternative is to locate the pipelines along the easterly side of CWA's right-of-way. This alternative lessens the impact of construction on the community, is the most cost effective, avoids heavy street traffic, and eliminates tearing up local streets that are already congested with existing utilities. The CWA right-of-way alignment southerly from the park site to Olympic Parkway allows the District to perform a "dual" use of an existing pipeline easement recently conveyed to the District. This dual use minimizes the permanent easement width required by the District within CWA's right-of-way.

In addition to the permanent easements, the District requires temporary construction easements to construct the pipelines. The legal descriptions and plats for both the permanent and temporary easements are attached for your review. They are presented by underlying fee owner. The accompanying overall easement plat (Exhibit B) details all easements required from CWA. In the cases where CWA is not the underlying fee owner, the District will negotiate separately with each legal owner for those required easements.

Mr. Fred Clark
Acting Director of Right of Way
San Diego County Water Authority
October 2, 2000
Page -3-

This matter is very urgent to the District and we are anxious to proceed with appraisals and design of the pipelines. I would therefore like to meet with you and appropriate CWA staff, including your Operations and Engineering staff members, to review our request. I will be contacting you in the near future to schedule a meeting. If you have any questions or I can be of assistance, please do not hesitate to contact me at 619/670-2279.

Sincerely,

Ron Ripperger
Engineering Manager

RR/mml

Attachments

cc: Bart Mumford (w/o attachments)
Tom Nutt (Tom Nutt Consulting)
Curt Smith (The EastLake Company)

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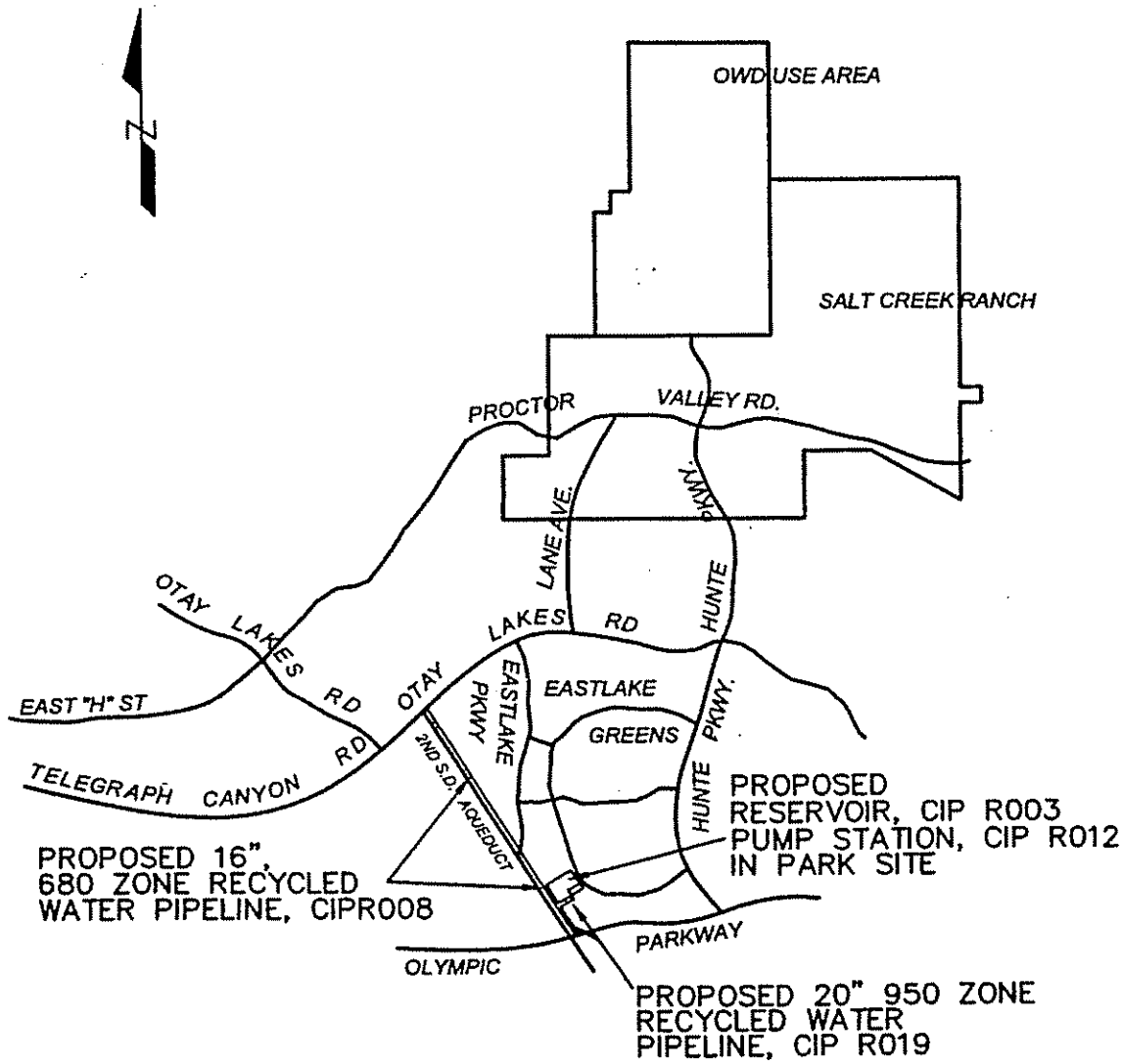


## VICINITY MAP

N.T.S.

# OTAY WATER DISTRICT

## 680 RESERVOIR & 950 PUMP STATION

W.O. 8653/W.O. 9038

DIR. DIV. 1

WO8653EXHIBITA 9/20/00 MTG

EXHIBIT A

## RESPONSE TO COMMENT NO. 4
## San Diego County Water Authority
## (Letter dated August 22, 2001)

**4-A** As indicated in the Draft EIR ( p.3-42) it is acknowledged that the applicant will need coordinate and obtain the appropriate approvals for any work within existing easements.

**4-B** The Draft EIR has been revised to reflect that the discussion of trail location and use within the SDG&E easement also applies to the Authority for any trails proposed within their rights-of-way.

**4-C** The Authority will have the ability to require any design specifications within their rights-of-way during their review and approval of proposed improvements.

**4-D** The Draft EIR analyzes a conceptual Tentative Map based on information available at the time of publication of the Draft document. The City's consideration and approval of the Tentative Map will be based on a review of the Conceptual Tentative Map presented in the Draft EIR. At that time, the Tentative Map will be compared to the assumptions and conclusions of the EIR. If it is determined that actual unit counts, or other aspects of the Tentative Map are substantially different from what was analyzed in the EIR, additional CEQA review may be required.

**4-E** Comment noted. In the event that the 680 Recycled Water Zone water main is not placed within the Authority's easement, connection would be made at the ultimate location of the water main.

**4-F** The State of California has mandated water conservation measures that are required per the Uniform Plumbing Code. Because these are code requirements, it is not necessary or required to list these measures as mitigation under CEQA. In addition to these conservation requirements, the City of Chula Vista requires that a Water Conservation Plan be submitted for approval by the City at the Tentative Map stage. The Water Conservation Plan must address water saving landscape design and the use of reclaimed water.

**4-G** Comment noted.

## COMMENT NO. 5

08/27/2001 08:56 858-694-8928 LAND DEVELOPMENT PAGE 01

# County of San Diego

JOHN L. SNYDER
DIRECTOR
(858) 694-2233
FAX: (858) 292-6481

DEPARTMENT OF PUBLIC WORKS

5560 OVERLAND AVE, SAN DIEGO, CALIFORNIA 92123-1295

COUNTY ENGINEER
COUNTY AIRPORTS
COUNTY ROAD COMMISSIONER
TRANSIT SERVICES
COUNTY SURVEYOR
FLOOD CONTROL
WASTEWATER MANAGEMENT

August 23, 2001

Marisa Lundstedt
Environmental Project Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

Dear Ms. Lundstedt:

OTAY RANCH GDP AMENDMENTS/VILLAGE 11 – DRAFT ENVIRONMENTAL IMPACT REPORT

County staff has reviewed the Draft Environmental Impact Report (DEIR) dated July 2001 regarding the Otay Ranch GDP Amendments/Village 11 Section Planning Area Plan. The following are our comments:

TRAFFIC/CIRCULATION

1. Page 5.10-1 refers to two traffic studies that were prepared by Linscott, Law, and Greenspan. The two traffic studies are summarized in the DEIR. The DEIR should include both traffic studies as appendices to the report. **5-A**

2. The DEIR should explain what land use and roadway network assumptions were made for the area within the County's jurisdiction for all project scenarios. Assumptions regarding the extension of Alta Road should be identified. **5-B**

3. Page 5.10-24 states that the near-term cumulative analysis includes all proposed projects in eastern Chula Vista. The City should coordinate with the County's Department of Planning and Land Use in order to verify that all proposed projects within both the unincorporated area and the Otay Ranch study area are included in the near-term cumulative analysis. **5-C**

4. The City of Chula Vista should coordinate the development of the Otay Ranch project with the County's Department of Planning and Land Use (DPLU). The County's Planning Department has initiated a project to revise the East Otay Mesa Specific Plan. The DPLU Project Manager for the revised Specific Plan project is Stella Caldwell (858-495-5375). **5-D**

5. The Project Description should identify whether Alta Road will be reclassified or deleted from the Circulation Element. Alta Road is currently on the County's General Plan Circulation Element. The post-2010 and buildout scenarios do not assume Alta Road in place. **5-E**

6. All LOS tables in the DEIR that summarize the long-range (Post-2010) traffic conditions should include Alta Road. The County, as part of an amendment to the East Otay Mesa Specific Plan will consider deleting Alta Road from the County's Circulation Element. **5-F**

7. The DEIR states (pg. 5.10-40) that the applicant shall participate in fair-share funding and implementation of several roads, including roads within the County's jurisdiction such as Bonita Road and Sweetwater Road. The County has not scheduled roadway improvements for the segments of Bonita Road and Sweetwater Road identified in the DEIR. Without an approved roadway improvement project, the County cannot obtain fair-share contributions. The City of Chula Vista should coordinate the County's DPW Capital Improvement Projects section in order to facilitate the establishment of official roadway improvements projects needed to serve the Otay Ranch project. **5-G**

FLOOD CONTROL

1. The original EIR for Otay Ranch indicated severe impacts to drainage volumes and flooding from unknown, undefined planning land uses. It was finally agreed to allow the preparation of a detailed Flood Control Master Plan to be delayed until such time as each Village was to be planned or the first TM within an area was filled (whichever came first). **This is a detailed plan for Village 11. It is now time to prepare, provide, and obtain Flood Control approval of a Flood Control Master Plan for the entire drainage basin that Village 11 is in.** **5-H**

2. The "Drainage Plan" on figure 5.9-1 is not approved and is not appropriate to be in this General Plan Document. All proposed drainage facilities should reference the Flood Control approved "Master Drainage Plan" of the drainage basin that contains Village 11. **5-I**

If you have any questions regarding Flood Control issues, please call Kent Burnham at (858) 874-4084. We appreciate the opportunity to be able to review and comment on the proposed plan. Please call me at (858) 694-3728, if you have any questions regarding our comments.

Very truly yours,

BOB GORALKA, Land Development Project Manager
Department of Public Works

Cc: Barry Beech, DPW; Kent Burnham, DPW; Doug Isbell, DPW; Stella Caldwell, DPLU

M:\LTR\Otay Ranch DEIR

## RESPONSE TO COMMENT NO. 5
## County of San Diego Department of Public Works
## (Letter dated August 23, 2001)

**5-A** The two referenced traffic studies were included in the Draft EIR as Appendix G.

**5-B** Alta Road was assumed to be completed in the buildout analysis since this road is currently on both the City of Chula Vista and County of San Diego Circulation Elements. Alta Road was not assumed to be completed in any near term scenarios. SANDAG Series 9 land uses were assumed for the unincorporated area. The Series 9 forecast contains the currently adopted County General Plan land uses.

**5-C** SANDAG Series 9 land uses were assumed for the unincorporated area. The Series 9 forecast contains the currently adopted County General Plan land uses.

**5-D** The City of Chula Vista, through SANDAG, has provided Otay Ranch land use assumptions to the County and will continue to coordinate with the County in the development of Otay Ranch, particularly regarding the East Otay Mesa land uses.

**5-E** Neither the proposed GDP Amendments nor the Village 11 SPA/TM propose the deletion of Alta Road. For modeling purposes, Alta Road was assumed to be completed at buildout. Please also refer to response to Comment No. 5B.

**5-F** Alta Road was assumed to be completed only under the buildout scenario in the LOS tables.

**5-G** It is acknowledged that certain road improvement projects identified to mitigate cumulative traffic impacts in the Draft EIR by the Program EIR 90-01 for the Otay Ranch GDP (1993) may require multi-jurisdictional cooperation. The City of Chula Vista will work with the County and other relevant agencies to identify the appropriate funding mechanisms and implementation procedures for such improvements.

## RESPONSE TO COMMENT NO. 5 (*Continued*)

**5-H** The mitigation measures developed for the Program EIR 90-01 (Otay Ranch General Development Plan) states that for the first SPA plan, a comprehensive drainage infrastructure plan shall be prepared for the drainage basin as defined by the appropriate jurisdiction. The measure further states that the specific master drainage plans shall include drainage infrastructure, staging/development detail, timing, financing, and responsibility for drainage impacts. Appendix F to the Draft EIR consists of a Master Drainage Study for the project. The study includes an analysis of upstream and downstream hydrologic flows within the entire Salt Creek drainage basin and is the basis for the design of the drainage infrastructure for Village 11, as identified in the Tentative Map. In addition, the Draft EIR includes specific design conditions related to water quality and erosion control. All of the drainage facility improvements associated with the Village 11 SPA Plan are required to be financed and constructed in conjunction with project development. With due respect to the commenter, the mitigation measures from the Program EIR 90-01 do not require a " Flood Control Master Plan". Because the project includes a Master Drainage Study as required by the mitigation measures, the project has satisfied the environmental mitigation requirements set by the Program EIR.

**5-I** As described in the Executive Summary (Draft EIR page 1-1), Introduction (Draft EIR page 2-1), and Project Description (Draft EIR page 3-8 and 3-35), the project addressed in the Draft EIR consists of General Plan and GDP Amendments, as well as a SPA Plan and Tentative Map for Village 11. The referenced figure 5.9-1 depicts the proposed drainage plan for Village 11 at an appropriate level of detail for the SPA/Tentative Map stage of planning, and is based on the hydrologic analysis conducted for the entire Salt Creek drainage basin.

## COMMENT NO. 6

The Corky McMillin Companies
Realty • Mortgage • Land Development • Homes • Commercial

August 27, 2001

RECEIVED
AUG 27 2001
PLANNING

Ms. Marisa Lundstedt
Environmental Projects Manager
**CITY OF CHULA VISTA**
276 Fourth Avenue
Chula Vista, CA 91910

**RE: Draft Second Tier Environmental Impact Report**
**Otay Ranch GDP Amendments/Village 11 Sectional Planning Area Plan,**
**Conceptual Tentative Map EIR 01-01 SCH #2001031120**

Dear Ms. Lundstedt,

Pursuant to your public notice dated July 13, 2001, this letter is our response to the referenced Environmental Impact Report ("EIR").

The document fails to reflect that McMillin Otay Ranch, LLC is an applicant for the General Development Plan changes. **6-A**

The GDP Amendment area is identified as 1,500 acres in the Executive Summary (Page 1-3) and 2,200 acres in the Project Description (Page 3-1). **6-B**

The Project Objectives section fails to include the proposed phasing changes (Page 3-6). **6-C**

Figure 3-5 does not include all of the proposed intersections to adequately serve the planned intensity for the Eastern Urban Center and the Freeway Commercial portions of Planning Area 12. **6-D**

The proposed Village Greenway is described in the Overall Design Plan as a 200-foot average width within the villages that it traverses. The EIR fails to address how this goal is met with reduction of the Village 11 portion to a sidewalk adjacent to an arterial street within a 75-foot buffer mostly in slope area. On addition, this change, if made, should apply equally to the entire length of the greenway which is described as a singular facility in the Overall Design Plan (Page 3-14 and 5.1-18). **6-E**

The document properly identifies that Village 11 cannot be guaranteed sufficient sewer capacity without provision of the Salt Creek Sewer trunk line. The mitigation is proposed as interim use of the Poggi Canyon sewer line. However, there is no mention of compliance with the existing Council Policy regarding findings required to approve proposed sewer pump stations (Page 3-52 and 5.13-22). **6-F**

McMillin Realty McMillin Mortgage McMillin Land Development McMillin Homes McMillin Commercial
h:data\engnring\bpletcher\otaymch\gdp amendment\gdp eir comments
CORPORATE OFFICE 2727 HOOVER AVENUE NATIONAL CITY, CA 91950 TEL (619) 477-4117 FAX (619) 336-3119 www.mcmillin.com

If you have any particular questions or require additional information, please contact me directly at 336-3672.

Sincerely,

McMillin Companies, LLC

Robert A. Pletcher
Vice-President

h:data\engnring\bpletcher\otaymch\gdp amendment\gdp eir comments

## RESPONSE TO COMMENT NO. 6
## The Corky McMillin Companies
## (Letter dated August 27, 2001)

**6-A** The proposed GDP Amendments affect land within Otay Ranch that is within numerous ownerships. The Draft EIR analyzes the proposed GDP Amendments as discretionary actions of the City that may or may not be at the request of the affected property owners. It is acknowledged that the McMillin Companies, LLC have submitted an application for the GDP Amendments that affect portions of their ownership within the GDP Amendment Area.

**6-B** Comment noted. The Executive Summary has been revised to reflect the accurate acreage of the GDP Amendment Area of 2,200 acres.

**6-C** The proposed amendments to the phasing plan are not objectives of the project. The change in phasing is, however related to the stated project objective: "Foster development patterns that promote orderly growth and prevent urban sprawl".

**6-D** Figure 3-5 is a depiction of GDP level components of the proposed amendments and is not intended to show all of the land uses or circulation features for each of the villages within the GDP Amendment Area. The specific land uses and circulation features for the EUC will be evaluated at the SPA-level of planning.

**6-E** The adopted GDP contained specific requirements for the dimension and characteristics of the Village Greenway for each affected village and planning area based on its location and surrounding geographical features, particularly topography. The proposed amendments have necessitated the relocation of the Village Greenway within the EUC and Village 11. As a result, the Village Greenway width had been reduced based on the characteristics of its proposed location. The design of the Village Greenway in the EUC and Village 11 have been developed to be functionally equivalent, and to meet the intended purpose of the Village Greenway specified in the adopted GDP, which is to provide a link connecting Wolf Canyon and Salt Creek.

## RESPONSE TO COMMENT NO. 6 (*Continued*)

**6-F** City Council Policy Number 570-03 identifies policies and procedures related construction and operation of sewer pump stations. It is a City of Chula Vista policy that gravity flow is preferable to pumping due to the added costs associated with the construction, operation and maintenance of pump stations. However, pumping sewage flows from one basin to another is considered acceptable as an interim solution until capital improvements can be completed to provide adequate capacity in the gravity flow system.

As discussed in the Draft EIR, Section 5.13.2, the City is currently undergoing design of a gravity sewer line, the Salt Creek Interceptor Sewer, that would ultimately serve Village 11 and other developments. Previous analysis performed by the City has found the Salt Creek Interceptor Sewer to be cost effective compared to pumping. However, as discussed in Section 5.13.2 of the Draft EIR, an issue for Village 11 is the precise timing of the construction of this facility relative to construction of Village 11. The City has determined that if the Salt Creek Interceptor Sewer is not in place prior to need being generated by Village 11 development, the Poggi Canyon sewer would be a viable option until the Salt Creek Sewer is operable. Therefore, while not explicitly discussed in the Draft EIR, analysis of potential temporary pumping of sewage to address construction timing has been done in consideration of City Council Policy Number 570-03.

## COMMENT NO. 7

AUG 27 2001 17:00 FR TO 916194095859 P.02/03

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

**DEPARTMENT OF TRANSPORTATION**
DISTRICT 11, P.O. BOX 85406, MAIL STATION 50, SAN DIEGO, 92186-5406
Telephone: (619) 688-6954
Fax: (619) 688-4299

August 22, 2001

11-SD-125 South

Mr. Scott Morgan
State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Dear Mr. Morgan:

Draft EIR for the Proposed Otay Ranch GDP Amendments/ Village 11 Sectional Planning Area Plan and Conceptual Tenative Map – SCH 2001031120

The California Department of Transportation (Department) comments are as follows:

- The Department endeavors to maintain a target Level of Service (LOS) at the transition between LOS "C" and LOS "D" for State owned facilities, including intersections. **7-A**
- Intersections at ramp junctions should be analyzed using Intersecting Lane Vehicle (ILV) calculations as per the Department Highway Design Manual (HDM), Section 406, page 400-21. **7-B**
- The proposed amendments significantly degrade the intersection LOS at the future Otay Lakes Road/ State Route 125 (SR-125) SB Ramp. The 2015 intersection analysis at Otay Lakes Rd./ SR-125 SB Ramps is forecast with a 37 second (approaching LOS C) delay under the adopted land use and the delay at this intersection is forecast at 54.4 seconds (approaching LOS E) with the proposed land use amendments. **7-C**
- The proposed amendments significantly degrade the intersection LOS at the future Olympic Parkway/ SR-125 SB Ramp intersection. The 2015 intersection analysis at Olympic Parkway/SR-125 SB Ramps is forecast with a 27 second (LOS C) delay under the adopted land use and the delay at this intersection is forecast at 44.9 seconds (LOS D) with the proposed land use amendments. **7-D**
- The proposed amendments significantly degrade the intersection LOS at the future Rock Mountain Road/SR-125 NB Ramp intersection. The 2020 intersection analysis at Rock Mountain Road/SR-125 NB Ramps is forecast with a 21 second (approaching LOS B) delay under the adopted land use and the delay at this intersection is forecast at 48.5 seconds (LOS D) with the proposed land use amendments. **7-E**
- The delay time at the Otay Lakes Road/SR-125 SB ramp intersection decreases between the 2015 and the 2020 horizon year while the segment volumes for Otay Lakes Road are increasing as expected. Please verify intersection delay time calculations. **7-F**
- Provide lane volumes for all intersections at ramp junctions with the proposed SR-125. **7-G**

AUG 27 2001 17:00 FR TO 916194095859 P.03/03

Mr. Scott Morgan
August 22, 2001
Page 2

- Provide a LOS analysis for the future SR-125 Toll Road. Both a segment analysis and weave analysis should be performed in compliance with the 1997 Highway Capacity Manual (HCM) methodology. **7-H**
- Please verify number of lanes and capacity for segments of Interstate Route 805 (I-805) shown in Table 9 of the Traffic Impact Analysis. The table states that I-805 from Bonita Road to East H street is 4 lanes with a total capacity of 6000 veh/hr or 1500 veh/lane/hr. The next segment shows that I-805 from East H to Telegraph Canyon Road is 5 lanes with a total capacity of 8600 veh/hr or 1720 veh/lane/hr. The capacity volumes stated appear to be below expected freeway lane capacities using the HCM methodology. Please verify freeway segment capacities and existing freeway LOS. **7-I**
- Please include all the entrances to Village 11 in the traffic volumes and traffic distribution diagrams of the Traffic Impact Analysis so that contributions for Village 11 traffic to the regional traffic and the future intersections with SR-125 can be verified. Also, please show the trip generation for the adopted land uses and the proposed land uses on the above listed diagrams. **7-J**
- The Department supports "fair share" contributions from developers for interchange improvements and/or other mitigation measures to State facilities due to traffic impacts from their projects **7-K**
- Figure 3-8 shows the location of the 35-acre community park we commented on when we reviewed the NOP for the GDP Amendments. If the park is located as depicted on the plans, potential planning issues involving SR-125 South and the park will be resolved. Please continue to coordinate with us as the project level planning progresses. **7-L**
- The Department has received environmental approval for construction, however, the developer has yet to secure financing for the Toll Road. Project construction will not start until sometime in 2002, with project completion expected by the end of 2005. **7-M**

Thank you for the opportunity to comment on the Draft EIR. We look forward to further coordination and joint planning with the city of Chula Vista as the SR-125 South project proceeds through final design and as Otay Ranch continues to be developed and planned. Our contact person for SR-125 is Laurie Berman, Route Manager, at (619) 688-3631.

Sincerely,

Bill Figge

BILL FIGGE, Chief
Development Review and Public Transportation Branch

## RESPONSE TO COMMENT NO. 7
## Department of Transportation - District 11
## (Letter dated August 22, 2001)

**7-A** The Draft EIR traffic analysis used significance criteria adopted by the City of Chula Vista. The City's criteria are consistent with the "SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region" dated March 2, 2000. The SANTEC/ITE guidelines specify that Level of Service (LOS) D is the region-wide goal for an acceptable LOS. This is described in more detail on page 3 of this document.

> "In general, the region-wide goal for an acceptable level-of-service (LOS) on all freeways, roadway segments, and intersections is "D". For undeveloped or not densely developed locations, as determined by any local jurisdiction, the goal may be to achieve a level-of-service of "C". Individual local jurisdictions, as well as Caltrans, have slightly different LOS objectives. For example, the Regional Growth Management Strategy for San Diego has a level-of-service objective of "D", while the Congestion Management Program has established a minimum level-of-service of "E", or "F" if that is the existing 1990 base year LOS. In other words, if the existing LOS is "D" or worse, preservation of the existing LOS must be maintained or acceptable mitigation must be identified."

**7-B** The more comprehensive 1997 Highway Capacity Manual (HCM) operational method was used instead of the Intersecting Lane Volume (ILV) planning method. The 1997 HCM method requires a significant amount of input and quantifies the operational characteristics of the intersection by a LOS from A to F. The ILV method requires significantly less input and only provides a planning level characteristic of the intersection as under, over or near capacity.

**7-C** Since LOS D was maintained, no significant impacts were identified based on the established significance criteria.

**7-D** See response to Comment No. 7C.

**7-E** See response to Comment No. 7C.

## RESPONSE TO COMMENT NO. 7 (*Continued*)

**7-F** The ADT volume on Otay Lakes Road west of SR 125 decreases between 2015 and 2020. The decrease is due to assumed additional network in the SANDAG model. As a result, the intersection delays decreased between 2015 and 2020.

**7-G** Intersection volumes can be found in Appendix H-L of the traffic study (Appendix G to the Draft EIR).

**7-H** Pages 32,90 and 113 of the traffic study (Appendix G to the Draft EIR) contain the SR 125 freeway analysis.

**7-I** The capacities that were utilized are slightly conservative. The number of lanes is based on field observations.

**7-J** Pages 58 – 63 of the traffic study (Appendix G of the Draft EIR) show the Village 11 traffic contribution to all roadways in the project area. The traffic study contains an appendix (Appendix M) that shows the traffic volume forecast at the project access points. Appendix M is on file at the City of Chula Vista Planning and Building Department.

**7-K** Comment noted. It is understood that Caltrans supports the concept of fair share conditions. This concept is incorporated in the proposed project through the Public Facilities Financing Plan (PFFP).

**7-L** The land uses mapped at the GDP-level of planning for the Otay Ranch are shown in generalized locations. Planning for the SR-125 alignment is more advanced than the planning for land uses in most of the villages of Otay Ranch. It is understood that, at the SPA-level of planning, the specific locations for uses, including the referenced park would be planned in coordination with Caltrans and their intended rights-of-way for SR-125.

**7-M** Comment noted. A full Year 2005 analysis was prepared assuming SR 125 is not completed.

## COMMENT NO. 8

AUG. 27. 2001 5:23PM THE OTAY RANCH CO NO. 8190 P. 2

August 27, 2001

THE OTAY RANCH COMPANY

Ms. Marisa Lundstedt
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Dear Marisa:

The Otay Ranch Company (ORC) appreciates the opportunity to comment on the Draft Second Tier Environmental Impact Report for the Otay Ranch GDP Amendments/Village 11 Sectional Planning Area Plan (EIR 01-02). The focus of ORC's comment will be on impacts caused by the proposed project on the ORC's holding within Otay Ranch.

The proposed project seeks to amend the Otay Ranch Phasing Plan by advancing Village 11 from the Third Western Phase to the Second Western Phase.

The Draft EIR also states that the proposed project would involve moving the Freeway Commercial Portion of Planning Area 12 to the Second Western Phase. My reading of the current Phasing Plan leads me to conclude that Planning Area 12, including the Freeway Commercial, may proceed at any time depending on market demand and facility adequacy. Thus, this segment of the proposed amendment is not necessary. **8-A**

The Draft EIR accurately states that the Village Phasing Plan calls for development on the Western Parcels to be based in the rational extension of facilities. The Draft EIR concludes that the proposed amendment to the Village Phasing Plan is consistent with the goals of the GDP and therefore no significant impacts would result. This conclusion is not supported by the facts. The amendment to the Phasing Plan has adverse impacts that are not adequately addressed in the Draft EIR. **8-B**

The current Phasing Plan contemplates the planning and development of Village 2 before Village 11. Advancing Village 11 before Village 2 creates several policy conflicts and facility problems, as follows:

1) Fire Service: The first Otay Ranch fire station is planned to be located in Village 2 because of its central location within the station's desired service area. The proposed project allows for the entitlement of Village 11 before Village 2 creating the possibility of development out pacing fire services. **8-C**
2) Sewer Service: The Village Phasing Plan intended that the Poggi Canyon sewer serve development within the Poggi Basin, Villages 1, 5, 2 and 6. The Phasing **8-D**

350 W. ASH STREET, SUITE 730, SAN DIEGO, CA 92101 PH. (619) 234-4050 FX: (619) 234-4088 E-MAIL: info@otayranch.com

Plan rationally concluded that Village 11, in due course, would be served by the Salt Creek Sewer System. Advancing Village 11 before Villages 2 and 6 contrary to the Village Phasing Plan, creates the possibility of pumping out-of-basin sewage flows into the Poggi Canyon System. The EIR correctly noted that the Poggi system has very limited capacity. Permitting Village 11 pumped flows into the basin could prohibit or otherwise restrict flows from Villages 6 and 2, contrary to the current phasing plan and the city's procedure and policy of granting preference to in-basin flows. If Village 2 is unable to proceed because of restricted sewage capacity in the Poggi System, this could jeopardize the regional facilities located in Village 2, such as the High School, the community park and the fire station.

3) Community Park: The GDP locates the first community park in Village 2. The park is intended to serve the first two western phases of the project, not Village 11. Advancing Village 11 while delaying Village 2 has the impact of increasing demand for a community park while prohibiting or delaying its construction. This problem is compounded by eliminating the Village 10 community park identified in the proposed plan. The EIR fails to adequately analyze the impacts of these changes on the phasing and financing of the park facilities throughout Otay Ranch. If, as we suspect, the consequence of the proposed project is to shift greater park burdens onto other Villages and other ownerships, then a mitigation measure must be included which requires that Village 11 applicants fully compensate the newly burdened properties. **8-E**

4) High School: The proposed project seeks to relocate the planned Village 11 high school from Village 11 to Village 7 or 8 with the addition of a 50-acre high school. The Village 2 high school was intended to serve Villages 1, 2, 5, and 6 pursuant to the current phasing plan, not Village 11. The impact of this change is not adequately addressed in the EIR. Nor does the EIR adequately analyze the impact of relocating the high school or the viability of both Village 7 and 8. In addition, the EIR did not adequately analyze the updated student generation data prepared for the Sweetwater Union High School District. By not analyzing this data, it is not clear when the second Otay Ranch high school will be required. **8-F**

5) Greenbelt System: The proposed projects relocates the regional greenbelt to the newly configured southern edge of Village 11 and reduces the width from 200 feet to 75 feet. This is different than the 200 foot standard contained in the GDP. The EIR should contain sufficient analysis to provide policy makers the option to alter the width throughout the entire Otay Ranch project **8-A**

6) University Status: The EIR is not clear as to the status of the University Villages (9 and 10) if the University does not locate in Otay Ranch. This should be clarified. **8-H**

7) Other Document: It is unclear if the proposed project also seeks to amend the Facilities Implementation Plan and the Service Revenue Plan. It is important to note these two plans have the same regulatory and policy status as the GDP, the RMP, and Phasing Plan. **8-I**

AUG. 27. 2001 5:24PM THE OTAY RANCH CO NO. 8190 P. 4

Your consideration of these comments is appreciated.

Sincerely

Kim John Kilkenny
Executive Vice President

## RESPONSE TO COMMENT NO. 8
## The Otay Ranch Company
## (Letter dated August 27, 2001)

**8-A** As described in the Draft EIR, the Freeway Commercial portion of Planning Area 12 is proposed to be changed from a non-specified phase to the Second Western Phase.

**8-B** As further detailed in the following responses to specific public facility issues, the Draft EIR provides a complete analysis of environmental impacts related to the proposed change in phasing for Village 11.

**8-C** The PFFP for Village 11 identifies the phasing and financing for fire service infrastructure. In addition to the fire stations proposed within Otay Ranch in Villages Two, Nine and 13, construction of a fire station to replace Station #3 in a relocated site within Sunbow has recently been completed, and will provide first-in coverage for Village 11. Fire Station #7 proposed for Village Two would replace the coverage provided by Fire Station #3 when it is constructed (estimated 2003). Ultimately, Fire Station #8 in Rolling Hills Ranch would provide first-in service for Village 11. With the recent completion of Fire Station #3, adequate phased fire service can be provided to the Village 11 development.

**8-D** As stated in the Draft EIR, Village 11 cannot be fully developed without construction of the Salt Creek Interceptor Sewer to serve the project. Construction of the Salt Creek Interceptor is slated to begin in 2001, with the pipeline being in operation by 2003. The Draft EIR further states that, based on the February 2001 *Sewer Diversion Analysis*, performed by Dexter Wilson Engineering, the Poggi Canyon Interceptor could accept sewage from Village 11 on an interim basis, until such time as the Salt Creek Interceptor was fully operational. For planning purposes, it was assumed that approximately 500 EDUs would utilize the interim option of pumping sewage to the Poggi Canyon Interceptor. It is not anticipated that temporary pumping of sewage from Village 11 into the Poggi basin would exceed the EDU thresholds for the Poggi Canyon Sewer identified in the Draft EIR. It is also anticipated that the Salt Creek Sewer would be operational within a time frame that would not constrain the processing or development of Village Two.

## RESPONSE TO COMMENT NO. 8 (*Continued*)

**8-E** Pursuant to the GDP, Village 11 is required to provide park land dedication and/or in lieu payments of fees for park facility development in accordance with City standards that are applied to all villages. The adopted GDP states that Village 11's community park obligation would be satisfied offsite, through provision of community parks in Villages Two, Ten and the EUC. The provision of community park facilities is not tied to village phasing. The costs for development of community parks is included in the calculation of financial responsibility for park facilities for Village 11, which is included as a mitigation measure in the EIR. The comment states that the proposed plan identifies elimination of the park in Village Ten. Neither the GDP Amendments nor the Village 11 SPA Plan/TM involve elimination of the community park identified for Village Ten.

**8-F** As stated in the Draft EIR, the intent of the GDP was to provide land use designations of appropriate size and locations to allow for school facilities to be provided to serve development. The school districts are ultimately responsible for planning, designing and building facilities. At this time, the Sweetwater Union High School District (SUHSD) has not established service boundaries for the proposed Village 2 high school, and funding for a new high school has not been established. It has therefore, not been determined that the high school proposed for Village 2 is needed prior to development of Village 11. The SDHSD has indicated that demand generated by Village 11 in the near term can be accommodated through upgrading existing facilities. The proposed relocation of the high school site from Village 11 to Village Seven is consistent with recent discussions between the city and the SUHSD to accommodate the needs and timing considerations of the District.

The SDHSD has indicated that the student generation numbers identified in the Draft EIR are consistent with currently adopted formulas and are accurate.

**8-G** Please refer to the response to Comment No. 6 E.

**8-H** Section 3.0, Project Description, of the Draft EIR contains a detailed description of the proposed GDP Amendments for Villages Nine and Ten under both the primary use (university) and secondary use (residential village) scenarios. The proposed GDP Amendments would not change the process by which application of the secondary land use for Villages Nine and Ten would be considered.

## RESPONSE TO COMMENT NO. 8 (*Continued*)

**8-1** City staff has determined that no amendments would be needed for either the Facility Implementation Plans or the Service Revenue Plan. Consistent with the determination made on previous Otay Ranch GDP Amendments, the Public Facilities Financing and Phasing Plan (PFFP) for Village 11 is considered to provide sufficient information to demonstrate the adequacy of facilities and service delivery to meet demand. The PFFP has been determined to be consistent with the policies established in the Facility Implementation Plans, and therefore, no amendments to the plans are required. The GDP/Growth Management Chapter requires that changes to the phasing plan be analyzed through the FIND model. That analysis is currently being conducted. No amendments to the Service Revenue Plan itself are required.

## COMMENT NO. 9

08/29/2001 WED 19:01 FAX 003
08/29/2001 18:34 FAX 7809180638 US FISH AND WILDLIFE 002

US Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2730 Loker Avenue West
Carlsbad, CA 92008
(760) 431-9440
FAX (760) 431-9624

CA Dept. of Fish & Game
South Coast Regional Office
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201
FAX (858) 467-4299

In Reply Refer To: FWS-SDG-954.1 and CDFG No. SCH2001031120

Ms. Marilyn Ponseggi
City of Chula Vista Planning Department
276 Fourth Avenue
Chula Vista, CA 91910

August 29, 2001

RE: Review and Comment of the Draft Second Tier Environmental Impact Report for the Otay Ranch GDP Amendments / Village 11 Sectional Planning Area Plan, Conceptual Tentative Map, City of Chula Vista, San Diego County, California

Dear Ms. Ponseggi:

The U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Game (Department), collectively the "Wildlife Agencies," have reviewed the draft "Review and Comment of the Draft Second Tier Environmental Impact Report (DEIR) for the Otay Ranch GDP Amendments / Village 11 Sectional Planning Area Plan, Conceptual Tentative Map". The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). The Department is a trustee agency under the California Environmental Quality Act (CEQA) and is responsible for ensuring appropriate conservation of fish and wildlife resources including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act, and administers the Natural Community Conservation Planning Program (NCCP). The City of Chula Vista (City) is a participant in NCCP planning and is in the process of completing the Chula Vista Subarea Plan (Subarea Plan) under the Multiple Species Conservation Program (MSCP) subregional plan.

The proposed GDP Amendment area encompasses approximately 1,500 acres in the northeastern portion of the Otay Valley Parcel of Otay Ranch. It generally includes Villages 9 and 10 (the University site), Village 11, and Planning Area 12 (Freeway Commercial and Eastern Urban Center). Implementation of the Village 11 Sectional Planning Area (SPA) and conceptual Tentative Map (TM) would involve approximately 565 acres within the larger GDP Amendment area. The DEIR addresses the following project elements:

- Realign and reclassify Circulation Element roads;
- Reconfigure Village boundaries to reflect the realignment of Circulation Element roads;
- Reorganize land use designations within Villages primarily due to changes in Village acreages;
- Reorder development phasing prescribed in the Otay Ranch Village Phasing Plan; and,
- Implement the proposed Village 11 SPA and TM.

Under the proposed GDP Amendments, Village 11 would increase in size by 34 acres, to a total of 489 acres. It would consist of residential (304.9 acres), parks (16.7 acres), open space (49.2 acres), community purpose facilities (CPF; 5.5 acres), schools (36.6 acres), commercial land uses (10 acres), and streets (66.2 acres).

**Summary of Identified Impacts**

Implementation of the proposed TM for Village 11 would result in the loss of the following sensitive upland communities: 0.16 acre of disturbed broom baccharis scrub, 1.27 acres of coastal sage scrub, 5.16 acres of sparse coastal sage scrub, and 0.33 acre of southern cactus scrub. Also impacted would be 0.02 acre of cismontane alkali marsh, a wetland habitat type, 538.17 acres of agriculture, 8.8 acres of non-native grassland, and 10.8 acres of disturbed habitat. The above-identified impacts total 565 acres, of which 76 of these acres are attributed to off-site grading, sedimentation basins, access roads, arterial improvements, and sewer line – they therefore do not figure in the conveyance requirements for Village 11. Please indicate if the identified impacts include any need for brush management. **9-A**

The proposed development of Village 11 would also eliminate one territory of the coastal California gnatcatcher (*Polioptila californica californica*), a federally threatened species, and a cactus wren (*Campylorhynchus brunneicapillus*). The loss of open sage scrub, non-native grassland, and agricultural areas would also result in a significant impact to raptor foraging habitat.

**Proposed Mitigation Measures**

The assessment of impacts and proposed mitigation is based upon prior documents, including the Otay Ranch General Development Plan/Subregional Plan Program EIR (Program EIR), and the Otay Ranch Resource Management Plan (Phases 1 and 2). Mitigation requirements identified in the DEIR for impacts to biological resources include the following:

- Prior to recordation of each final map, the applicant shall either convey land within the Otay Ranch RMP Resource preserve at a ratio of 1.188 acres for each acre of development, for a total of 455 acres, or shall pay in lieu conveyance fees as prescribed by the RMP. The preserved open space would either be annexed into an existing Community Facilities District (CFD) or a separate CFD would be created.

- The applicant shall prepare a plan for the restoration of 0.02 acre of cismontane alkali marsh. The plan must be approved by the City after receiving review and comment by the Wildlife Agencies.

- The applicant must receive incidental take authority for the California gnatcatcher from the Service, or the City upon the completion of its MSCP Subarea Plan.

- Prior to issuance of grading permits, a third-party biologist will evaluate potential noise impacts to nesting gnatcatchers both on and off-site. If impacts from noise are potentially significant, measures must be developed and implemented which would reduce the impact to below a level of significance.

- Prior to approval of the first Tentative Map for construction of Hunte Parkway adjacent to the Salt Creek preservation area, an "edge plan" shall be prepared which includes a list of plant species appropriate and inappropriate for use in the landscaping. The edge plan must be approved by the Director of Planning and Building.

- The project, including all aspects of its construction, must meet all Adjacency Management guidelines as listed in Section 6.3.2 of the City of Chula Vista's MSCP Subarea Plan.

- If the project is not constructed in 2001, then Quino checkerspot butterfly (*Euphydryas editha quino*) surveys shall be performed in the year prior to construction. If Quino checkerspot butterflies are detected within development areas, avoidance of the area, or mitigation consisting of purchase of suitable off-site habitat at a ratio of 3:1 shall be provided.

Notwithstanding the above mitigation measures, the Program EIR identified several significant and unmitigable biological impacts, as no feasible mitigation measures were identified which could reduce the impacts to below a level of significance. These impacts include the loss of habitat of the California gnatcatcher and cactus wren; impacts to 49 other sensitive wildlife species; loss of regional raptor foraging areas; and, impacts to regional and local wildlife corridors.

**Additional Wildlife Agency Concerns**

The Wildlife Agencies have the following areas of concern:

Conveyance and Habitat Restoration

As reported in the Otay Ranch Phase 2 Resource Management Plan (June 4, 1996), Village 11 encompassed a total of 455 acres, 70 acres of which was designated as Common Areas, leaving 385 acres of impacts toward which the conveyance requirement applied. The original plan therefore required a total conveyance of 458 acres (at 1.188:1). With the proposed changes to Village 11, the new total acreage would be 489 acres, with 106 acres of Common Areas, leaving 383 acres of impacts that required conveyance. The new plan proposed in the DEIR, therefore, requires a total conveyance of 455 acres (at 1.188:1). Village 11 is now proposed to have 68 more acres of residential development and 25 fewer acres of schools (refer pg 3-14). Please clarify how the apparent increase of total impacts translates into a net decrease in conveyance of 3 acres. Specifically, please clarify the component acreages of Common Areas which combine to the 106 acres that is subtracted from the total to determine conveyance. Also, please indicate the manner in which the conveyed land will be managed. Additionally, please indicate if the proposed changes in impacts and conveyance for Village 11 will subsequently affect the future conveyance requirements of other Villages in order to achieve the total target conveyance goal of 11,374 acres for the entire Otay Ranch. **9-B**

In addition to the conveyance requirements, the Otay Ranch Resource Management Plan requires that for every one acre of coastal sage scrub which is impacted, the applicant must restore 0.4 acre of coastal sage scrub elsewhere in Otay Ranch. The DEIR states (pg 5.3-24) that 2.72 acres of coastal sage scrub is required to meet the restoration requirement. However, we believe this amount should actually be 2.77 acres for the total proposed impact to 6.92 acres of sage scrub habitat **9-C**

(consisting of 0.16 acre of disturbed broom baccharis scrub, 1.27 acres of coastal sage scrub, 5.16 acres of sparse coastal sage scrub, and 0.33 acre of southern cactus scrub). Please rectify.

Otay Tarplant

The DEIR is not clear with respect to the presence and potential for impacts to Otay tarplant (*Deinandra conjugens*), a state endangered and federally threatened species. While the DEIR states (pg 5.3-8) that no listed plant species were observed during biological surveys performed from January to July 1999, the biological resources report (Dudek 1999, pg 19) states that no focused surveys for sensitive plants were performed, and later states that focused surveys for Narrow Endemic species would be required where grading is proposed within the Multi-Habitat Planning Area (MHPA) boundary (pg 43). The DEIR also reports that spring 2001 surveys for the Salt Creek Sewer project revealed 71 individuals of Otay tarplant within the Hunte Parkway grading area. However, a specific location is not given for these plants, and it is not clear if these individuals are located within the extended Village 11 Project Area (which includes off-site grading, access roads, arterial improvements, and sewer line extension). Also, based on the finding of Otay tarplant and the tendency of populations to naturally fluctuate, the DEIR states that there is potential for this species to occur within the Village 11 Project Area. 9-D

The Wildlife Agencies recommend that focused surveys for Otay tarplant be performed in any areas supporting suitable habitat (which may include degraded areas) for this species which may be impacted by the project. Also, please clarify the location(s) of the identified Otay tarplant population(s) and which project element will be responsible for permitting and mitigating impacts to this species.

Burrowing Owl

In the biological technical report (Dudek, March 2001), the western burrowing owl (*Speotyto cunicularia hypugaea*) was reported as having high potential for occurrence on-site as a breeding species. Because this species was not observed during numerous site visits in 1999, it was concluded that it had a low probability of occurring. However, according to the presented schedule, the biological surveys focused on delineating vegetation and wetlands, and assessing the potential presence of Quino checkerspot butterflies, California gnatcatchers, and other coastal sage scrub associated species. Most surveys, therefore, were not performed in the early morning or late evening, as recommended by the Department, which would have provided a better opportunity to detect burrowing owls in the event that they were present. Further, due to the general lack of vegetation diversity and easily defined wetland distribution in the northwestern half of Dudek's 1,200-acre study area, and the absence of suitable habitat for Quino checkerspot (under pre-2000 survey protocol) or California gnatcatcher in this area, the Wildlife Agencies must assume that the majority of field investigations were performed in the eastern/southeastern portion of the site. Conversely, the majority of potential habitat for burrowing owls likely occurs in the western/northwestern portion of the site. 9-E

In the project vicinity, Burrowing owls occur near the north end of the Otay Interconnect Pipeline (south of an Otay Water District facility near the northernmost segment of Otay Ranch), adjacent to a major powerline easement (Department, staff observations). The habitat surrounding these resident

owls is regularly disced/agricultural land, which is used for foraging and may also support burrows if there are extended periods between discing. However, the main burrows used by these owls occur along a narrow strip of disturbed habitat located approximately 15 feet from a frequently used dirt road. Due to the presence of large tracts of suitable habitat in the present study area, the known occurrence of burrowing owls in similar habitat to the north, potential for presence of this rapidly declining species, the Wildlife Agencies recommend that focused surveys, and an assessment of potential impacts, should be conducted. The surveys should conform to recommendations in the Department's staff report for burrowing owls (CDFG 1995) and the MSCP. Grassland, open sage scrub, agricultural areas, and even barren/disturbed land should be considered potential habitat for burrowing owls.

Northern Harrier

The extensive areas of grassland and open sage scrub provide potential breeding habitat for the northern harrier, and the DEIR indicates that there is potential for harriers to breed in the on-site agricultural fields or grasslands. If construction is to occur in the breeding season of this species (roughly March 1 through July 31), focused surveys should be performed to ensure that active nests are avoided by a minimum of 900 feet, or greater if possible, as recommended in the MSCP and the Chula Vista Subarea Plan. **9-F**

**Summary of Recommendations**

1. It is unclear whether surveys for Narrow Endemic species were conducted, surveys for all Narrow Endemic species should be conducted prior to impacts. If detected, they should be addressed appropriately. **9-G**

2. The Otay tarplant population to be impacted should be quantified by both the area distribution as well as the number of individual plants. Unless the project construction time-frame allows the impact to Otay tarplant to be permitted under the City of Chula Vista's MSCP Subarea Plan, the impact to this species will need to be addressed by the Department and the Service. Under the latter scenario, impacts to Otay tarplant should be mitigated by a 4:1 conservation of off-site populations (by areal extent and number of individuals). The Wildlife Agencies are available to further work with the City and the applicant to address impacts to this species. **9-H**

3. Should impacts to Quino checkerspot butterflies occur, the proposed 3:1 ratio might be modified, depending on the outcome of the City's Plan or consultation with the Service. **9-I**

4. Focused surveys, following Department recommendations, should be performed to determine the status of the burrowing owl in the entire 565-acre study area. Any impacts to burrowing owls should be mitigated based upon the conditions for coverage under the San Diego County's approved MSCP Subarea Plan (Table 3-5). **9-J**

5. If impacts are to occur in the breeding season of the northern harrier, focused pre-construction surveys should be performed to ensure that active nests would not be impacted by construction activities. Any active nests should be avoided by a minimum distance of 900 feet. **9-K**

6. Clearing of vegetation should be performed in the non-breeding season (February 15-August 31) to avoid impacts to active breeding birds. This should include clearing of all native habitats (coastal sage scrub, etc.) as well as vegetation in disturbed areas because loggerhead shrikes (*Lanius ludovicianus*) are known to nest in Russian-thistle (*Salsola tragus*) in the immediate region. **9-L**

7. Unauthorized clearing of coastal sage scrub and other sensitive habitats outside of the defined construction corridor could cause significant impacts and should be mitigated at a 5:1 ratio. **9-M**

8. A revegetation and monitoring plan should be prepared and approved by the Wildlife Agencies prior to initiation of project construction. The plan should, at a minimum, include: success criteria, monitoring, remedial measures, and financial assurances. Special attention should be paid to the long-term control and management of weeds. **9-N**

9. Salvage of topsoil should be a mitigation requirement of the project. This should include a provision for the top four inches of topsoil to be salvaged and stored at clearly demarcated areas for eventual re-use in the revegetation plan. Areas selected for topsoil salvage should be relatively clean of non-native plant species (non-native grasses, thistles, etc.).

10. The revegetation phase should plan for substantial use of salvageable plant species, including the use of native bunch grasses and slow growing species such as cactus. For example, cholla cactus can be salvaged and stored, and following topsoil replacement, the nodules can be lightly raked into the soil. This technique has shown considerable success elsewhere, though it will take many years for these plants to mature and provide viable habitat. **9-O**

If you have any questions or would like to discuss our comments further, please do not hesitate to call David Mayer of the Department at (858) 467-4234, or Gjon Hazard of the Service at (760) 431-9440.

Sincerely,

Nancy Gilbert
Assistant Field Supervisor
Carlsbad Field Office
U.S. Fish and Wildlife Service

William E. Tippets
Environmental Program Manager
South Coast Region
California Department of Fish and Game

**References**

California Department of Fish and Game. 1995. Staff Report on Burrowing Owl Mitigation. September 28, 1995.

## RESPONSE TO COMMENT NO. 9
## U.S. Fish and Wildlife Service and California Department of Fish and Game (Letter dated August 29, 2001)

**9-A** The Village 11 project site is buffered from the natural vegetation in the Preserve by the proposed Hunte Parkway. Therefore, no brush management will be required.

**9-B** The following is a breakdown of acreage of Common Use Lands that was used to calculate the conveyance obligation:

| | |
|---|---|
| Elementary School | 11.0 ac |
| Middle School | 25.6 ac |
| P-1 Park | 8.9 ac |
| P-4 Park | 1.0 ac |
| Hunte Parkway | 24.2 ac |
| Eastlake Parkway | 7.2 ac |
| Easements (SDG&E and County Water Authority | 18.8 |
| **TOTAL** | **106 ac** |
| SPA Acreage | 489 ac |
| **REMAINDER (489 – 106)** | **383 ac** |

Applying the 1.188 ac of conveyance obligation per 1 ac of development yields the 455 ac conveyance obligation for Village 11.

Land conveyed into the Otay Ranch Preserve will be managed by the Preserve Owner/Manager (POM), as prescribed in the Otay Ranch Resource Management Plan (RMP). The formula for conveyance of Preserve land (1.188 acre of Preserve for each acre of development) is affected by two factors that have and will likely continue to occur in the implementation of the project: 1) purchase of Preserve land by non-developers (such as the USFWS and Otay Water District purchase of the "Inverted L" parcel); and 2) reduction in overall development. Such amendments/purchases could cumulatively affect the overall conveyance acreage by resulting in more Preserve land than can be

## RESPONSE TO COMMENT NO. 9 (*Continued*)

conveyed under the 1.188:1 acre ratio. The actual acreage conveyed to the POM could be different from the estimates provided in the RMP, but the level of conservation on all of the lands identified as Preserve would ultimately be the same as anticipated in the RMP. It is not anticipated that there would be any reduction in the total Preserve acreage, and the actual Preserve is anticipated to be larger than the 11,374 acre area identified in the GDP and RMP, as a result of reductions in development areas that have already occurred.

**9-C** Comment noted, the text of the Final EIR has been revised to reflect this correction.

**9-D** Data regarding Otay tarplant were being collected and analyzed as a part of the rare plant surveys for the Salt Creek Sewer Interceptor project at the time that the Draft EIR for the GDP Amendments and Village 11 SPA/TM was being published. In an effort to include the most current data available, the Draft EIR included preliminary information regarding potential impacts to Otay tarplant. The Final EIR includes amendments to the Draft EIR text to reflect the most current data on Otay tarplant. According to the 2001 survey for Salt Creek Sewer, a total of 175 individual plants are within the impact area for Hunte Parkway. The Final EIR has been revised to reflect this clarification. The City also agrees with the U.S. Fish and Wildlife Service and California Department of Fish and Game (collectively the "Agencies") that, since the Otay tarplant has a natural tendency for population fluctuations, that additional focused surveys need to be performed in the year prior to grading. The Final EIR includes an additional mitigation measure (measure 5.3-10) to require such surveys. Mitigation for Otay tarplant is provided through the conservation of the species afforded by the RMP. It is however, acknowledged that in the absence of take authorization provided by the MSCP Subarea Plan, the Agencies may require additional mitigation through their authority to permit take of the species. The applicant will be required to provide mitigation at a ratio determined to be appropriate by the Agencies as part of the permitting for the Village 11 SPA/TM.

**9-E** Pursuant to the Agencies' recommendations, focused surveys for burrowing owl will be required prior to grading, and if evidence of occupied burrows is discovered, passive relocation of the individuals will be required. Mitigation Measure 5.3-11 has been added to address this issue.

## RESPONSE TO COMMENT NO. 9 (*Continued*)

**9-F** Pursuant to the Agencies' recommendations, if clearing of habitat is to occur in the breeding season of the northern harrier, focused surveys for active nests within areas of potential habitat will be required. Avoidance of active nests, in accordance with the Area Specific Management Plan requirements of the MSCP Subarea Plan will be required. Mitigation Measure 5.3-12 has been added to address this issue.

**9-G** As mentioned in response to comment 9C, additional focused surveys for Otay tarplant will be conducted in the year prior to grading (mitigation measure 5.3-10). Otay tarplant has the potential to exist within the marginal agricultural areas of the Village 11 Project Area. No other narrow endemic species would likely be present in areas not surveyed in 2001 (focused sensitive plant surveys conducted for Salt Creek Sewer in the alignment of Hunte Parkway).

**9-H** See response to Comment No. 9C.

**9-I** Comment noted. No impacts to quino checkerspot butterfly have been identified.

**9-J** See response to Comments No. 9D.

**9-K** See response to Comment No. 9E.

**9-L** Pursuant to the requirements of the Draft MSCP Subarea Plan, no clearing of natural vegetation will be conducted during the period between February 15 and August 15, or the appropriate time frames established by the Agencies in the permitting process. This requirement has been formally incorporated into the Final EIR in mitigation measure 5.3-9.

**9-M** Comment noted.

**9-N** If permitting is pursued through the Agencies in the absence of an approved Subarea Plan, is acknowledged that additional conditions may be placed on the project, including approval of revegetation and monitoring plans by the Agencies.

**9-O** Pursuant to the Agencies' recommendations, salvage of topsoil, seed and plant materials shall be incorporated into mitigation and revegetation plans for the Village 11 SPA/TM project (please see Final EIR mitigation measure 5.3-1).

## COMMENT NO. 10

08/29/2001 WED 19:05 FAX 010
08/29/01 09:53 CITY OF S.D. LDR → 94095859 NO.210 P002/004

THE CITY OF SAN DIEGO

August 27, 2001

VIA FACSIMILE TO (619) 409-5859

Ms. Marisa Lundstedt, Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Subject: Draft Environmental Impact Report, General Plan/Otay Ranch Development Plan Amendments, Village 11 Sectional Planning Area Plan and Conceptual Tentative Map

Dear Ms. Lundstedt:

Thank you for the opportunity to respond to the draft Environmental Impact Report for the General Plan/Otay Ranch Development Plan Amendments, Village 11 Sectional Planning Area Plan and Conceptual Tentative Map. The review of this draft EIR by the City of San Diego has been coordinated by the Environmental Analysis Section of the Development Services Department. The City of San Diego offers the following comments for your consideration:

Transportation/Circulation

The Transportation Development Section of the Development Services Department has reviewed the draft EIR and offers the following comments:

1. As requested in our review for the Notice Of Preparation for this project, the EIR should evaluate project impact on the following roadways and intersections within City of San Diego:

   **Roadways**
   Otay Mesa Road (Entire Length)
   La Media Road between City Boundary and Siempre Viva Road
   Heritage Road/Otay Valley Road between City boundary and Siempre Viva Road

10-A

Development Services
1222 First Avenue, MS 501 • San Diego, CA 92101-4155
Tel (619) 446-5460

Page 2
Ms. Marisa Lundstedt
August 27, 2001

**Intersections**
Intersections along Otay Mesa Road within City of San Diego
Intersections along La Media Road within City of San Diego
Intersections along Heritage Road/Otay Valley Road within City of San Diego

2. Page S-30, Bullet Item 6: This mitigation is recommending to upgrade **La Media Road between SR-905 and Airway Road** from 4-lane major to 6-lane prime. Please note that the subject segment of La Media Road is presently built as a 2-lane roadway and not a "4-lane major". **10-B**

3. Page S-32, Bullet Item 5: This mitigation is recommending to upgrade **La Media Road between Otay Mesa Road and SR-905** from 4-lane major to 6-lane major. Please note that the subject segment of La Media Road is presently built as a 2-lane roadway and not a "4-lane major" and the future classification of this roadway in the Otay Mesa Community Plan is "6-lane primary arterial instead of "6-lane major" as stated in this mitigation. **10-C**

4. Page S-32, Bullet Item 6: This mitigation is recommending to upgrade **Brittania Boulevard between SR-905 and Airway Road** from 4-lane major to 6-lane major. Please note future classification of this roadway in the Otay Mesa Community Plan is "4-lane major". Any changes in the classification of this roadway requires a Community Plan Amendment and should be addressed in the EIR. **10-D**

5. Page 5.10-15, Table 5.10-2, La Media Road from Otay Mesa Road to SR-905: Please note that the future classification of this roadway in the Otay Mesa Community Plan is "6-lane primary arterial with capacity of 50,000 ADT at LOS "C" instead of "6-lane major" with capacity of 40,000 ADT at LOS "C" as shown in this table. **10-E**

6. Page 5.10-15, Table 5.10-2, Brittania Boulevard from SR-905 to Airway Road: Please note future classification of this roadway in the Otay Mesa Community Plan is "4-lane major" and not "6-lane major" as shown in this table. Any changes in the classification of this roadway requires a Community Plan Amendment and should be addressed in the EIR. **10-F**

7. Page 5.10-17, Intersection Analyzed: This section states that significant impact at the intersection of La Media Road / Otay Mesa Road within city of San Diego will continue to exist if the proposed amendments are implemented. However, the EIR does not provide any mitigation for this impact. **10-G**

8. Page 5.10-41, Section 5.10-9, Bullet Item 2: This mitigation is recommending to upgrade **La Media Road between Otay Mesa Road and SR-905** from 4-lane major to 6-lane major. Please note that the subject segment of La Media Road is presently built as a 2-lane roadway and not a "4-lane major" and the future classification of this roadway in the Otay Mesa Community Plan is "6-lane primary arterial instead of "6-lane major" as stated in this mitigation. **10-H**

08/29/2001 WED 19:06 FAX

08/28/01 09:53 CITY OF S.D. LDR → 94095859 NO.210 P004/004

Page 3
Ms. Marisa Lundstedt
August 27, 2001

9. Page 5.10-41, Section 5.10-9, Bullet Item 3: This mitigation is recommending to upgrade **Brittania Boulevard between SR-905 and Airway Road** from 4-lane major to 6-lane major. Please note future classification of this roadway in the Otay Mesa Community Plan is "4-lane major". Any changes in the classification of this roadway requires a Community Plan Amendment and should be addressed in the EIR. **10-1**

The City of San Diego greatly appreciates the opportunity to provide our input. We look forward to reviewing the draft EIR. If you should have any questions regarding the above comments, please contact Elizabeth Shearer-Nguyen at (619) 446-5369.

Sincerely,

Lawrence C. Monserrate
Environmental Review Manager

cc: Ali Sabouri, Associate Traffic Engineer, Development Services Department
Paul Hellman, Senior Planner, Development Services Review
City of San Diego Environmental Review and Comment Files

## RESPONSE TO DOCUMENT NO. 10
## City of San Diego Development Services
## (Letter dated August 27, 2001)

**10-A** The project is calculated to add less that 50 peak hour trips to these locations. Therefore, an analysis is not warranted based on SANTEC/ITE Regional Guidelines. Page 66 of the traffic study (Appendix G of the Draft EIR) shows the project assignment.

**10-B** It is acknowledged that the referenced road segment is currently configured as two-lanes. The traffic analysis conducted for the Program EIR 90-01 for the Otay Ranch GDP (1993) that included cumulative traffic impacts at buildout, identified the need to upgrade La Media Road to mitigate impacts.

**10-C** As indicated in response to Comment No. 10B, the mitigation measures identified in the Program EIR 90-01 identified the need to upgrade La Media Road. The minimum requirements for improvements were identified as a 6-lane major facility. It is understood that the Otay Mesa Community Plan designation for La Media Road is a 6-lane primary facility, which would adequately mitigate for the impacts identified in the Program EIR 90-01.

**10-D** The Program EIR 90-01 required this mitigation measure as a result of impacts from cumulative development in the region. The Draft EIR carries this measure forward. It should be noted that the GDP Amendments are analyzed at a program-level of detail, and that the specific impacts related to mitigation measures that may be required at subsequent levels of analysis will require additional CEQA review. Any circulation element reclassifications that may be necessitated by measures intended to mitigate for regional growth would be identified at the time that the specific measures were to be implemented.

**10-E** Please refer to response to Comment No. 10C.

**10-F** See response to Comment No. 10D.

## RESPONSE TO COMMENT NO. 10 (*Continued*)

**10-G** Impacts and mitigation at the intersections listed on page 5.10-17 were identified in the 1993 Program EIR 90-01 for the adopted GDP, and the text of the Draft EIR (p. 5.10-17) indicates that all of the referenced intersections included mitigation measures. Analysis conducted for the GDP Amendments has concluded that the GDP Amendments would not result in any new impacts at these locations. Therefore, mitigation was not recommended for the GDP Amendments.

**10-H** See response to Comment No.10B and 10C.

**10-I** See response to Comment No.10D.

# COMMENT NO. 11

09/13/2001 THU 10:42 FAX 002

San Diego
ASSOCIATION OF
GOVERNMENTS

401 B Street, Suite 800
San Diego, CA 92101-4231
(619) 595-5300 • Fax (619) 595-5305
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August 24, 2001

Ms. Marisa Lundstedt
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

SUBJECT: Otay Ranch GDP Amendments, Village 11 SPA Plan

Dear Ms. Lundstedt:

Thank you for sending to SANDAG the copy of the Otay Ranch GPA Amendments, Village 11 SPA Plan. Staff has reviewed the Plan and has the following comments.

CMP related EIR comments

SANDAG has reviewed the proposed project for compliance with the Traffic Impact Analysis requirements of the Congestion Management Program (CMP). Based upon the analysis contained within the EIR and the proposed project mitigation measures, traffic impacts to Interstate 805 remain significant and unmitigable. It was noted in the EIR that additional lanes would be required on Interstate 805 to maintain acceptable levels of service and that this is the responsibility of Caltrans as determined by continued freeway planning efforts.

The impacts on Interstate 805 are a direct result of new traffic generated by the proposed project. SANDAG would encourage the project sponsor to aggressively implement the Travel Demand Management (TDM) strategies noted in the EIR to reduce or better manage the travel demand before it reaches Interstate 805. Examples of TDM strategies include: **11-A**

- establishing carpool and van pool staging areas
- constructing enhanced bus stop facilities
- ongoing marketing of alternative transportation services
- joint funding of expanded or new transit services

With these efforts the impacts on Interstate 805 can be minimized until longer-term strategies can be identified and implemented. The project sponsor is encouraged to contact SANDAG for additional information on potential TDM strategies.

These comments have not been reviewed by the SANDAG Board of Directors. If you have any questions about this staff review please contact Mario Oropeza at (619) 595-5369.

Sincerely,

Gary L. Gallegos

GARY L. GALLEGOS
Executive Director

GLG/MO/dak

MEMBER AGENCIES: Cities of Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach, Vista, and County of San Diego.
ADVISORY/LIAISON MEMBERS: California Department of Transportation, Metropolitan Transit Development Board, North San Diego County Transit Development Board, U.S. Department of Defense, S.D. United Port District, S.D. County Water Authority, and Tijuana/Baja California/Mexico.

## RESPONSE TO DOCUMENT NO. 11
### San Diego Aassociation of Governments
### (Letter dated August 24, 2001)

**11-A** Comment noted. The City will continue to coordinate with SANDAG on potential TDM strategies.

# Table of Contents

**Section** **Page No.**


**1.0 EXECUTIVE SUMMARY** ..... 1-1
- 1.1 Introduction ..... 1-1
- 1.2 Project Objectives ..... 1-1
- 1.3 Project Description ..... 1-2
  - 1.3.1 Circulation Amendments ..... 1-3
  - 1.3.2 Land Use Amendments ..... 1-4
  - 1.3.3 Phasing ..... 1-5
  - 1.3.4 Village 11 Spa and Tm ..... 1-6
  - 1.3.5 Tentative Map ..... 1-7
- 1.4 Discretionary Actions ..... 1-7
- 1.5 Environmental Analysis ..... 1-8
- 1.6 Project Alternatives ..... 1-58

**2.0 INTRODUCTION** ..... 2-1
- 2.1 Purpose and Scope of the EIR ..... 2-1
- 2.2 CEQA Requirements ..... 2-3
- 2.3 Uses of this EIR ..... 2-4

**3.0 PROJECT DESCRIPTION** ..... 3-1
- 3.1 Site Location ..... 3-1
- 3.2 Project History ..... 3-5
- 3.3 Project Objectives ..... 3-6
- 3.4 Project Characteristics ..... 3-7
  - 3.4.1 General Plan Amendments ..... 3-8
  - 3.4.2 GDP Amendments ..... 3-8
  - 3.4.3 Tentative Map ..... 3-52
- 3.5 Discretionary Actions ..... 3-54

**4.0 ENVIRONMENTAL SETTING** ..... 4-1
- 4.1 Physical Setting ..... 4-1
- 4.2 Applicable Land Use Plans ..... 4-2

# Table of Contents


| Section | | Page No. |
|---|---|---|
| **5.0** | **ENVIRONMENTAL ANALYSIS** | 5-1 |
| 5.1 | Land Use, Planning and Zoning | 5.1-1 |
| 5.2 | Landform and Alteration | 5.2-1 |
| 5.3 | Biological Resources | 5.3-1 |
| 5.4 | Cultural Resources | 5.4-1 |
| 5.5 | Geology and Soils | 5.5-1 |
| 5.6 | Paleontological Resources | 5.6-1 |
| 5.7 | Agricultural Resources | 5.7-1 |
| 5.8 | Housing and Population | 5.8-1 |
| 5.9 | Water Resources and Water Quality | 5.9-1 |
| 5.10 | Transportation, Circulation and Access | 5.10-1 |
| 5.11 | Air Quality | 5.11-1 |
| 5.12 | Noise | 5.12-1 |
| 5.13 | Public Services and Utilities | 5.13-1 |
| 5.14 | Hazards/Risk of Upset | 5.14-1 |
| **6.0** | **CUMULATIVE IMPACTS** | 6-1 |
| 6.1 | Cumulative Effects Considered Significant | 6-5 |
| 6.2 | Cumulative Effects Considered Not Significant | 6-13 |
| **7.0** | **GROWTH INDUCING IMPACTS** | 7-1 |
| 7.1 | GP/GDP Amendments | 7-2 |
| 7.2 | Village 11 SPA Plan and Conceptual Tentative Map | 7-2 |
| **8.0** | **SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES** | 8-1 |
| **9.0** | **EFFECTS FOUND NOT TO BE SIGNIFICANT** | 9-1 |
| **10.0** | **PROJECT ALTERNATIVES** | 10-1 |
| 10.1 | No Project/No Development Alternative | 10-2 |
| 10.2 | Reduced Density Alternative | 10-6 |
| **11.0** | **REFERENCES** | 11-1 |
| **12.0** | **LIST OF PREPARERS/ORGANIZATIONS CONSULTED** | 12-1 |

**Section** **Page No.**

## LIST OF FIGURES


3-1 Regional Location . . . . . 3-2
3-2 Otay Ranch Parcels . . . . . 3-3
3-3 Project Area Location . . . . . 3-4
3-4 Existing and Proposed GP/GDP Circulation Element . . . . . 3-9
3-5 Adopted GDP with Proposed Changes for the Amendment Area . . . . . 3-12
3-6 Adopted GDP with Proposed Land Use Changes for Village 11 . . . . . 3-15
3-7 Adopted and Proposed Development Phasing Plan . . . . . 3-17
3-8 Adopted GP/GDP with Proposed Land Use Changes for the Eastern Urban Center . . . . . 3-19
3-9 Adopted GP/GDP with Proposed Land Use Changes for the Freeway Commercial . . . . . 3-20
3-10 Adopted GP/GDP with Proposed Land Use Changes for Village Seven . . . . 3-23
3-11 Adopted GP/GDP with Proposed Land Use Changes for Village Eight . . . . 3-25
3-12 Adopted GP/GDP and Proposed Land Use Changes for Village Nine – University Land Use Plan . . . . . 3-28
3-13 Adopted GDP and Proposed Land Use Changes for Village Nine – Village Scenario . . . . . 3-29
3-14 Adopted GP/GDP and Proposed Land Use Changes for Village Ten – University Land Use Plan . . . . . 3-32
3-15 Adopted GDP and Proposed Land Use Changes for Village Ten-Residential 3-34
3-16 Village 11 SPA Detailed Land Use Plan . . . . . 3-38
3-17 Proposed Conceptual Vehicular Circulation Plan . . . . . 3-43
3-18 Proposed Parks, Recreation, Open Space and Trails Plan . . . . . 3-44
3-19 Village Core Concept Plan . . . . . 3-46
3-20 Village 11 Conceptual Phasing Plan . . . . . 3-47
3-21 Village 11 Conceptual Grading Plan . . . . . 3-49
3-22 Proposed Cut and Fill Map . . . . . 3-50
3-23 Conceptual Tentative Map . . . . . 3-53

5.2-1 Steep Slopes . . . . . 5.2-3
5.2-2 Vantage Point Locations . . . . . 5.2-4
5.2-3 Views along Olympic Parkway . . . . . 5.2-5
5.2-4 Views from the Eastlake Community . . . . . 5.2-6
5.2-5 Views from the West . . . . . 5.2-7

| Section | | Page No. |
|---|---|---|
| 5.2-6 | Views from Salt Creek Approaching from Otay River Valley | 5.2-8 |
| 5.2-7 | View from Salt Creek, East of Village 11 Vantage Point F | 5.2-9 |
| 5.2-8 | View from Olympic Training Center Vantage Point G | 5.2-10 |
| 5.2-9 | Proposed Landform Alteration | 5.2-22 |
| 5.3-1 | Biological Resources Map | 5.3-6 |
| 5.3-2 | Biological Resources with Proposed Limits of Grading | 5.3-7 |
| 5.5-1 | Geologic Map | 5.5-4 |
| 5.9-1 | Drainage Plan | 5.9-7 |
| 5.10-1 | Existing and Proposed Circulation Network | 5.10-2 |
| 5.12-1 | Future DNL Noise Contours | 5.12-10 |
| 5.12-2 | Noise Barrier Locations and Heights | 5.12-13 |
| 5.13-1 | Existing and Proposed Water Facilities | 5.13-5 |
| 5-13-2 | Potable Water | 5.13-7 |
| 5.13-3 | Proposed Onsite Sewer Facilities | 5.13-24 |
| 6-1 | Major Projects in Vicinity of Village 11 SPA | 6-4 |
| 10-1 | Otay Ranch Village 11 Draft Alternative SPA Land Use Plan | 10-7 |


## LIST OF TABLES


| | | |
|---|---|---|
| S-1 | Summary of Environmental Impacts | S-9 |
| S-2 | Comparison of Project Alternatives | S-57 |
| 3-1 | Comparison of Adopted and Proposed GDP Land Use Designations and Acreage under University Scenario | 3-13 |
| 3-2 | Comparison of Adopted and Proposed GDP Land Use Designations and Acreage under Residential Scenario | 3-30 |
| 3-3 | Description of Land Use Designations | 3-36 |

| Section | | Page No. |
|---|---|---|
| 3-4 | Neighborhood Land Use Summary | 3-39 |
| 3-5 | Village 11 Phasing Plan Summary | 3-48 |
| 3-6 | Proposed Minimum Lot Area | 3-54 |
| 3-7 | Discretionary Actions | 3-55 |
| 3-8 | Required Permits | 3-55 |
| 5.2-1 | Steep Slope Allocation by Villages (Phase 2 RMP as Modified by Spa One Implementation) | 5.2-17 |
| 5.3-1 | Sensitive Plant Species with the Potential for Occurrence | 5.3-9 |
| 5.3-2 | Sensitive Wildlife Species Known, or Potentially Occurring | 5.3-11 |
| 5.3-3 | Summary of Impacts to Vegetation Communities Village 11 Project Area | 5.3-22 |
| 5.5-1 | Summary of Fault Parameters | 5.5-3 |
| 5.8-1 | Estimated Affordable Housing Obligation | 5.8-6 |
| 5.8-2 | Population and Housing Mix | 5.8-6 |
| 5.9-1 | 100-YEAR Village 11 Discharge Quantities | 5.9-9 |
| 5.10-1 | Existing + Project Street Segment Operations | 5.10-3 |
| 5.10-2 | Segment Operations | 5.10-15 |
| 5.10-3 | Alternative High School Locations Net Trip Generation | 5.10-19 |
| 5.10-4 | Intersection Operations – High School Analysis | 5.10-20 |
| 5.10-5 | Otay Ranch – Village 11 External Trips — Proposed Project | 5.10-22 |
| 5.10-6 | Future Street Segment Operations | 5.10-25 |
| 5.11-1 | SCAQMD Thresholds | 5.11-3 |
| 5.11-2 | Maximum Quarter Short-term Construction Emissions | 5.11-7 |
| 5.11-3 | Total Long-term Operation Emissions | 5.11-8 |
| 5.12-1 | Noise Land Use Compatibility Chart | 5.12-5 |
| 5.13-1 | Existing Operational Reservoirs | 5.13-6 |
| 5.13-2 | Projected Daily Potable Water Demands | 5.13-12 |

**Section** **Page No.**


5.13.3 Short-term Pumping Capacity Balance . . . . . 5.13-13
5.13-4 Projected Recycled Water Demands . . . . . 5.13-14
5.13-5. Poggi Canyon Sewer Basin Improvements Required for Both Gravity and Pumped Flows . . . . . 5.13-20
5.13-6 Poggi Canyon Sewer Basin Improvements Required Only for Pumped Flows . . . . . 5.13-20
5.13-7 Projected Sewage Generation . . . . . 5.13-23
5.13-8 Student Generation Rates . . . . . 5.13-42
5.13-9 High Schools Servicing the Project Area . . . . . 5.13-46

6-1 Cumulative Projects . . . . . 6-2

10-1 Draft Alternative SPA Land Use Plan . . . . . 10-7

# SECTION 1.0
# EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

This summary provides a brief synopsis of the project description and the results of the environmental analysis contained in this Environmental Impact Report (EIR). The project alternatives that were considered and their potential impacts are also summarized. While it provides a general overview of the document, by necessity, it does not contain the extensive background and analysis contained in the document. Therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

The purpose of this EIR is to evaluate the environmental effects of the proposed Otay Ranch General Development Plan (GDP) Amendment, and Otay Ranch Village 11 project, including the Sectional Planning Area (SPA) Plan required to implement the Otay Ranch General Development Plan/Subregional Plan (GDP/SRP) for Village 11 as amended, and the subsequent Conceptual Tentative Map (TM). The proposed GDP Amendments involve Village boundary changes, amendments to the City of Chula Vista Circulation Element roadways, reorganization of land use designations and reordering of development phasing that have evolved from changes to ownership and infrastructure phasing since adoption of the Otay Ranch GDP/SRP on October 28, 1993. The SPA Plan for Village 11 is a planning document that refines and implements the land use plans, goals, objectives, and policies of the Otay Ranch GDP/SRP. The proposed Village 11 Conceptual TM provides lots for proposed Village 11 single-family dwelling unit neighborhoods and lot boundaries for multi-family and other land uses.

## 1.2 PROJECT OBJECTIVES

Since adoption of the Otay Ranch GDP/SRP and certification of the associated Program EIR (EIR 90-01), parcel ownerships and phasing of public improvements have changed. These changes have resulted in the need to adjust planning unit boundaries and to make corresponding changes to circulation roadways to conform to the new boundaries. As a result of the boundary changes, land use designations within the villages need to be adjusted. Amendments to the adopted GDP and corresponding amendments to the General Plan (GP) are necessary to reflect changes in planning area boundaries, circulation network and roadway classifications.

The SPA plan for Village 11 refines and implements the land use goals, objectives, and policies of the City's General Plan and the GDP/SRP. Primary objectives of the Village 11 SPA include:

- Establish a pedestrian-oriented village with an intense urban core;
- Promote synergistic uses between Village 11 and adjacent neighborhoods to balance activities services and facilities;
- Implement the goals and objectives and policies of the City of Chula Vista's General Plan, and Otay Ranch's GDP, Phase 1 and Phase 2 Resource Management Plan, Facility Implementation Plan, Phasing Plan and Service/Revenue Plan;
- Implement the City's Growth Management Program to ensure that public facilities are provided in a timely manner and financed by the parties creating the demand for, and benefiting from, the improvements;
- Foster development patterns that promote orderly growth and prevent urban sprawl; and
- Accentuate the relationship of the land use plan with its natural setting and the physical character of the region and promote effective management of natural resources by concentrating development into less sensitive areas while preserving large contiguous open space areas with sensitive resources.

Additional Village 11 SPA plan objectives are provided in Section 3.0.

## 1.3 PROJECT DESCRIPTION

The proposed project involves amendments to the Otay Ranch GDP and corresponding amendments to the Chula Vista General Plan to:

- Realign and reclassify Circulation Element roads;
- Reconfigure Village boundaries to reflect the realignment of Circulation Element roads;
- Reorganize land use designations within Villages primarily due to changed Village acreages; and
- Reorder development phasing prescribed in the Otay Ranch Village Phasing Plan.

The proposed project also includes implementation of the proposed Village 11 SPA Plan and conceptual Tentative Map (TM).

The proposed GDP Amendment area encompasses approximately ~~1,500~~ 2,200 acres in the northeastern portion of the Otay Valley Parcel of Otay Ranch generally including Village 7, Village 8, Villages 9 and 10 (University site), Village 11, and Planning Area 12 (Freeway Commercial and Eastern Urban Center). Implementation of the Village 11 SPA and TM would involve approximately 565 acres within the larger GDP Amendment area. A brief description of the proposed GDP Amendments and Village 11 SPA/TM is provided below. The reader is referred to Section 3.0 for a complete description of the proposed project that is addressed by this EIR.

## 1.3.1 CIRCULATION AMENDMENTS

The proposed GDP Amendments would realign Hunte Parkway and EastLake Parkway. Hunte Parkway would be relocated north of the approved alignment to become the southern border of Village 11 and to traverse the southern portion of the EUC. The realigned Hunte Parkway would meet Rock Mountain Road at the proposed SR-125. South of Olympic Parkway, EastLake Parkway would shift to the east and would extend to the future alignment of Alta Road.

The proposed GDP Amendments would eliminate some road segments and would reclassify others. Specifically, Patrick Drive, between Village Ten and the EUC and Birch Road, east of the future alignment of EastLake Parkway, would be eliminated. Birch Road, from La Media to SR-125, would be reclassified from a four-lane major road to a six-lane major road. Hunte Parkway, from SR-125 to Olympic Parkway, would be classified as six-lane prime arterials. Main Street would be eliminated east of SR-125 if the University is developed in Village Nine and Ten. Alternatively, if the village scenario is developed in Villages Nine and Ten, Main Street, from SR-125 to its intersection with Hunte Parkway would be classified as a four-lane major road.

Lastly, the proposed GDP Amendments include renaming Orange Avenue as "Olympic Parkway" east of I-805.

## 1.3.2 LAND USE AMENDMENTS

The aforementioned road realignments and elimination of roads would change the configuration and acreage of Villages 10, 11 and Planning Area 12 (FC and EUC). The acreage of Village 9 would not be affected by the proposed circulation changes. The change in configuration and acreage within each village would result in changes in land use distributions. The proposed land use changes are detailed in Section 3.0. The following is a summary of the changes within these villages:

***Village Nine:*** As stated previously, the proposed GDP Amendments would not change the acreage of Village Nine. In accordance with the adopted GDP, the primary land use designation is University. The proposed GDP Amendments would not change this primary use but would reduce acreage dedicated to arterials.

The adopted GDP provides a secondary land use scenario for Village Nine. Based on criteria that are specified in the GDP, Village Nine could be developed as a "Village" with single- and multi-family residential, park, open space, community purpose facilities (CPF), school and commercial land uses. Under this scenario, the proposed GDP Amendments would not result in any changes to Village Nine.

***Village Ten:*** The proposed GDP Amendments would reduce the size of Village Ten by approximately 64 acres. In accordance with the adopted GDP and similar to Village Nine, the primary land use designation for Village Ten is University. Due to the overall reduction in size of Village Ten, there would be a reduction in the acreage allocated for University use. There would also be a reduction in arterial acreage.

Also similar to Village Nine, the adopted GDP provides a secondary land use scenario for Village Ten. Based on criteria that are specified in the GDP, Village Ten could be developed as a "Village" with single- and multi-family residential, parks, open space, CPF, schools and commercial land uses. Under this scenario, the proposed GDP Amendments would result in a decrease in residential units, and acreage allocated to CPF, schools, and commercial uses. However, there would be an increase in open space and arterial acreage within this village. There would be no change to park acreage.

***Village 11:*** The proposed GDP Amendments would increase the size of Village 11 by 34 acres. In accordance with the adopted GDP, Village 11 will be developed as a "Village"

with single- and multi-family residential, parks, open space, CPF, schools and commercial land uses. There is no secondary land use scenario for Village 11. The proposed GDP Amendments would result in an increase in residential acreage and units, CPF acreage, and acreage dedicated to arterials. There would be a decrease in acreage dedicated to open space, schools and commercial use. There would be no change to park acreage.

***Planning Area 12 – EUC:*** The proposed GDP Amendments would decrease the size of the EUC by approximately 35 acres. In accordance with the adopted GDP, the EUC will be developed as an urban node with primarily commercial use as well as multi-family residential, parks, open space, CPF, school acreage. There is no secondary land use scenario for the EUC. The proposed GDP Amendments would result in an decrease in residential acreage and units, CPF acreage, and acreage dedicated to commercial use. There would be an increase in open space and acreage dedicated to arterials. There would be no change to park or school acreage.

***Planning Area 12 – FC:*** The proposed GDP Amendments would increase the size of the FC by approximately 28 acres. In accordance with the adopted GDP, the FC will be developed as a commercial center with some acreage dedicated to open space and arterials. There is no secondary land use scenario for the FC. The proposed GDP Amendments would result in an increase in acreage dedicated to commercial use, open space and arterials.

***Village Seven/Eight:*** The proposed GDP Amendments would relocate the high school site from Village 11 into either Village Seven or Village Eight, resulting in reductions to single-family dwelling unit counts for those villages of 250 or 240, respectively. The high school site would be located either in the southern portion of Village Seven on the northern portion of Village Eight, to provide a more centrally located site to meet the Sweetwater Union High School District's needs.

## 1.3.3 PHASING

The Otay Ranch Village Phasing Plan specifies the phasing of development within Otay Ranch. The fundamental premise of the Village Phasing Plan is to phase the development of planning areas in a logical order to respond to market forces, ensure timely provision of public facilities and assure the efficient use of public fiscal resources. The provision of transportation facilities is one of the major phasing determinants. In order to remain current and timely, the GDP/SRP allows for continual evaluation and update of the Phasing Plan.

The proposed GDP Amendments involve an amendment to the Otay Ranch Village Phasing Plan to move development of Village 11 and the FC portion of Planning Area 12 into the Second Western Phase from the Third Western Phase. This phase shift is proposed since Olympic Parkway will provide a major transportation corridor to Village 11 and the FC. In addition, Village 11 and the FC are adjacent to developed areas and approved SPA areas of the EastLake community and Otay Ranch.

## 1.3.4 VILLAGE 11 SPA AND TM

The proposed project also includes implementation of the Village 11 SPA and TM. The GDP envisions Village 11 as an "Urban Village", planned for transit-oriented development with higher densities and mixed uses located in the village core. The Village 11 SPA Land Use Plan is a further refinement of the existing and proposed GDP Land Use Map for Village 11. As discussed in detail in Section 3.0, the Village 11 SPA Land Use Summary provides for the following land uses within Village 11:

| Neighborhood Land Use | Acreage |
|---|---|
| Residential (2,104 single- and multi-family units) | 304.9 |
| Commercial | 10[1] |
| CPF | 5.5 |
| Park | 16.7 |
| School | 36.6 |
| Open Space | 49.2 |
| Streets | 66.2 |
| **Total** | **489** |

1 A mixed use area assigned 10.0 acres for both commercial and residential uses, but as a mixed use area, the 10 acres is included only once in the overall total.

In accordance with the Village 11 SPA, Village 11 would be developed in three phases to provide for the installation of necessary infrastructure and amenities. The proposed development would require approximately 10 million cubic yards of cut and fill material. All graded material would be reused onsite to achieve balanced earthwork.

A Public Facilities Financing and Phasing Plan (PFFP) has been prepared for Village 11. The Village 11 PFFP describes local, public facilities that are necessary to enable the proposed

development to function, such as water service and infrastructure, and sewer and storm drain facilities. The PFFP assigns the responsibility for construction and financing of all required facilities.

### 1.3.5 TENTATIVE MAP

The proposed Village 11 Conceptual TM, when adopted, would provide lots for proposed single-family dwelling units and lot boundaries for multi-family and other land uses. Section 3.0 provides a Conceptual TM that shows areas of the SPA Plan to be rough graded as pads by land use. Single-family lots would range from 3,400 to 6,000 square feet in size. Multiple final maps will be recorded during the Village 11 entitlement process.

## 1.4 DISCRETIONARY ACTIONS

The proposed project as briefly summarized above and described in detail in Section 3.0 would require the following discretionary actions:

| Discretionary Action | Purpose | Lead Agency |
|---|---|---|
| General Plan Amendment | Amend various elements of the General Plan to reflect proposed roadway realignments and reclassifications, amend land use designations and acreages in Villages Nine, 10, 11, and 12 (FC and EUC) and clean up inconsistencies amongst Elements. | City of Chula Vista |
| Otay Ranch General Development Plan Amendment | Amend the Otay Ranch GDP to reflect proposed roadway realignments and reclassifications, amend land use designations and acreages in Villages Nine, 10, 11, and 12 (FC and EUC) and amend the Phasing Plan. | City of Chula Vista |
| Village 11 SPA Plan | Process SPA Plan in compliance with the General Plan and GDP goals and policies | City of Chula Vista |
| Tentative Subdivision Map | Phased construction in accordance with SPA land uses and performance standards | City of Chula Vista |

Additional required permits for project development include a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Quality Control Board to discharge into drainages, an Incidental Take Permit from the U.S. Fish and Wildlife Service for the loss of one gnatcatcher location, and Conditional Use Permit(s) from the City of Chula Vista for future CPF uses.

## 1.5 ENVIRONMENTAL ANALYSIS

Section 5.0 of this EIR analyzes the potentially significant environmental issues that have been identified by agencies and the public during the Notice of Preparation (NOP) comment period and during preparation of the EIR. In order to establish the context by which the proposed GDP Amendments are being analyzed, Section 5.0 also briefly identifies the environmental impacts that were identified in the Program EIR (EIR 90-01) and whether mitigation measures previously required to implement the GDP/SRP are still applicable with the proposed GDP Amendment. *Table S-1, Summary of Environmental Impacts*, provides a brief summary of the impact analysis conclusions relative to each of the environmental issues addressed in Section 5.0.

Two environmental issues were found not to be significant at the SPA level, and were not analyzed in this EIR: mineral resources and gas/electric service. Mineral resources of economic value on the Otay Ranch property include sand, gravel, crushed rock (known collectively as construction aggregate), and bentonitic clay. None of these mineral resources occur within Village 11. Therefore, no significant impacts with respect to mineral resources would occur with implementation of the proposed project.

Gas and electric services are being extended within the grading for Olympic Parkway. Lateral connection to Village 11 would be accomplished by under grounding within Village 11 street network. Installation of gas and electric infrastructure within street grading is consistent with current design plans and would no create impacts beyond the grading required for the road system. The proposed GDP Amendments and Village 11 SPA have been included in regional growth forecasts and energy demand projections. Therefore, no significant impacts due to the increased demand on installation of gas and electric infrastructure to serve the proposed project would occur.

## TABLE S-1 – SUMMARY OF ENVIRONMENTAL IMPACTS

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| **LAND USE, PLANNING AND ZONING** | | |
| **GDP Amendments** | | |
| The significant impacts previously identified in Program EIR 90-01 that would apply to the proposed GDP Amendments include:<br>• Potential incompatibility with existing adjacent land uses including Otay Landfill, Eastlake, San Diego Air Sports Center, and three quarries. The impact related to incompatibility with immediately surrounding land use was identified as a significant, but mitigable impact.<br>• Potential incompatibility with internal project land uses. Internal compatibility of land use was identified as a potentially significant, but mitigable impact.<br>• Conversion of the site's character from undeveloped open space to developed land, and the related inconsistencies of the change to the City of Chula Vista's goals for the Eastern Territories was considered to be a significant and unmitigable impact. | • Mitigation measures from Program EIR 90-01 require that each SPA Plan include measures to mitigate potential external compatibility with adjacent land uses (Eastlake), including landscaping, grading and buffering standards. All of the mitigation measures from Program EIR 90-01 are contained in *Appendix B*, and are still applicable to the proposed GDP Amendments.<br>• The SPA One EIR included mitigation measures specific to the SPA Plan. However, it also included requirements for the preparation of Edge Plans, to address potential impacts to Preserve areas at the interface with development, as well as Village Design Plans. This requirement applies to all SPA plans. The Edge Plan documents are to be prepared as each SPA Plan is submitted. The requirement to prepared Edge Plans for each SPA Plan is a mitigation measure that is required with the proposed GDP Amendments. | • The Program EIR 90-01 identified significant and unmitigable impacts related to inconsistency with City of Chula Vista policies and goals for the Eastern Territories. This impact is still significant and unmitigable with the proposed GDP Amendments. |
| **Village 11 SPA/TM** | | |
| • Development of the Village 11 SPA Plan, as proposed, would result in a significant change in the character of the site from undeveloped to intensive urban use. No feasible mitigation measures have been identified to reduce this impact to less than significant levels. | • The Village 11 SPA Plan includes all of the plans and studies that are required by ~~of~~ the GDP, as amended. The SPA Plan demonstrates compliance with all mitigation standards that were previously developed to mitigate potentially significant land use impacts to less than significant levels. No additional mitigation is required. | • All existing land use, planning, and zoning regulations would be adhered to under the proposed Village 11 SPA Plan. No significant impacts to related land use compatibility or compliance with land use plans, policies or regulations would result from adoption of the Village 11 SPA Plan, as proposed. However, implementation of the Village 11 SPA Plan would result in the conversion of the site from undeveloped to |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | | intensive urban uses, as identified in Program EIR 90-01. No feasible mitigation has been identified to reduce this impact to less than significant levels. |
| **LANDFORM/ALTERATION AND AESTHETICS** | | |
| **GDP Amendments** | | |
| • The Program EIR 90-01 identified significant impacts to landforms and visual resources from implementation of the plan. Significant impacts identified in the Program EIR 90-01 that would apply to the proposed GDP Amendments include: (1) a change in the overall visual character of the Amendment Area; (2) alteration of significant or sensitive landforms, including steep slopes; and (3) development in highly visible areas. These impacts would remain significant with the approval of the proposed GDP Amendments. No feasible mitigation has been identified for these impacts. No new or additional significant impacts have been identified for the proposed GDP Amendments. | • The proposed GDP Amendments would result in similar significant impacts to landform and visual resources as those identified in Program EIR 90-01, and would be subject to all of the applicable measures identified in the Program 90-01. An inventory of those measures is contained in *Appendix B*. | The proposed GDP Amendments would result in the same significant and unmitigated impacts as identified in Program EIR 90-01:<br>• An unavoidable change in the overall visual character of the project area.<br>• An unavoidable impact to significant or sensitive landforms<br>• An unavoidable impact related to development in highly visible areas. |
| **Village 11 SPA/TM** | | |
| • Conversion of the visual character of the proposed Village 11 Project Area would result in significant impacts to visual resources of the site, which are unavoidable.<br>• Development of Village 11 would result in significant impacts to views of the site from adjacent areas. This impact can be mitigated to a less than significant level.<br>• The proposed Village 11 SPA Plan and TM may have direct, long-term potentially significant nighttime view | • No mitigation is available for impacts related to the change in visual character of the Village 11 Project Area<br>**5.2-1** Prior to approval of grading plans, the Director of Planning and Building and City Engineer shall review the grading plans to confirm that the grading guidelines contained in the proposed Village 11 SPA have been integrated into the grading plans. | • The Village 11 SPA Plan would contribute to the significant unavoidable change in the overall visual character of the Otay Ranch area.<br>• All other significant impacts to landform and visual resources related to Village 11 would be mitigated to less than significant levels. Mitigation measures 5.2-1 and 5.2-2 would provide review of all grading plans for Village 11 to assure that implementation of the project conforms to the guidelines and standards set forth for the Village 11 SPA Plan, the Village 11 GDP and the Otay Ranch Overall Design Plan. Verification would be |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| impacts. This impact can be mitigated to a less than significant level. | **5.2-2** Prior to approval of grading plans, the applicant shall submit documentation to the satisfaction of the Director of Planning and Building which demonstrates that the anticipated steep slope encroachment would not exceed 18.5 acres.<br>**5.2-3** Prior to approval of grading plans, landscape screening shall be designed by a licensed landscape architect that is consistent with the standards established by the Village 11 SPA Plan, and shall be installed pursuant to the landscape plan approved by the Director of Planning and Building and the Department of Parks and Recreation. Plants and landscape elements as described in the Edge Plan shall be incorporated to buffer the Salt Creek open space area from the urban setting of Village 11 SPA Plan.<br>**5.2-4** Prior to the approval of improvement plans, the applicant shall prepare a plan which shows the proposed height, location, and intensity of street lights on site. The plan shall comply with the minimum standards for roadway lighting and shall be submitted for review and subject to approval by the Director of Planning and Building and the City Engineer. | made that steep slope encroachment would not exceed that anticipated in the approved GDP and appropriate buffering between development and preserve areas would be retained. Mitigation measure 5.2-3 would ensure that a landscape plan is reviewed and implemented consistent with the Village 11 SPA Plan.<br>• Mitigation measure 5.2-4 would reduce the effects of nighttime lighting from the development to an insignificant level. |
| **BIOLOGICAL RESOURCES** | | |
| **GDP Amendments** | | |
| The Program EIR identified significant impacts to biological resources, the following of which are pertinent to the proposed GDP Amendments: | • The Program EIR 90-01 mitigation measures would still apply to the proposed GDP Amendments, and are listed in *Appendix B*. No new or additional significant impacts have been identified with the proposed GDP | • Significant and unmitigable biological impacts identified in the Program EIR 90-01, that are applicable to the proposed GDP Amendments include: impacts to sensitive upland habitats and impacts to sensitive |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| • Sensitive uplands (including coastal sage scrub), wetlands, and vernal pool habitat would be impacted. No feasible measures were identified to lessen the level of significance for: Diegan coastal sage scrub, maritime succulent scrub, non-native grasslands, Valley needlegrass grassland, alkali meadow and vernal pools, although the Findings of Fact required certain mitigation measures as a condition of SPA Plan approval. Other mitigation measures reduced the impacts to: woodlands, scrub, southern willow scrub, and aquatic freshwater marsh to a level below significance.<br><br>• State-listed endangered plant species would be impacted. No feasible mitigation measures were identified at the program level of planning to lessen the impact to a level below significance for: San Diego button-celery. Other mitigation measures lessened the impacts to a level below significance for: San Diego thorn-mint, Otay tarplant, and willowy monardella.<br><br>• Second, third, and fourth priority plant species would be impacted. No feasible measures were identified to lessen the level of significance for: San Diego goldenstar and Munz's sage. Other mitigation measures lessened the impacts to a level below significance for all other second, third, and fourth priority plant species. | Amendments. No additional mitigation measures are required beyond those identified in the Program EIR. | wildlife species (as further detailed and summarized in Section 5.3.3). No new or additional significant impacts would result from the implementation of the proposed GDP Amendments beyond those identified in the Program EIR 90-01. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| • Impact to least Bell's vireo, tricolored blackbird, and the southwestern willow flycatcher habitat. Mitigation measures were required that would reduce the impacts to a level below significance. | | |
| • Cactus wren and California gnatcatcher habitat would be impacted. No feasible mitigation measures were found to lessen the environmental impact to a level below significance because the preservation standard for these species is 100% in lieu of an approved MSCP, although mitigation measures were required as a condition of SPA Plan approval. | | |
| • Riverside fairy shrimp habitat would be impacted. Mitigation measures were required that would reduce the impacts to a level below significance. | | |
| • San Diego vernal pool fairy shrimp habitat would be impacted. No feasible mitigation measures were identified that would reduce the impacts to a level below significance, although required mitigation measures were required. | | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| • Harbison's dun skipper, Hermes copper, Thornes' hairstreak and quino checkerspot butterfly habitat would be impacted. Mitigation measures that would reduce the impacts to a level below significance were required. | | |
| • California red-legged frog and southwestern pond turtle would be impacted. Mitigation measures that would reduce the impacts to a level below significance were required. | | |
| • Forty-nine (49) other sensitive wildlife species may be impacted. No feasible mitigation measures were identified at the program level of planning to reduce the impacts to a level below significance, although required mitigation measures were required. | | |
| • Regional raptor-foraging areas would be impacted. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required. | | |
| • Regional and local wildlife corridors would be impacted. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required. | | |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| **Village 11 SPA/TM** | | |
| • The proposed Village 11 SPA Plan would result in significant impacts resulting from project implementation including direct impacts to disturbed broom baccharis scrub, coastal sage scrub, sparse coastal sage scrub, cismontane alkali marsh, non-native grassland, southern cactus scrub and direct impacts to locations determined to be occupied by coastal California gnatcatcher, cactus wren and California horned lark. In addition, impacts from edge effects such as invasive plant species and lighting would cause significant indirect impacts to wildlife species in adjacent Preserve areas. | **5.3-1** Prior to recordation of each final map, the applicant shall either convey land within the Otay Ranch RMP Resource Preserve at a ratio of 1.188 acres for each acre of development area as defined in the RMP, for a total of 455 acres, or shall pay in-lieu-of-conveyance fees as prescribed by the RMP. The preserved open space would either be annexed to an existent Community Facilities District (CFD) or a separate CFD would be created. In addition, to comply with the RMP coastal sage scrub restoration requirements, 2.77 acres of coastal sage scrub shall be restored within Otay Ranch. Restoration shall incorporate salvaged soil, seed and plant material from impacted areas within the Village 11 Project Area.<br><br>**5.3-2** Prior to issuance of grading permit(s) which would impact coastal sage scrub or southern cactus scrub, the applicant shall furnish the City with copies of the appropriate permits from the state and federal wildlife agencies, or shall provide evidence demonstrating that no permits are required or shall secure "take" authorization from the City of Chula Vista under the MSCP.<br><br>**5.3-3** Prior to issuance of grading permit(s), the applicant shall have approved by the City a program for restoration of 0.02 acre of cismontane alkali marsh in the vicinity of the project area. The details of the mitigation shall be | • Mitigation measures 5.3-1 through 5.3-8 would reduce the identified significant impacts to less than significant levels, with the exception of those impacts identified as significant and unmitigable in the Program EIR 90-01, including:<br>a) Cactus wren and California gnatcatcher habitat would be impacted. No feasible mitigation measures were found to lessen the environmental impact to a level below significance because the preservation standard for these species is 100% in lieu of an approved MSCP, although mitigation measures were required as a condition of SPA Plan approval.<br>b) Forty-nine (49) other sensitive wildlife species may be impacted. No feasible mitigation measures were identified at the program level of planning to reduce the impacts to a level below significance, although required mitigation measures were required.<br>c) Regional raptor-foraging areas would be impacted. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.<br>d) Regional and local wildlife corridors would be impacted. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | provided following consultation with wetland resource agencies. | |
| | **5.3-4** If the City of Chula Vista has received take authority from the Wildlife Agencies, the Village 11 SPA project would need to obtain an Incidental Take Permit (ITP) from the City for impacts to one gnatcatcher location. However, if the City has not received take authority from the Wildlife Agencies, the Village 11 SPA project would need to obtain the Incidental Take Permit from the USFWS for the impacts to one gnatcatcher location. | |
| | **5.3-5** Prior to issuance of grading permit(s), a third-party biologist acceptable to the City would evaluate potentially significant noise impacts to nesting gnatcatchers both on and off-site. If significant noise impacts would occur, the applicant would be required to reduce the impact to a level below significant through either modification of construction activities or avoiding clearing, grubbing, grading or construction activities within 500 feet of an occupied gnatcatcher nest. | |
| | **5.3-6** Prior to approval of the first Tentative Map for construction of Hunte Parkway adjacent to the Salt Creek preservation area, an "edge plan" shall be prepared in consultation with a qualified biologist to include a list of plant species that may and may not be used for landscaping. The edge plan shall be submitted for, and is subject | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | to, the approval of the Director of Planning and Building. | |
| | **5.3-7** During construction, and continuing after project completion, the proposed project shall meet all Adjacency Management guidelines as listed in Section 6.3.2 of the City's MSCP Subarea Plan. | |
| | **5.3-8** Surveys for the quino checkerspot butterfly shall be conducted every year, prior to construction, starting with the current surveys conducted in the spring, 2001 season. If the project is not constructed in 2001, then surveys shall be performed in the year prior to construction. If quino checkerspot butterflies are detected within development areas, avoidance of this area, or mitigation consisting of purchase of suitable offsite habitat at a ratio of 3:1 shall be provided. | |
| | **5.3-9** In accordance with the requirements of the Draft Subarea Plan, no clearing of occupied coastal sage scrub habitat may occur from February 15 through August 15. | |
| | **5.3-10** Surveys for Otay tarplant shall be conducted in the year prior to grading to determine population characteristics at the time of impact. Mitigation for Otay tarplant under CEQA is provided through conservation provided by the Otay Ranch RMP. Additional mitigation may be required by the USFWS and CDFG under their permitting jurisdiction. | |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | **5.3-11** Focused surveys for burrowing owl shall be conducted in the year prior to grading. If occupied burrows are detected, passive relocation of the species shall be conducted to avoid impacts from grading.<br>**5.3-12** Focused surveys for active nests of northern harriers shall be conducted in the year prior to grading. If active nests are detected, and if construction activities occur between March 1 and July 31, construction activities shall be restricted within 900 feet of the active nest sites. | |
| **CULTURAL RESOURCES** | | |
| **GDP Amendments** | | |
| • The Program EIR 90-01 for the adopted GDP concluded that the impacts related to the disturbance of prehistoric and historic resources would be significant and that no feasible mitigation was available at a program-level of analysis. The same conclusions would be applicable to the proposed GDP Amendments. | • The Program EIR 90-01 required mitigation consisting of further analysis and significance testing at subsequent stages of planning. These measures are listed in *Appendix B* of this EIR. No additional mitigation measures are required for the proposed GDP Amendments beyond those identified in the Program EIR 90-01. | • The Program EIR 90-01 for the adopted GDP concluded that the impacts to cultural resources would be significant and unmitigable at a program-level of analysis. The proposed GDP Amendments would not change this conclusion. |
| **Village 11 SPA/TM** | | |
| • Based on the information derived from the testing program required at the SPA level, six sites that occur within the Village 11 Project Area were determined to be not significant. This determination was based on several factors. First, all six sites within the Village 11 Project Area have been heavily disturbed by past agricultural activities, or have not yielded artifacts that would be | • Since no significant impacts have been identified, no additional mitigation measures are required. | • The six identified cultural sites existing within the Village 11 Project Area were found not to be significant. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| useful in addressing scientifically consequential and reasonable research questions. Lastly, the sites do not contain any substantial research potential, since previous mitigation efforts appear to have provided all information available from the sites. | | |
| **GEOLOGY AND SOILS** | | |
| **GDP Amendments** | | |
| • The proposed GDP Amendments would result in the same significant impacts identified in the Program EIR 90-01 related to slope instability, development proposed on metavolcanic bedrock, seismic hazards, development on expansive soils, erosion, and liquefaction. The Program EIR 90-01 identified these impacts as significant and mitigable. | • Program EIR 90-01 included mitigation measures for all identified significant impacts to geologic and soils conditions. Those measures are listed in *Appendix B*. No additional mitigation measures are required beyond those identified in the Program EIR 90-01. | • The Program EIR 90-01 found that, with the implementation of required mitigation measures, impacts would be less than significant. The proposed GDP Amendments require those same measures and would not result in any new or additional impacts to earth resources beyond those identified in the Program EIR 90-01. Therefore, impacts associated with the proposed GDP Amendments would also be mitigated to a less than significant level. |
| **Village 11 SPA/TM** | | |
| Construction of the proposed Village 11 SPA Plan/TM on unstable or expansive soils would have a direct, long-term potentially significant impact. Failure of slopes manufactured under the proposed Village 11 Project Area would be a direct, long-term potentially significant impact. | **5.5-1** During construction, soils containing alluvium and un-compacted artificial fill shall be removed completely and replaced with engineered compacted fill. Anticipated removal depths are on the order of 4.0 to 11.0 feet. Evidence that such soils have been adequately engineered shall be provided to the City Engineer for approval prior to approval of grading plans.<br>**5.5-2** Grading plans shall indicate that all unstable slopes shall be buttressed during rough grading. | • Impacts related to construction on unstable or expansive soils, as well as slope failure would be reduced to less than significant levels with implementation of the required mitigation measures. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | **5.5-3** Grading plans shall indicate that cut pads on highly expansive soils shall be over-excavated to provide a minimum depth of five feet of engineered fill. Bentonite beds should not be left within eight feet of finished grade. If bentonite beds are encountered in cut areas and shallow fill areas, a minimum over-excavation of eight feet and replacement with engineered fill shall be provided. Pot holes shall be excavated eight feet as grading approaches final grade to ascertain existence of bentonite beds and need for over-excavation. In addition to over-excavation of the highly expansive soils, measures such as the use of post-tensioned slabs, additional concrete reinforcement, pre-saturation of sub-grade soils, and/or other methods to limit the introduction of stormwater and irrigation into the subgrade soils may be taken. | |
| | **5.5-4** Drainage devices such as berms, concrete swales, splash walls, catchment fills, and debris walls shall be shown, as appropriate on final grading and/or improvement plans to protect structures and infrastructure at the toe of slopes and on stabilization fills. Existing outlets in the existing fill slopes at the northern portion of the Village 11 Project Area boundary will need to be connected and tied into the proposed storm drain system or out-letted to the natural drainage area to the east of the Village 11 Project Area. Subdrains shall be installed in canyon areas after | |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | removals have been performed and generally should extend throughout the canyon areas. The building pads shall be properly finish-graded after the buildings and other improvements are in place so that drainage water is directed away from foundations, pavements, concrete slabs, and slope tops to controlled drainage devices.<br>**5.5-5** Grading plans shall indicate that, for slopes steeper than 3:1, to the maximum extent practical: (a) disturbed/loosened surficial soils shall be either removed or properly recompacted, (b) irrigation systems shall be periodically inspected and maintained to eliminate leaks and excessive irrigation, and (c) surface drains on and adjacent to slopes shall be periodically maintained to preclude ponding or erosion. | |
| **PALEONTOLOGICAL RESOURCES** | | |
| **GDP AMENDMENTS** | | |
| • The Program EIR 90-01 for the adopted GDP concluded that the impacts related to the potential disturbance of paleontological resources would be significant but mitigable. The same conclusions would be applicable to the proposed GDP Amendments. | • The Program EIR 90-01 included measures to be implemented at the SPA-level to mitigate potentially significant impacts to less than significant levels. No additional mitigation measures are required beyond those identified in the Program EIR 90-01 for the adopted GDP, as listed in *Appendix B*. | • The Program EIR 90-01 for the adopted GDP concluded that the impacts to paleontological resources would be reduced to a less than significant level after mitigation. The proposed GDP Amendments would not change this conclusion. |
| **Village 11 SPA/TM** | | |
| • The proposed grading for the project would potentially result in direct, long-term significant impacts because the alluvium has an unknown sensitivity. Destruction of the paleontological resources from the Otay Formation would be a direct, long-term potentially significant | **5.6-1** Prior to issuance of grading permits, the applicant shall confirm to the City of Chula Vista that a qualified paleontologist (as defined in the Otay Ranch GDP/SRP) has been retained to carry out an appropriate mitigation program. The | • Identification and recovery of presently unknown, but important, fossil remains, as proposed by mitigation measures 5.6-1 and 5.6-2, would assure that significant paleontological resources are recovered for their scientific and intrinsic value and would provide for |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| impact to resources with high sensitivity. | paleontologist shall attend pre-grade meetings to consult with grading and excavation contractors. (A qualified paleontologist is defined as an individual with a M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques.)<br>**5.6-2** During grading operations, a paleontological monitor shall be on-site at all times during the original cutting of previously undisturbed sediments of highly sensitive geologic formations (Otay formation) to inspect cuts for contained fossils. The paleontological monitor shall work under the direction of a qualified paleontologist. The monitor shall periodically (every several weeks) inspect original cuts in deposits with an unknown resource sensitivity (Quaternary alluvium). (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.)<br>In the event that fossils are discovered in unknown sensitive formations, it may be necessary to increase the per-day field monitoring time. Conversely, if fossils are not discovered, the monitoring effort may be reduced.<br>When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them. In instances where recovery requires an extended salvage time, the paleontologist (or paleontological monitor) shall be allowed to direct, divert, or halt grading to allow recovery of | the long-term preservation of the fossils in conjunction with the scientific documentation of the context in which they were initially deposited. This level of resource and information preservation reduces the impact to a less than significant level. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | fossil remains. Where deemed appropriate by the paleontologist (or paleontological monitor), a screen-washing operation for small fossil remains shall be set up.<br>Prepared fossils along with copies of all pertinent field notes, photos and maps shall be deposited in a scientific institution with paleontological collections such as the San Diego Natural History Museum. A final summary report shall be completed which outlines the results of the mitigation program. This report shall include discussion of the methods used, stratigraphy exposed, fossils collected and significance of recovered fossils. | |
| **AGRICULTURAL RESOURCES** | | |
| **GDP AMENDMENTS** | | |
| The Program EIR 90-01 concluded that the following impacts to agricultural resources would occur:<br>● Conversion of prime farmlands and elimination of existing crop production. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.<br>● Inconsistency with existing City of Chula Vista plans and policies and State policies regarding the loss of agricultural resources and prime agricultural soil. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required. | ● The Program EIR 90-01 includes mitigation measures to reduce impacts to agricultural resources, including preparation of an Agricultural Plan. Program EIR 90-01 mitigation measures are listed in *Appendix B*, and would still apply with the proposed GDP Amendments. No additional mitigation measures would be required. | ● The Program EIR 90-01 concluded that the impacts related to the loss of agricultural land and inconsistency with agricultural policies would remain significant after mitigation. The proposed GDP Amendments would not change this conclusion. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| • Land use interface impacts associated with agricultural activities and urban uses. Mitigation measures that would reduce the impacts to a level below significance were required.<br>The same conclusions would be applicable to the proposed GDP Amendments. | | |
| **Village 11 SPA/TM** | | |
| The contribution of the development of the Village 11 Project Area to significant unmitigable impacts related to the loss of agricultural land is considered significant. Noise, odor, insects, rodents, and chemicals associated with agricultural operations would create indirect, short-term potentially significant impacts between the agricultural uses and the urban uses through buildout as urban uses replace agricultural uses. | **5.7-1** As development proceeds within the Village 11 Project Area, the following measures as listed in the SPA Agricultural Plan shall be implemented:<br>(1) A 200-foot distance buffer shall be maintained between developed property and ongoing agriculture operations,<br>(2) In those areas where pesticides are to be applied, vegetation shall be utilized to shield adjacent urban development (within 400 feet) from agriculture activities,<br>(3) The applicant shall notify adjacent property owners of potential pesticide application through advertisements in newspapers of general circulation, and<br>(4) Fencing shall be placed, where the Director of Planning and Building deems necessary for appropriate separation of agricultural and urban land uses. | • An Agricultural Plan has been prepared to reduce short-term significant impacts between urban uses and agricultural operations to a level less than significant. Roadways and adjacent designed landscape areas would provide adequate buffers between development and any ongoing adjacent agriculture. The Agricultural Plan provides separation between urban uses and adjacent agricultural operations, and includes a requirement for notification of adjacent property owners of pesticide use and other potentially harmful activities, plus physical barriers if warranted.<br>• The cumulative loss of important agricultural lands is considered a significant impact, and no mitigation measures are available to reduce this impact below the level of significance (also see *Section 6.0, Cumulative Impacts*). |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| **HOUSING AND POPULATION** | | |
| **GDP Amendments** | | |
| • The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01 regard to significant growth inducing impacts. The Program EIR 90-01 stated that, while the Otay Ranch would foster new growth, the Otay Ranch would provide adequate infrastructure and facilities to accommodate the growth. Significant impacts related to population growth would be mitigated by the provision of infrastructure and public services provided by the GDP, both as it is currently adopted and with the proposed GDP Amendments. The proposed GDP Amendments would not result in significant impacts to housing, since the type and character of housing to be provided with the proposed GDP Amendments would be consistent with the adopted GDP and with the policies related to housing in the City's General Plan. | • Growth inducing impacts identified at the program-level of analysis would be mitigated by the provision of adequate public services and facilities as provided for in the adopted GDP and with the proposed GDP Amendments. | • The proposed amendments to the GDP would not result in any significant unmitigated growth inducing impacts. |
| **Village 11 SPA/TM** | | |
| • The anticipated growth in population and dwelling units within Village 11 is consistent with the growth forecasted by SANDAG and the Growth Management Program adopted by the City, and would not present significant population or housing impacts. | • No impacts to population and housing are anticipated with the proposed Village 11 SPA Plan; therefore, no mitigation measures are required. | • There are no impacts to housing and population that would result from implementation of the Village 11 SPA Plan. |
| **WATER RESOURCES AND WATER QUALITY** | | |
| **GDP Amendments** | | |
| The Program EIR 90-01 concluded that the following impacts to water resources would be significant but mitigable:<br>• Increases in surface water runoff due to an increase in | • The Program EIR 90-01 requires that additional study of water-related issues be conducted at the SPA-level of analysis, and requires specific standards to be met. These mitigation measures are included in *Appendix* | • The Program EIR 90-01 concluded that the impacts to water resources are significant but would be mitigated at the SPA-level of analysis, with the completion of the required studies and implementation of the required |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| impervious surfaces could increase potential for downstream flooding, cause potential safety impacts, and increase erosion and siltation. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.<br>• Development may encroach into the 100-year floodplain. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.<br>The proposed GDP Amendments would, not substantially change the character or intensity of impacts to water resources, and would result in the same significant impacts related to increased surface water runoff, decreased groundwater recharge, erosion and siltation as the adopted GDP. | *B* and would still apply under the amended GDP. No additional mitigation measures would be required. | mitigation measures. The proposed GDP Amendments would not change any of the conclusions of the Program EIR 90-01 related to water resources and water quality. With implementation of mitigation measures to be developed at the SPA-level of analysis, impacts would be mitigated to less than significant levels. |
| **Village 11 SPA/TM** | | |
| • Potentially significant impacts related to flooding and water quality could result without implementation of the proposed storm drain sytem, as approved in its final design by the City Engineer. | **5.9-1** Prior to approval of Tentative Map, the final design for the Village 11 drainage facilities shall be approved by the City Engineer. The design shall demonstrate the following:<br>a) First flush/dry-weather detention facilities shall be demonstrated to contain the dry-weather flows from all sources, as well as first flush runoff from the Village 11 Project Area;<br>b) Each inlet, outlet, interceptor, concentration or confluence point, shall be demonstrated to handle the peak runoff for post-development conditions; | • The proposed mitigation measures and project design would mitigate all significant impacts related to water resources to a less than significant level. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | c) The proposed system shall be integrated with existing and proposed downstream drainage facilities to effectively control flows within the entire system;<br>d) Main lines and detention/desilting facilities shall be designed pursuant to Section 3-202-1 of the Chula Vista Subdivision Manual;<br>**5.9-2** The applicant shall provide interim drainage facilities, within Village 11, downstream of each development phase, in compliance with RWQCB regulations. These interim facilities shall be shown on grading plans, to be submitted and approved by the City Engineer, and shall be required until such time that the permanent drainage facilities can be completed per the Village 11 Master Drainage Study (Hunsaker 2001).<br>**5.9-3** Upon completion of all drainage facilities, the applicant shall obtain approval from the Federal Emergency Management Agency (FEMA) for the update of the Salt Creek floodplain boundary. This mitigation measure shall be satisfied by a letter of map revision from FEMA.<br>**5.9-4** The applicant shall submit a SWPPP including assignment of maintenance responsibilities for review and approval by the City Engineer prior to issuance of grading permits. The SWPPP shall be consistent with the requirements of the Clean Water Act and the BMPs of the RWQCB. BMPs identified in the SWPPP shall include, but shall not be limited to the following: | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | a) Existing vegetation shall be retained where possible. To the extent feasible, grading activities will be limited to the immediate area required for construction.<br>b) Temporary erosion control measures will be employed for disturbed areas.<br>c) No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months.<br>d) Sediment will be retained on-site by a system of sediment basins, traps, or other appropriate measures.<br>e) Storm drains will be equipped with silt and oil traps to remove oils, debris and other pollutants. Storm drain inlets shall be labeled "No Dumping-Drains to Ocean."<br>f) The parking lots shall be designed to allow storm water runoff to be directed to vegetative filter strips and/or oil-water separators to control sediment, oil, and other contaminants.<br>g) Permanent energy dissipaters will be included for drainage outlets.<br>h) The project area drainage basins will be designed to provide effective water quality control measures. Design and operational features of the drainage basins will include design features to provide maximum detention time for settling of fine particles; maximize the distance between basin inlets | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | and outlets to reduce velocities; and establish maintenance schedules for periodic removal of sedimentation, excessive vegetation and debris. | |
| **TRANSPORTATION, CIRCULATION AND ACCESS** | | |
| **GDP Amendments**<br>No new significant impacts were identified due to the proposed GDP Amendments. In addition, all street segments previously identified as having a significant impact would remain significant except for the following:<br>• Central Avenue between Bonita Road and Corral Canyon Road.<br>• Olympic Parkway between Hunte Parkway and Eastlake Vista<br>• Hunte Parkway between Otay Lakes Road and Eastlake Greens<br>• Hunte Parkway between Eastlake Trails and Olympic Parkway<br>Mitigation recommended in the Program EIR 90-01 for these segments is no longer necessary since LOS C or better operations are calculated.<br><br>The Otay Lakes Road/La Media Road and Otay Lakes Road/East H Street intersections were recommended to be grade separated in the 1993 adopted GDP traffic analysis. Since LOS D operations are calculated using current methodologies, grade separation is no longer required for these intersections. | The following mitigation measures amend the mitigation measures that apply to the Amendment Area identified in the Program EIR 90-01, based on the analysis contained in this EIR (see Appendix G):<br>**5.10-1** A traffic analysis shall be conducted within the study area of the proposed SPA to identify additional transportation mitigation measures for the construction of new roads, bridges and roadway improvements, and shall implement transportation demand/system management programs and/or facilities or other measures necessary to mitigate traffic impacts on circulation element roads. The standard to be achieved shall be in conformance with the City of Chula Vista's project significance criteria and GMOC criteria applicable at the time of SPA preparation.<br>Arterial segment LOS measurements shall be for the average weekday peak hours, excluding seasonal and special circumstance variations.<br>Urban and suburban arterials are defined as surface highways having signal spacing of less than 2 miles with average weekday traffic volumes greater than 10,000 vehicles per day. | With the required mitigation measures, impacts to intersections and street segments would be reduced below a level of significance. As identified in Program EIR 90-01, secondary impacts associated with offsite roadway improvements would still be significant and unmitigable at the program-level of analysis. At the time such offsite improvements are proposed, additional environmental review would be required to determine potential impacts and the need for mitigation measures. |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| Development of a high school in Village Seven, or alternatively in Village Eight, would not result in additional significant traffic impacts beyond those impacts identified in Program EIR 90-01. | Arterial segments shall be stratified into three classifications - Class I, Class II, Class III.<br>The LOS measurement of arterial segments and freeway ramps shall be a growth management consideration in situations where proposed developments have significant impact at interchanges.<br>Circulation improvements shall be implemented prior to anticipated deterioration of LOS below established standards.<br>The criteria for calculating arterial LOS and defining arterial lengths and classifications shall follow the procedures detailed in Chapter 11 of the 1985 Highway Capacity Manual (HCM) and shall be confirmed by the City or County Traffic Engineer, as appropriate.<br>During the preparation of future Traffic Monitoring Program field surveys, intersections experiencing significant delays would be identified. The information generated by the field surveys would be used to determine possible signal timing changes, geometric and/or traffic operational improvements for the purpose of reducing intersection delay.<br>Level of Service values for arterial segments shall be based on the Highway Capacity Manual, Special Report 209, Transportation Research Board, National Research Council, Washington, D.C. 1985.<br>**5.10-2** To the extent that Otay Ranch contributes to the need for a facility outside of its boundaries, the | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | Project shall contribute (at the level at which it impacts the facility) to the mitigation of the impact by participating in impact fee programs or other means identified at the SPA or tentative map level. | |
| | **5.10-3** Applicants on the Otay Valley Parcel shall contribute their "fair share" to the capital and operating costs associated with the new transit system. This shall be done through provisions in facility financing plans at the SPA level. Further, benefit assessment districts shall be established to fund new transit routes under MTDB Board Policy No. 40 Non-Transit Funding of Transit Services. (This final requirement cannot be mandated because the Lead Agency cannot mandate MTDB to take this action; because this finding is not within the jurisdiction of the Lead Agency it should be interpreted as a mandate for the Applicant to work with MTDB). | |
| | **5.10-4** For each SPA, the Applicant shall prepare a detailed analysis of peak hour turning movement volumes and intersection capacity for all major affected intersections as determined by the traffic engineer representing the reviewing jurisdiction or agency. | |
| | **5.10-5** The Applicant shall construct as a condition of approval to the SPA, new roads, bridges and roadway improvements and shall implement transportation demand/system management programs and/or facilities, or other measures necessary to fully mitigate traffic impacts (related to traffic impacts of the Project) per the City of | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | Chula Vista's project significance criteria and GMOC criteria applicable at the time of SPA preparation.<br>**5.10-6** No more than 15,000 dwelling units or 4,000,000 square feet of commercial may be constructed within the Otay Ranch Project until funding and construction for light rail transit (LRT) is assured. Applicants in the Otay River Parcel shall contribute their "fair share" to the funding of these facilities and operating costs.<br>**5.10-7** The Applicant shall participate in fair share funding and implementation of the following general mitigation measures:<br>● Prepare Transportation Demand Management (TDM) Mitigation Strategies<br>● Update General Plans<br>● Prepare Transportation Phasing Plans<br>● Provide Parallel Arterial System<br>● Improve Mode Split<br>● Increase Local/Regional Trip Capture<br>● Regional Freeway System Mitigation - Increase Freeway Capacities<br>● Arterial Segment Mitigation - Increase Segment Capacities<br>● Arterial Intersection Mitigation - Increase Intersection Capacities<br>● Other Mitigation Strategies including: Implement Transportation System Management Strategies and Implement Traffic Control Strategies | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | **5.10-8** The following project-specific measures shall be required for individual on-site and off-site segments and intersections to mitigate significant impacts associated with the project.<br>***On-site Network***<br>• Upgrade EastLake Parkway between Orange Avenue and EUC north from 4-lane major to 6-lane major and provide special at-grade intersection design or grade separated intersection design.<br>• Upgrade Village Two Local between EUC north (La Media Road) and EUC north (Village Two Loop Road) from 2-lane local collector to 4-lane collector.<br>• Upgrade Village Three Local between Village Three Local (Village Three Loop Road) and Paseo Ranchero from 2-lane local collector to 3-lane collector.<br>• Upgrade Village Three Local (Village Three Loop Road) from 2-lane local collector to 3-lane collector.<br>• Upgrade Village Seven Local between Village Seven Collector and Village Seven Major from 2-lane local collector to 3-lane collector.<br>• Upgrade Village Seven Local between Village Seven Major and Village Seven Collector from 2-lane local collector to 3-lane collector. | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | ***Off-site Network***<br>The Applicant shall participate in fair share funding and implementation of the following:<br>● Upgrade Bonita Road between Plaza Bonita Road and Willow Street by providing at-grade intersection design<br>● Upgrade Bonita Road between Willow Street and Otay Lakes Road by providing special at-grade intersection design<br>● Upgrade Bonita Road between Otay Lakes Road and Central Avenue by providing special at-grade intersection design<br>● Upgrade Camino Maquiladora between Otay Mesa Road and Heritage Road from 2-lane local collector to 4-lane collector.<br>● Upgrade Camoustie Road between Harvest Road and Domoch Court from 2-lane local collector to 3-lane collector.<br>● Upgrade Del Sol Road west of Paseo Ranchero from 2-lane local collector to 3-lane collector.<br>● Upgrade East 'H' Street between I-805 and Terra Nova Road from 6-lane prime to 8-lane prime.<br>● Upgrade EastLake Parkway between Palomar Street and Orange Avenue from 4-lane major to 6-lane prime and provide special at-grade intersection design<br>● Upgrade La Media Road between SR-905 and Airway Road from 4-lane major to 6-lane prime. | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | • Upgrade Oleander Avenue between Telegraph Canyon Road and Naples Avenue from 2-lane local collector to 4-lane collector.<br>• Upgrade Otay Lakes Road between East 'H' Street and Telegraph Canyon Road by providing special at-grade intersection design or grade separated intersection design.<br>• Upgrade Otay Lakes Road between SR-125 and EastLake Parkway from 6-lane prime to 7-lane prime, and by providing special at-grade intersection design or grade separated intersections.<br>• Upgrade Paseo del Rey between East 'H' Street and Telegraph Canyon Road from 2-lane local collector to 4-lane collector.<br>• Upgrade Sweetwater Road between Bonita Mesa Road and Willow Street from 4-lane collector to 6-lane major.<br>• Upgrade Sweetwater Road between Bonita Road and SR-54 from 4-lane collector to 4-lane major.<br><br>**5.10-9** If forecasted reductions in traffic activity resulting from village design and TDM analysis do not occur, additional mitigation described below would be required on the following segments:<br>• Upgrade EUC North between Village Two Local and La Media Road from a 4-lane collector to a 4-lane major, and by providing | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | special at-grade intersection design or grade separated intersection design.<br>● Upgrade La Media Road between Otay Mesa Road and SR-905 from a 4-lane major to a 6-lane major and by providing special at-grade intersection design.<br>● Upgrade Brittania Boulevard between SR-905 and Airway road from 4-lane major to 6-lane major.<br>● Upgrade Millar Ranch Road between SR-94 and Proctor Valley Road from 4-lane collector to 4-lane major.<br>● Upgrade Otay Lakes Road between Bonita road and East 'H' Street by providing special at-grade intersection design.<br>● Upgrade Paseo Ranchero between Otay Valley Road and Del Sol Road by providing special at-grade intersection design.<br>**5.10-10** If forecasted reductions in traffic resulting from village design and TDM analysis do not occur, additional segment mitigation, beyond special at-grade intersection upgrades as identified previously would be required including:<br>● Bonita Road between I-805 and Plaza Bonita Road from 4-lane major to 6-lane prime.<br>● Bonita Road between Plaza Bonita Road and Willow Street from 4-lane major to 6-lane major.<br>● Bonita Road between Willow Street and Otay Lakes Road from 4-lane major to | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | 6-lane prime.<br>● Bonita Road between Otay Lakes Road and Central Avenue from 4-lane major to 6-lane major.<br>● Bonita Road between Central Avenue and San Miguel Road from a 4-lane collector to a 4-lane major. | |
| **Village 11 SPA/TM** | | |
| Impacts to traffic are not significant in the existing plus project traffic condition.<br>A near term significant cumulative impact would occur on Telegraph Canyon Road in the near future if SR-125 is not built. The impact on Telegraph Canyon Road was calculated to occur when the total number of new dwelling units in the Eastern Territories exceeded 9,429 units beginning January 1, 2000.<br><br>Significant long-term (2005 and beyond) project-specific impacts were identified on the following road segments by analysis year:<br>***Year 2005, Without SR-125***<br>Olympic Parkway: SR-125 to EastLake Parkway<br>EastLake Parkway to Hunte Parkway<br>Otay Lakes Road: H Street to Telegraph Canyon Road<br>***Year 2005, With SR-125***<br>Olympic Parkway: SR-125 to EastLake Parkway<br>EastLake Parkway to Hunte Parkway | ***Project Impacts***<br><br>**5.10-11** Construct Olympic Parkway from SR-125 to Hunte Parkway to six-lane Prime Arterial standards at the time the first project dwelling unit is constructed.<br>**5.10-12** If development exceeds 944 units without SR-125, Otay Lakes Road between H Street and Telegraph Canyon Road shall be widened to six lanes or construction of intersection improvements on Otay Lakes Road, which provides additional capacity to the satisfaction of the City Engineer.<br>**5.10-13** Prior to the approval of the first final map, which triggers the installation of related street improvements, developer shall enter into an agreement to construct and secure a fully activated traffic signal including interconnect wiring at the following intersections:<br>a) EastLake Parkway/Driveway B<br>b) EastLake Parkway/Birch Road<br>c) EastLake Parkway/Driveway F | With the required mitigation measures, impacts to intersections and street segments would be reduced below a level of significance. Traffic impacts to I-805 remain significant and unmitigable. |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| ***Year 2010***<br>Olympic Parkway: EastLake Parkway to Hunte Parkway<br>***Year 2015***<br>Olympic Parkway: EastLake Parkway to Hunte Parkway<br>***Year 2020***<br>Olympic Parkway: EastLake Parkway to Hunte Parkway<br>***Buildout***<br>Olympic Parkway: EastLake Parkway to Hunte Parkway<br><br>Significant long-term cumulative impacts were identified at the following road segments by analysis year:<br>***Year 2005, Without SR-125***<br>East H Street: I-805 to Hidden Vista Dr.<br>Otay Lakes Road: North of H Street<br><br>***Year 2010***<br>Otay Lakes Road: North of H Street<br>H Street to Telegraph Canyon Road<br>Olympic Parkway: SR-125 to EastLake Parkway<br><br>***Year 2015***<br>Olympic Parkway: SR-125 to EastLake Parkway<br><br>***Year 2020***<br>Olympic Parkway: SR-125 to EastLake Parkway | d) Olympic Parkway/Driveway A<br>e) Olympic Parkway/Driveway E<br>f) Hunte Parkway/Driveway C<br>g) Hunte Parkway/Driveway D<br>h) Hunte Parkway/Driveway H<br>i) Hunte Parkway/Driveway I<br><br>Developer shall fully design the aforementioned traffic signals as part of the improvement plans for the related street. Developer shall install underground improvements, standard and luminaries in conjunction with the construction of the related street improvements. In addition, developer shall install mast arms, signal heads, and associated equipment when traffic signal warrants are met as determined by the City Engineer.<br>**5.10-14** All non-residential projects (with the exception of schools) shall comply with the City's GMOC standards and other applicable traffic policies and standards. The City Engineer shall review all site plans for non-residential uses, (with the exception of schools), and require a project-specific traffic study if the project has the potential for resulting in circulation impacts. Recommendations to reduce potentially significant impacts, pursuant to the GMOC standards and City traffic standards and policies, shall be incorporated into the site plan and/or required as a condition of project approval. Should the analysis determine that | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| ***Buildout***<br>Otay Lakes Road: SR-125 to EastLake Parkway<br>Olympic Parkway: SR-125 to EastLake Parkway<br><br>Significant cumulative impacts were identified on the following intersections by analysis year:<br>***Year 2005 without SR-125***<br>East H Street/I-805 Southbound Ramps<br>East H Street/ Hidden Vista Drive<br>Telegraph Canyon Road/I-805 Southbound Ramps<br>Telegraph Canyon/I-805 Northbound Ramps<br><br>Significant short- and long- term impacts were identified for I-805 between Bonita Road and Telegraph Canyon Road. | additional capacity is possible through improvements, such identified improvements may be subject to future environmental review.<br><br>Potential traffic impacts resulting from development and operation of the schools shall be reviewed by the respective school districts when specific projects are under consideration. Any street improvements shall be coordinated with the City and shall comply with applicable City street standards and policies. The City shall request review on all draft plans.<br><br>***Cumulative Impacts***<br>**5.10-15** The General Plan shall be amended to designate Olympic Parkway from SR-125 to EastLake Parkway as an Enhanced Prime Arterial with eight lanes. The required amendment shall be adopted no later than the first General Plan Amendment considered for adoption in 2002. The applicant shall contribute a fair share towards the construction of the two additional lanes.<br>**5.10-16** The General Plan shall be amended to designate Otay Lakes Road from SR-125 to EastLake Parkway as an Enhanced Prime Arterial with seven-lanes (additional lane westbound). The required amendment shall be adopted no later than the first General Plan Amendment considered for adoption in 2002. The applicant shall contribute a fair share | |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | towards the construction of the additional lane.<br><br>**5.10-17** The applicant shall contribute a fair share towards the widening of Otay Lakes Road from H Street to Telegraph Canyon Road to six lanes or towards an intersection improvement, which provides additional capacity along Otay Lakes Road to the satisfaction of the City Engineer.<br>**5.10-18** The applicant shall contribute a fair share towards the widening of Otay Lakes Road from Bonita Road to H Street to six lanes or towards an intersection improvement, which provides additional capacity along Otay Lakes Road to the satisfaction of the City Engineer.<br>**5.10-19** Prior to the construction of SR-125, the City shall stop issuing new building permits for Village 11 when the City, in its sole discretion determines either:<br>a) Building permits for a total of 9,429 dwelling units have been issued for projects east of I-805 or,<br>b) An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance.<br><br>The start date for counting the 9,429 dwelling units is January 1, 2000. Notwithstanding the foregoing, the City may issue building permits if the City decides in its sole discretion that either traffic studies demonstrate, to the satisfaction of the City Engineer, that the | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | circulation system has additional capacity without exceeding the GMOC traffic threshold standards; other improvements are constructed which provide additional necessary capacity; or the City selects an alternative method of implementing the GMOC standards. These traffic studies would not require additional environmental review under CEQA. However, any improvements proposed in these traffic studies would be subject to additional environmental review as required.<br>**5.10-20** Additional lanes would be required to maintain acceptable levels of service on I-805. Construction of the additional lanes on I-805 is the responsibility of Caltrans. Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG will determine mitigation strategies for the regional freeway system.<br>**5.10-21** The applicant shall contribute a fair share towards the future signalization of the intersection of Olympic Parkway and Wueste Road.<br><br>***Secondary Impacts Associated with Offsite Traffic Mitigation Improvements***<br><br>The off-site traffic improvements described above for direct and cumulative traffic impacts could create secondary impacts associated with land use, biological resources, noise, and cultural resources. Although these off-site | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | roadway improvements have not been designed or engineered, the area potentially affected by the widening is described below along with an evaluation of potential impacts.<br><br>Otay Lakes Road: H Street to Telegraph Canyon Road<br><br>The widening of Otay Lakes Road to six lanes along this segment would increase the road width by twelve feet on both sides. This segment of Otay Lakes Road, which is approximately one mile in length, exists within an existing developed setting and is characterized by residential, commercial, and public/quasi-public uses such as an educational facility and church. The land adjacent to the roadway is largely landscaped with grass or other ornamental vegetation. No significant biological resources were identified by RECON biologists during a survey for the EastLake III Woods and Vistas Replanning Program EIR (EIR #01-01) of the improvement area, and cultural resource impacts would not be anticipated. Widening of the roadway to six-lane standards could create increased noise impacts for the existing houses with frontage on the roadway by placing the noise source closer to the homes. At the time such improvements are proposed, additional environmental review would be required to determine potential impacts and the need/feasibility of noise mitigation measures.<br><br>Olympic Parkway: SR-125 to EastLake Parkway<br><br>Construction of this roadway segment to its current six-lane Prime arterial standard was studied in several previous | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | environmental documents. These include both the EastLake Greens and EastLake Trails Final EIR, and the Final Mitigated Declaration for the Olympic Parkway extension. An amendment to the General Plan to designate Olympic Parkway as an eight-lane roadway on the segment between SR-125 and EastLake Parkway has not been addressed and would increase the width of the segment by 12 feet on both sides. Given the disturbed condition (agricultural) of the land on either side of the planned six-lane roadway, impacts to biological resources would be anticipated to be minimal. Land uses along the segment are planned to be largely residential and commercial. With adequate setbacks and, if needed, screening, noise and land use impacts could create impacts to cultural/ paleontological resources and construction-related water quality and traffic impacts. At the time such improvements are designed and proposed, additional environmental review may be required to determine potential impacts and the need for specific mitigation measures.<br><br><u>Otay Lakes Road: SR-125 to EastLake Parkway</u><br><br>Mitigation for cumulative impacts on this segment (which requires an amendment to the General Plan to designate Otay Lakes Road as a seven-lane roadway) would increase width of the road by 12 feet on the north side (westbound). The land adjacent to this segment of roadway is landscaped on both sides of the existing sidewalk. Beyond the landscaping, the potential area of impact is graded and devoid of vegetation. No significant biological resources were identified in a review by RECON biologists, and | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | impacts to cultural resources would not be anticipated. In addition, adverse land use and noise impacts would not be expected given the approved business center uses. However, at the time such improvements are designed and proposed, additional environmental review may be required to determine potential impacts related to construction, including water quality, traffic, and impacts to paleontological resources and the need for specific mitigation measures to address these potential impacts.<br><br>Otay Lakes Road: Bonita Road to H Street<br>Mitigation on this segment requires either an intersection improvement to provide additional capacity along Otay Lakes Road or widening of the road to six lanes. Widening to six lanes would increase the width by 12 feet on both sides. This segment of road is largely characterized by commercial, public/quasi-public uses (Scripps Medical Center), and residential uses, and therefore much of the adjacent land is landscaped with grass or other ornamental vegetation. No significant biological resources were identified in a review by RECON biologists and impacts to cultural resources would not be anticipated. However depending on specific design considerations for the improvement, grading to widen the roadway to this standard could create impacts to cultural/paleontological resources, construction-related water quality and traffic impacts. In addition, widening of the roadway to six lane standards could create landform alteration impacts and increased noise impacts for the existing houses with frontage on the roadway by placing the noise source closer to the homes. At the time such improvements are proposed, additional | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | environmental review may be required to determine potential impacts and the need for specific mitigation measures.<br><br>***Mitigation Measures for Secondary Impacts from Off-site Traffic Improvements***<br><br>Application of the following program-level mitigation measures shall be implemented at the discretion of the Director of Planning and Building at the time the roadway improvements are proposed to reduce the potential significant impacts to below a level of significance. Depending on the detailed design of the off-site traffic improvements to the above-referenced segments of Olympic Parkway and Otay Lakes Road, additional environmental review may be required. The program-level mitigation measures include the following:<br><br>**5.10-21** Prior to approval of a roadway improvement project, a biological reconnaissance based on detailed grading and design plans shall be conducted to document any impacts to sensitive biological resources. Any impacts to sensitive biological habitats shall be mitigated pursuant to the mitigation ratios described in the Draft Chula Vista MSCP Subarea Plan.<br>**5.10-22** Prior to issuance of any grading permits for a roadway improvement, a detailed acoustical study for the affected roadway segment shall be prepared to determine the need for any noise attenuation measures for adjacent sensitive land uses. | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | **5.10-23** Prior to the approval of the design plans for a roadway improvement, a detailed landscaping plan shall be prepared to ensure that potential aesthetic impacts associated with any grading necessary for the improvement are mitigated.<br>**5.10-24** As a condition of any off-site roadway improvement approval, monitoring of any grading for the presence of cultural and paleontological resources shall be required. If such resources are encountered during grading operations, the protocol described in Section 5.6 of this EIR shall be required.<br>**5.10-25** As a condition of any off-site roadway improvement approval, applicable construction-related water quality mitigation measures shall be required by the City Engineer.<br>**5.10-26** As a condition of any off-site roadway improvement approval, preparation of a traffic control plan for delays and hazards associated with construction impacts shall be prepared and approved by the City Engineer.<br>**5.10-27** For the widening of Otay Lakes Road between H Street and Telegraph Canyon Road, plans prepared for the improvements shall be designed to avoid impacts to the church and the library. | |
| **AIR QUALITY** | | |
| **GDP Amendments** | | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| The Program EIR 90-01 identified the following significant impacts to air quality:<br>● Air quality impacts would exceed the State Implementation Plan (SIP) air quality attainment regulations that were based on SANDAG Series 7 growth projections. Also Project emissions of NOx, reactive organic gases (ROG), CO, and PM-10 from vehicular and stationary sources would add to existing violations of federal and state ozone standards. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.<br>● Short-term emissions would occur during project construction. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.<br>The proposed amendments to the GDP would not change the conclusions of the Program EIR 90-01 related to air quality impacts. | ● The mitigation measures required in the Program EIR 90-01, as listed in Appendix B, would still be required by the proposed GDP Amendments. No additional mitigation measures beyond those required in the Program EIR 90-01 would be required of the proposed GDP Amendments. | ● The Program EIR 90-01 concludes that long-term impacts to air quality would be significant and not mitigable. The same conclusion is applicable to the proposed GDP Amendments. |
| **Village 11 SPA/TM** | | |
| ● Short-term construction-related emissions and long-term impacts associated with mobile-source emissions would exceed the significance thresholds. Therefore, air quality impacts would be significant. | **5.11-1** The following mitigation measures shall be requirements of construction operations, however, no mitigation is available for long-term impacts:<br>● Minimize simultaneous operation of multiple construction equipment units.<br>● Use low pollutant-emitting construction equipment<br>● Use electrical construction equipment as practical | ● Long-term, mobile source air quality impacts are considered significant. Mobile emissions would have a temporary significant and unavoidable air quality impact due to emissions of $NO_x$ and PM-10. Emissions would exceed the identified significance threshold for $NO_x$ and PM-10. There are no known mitigation measures considered feasible for construction of a project of this magnitude, and air quality impacts are considered significant and unmitigable. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | • Use catalytic reduction for gasoline-powered equipment<br>• Use injection timing retard for diesel-powered equipment<br>• Water the construction area twice daily to minimize fugitive dust<br>• Stabilize graded areas as quickly as possible to minimize fugitive dust<br>• Pave permanent roads as quickly as possible to minimize dust<br>• Apply chemical stabilizer or pave the last 100 feet of internal travel path within a construction site prior to public road entry<br>• Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads<br>• Remove any visible track-out into traveled public streets within 30 minutes of occurrence<br>• Wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces has occurred<br>• Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads.<br>• Cover haul trucks or maintain at least 12 inches of freeboard to reduce blowoff during hauling.<br>• Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 mph. | |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| **NOISE** | | |
| **GDP Amendments** | | |
| • The Program EIR 90-01 identified traffic noise in excess of 60 CNEL as a significant impact to residential uses and to sensitive wildlife species. No feasible mitigation measures were identified at the Program-level of analysis to reduce the impacts to a less than significant level, even though mitigation was required. Subsequent amendments to the GDP increased the standard for residential noise to 65 CNEL. The proposed Amendments to the GDP would not change this conclusion. | • The Program EIR 90-01 for the adopted GDP requires that site-specific noise studies be prepared for individual SPA Plans at subsequent stages of development. The Program EIR 90-01 also contains standards for noise mitigation for residential uses. The proposed GDP Amendments would require the same measures, and since no new significant impacts related to the proposed amendments have been identified, no additional mitigation is required. | • The Program EIR 90-01 identifies noise impacts resulting from the project to be significant and potentially unmitigable at the program-level of analysis. Final determination of significance is to be determined at the SPA-level. The proposed Amendments to the GDP would not change this conclusion. |
| **Village 11 SPA/TM** | | |
| Construction activities, especially heavy equipment, would create short-term noise increases that would exceed significance thresholds. Potential sources of noise related to to the proposed Village 11 SPA/TM include construction noise, traffic generated noise, and commercial noise. Upon completion of construction, if left unmitigated, project-related traffic would cause a significant increase in noise levels in the Village 11 Project Area. | **5.12-1** Project construction shall be required to adhere to the time limitations for construction activities identified in the Chula Vista Municipal Code. Those limitations restrict construction activity to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday.<br>**5.12-2** Traffic Generated Noise<br>b) Exterior Noise<br>(1) Noise barriers ranging from 5 to 8 feet in height shall be shown on Improvement Plans for single-family residences located adjacent to Hunte Parkway and Olympic Parkway, and shall be installed concurrent with development. Noise barrier locations and heights are depicted in *Figure 5.12-2*. | • Mitigation measure 5.12-1 would mitigate construction noise to less than significant levels.<br>• Mitigation measures listed under 5.12-2 would mitigate significant exterior and interior noise impacts to a level below 65 dB CNEL, and 45 dB CNEL respectively. Mitigation measure 5.12-3 would ensure that studies were conducted to identify measures to avoid significant noise impacts generated by commercial uses. |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | (2) Noise barriers ranging from 6 to 7 feet in height shall be shown on Improvement Plans at the multi-family lots adjacent to Hunte Parkway, Olympic Parkway and Eastlake Parkway, if exterior usable space areas (i.e., common use areas and private patio areas) are located adjacent to these roads. Exterior noise levels at the usable space areas of single- and multi-family residences would have to be mitigated to a CNEL of 65 dB or less. The height of the noise barriers shall be reduced or eliminated through site design measures, such as incorporating setbacks, orienting the buildings to shield exterior usable space areas, or locating non-noise sensitive uses such as parking/carports adjacent to the roads. Noise barriers shall be installed concurrent with development.<br>(3) Noise barriers as shown on Improvement Plans where required, shall be constructed as a wall, berm, or combination of both. Construction of the barriers shall be concurrent with development of the impacted uses. The materials used in the construction of the barrier shall have a minimum surface density of 3.5 pounds per square foot. Barriers shall consist of masonry material, plexiglass, tempered glass or a | |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| | combination of these materials. The barriers shall be designed so that there are no openings or cracks.<br>ii) Interior Noise<br>(1) Prior to issuance of grading permits, an interior noise analysis shall be required for the project to comply with the City's interior noise standard. The acoustical analysis shall be required for the multi-family homes located adjacent to Hunte Parkway, Olympic Parkway and Eastlake Parkway to ensure that the interior noise levels would not exceed a CNEL of 45 dB.<br>**5.12-3** Commercial/Mixed Uses<br>a) Prior to issuance of grading permits, an acoustical study shall be required for all commercial development plans, to ensure that potential noise impacts are assessed and mitigation measures are incorporated into the project design. Noise abatement measures may include noise barriers, setbacks, selecting quieter equipment or limiting the hours or operation | |
| **PUBLIC SERVICES AND UTILITIES** | | |
| **GDP Amendments – Water** | | |
| • The Program EIR 90-01 identified significant impacts to water service demand that were identified as significant and unmitigable. Although the population increases represented by the proposed Amendments are relatively | The mitigation measures required by Program EIR 90-01, that are listed in *Appendix* B of this EIR would still be applicable to the proposed GDP Amendments. | The Program EIR 90-01 identifies impacts related to water supply that are significant and not mitigated at the Program-level of analysis. The proposed GDP Amendments wo uld not change this conclusion. |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| minor (1.0%), the proposed GDP Amendments would not change the conclusions of the Program EIR 90-01 and impacts related to water supply would still be significant and unmitigable at the Program-level analysis. | | |
| **Village 11 SPA/TM – Water** | | |
| • The Village 11 SPA/TM would result in an incremental increase in water consumption and place additional demands on water storage and pumping facilities. The increase in demand for water would not have a significant impact on the ability of OWD to provide service to the Village 11 Project Area. However, the impact to water storage and pumping facilities would be significant if construction of facilities does not coincide with the anticipated growth associated with the Village 11 SPA/TM. | **5.13-1** Prior to approval of the first Tentative Map, the applicant shall provide to the City a letter from the OWD stating that adequate storage, delivery and pumping facilities are available or would be available concurrent with need because an additional pump is under installation at Central Area Pump Station or the EastLake Greens Pump Station is under construction.<br>**5.13-2** Prior to approval of the first Tentative Map, the applicant shall provide to the City a letter from the OWD stating that adequate storage capacity exists, or would be available, concurrent with need.<br>**5.13-3** A complete Subarea Master Plan shall be submitted to the City for review and must be approved by OWD prior to the approval of the Tentative Map. The Master Plan shall include the design of water system infrastructure including timing and cost by phase of development and must be in compliance with the OWD Water Master Plan.<br>**5.13-4** Water facilities improvements shall be financed and/or installed on-site and off-site in accordance with the fees and phasing in the approved PFFP for the Village 11 SPA Plan and TM. | • Mitigation measures 5.13-1 t hrough 5.13-4 would assure that adequate water supply and facilities are provided in accordance with OWD standards concurrent with need at the SPA level, reducing impacts to below the level of significance. |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| **GDP Amendments – Sewer** | | |
| • The Program EIR 90-01 identified significant impacts to sewer service that were anticipated to be mitigated to less than significant levels with the provision of adequate facilities to serve development. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01. | • The mitigation measures required in Program EIR 90-01, as listed in Appendix B, would still be required with the proposed GDP Amendments. No additional measures would be required. | • The Program EIR 90-01 identifies impacts that are significant, but mitigated to a less than significant level with mitigation measures that would be undertaken at the SPA-level. |
| **Village 11 SPA/TM – Sewer** | | |
| • The Village 11 SPA Plan and Tentative Map cannot be guaranteed sufficient capacity in a sewage disposal system without the ultimate construction of the Salt Creek Interceptor, or a sewer line in an alternative location. In the interim, with the completion of Reach 9B of the Salt Creek gravity Sewer Interceptor (project P1), the Poggi Canyon Trunk Sewer could accept pumped sewage flows from the project site given the EDU thresholds discussed above. | **5.13-5** Prior to recordation of any Final Maps, the City Engineer shall be satisfied that the Salt Creek Interceptor, or other acceptable alternative location, is under construction, and that the Poggi Canyon Interceptor has adequate capacity in the interim. The calculations of existing and anticipated sewage flows have determined thresholds at which three capital improvement projects must be completed. These thresholds are 947 EDUs for P1, 3,770 EDUs for P2, and 1,693 EDUs for P3. At the sole discretion of the City Engineer, the thresholds for Poggi Canyon can be amended, if determined that the additional flows, beyond what is currently allowed under these EDU thresholds, can be accommodated as evidenced by monitoring.<br>**5.13-6** Sewer facilities improvements shall be financed and/or installed on-site and off-site in accordance with the fees and phasing in the approved PFFP for the Village 11 SPA Plan, and shall comply with City of Chula Vista Policy No. 570-03. | • Mitigation Measures 5.13-5 through 5.13-8 would reduce impacts to below the level of significance because there would be adequate capacity for sewage flows concurrent with need. The phasing of development within the Village 11 Project Area allows for early hookup with the Poggi Canyon Interceptor, while allowing time for eventual hookup with the Salt Creek Interceptor, or a sewer line in an alternative location, when completed. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| **GDP Amendments – Integrated Waste Management** | | |
| • The Program EIR 90-01 identified significant impacts related to landfill capacity in the region that were anticipated to be mitigated at the SPA-level with measures identified in *Appendix B*. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01 and impacts would be significant at the Program-level of analysis. | • The mitigation measures required in Program EIR 90-01 would still be applicable to the proposed GDP Amendments. | • Impacts to waste disposal would be significant and unmitigated at the Program-level of analysis. |
| **Village 11 SPA/TM - Integrated Waste Management** | | |
| Measures required by the Program EIR 90-01 have been implemented on a city-wide basis. Therefore, no significant waste impacts have been identified for the Village 11 Project Area. | No additional mitigation measures are required. | Mitigation measures that have been applied on a city-wide basis mitigate the impacts from Village 11 to less than significant levels. |
| **GDP Amendments – Law Enforcement** | | |
| The mitigation measures required in Program EIR 90-01 would still be applicable to the proposed GDP Amendments. | The mitigation measures required in Program EIR 90-01 would still be applicable to the proposed GDP Amendments. | The proposed GDP Amendments would not change the conclusion of the Program EIR 90-01, that significant impacts to law enforcement staff and facilities would result and would not be mitigated at the Program-level of analysis. |
| **Village 11 SPA/TM – Law Enforcement** | | |
| Development of the proposed project would result in potentially significant impacts to law enforcement services if additional personnel and facilities are not provided to sufficiently handle the increased demand. Implementation of the PFFP would reduce potential impacts to law enforcement to less than significant levels. | **5.13-8** Police facilities and services shall be financed and/or provided in accordance with the fees and phasing in the approved PFFP for the Village 11 SPA Plan. | Mitigation measure 5.13-8 would reduce the impacts to a level below the level of significant because the addition of personnel and facilities concurrent with need would allow the law enforcement agency to sufficiently handle increases in demand. |
| **GDP Amendments – Fire Protection** | | |
| • The Program EIR 90-01 identified significant impacts related to provision of fire protection services related to | • The mitigation measures required in Program EIR 90-01 (Appendix B) would still be applicable to the | • The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01, that impacts to |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| potential deficiencies in staff and facilities. Mitigation measures to be implemented at the SPA-level were anticipated to reduce impacts to less than significant levels. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01. | proposed GDP Amendments. | five service staff and facilities would be significant and unmitigable at the Program-level of analysis. |
| **Village 11 SPA/TM – Fire Protection** | | |
| Lack of adequate fire protection facilities, staffing and planning concurrent with need would have a potentially significant fire protection impact. | **5.13-7** Fire service facilities shall be financed, and/or provided in accordance with the fees and phasing in approved PFFP for the Village 11 SPA Plan.<br>**5.13-8** The City shall continue to monitor Fire Department responses to emergency fire and medical calls and report the results to the Growth Management Oversight Committee (GMOC) on an annual basis. | • Mitigation Measures 5.13-7 through 5.13-9 would reduce the fire service and hazard impacts to below the level of significance. The addition of facilities and staff concurrent with need would allow the fire department to sufficiently handle increases in demand. |
| **GDP Amendments – Schools** | | |
| • The Program EIR 90-01 identified significant impacts related to school services that required more specific study at subsequent SPA-level planning stages. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01 and would be consistent with the policies of the adopted GDP related to the siting of shcool facilities. | • No new impacts to school services would result from implementation of the GDP Amendments, therefore, no mitigation is required.<br>• Prior to approval of the first SPA Plan in Phase 3, the location of the high school site proposed for Village Seven or alternatively within Village Eight Nine shall be re-evaluated, to determine the appropriate location for the site. and if found to be necessary in Phase 3, included in one of the Villages in Phase 3. | • The Program EIR 90-01 identifies impacts that are significant, but mitigated to a less than significant level with mitigation measures that would be undertaken at the SPA-level. The proposed GDP amendments would provide the designaiton of school sites consistent with the policies of the adopted GDP, and therefore, no significant impacts to school faciliites would result from the proposed GDP Amendments. |
| **Village 11 SPA/TM – Schools** | | |
| • A potentially significant impact related to inadequate facilities for new student demands could result without the construction of new school facilities in Otay Ranch. EastLake High can accommodate Village 11 students | **5.13-9** The applicant shall pay all required school mitigation fees. | • Mitigation measure 5.13-9 would reduce the impact to below a level of significant because the construction of new school facilities would accommodate increases in the student population. |

TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| initially, however, another high school must be built in Otay Ranch to avoid significant cumulative impacts for the future. The additional site within Otay Ranch has been identified in the proposed GDP Amendments to be within Village Seven or, alternatively in Village Eight. | | |
| **GDP Amendments – Library Service** | | |
| • The Program EIR 90-01 determined that additional environmental review at the SPA-level of analysis would be required to adequately determine the level of significance of impacts to library services. Impacts were determined to be significant and not mitigated at the program level of analysis. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01. | • The mitigation measures adopted for the approved GDP, including additional study of library service delivery at the SPA-level, as listed in Appendix B, would still be applicable to the proposed GDP Amendments. | • Impacts to library services would be significant and not mitigated at the Program-level of analysis. |
| **Village 11 SPA/TM – Library Service** | | |
| • Without the construction of new library facilities, there would be a potentially significant impact because of inadequate library space and book standards for new residents. | **5.13-10** Library facilities, supplies and services shall be financed in accordance with the approved fees and phasing as established in the PFFP for Village 11. | • Mitigation measure 5.13-10 would reduce impacts to library services to below the level of significance because the PFFP would delineate funding and phasing of new library facilities and services concurrent with need. |
| **GDP Amendments – Parks and Recreation** | | |
| • The Program EIR 90-01 determined that preparation of a parks and recreation master plan at the SPA-level of analysis would be required to adequately determine the level of significance of impacts to park and recreation services. Impacts to parks and recreation would be significant and not mitigated at the Program-level of analysis. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01. | • The mitigation measures adopted for the approved GDP, including preparation of a parks and recreation master plan at the SPA-level (Appendix B) would still be applicable to the proposed GDP Amendments. No additional mitigation measures would be required. | • The Program EIR 90-01 identifies impacts that are significant and not mitigated at the Program-level of analysis. The proposed GDP Amendments would not change this significance conclusion. |

## TABLE S-1 (*Continued*)

| IMPACT | MITIGATION MEASURES | LEVEL OF SIGNIFICANCE |
|---|---|---|
| **Village 11 SPA/TM – Parks and Recreation** | | |
| • Although the Village 11 SPA/TM would receive 8 acres of total park land within Village 11 and would pay fees to contribute to the funding for regional park acquisition and facilities development that would satisfy the remaining 12.8-acre park obligation of Village 11. Therefore, no significant impacts related to the provision of park and open space are anticipated with project implementation. | **5.13-12** Total local parkland obligation of 20.8 acres (consisting of on-site parks and off-site parks) shall be financed and constructed in accordance with the fees and phasing approved in the PFFP for the Village 11 SPA Plan. | • Mitigation measure 5.13-12 would reduce the impact of the Village 11 SPA/TM to below the level of significance, because the PFFP would delineate funding and phasing of new park facilities concurrent with need. |
| **HAZARDS/RISK OF UPSET** | | |
| **GDP Amendments** | | |
| • The Program EIR 90-01 identified significant impacts related to hazards on the property, related to and increase in urbanization would result in an increase in the use, transport, storage, and disposal of hazardous materials and an associated increase in the risk of an upset condition in the area. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01. | • The Program EIR 90-01 included mitigation measures that are listed in Appendix B. Those same measures would apply to the proposed GDP Amendments. | • Significant impacts, as identified in the Program EIR 90-01 related to hazards would result from the proposed GDP Amendments that would not be mitigated at the Program-level of analysis. |
| **Village 11 SPA/TM** | | |
| • Potentially significant impacts related to the transport of hazardous materials could result from implementation of the Village 11 SPA Plan. | **5.14-1** The use, transport, storage, and disposal of hazardous materials shall be conducted in compliance with the relevant regulations of federal, state, and local agencies, including the EPA, California Department of Heath Services (DHS), and Caltrans. | • With the application of the required mitigation measure, the Village 11 SPA Plan would not result in any significant impacts. |

# 1.6 PROJECT ALTERNATIVES

In developing alternatives to be addressed in this EIR, consideration was given regarding their ability to: 1) meet the basic objectives of the project described in Section 3.0; and 2) eliminate significant environmental impacts as identified in Section 5.0 of this EIR. Based on the above parameters, three alternatives were identified: No Project/No Development, and Reduced Intensity Alternative. Each of these alternatives is briefly described below, and a comparison of the environmental impacts of each of these alternatives is provided in *Table S-2, Comparison of Project Alternatives.*

## NO PROJECT/NO DEVELOPMENT

The No Project Alternative is required by the *Guidelines for the California Environmental Quality Act (CEQA Guidelines),* as amended. For this analysis, the No Project Alternative is defined as no GDP Amendment and no Village 11 SPA/TM (essentially no development of the project area). Since implementation of the Village 11 SPA depends on the proposed GDP Amendments and cannot proceed without the proposed GDP Amendments, there is no feasible alternative whereby just Village 11 SPA/TM would be allowed to proceed but not the proposed GDP Amendments.

The No Project/No Development Alternative assumes that the area within Village 11 SPA would not be developed in accordance with the adopted GDP/SRP. Essentially, the land area would remain as it exists today. The Village 11 property would continue to be used for limited agriculture or for livestock grazing. Project-level impacts would be avoided, as would all contributions to cumulative impacts.

## REDUCED DENSITY

Under the Reduced Density Alternative, the intensity of development would be reduced by approximately 26% by decreasing the density of all multi- and single-family residential development. The Reduced Density Alternative would retain 10 acres of commercial development within Village 11, but would eliminate the residential component of what was planned as mixed use. This alternative would result in 1,707 residential units on 304.9 acres. This represents a 3% reduction in land area combined with a 26% reduction in dwelling units. The acreage allocated to parks, schools, roadways and open space would remain unchanged from the proposed project. The population would decrease by 2,440 individuals. The Reduced Density Alternative would not meet the project objectives.

## TABLE S-2
## COMPARISON OF PROJECT ALTERNATIVES

| Environmental Issue | No Development Alternative | Reduced Intensity Alternative |
|---|---|---|
| Land Use | Significant impacts related to conversion of uses from undeveloped to urban would be avoided because no development would occur. | This alternative does not meet the Village Concept goals of the Otay Ranch GDP. This alternative reduces the amount of multi-family residential use, which would not meet the housing needs of future residents and would not adequately support the commercial and public uses in the village core. |
| Landform Alteration/ Aesthetics | Significant impacts to landform alteration and lighting would be avoided because no site disturbance would occur. | Significant impacts on landform and visual quality would be similar to the proposed project as the site would be developed, and urban development would be extended. Mitigation measures required for the proposed project would be required for this alternative. |
| Biological Resources | While impacts to biological resources would be avoided because no site disturbance would occur, these impacts were determined to be less than significant. | The impacts to biological resources would essentially be the same as the proposed project as the same area would be developed. These impacts would remain less than significant. |
| Cultural Resources | While impacts to cultural resources would be avoided because no grading would occur, these impacts were determined to be less than significant. | Potential impacts to cultural resources would be the same as the proposed project, as the same development area would be affected. These impacts would remain less than significant. |
| Paleontological Resources | Potential significant impacts to paleontological resources would be avoided because there would be no grading of the site. | Potential significant impacts to paleontological resources would be the same as the proposed project as the same development area would be affected. Mitigation measures required for the proposed project would be required for this alternative. |
| Geology and Soils | Potential geologic impacts related to ground shaking from seismic activity and localized unstable soils conditions would be avoided because no development or public access would occur. | Potential geologic impacts related to ground shaking from seismic activity and localized unstable soils would be the same as the proposed project as the same development area would be affected. Mitigation measures required for the proposed project would be required for this alternative. |
| Agricultural Resources | Impacts to agricultural resources would be avoided because no site development would occur. However, continued agricultural activity could result in significant land use compatibility issues between the agricultural operations and adjacent urban uses. | Impacts to agricultural resources would remain the same as the proposed project as the same development area would be converted from agricultural to urban uses. Mitigation measures required for the proposed project would be required for this alternative. |

## TABLE S-2 (*Continued*)
## COMPARISON OF PROJECT ALTERNATIVES

| Environmental Issue | No Development Alternative | Reduced Intensity Alternative |
|---|---|---|
| Housing and Population | Impacts on housing and population would be avoided because no site development would occur. This is considered an adverse impact of this alternative because the several of the goals and objectives of the GDP and project, such as provision of housing and employment opportunities, would not occur. | The estimated 26% reduction in available housing would reduce the City's ability to meet the projected need for an additional 13,500 dwelling units by 2005. This alternative would not conform with the SANDAG growth forecast and Growth Management Plan which would result in a potentially significant impact on housing and population. |
| Water Resources/ Water Quality | While potential impacts associated with increased runoff, erosion and degraded water quality from paved surfaces would be avoided, this is considered a adverse impact of this alternative. No structural systems exist to control existing agriculture-related pollutants from entering Salt Creek.<br><br>Due to the lack of drainage improvements with this alternative, overall impacts to water resources and water quality are expected to be greater than the proposed project. | The overall development area would be reduced by approximately 3% or 10 acres. This reduction in development area would not be expected to result in a measurable reduction in the volume or quality of the runoff from the site. Water resource and water quality impacts would remain essentially unchanged from those associated with the proposed project. Mitigation measures required for the proposed project would be required for this alternative. |
| Transportation, Circulation and Access | While the contribution of project-related traffic would be avoided, this alternative would complicate the completion of the Otay Ranch circulation network. Regional traffic impacts would still be significant without completion of EastLake Parkway, Hunte Parkway, Olympic Parkway and SR-125. | There would be an estimated reduction of 7,392 ADT with this alternative. The significant traffic impacts associated with the proposed project would be reduced but would not be avoided. The traffic mitigation measures required for the proposed project would remain unchanged as the 26% reduction in ADTs would not bring the traffic volumes below the thresholds of significance. |
| Air Quality | Air quality impacts associated with construction, vehicular emissions, building operations and additional emissions from energy producing facilities would be avoided. In addition, operational emissions from the proposed residential, commercial and institutional uses would be avoided. Existing air quality impacts associated with agricultural operations would continue. | Construction-related air quality impacts would remain essentially the same as the proposed project as the development area is essentially the same as the proposed project. Vehicular emissions would be reduced by 26%, and there would be a slight decrease in overall long-term air quality impacts associated with power generation and the operation of commercial facilities due to the reduced population. Overall, the reduction in air quality impacts would be minor, and the cumulative impact would remain significant and unmitigated. |
| Noise | Significant noise impacts associated with project traffic would be avoided. Existing noise levels associated with agricultural operations as well as existing and future noise generated from regional traffic would continue. The overall noise levels within Otay Ranch would be reduced by this alternative due to the reduction in regional traffic. | The noise impacts associated with this alternative would essentially be the same as the proposed project as the development area is essentially the same. Mitigation measures for noise impacts associated with construction and future development areas would be required. |

## TABLE S-2 (*Continued*)
## COMPARISON OF PROJECT ALTERNATIVES

| Environmental Issue | No Development Alternative | Reduced Intensity Alternative |
|---|---|---|
| Public Services and Utilities | Significant impacts related to the increased demand on public services and utilities would be avoided. | The demand on public services and utilities would be reduced by 26%. While the need for new and improved infrastructure would be reduced, it would not be avoided. Mitigation measures to reduce significant impacts on public services and utilities would be required. Thus public service and utility impacts would remain significant but mitigable. |
| Hazards/Risk of Upset | The potential for hazards and risk of upset would be avoided because no use, storage or transportation of potentially hazardous materials would occur. The site would continue to be used for limited agricultural operations which may involve the use of agricultural pesticides. | The 26% reduction in population would reduce the potential impacts associated with hazards and risk of upset. This impact would remain less than significant. |

# SECTION 2.0
# INTRODUCTION

## 2.1 PURPOSE AND SCOPE OF THE EIR

Environmental Impact Reports (EIR) are informational documents "which will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project" (Section 15121 of the CEQA Guidelines). The purpose of this EIR is to evaluate the environmental effects of the proposed Otay Ranch General Development Plan (GDP) Amendments (proposed GDP Amendments), and Otay Ranch Village 11 Sectional Planning Area (SPA) Plan, required to implement the Otay Ranch GDP for Village 11 as amended, and the subsequent conceptual Tentative Map (TM), (Village 11 SPA/TM) . The proposed GDP Amendments involves Village boundary changes, amendments to the City of Chula Vista Circulation Element roadways, reorganization of land use designations and reordering of development phasing that have evolved from changes to ownership and infrastructure phasing since adoption of the Otay Ranch GDP/SRP on October 28, 1993. The SPA Plan for Village 11 is a planning document that refines and implements the land use plans, goals, objectives, and policies of the Otay Ranch GDP/SRP. The proposed Village 11 conceptual TM provides lots for proposed Village 11 single-family dwelling unit neighborhoods and lot boundaries for multi-family and other land uses.

Because of the size, complexity of issues and extended buildout time frame of the Otay Ranch Project, both the planning and environmental documentation associated with Otay Ranch were tiered from the general to the specific. The first tier of planning and approvals included approval of the Otay Ranch General Plan Amendment/General Development Plan/ Subregional Plan (GPA/GDP/SRP) in October 1993 and associated Program Environmental Impact Report (Program EIR 90-01). The Final Program EIR 90-01 for Otay Ranch was prepared and certified jointly by the City of Chula Vista and County of San Diego. The Program EIR 90-01 addresses the environmental impacts of implementation of the Otay Ranch GPA/GDP/SRP and related documents, which include Facility Implementation Plans, a Village Phasing Plan, Phase One Resource Management Plan (RMP), and a Service/Revenue Plan. As part of Program EIR 90-01, a Mitigation Monitoring and Reporting Program (MMRP) was prepared to define implementation of the mitigation measures described in the Program EIR.

The Program EIR 90-01 for the Otay Ranch GDP was certified with the intent that the individual SPA planning projects within Otay Ranch would be reviewed as "second-tier"

projects pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15153. Under CEQA, tiering is a process by which agencies can adopt an overall project with a programmatic, or "first tier," EIR focusing on the "big picture" and then use streamlined CEQA review for individual projects that are more specific components of such a first tier decision. This approach eliminates repetitive discussions of the same issues and focuses the EIR on the actual issues required for decision at each level of environmental review. Under such tiering principals, the proposed Otay Ranch GDP Amendments analysis is presented as and should be reviewed at a subsequent, first-tier level of review. The Village 11 SPA and TM analysis is presented and reviewed at a second-tier EIR level of review (project level).

While a second-tier analysis can rely on a first-tier analysis, it has the obligation to discuss any changed circumstances or new information that might alter the first-tier analysis. Under principals of tiering, if a first-tier document found significant impacts, then the second-tier EIR must require the mitigation measures unless the analysis explains that the measures are not applicable or that other mitigation measures can replace the previous measures and similarly reduce the impacts to a level of insignificance. As such, each environmental analysis section in this EIR identifies the avoidable and unavoidable significant environmental impacts previously identified in applicable EIRs and the required mitigation measures. This EIR also evaluates whether the previously required mitigation measures are still applicable, or whether there are other feasible mitigation measures that were not previously considered that might similarly reduce the stated impacts to less than significant.

The environmental impacts of the implementation of the three components of the proposed project, namely the proposed GDP Amendments, Village 11 SPA and Village 11 TM, are analyzed in Sections 5.0 through 9.0 of this EIR. The scope of the analysis of the Village 11 SPA and TM assumes that the proposed GDP Amendments have been approved, and in fact, the Village 11 SPA Plan could not move forward without prior approval of the proposed GDP Amendments. The Otay Ranch GDP/SRP, as currently adopted, (adopted GDP) is consistent with the current City of Chula Vista General Plan. The proposed GDP Amendments would require an amendment to the General Plan to maintain consistency. The General Plan Amendments are required as a discretionary action of the proposed GDP Amendments. The General Plan Amendments would consist of revisions to the text and map of the General Plan, as described in more detail in Section 3.0, Project Description. The physical environmental effects of the General Plan Amendments would not be different from those associated with the proposed GDP Amendments since the proposed changes to the General Plan are consistent with the proposed GDP Amendments. Therefore, the environmental analysis of the General Plan Amendments is contained in the analysis under the subheading "GDP Amendments," throughout this EIR.

# 2.2 CEQA REQUIREMENTS

## CEQA COMPLIANCE

This EIR has been prepared in accordance with the CEQA (Public Resources Code Sections 21000 et seq; the CEQA Guidelines published by the Resources Agency of the State of California (California Code of Regulations Sections 15000 et seq., as amended); and the City of Chula Vista environmental review procedures. Pursuant to Sections 15150 and 15152 of the CEQA Guidelines, this document incorporates by reference and serves as a first-tier EIR primarily to the Chula Vista General Plan EIR and the Final Otay Ranch GDP/SRP Program EIR (90-01). It also serves as a first-tier reference to each subsequent EIR that has amended the General Plan or GDP, such as the Otay Ranch SPA One and Annexation Final Second Tier EIR (95-01) and Final Second Tier EIR for Otay Ranch SPA One and General Development Plan/Sub-Regional Plan Amendments (97-03).

This document also incorporates by reference and serves as a second-tier EIR to the same documents as well as those documents that have changed the GDP at the SPA level, including following documents: the Final Program Environmental Impact Report for the Otay Ranch and the City of Chula Vista Sphere of Influence Update (94-03); the Final Second Tier EIR for Otay Ranch SPA One and GDP/SRP Amendments (97-03); the Otay Water District Resources Master Plan Final Master EIR (97-04); the Olympic Parkway Mitigated Negative Declaration (IS 00-33); the Final Program EIR for the Salt Creek Interceptor Sewer (EIR #01-03, released June 2001); and the Final Eastlake III Woods and Vistas Replanning Program EIR (EIR #01-01, released June 2001).

According to Section 15150 of the CEQA Guidelines, a lead agency may incorporate all or portions of another environmental document available to the public to avoid redundancy in the environmental review process. Applicable sections from the previous environmental documents have been summarized and incorporated into this EIR. All documents incorporated by reference are available for review at the City of Chula Vista.

## NOTICE OF PREPARATION

In compliance with Section 15082 of the CEQA Guidelines, the City of Chula Vista Planning and Building Department circulated a Notice of Preparation (NOP), dated March 30, 2001, to interested agencies, groups, and individuals. The NOP rescinded and replaced the NOP to prepare a Supplemental EIR for the proposed GDP Amendments 2001 dated March 23, 2001. In addition, the March 30 NOP rescinded and replaced the NOP for a Subsequent EIR to the

final Program EIR for Otay Ranch dated August 18, 1999. All comments received during these NOP public notice periods were considered during the preparation of this Draft EIR. The NOP and comments are included in Appendix A of this EIR. Based on the scope of analysis for this EIR, the following issues were determined to be potentially significant and are addressed in Sections 5.0 through 9.0 of this document:

- Land Use, Planning, and Zoning
- Landform Alteration/Aesthetics
- Biological Resources
- Cultural Resources
- Geology and Soils
- Paleontological Resources
- Agricultural Resources
- Housing and Population
- Water Resources and Water Quality
- Transportation, Circulation, and Access
- Air Quality
- Noise
- Public Services and Utilities
- Hazards/Risk of Upset

## 2.3 USES OF THIS EIR

As the designated Lead Agency, the City of Chula Vista has assumed responsibility for preparing this document. The Draft EIR was made available for review to the public and public agencies for 45 days to provide comments on the "sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (Section 15204 of the CEQA Guidelines).

Following public review of the Draft EIR, this Final EIR was prepared. The final document addresses the written comments received during the public review period and oral comments received during public hearing. The Final EIR is available for review at the City of Chula Vista, Planning and Building Department, 276 Fourth Avenue, Chula Vista, and the Chula Vista Library, 365 F Street, Chula Vista. The City of Chula Vista will review and consider the information in the Final EIR along with other information that may be presented in making its decision on the requested actions for the proposed GDP Amendments, Village 11 SPA and

TM. This document is also intended for use by responsible agencies having authority to require actions and permits in order to implement elements of the proposed project.

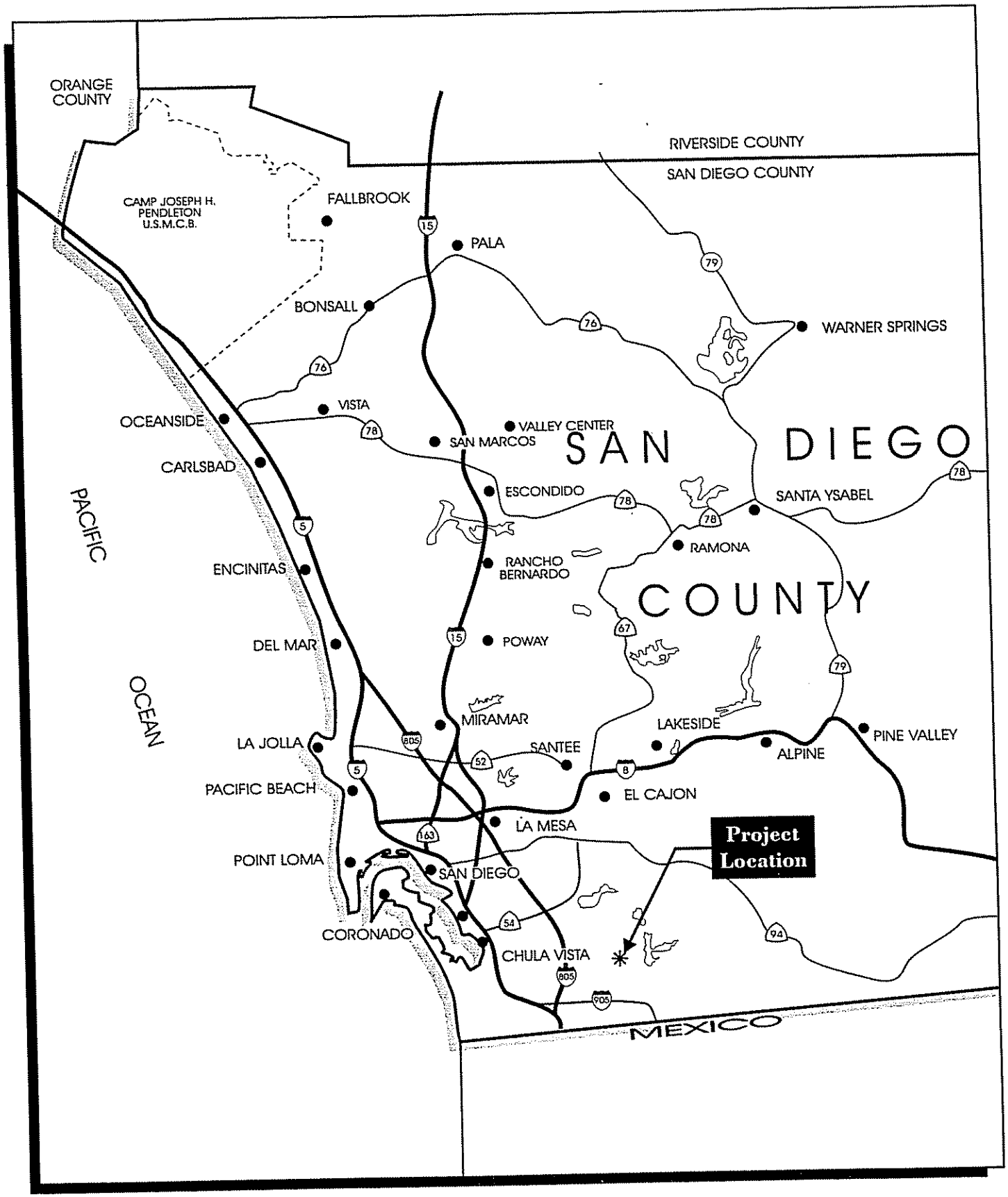
# SECTION 3.0
# PROJECT DESCRIPTION

## 3.1 SITE LOCATION

The proposed GDP Amendment Area is located within the eastern portion of the Otay Valley Parcel of Otay Ranch in the City of Chula Vista *(Figure 3-1, Regional Location; Figure 3-2, Adopted Otay Ranch Parcel Plan)*. The proposed GDP Amendment Area is generally located in the northeastern portion of the Otay Valley Parcel and includes approximately 2,200 acres. The proposed GDP Amendment Area is generally bordered on the west by the proposed alignment for SR-125 and on the north by the future easterly extension of Olympic Parkway *(Figure 3-3, GP/GDP Amendment and Village 11 Site Location)*. The only proposed GDP Amendments that affect areas west of SR-125 involve Village Seven and Eight, and Birch Road between SR-125 to La Media Road (see Section 3.3 for a description of the proposed GDP Amendments). The Olympic Training Center and open space associated with Salt Creek are located to the east of the proposed GDP Amendment Area. The Otay River Valley is located south of the GDP Amendment Area.

The Village 11 SPA Plan includes 489 acres. Offsite improvements and grading associated with the Village 11 SPA Plan increase the total project area to 565 acres within the larger proposed GDP Amendment Area described above (*Figure 3-3*). Offsite improvements include Eastlake Parkway, Hunte Parkway and drainage facilities totaling 76 acres. The future easterly extension of Olympic Parkway forms the northern boundary of the Village 11 SPA Plan area. The existing residential neighborhood of EastLake Greens is located north of Village 11 and Olympic Parkway. The adopted Otay Ranch GDP designates the property to the west of Village 11 as Planning Area 12, which is planned for the Eastern Urban Center (EUC) and Freeway Commercial (FC) developments. The adopted Otay Ranch GDP designates the property to the south of Village 11 (Villages Nine and Ten) for a University, or alternatively residential use. Open space associated with Salt Creek Canyon is located to the east of Village 11.

The proposed GDP Amendment Area, including the Village 11 SPA Plan area, is hereinafter referred to as the "Amendment Area." The Village 11 SPA Plan area plus all offsite improvements and grading, is hereinafter referred to as the "Village 11 Project Area." The Amendment Area is within the northern segment of U.S. Geological Survey 7.5 minute series Otay Mesa quadrangle and the southern segment of the Jamul Mountains Quadrangle, T18S, R1W.

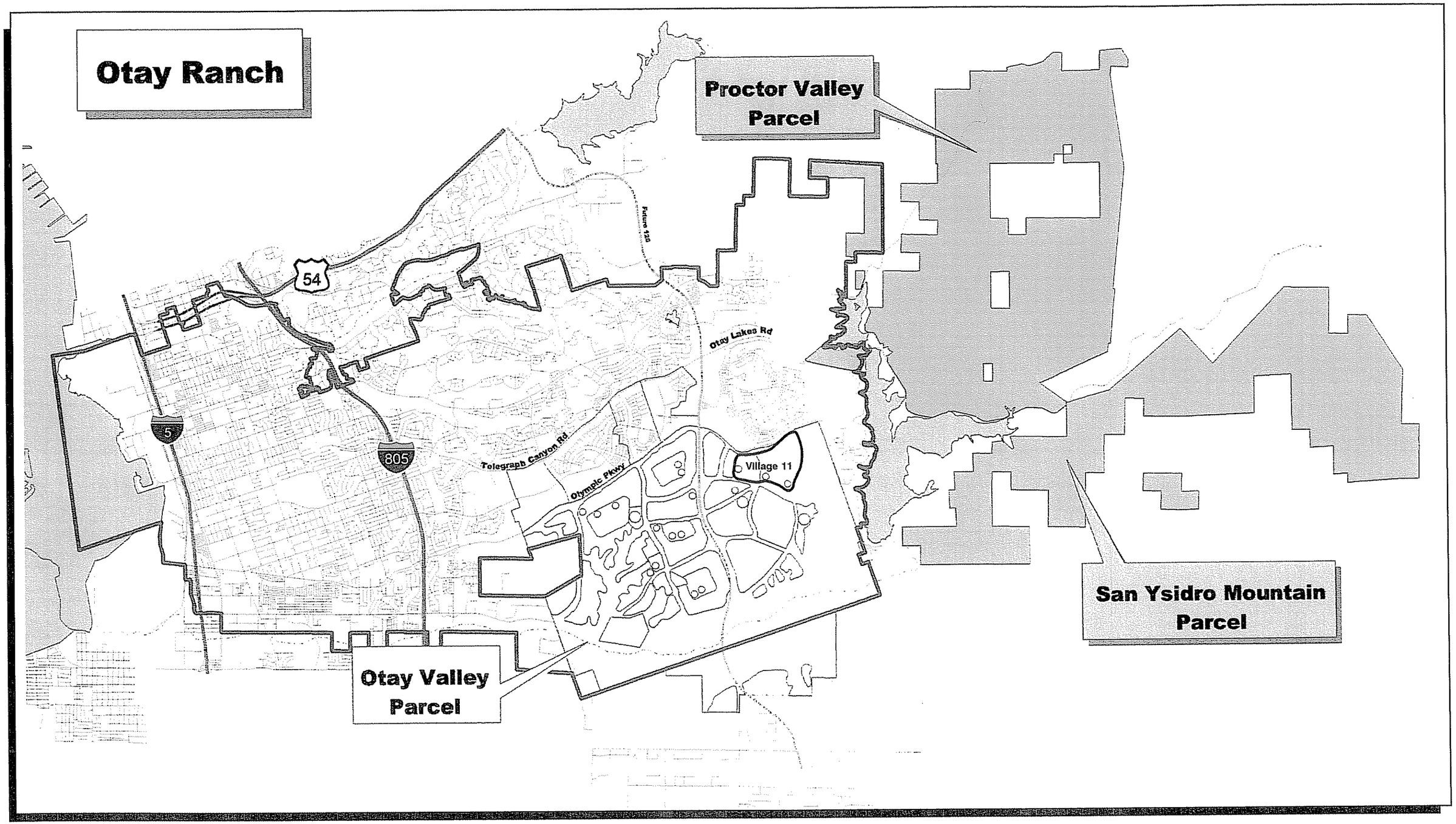



**Regional Location**

*figure 3-1*

0 5 10 miles

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR



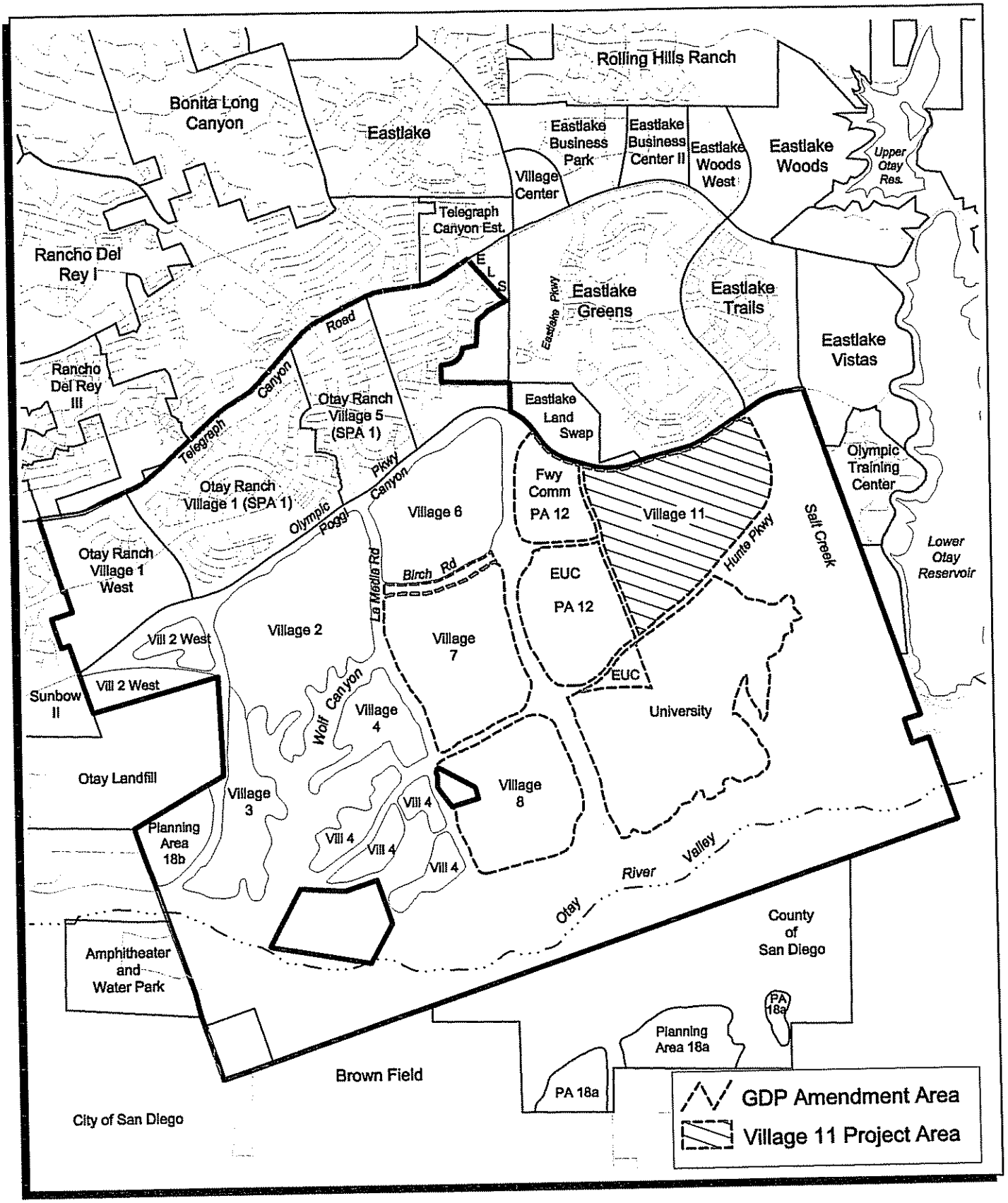

SOURCE: City of Chula Vista (12/00)

0 3000' 6000'
Graphic Scale

**1993 Adopted Otay Ranch Parcel Plan**

*Figure 3-2*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR




SOURCE: City of Chula Vista GIS (May 2001)

**GP/GDP Amendment and Village 11 Site Location**

*Figure 3-3*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR

Regional access to the project area is currently provided by I-805, which is located approximately four miles west of the project area. Future construction of SR-125 would provide additional north-south access approximately 1,000 feet to the west. Regional east-west traffic would utilize State Route 54 (SR-54), located approximately five miles northwest of the project area. The Village 11 Project Area would be located less than 500 feet east of the proposed regional transit-way line that will be extended from the west to connect with the regional north/south line. Local access would be provided by Otay Lakes Road, Hunte Parkway, Olympic Parkway and Eastlake Parkway once these roads are extended to the Village 11 Project Area.

## 3.2 PROJECT HISTORY

Discussions to develop the 23,000-acre, 36-square mile, Otay Ranch were initiated in 1988. Under a Memorandum of Understanding (MOU), the City of Chula Vista and the County of San Diego jointly prepared a single, phased development plan for the property. This Plan, called the *Otay Ranch General Development Plan/Subregional Plan (GDP/SRP)*, was jointly adopted by the City and the County on October 28, 1993, along with certification of the Otay Ranch GDP/SRP Program EIR (Program EIR 90-01). For planning purposes, Otay Ranch was grouped geographically to form three distinct parcels: Otay Valley Parcel, Proctor Valley Parcel, and the San Ysidro Mountains Parcel. As discussed previously, the proposed project area is located within the Otay Valley Parcel of Otay Ranch (see *Figure* 3-2).

As discussed above, several first- and second-tier documents have analyzed changes that have already been made to the Otay Ranch GDP/SRP. Those changes have been previously approved and adopted by the City. For purposes of this document, all references to the "adopted GDP" mean the Otay Ranch GDP/SRP, including all of the prior modifications made to the plan.

Since the last modifications to the Otay Ranch GDP/SRP, ownership of certain parcels within Otay Ranch and phasing of public improvements have changed. Land comprising the Otay Ranch currently has multiple owners. In many cases, the current land ownerships do not coincide with adopted Village boundaries, resulting in multiple ownerships within a planning area, or Village. In addition, changes in the phasing of public improvements within and adjacent to Otay Ranch have occurred. For example, construction of Olympic Parkway (formerly East Orange Avenue) has advanced due to delays in the permitting and construction of the proposed SR-125. All of these changes

have resulted in the need to adjust phasing assumptions, planning unit boundaries and to make corresponding changes to circulation roadways to conform to the new boundaries. As a result of the proposed planning area boundary changes, the land uses within the Villages would need to accommodate the proposed reconfigured boundaries.

## 3.3 PROJECT OBJECTIVES

The proposed GDP Amendments and Village 11 SPA Plan have different but compatible objectives. The overall objective of the proposed GDP Amendments is to allow for the orderly development of the affected areas of the Otay Ranch Parcel as generally envisioned by the adopted GDP/SRP. However, based on changes that have occurred since adoption of the GDP/SRP as discussed above, amendments to adopted plans are necessary to allow for such orderly development. As such, the objective of the proposed GDP Amendments is to modify the documents to reflect changes in planning area boundaries, circulation network, and roadway classifications to be consistent with the amended GDP. The affected elements of the General Plan and the Eastern Territories Area Plan are discussed in *Section 3.4* below. With the proposed amendments, the General Plan and the GDP would be consistent.

The SPA plan for Otay Ranch's Village 11 refines and implements the land use goals, objectives, and policies of the City's General Plan and the GDP/SRP. The SPA Plan defines in more detail the development parameters for Village 11 including the land uses, design criteria, primary transportation pattern, open space and recreation concept, and infrastructure requirements. The objectives of the Village 11 SPA Plan are to:

- Establish a pedestrian-oriented village with an intense urban core to reduce reliance on the automobile and promote walking and the use of bicycles, buses, and public transit.
- Promote synergistic uses between Village 11, the neighborhoods of Eastlake and adjacent Otay Ranch Villages to balance activities, services, and facilities.
- Implement the goals, objectives, and policies of the Chula Vista General Plan, particularly the Otay Ranch General Development Plan, the Otay Ranch Phase 1 and Phase 2 Resource Management Plan, the Otay Ranch Facility Implementation Plan, the Otay Ranch Village Phasing Plan, and the Otay Ranch Service/Revenue Plan.

- Implement the City of Chula Vista's Growth Management Program to ensure that the public facilities are provided in a timely manner and financed by the parties creating the demand for, and benefitting from, the improvements.
- Foster development patterns that promote orderly growth and prevent urban sprawl.
- Develop, maintain, and enhance a sense of community identity.
- Accentuate the relationship of the land use plan with its natural setting and the physical character of the region and promote effective management of natural resources by concentrating development into less sensitive areas while preserving large contiguous open space areas with sensitive resources.
- Add to the creation of a unique Otay Ranch image and identity that differentiates Otay Ranch from other communities.
- Wisely manage limited natural resources.
- Establish a land use and facility plan that assures the viability of Village 11 in consideration of existing and anticipated economic conditions.

## 3.4 PROJECT CHARACTERISTICS

The proposed project includes proposed GDP Amendments that address the following elements:

- Realignment and reclassification of Circulation Element roads;
- Land use amendments related to reconfiguration of Village boundaries and reorganization of land use designations; and
- Amendments to the Otay Ranch Village Phasing Plan.

The proposed project also includes implementation of the proposed Village 11 SPA and conceptual Tentative Map (TM). Each of these components of the project is discussed in detail below.

## 3.4.1 GENERAL PLAN AMENDMENTS

The adopted GDP is currently consistent with the City of Chula Vista General Plan. The proposed GDP Amendments, as further described below, would require changes to the text and map of the General Plan to maintain conformity. The required General Plan Amendments include revisions to circulation element roadways, including realignments, deletions, and additions, as described below. In addition, changes to land use designations would be required to depict the revised village boundaries and land use configurations. Minor amendments to the text of the General Plan would also be needed to reflect roadway name changes, and descriptions of circulations features and village boundaries that would change as a result of road realignments and village boundary configurations.

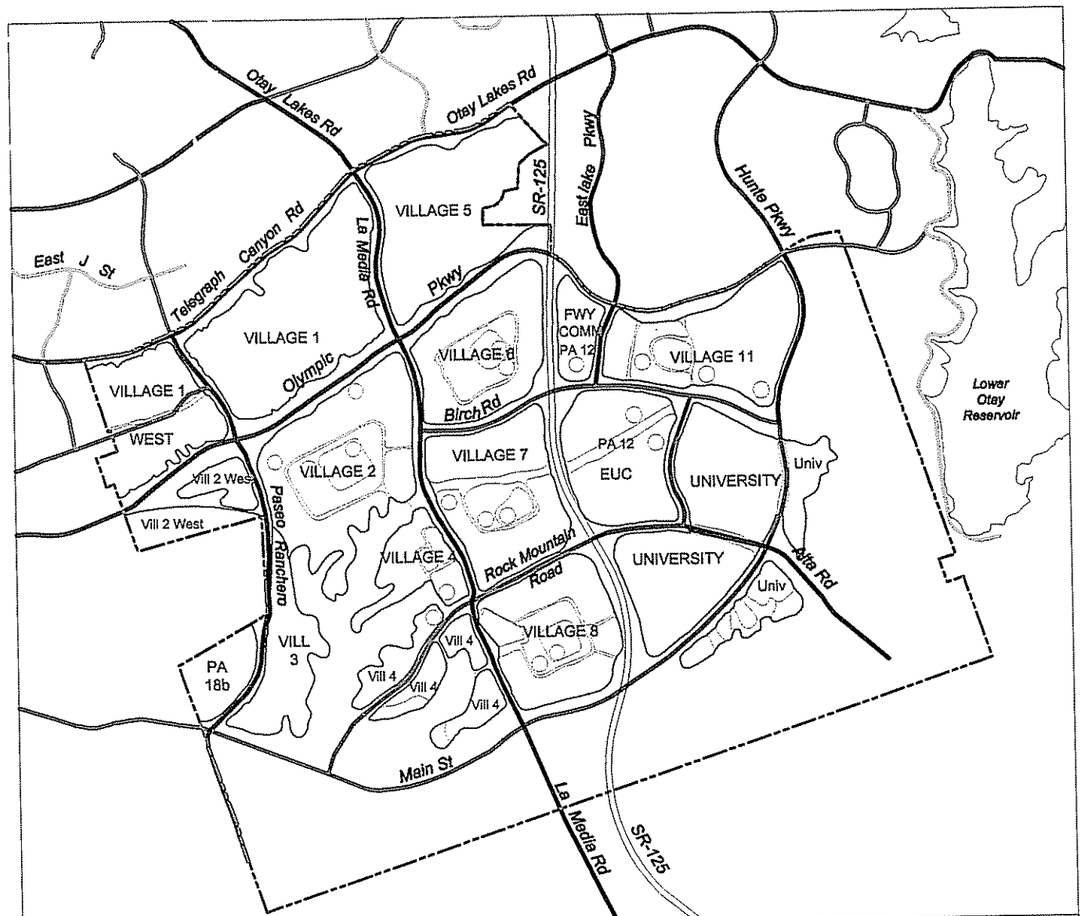
The physical environmental effects of the proposed General Plan Amendments would not be any different from those associated with the proposed GDP Amendments, since the proposed changes to the General Plan are consistent with, and included within the proposed GDP Amendments. Therefore, the environmental analysis for the General Plan Amendments is contained within the analysis under the subheading "GDP Amendments," throughout this EIR. The land use section (*Section 5.1*) however, does contain an analysis of potential impacts related to amending the General Plan independently from the proposed GDP Amendments.

## 3.4.2 GDP AMENDMENTS

The following proposed GDP Amendments are proposed to reflect current conditions and proposed planning area boundary changes as well as to make the General Plan and General Development Plan consistent with one another:

### A. CIRCULATION AMENDMENTS

The existing and proposed circulation plans of the General Development Plan are shown in *Figure 3-4, Adopted and Proposed GP/GDP Circulation Element.* Refer to *Figure 3-4* to identify the proposed changes to circulation. The changes proposed to circulation would be reflected in applicable sections of the GDP.

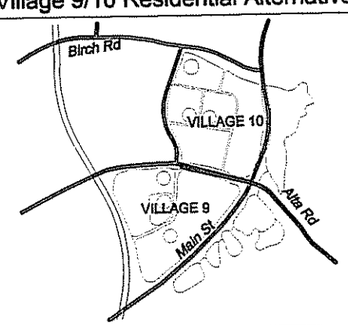


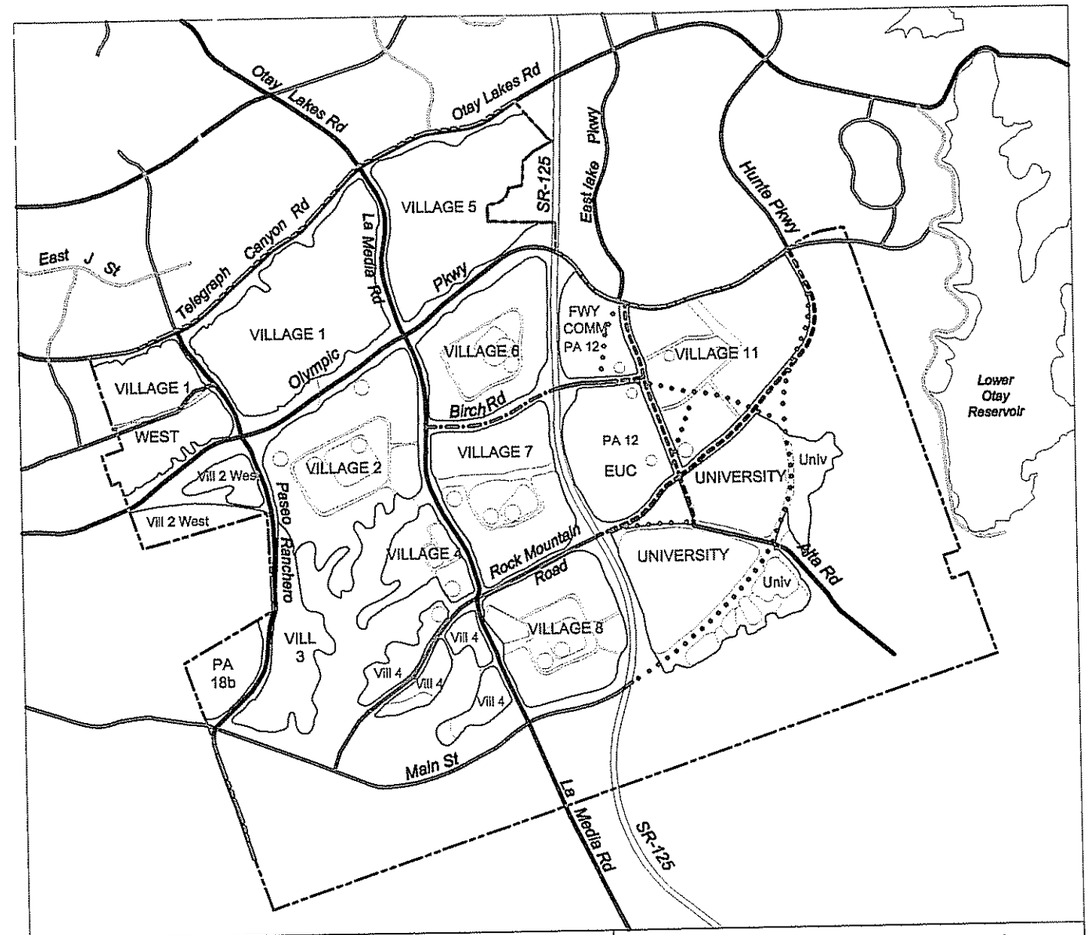

## Adopted Circulation

### Legend

- Toll/Freeway
- 6 Lane Prime
- 4 Lane Major
- Class I Collector
- Class II Collector
- Class III Collector
- Residential Street
- Adopted GDP
- Villages
- Otay Valley Parcel within the City of Chula Vista

## Village 9/10 Residential Alternative



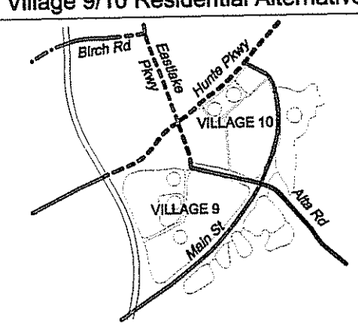




## Proposed Circulation

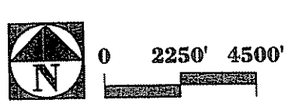
### Legend

- Toll/Freeway
- 6 Lane Prime
- 6 Lane Major
- 4 Lane Major
- Class I Collector
- Class II Collector
- Class III Collector
- Residential Street
- GDP 2000
- Villages
- Otay Valley Parcel within the City of Chula Vista
- Deleted Roadway Section
- Dashed line denotes Proposed Section
- Dashed/dot line denotes Reclassified Section

## Village 9/10 Residential Alternative




SOURCE: City of Chula Vista GIS (May 2001)




**Adopted and Proposed GP/GDP Circulation Element**

*figure 3-4*

## Hunte Parkway Realignment Connecting with Rock Mountain Road

The adopted GDP currently shows Hunte Parkway located along the eastern boundary of Village 11, and it would traverse the University site (Villages Nine and Ten) to connect with Main Street at the proposed alignment for SR-125 (*Figure 3-4*). The proposed GDP Amendments would move the alignment of Hunte Parkway north to become the southern border of the Village 11 Project Area and to traverse the southern portion of the EUC. As proposed, Hunte Parkway would meet Rock Mountain Road at the proposed SR-125. The new alignment would form the southern boundary of the Village 11 Project Area and northern boundary of the University site (Village Ten). The realignment of Hunte Parkway would eliminate an arterial road running through the University site.

## Eastlake Parkway Realignment and the Elimination of Patrick Drive

The adopted GDP currently shows Eastlake Parkway terminating at Birch Road (*Figure 3-4*). As proposed, Eastlake Parkway would shift to the east and extend south of Olympic Parkway to the future alignment of Alta Road and would be located between two different ownerships.

As currently adopted, Patrick Drive is a future north-south road that forms the boundary between Village Ten (northern portion of the University site) and the EUC. This road would be eliminated with the proposed project (*Figure 3-4*).

## Elimination of Birch Road East of Eastlake Parkway

As currently adopted, Birch Road is a future planned roadway that would extend east to the adopted alignment for Hunte Parkway. The proposed GDP Amendments would eliminate Birch Road east of the future alignment of Eastlake Parkway. The area included within the right-of-way for Birch Road would be included in the Village 11 Project Area(*Figure 3-4*).

## Road Reclassifications

Currently, Birch Road from La Media to SR-125 is classified as a four-lane major road. This segment of Birch Road would be reclassified to a six-lane major street to meet the future, buildout traffic needs for the Eastern Territories (*Figure 3-4*). In addition, Hunte Parkway from SR-125 to Olympic Parkway and Alta Road from Hunte Parkway to the southern boundary of the General Plan area would be classified as six-lane prime arterials.

Lastly, Main Street is currently classified as a six-lane major road between SR-125 and Alta Road, and four-lane major road from Alta Road to Birch Road. If the University is constructed, Main Street would be eliminated east of SR-125. If the University is not constructed, Main Street from SR-125 to its intersection with Hunte Parkway would be classified as a four-lane major road.

### Renaming of Orange Avenue East of I-805

Currently, the General Plan identifies Orange Avenue east of I-805 as "Orange Avenue." The proposed amendments include renaming Orange Avenue as "Olympic Parkway" east of I-805. This change would affect all elements and Area Plans of the General Plan.

## B. LAND USE AMENDMENTS

This section describes the proposed GDP land use amendments that would result from the aforementioned changes in the circulation network and changes in planning area acreage. The adopted Land Uses for the Amendment Area and the proposed land use changes are shown in *Figure 3-5, Adopted GDP with Proposed Changes for the Amendment Area.*

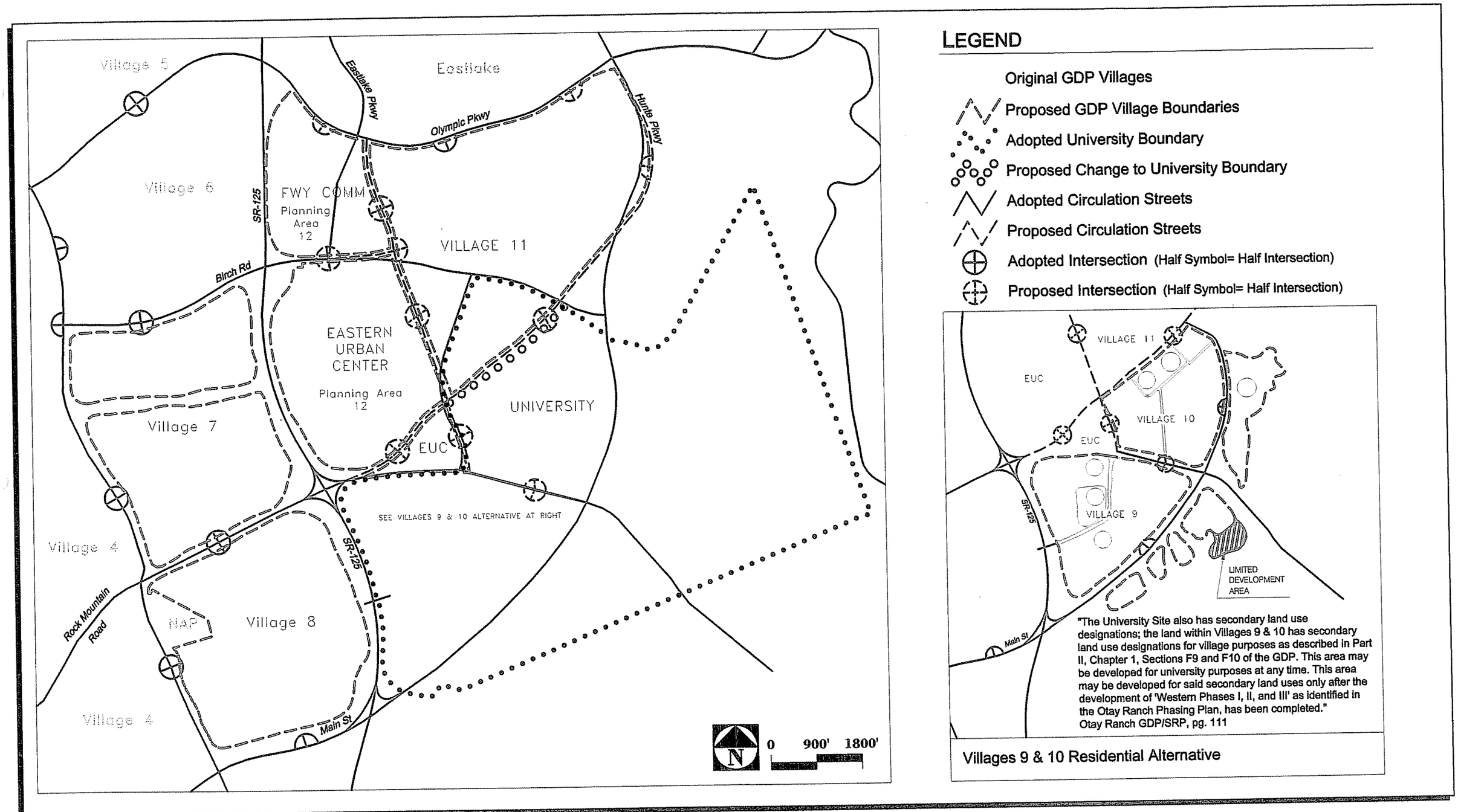
### Village 11

#### *Planning Boundaries and Acreage*

The configuration and acreage of Village 11 would be modified by the aforementioned realignment of Eastlake Parkway and Hunte Parkway as well as ownership boundary changes. *Figure 3-5* shows the proposed change to the Village 11 planning area configuration. Overall, the proposed GDP Amendments would result in an increase of 34 acres in Village 11 due primarily to the realignment of Eastlake Parkway and Hunte Parkway and the resulting shift in planning area boundaries, and elimination of right-of-way for Birch Road and Patrick Drive through Village 11.

#### *Land Use Amendments*

**Residential:** The adopted GDP for Village 11 allows for the development of 1,746 residential units (745 single-family and 1,001 multi-family units). As shown in *Table 3-1, Comparison of Adopted and Proposed GDP Land Use Designations and Acreage Under University,* the proposed GDP Amendments would increase the




SOURCE: City of Chula Vista GIS (May 2001)

**Adopted GDP with Proposed Changes for the Amendment Area Land Use Plan**

*Figure 3-5*

# TABLE 3-1. COMPARISON OF ADOPTED AND PROPOSED GDP LAND USE DESIGNATIONS AND ACREAGE UNDER UNIVERSITY SCENARIO[1]

| Land Use Designation and Acreage | Village Seven[4] | | Village Eight[4] | | Village Nine | | Village Ten | | Village 11 | | Planning Area 12 EUC | | Planning Area 12 FC | | Net Change (Village Seven Primary High School Site) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Adopted | Proposed GDP (Change) | Adopted | Proposed GDP (Change) | Adopted GDP | Proposed GDP (Change) | Adopted GDP | Proposed GDP (Change) | Adopted | Proposed GDP (Change) | Adopted | Proposed GDP (Change) | Adopted | Proposed GDP (Change) | |
| SF Units | 1,303 | 1,053 (– 250) | 1,021 | 781 (– 240) | 0 | 0 (0) | 0 | 0 (0) | 745 | 1,005 (260) | 0 | 0 (0.0) | 0 | 0 | 10 |
| MF Units | 448 | 448 (0) | 436 | 436 (0) | 0 | 0 (0) | 0 | 0 (0) | 1,001 | 1,385 (384) | 2,500 | 2,332 (-168) | 0 | 0 (0) | 216 |
| Total Residential Units | 1,751 | 1,501 (– 250) | 1,457 | 1,217 (– 240) | 0 | 0 (0) | 0 | 0 (0) | 1,746 | 2,390 (644) | 2,500 | 2,332 (-168) | 0 | 0 (0) | 476 |
| Residential Acreage | 291.5 | 241.5 (– 50.0) | 267.7 | 217.7 (– 50.0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 238.9 | 306.7 (67.8) | 70.1 | 65.5 (-4.6) | 0.0 | 0.0 (0.0) | 63.2 |
| Park Acreage[2] | 9.3 | 9.3 (0) | 8.9 | 8.9 (0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 10.0 | 10.0 (0.0) | 45.0 | 45.0 (0.0) | 0.0 | 0.0 (0.0) | 0.0 |
| Open Space Acreage | 45.3 | 45.3 (0) | 22.6 | 22.6 (0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 95.0 | 51.4 (-43.6) | 13.3 | 16.1 (2.8) | 6.7 | 13.1 (6.4) | -34.4 |
| CPF Acreage[3] | 6.3 | 6.3 (0) | 6.0 | 6.0 (0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 6.9 | 9.4 (2.5) | 8.9 | 8.3 (-0.6) | 0.0 | 0.0 (0.0) | 1.9 |
| School Acreage | 35.0 | 85.0 (50.0) | 10.0 | 60.0 (50.0) | 0.0 | 0 (0) | 0.0 | 0.0 (0.0) | 60.0 | 35.0 (-25.0) | 10.0 | 10.0 (0.0) | 0.0 | 0.0 (0.0) | 25.0 |
| Commercial Acreage | 7.2 | 7.2 (0) | 13.4 | 13.4 (0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 10.4 | 10.0 (-0.4) | 155.0 | 118.7 (-36.3) | 91.5 | 110.2 (18.7) | -18.0 |
| Arterial Acreage | 17.1 | 17.1 (0) | 14.2 | 14.2 (0) | 19.1 | 4.3 (-14.8) | 21.1 | 14.8 (-6.3) | 33.8 | 66.5 (32.7) | 16.1 | 19.5 (3.4) | 8.1 | 11.2 (3.1) | 18.1 |
| University Acreage | 0 | 0 (0) | 0 | 0 (0) | 344.8 | 359.6 (14.8) | 312.5 | 254.4 (-58.1) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | -43.3 |
| Gross Acreage | 411.7 | 411.7 (0) | 342.8 | 342.8 (0) | 363.9 | 363.9 (0.0) | 333.6 | 269.2 (-64.4) | 455.0 | 489.0 (34.0) | 318.5 | 283.1 (-35.4) | 106.2 | 134.5 (28.3) | -37.5 |

[1] This analysis addresses the University Scenario which assumes Village 3 is industrial, Villages 9 and 10 are university, and the Proctor Valley parcel and San Ysidro Mountains develop as currently adopted.

[2] Actual park acres will be determined at the SPA level.

[3] Actual CPF acres will be determined at the SPA level.

[4] Village Seven is the primary high school site; only one option for the high school site will be selected.

Source: City of Chula Vista, 2001.

SF = Single family; MF = Multi family; CPF = Community Purpose Facility

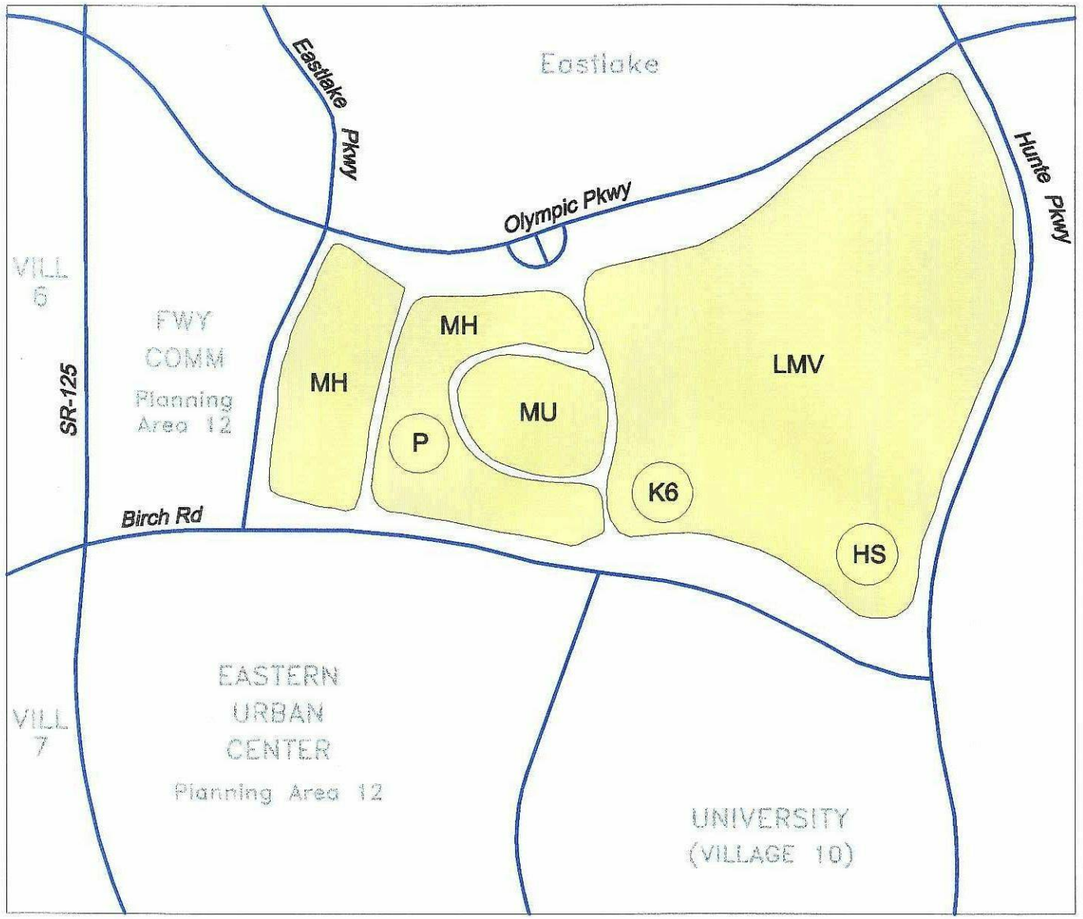
residential development potential within Village 11 to 2,390 units (1,005 single-family and 1,385 multi-family units) for a net increase of 644 units. The acreage allocated to residential use would increase from approximately 239 acres to 307 acres, for a net increase of approximately 68 acres. The adopted GDP and proposed land use plan for Village 11 are shown in *Figure 3-6, Adopted GDP with Proposed Land Use Changes for Village 11*.

**Parks and Open Space:** In the adopted GDP, the Village Greenway runs from Wolf Canyon to Salt Creek traversing through Village Seven, the EUC, and Village 11. The Village Greenway or "EUC/University Open Space Concourse," as identified by the General Plan, is open space that is "expected to be more urban than natural, and follows along a landscaped local street." The General Plan further states that the concourse would "provide direct pedestrian, bicycle and transit connection between the EUC and the University" and would "permit local internal vehicular circulation between these activity centers without use of the prime arterial loop road."

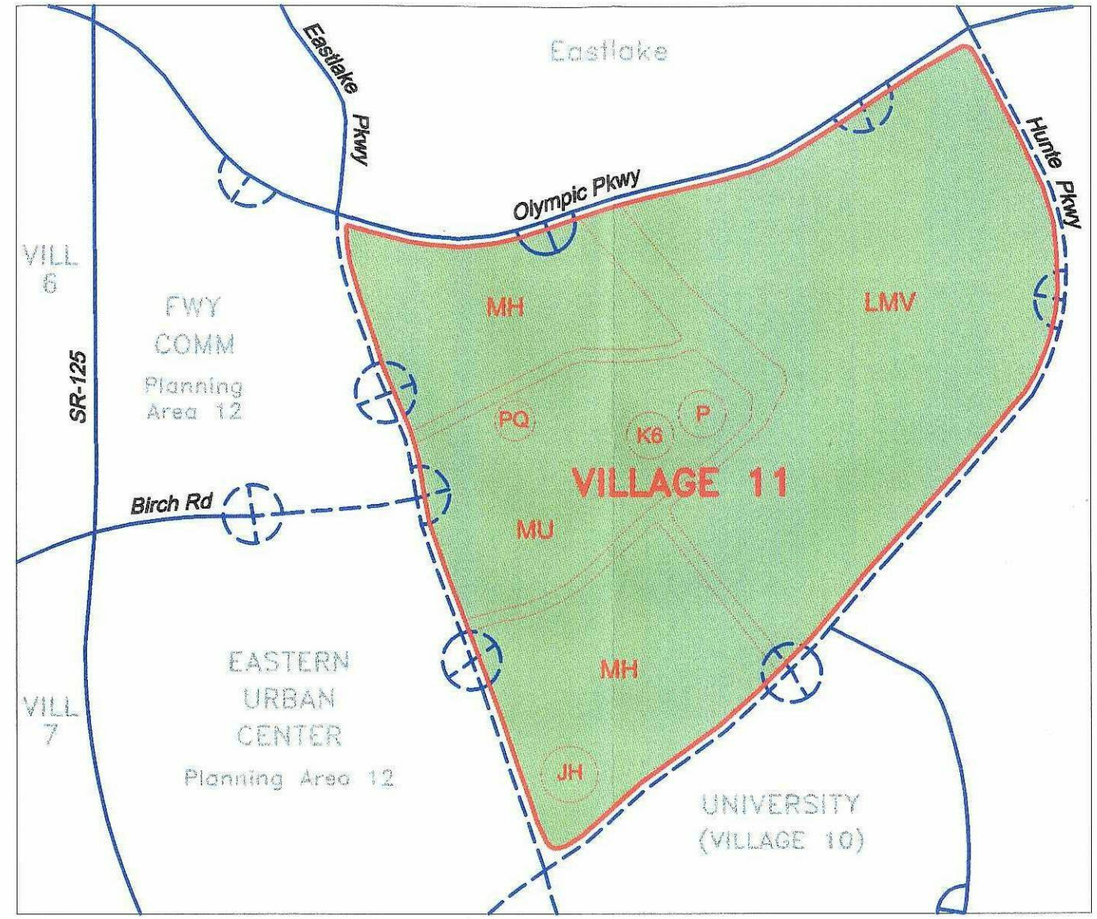
Due to the arterial street changes, realignment of the Village Greenway is proposed in Village 11 (and the EUC, which is discussed below). The proposed Greenway would cross Eastlake Parkway from the EUC and would be located along the southern edge of the Village 11 Project Area adjacent to Hunte Parkway (*Figure 3-6*). The proposed corridor along Hunte Parkway is within the village perimeter, 75-foot average buffer. The Village 11 Greenway will cross Hunte Parkway and connect with the City's Greenbelt Trail proposed along Salt Creek.

As shown in *Table 3-1*, the overall acreage for parks within Village 11 would not change with the proposed GDP Amendments. The adopted GDP allocates 10 acres to parks within the Village 11 Project Area. The open space acreage would however, be reduced from 95 acres to approximately 51.4 acres. The net change would be a reduction of 43.6 acres of open space within Village 11, a portion of which is being transferred into the Preserve.

**Community Purpose Facilities:** The overall acreage allocated to Community Purpose Facilities (CPF) increases with the proposed GDP Amendments. CPF acreage is based on population, and the acreage increases from 6.9 acres to 9.6 acres (*Table 3-1*). The increase in CPF acreage is due to the proposed increase in residential units.




Adopted Plan




Proposed Plan

## LEGEND

- Original GDP Village
- Proposed Village Boundaries
- Adopted Circulation Streets
- Proposed Circulation Streets
- Adopted Intersection (Half Symbol = Half Intersection)
- Proposed Intersection (Half Symbol = Half Intersection)

LMV- Low-Medium Village Density Residential
MH - Medium-High Density Residential
PQ - Public/Quasi-Public Facility
P - Park
HS - High School
JH - Junior High School
K6 - Kindergarden-Grade 6 Elementary School
MU - Mixed Use

SOURCE: City of Chula Vista GIS (May 2001)

**Adopted GP/GDP with Proposed Land Use Changes for Village 11**

*Figure 3-6*

N 0 600' 1200'

**Schools:** The planned high school in Village 11 is proposed to be relocated to Village Seven, and a middle school is proposed to be moved to Village 11 from Village Ten. This EIR also considers an alternative location for the high school in Village Eight. The adopted high school site in Village 11 occupies 50 acres, and would be replaced by a middle school site of 25 acres, resulting in a net decrease in school acreage for Village 11 of 25 acres (60 acres to 35 acres). The proposed 10-acre elementary school site would not be changed.

**Commercial:** The commercial acreage in Village 11 would essentially remain the same as the adopted GDP. The proposed GDP Amendments would reduce the commercial acreage by 0.4 acre (*Table 3-1*).

### *Phasing*

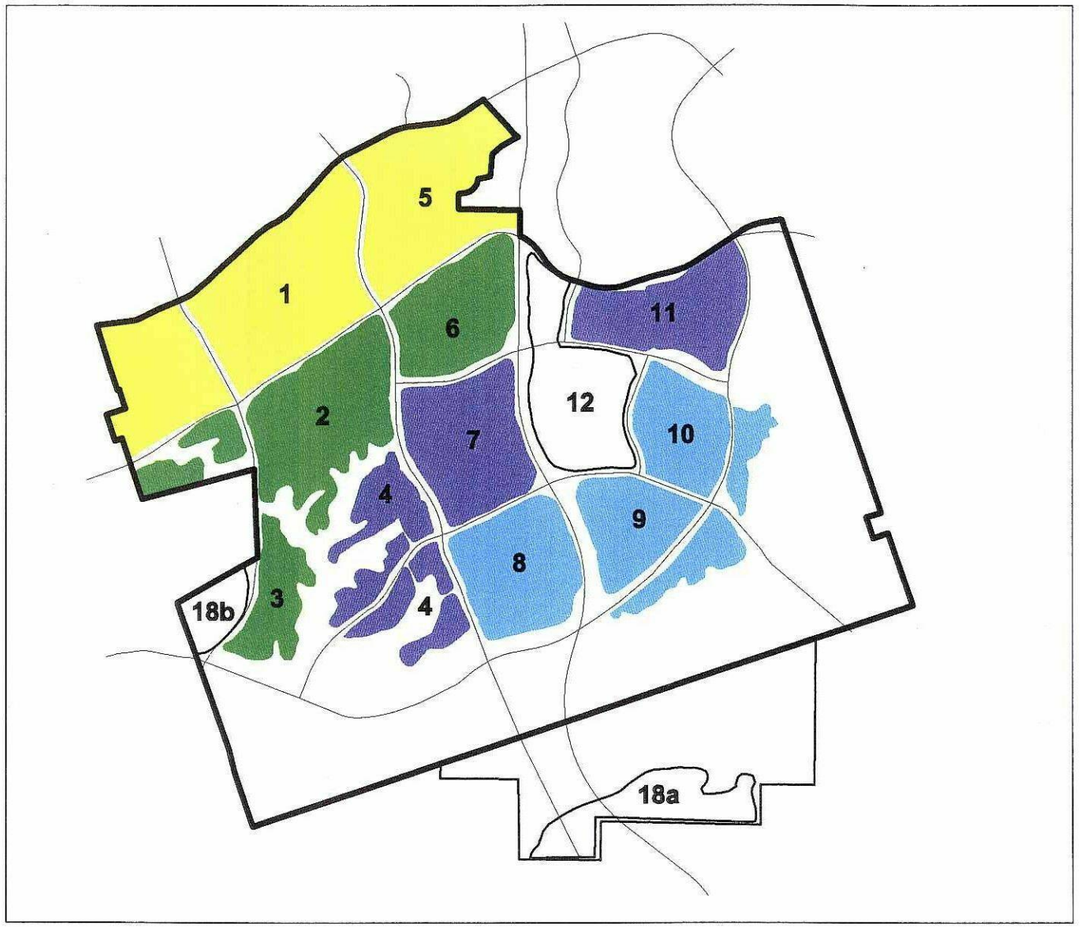
The proposed GDP Amendments includes changes to the Otay Ranch Village Phasing Plan. The fundamental premise of the Village Phasing Plan is to phase the development of planning areas in a logical order to respond to market forces, ensure timely provision of public facilities and assure the efficient use of public fiscal resources. The provision of transportation facilities is one of the major phasing determinants. In order to remain current and timely, continual evaluation and update of the Phasing Plan is allowed by the GDP/SRP.

The proposed GDP Amendments includes an amendment to the 1993 Otay Ranch Village Phasing Plan to move development of Village 11 into the Second Western Phase as shown in *Figure 3-7, Adopted and Proposed Development Phasing Plan*. This amendment is being considered due to the fact that the current construction of Olympic Parkway will provide a major transportation corridor to Village 11, which is located adjacent to Olympic Parkway. In addition, the Village 11 Project Area is immediately adjacent to developed and approved SPA areas of the EastLake community and east of two villages contained in the First Western Phase of Otay Ranch (Villages 1 and 5) that are also on the Olympic Parkway corridor.

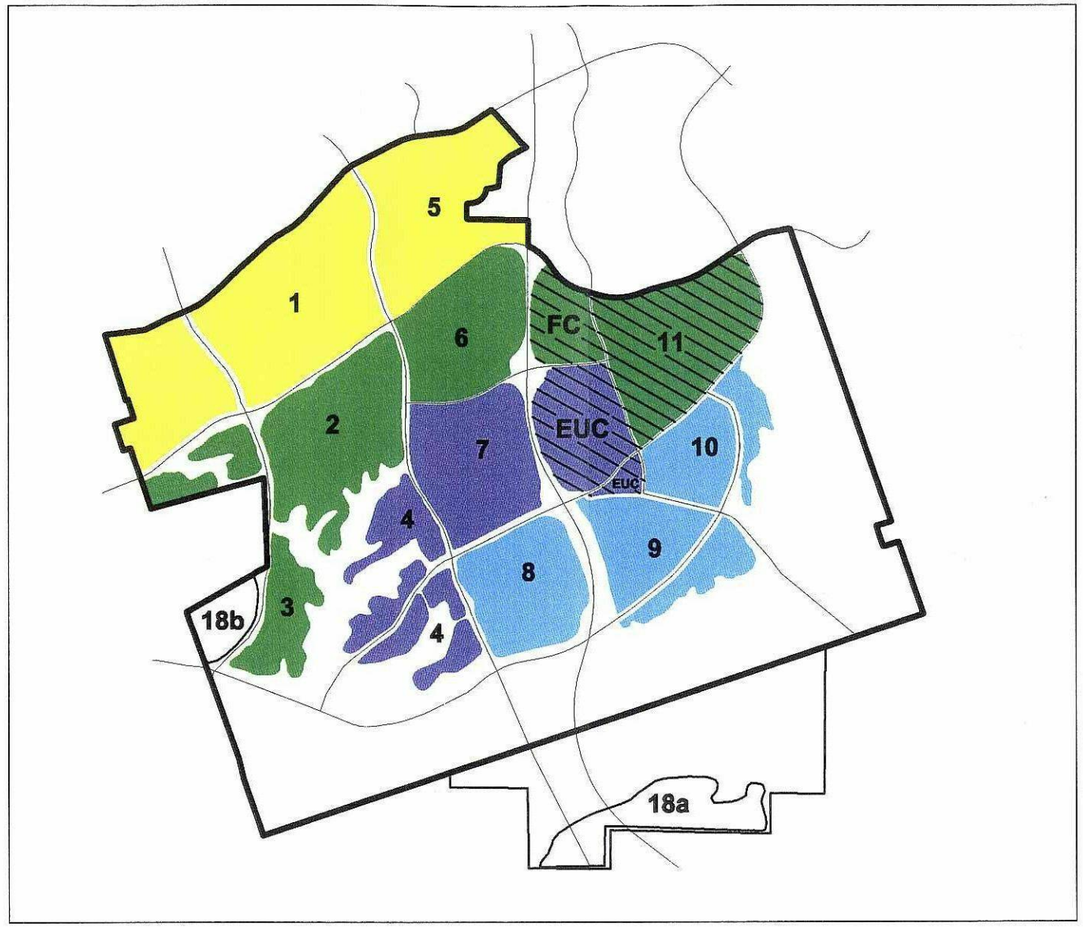
## Planning Area 12 (Freeway Commercial and Eastern Urban Center)

### *Planning Boundaries and Acreage*

The area of the Freeway Commercial (FC) portion of Planning Area 12 would increase, and the area of the Eastern Urban Center (EUC) portion of Planning Area 12 would




Adopted Phasing




Proposed Phasing

## LEGEND

- First Phase
- Second Phase
- Third Phase
- Fourth Phase
- Non-specified Phase
- Phase Change

**Phase Changes**

- Village 11 Phase Change:
  From Phase 3 to Phase 2.
- Freeway Commercial Phase Change:
  From non-specified phasing in Adopted GDP to Phase 2.
- Eastern Urban Center Phase Change:
  From non-specified phasing in Adopted GDP to Phase 3 (Commercial) and Phase 4 (Residential).

**Abbreviations**

FC - Freeway Commercial
EUC - Eastern Urban Center
UNIV - University
1 - Denotes Village Number

SOURCE: City of Chula Vista GIS (May 2001)

N 0 2500' 5000'

**Adopted and Proposed Development Phasing Plan**

*Figure 3-7*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR

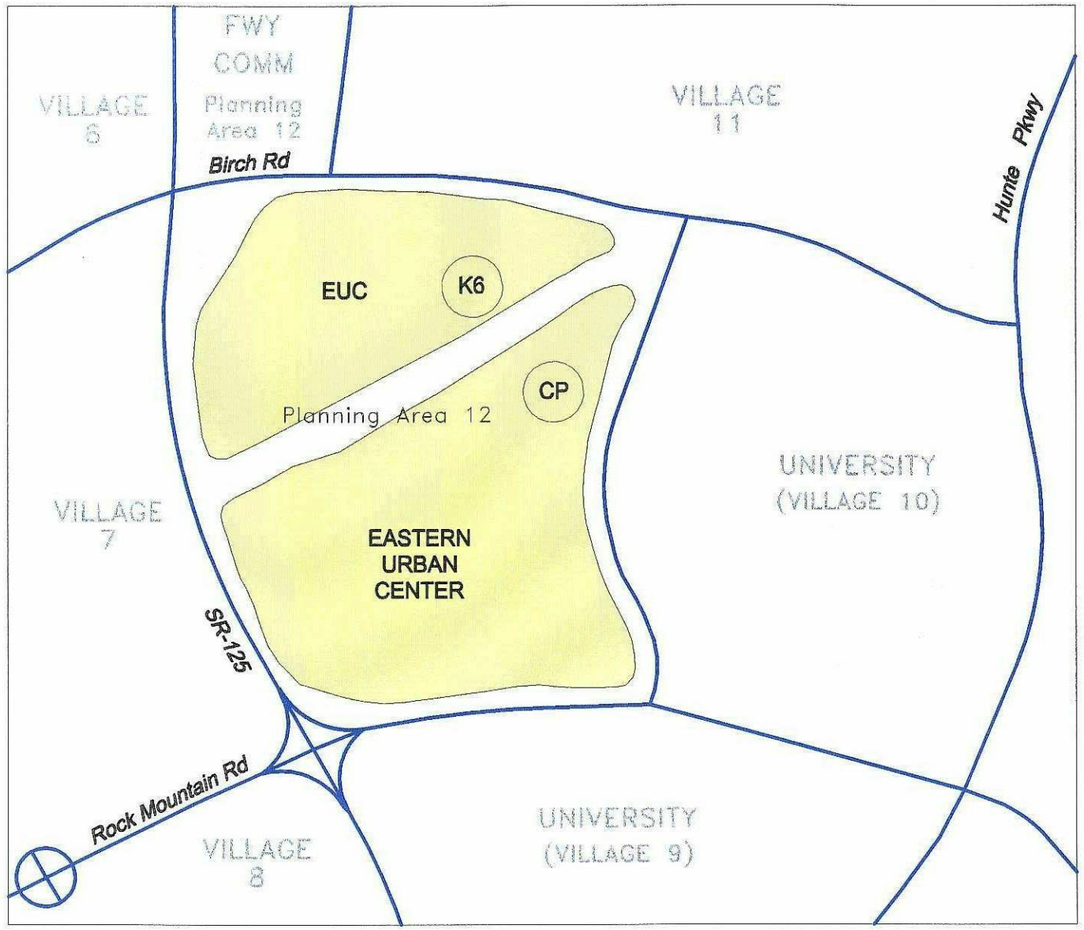
decrease due to the proposed GDP Amendments (*Figure 3-5*). The proposed change in area is primarily due to the realignment of Eastlake Parkway. *Figure 3-5* shows the proposed change to the planning area configuration. Overall, there would be a decrease of 35.4 acres in the EUC, and an increase of 28.3 acres in the FC with the proposed GDP Amendments (*Table 3-1*).

## *Land Use Amendments*

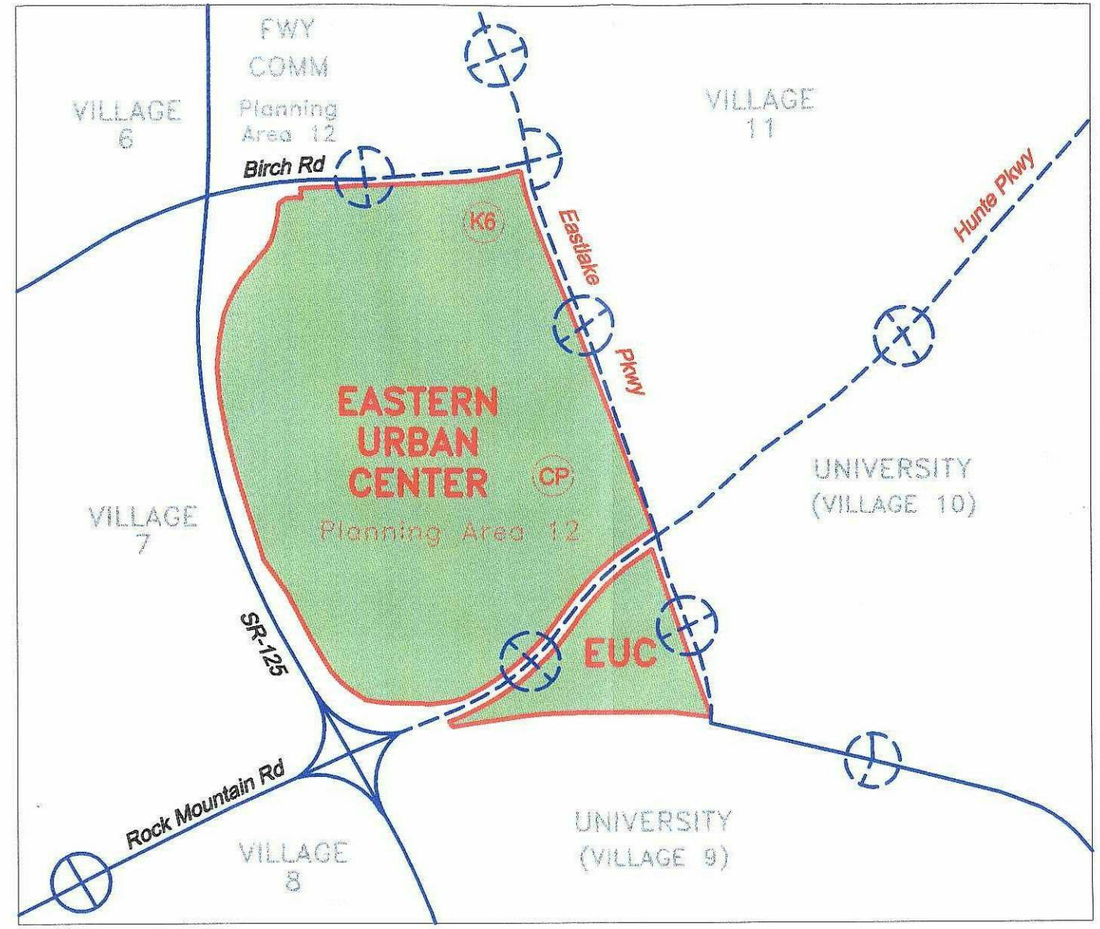
**Residential:** The proposed boundary change would result in a reduction in residential development in the EUC area of Planning Area 12. The adopted GDP permits the development of 2,500 multi-family units. The proposed GDP Amendments would reduce the permitted number of multi-family units to 2,332, for a reduction of 168 units (*Table 3-1*). The residential acreage would similarly decrease in the EUC of Planning Area 12. There would be a net decrease of 4.6 acres of residential acreage. *Figure 3-8, Adopted GP/GDP with Proposed Land Use Changes for the Eastern Urban Center,* shows the adopted GDP and proposed land use changes for the EUC. No residential development is planned for the FC area of Planning Area 12. *Figure 3-9, Adopted GP/GDP with Proposed Land Use Changes for the Freeway Commercial,* shows the adopted GDP and proposed land use changes for the FC.

**Parks and Open Space:** The proposed GDP Amendments would not change the park acreage allocated to Planning Area 12. The planned 45 acres of parkland would remain in the EUC (*Figure 3-8*). The proposed GDP Amendments would increase the open space acreage in both the EUC and FC by 2.8 and 6.4 acres, respectively (*Table 3-1*).

As discussed previously, the adopted Village Greenway runs from Wolf Canyon to Salt Creek traversing through Village Seven, the EUC, and Village 11. Due to the arterial street changes, realignment of the Village Greenway is proposed in the EUC. The proposed alignment of the Greenway would extend from the under crossing at SR-125 to the southeastern corner of the EUC (*Figure 3-8*). There it would connect with the realigned corridor through Village 11. The average width of the Greenway would be 200 feet through Village Seven and the Eastern Urban Center, and 75 feet through Village 11.




Adopted Plan




Proposed Plan

## LEGEND

- Original EUC
- Proposed EUC Boundaries
- Adopted Circulation Streets
- Proposed Circulation Streets
- Adopted Intersection (Half Symbol = Half Intersection)
- Proposed Intersection (Half Symbol = Half Intersection)

CP - Community Park
K6 - Kindergarden-Grade 6 Elementary School

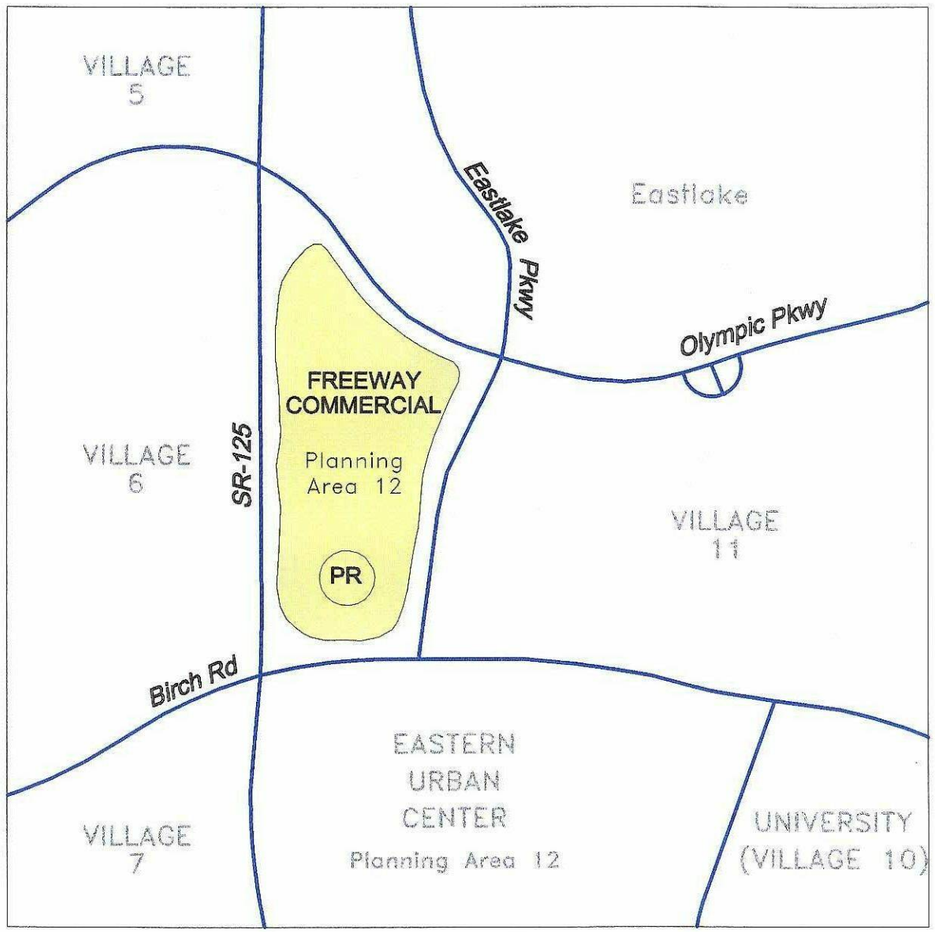
SOURCE: City of Chula Vista GIS (May 2001)

N 0 600' 1200'

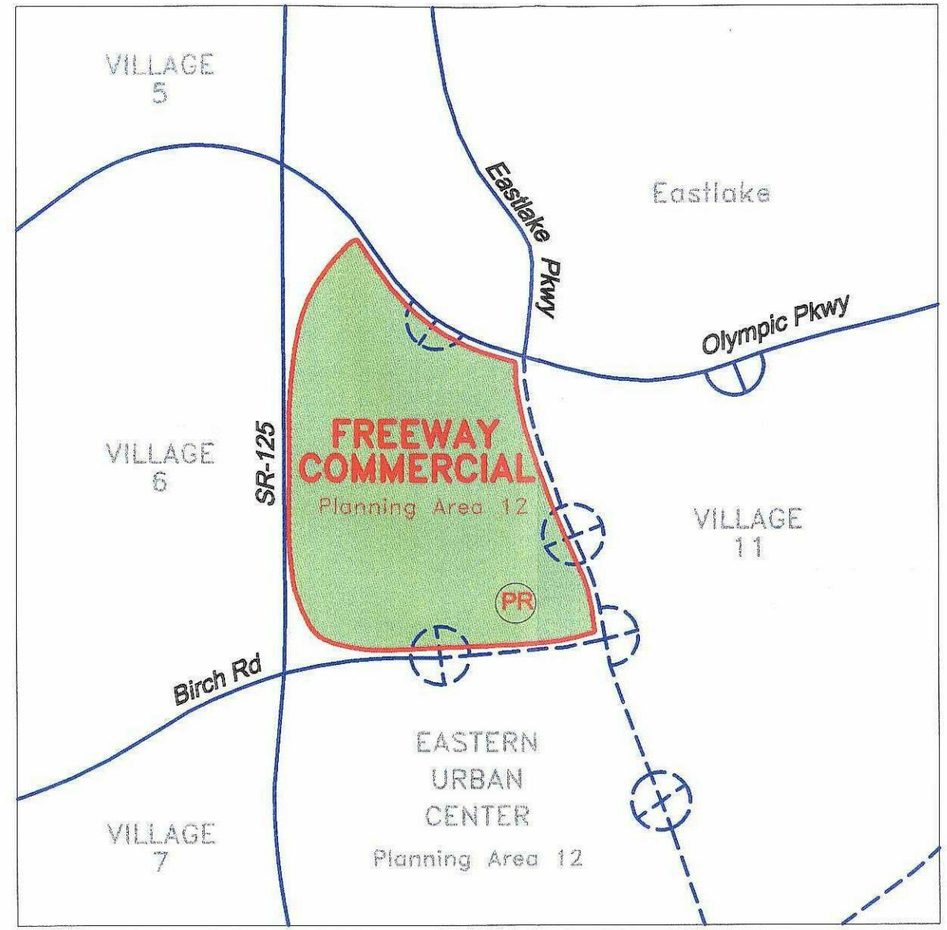
**Adopted GP/GDP with Proposed Land Use Changes for The Eastern Urban Center**

*Figure 3-8*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR




Adopted Plan




Proposed Plan

## LEGEND

- Original GDP Village
- Proposed Village Boundaries
- Adopted Circulation Streets
- Proposed Circulation Streets
- Adopted Intersection (Half Symbol = Half Intersection)
- Proposed Intersection (Half Symbol = Half Intersection)

LMV- Low-Medium Village Density Residential
MH - Medium-High Density Residential
PQ - Public/Quasi-Public Facility
P - Park
PR - Park & Ride Facility
HS - High School
JH - Junior High School
K6 - Kindergarden-Grade 6 Elementary School
MU Mixed Use

SOURCE: City of Chula Vista GIS (May 2001)

**Adopted GP/GDP with Proposed Land Use Changes for The Freeway Commercial**

*Figure 3-9*

N 0 600' 1200'

**Community Purpose Facilities:** Because there are no residential land uses in the FC, a CPF site is not included in the FC area of Planning Area 12 (*Figure 3-9*). However, the 8.9 acres allocated to a CPF site in the EUC would reduce to 8.3 acres, for a net decrease of 0.6 acres. The reduction in CPF acreage is due to the reduction in residential units in the EUC.

**Schools:** A 10-acre school site would remain in the EUC (*Figure 3-8*). No school sites are planned for the FC (*Figure 3-9*).

**Commercial:** Overall, the proposed GDP Amendments would decrease the commercial acreage in the EUC and would increase the commercial acreage in the FC due primarily to the realignment of Eastlake Parkway. As shown in *Table 3-1*, the commercial acreage in the EUC would decrease by 36.3 acres. The commercial acreage in the FC would increase by 18.7 acres (*Figures 3-8 and 3-9*).

### *Phasing*

Similar to Village 11, the proposed GDP Amendments includes an amendment to the 1993 Otay Ranch Village Phasing Plan to move development of the FC area of Planning Area 12 into the Second Western Phase (*Figure 3-7*). Olympic Parkway will provide a major transportation corridor to FC area of Planning Area 12, and similar to Village 11, the FC area is immediately adjacent to developed and approved SPA areas of the EastLake community and Otay Ranch.

## Village Seven

Village Seven is the proposed location for the proposed relocation of the high school site from Village 11. The proposed relocation of the high school site from Village 11 to Village Seven is consistent with recent discussions between the city and the Sweetwater Union High School District to accommodate the needs and timing considerations of the District. The GDP adopted in 1993 originally included high school sites in Villages Seven and 11. The original Village Seven high school site was subsequently moved to Village Two, and the GDP was amended to show that relocation. The proposed GDP Amendments would relocate the high school planned for Village 11 to Village Seven as described below. An alternative high school site location in Village 8 is also included and evaluated as a component of the proposed GDP Amendments. It should be noted that if Village 8 were selected as the location for the future high school site, then no amendments or changes would be required for Village 7.

## Planning Boundaries and Acreage

The proposed arterial road realignments would not change the gross acreage of Village Seven. Village Seven would remain at 411.7 acres consistent with the currently adopted GDP.

## Land Use Amendments

The adopted GDP proposes residential, parks/open space, CPF, schools and commercial land uses within Village Seven. As shown in *Figure 3-10, Adopted GP/GDP with Proposed Land Use Changes for Village Seven*, the proposed GDP Amendments would change the Village Seven land use distribution, as discussed below:

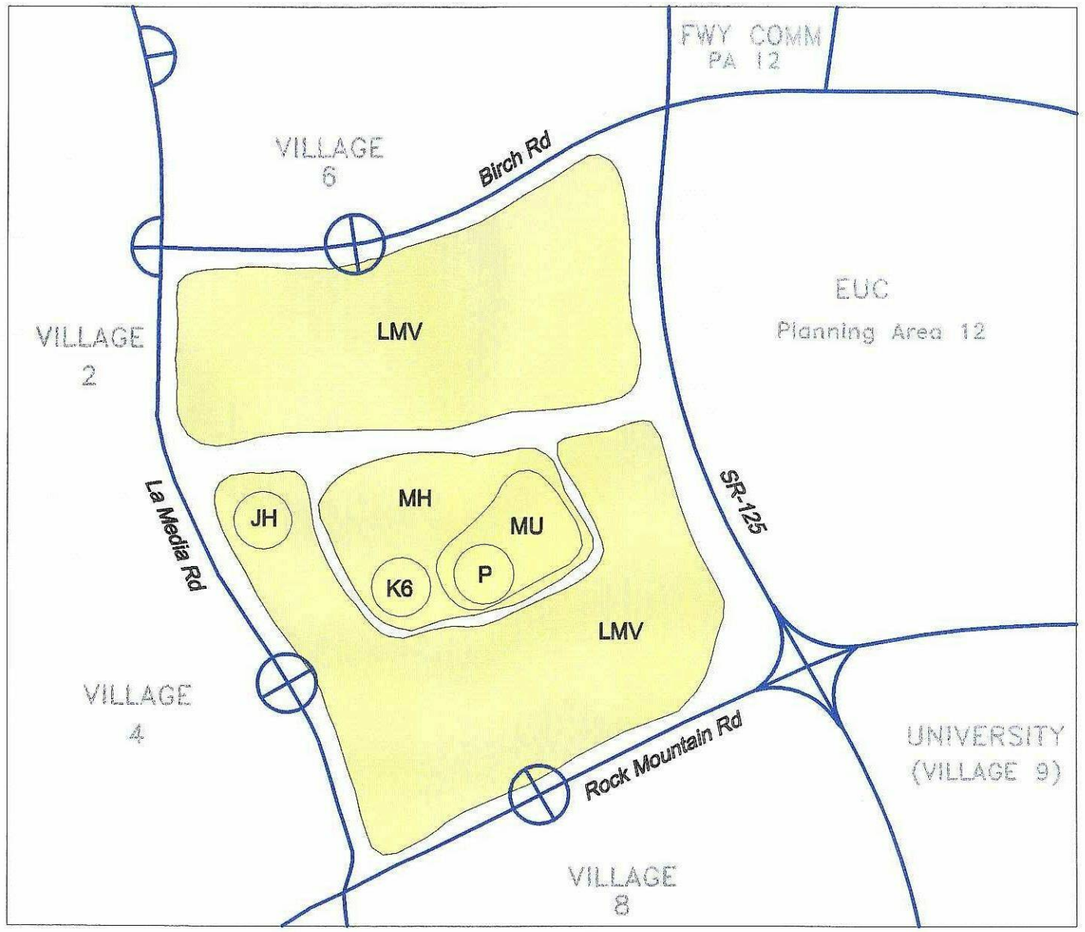
**Residential:** The currently adopted GDP permits the development of 1,303 single-family units. Under this scenario, the proposed GDP Amendments would reduce the permitted number of single-family units to 1,053, for a reduction of 250 units (*Table 3-1*). The residential acreage would similarly decrease by 50 acres. There would be no change to the permitted multi-family use. The proposed changes to Village Seven would result in a land use plan consistent with the Village Seven design proposed in the adopted 1993 Otay Ranch GDP.

**Parks and Open Space:** The proposed GDP Amendments would not change the proposed park acreage in Village Seven.

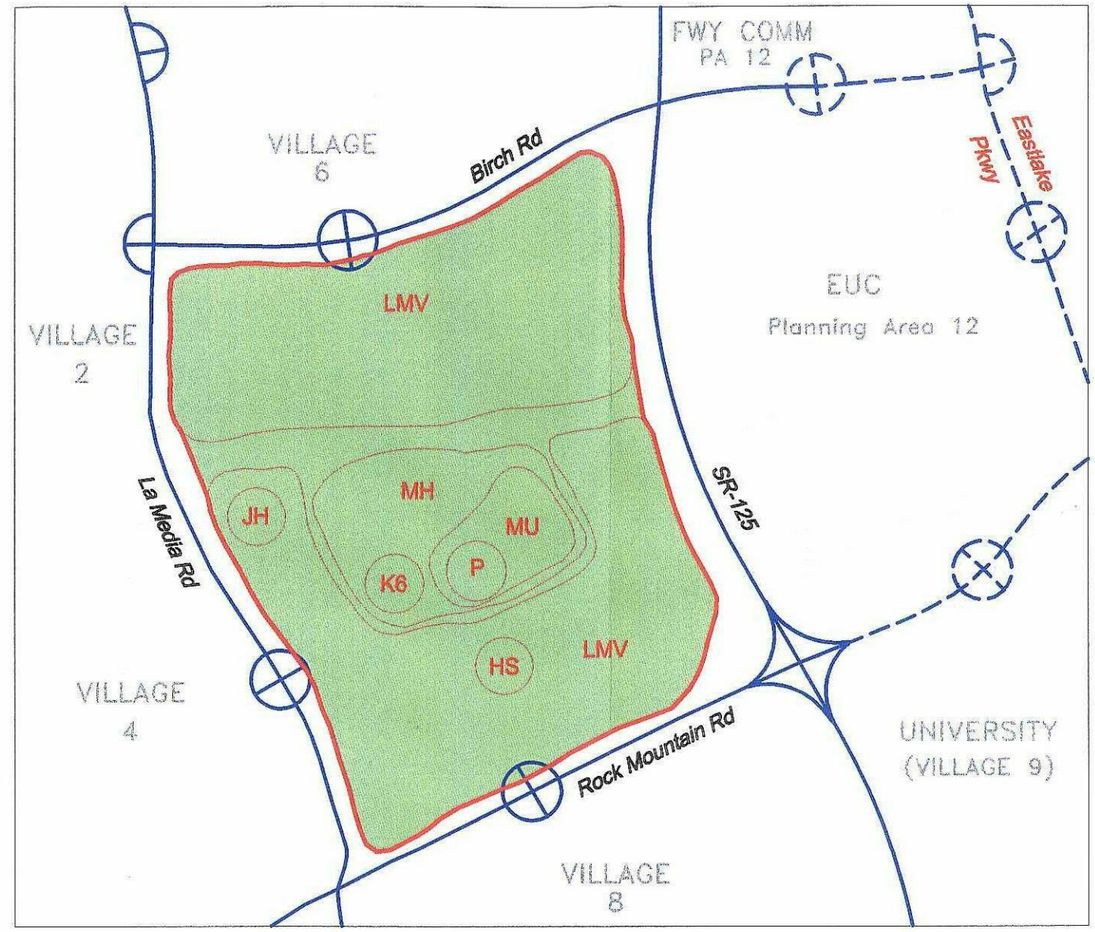
**Community Purpose Facilities:** The proposed GDP Amendments would not change the proposed community purpose facility acreage in Village Seven.

**Schools:** The proposed GDP Amendments would relocate the high school planned for Village 11 to Village Seven (*Table 3-1; Figure 3-10*). As discussed previously, Village Seven would not be reduced in size with the arterial street alignments and would be of sufficient size to accommodate a high school site.

**Commercial:** The proposed GDP Amendments would not change the adopted GDP with respect to commercial acreage.




Adopted Plan




Proposed Plan

## LEGEND

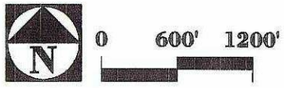
- Original GDP Village
- Proposed Village Boundaries
- Adopted Circulation Streets
- Proposed Circulation Streets
- Adopted Intersection (Half Symbol = Half Intersection)
- Proposed Intersection (Half Symbol = Half Intersection)

LMV- Low-Medium Village Density Residential
MH - Medium-High Density Residential
P - Park
HS - High School
JH - Junior High School
K6 - Kindergarden-Grade 6 Elementary School
MU - Mixed Use

SOURCE: City of Chula Vista GIS (May 2001)

**Adopted GP/GDP with Proposed Land Use Changes for Village Seven**

*Figure 3-10*



### *Phasing*

No changes to the Otay Ranch Phasing Plan are proposed for Village Seven. Village Seven would develop in conjunction with Village Four in the Third Western Phase.

## Village Eight

An alternative high school site location is proposed in Village 8 as a part of the proposed GDP Amendments. A discussion of the Village 8 land use changes are provided below. If the alternative high school location is not selected, then no amendments to Village 8 would be needed and land uses would remain the same as proposed in the adopted GDP.

### *Planning Boundaries and Acreage*

The proposed arterial road realignments would not change the gross acreage of Village Eight. Village Eight would remain at 342.8 acres consistent with the currently adopted GDP.

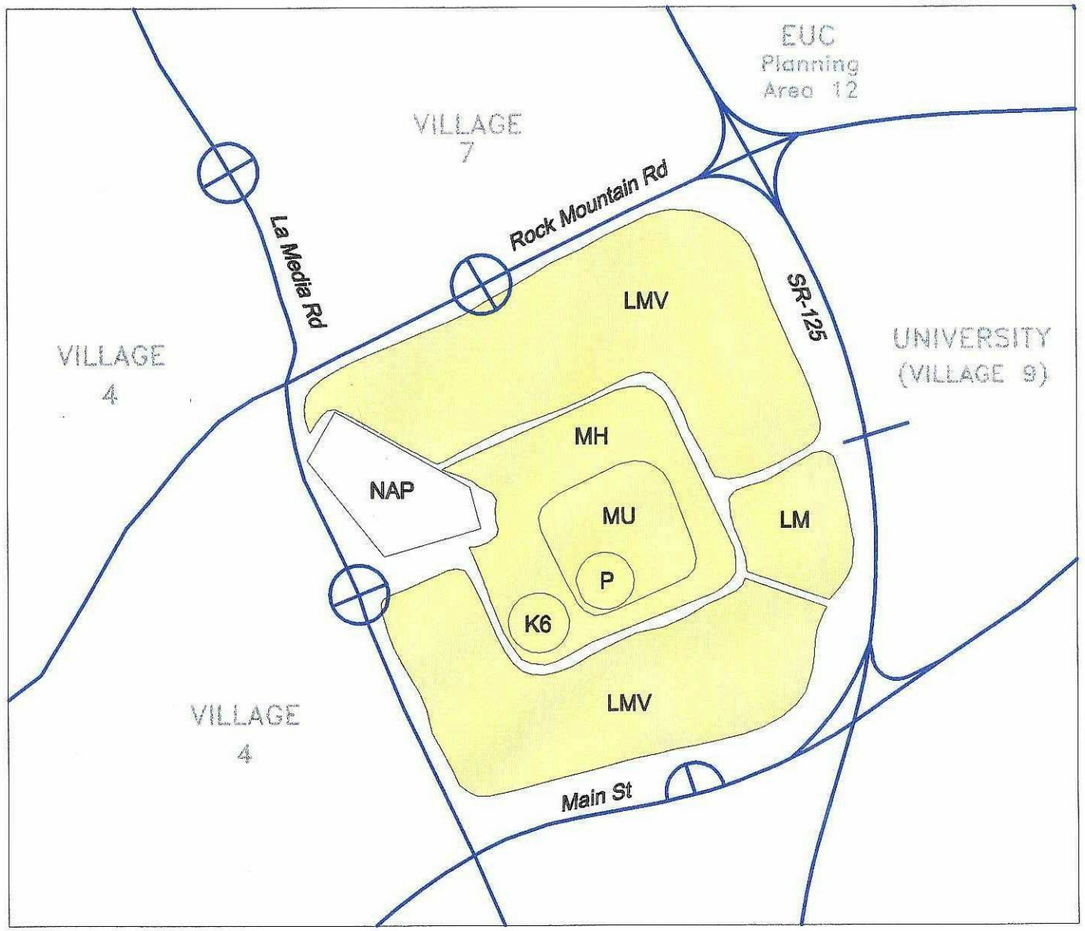
### *Land Use Amendments*

The adopted GDP proposes residential, parks/open space, CPF, schools and commercial land uses within Village Eight. As shown in *Figure 3-11, Adopted GP/GDP with Proposed Land Use Changes for Village Eight*, the proposed GDP Amendments would change the Village Eight land use distribution, as discussed below:

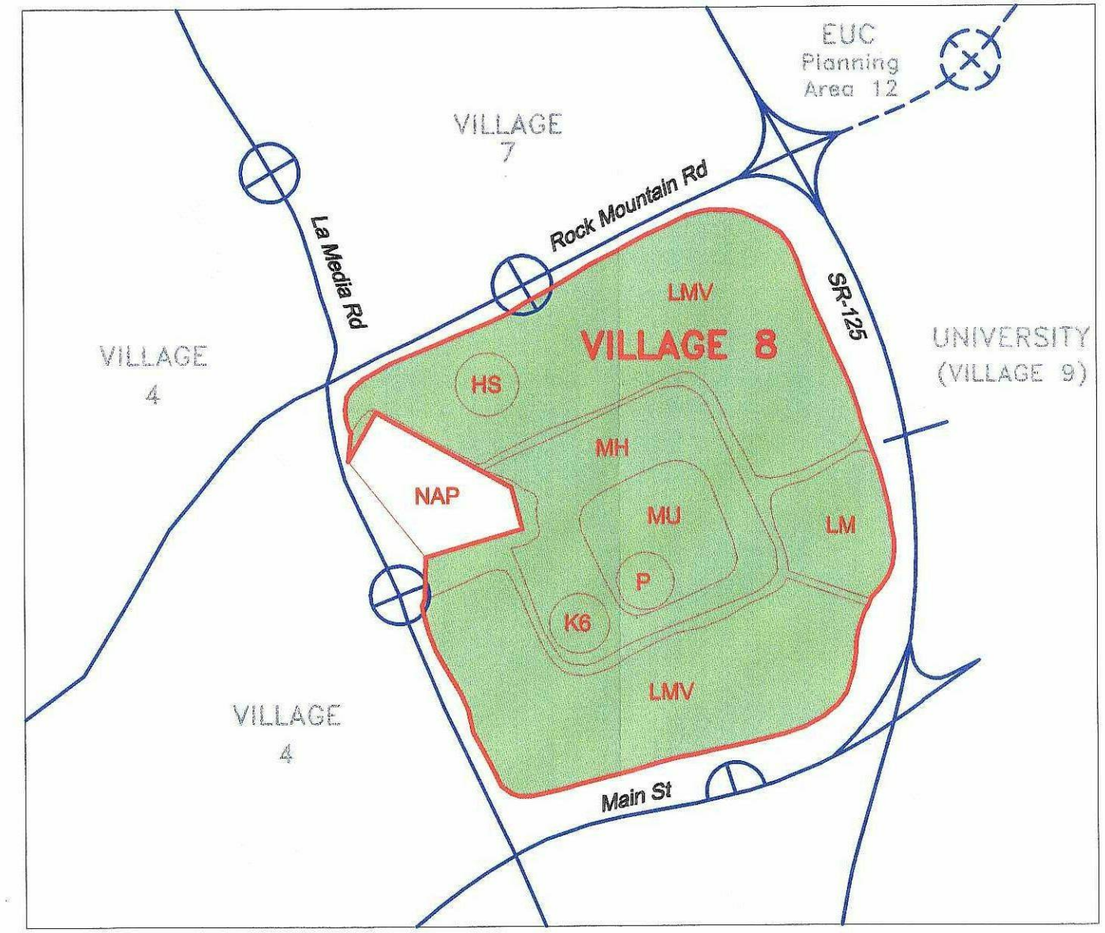
**Residential:** The currently adopted GDP permits the development of 1,021 single-family units. Under this scenario, the proposed GDP Amendments would reduce the permitted number of single-family units to 781, for a reduction of 240 units (*Table 3-1*). The residential acreage would similarly decrease by 50 acres. There would be no change to the permitted multi-family use.

**Parks and Open Space:** The proposed GDP Amendments would not change the proposed park acreage in Village Eight.

**Community Purpose Facilities:** The proposed GDP Amendments would not change the proposed community purpose facility acreage in Village Eight.




Adopted Plan




Proposed Plan

## LEGEND

- Original GDP Village
- Proposed Village Boundaries
- Adopted Circulation Streets
- Proposed Circulation Streets
- Adopted Intersection (Half Symbol = Half Intersection)
- Proposed Intersection (Half Symbol = Half Intersection)

LM - Low-Medium Density Residential
LMV- Low-Medium Village Density Residential
MH - Medium-High Density Residential
P - Park
HS - High School
JH - Junior High School
K6 Kindergarden-Grade 6 Elementary School
MU Mixed Use
NAP Not A Part

SOURCE: City of Chula Vista GIS (May 2001)

N 0 600' 1200'

**Adopted GP/GDP with Proposed Land Use Changes for Village Eight**

*Figure 3-11*

**Schools:** The proposed GDP Amendments would relocate the high school planned for Village 11 to Village Eight (*Table 3-1; Figure 3-11*). As discussed previously, Village Eight would not be reduced in size with the arterial street alignments and would be of sufficient size to accommodate a high school site.

**Commercial:** The proposed GDP Amendments would not change the adopted GDP with respect to commercial acreage.

### *Phasing*

No changes to the Otay Ranch Phasing Plan are proposed for Village Eight. Development of Village Eight is planned for the Fourth Western Phase.

## Village Nine (University Land Use Scenario)

The GDP addresses two land use scenarios for Villages Nine and Ten. The primary land use designation is University. The GDP states that Villages Nine and Ten may be developed at any time for a university campus and ancillary uses such as campus-related commercial, residential, and research and development support services. Villages Nine and Ten also have secondary designations for "Village" purposes, including residential, park, open space, CPF, school, and commercial uses. This area may be developed for such secondary land uses only after the development of "Western Phases I, II and III," as identified in the Otay Ranch Phasing Plan, has been completed. Completion of such development for purposes of this requirement shall be deemed to be issuance of building permits for 75% of the residential units in Phases I through III (Otay Ranch GDP/SRP).

The proposed GDP Amendments would affect development of Villages Nine and Ten under the University land use scenario. Thus, both scenarios are discussed below.

### *Planning Boundaries and Acreage*

*Table 3-1* shows that the gross acreage in Village Nine would not change with the proposed GDP Amendments under the University scenario. Village Nine would remain 363.9 acres. However, as shown in *Figure 3-5*, Village Nine would be reconfigured primarily due to the realignment of Hunte Parkway.

### Land Use Amendments

The adopted GDP designates the primary land use for Village Nine as University *(Figure 3-12, Adopted GP/GDP and Proposed Land Use Changes for Village Nine – University Land Use Plan)*. As such, under the primary land use scenario, no residential, parks/open space, CPF site, schools or commercial land uses are planned. The proposed GDP Amendments would add a total of 14.8 acres of University land as a result of the realignment of Hunte Parkway and deletion of Main Street through the University site. .

### Phasing

No changes to the Otay Ranch Phasing Plan are proposed for Village Nine. Development of Village Nine is planned for the Fourth Western Phase. However, the GDP allows for the University to develop at any time.

## Village Nine (Residential Village Land Use Scenario)

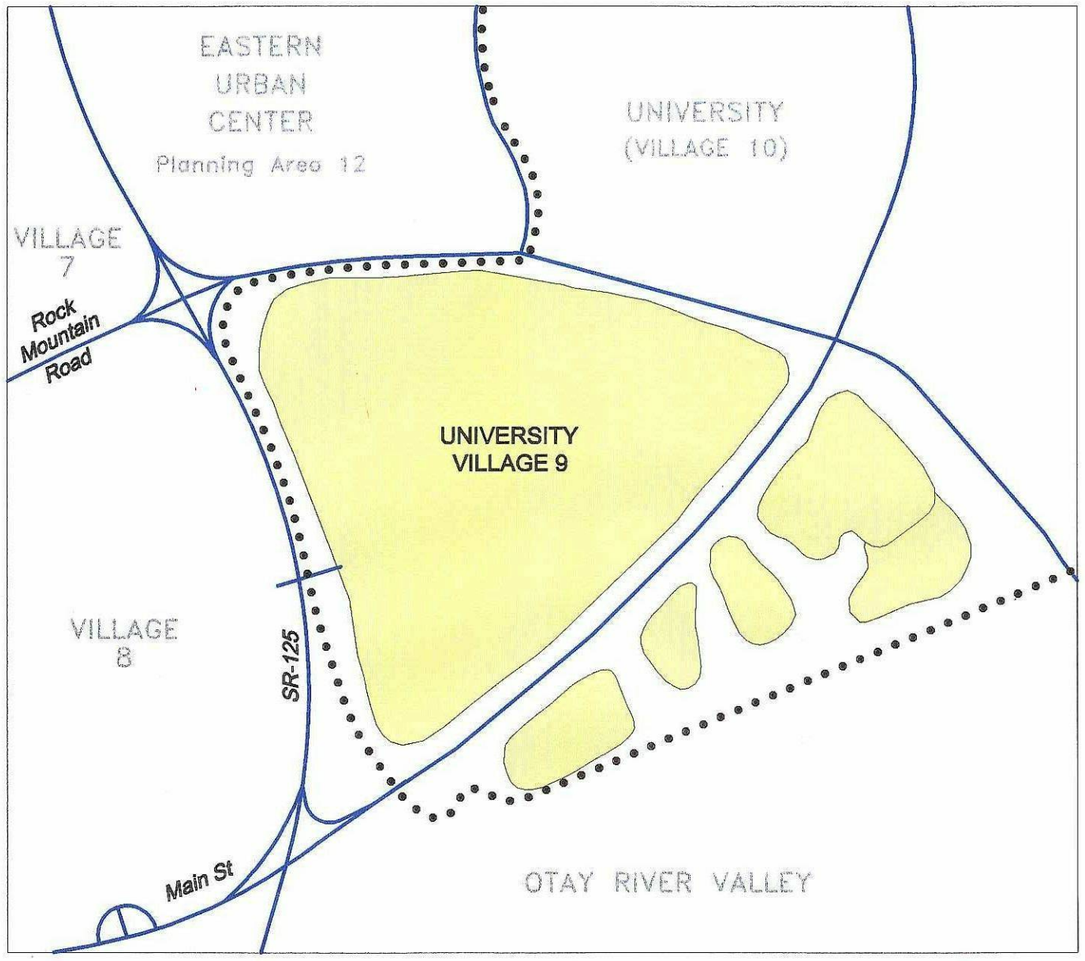
As discussed previously, the GDP provides for the development of Village Nine as a village as the secondary land use development scenario in the event that a University is not developed, and 75% of the residential units in Western Phases I through III have been developed. The proposed GDP Amendments would not affect the land use mix under the village secondary land use scenario, as shown in *Table 3-2, Comparison of Adopted and Proposed GDP Land Use Designations and Acreage Under Residential Scenario* and in *Figure 3-13, Adopted GP/GDP with Proposed Land Use Changes for Village Nine, Village Scenario*.

### Planning Boundaries and Acreage

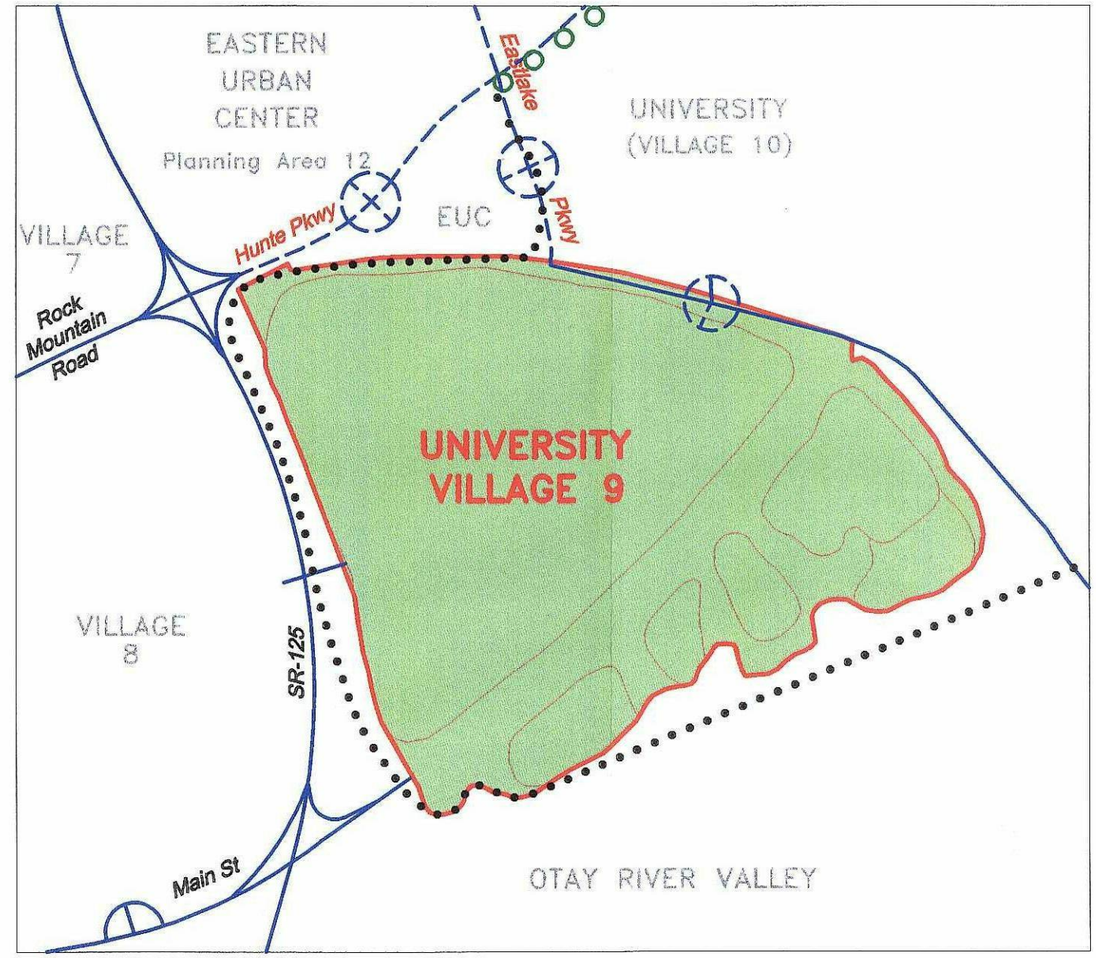
*Table 3-2* shows that the gross acreage in Village Nine would not change with the proposed GDP Amendments under the Village Secondary Land Use scenario. Village Nine would remain 363.9 acres.

### Phasing

No changes to the Otay Ranch Phasing Plan are proposed for Village Nine. Village Nine would develop in the Fourth Western Phase.




Adopted Plan




Proposed Plan

## LEGEND

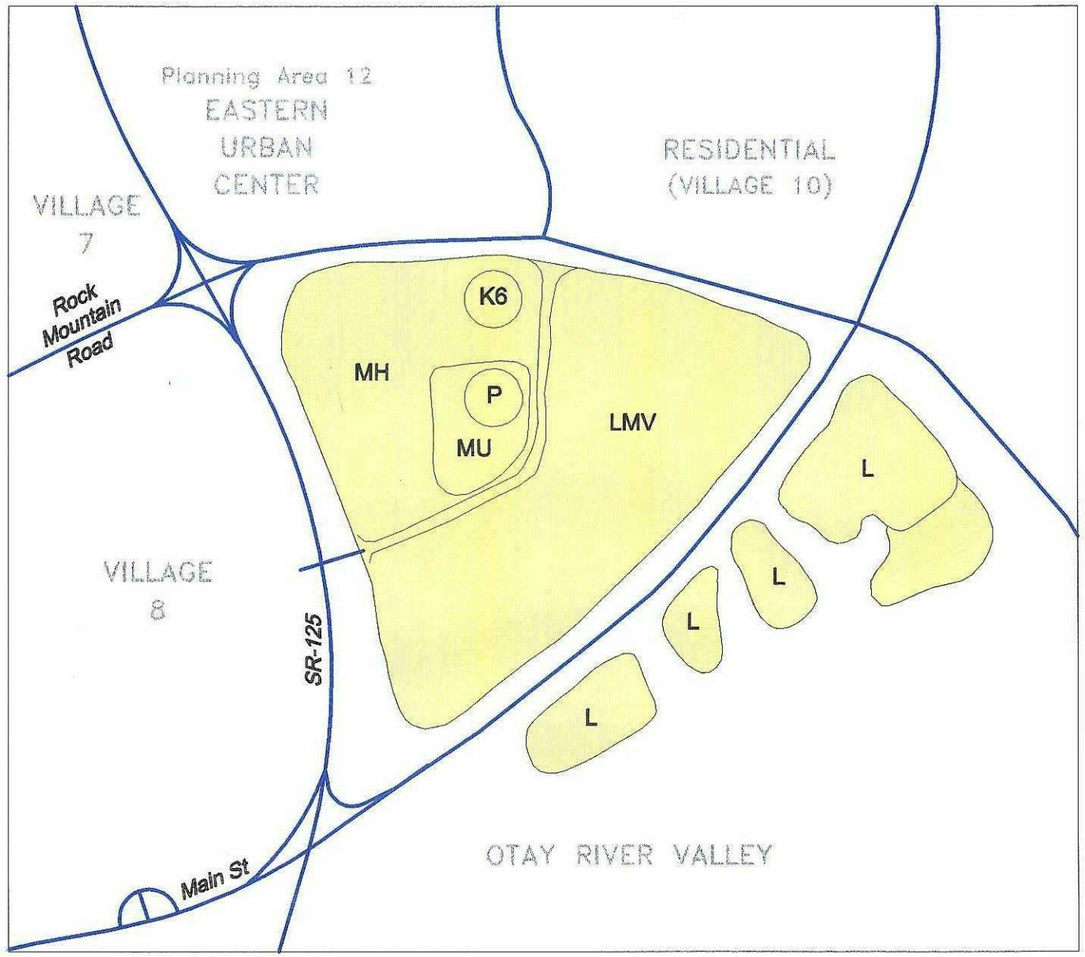
- Original GDP Village
- Proposed Village Boundaries
- Adopted University Boundary
- Adopted Circulation Streets
- Proposed Circulation Streets
- Proposed Change to University Boundary
- Adopted Intersection (Half Symbol = Half Intersection)
- Proposed Intersection (Half Symbol = Half Intersection)

SOURCE: City of Chula Vista GIS (May 2001)

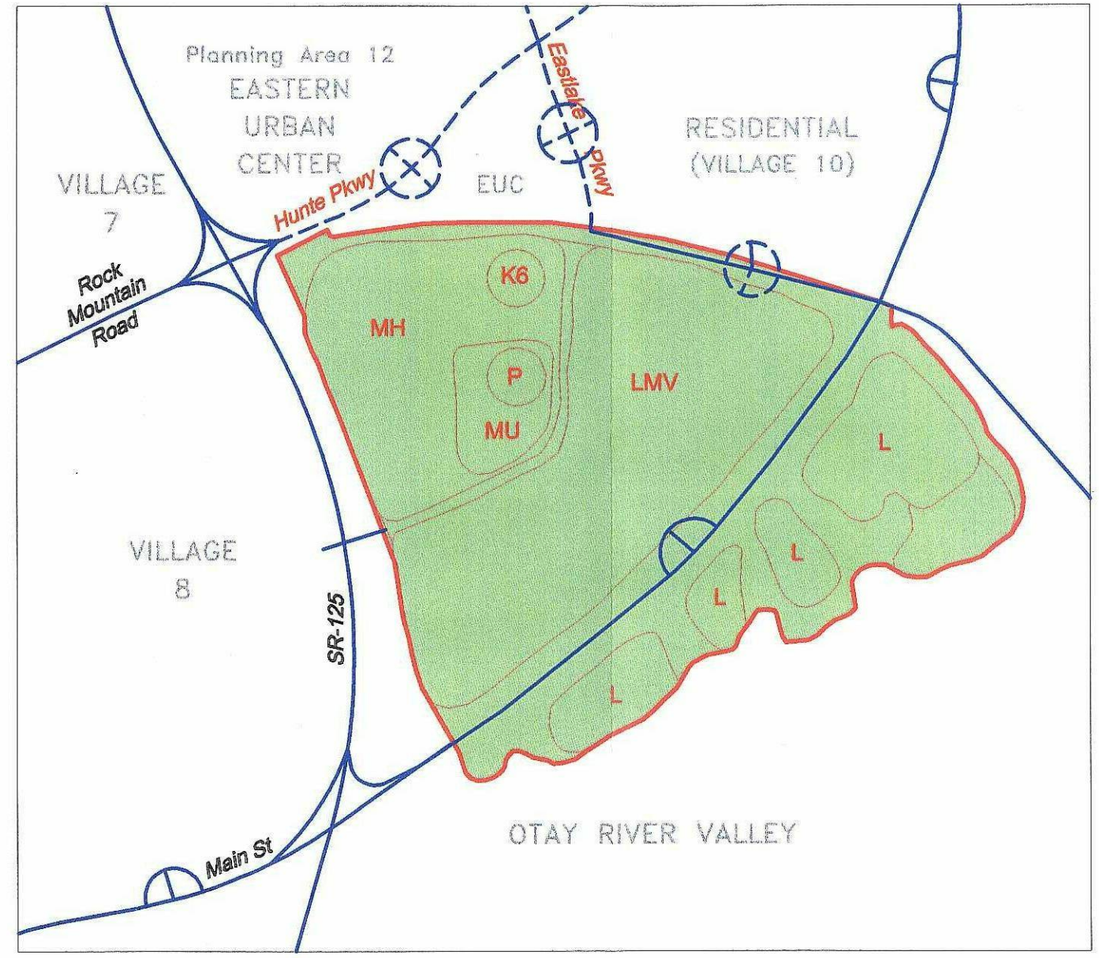
**Adopted GP/GDP with Proposed Land Use Changes**
**Village Nine, University Land Use Plan**

N 0 600' 1200'

*Figure 3-12*




Adopted Plan




Proposed Plan

## LEGEND

- Original GDP Village
- Proposed Village Boundaries
- Adopted Circulation Streets
- Proposed Circulation Streets
- Adopted Intersection (Half Symbol = Half Intersection)
- Proposed Intersection (Half Symbol = Half Intersection)

L - Low Density Residential
LMV- Low-Medium Village Density Residential
MH - Medium-High Density Residential
P - Park
K6 - Kindergarden-Grade 6 Elementary School
MU - Mixed Use

SOURCE: City of Chula Vista GIS (May 2001)

N 0 600' 1200'

**Adopted GP/GDP with Proposed Land Use Changes**
**Village Nine, Village Scenario**

*Figure 3-13*

# TABLE 3-2

## COMPARISON OF ADOPTED AND PROPOSED GDP LAND USE DESIGNATIONS AND ACREAGE UNDER RESIDENTIAL SCENARIO[1]

| Land Use Designation and Acreage | Village Seven[4] | | Village Eight[4] | | Village 9 | | Village Ten | | Village 11 | | Planning Area 12 EUC | | Planning Area 12 FC | | Net Change (Village Seven Primary High School Site) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Adopted | Proposed GDP (Change) | Adopted | Proposed GDP (Change) | Adopted GDP | Proposed GDP (Change) | Adopted GDP | Proposed GDP (Change) | Adopted | Proposed GDP (Change) | Adopted | Proposed GDP (Change) | Adopted | Proposed GDP (Change) | |
| SF Units | 1,303 | 1,053 (– 250) | 1,021 | 781 (– 240) | 735 | 510 (-225) | 819 | 669 (-150) | 745 | 1,005 (260) | 0 | 0.0 (0.0) | 0 | 0 (0) | -365 |
| MF Units | 448 | 448 (0) | 436 | 436 (0) | 1,010 | 1,010 (0) | 271 | 170 -101) | 1,001 | 1,385 (384) | 2,500 | 2,332 (-168) | 0 | 0 (0) | 115 |
| Total Residential Units | 1,751 | 1,501 (– 250) | 1,457 | 1,217 (– 240) | 1,745 | 1,520 (-225) | 1,090 | 839 (-251) | 1,746 | 2,390 (644) | 2,500 | 2,332 (-168) | 0 | 0 (0) | 0 |
| Residential Acreage | 291.5 | 241.5 (– 50.0) | 267.7 | 217.7 (– 50.0) | 251.1 | 201.1 (-50.0) | 178.1 | 146.1 (-32.0) | 238.9 | 306.7 (67.8) | 70.1 | 65.5 (-4.6) | 0.0 | 0.0 (0.0) | -18.8 |
| Park Acreage[2] | 9.3 | 9.3 (0) | 8.9 | 8.9 (0) | 10.0 | 10.0 (0.0) | 34.7 | 34.7 (0.0) | 10.0 | 10.0 (0.0) | 45.0 | 45.0 (0.0) | 0.0 | 0.0 (0.0) | 0.0 |
| Open Space Acreage | 45.3 | 45.3 (0) | 22.6 | 22.6 (0) | 58.1 | 59.1 (1.0) | 40.1 | 56.7 (16.6) | 95.0 | 51.4 (-43.6) | 13.3 | 16.1 (2.8) | 6.7 | 13.1 (6.4) | -16.8 |
| CPF Acreage[3] | 6.3 | 6.3 (0) | 6.0 | 6.0 (0) | 6.9 | 5.9 (-1.0) | 4.6 | 3.6 (-1.0) | 6.9 | 9.4 (2.5) | 8.9 | 8.3 (-0.6) | 0.0 | 0.0 (0.0) | -0.1 |
| School Acreage | 35.0 | 85.0 (50.0) | 10.0 | 60.0 (50.0) | 10.0 | 10.0 (0) | 35.0 | 10.0 (-25.0) | 60.0 | 35.0 (-25.0) | 10.0 | 10.0 (0.0) | 0.0 | 0.0 (0.0) | 0.0 |
| Commercial Acreage | 7.2 | 7.2 (0) | 13.4 | 13.4 (0) | 8.7 | 8.7 (0.0) | 20.0 | 3.0 (-17.0) | 10.4 | 10.0 (-0.4) | 155.0 | 118.7 (-36.3) | 91.5 | 110.2 (18.7) | -35.0 |
| Arterial Acreage | 17.1 | 17.1 (0) | 14.2 | 14.2 (0) | 19.1 | 19.1 (0.0) | 40.1 | 56.7 (16.6) | 33.8 | 66.5 (32.7) | 16.1 | 19.5 (3.4) | 8.1 | 11.2 (3.1) | 33.2 |
| University Acreage | 0 | 0 (0) | 0 | 0 (0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 0.0 | 0.0 (0.0) | 0.0 |
| Gross Acreage | 411.7 | 411.7 (0) | 342.8 | 342.8 (0) | 363.9 | 363.9 (0.0) | 333.6 | 269.2 (-64.4) | 455.0 | 489.0 (34.0) | 318.5 | 283.1 (-35.4) | 106.2 | 134.5 (28.3) | -37.5 |

1 This analysis addresses the Residential Scenario which assumes that Villages 9 and 10 develop primarily as residential uses , and the Proctor Valley parcel and San Ysidro Mountains develop as currently adopted.

2 Actual park acres will be determined at the SPA level.

3 Actual CPF acres will be determined at the SPA level.

4 Village Seven is the primary high school site; ony one option for the highschool site will be selected.

SF - Single family; MF - Multi family; CPF - Community Purpose Facility

Source: City of Chula Vista, 2001.

## Village Ten (University Land Use Scenario)

As discussed previously, the GDP addresses two land use scenarios for Villages Nine and Ten. The primary land use addressed in the GDP for Village Ten is University. The secondary land use is as a Village, with the primary land use being residential. The proposed GDP Amendments would affect both scenarios. Thus, both scenarios are discussed below for Village Ten.

### *Planning Boundaries and Acreage*

As shown in *Table 3-1*, the proposed GDP Amendments would reduce the acreage of Village Ten by 64.4 acres. There would also be a reduction in acreage allocated to arterials (6.3 acres) primarily due to the relocation of Hunte Parkway. *Figure 3-5* shows the reconfiguration of Village Ten.

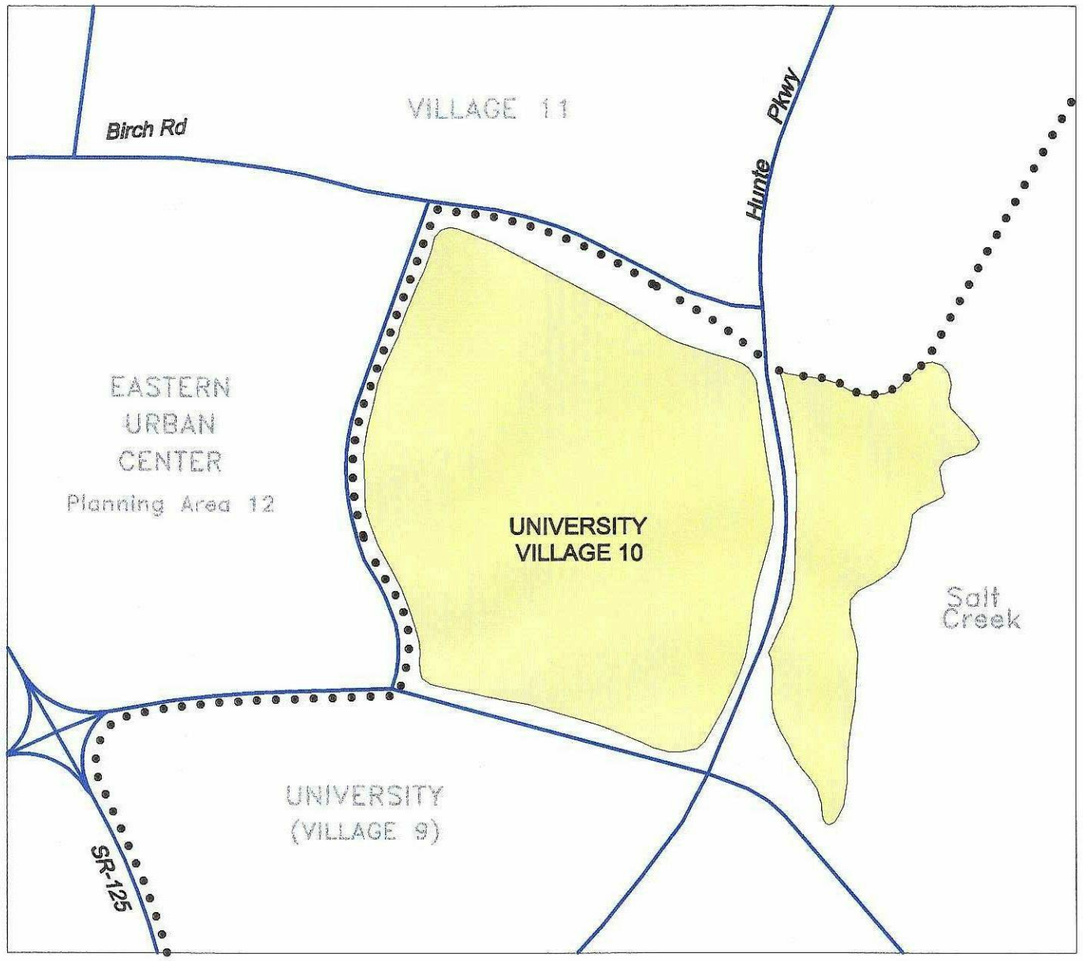
### *Land Use Amendments*

The adopted GDP designates the primary land use for Village Ten as University. As such, under the adopted primary land use scenario, no residential, parks/open space, CPF site, school or commercial land uses are planned. The proposed GDP Amendments would affect the University acreage, as discussed below:

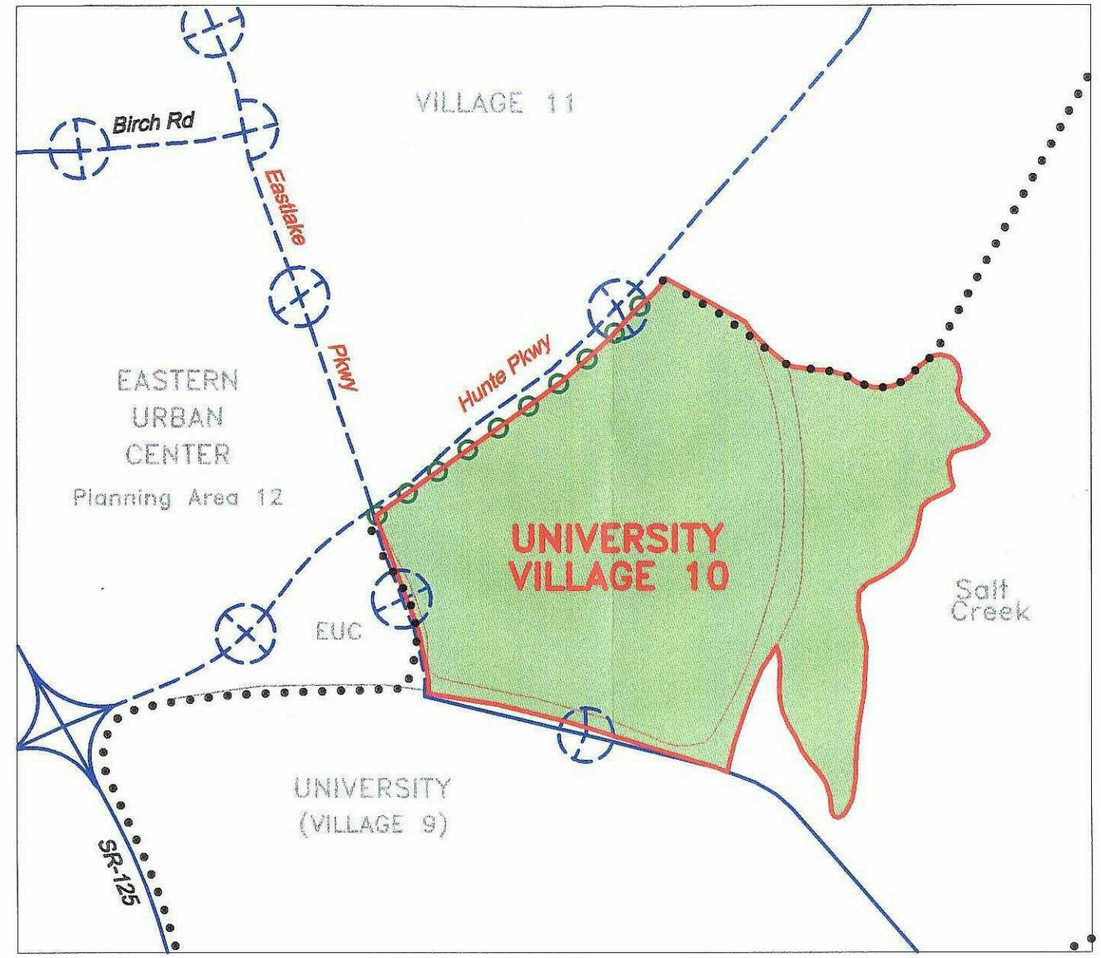
**University:** The proposed GDP Amendments would reduce the overall acreage allocated to University use. As shown in *Table 3-1*, the adopted GDP allocates 312.5 acres to University use. The proposed GDP Amendments would reduce this acreage by 58.1 acres for a total of 254.4 acres for the University. The adopted GDP and proposed land use plan for Village Ten under the University scenario is shown in *Figure 3-14, Adopted GP/GDP and Proposed Land Use Changes for Village Ten-University Land Use Plan*.

### *Phasing*

No changes to the Otay Ranch Phasing Plan are proposed for Village Ten. Village Ten would develop in conjunction with Villages Eight and Nine, in the Fourth Western Phase.




Adopted Plan




Proposed Plan

## LEGEND

- Original GDP Village
- Proposed Village Boundaries
- Adopted University Boundary
- Proposed Change to University Boundary
- Adopted Circulation Streets
- Proposed Circulation Streets
- Adopted Intersection (Half Symbol= Half Intersection)
- Proposed Intersection (Half Symbol= Half Intersection)

SOURCE: City of Chula Vista GIS (May 2001)

N 0 600' 1200'

**Adopted GP/GDP with Proposed Land Use Changes**
**Village 10, University Land Use Plan**

*Figure 3-14*

## Village Ten (Residential Village Land Use Scenario)

As discussed previously, the GDP provides for the development of Village Ten as residential use in the event that a University is not developed. As such, it is the secondary land use development scenario. The proposed GDP Amendments would effect the land use mix under the Village Secondary Land Use as shown in *Table 3-2* and *Figure 3-15, Adopted GDP and Proposed Land Use Changes for Village Ten-Village Scenario.*

### *Planning Boundaries and Acreage*

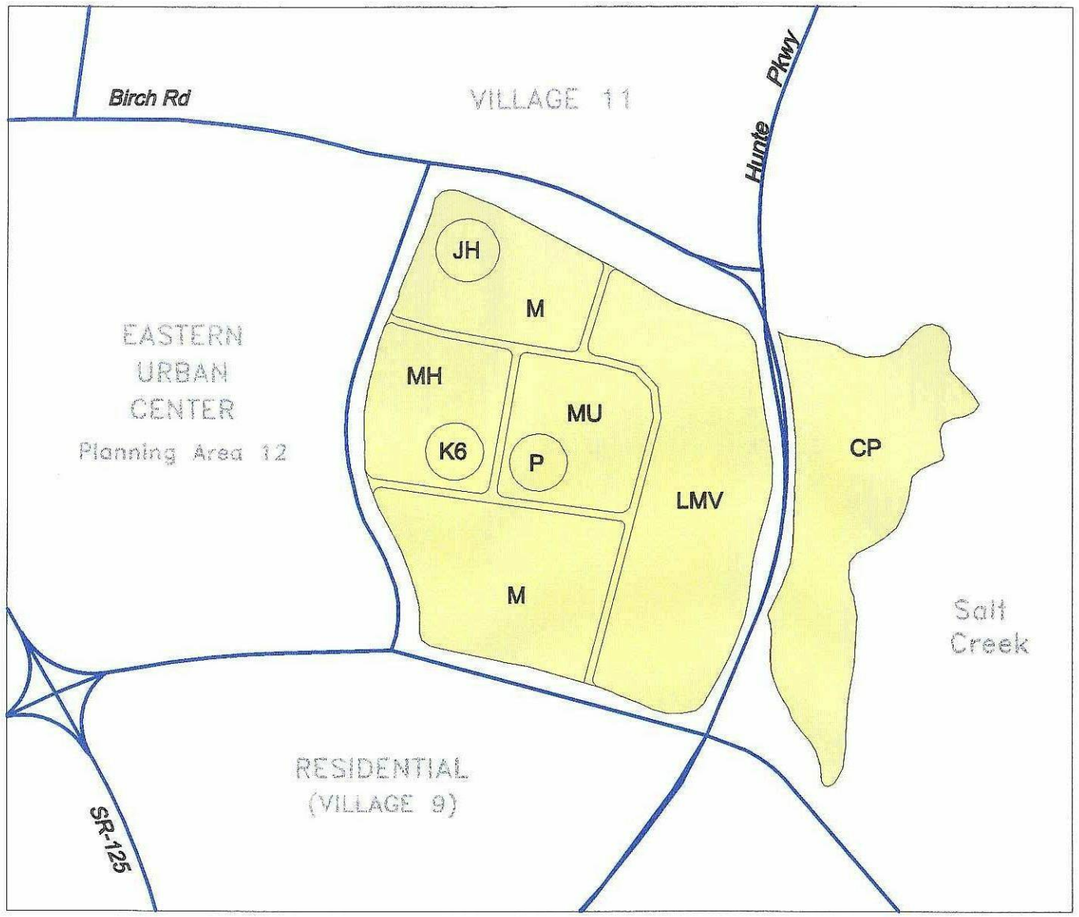
Similar to the University scenario, the gross acreage in Village Ten would change from 333.6 to 269.2 acres (a loss of 64.4 acres) with the proposed GDP Amendments. A comparison of *Tables 3-1* and *3-2* show that the reduction in acreage would occur in Village Ten whether the village was developed under the University or the Village Secondary Land Use. *Figure 3-5* shows the reconfiguration of Village Ten resulting from the proposed GDP Amendments.

### *Land Use Amendments*

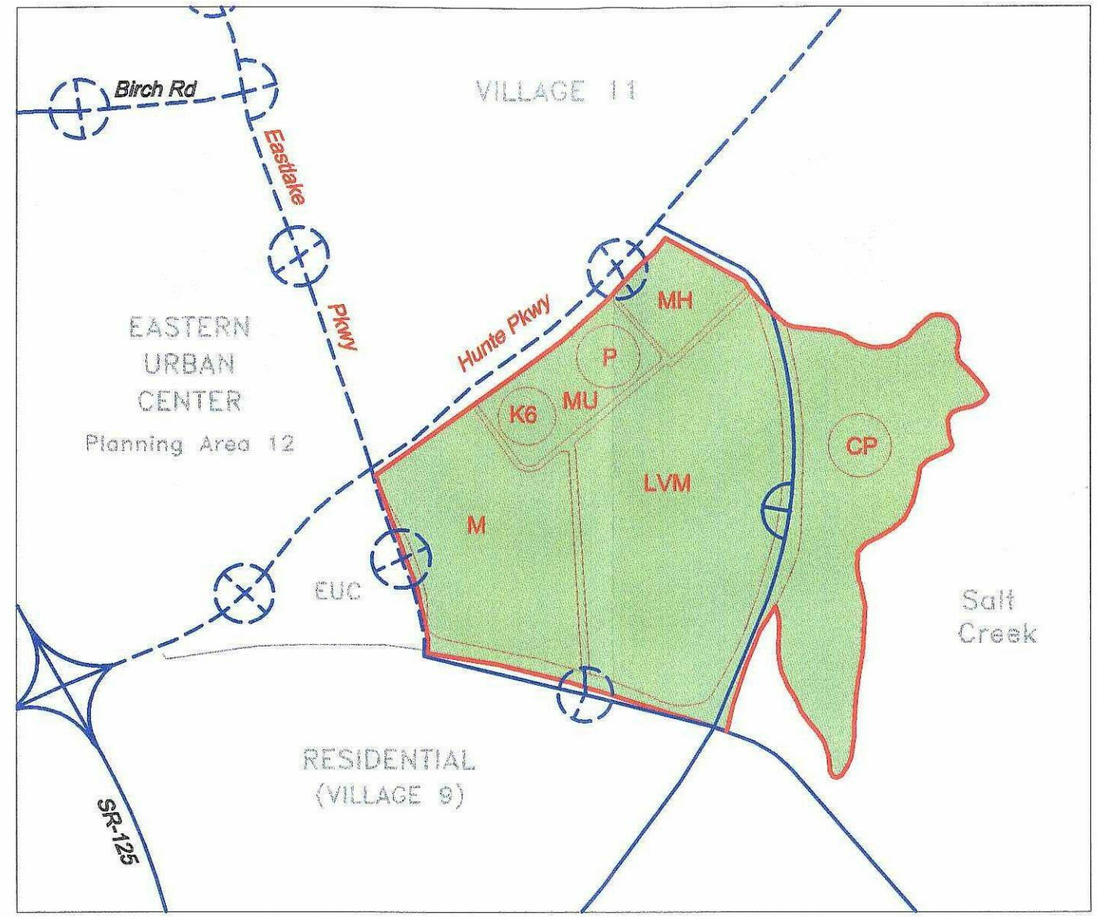
The adopted GDP allows residential, parks/open space, CPF, schools and commercial land uses within Village Ten. The proposed GDP Amendments would change the land use mix, as shown in *Figure 3-15*, and discussed below:

**Residential:** There would be a reduction in both single-family and multi-family residential development in Village Ten due to the proposed GDP Amendments. The adopted GDP permits the development of 819 single-family units and 271 multi-family units for a total residential development potential of 1,090 units. Under this scenario, the proposed GDP Amendments would reduce the permitted number of residential units to 839 (669 single-family and 170 multi-family units) for a total reduction of 251 units (*Table 3-2 and Figure 3-15*). The residential acreage would also decrease by 32 acres.

**Parks and Open Space:** The proposed GDP Amendments would not change the park acreage in Village Ten. However, the proposed GDP Amendments would result in an increase in the open space acreage of 16.6 acres (*Table 3-2 and Figure 3-15*).




Adopted Plan




Proposed Plan

## LEGEND

- Original GDP Village
- Proposed Village Boundaries
- Adopted Circulation Streets
- Proposed Circulation Streets
- Adopted Intersection (Half Symbol = Half Intersection)
- Proposed Intersection (Half Symbol = Half Intersection)

LMV- Low-Medium Village Density Residential
M - Medium Density Residential
MH - Medium-High Density Residential
P - Park
CP - Community Park
JH - Junior High School
K6 - Kindergarden-Grade 6 Elementary School
MU - Mixed Use

SOURCE: City of Chula Vista GIS (May 2001)

**Adopted GP/GDP with Proposed Land Use Changes**
**Village 10, Village Scenario**

*Figure 3-15*

N 0 600' 1200'

**Community Purpose Facilities:** Under this scenario, the proposed GDP Amendments would reduce the CPF acreage by one acre (*Table 3-2 and Figure 3-15*). The reduction in CPF acreage is due to the proposed reduction in residential development.

**Schools:** Under this scenario, the 25-acre middle school would be relocated from Village Ten to Village 11 thereby reducing the school acreage in Village Ten by 25 acres (*Table 3-2 and Figure 3-15*).

**Commercial:** The proposed GDP Amendments would reduce the commercial acreage in Village Ten by 17 acres (*Table 3-2 and Figure 3-15*).

**University:** Under the Village Secondary Land Use, no University acreage is allocated to Village Ten in either the adopted or proposed GDP Amendments (*Table 3-2 and Figure 3-15*).

### *Phasing*

No changes to the Otay Ranch Phasing Plan are proposed for Village Ten. Village Ten would develop in conjunction with Villages 8 and Nine the Fourth Western Phase.

## 3.4.3 VILLAGE 11 SPA PLAN

The proposed project includes implementation of the Village 11 SPA Plan, which is discussed in this section. Otay Ranch's Village 11 is defined by the GDP as an "Urban Village", planned for transit-oriented development with higher densities and mixed uses located in the village core. *Table 3-3, Description of Land Use Designations*, is an excerpt from the GDP that describes the land use designations assigned to Village 11 by the GDP.

The location of land uses in Village 11 is intended to be conceptual at the General Plan and GDP levels. While the Chula Vista General Plan Land Use Element designates a Village Core (VC) and Low-Medium Village (LMV) land uses for Otay Ranch Village 11, the goals, objectives, and policies in the GDP provide guidelines to refine the limits of the land uses at the SPA level. The GDP provides that the density of development in the SPA and TM cannot exceed the density permitted by the GDP. The boundaries of the village core and surrounding residential communities are defined by the SPA Plan in specific detail consistent with the Otay Ranch GDP.

## TABLE 3-3. DESCRIPTION OF LAND USE DESIGNATIONS (Description Excerpted from Otay Ranch GDP)

| Symbol | Category | Description |
|---|---|---|
| LMV | Low Medium Village | The category is permitted only in large scale, master-planned communities containing a variety of uses, including commercial, designed and organized in a manner that encourages non-automotive travel and pedestrian orientation: a village. To ensure character differentiation and village viability, the LMV category requires specific area densities within the range of 3 to 6 dwelling units per acre. Therefore, LMV categories are accompanied by a specific density and number of homes. The density is not tied to any segment of the range. This housing type includes a wide variety of lot sizes, predominantly single family, organized in patterns which contribute to small scale pedestrian-oriented community. The occurrence of some attached homes within this designation is consistent with the intent, as long as the character of the project area is consistent with the typical single family neighborhood. |
| M | Medium Residential | This category includes small single family, detached units on smaller lots, zero lot line, patio and attached homes, such as duplexes and townhomes with a limited amount of stacked flats. Densities with the range of 6 to 11 dwelling units per acre are appropriate, with densities above 8 dwellings units per acre considered multi-family for purposes of GDP planning. |
| MH | Medium High | Village Core. This category includes multi-family units, such as townhomes, garden apartment and stacked flats, including flats over commercial. Densities within the range of 11 to 18 dwelling units per acre are appropriate. Mobile homes are also included in this category. |
| MU | Mixed Use | Village Core. The most critical element of the village cores is mixed-use areas. Mixed land uses are provided in order to concentrate activities accessible to pedestrians. The creative mixing of uses enhances interaction and discourages multiple auto trips. The mixed-use development category is a combination of uses, befitting an energetic town-like environment. The mixed-use category promotes innovation and economic services to the village, therefore, there is flexibility in the standards. |
| CP/P | Community Park/Park | This overlay designation indicates the approximate location of Community Parks (CP) and Neighborhood Parks (P). These facilities to be fixed in location at the SPA level. |
| OS | Open Space | These area include Management Preserve, open space, regional park, and open space district areas. No dwelling units are allocated to these areas. |

SOURCE: GDP Otay Ranch Land Use Designations Table, 1993

The Village 11 SPA Land Use Plan (*Figure 3-16, Village 11 SPA Detailed Land Use Plan*) is a further refinement of the existing GDP Land Use Map for Village 11 and the proposed GDP Land Use Map for Village 11 shown in *Figure 3-6*. *Figure 3-16* identifies the boundaries of each neighborhood within the Village 11 SPA Plan. *Table 3-4, Neighborhood Land Use Summary*, provides a breakdown of the neighborhood land uses. The village core would contain a private town square, CPF uses, an elementary school, public parks and private recreational facilities, and mixed-use areas of commercial and multi-family residential. The village core also includes other residential units not within the mixed-use area. A junior high school site would be located in the southwest corner of the village. Multi-family residential sites would be concentrated in the village core. An existing utility easement provided for San Diego Gas & Electric (SDG&E) and the San Diego County Water Authority (SDCWA) would serve as an open space area between eastern neighborhoods and village core uses (*Figure 3-16*). Single-family residential neighborhoods would be located on the east side of the easement between the village core and the Salt Creek area to the southeast. A private park is proposed within the eastern single-family residential portion of the village. In addition, the roadways to be constructed or portions thereof, as a part of Village 11, are as follows:

- Olympic Parkway
- Eastlake Parkway
- Birch Road
- Hunte Parkway
- La Media Road
- Otay Lakes Road
- Internal link between neighborhoods R-1 and R-11

## VILLAGE 11 PROPOSED USES

The following discussion is a synopsis of the detailed SPA Plan text description of the project design. The Village 11 SPA Plan is available for review at the City of Chula Vista, Planning and Building Department. As previously noted, the GDP provides that the density of development in the SPA and TM cannot exceed the density permitted by the GDP. As such, the density of development discussed below for the proposed Village 11 SPA may be less than the development potential shown in *Tables 3-1* and *3-2*.

| NEIGHBORHOOD AREA | LAND USE | APPROX. GROSS ACREAGE | TARGET DU'S/AC | DWELLING UNITS |
|---|---|---|---|---|
| R-1 | SF | 26.7 | 6.1 | 164 |
| R-2 | SF | 14.2 | 3.2 | 46 |
| R-3 | SF | 15.3 | 3.0 | 46 |
| R-4 | SF | 12.4 | 4.4 | 55 |
| R-5 | SF | 7.5 | 5.0 | 37 |
| R-6 | SF | 7.5 | 4.7 | 35 |
| R-7 | SF | 11.4 | 6.1 | 70 |
| R-8 | SF | 11.2 | 5.7 | 64 |
| R-9 | SF | 11.6 | 5.2 | 60 |
| R-10 | SF | 18.0 | 4.8 | 86 |
| R-11 | SF | 7.7 | 4.7 | 36 |
| R-12 | SF | 11.1 | 5.2 | 58 |
| R-13 | SF | 11.4 | 4.6 | 53 |
| R-14 | SF | 11.0 | 5.1 | 56 |
| R-15 | SF | 10.3 | 6.6 | 68 |
| R-16 | SF | 8.5 | 7.3 | 62 |
| **SUBTOTAL** | **SF** | **195.8** | **5.1** | **996** |
| R-17 | MF | 18.5 | 8.0 | 118 |
| R-18 | MF | 12.5 | 12.5 | 125 |
| R-19 | MF | 11.6 | 18.0 | 167 |
| R-20 | MF | 10.6 | 8.0 | 78 |
| R-21 | MF | 10.5 | 12.5 | 112 |
| R-22 | MF | 8.4 | 15.0 | 105 |
| R-23 | MF | 16.8 | 8.0 | 119 |
| R-24 | MF | 10.2 | 15.0 | 169 |
| R-25 | MF | 10.0 | 25.0 | 200 |
| **SUBTOTAL** | **MF** | **109.1** | **10.9** | **1,193** |
| MU | MU | 10.0 | 11.5 | 115 |
| **SUBTOTAL** | **RES.** | **314.9** | | **2,304** |
| MU-1 | COMM. | 10.0 | | |
| **SUBTOTAL** | **COMM.** | **10.0** | | |
| CPF | CPF | 5.5 | | |
| **SUBTOTAL** | **CPF** | **5.5** | | |
| P-1 | PARK | 8.9 | | |
| P-2 | PARK | 3.8 | | |
| P-3 | PARK | 3.0 | | |
| P-4 | PARK | 1.0 | | |
| **SUBTOTAL** | **PARK** | **16.7** | | |
| S-1 / K-6 | SCHOOL | 11.0 | | |
| S-2 / Jr. H S | SCHOOL | 25.6 | | |
| **SUBTOTAL** | **SCHOOL** | **36.6** | | |
| Hunte Parkway | ROAD | 24.2 | | |
| Olympic Parkway | ROAD | 9.3 | | |
| Eastlake Parkway | ROAD | 7.2 | | |
| W$^{n}$ Circulation Sts | ROAD | 17.4 | | |
| E$^{n}$ Circulation Sts | ROAD | 8.1 | | |
| **SUBTOTAL** | **ROAD** | **66.2** | | |
| Green Buffer | O.S. | 27.6 | | |
| Easemt thru Property | O.S. | 18.8 | | |
| Paseo Area in West | O.S. | 1.5 | | |
| Paseo Area in East | O.S. | 1.3 | | |
| **SUBTOTAL** | **O.S.** | **49.2** | | |
| **TOTAL** | | **489** | | **2,304** |

SOURCE: Brookfield Shea Otay, LLC (May 2001)

N Not to Scale

**Village 11 SPA Detailed Land Use Plan**

*Figure 3-16*

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

## TABLE 3-4 NEIGHBORHOOD LAND USE SUMMARY

| Neighborhood Area | Land Use | Gross Acreage | Dwelling Units | Target DUs/Acre | Product Type |
|---|---|---|---|---|---|
| R-1 | SF | 26.7 | 164 | 6.1 | Single Family (M) |
| R-2 | SF | 14.2 | 46 | 3.2 | Single Family (LMV) |
| R-3 | SF | 15.3 | 46 | 3.0 | Single Family (LMV) |
| R-4 | SF | 12.4 | 55 | 4.4 | Single Family (LMV) |
| R-5 | SF | 7.5 | 37 | 5.0 | Single Family (LMV) |
| R-6 | SF | 7.5 | 35 | 4.7 | Single Family (LMV) |
| R-7 | SF | 11.4 | 70 | 6.1 | Single Family(M) |
| R-8 | SF | 11.2 | 64 | 5.7 | Single Family (LMV) |
| R-9 | SF | 11.6 | 60 | 5.2 | Single Family (LMV) |
| R-10 | SF | 18.0 | 86 | 4.8 | Single Family (LMV) |
| R-11 | SF | 7.7 | 36 | 4.7 | Single Family (LMV) |
| R-12 | SF | 11.1 | 58 | 5.2 | Single Family (LMV) |
| R-13 | SF | 11.4 | 53 | 4.6 | Single Family (LMV) |
| R-14 | SF | 11.0 | 56 | 5.1 | Single Family (LMV) |
| R-15 | SF | 10.3 | 68 | 6.6 | Single Family(M) |
| R-16 | SF | 8.5 | 62 | 7.3 | Single Family(M) |
| **SUBTOTAL** | **SF** | **195.8** | **996** | **5.1** | |
| R-17 | MF | 18.5 | 118 | **8.0** | Small Lot Single Family (M) |
| R-18 | MF | 12.5 | 125 | **12.5** | Townhomes (MH) |
| R-19 | MF | 11.6 | 167 | **18.0** | Townhomes / Flats (MU) |
| R-20 | MF | 10.6 | 78 | **8.0** | Small Lot Single Family (M) |
| R-21 | MF | 10.5 | 112 | **12.5** | Townhomes (MH) |
| R-22 | MF | 8.4 | 105 | 15.0 | Townhomes / Flats (MH) |
| R-23 | MF | 16.8 | 119 | 8.0 | Small Lot Single Family (M) |
| R-24 | MF | 10.2 | 169 | 15.0 | Townhomes / Flats (MH) |
| R-25 | MF | 10.0 | 200 | 25.0 | Apartments (MU) |
| **SUBTOTAL** | **MF** | **109.1** | **1,193** | **10.9** | |
| MU-1 | MF | 10.0 | 115 | 11.5 | |
| **SUBTOTAL** | **RES.** | **314.9** | **2,304** | **7.3** | **Apartments / Condos** |
| MU-1[1] | **COMM.** | 10.0 | N/A | **N/A** | **N/A** |
| **SUBTOTAL** | **COMM.** | **10.0** | **N/A** | **N/A** | **N/A** |
| CPF | CPF | 5.5 | N/A | N/A | N/A |
| **SUBTOTAL** | **CPF.** | **5.5** | **N/A** | N/A | N/A |
| P-1[2] | PARK | 8.9 | N/A | N/A | N/A |
| P-2[3] | PARK | 3.8 | N/A | N/A | N/A |
| P-3[3] | PARK | 3.0 | N/A | N/A | N/A |
| P-4[3] | PARK | 1.0 | N/A | N/A | N/A |
| **SUBTOTAL** | **PARK** | **16.7** | **N/A** | **N/A** | **N/A** |
| S-1 | SCHOOL | 11.0 | N/A | N/A | N/A |
| S-2 | SCHOOL | 25.6 | N/A | N/A | N/A |
| **SUBTOTAL** | **SCHOOL** | **36.6** | **N/A** | **N/A** | **N/A** |
| OPEN SPACE | O.S. | 49.2 | N/A | N/A | N/A |
| STREETS | STREETS | 66.2 | N/A | N/A | N/A |
| **SUBTOTAL** | **OTHER** | **115.4** | **N/A** | **N/A** | **N/A** |
| **OVERALL TOTAL** | | **489** | **1,298** | **N/A** | **N/A** |

Source: Village 11 SPA Plan

1 MU-1 assigned 10.0 acres for both residential and commercial, but as a mixed use area, the 10.0 acres is included only once in overall total.
2 public park
3 private park

## Single-Family Residential

A total of 996 single-family residential dwelling units are proposed over 195.8 acres. These units would be distributed throughout 16 neighborhoods. Neighborhood densities would range from 3.0 to 8.0 dwelling units per acre. Minimum lot sizes would range from 3,400 to 6,000 square feet. Dwelling units would be either one story or two stories.

## Multi-Family Residential

A total of 1,308 multi-family dwelling units (including mixed-use units) with densities ranging from 8.0 to 25.0 dwelling units per acre are proposed on 119.1 acres. This includes the 115 residential units to be located within 10 acres of mixed-use development. Nine multi-family neighborhoods are proposed within the village. Multi-family dwelling units would be one to four stories.

## Parks

Based on the estimated build-out residential population for Village 11, 20.8 acres of parkland would be required per the requirements of the City of Chula Vista Park Development Ordinance (PDO). The number of dwelling units approved at the TM stage would determine the actual village population and park requirement. In addition, the adopted GDP recommends that Village 11 allocate 10 acres to park use.

As shown on *Figure 3-16*, the Village 11 SPA Plan proposes an 8.9 gross acre public neighborhood park (P-1), 7.0 acres of which are eligible for parkland credit pursuant to the PDO and Otay Ranch GDP. In addition, a 1-acre private town square for public use (P-4), which is also eligible for parkland credit, and a 3-acre private recreation facility (P-3) are also proposed within the village core. An additional park area located on the eastern portion of the village would be a private pedestrian park of approximately 3.8 acres (P-2). The remaining acreage requirement would be satisfied through the payment of parkland dedication fees, which include both acquisition and park development fees toward community parks in Otay Ranch.

## Schools

A total of 10 net acres for an elementary school and a total of 25 net acres for a junior high school are proposed within Village 11 (*Figure 3-16*). The elementary school would be

located within the village core, while the junior high school is proposed outside of the village core.

## Community Purpose Facility

A 5.5-acre CPF site is proposed to surround the private 1-acre town square park on three sides (*Figure 3-16*). Based on the population generated by the Village 11 residential development (buildout population of 6,935 persons at 1.39 acres of CPF per 1,000 persons), 9.6 acres should be allocated to community purpose facilities. A Conditional Use Permit (CUP) would be required for all CPF uses proposed within the village. Additional CPF uses may be provided in the private pedestrian park. Building square footage within the mixed use/commercial site would also be available for additional CPF uses.

## Commercial/Retail Use

Commercial/retail and residential multi-family residential uses are envisioned under the Mixed Use designation. Residential uses within the Mixed Use designation may be located in the upper floors of the commercial/retail or in separate residential buildings within the project area.

## Circulation System

Nine entrances to Village 11 are proposed from the surrounding arterial roadways, including three along Eastlake Parkway, four from Hunte Parkway, and two from Olympic Parkway. Bus lines are proposed for public transit service into the village. The public transportation concept plan proposes the bus route through the village between Olympic Parkway and Hunte Parkway. A transit stop would be located within the village core. Two additional bus stops would be provided in other areas of Village 11. One stop would be near the route entrance within the area of low medium village residential development, the other would be nearby the proposed junior high school. As the transit stops are further refined, these locations may be subject to change based on the City's transit operator. Two pedestrian bridges are proposed for Village 11, one that would cross Eastlake Parkway and connect to the Eastern Urban Center, and the other that would cross Hunte Parkway connecting to the Greenbelt Trail.

The Village 11 proposed Circulation Plan consists of a system that extends existing transportation routes and constructs planned facilities for vehicular and non-vehicular

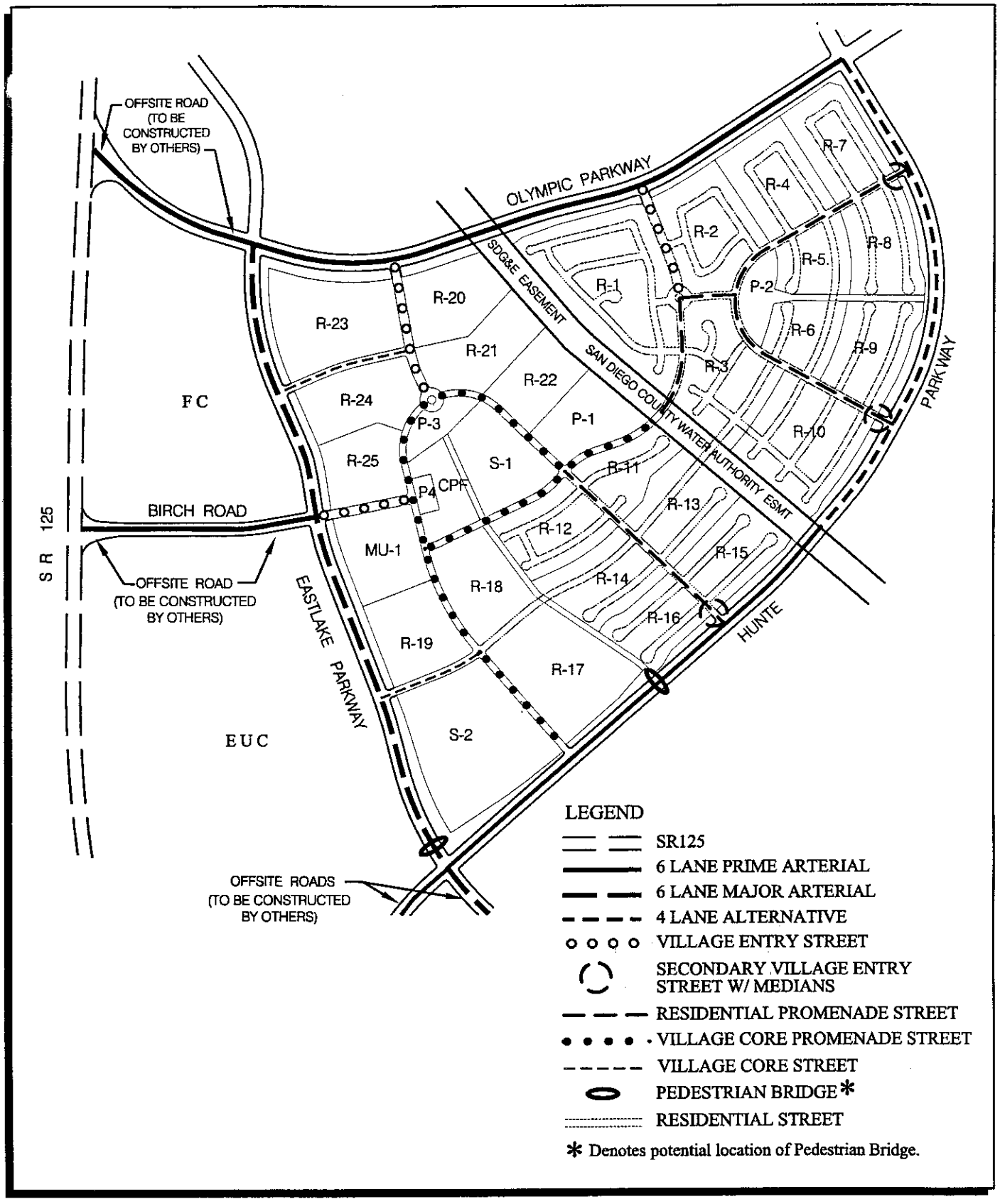
modes of transportation, including roads, cart paths, bike lanes, trails, and pedestrian ways. *Figure 3-17, Proposed Conceptual Vehicular Circulation Plan*, shows the proposed circulation system for Village 11. Primary access would be provided by the "Village Entry Streets" at the intersection of Eastlake Parkway and Birch Road and from Olympic Parkway.

The western Village Entry Streets would lead to the village core. The streets in the core would be built as "Village Promenade Streets." The entry streets from Eastlake Parkway (Birch Road) would be built as "Village Core Streets." Secondary Village Entry Streets would provide access to the village from Hunte Parkway. These streets would continue through the village as "Residential Promenade Streets." The eastern Village Entry Streets from Olympic Parkway would also continue through the village as "Residential Promenade Streets." Three of the internal streets to Village 11 would traverse the SDG&E/County Water Authority easements. Grading for some of these crossings may require minor adjustments to existing facilities within the easements, and would require coordination with the appropriate entities. The Tentative Map prepared for the Village 11 SPA Plan would further refine internal roads (including bicycle and pedestrian crossing routes).

## Open Space and Trails

A total of 49.2 acres of open space is proposed within the Village 11 Project Area. Village 11 does not contain significant natural resources. Open space is shown surrounding the Village with a large component dividing the eastern portion of the project area from the village core and more intense uses on the western half. The bisecting open space follows the existing easement for the SDWA aqueduct and the SDG&E power lines. Two "paseo" trails of less than two acres each are also proposed. If trails are proposed within the SDG&E easement a Joint Use Agreement between the City, ~~and~~ SDG&E, and the SDWA would be required prior to construction of the trails. Open space would be controlled through easements and/or dedication to the City.

A system of bike lanes and pedestrian paths are proposed to loop internally and to connect to parks and regional trials, including a link with the Greenbelt Trail and the planned Otay Valley Regional Park through Wolf Canyon. *Figure 3-18* depicts the *Proposed Parks, Recreation, Open Space, and Trails Plan* for the Village 11 Project Area. The SDG&E easement proposes trails to connect the east and west portions of the village.




SOURCE: Brookfield Shea Otay, LLC (May 2001)

**Proposed**
**Conceptual Vehicular Circulation Plan**

*Figure 3-17*

N **Not to Scale**

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

SOURCE: Brookfield Shea Otay, LLC (May 2001)

**Proposed Parks, Recreation, Open Space and Trail Plan**

*Figure 3-18*

Not to Scale

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR

## Village Core

*Figure 3-19, Village Core Concept Plan*, depicts the proposed village core, which is located in the western portion of the Village 11 Project Area. The community commercial uses of the village core would provide a transition from the more intense regional commercial uses of Planning Area 12, through the less intense residential nature of the eastern Village 11, and into the Salt Creek open space. The village core is proposed as the focal point for Village 11 community uses. The village core would provide up to 115 dwelling units as upper level residential units above ground floor retail. This mixed-use component may also accommodate additional CPF uses.

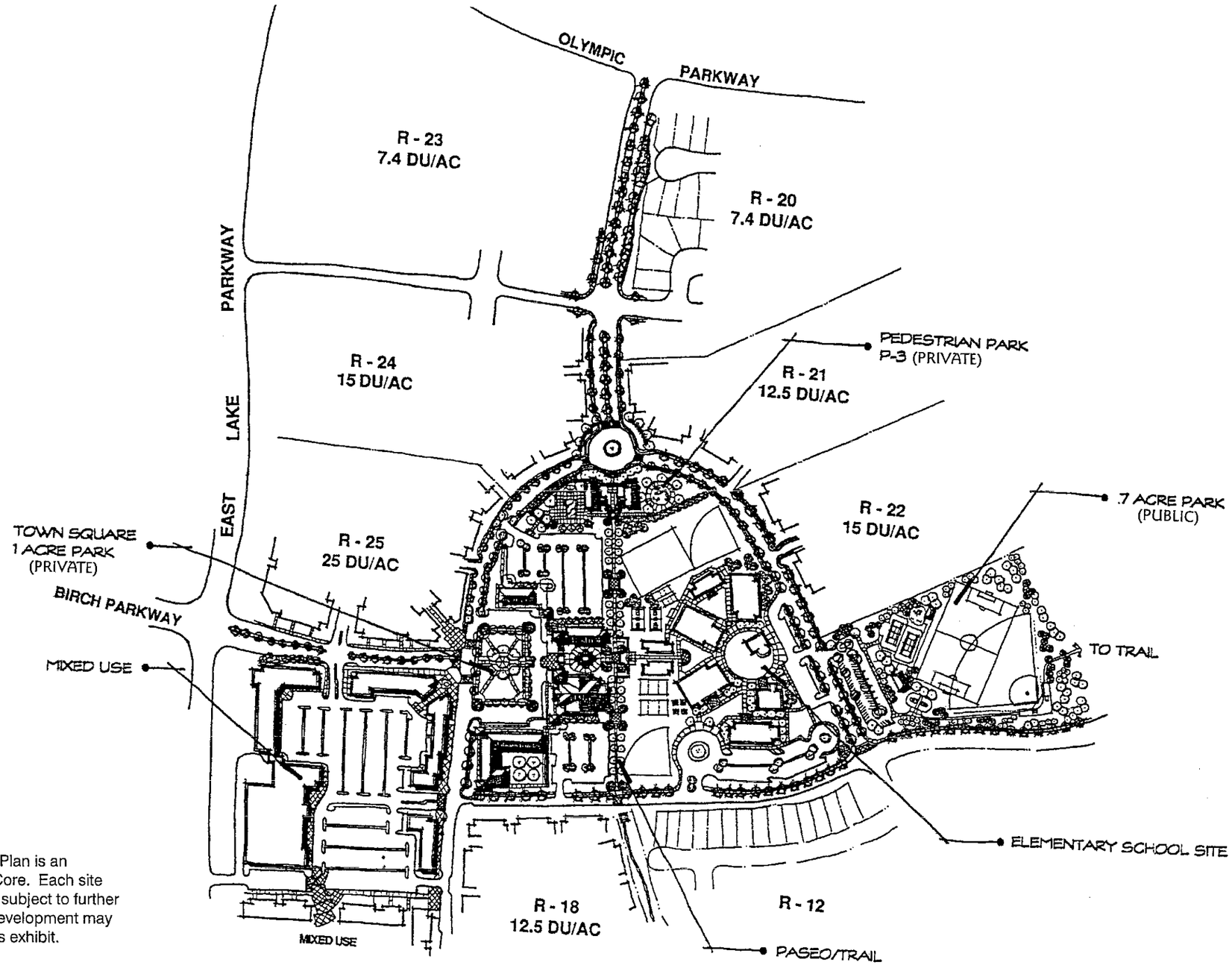
## Village 11 Development Phasing

Village 11 would be constructed in several phases to provide for installation of necessary infrastructure and amenities. Each of the phases is shown in *Figure 3-20, Village 11 Conceptual Phasing Plan*. *Table 3-5, Village 11 Phasing Plan Summary*, provides a summary of the proposed phasing by land use.

Phase 1 would commence in the northern area of the Village 11 Project Area with development of residential single-family units and construction of Olympic Parkway, between Highway 125 and Hunte Parkway. A private pedestrian open space and public park (P-1) would also be included in this phase. During Phase 2, residential development east of the utility easement would be completed, and the project areas for village core uses and nearby multi-family residential dwelling units would be developed.

Actual construction of the mixed-use area, the CPF, elementary school, and neighborhood park areas would occur as conditioned by the tentative map. The primary entry street would be extended between Olympic Parkway and the town square. A private recreation facility would also be developed. With Phase 3, the applicant would complete construction of the remaining Village 11 residential dwelling units, as well as the junior high school site.

Project phasing within the Village 11 Project Area refers to the development of structures only. Grading and development of infrastructure may occur outside of the development phasing in order to provide the necessary access, utilities, and public services to the newly constructed neighborhoods. Grading may also be completed out of phase with development in order to balance the cut and fill areas within the master grading plans.

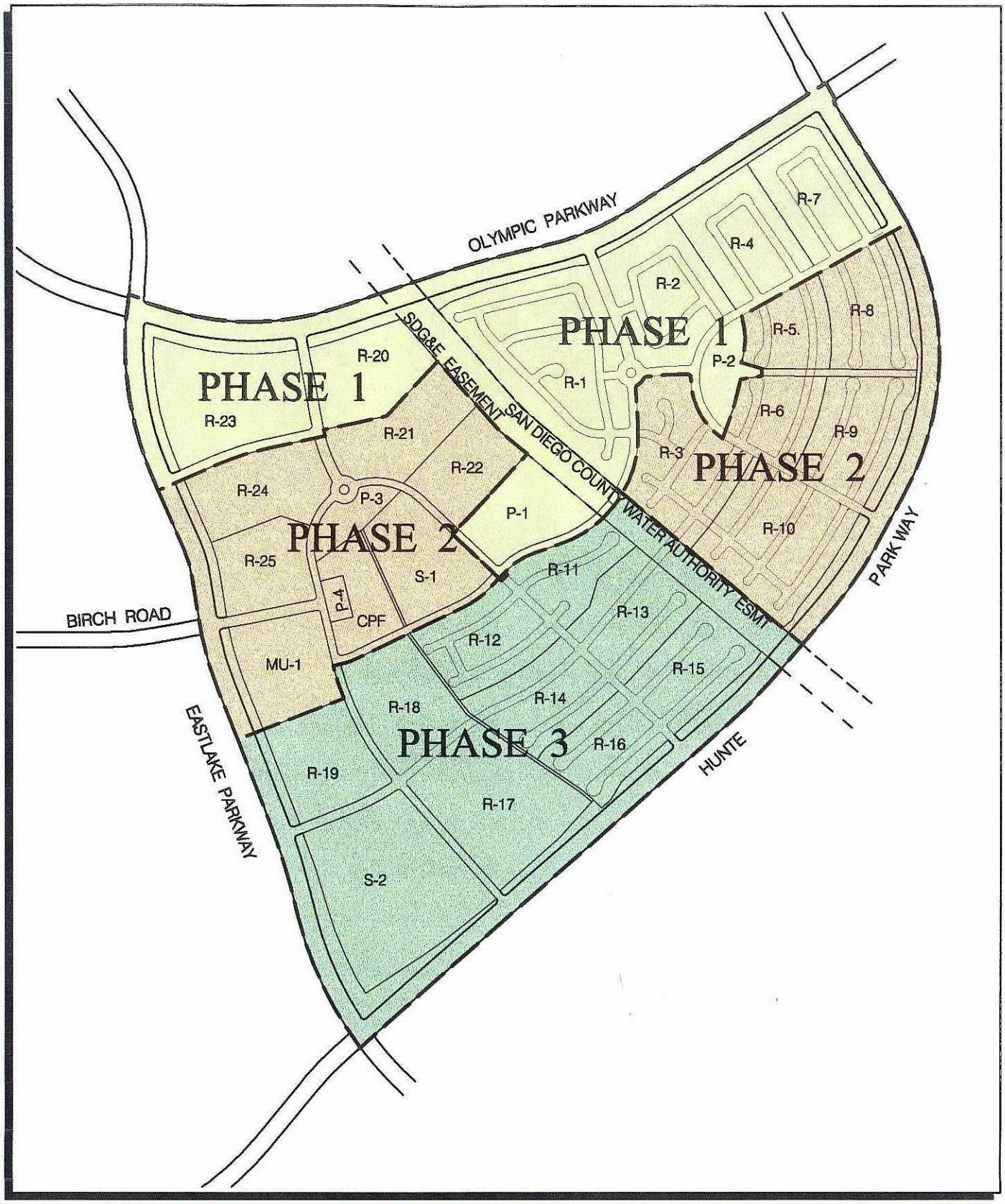



NOTE: The Village Core Concept Plan is an illustrative example of the Village Core. Each site depicted within the Village Core is subject to further discretionary review. Actual site development may vary from concepts depicted in this exhibit.

SOURCE: Brookfield Shea Otay, LLC, 2001

**Village Core Concept Plan**

*Figure 3-19*




SOURCE: Brookfield Shea Otay, LLC (May 2001)

**Village 11 Conceptual Phasing Plan**

*figure 3-20*

**Not to Scale**

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

**TABLE 3-5 VILLAGE 11 PHASING PLAN SUMMARY**

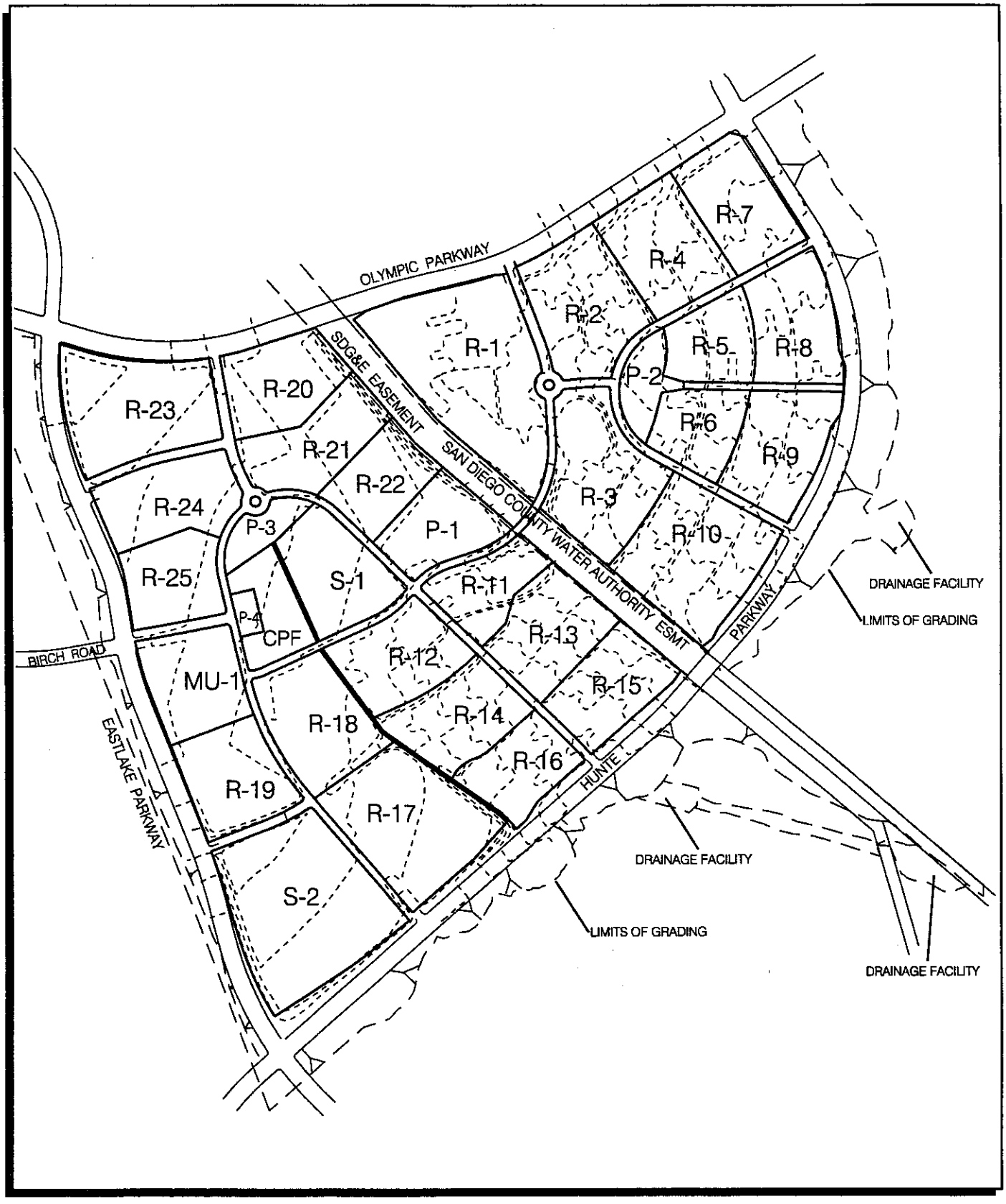
| Phase | Land Use | Acres | Dwelling Units |
|---|---|---|---|
| 1 | Single Family | 64.7 | 335 |
| | Pedestrian Park (P-2) | 3.8 | - |
| | Multi-family | 27.4 | 197 |
| | Park (P-1) | 8.9 | - |
| | **Subtotal** | **104.8** | **532** |
| 2 | Single Family | 71.1 | 328 |
| | Multi-family | 39.1 | 586 |
| | Parks ( P-3) | 3.0 | N/A |
| | Elementary School | 11.0 | N/A |
| | Mixed Use/Commercial | 10.0 | 115 |
| | CPF | 5.5 | N/A |
| | Town Square Park (P-4) | 1.0 | N/A |
| | **Subtotal** | **140.7** | **1,029** |
| 3 | Single Family | 60.0 | 333 |
| | Multi-family | 42.6 | 410 |
| | Junior High School | 25.6 | N/A |
| | **Subtotal** | **128.2** | **443.3** |
| **Total[5]** | | **373.7** | **2,304** |

[1] Net acres.

Source: Village 11 SPA Plan

## Grading

*Figure 3-21, Conceptual Grading Plan*, shows the preliminary grading concept for the Village 11 SPA Plan. The proposed grading would require approximately 10 million cubic yards of cut and fill material. All graded material would be reused onsite to achieve balanced earthwork. Future phase areas would be used as either borrow or fill sites and although grading for individual phases may not balance, overall cut and fill for the Village 11 Project Area will be balanced. As shown in *Figure 3-22, Proposed Cut and Fill Plan*, ridgelines would be cut and lower elevations filled.



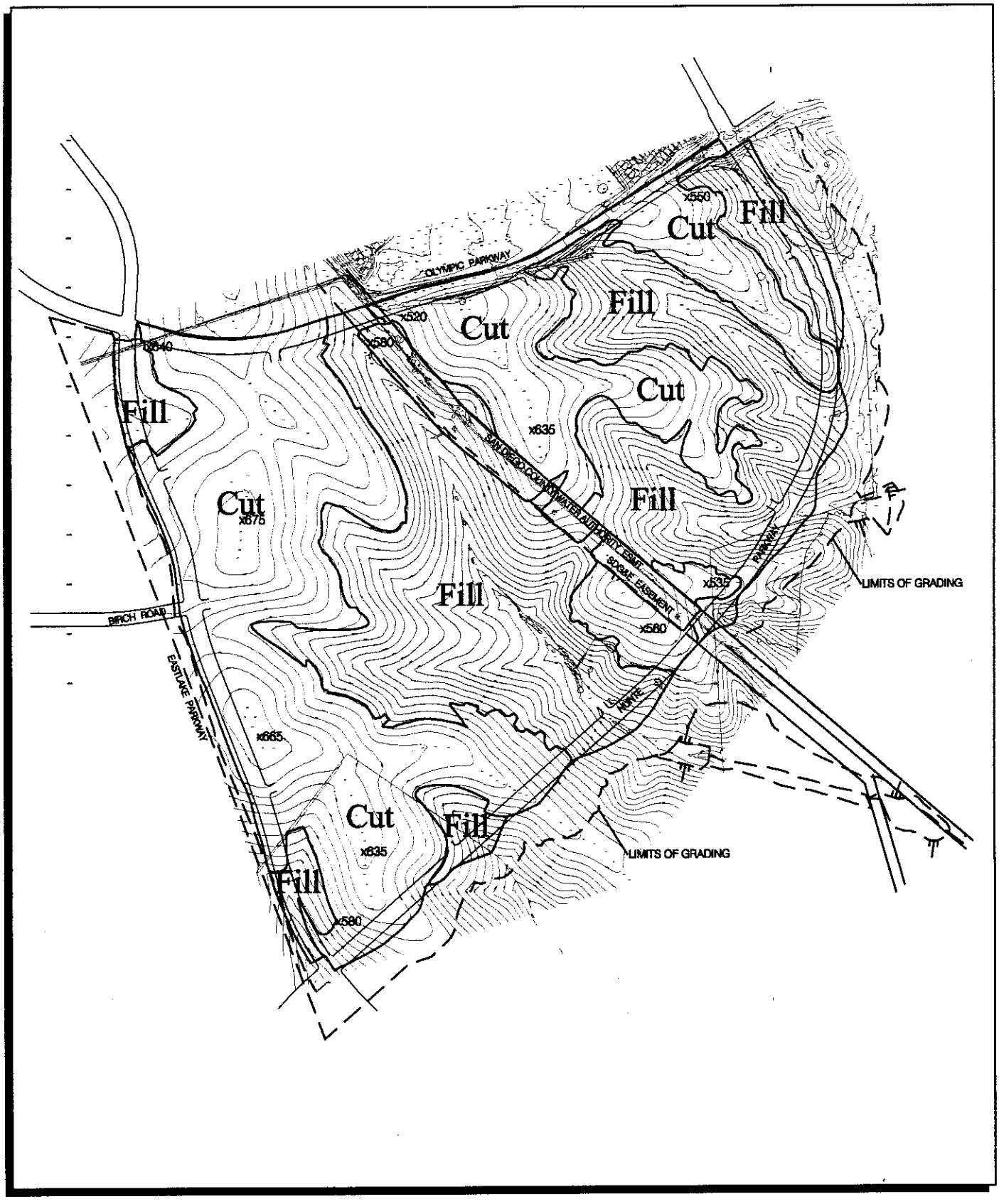

SOURCE: Brookfield Shea Otay, LLC (May 2001)

**Not to Scale**

## Conceptual Grading Plan

*Figure 3-21*

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**




SOURCE: Brookfield Shea Otay, LLC (May 2001)

**Proposed Cut and Fill Map**

*Figure 3-22*

**Not to Scale**

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

## Infrastructure Improvements

A Public Facilities Financing and Phasing Plan (PFFP) has been prepared for Village 11. The PFFP is available for review at the City of Chula Vista Planning and Building Department. A PFFP describes local, public facilities that are necessary to enable a community to function, such as water service and infrastructure, and sewer and storm drain facilities. The Village 11 PFFP describes these public facilities in detail and assigns the responsibility for construction and financing of all required facilities. The PFFP includes requirements for construction of infrastructure, some of which may need to be constructed offsite, based on either adjacency guidelines or unit thresholds.

### *Water*

Potable water would be supplied by the Otay Water District through two pressure zones, identified as 711 and 980. Distribution pipelines would be constructed as required by the Otay Water District. It is anticipated that recycled water would be used to irrigate street parkway landscaping, parks, and manufactured slopes along open space areas. Recycled water would be received from the Otay Water District's Ralph W. Chapman Recycling Facility until the planned Otay Valley Water Reclamation Plant is operational.

### *Sewer*

Sewer service would be provided by the City of Chula Vista. The northwestern portion of the Village 11 Project Area is located in the Poggi Canyon drainage basin. The remaining majority of the village is in the Salt Creek drainage basin. Extension of trunk sewer facilities to serve the Salt Creek basin by gravity flow is planned as a part of Otay Ranch. Three lateral connections from Village 11 are planned that would extend into the Salt Creek open space to connect with the trunk sewer. The impacts of these lateral connections are addressed in the Final Salt Creek Interceptor Sewer EIR (Dudek & Associates 2001), which is both incorporated by reference and summarized in this document. Approval and implementation of this project is contingent on the City's prior approval of sewer improvements. The environmental impacts associated with the southernmost sewer lateral have also been addressed in this EIR as the area of impact has expanded slightly beyond that previously analyzed in the Final Salt Creek Interceptor Sewer EIR due to design modifications.

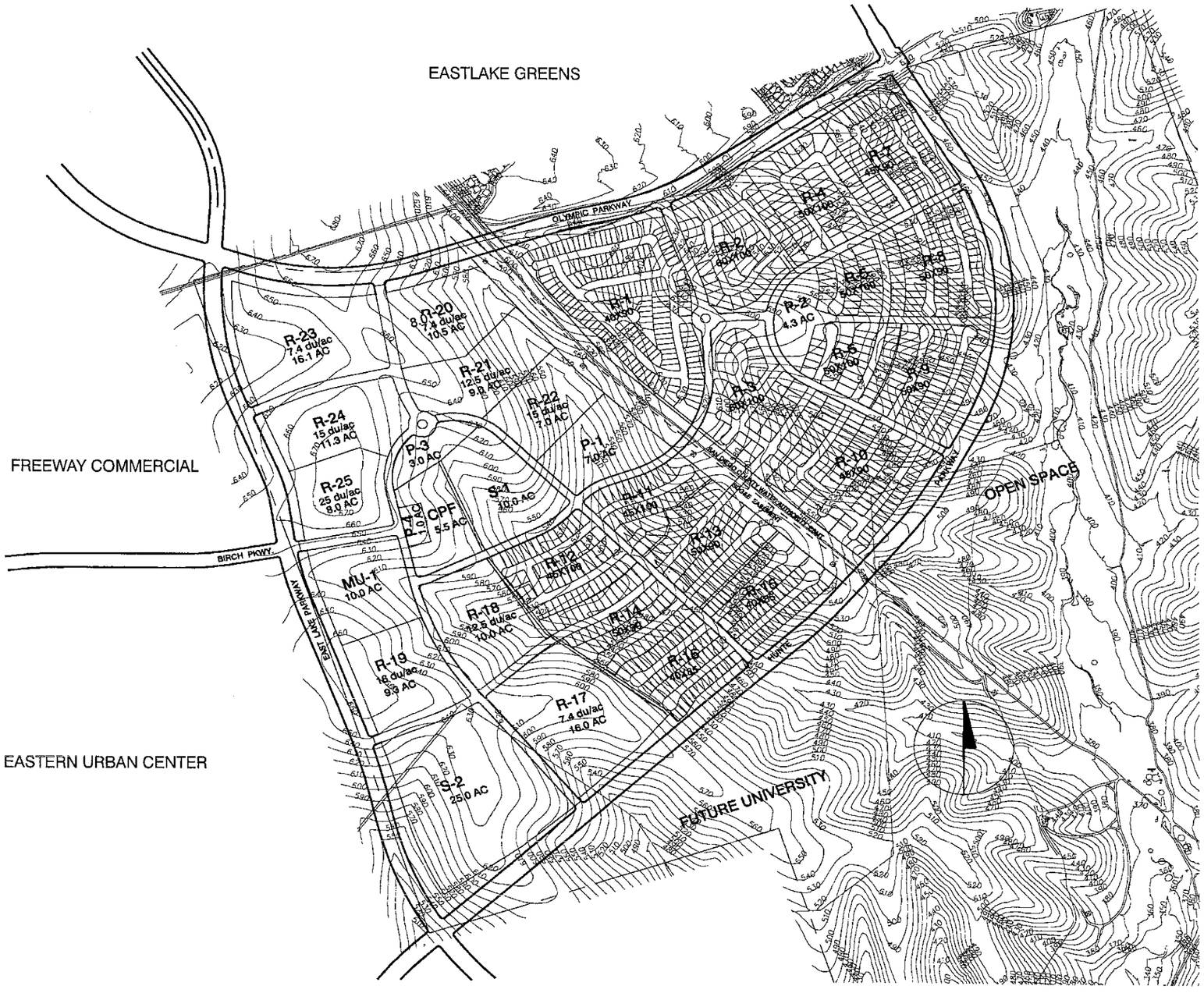
Currently, no sewer facilities exist in Salt Creek in the vicinity of the Village 11 Project Area. To serve Village 11 and other future development projects in Otay Ranch, the City is currently considering the installation of a proposed gravity flow interceptor in Salt Creek, or alternatively, a force main located within Otay Ranch. The construction of sewer facilities would be phased as provided in the PFFP and if necessary, Village 11 sewer flows may be pumped to Poggi Canyon sewer line. Although it is unlikely that the Poggi Canyon facility would be able to collect sewerage from the Village 11 Project Area at full build-out, phasing of Village 11 SPA development would allow interim use of Poggi Canyon until the Salt Creek trunk sewer is constructed.

### *Drainage*

The phased construction of storm drain facilities would be based on the proposed Village 11 SPA Master Drainage Plan. As required by the City, post-development peak flows must not exceed pre-development peak flows. It is anticipated that development would begin to the north and then proceed to the south. Temporary drainage facilities, constructed in compliance with RWQCB regulations and BMPs, would be located below each phase of development to control erosion and potential impacts to off-site water quality. Conceptually, the onsite runoff from the Village 11 Project Area would be collected by the on-site system and discharged into the Salt Creek drainage. Three drainage facilities are proposed to be located outside of the Village 11 Project Area: one is within the designated University project area (or alternatively Villages Nine and Ten), and another is located downstream on the west side of the power and water easements, within the Preserve, and is connected to the upstream facility by a series of weir structures. The third is adjacent to Hunte Parkway (*Figure 3-21*). The project would also include the construction of runoff conveyance and erosion protection facilities between these two basins.

## 3.4.3 TENTATIVE MAP

The proposed Village 11 Conceptual Tentative Map (TM), when adopted, would provide lots for proposed single-family dwelling unit neighborhoods and lot boundaries for multi-family and other land uses. *Figure 3-23, Conceptual Tentative Map,* shows the proposed subdivision of the land into individual lots. A total of 996 single-family dwelling units is proposed. Single-family lots would range in size from 3,400 to 6,000 square feet. The smallest lots are proposed west of the utility easement, and the largest lots are east of the easement. *Table 3-6, Proposed Minimum Lot Area,* lists the minimum lot areas for each




SOURCE: Cinti, LLC, (2-1-01)

N 0 425' 850'

**Conceptual Tentative Map**

*Figure 3-23*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR

single-family neighborhood. Multiple final maps will be recorded during the Village 11 entitlement process.

**TABLE 3-6 PROPOSED MINIMUM LOT AREA**

| Neighborhood | Minimum Lot Area |
|---|---|
| R-1 | 40' X 90' = 3,600 square feet |
| R-2 | 60' X 100' = 6,000 square feet |
| R-3 | 60' X 100' = 6,000 square feet |
| R-4 | 50' X 100' = 5,000 square feet |
| R-5 | 50' X 100' = 5,000 square feet |
| R-6 | 50' X 100' = 5,000 square feet |
| R-7 | 45' X 90' = 4,050 square feet |
| R-8 | 50' X 90' = 4,500 square feet |
| R-9 | 50' X 90' = 4,500 square feet |
| R-10 | 45' X 90' = 4,050 square feet |
| R-11 | 45' X 100' = 4,500 square feet |
| R-12 | 45' X 100' = 4,500 square feet |
| R-13 | 50' X 90' = 4,500 square feet |
| R-14 | 50' X 90' = 4,500 square feet |
| R-15 | 40' X 85' = 3,400 square feet |
| R-16 | 40' X 85' = 3,400 square feet |

Source: Village 11 SPA Plan

The proposed Conceptual TM would require construction of Olympic Parkway, between Eastlake Parkway and Hunte Parkway, and Hunte Parkway, between Eastlake Parkway and Olympic Parkway.

## 3.5 DISCRETIONARY ACTIONS

Implementation of the proposed project requires a number of discretionary actions from various public agencies. The proposed GDP Amendments and SPA Plan would be reviewed and approved by the City Council, and the TM and other improvement plans would be reviewed and approved by the City's Planning Commission. *Table 3-7, Discretionary Actions,* identifies the discretionary actions, summarizes the general purpose of the actions, and identifies the lead agency for each discretionary action. *Table 3-8, Required Permits,* identifies permits needed to implement the proposed project, the purpose of each permit, and the lead agency that will issue each permit.

## TABLE 3-7
## DISCRETIONARY ACTIONS

| Discretionary Action | Purpose | Lead Agency |
|---|---|---|
| General Plan Amendment | • Amend various elements of the General Plan to reflect proposed roadway alignments and reclassifications, amend land use designations and acreages in Villages Seven, Eight, Nine, Ten, 11, and 12 (FC and EUC) and clean up inconsistencies amongst the elements. | City of Chula Vista |
| GDP Amendments | • Amend various elements of the General Development Plan to realign roadways, reconfigure village boundaries and land uses and revise acreage of land uses within reconfigured villages. | City of Chula Vista |
| Village 11 SPA Plan | • Process SPA Plan in compliance with the General Plan and GDP goals and policies | City of Chula Vista |
| Tentative Subdivision Map(s) | • Phased construction in accordance with SPA land uses and performance standards | City of Chula Vista |

## TABLE 3-8
## REQUIRED PERMITS

| Discretionary Action | Purpose | Lead Agency |
|---|---|---|
| National Pollutant Discharge Elimination System (NPDES) | • Permit to discharge into drainages<br>• Stormwater Pollution Prevention Plan | State Water Quality Control Board |
| California Fish and Game Code Section 1600 | • Streambed Alteration Agreement | California Department of Fish and Game |
| Clean Water Act Section 404 Permit | • Impacts to Waters of the U.S. | U.S. Army Corps of Engineers |
| Incidental Take Permit (or 4[d] Permit) | Loss of one gnatcatcher location | U.S. Fish and Wildlife Service/ California Dept. of Fish and Game |
| Conditional Use Permit | Community Public Facilities (CPF) uses | City of Chula Vista |

# SECTION 4.0
# ENVIRONMENTAL SETTING

In accordance with Section 15125 of the CEQA Guidelines, the general environmental setting for the project area is provided in this section. More detailed descriptions of the setting specifically pertaining to each environmental issue is provided at the beginning of each impact issue area addressed in Section 5.0. Information related to the regional environmental setting below is summarized from Section 2.0 of the Otay Ranch Program EIR (90-01) which is incorporated by reference.

## 4.1 PHYSICAL SETTING

The proposed GDP Amendment Area and Village 11 Project Area area are located within the Otay Valley Parcel of the 23,000-acre Otay Ranch. The Otay Valley Parcel is the largest of the three parcels, comprising approximately 9,449 acres. This parcel located in the western and southernmost portion of Otay Ranch and is bounded by Telegraph Canyon Road and the developing EastLake community on the north, Lower Otay Lake to the east, Otay Mesa on the south, and Heritage Road on the west (*Figure 3-2*).

Five natural landforms are located within the Otay Valley Parcel: Otay River Valley, Wolf Canyon, Salt Creek, Poggi Canyon, and Rock Mountain. None of these natural landforms occur within the GDP Amendment Area or Village 11 SPA Plan area, which comprises the majority of the GDP Amendment area. The GDP Amendment area features rolling hillsides that have been altered by years of dry farming. The EastLake Greens residential community is located to the north of the GDP Amendment Area. The land to the west is agricultural but will eventually be developed with SR-125 and Village Six. Agricultural uses continue to the south and transition into natural vegetation as the land drains into the Otay River Valley south of the GDP Amendment area. The San Diego County Water Authority's (SDCWA) second San Diego aqueduct and San Diego Gas & Electric's (SDG&E) traverse Village 11 north to south at a slight diagonal, bisecting the mesa area. East of the GDP Amendment area is Salt Creek, the Olympic Training Center and Lower Otay Reservoir.

Descriptions of onsite physical features such as biology, geology, cultural and paleontological resources are provided in Section 5.0.

## 4.2 APPLICABLE LAND USE PLANS

Section 15125 (d) of the CEQA Guidelines requires that a discussion of inconsistencies between the proposed project and applicable general plans and regional plans be provided. The consistency analysis for the proposed project with applicable plans, policies and regulations is provided in Section 5.0 of this EIR. The following is a list of the plans, policies and regulations that are applicable to the proposed GDP Amendments and Village 11 SPA Plan and which are discussed in appropriate sections of Section 5.0:

- City of Chula Vista General Plan
- Otay Ranch GDP/SRP
- Otay Ranch Resource Management Plan
- Multiple Species Conservation Plan
- Congestion Management Plan
- San Diego Air Pollution Control District Regional Air Quality Strategies
- San Diego Association of Governments (SANDAG) Regional Housing Allocation Plan
- Otay Water District Master Plan
- Draft Chula Vista MSCP Subarea Plan
- City of Chula Vista Growth Management Ordinance
- City of Chula Vista Park Development Ordinance

# SECTION 5.0
# ENVIRONMENTAL ANALYSIS

## 5.1 LAND USE, PLANNING, AND ZONING

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to the existing and proposed land uses for the entire Otay Ranch project area. Section 4.9.2 of the Program EIR 90-01 included an analysis of land use impacts related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of land use issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan Alternative. The following discussion focuses on the project-specific impacts to land use, planning and zoning that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the Village 11 SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

### 5.1.1 EXISTING CONDITIONS

#### CURRENT LAND USES

#### GDP Amendments

The proposed Amendment Area is generally located east of the proposed alignment of SR-125, with the exception of Villages Seven and Eight, and the reclassification of Birch Road between SR-125 to La Media Road (west of the SR-125 alignment). As discussed in the Program EIR 90-01, the Amendment Area has been historically farmed and is actively used for cattle grazing. At the southern end of the Amendment Area, within the University Site (Village Nine), the City of San Diego maintains an easement for a domestic water supply pipeline from the southern end of the Lower Otay Reservoir. Additional easements located within the Amendment Area include overhead electrical transmission lines and a subsurface natural gas pipeline that are owned and maintained by SDG&E, and a San Diego County Water Authority aqueduct easement. The Program EIR 90-01 also described developments in eastern Chula Vista that were either planned, built, or under construction. These included Eastlake, Salt Creek Ranch (Rolling Hills Ranch), Rancho del Rey, Sunbow, and Bonita Long

Canyon. The Program EIR further described land use designations and zoning for the County of San Diego and the City of Chula Vista on the Otay Ranch property and surrounding areas, and included a summary of relevant land use goals and policies of each jurisdiction.

## Village 11 SPA/TM

The Village 11 Project Area is located in the northeastern portion of Otay Ranch, south of the extension of Olympic Parkway and west of the extension of Otay Valley Road and Hunte Parkway. This area has historically been farmed and is actively used for cattle grazing. The Village 11 Project Area is bisected by the SDG&E power line easement (power lines overhead and subsurface gas pipeline) shared with the Otay Water District/San Diego County Water Authority aqueduct easements. This 240-foot wide easement occupies approximately 28 acres. The proposed Village 11 Project Area covers 489 acres while the total impact area identified for implementation of Village 11 is approximately 565 acres. The 565 acres includes offsite grading outside of the Village 11 boundaries that is necessary to construct roads and facilities required for the Village 11 land uses.

The residential community of EastLake Greens is located to the north and would be separated from Village 11 by Olympic Parkway. The area west of the proposed Village 11 Project Area historically has been farmed. Land uses to the south consist of both agriculture and natural open space. The Salt Creek area is located to the east of the project area.

The area to the west is designated as Planning Area 12 in the Otay Ranch GDP (Freeway Commercial and Eastern Urban Center). This area is envisioned as high-intensity development comprised primarily of commercial, office and high-density residential uses. As discussed in *Section 3.0, Project Description*, the land south of Village 11 has been designated as University. An alternative development concept for Village Nine and 10 is permitted after a specified threshold of development has occured in Phases I through III. The Salt Creek hillsides, valleys, and watercourse are designated as open space preserve areas under the Multiple Species Conservation Program (MSCP) and Otay Ranch Resource Management Plan (RMP) (as discussed more fully below) and would be separated from the proposed Village 11 Project Area by Hunte Parkway and an adjacent landscape buffer.

## LAND USE PLANS AND POLICIES

### GDP Amendments

#### *General Plan*

The Chula Vista General Plan establishes goals and objectives to provide guidance in the growth of the City. The General Plan contains nine elements: Land Use, Circulation, Public Facilities, Housing, Growth Management, Open Space and Conservation, Parks and Recreation, Safety, and Noise. The General Plan was amended with the adoption of the GDP, and currently, the GDP and General Plan are consistent with one another.

#### *Otay Ranch General Development Plan*

The land use designations for Otay Ranch are specified by the approved Otay Ranch GDP for those incorporated areas of the City of Chula Vista and by the Otay Ranch Subregional Plan (SRP) for those unincorporated portions of the County of San Diego. The Chula Vista City Council and the San Diego County Board of Supervisors jointly adopted the Otay Ranch GDP/SRP in 1993. The major components of the GDP/SRP include an adopted land use map, Facility Implementation Plans, a Service/Revenue Plan, a Village Phasing Plan, and Phase One Resource Management Plan (RMP 1). When the first SPA Plan was approved in 1996 (SPA One), the City of Chula Vista also approved additional GDP documents and GDP amendments related to an Overall Design Plan, a Phase 2 Resource Management Plan (RMP 2), and a Ranch-wide Housing Plan. Amendments that have previously been made to the GDP and their relationship to the proposed GDP Amendments are discussed in *Section 5.1.3, Impacts.* The proposed GDP Amendments are exclusively within the corporate boundaries of the City of Chula Vista. No changes to the County SRP portion of the plan are proposed or required.

Features of the GDP that would be affected by the proposed Amendments include alignments to circulation facilities east of the proposed SR-125, the classification of Birch Road west of SR-125, boundary reconfigurations for Villages 10, 11 and Planning Area 12 (Eastern Urban Center and Freeway Commercial), and the location of a high school site in Village Seven, or alternatively in Village Eight. Circulation facilities in the Amendment Area are designed to service development proposed by the GDP. The adopted GDP envisioned mixed use development within Planning Area 12 to serve a regional or subregional market. Village 11 was planned as a stand-alone Village, similar to Villages One - Eight. Villages Nine and 10

were contemplated for a University as the primary use, with residential Village uses proposed as a secondary use.

The proposed GDP Amendments also establish general alignments and classifications for transportation and transit facilities. The proposed GDP Amendments include a mix of uses and transportation features intended to improve the regional jobs/housing balance, in accordance with the goals and policies of the San Diego Association of Governments (SANDAG), with respect to growth management and regional transportation.

### *Otay Ranch Resource Management Plan*

The Otay Ranch Resource Management Plan (RMP) was established in the 1993 GDP in order to establish a permanent open space Preserve within Otay Ranch. The purpose of the Otay Ranch Preserve is the protection and enhancement of biological, paleontological, cultural and scenic resources. RMP objectives include biological diversity and promotion of the survival and recovery of native species and habitats. The RMP identifies an open space system of 11,375 acres dedicated within the Otay Ranch. The Otay Ranch Preserve would also connect large areas of open space through a series of wildlife corridors. The preserve would cover portions of Salt Creek Canyon to Otay Valley. The Preserve boundaries from the RMP have been incorporated into the adopted GDP. The Preserve/development boundary of the GDP is consistent with the objectives, policies and criteria established in the RMP.

The RMP incorporates a Preserve Conveyance Plan as a transfer mechanism for land with high quality resources. The RMP identifies vernal pools, coastal sage scrub habitat, coastal California gnatcatcher population area, and potential wetlands restoration areas as important target lands. The RMP includes conveyance procedures for dedicating parcels of land to the Resource Preserve and for determining the proportionate share for each Village. The Otay Ranch GDP identified that the entire Otay Ranch area contained 9,575 developable acres. The estimated conveyance obligation of 11,375 acres to the Otay Ranch Preserve would be met on a village-by-village basis. The conveyance ratio for all development is 1.188 acres for each net acre of project area. Conveyance is required prior to the approval of final maps.

### *City of Chula Vista Draft MSCP Subarea Plan*

The MSCP is a comprehensive, long-term habitat conservation plan which addresses the needs of a variety of biological resources. The MSCP will cover approximately 900 square miles in southwest San Diego County including Otay Ranch.

The primary goal of the MSCP is to identify large preserve systems which can be set aside to offset impacts from development throughout the area covered by the MSCP. The MSCP is intended to create a process for the take of a covered plant or wildlife species under the state and federal Endangered Species Acts. Local governments which have adopted Subarea Plans detailing how the goals of the MSCP will be achieved and have entered into an Implementing Agreement with the U.S. Fish and Wildlife Service are entitled to issue permits to take any species which is specifically covered under the MSCP.

The City of San Diego's MSCP Final EIR/EIS analyzed a draft Subarea Plan for the City of Chula Vista. The Draft Subarea Plan for Chula Vista was based on the future preserve boundaries contained in the Otay Ranch RMP. On October 17, 2000, the City of Chula Vista City Council adopted the Draft Subarea Plan and is in the process of obtaining permit authority from the resource agencies through the signing of an Implementing Agreement.

For the Otay Ranch GDP area, the Draft Subarea Plan relies on the Preserve design and policies contained in the Otay Ranch RMP as the framework for conservation and management of biological resources within Otay Ranch.

## Village 11 SPA/TM

### *Otay Ranch General Development Plan*

The Village 11 SPA Plan has been prepared assuming that the proposed GDP Amendments, as identified and analyzed in this EIR would be adopted. The proposed GDP Amendments affect the arrangement of land uses and transportation facilities, but do not propose any change in the allowable uses within land use designation categories. The land use designations which apply to the Village 11 Project Area include residential with varying densities, including Low-Medium Village Density (LMV), Medium Density (M), and Medium-High Density (MH). The LMV residential land use designation was implemented to establish a village core that encourages non-automotive travel and pedestrian activity. The LMV is a special category that requires specific area densities within the range of 3 to 6 dwelling units per acre to ensure character differentiation, village viability and maintain a small scale, pedestrian-oriented community with the character of a single-family neighborhood.

Other land use designations which apply to the project area include Neighborhood Park (P), Junior High School (JH), Mixed Use (MU), Community Purpose Facility (CPF), and Open Space (OS) (*see Figure 3-23*).

The Otay Ranch GDP/SRP establishes specific criteria with which to evaluate the consistency of future SPA plans and subsequent discretionary applications. The criteria include the following:

- Total land use acres for each individual Village may not vary by greater than 15 percent of the designated acres as indicated on the overall project summary table of the Otay Ranch GDP, except for Preserve wildlife corridor planning purposes;
- Mixed-use and medium-high and high density residential uses for a village may not exceed the Otay Ranch GDP specified acres as indicated on the overall Project Summary Table of the Otay Ranch GDP, except as permitted by transfer, consistent with the Otay Ranch GDP requirements;
- The total number of units within a village may not exceed the total number of units as indicated on the Overall Project Summary Exhibit of the Otay Ranch GDP for that village;
- Units may be moved between villages only in response to the location of major public facilities, i.e., schools;
- If the residential development area is reduced at the SPA level, priority should be given to preserving the amount of land devoted to higher densities supporting transit and pedestrian orientation;
- The Otay Ranch Overall Design Plan (approved March 14, 1995) shall be accepted prior to the approval of the first SPA and shall be subject to review and approval by the City of Chula Vista and County of San Diego; and
- A Village Design Plan shall be subject to review and approval concurrent with SPA Plan approval by the responsible jurisdiction (City or County).

Village 11 is designated in the GDP as an Urban Village. Urban Villages are adjacent to existing urban development and are planned for transit oriented development with higher densities and mixed uses in the village cores. The key land use policies of the Otay Ranch GDP/SRP for Village 11 relate to village character, village core, and parks/open space. Those adopted policies which are relevant to the Village 11 Project Area include:

- Village Character should be guided by the following qualities: location adjacent to the Salt Creek corridor; high intensity of the village land uses; compatibility with the Eastern Urban Center (EUC); views to the mountains to the northeast, east and southeast, and the Salt Creek corridor;
- Multi-family residential uses should be located within and outside the village core to provide housing opportunities adjacent to the EUC and Freeway Commercial area;
- The village core land uses should provide a medium density transition to the Freeway Commercial areas to the west;
- The village core should utilize the greenway/open space corridor as an identifying feature;
- Natural open space areas adjacent to Salt Creek identified on the GDP/SRP Land Use Map shall be preserved outside of the individual private lots. Natural open space character along the canyon shall be based upon the concepts developed in the Overall Ranch Design Plan and refined in the Village Design Plan for this Village;
- The perimeter of natural open space would average 75 feet from curb space to buffer;
- The average width of the landscape buffer along Hunte Parkway is between 20 to 25 feet when adjacent to the preserve;
- Pedestrian trails shall link the village with Salt Creek and the Otay Valley Regional Park;
- The environmental resources contained in Salt Creek shall be protected through careful buffering, landscaping and grading techniques;
- The SDCWA aqueduct and SDG&E easements should be integrated into the design of the village as open space. These easements may be utilized for road crossings, and limited landscaping, however, no habitable structures may be placed in the area. Residential and school uses should be buffered from the SDG&E power lines. The width of the buffer would conform to school district requirements;
- Contour grading shall be required adjacent to Salt Creek. Landform grading guidelines identified in the Chula Vista General Plan have been developed

as part of the Overall Ranch Design Plan and further refined in the Village Design Plan at the SPA level; and

- Design guidelines which address the visual quality of development adjacent to Salt Creek have been defined in the Overall Ranch Design Plan and further in the Village Design Plan for Village 11. The slopes of the developments adjacent to Salt Creek would be at 2:1 to avoid encroachment into the habitat area.

## *Otay Ranch Resource Management Plan*

The requirements of the RMP that are applicable at the SPA level, are included in Section 3.0 of the Phase One RMP. This section includes objectives and policies related to identification, conservation, and mitigation/restoration of sensitive biological resources in Otay Ranch. The requirements that are applicable to Village 11 include conveyance of Preserve land, and preparation of an "edge plan" to address potential edge effects for development areas adjacent to the Preserve.

The RMP incorporates a Preserve Conveyance Plan as a transfer mechanism for land with high quality resources. The RMP identifies vernal pools, coastal sage scrub habitat, coastal California gnatcatcher population area, and potential wetlands restoration areas as important target lands. The RMP includes conveyance procedures for dedicating parcels of land to the Resource Preserve and for determining the proportionate share for each village. The Otay Ranch GDP identified that the entire Otay Ranch area contained 9,575 developable acres. The estimated conveyance obligation of 11,375 acres to the Otay Ranch Preserve would be met on a village-by-village basis. The conveyance ratio for all development is 1.188 acres for each acre of project area. Conveyance is required prior to the approval of final maps. For Village 11, conveyance responsibility is calculated based on the 489-acre SPA area, less common areas, including schools, parks, and roadways,(totaling 106 acres), leaving 383 acres to which the 1.188-acre multiplier is applied. The resulting conveyance responsibility for Village 11 would be 455 acres.

## *Chula Vista MSCP Subarea Plan*

The Draft City of Chula Vista MSCP Subarea Plan establishes the Otay Ranch as a "covered project," for which hard line Preserve boundaries have been established, and 100% conservation in the Preserve areas is required. However, the Subarea Plan allows for

infrastructure within the Preserve to support development outside of the Preserve, subject to specific conditions. The conditions affecting Village 11 include siting criteria for proposed drainage facilities to be located in the Preserve. A discussion of the criteria is contained in *Section 5.3, Biological Resources*.

### Zoning

The Planned Community (PC) zone of the City of Chula Vista was implemented concurrently with adoption of the Otay Ranch GDP. The primary purpose of the PC zone is to provide for orderly preplanning and long-term development of large tracts of land. The City will be able to adopt measures providing for the development of the surrounding area compatible with the PC zone and GDP. The entire Otay Ranch within the City's General Plan area was prezoned as part of the Otay Ranch GDP approval as PC-Planned Community Zone, which includes Village 11.

## 5.1.2 THRESHOLDS OF SIGNIFICANCE

According to the Environmental Checklist contained in Appendix G of the CEQA Guidelines impacts to land use would be significant if the proposed project:

(a) Physically divides an established community.

(b) Conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

(c) Conflicts with any applicable habitat conservation plan or natural community conservation plan.

## 5.1.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA/Conceptual TM, including changes that have been made to the conclusions and analysis contained in the Program EIR.

## OTAY RANCH PROGRAM EIR

The Otay Ranch Program EIR found the following significant impacts to land use, planning and zoning that are pertinent to the proposed GDP Amendments:

- Potential incompatibility with existing adjacent land uses including Otay Landfill, Eastlake, San Diego Air Sports Center, and three quarries. The impact related to incompatibility with immediately surrounding land use was identified as a significant, but mitigable impact.

- Potential incompatibility with internal project land uses. Internal compatibility of land use was identified as a potentially significant, but mitigable impact.

- Conversion of the site's character from undeveloped open space to developed land, and the related inconsistencies of the change to the City of Chula Vista's goals for the Eastern Territories was considered to be a significant and unmitigable impact.

These impacts were re-examined for purposes of determining the level of impact caused by the proposed GDP Amendments. The analysis of these impacts related to the Amendments is included in Section 5.1.4 of this EIR.

## SPHERE OF INFLUENCE UPDATE EIR

No significant adverse impacts related to land use planning and zoning were identified because inclusion of the Otay Ranch into the City of Chula Vista's Sphere of Influence would not result in a physical change.

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the land use assumptions or conclusions or mitigation measures of the Program EIR 90-01. The SPA One EIR found that the annexation of lands within the Otay Ranch GDP would cause significant impacts to land use, but none beyond what was described in the Program EIR 90-01.

The GDP amendments made with the SPA One Plan adoption added SPA-level requirements that affect future SPA plans. With respect to land use, those requirements included the following:

- Each Village is required to locate a transit stop in each SPA Plan. Approval of the each SPA Plan shall include a condition requiring the location and dedication of the transit stop at the Tentative Map level.

- Each SPA Plan shall include an "Edge Plan" that identifies more precise preserve boundaries, and shows the interface between development areas and Preserve areas.

### AMENDED SPA ONE EIR

The Amended SPA One EIR found no significant adverse impacts related to land use, planning and zoning would occur from implementation of the SPA One GDP Amendments or amended SPA Plan. However, in response to comments on the Draft EIR, a mitigation measure was required that modified a village core policy to allow for reductions in the number of multi-family units, provided that sufficient densities are provided to support bus and light rail transit. The Village 11 SPA Plan does not propose reductions in multi-family residential units, and is therefore, not subject to this additional measure.

## 5.1.4 IMPACTS

### POTENTIAL DIRECT AND INDIRECT IMPACTS TO LAND USES

#### GDP Amendments

The residential community of EastLake Greens is located to the north of the Amendment Area. The development in this portion of Eastlake did not exist at the time that the GDP was adopted in 1993. The extension of Olympic Parkway is currently under construction along the northern boundary of the Amendment Area. Olympic Parkway would serve as a six-lane prime arterial designated as a "Scenic Corridor." Land uses along the northern boundary of the Amendment Area would not substantially change from those identified in the adopted GDP.

The remaining areas within the Amendment Area currently exist as agricultural land and are adjacent to natural open space. These uses have not changed substantially since the adoption of the GDP.

The existing land uses within the proposed Amendment Area have not substantially changed since certification of the Program EIR. Further, surrounding development (EastLake Greens) occurring since certification of the Program EIR 90-01 has developed as anticipated in the Program EIR 90-01. Therefore, the proposed GDP Amendments would not result in any significant impacts beyond those previously analyzed in the Program EIR 90-01, including: 1) a significant change in the character of the site from open space to urban and semi-rural development (direct land use impacts); and 2) potential adverse impacts due to residential land uses planned adjacent to the Eastlake Greens project (indirect land use impacts).

The proposed GDP Amendment would still result in a significant and unmitigable impact related to conversion of undeveloped land to urban uses.

## VILLAGE 11 SPA/TM

The residential community of EastLake Greens is located to the north of the Village 11 Project Area. The extension of Olympic Parkway is planned between EastLake Greens and Village 11. Olympic Parkway would serve as a six-lane prime arterial designated as a "Scenic Corridor." A 75-foot (average) landscaped buffer would be located on each side of the street and a regional trail would be located on the north side of the Village adjacent to Olympic Parkway. The northern portion of the Village 11 Project Area is proposed for residential development which is compatible with the adjacent residential land use to the north.

The area south of the Village 11 Project Area currently exists as agricultural land and natural open space. The proposed land use is designated as a University campus site. If the area is not developed as a University, the adopted Otay Ranch GDP provides that the area may develop as Villages Nine and 10. These villages would include village core, residential, community facility, school, and park development. The proposed boundary between Village 11 and the University project area is Hunte Parkway, a six-lane prime arterial and designated scenic corridor. The southern portion of the Village 11 Project Area is proposed for a junior high school and residential development. This land use is compatible with the proposed university, residential, or community park land to the south.

Salt Creek is located to the east of the Village 11 Project Area. The Salt Creek hillsides, valley, and watercourse are designated as open space preserve areas within the Otay Ranch RMP and in the adopted County of San Diego MSCP Subarea Plan and Draft Chula Vista MSCP Subarea Plan. The proposed Hunte Parkway would provide separation between the Salt Creek Preserve area and development in the Village 11 Project Area. The landscaped areas along Hunte Parkway would provide a buffer between the preserve and Village 11 Project

Area. Construction of Hunte Parkway would not encroach into the MSCP Preserve. However, the offsite drainage facilities would encroach into the Preserve, according to the siting criteria in the Subarea Plan for future facilities. The lowest intensity development, single-family residences, would be located in this area, which is consistent with other development planned adjacent to the Preserve.

The area west of the Village 11 Project Area is agricultural land proposed for development as Otay Ranch Planning Area 12. The northern portion of Planning Area 12 is designated as Freeway Commercial (FC) development and the southern portion is designated as the EUC. Short-term impacts related to the adjacency of agricultural uses to development are not anticipated, because the short duration of potential nuisance related to continuation of adjacent agricultural activities, impacts to future land uses within the Village 11 Project Area are not anticipated to be significant. The FC is proposed as a thoroughfare commercial, visitor commercial, and regionally oriented retail commercial center which would require direct freeway exposure and serve the market needs of the region. The EUC is envisioned as a high-intensity development comprised primarily of commercial, office, and high-density residential land uses. Eastlake Parkway is a six-lane prime arterial street proposed to be located between Planning Area 12 and Village 11. The proposed land uses in the western portion of Village 11 are mixed-use (including commercial, high-density residential and community facilities), medium to higher density residential and a junior high school. These are the highest-intensity land uses within the village and are compatible with the adjacent development. These land uses would also serve as a transition between high-intensity uses to the west and lower-intensity residential uses within Village 11.

Because the development associated with the Village 11 SPA Plan would not create land use compatibility conflicts with adjacent uses, no significant impacts to existing established communities would result. The Village 11 SPA Plan would, however, result in the conversion of land to intensive urban development, which would be considered a significant land use impact.

## LAND USE PLANS AND POLICY CONFORMANCE

### GDP Amendments

#### *General Plan Consistency*

The following discussion under the subheading of *Otay Ranch General Development Plan Consistency* analyzes the consistency between the proposed GDP Amendments and the

adopted GDP. Since the adopted GDP and the current General Plan are consistent with one another, analysis of consistency of the proposed GDP Amendments to the adopted GDP also serves to analyze consistency of the proposed General Plan Amendments with the adopted General Plan.

## *Otay Ranch General Development Plan Consistency*

### CIRCULATION AMENDMENTS

**Hunte Parkway Realignment Connection with Rock Mountain:** The realignment of Hunte Parkway is proposed to eliminate an arterial road running through the University site by realigning Hunte Parkway to terminate with Rock Mountain Road at the proposed SR-125 interchange. Because traffic volumes with the proposed alignment are similar with the proposed amendment, and the realignment would allow for a cohesive University development area, the realignment provides adequate access to the proposed land uses, and adequate circulation within the Amendment Area. Therefore, the Amendments are not inconsistent with the intent of the adopted GDP and would not result in a significant impact to land use plans, policies or regulations of the GDP.

**Eastlake Parkway Realignment and the Elimination of Patrick Drive:** Eastlake Parkway south of Olympic Parkway would be realigned to follow the property line between the McMillin Companies ownership and the property now owned by Brookfield Shea Otay, LLC. Patrick Drive, which currently is the boundary between Village Ten and the EUC, would be eliminated under the proposed amendments. Because the origin and destination points for the new alignment of Eastlake Parkway are similar to those identified in the adopted GDP, and because the traffic volume anticipated with the amendments are similar to the adopted GDP forecasts, that the realignment and road deletion is determined to be consistent with the intent of the adopted GDP and would not result in a significant impact to land use plans, policies or regulations of the GDP.

**Elimination of Birch Road east of Eastlake Parkway:** Birch Road was originally planned to extend to Hunte Parkway, forming the southern boundary for Village 11. The road is now proposed to terminate at Eastlake Parkway. Although this represents a change from the adopted GDP, the traffic analysis for the proposed GDP Amendments (Section 5.10) determined that no new significant impacts to traffic and circulation would result from the proposed GDP Amendments overall. Therefore, the elimination

of the eastern segment of Birch Road is not anticipated to result in any significant impacts to the circulation plan of the adopted GDP.

**Birch Road Reclassification to Six-lane Major Street, La Media to SR-125:** Birch Road from La Media to SR-125 would be reclassified from a four-lane major to a six-lane major to meet the future traffic capacity, as estimated by the new SANDAG Series 9 growth forecast traffic model. Because of the close spacing of La Media, the Village 6 entry and the traffic controlled intersection of a proposed private high school, Birch Road requires reclassification to a six-lane major road to accommodate future buildout volumes on that segment. This change is considered to be a minor amendment to the GDP. The change is also considered to be consistent with the goals and objectives of the adopted GDP. Therefore, no significant impacts to land use plans, policies or regulations of the GDP would result.

## LAND USE AMENDMENTS

**Village Nine:** The primary land use for Village Nine is *University* and the secondary use is *Residential Village*. Under the Village scenario, there would be no change to proposed land uses. Under the University scenario, 14.8 acres of additional land would be available for University use due to the elimination of Main Street through the Village. The changes proposed by the GDP Amendments would not affect the overall viability of the Village, nor would they substantially change the character of the Village or reduce the ability of the Village to support transit. Therefore, no significant impacts to land use plans, policies or regulations of the GDP would result.

**Village Ten:** The primary land use for Village Ten is *University*. Under the University scenario, the proposed GDP Amendments would result in a reduction of 64.4 acres of University use. The reduction in University acreage would not affect the ability of a future university development to establish a viable university campus within Otay Ranch.

The secondary land use for Village Ten is *Residential Village*. Under the Village scenario, residential acreage would be reduced by 32 acres, CPF uses would be reduced by 1.0 acre, commercial uses would be reduced by 17 acres, and school acreage would be reduced by 25 acres, as a result of relocation of a middle school from Village Ten to Village 11. There would be an increase in open space acreage of 16.6 acres. The net effect of the proposed GDP Amendments in terms of total acreage of the Village would be a 64.4-acre reduction in the size of Village Ten. Residential units would be reduced by 150 single-family and 101 multi-family units. The changes in unit counts

for Village Ten relate to the changes in overall acreage of the Village, as a result of reconfiguration of its boundaries. The proposed Amendments would not substantially change the type and density of uses for Village Ten. Consistent with the goals of the adopted GDP, the proposed Amendments would retain the character of the village and its viability, in terms of mix of uses and maintaining its ability to support transit. Therefore, no significant impacts to land use plans, policies or regulations of the GDP would result.

**Village Seven:** Village Seven is the proposed location for the proposed relocation of a high school site from Village 11. The proposed relocation of the high school site from Village 11 to Village Seven is consistent with recent discussions between the city and the Sweetwater Union High School District to accommodate the needs and timing considerations of the District. The GDP adopted in 1993 originally included a high school site in Village Seven. That high school site was subsequently moved to Village Two, and the GDP Amended to show that relocation. If the Village Seven location is selected, the high school site would replace 250 single-family residential dwelling units. The 250 unit reduction represents the maximum yield achievable for the 50-acre school site under the existing LMV-5 land use designation, which would allow for 5 dwelling units per acre. The same number of units were added to Village Seven when the high school site was removed from the village. The proposed GDP Amendments would result in a land plan consistent with the Village Seven design proposed in the original GDP adopted in 1993. The land use plan for Village Seven under the original GDP was planned to function as a viable village. It is not anticipated that addition of the high school site back into Village Seven would result in any significant impacts to the policies or regulations of the GDP.

**Village Eight:** Village Eight is the alternative location for the relocation of the high school site from Village 11. Placement of the high school site in the northern portion of Village Eight would eliminate approximately 240 single-family residential dwelling units, resulting in a reduction from 1,021 units to 781 units. The 240 unit reduction represents the maximum yield achievable for the 50-acre school site under the existing LMV-4.5 land use designation, which would allow for 4.5 dwelling units per acre. Reduction in single-family residential dwelling units to 781 units within Village Eight would result in a single-family unit count that would be adequate to support a functional village including the support of transit, in the adopted GDP, as with Villages Nine, 10 and 11 which have single-family residential unit counts ranging from 735 to 819. Therefore, since Village Eight could function as a viable village with the proposed addition of the high school site, it is not anticipated that the proposed GDP

Amendments with the high school site in Village Eight would result in any significant adverse impacts to land use regulations and/or policies of the GDP.

**Village 11:** The boundaries of Village 11 would be modified by the realignment of Eastlake Parkway and Hunte Parkway. The realignment of Eastlake Parkway increases Village 11 and reduces the area of the EUC by approximately 40 acres. The realignment of Eastlake Parkway also reduces Village 11 by approximately 46 acres and increases the area of the Freeway Commercial area by an equal amount. The realignment of Hunte Parkway reduces the area of the University Site (including Village 10 secondary land uses) by 64 acres. Under the University Scenario for the portion of Village Ten that would be incorporated into Village 11, the total number of units increase only slightly. Therefore, the proposed GDP Amendments are considered to be consistent with the overall intent of the GDP and would, therefore, not result in any significant impacts to land use plans, regulations or policies of the GDP.

**Planning Area 12:** The Freeway Commercial boundaries would be expanded with the realignment of Eastlake Parkway. The Freeway Commercial area would be increased by approximately 46 acres. Village 11 would be decreased by an equal amount.

The realignment of Eastlake Parkway also decreases the size of the Eastern Urban Center (EUC) of Planning Area 12 by approximately 40 acres. The proposed GDP Amendments would transfer the 40 acres from the EUC to Village 11. Both the expansion of the Freeway Commercial area and the reduction in size of the EUC constitute minor adjustments to planning area boundaries due to realignment of Eastlake Parkway and elimination of Patrick Drive because the viability of the Freeway Commercial or EUC uses would not be compromised. The amendments are, therefore, considered to be consistent with the overall intent of the GDP and would, therefore, not result in any significant impacts to land use plans, regulations or policies of the GDP.

**Village Greenway:** The Village Greenway runs from Wolf Canyon to Salt Creek traversing through Village Seven, the EUC and Village 11 in the adopted GDP. Due to the arterial street changes, realignment of the route is proposed in the EUC and Village 11. The realignment of the Greenway is proposed from the under crossing at SR-125 to the southeastern corner of the EUC. The proposed Greenway crosses Eastlake Parkway and then runs along the southern edge of Village 11 adjacent to Hunte Parkway. The proposed corridor along Hunte Parkway would be combined within the village perimeter 75-foot average buffer. Since the Greenway would still provide a viable

connection between Wolf Canyon and Salt Creek through Village Seven, the EUC and Village 11, that the proposed amendment is consistent with the intent of the adopted GDP. Therefore, no significant impacts to land use plans, policies or regulations of the GDP would result.

**Phasing:** The proposed GDP Amendments would amend the Otay Ranch Village Phasing Plan. Village 11 would be moved into the Second Western Phase from the Third Western Phase. The Freeway Commercial area of Planning Area 12 would also be included in the Second Western Phase. The amendment to the phasing plan is viewed as consistent with the overall phasing goals of the adopted GDP. The Phasing Plan in the adopted GDP calls for the development of the Western (Otay) Parcel to be based on a rational and logical extension of public facilities. The sequencing of infrastructure construction has been modified by advancing the construction of Olympic Parkway. In addition, development in the southeastern portions of Eastlake has progressed, extending infrastructure to the eastern portions of the Otay Parcel. As a result, Village 11 and the Freeway Commercial areas are now adjacent to existing facilities. The further extension of facilities to serve these two planning areas is consistent with the logical extension of public facilities contemplated in the adopted GDP. The adopted Village Phasing Plan states that the Phasing Plan "may be amended or updated in response to changing conditions." As a result of these considerations, the proposed GDP Amendments are considered to be consistent with the goals, objectives and policies of the adopted Otay Ranch GDP. Therefore, no significant impacts to land use plans, policies or regulations of the GDP would result.

## OTAY RANCH RESOURCE MANAGEMENT PLAN CONSISTENCY

The proposed GDP Amendments would not change the boundaries of the Preserve identified in the RMP. All of the proposed changes to the GDP are within the development area identified in the RMP, and as such, no new or additional impacts to sensitive biological resources would result from adoption of the proposed GDP Amendments. The proposed GDP Amendments would also not affect the conveyance of land into the Preserve. Development in accordance with the proposed GDP Amendments would still be subject to the conveyance requirements of 1.188 acres of preserve per acre of developed land into the Preserve. For Village 11, conveyance responsibility is calculated based on the 489-acre SPA area, less common areas, including schools, parks, and roadways,(totaling 106 acres), leaving 383 acres to which the 1.188-acre multiplier is applied. The resulting conveyance responsibility for Village 11 would be 455 acres. The management structure and maintenance requirements

of the RMP would not be affected by the proposed GDP Amendments. In addition, all of the policies and standards set forth in the RMP would apply to the proposed GDP Amendments. Overall, the proposed GDP Amendments would not result in any significant adverse impacts to the Otay Ranch Resource Management Plan, or in any way adversely affect its implementation.

### CHULA VISTA MSCP SUBAREA PLAN CONSISTENCY

As stated in *Section 5.1.1, Existing Conditions*, the Chula Vista MSCP Draft Subarea Plan relies extensively on the Otay Ranch Resource Management Plan (RMP) for conservation of sensitive habitats and species, as well as for long-term Preserve management, for the portions of the Preserve encompassed within the Otay Ranch Project area. The Chula Vista MSCP Draft Subarea Plan proposes modifications to the Preserve boundary which, once approved by the Wildlife Agencies, would necessitate further modifications to the RMP Preserve boundary, as well as further amendments to the Otay Ranch GDP to reflect those changes. However, as stated above, the proposed GDP Amendments addressed in this EIR would not have a significant adverse effect on the RMP. Similarly, and for the reasons discussed in the previous section related to the RMP, the proposed GDP Amendments would not adversely affect the City's Draft Subarea Plan.

## VILLAGE 11 SPA/TM

It is again noted that this discussion assumes that the proposed GDP Amendments identified and addressed in this EIR would be approved prior to or concurrent with SPA Plan approval. Without the Amendments, a new SPA Plan would be required, addressing the existing GDP configuration of Village 11.

### General Plan Land Use Diagram and Policies

In order to remain consistent with the General Plan, landscape buffering guidelines have been included in the SPA Plan to provide a landscape screen between Village 11 uses and the prime arterial roads. The proposed Village 11 core area contains higher density residential as one of the mixed land uses to be provided. In accordance with policies outlined in the General Plan for Otay Ranch villages within the Eastern Territories Area Plan, single family residences surround the Village core areas. The Village core also includes elementary school sites and one public neighborhood park, a private town square, and two private recreation areas.

The proposed overall density of 4.9 dwelling units per acre within the low-medium village residential land use designation is within the General Plan's 3 to 6 dwelling units per acre range. The proposed residential medium-high density of 14.5 dwelling units per acre is considered consistent with the intended 11 to 25 dwelling units per acre under the Village core designation of the General Plan because precise plans have been prepared to encourage a mixture of Village 11 core land uses.

The Village 11 SPA Plan would not require amendments to any General Plan policies. The General Development Plan, serves as the guiding land use and circulation document for Otay Ranch. No inconsistencies or lack of conformance with the General Plan would result from approval for the Village 11 SPA Plan. Therefore, the Village 11 SPA Plan would not result in significant impacts to land use plans, policies or regulations of the GDP as amended.

## Otay Ranch GDP Implementation Plans and Policies

The proposed Village 11 SPA Plan is consistent with the Otay Ranch GDP Amendment Land Use Map conceptual design. The multi-family neighborhoods and the proposed CPF sites would provide the visual and physical separation between the village core local services and the regional uses of the EUC.

The proposed Village 11 SPA Plan and the TM identify an open space easement along the perimeter of the project. The proposed SPA Plan establishes grading policies and requires that all landscaping within the open space shall comply with the City's Landscape Manual, and other applicable codes. The proposed SPA design and guidelines would implement GDP policies. The Conceptual TM would establish a pedestrian friendly community centered around the village core. The Conceptual TM contains 2,304 single-family and multi-family dwelling units in residential and mixed use areas. There is also area reserved for commercial development, road circulation, public parks and private recreational facilities, and open space. In addition, the village design includes a transit stop pursuant to the requirements of the GDP, as amended. The design for the Conceptual TM and the proposed Village 11 SPA Plan are in conformance with the GDP, as amended. Therefore, no significant impacts to land use plans, policies or regulations of the GDP, as amended, would result from implementation of the Village 11 SPA Plan.

## Otay Ranch Resource Management Plan

The proposed Village 11 SPA Plan would not affect any property or resources identified for permanent preservation within the Otay Ranch RMP. Village 11 conveyance obligations are

based on the 1.188 acre of open space dedication per acre of development (as defined by the RMP 2). For Village 11, conveyance responsibility is calculated based on the 489-acre SPA area, less common areas, including schools, parks, and roadways,(totaling 106 acres), leaving 383 acres to which the 1.188-acre multiplier is applied. The resulting conveyance responsibility for Village 11 would be 455 acres. Conveyance timing requires actual conveyance prior to the time of development. The proposed Village 11 SPA Plan and its implementing permits would be in compliance with the RMP. No significant impacts to the RMP or to its implementation would result from implementation of the Village 11 SPA Plan.

## Zoning

The proposed Village 11 SPA Plan, once adopted, would establish City regulations for development within Village 11 of Otay Ranch. Under the Planned Community (PC) Zone, Planned Community District Regulations specific to Village 11 are required. For areas not regulated under the Planned Community District Regulations, applicable City regulations would apply. The proposed Village 11 Conceptual TM would conform to the residential district development standards for lot sizes. All CPF uses would require a Conditional Use Permit (CUP), including places of worship, private ballfields and daycare facilities. The proposed structures must meet the applicable height, setback and coverage regulations. Therefore, the proposed project is consistent with planned community zoning regulations. and no significant land use impacts related to regulations of the zoning ordinance would result.

## Multiple Species Conservation Plan

The proposed Village 11 SPA Plan conforms to the MSCP and the Draft Chula Vista Subarea Plan. The Village 11 Project Area is within a designated development area. The proposed project area is currently 97 percent in agriculture or disturbed areas, and as further discussed in *Section 5.3, Biological Resources*, contains sensitive habitats or protected plants or animals. The SPA Plan conforms to the development and conservation assumptions in the MSCP Subregional Plan. The Salt Creek MSCP Subarea Plan open space occurs adjacent to the project area, along the eastern property line. A relatively small amount of project grading (2.7 acres) for the creation of two drainage facilities would encroach into the Salt Creek open space (a third drainage facility is located outside the open space area). Mitigation measures that conform with the City's MSCP Adjacency requirements are included in *Section 5.3, Biological Resources.* The offsite facilities associated with the Village 11 Project Area have been designed to conform to the siting criteria of the Draft Subarea Plan, and would not result in

inconsistencies with the Plan. Therefore, no significant impacts to the MSCP or its implementation would result from the Village 11 development.

## 5.1.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The significant impacts previously identified in Program EIR 90-01 that would apply to the proposed GDP Amendments include:

- Potential incompatibility with existing adjacent land uses including Otay Landfill, Eastlake, San Diego Air Sports Center, and three quarries. The impact related to incompatibility with immediately surrounding land use was identified as a significant, but mitigable impact.

- Potential incompatibility with internal project land uses. Internal compatibility of land use was identified as a potentially significant, but mitigable impact.

- Conversion of the site's character from undeveloped open space to developed land, and the related inconsistencies of the change to the City of Chula Vista's goals for the Eastern Territories was considered to be a significant and unmitigable impact.

The proposed GDP Amendments would not result in any additional significant adverse impacts, or intensification of impacts to land use and planning that were not previously analyzed in the Program EIR 90-01 for the adopted GDP.

### VILLAGE 11 SPA/TM

Development of the Village 11 SPA Plan, as proposed, would result in a significant change in the character of the site from undeveloped to intensive urban use. No feasible mitigation measures have been identified to reduce this impact to less than significant levels.

## 5.1.6 MITIGATION MEASURES

### GDP AMENDMENTS

Mitigation measures from Program EIR 90-01 require that each SPA Plan include measures to mitigate potential external compatibility with adjacent land uses (Eastlake), including landscaping, grading and buffering standards. All of the mitigation measures from Program EIR 90-01 are contained in *Appendix B*, and are still applicable to the proposed GDP Amendments.

**5.1-1** The SPA One EIR included mitigation measures specific to the SPA Plan. However, it also included requirements for the preparation of Edge Plans, to address potential impacts to Preserve areas at the interface with development, as well as Village Design Plans. This requirement applies to all SPA plans. The Edge Plan documents are to be prepared as each SPA Plan is submitted. The requirement to prepare Edge Plans for each SPA Plan is a mitigation measure that is required with the proposed GDP Amendments.

No new mitigation measures are required for the proposed GDP Amendments, since no new significant impacts to land use have been identified.

### VILLAGE 11 SPA/TM

The Village 11 SPA Plan includes all of the plans and studies that are required by the GDP, as amended. The SPA Plan demonstrates compliance with all mitigation standards that were previously developed to mitigate potentially significant land use impacts to less than significant levels. No additional mitigation is required.

## 5.1.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 identified significant and unmitigable impacts related to inconsistency with City of Chula Vista policies and goals for the Eastern Territories. This impact is still significant and unmitigable with the proposed GDP Amendments.

The proposed amendments to the GDP would not result in any new significant adverse impacts, or intensification of impacts to land use and planning that were not previously analyzed in the Program EIR 90-01 for the adopted GDP.

## VILLAGE 11 SPA/TM

All existing land use, planning, and zoning regulations would be adhered to under the proposed Village 11 SPA Plan. No significant impacts to related land use compatibility or compliance with land use plans, policies or regulations would result from adoption of the Village 11 SPA Plan, as proposed. However, implementation of the Village 11 SPA Plan would result in the conversion of the site from undeveloped to intensive urban uses, as identified in Program EIR 90-01. No feasible mitigation has been identified to reduce this impact to less than significant levels.

# 5.2 LANDFORM ALTERATION/AESTHETICS

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to land for and Aesthetics for the entire Otay Ranch project area. Section 4.9.3 of the Program EIR 90-01 included an analysis of landform and visual impacts related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of landform and visual issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to landform and visual resources that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

## 5.2.1 EXISTING CONDITIONS

### GDP AMENDMENTS

The Amendment Area includes Villages Seven, Eight, Nine, 10 and 11, and Planning Area 12 (Eastern Urban Center and Freeway Commercial uses). The proposed amendments to land use and circulation facility realignments are generally located east of future SR-125, south of Olympic Parkway (under construction), west of Salt Creek and north of Otay River, with the exception of Villages Seven and Eight, and the reclassification of Birch Street west of future SR-125. The following changes in visual character of the surrounding area have occurred since the adoption of the Program EIR 90-01: Olympic Parkway construction (ongoing), offsite development that has occurred in Eastlake Greens to the north, and further buildout of the Olympic Training Center offsite to the east. As discussed in *Section 4.1* of this EIR, the Amendment Area generally consists of rolling terrain that has been altered by dry farming. The five significant landforms in the region, namely Poggi Canyon, Wolf Canyon, Otay River Valley and Salt Creek, are located outside of the Amendment Area. No development or grading has occurred within the GDP Amendment Area, and visual and landform conditions on the site have not substantially changed since the adoption of the Otay Ranch GDP.

## VILLAGE 11 SPA/TM

Elevations within the project area range from 440 to 677 feet above mean sea level, sloping from northwest to southeast. The undulating topography consists of a series of ridges and narrow drainages which steepen where the mesa transitions into the Otay River and Salt Creek valleys. The area conveys a rural, agricultural, and undeveloped open space character, crossed by a corridor of power lines and other features of a major utility easement.

Slopes greater than 25 percent were previously identified as visual resources within the Program EIR 90-01. Approximately 13 acres of slopes 25 percent or greater occur within the Village 11 Project Area (*Figure 5.2-1, Steep Slopes*). These steep slopes are located along the drainages near Salt Creek and along the Village 11 Project Area's northeastern boundary. Salt Creek Canyon and the Otay River Valley were identified in the Program EIR 90-01 as significant landforms. Lower Otay Lake to the east, was also identified as a significant visual landform, located outside of Otay Ranch, but potentially affected by the overall development in Otay Ranch.

### Views

The primary locations from which the Village 11 Project Area is visible are illustrated in *Figure 5.2-2, Vantage Point Locations*. Representative photographs taken from these locations are presented in *Figures 5.2-3* through *5.2-8, Views along Olympic Parkway; Views from the EastLake Community; Views from the West; Views from Salt Creek Approaching from Otay River Valley; View from Salt Creek, East of Village 11; and View from Olympic Training Center.*

As illustrated in *Figures 5.2-3 and 5.2-4*, the northern portion of the Village 11 Project Area is visible from the Eastlake communities. This view would be separated by the planned six-lane Olympic Parkway. Olympic Parkway is designated as a "Scenic Corridor", to be developed with a regional trail along the north side. The views from this future roadway and associated regional trail include single-family residences, agricultural land, and existing power lines.

Existing agricultural use areas within Planning Area 12, would have views of the Village 11 Project Area from the west. Until Planning Area 12 is developed, there may be more distant vistas of the Village 11 Project Area from portions of Village Five to the northwest and from proposed development within Village Six to the west (*Figure 5.2-5* c).

LEGEND

AREA OF 25% SLOPE AND GREATER IN VILLAGE 11

| Range Beg. | Range End | Area | Percent | Color |
|---|---|---|---|---|
| 25.00 | Greater | 571759.23 | 100.0 | ■ |

SOURCE: Brookfield Shea Otay, LLC, (12-22-00)

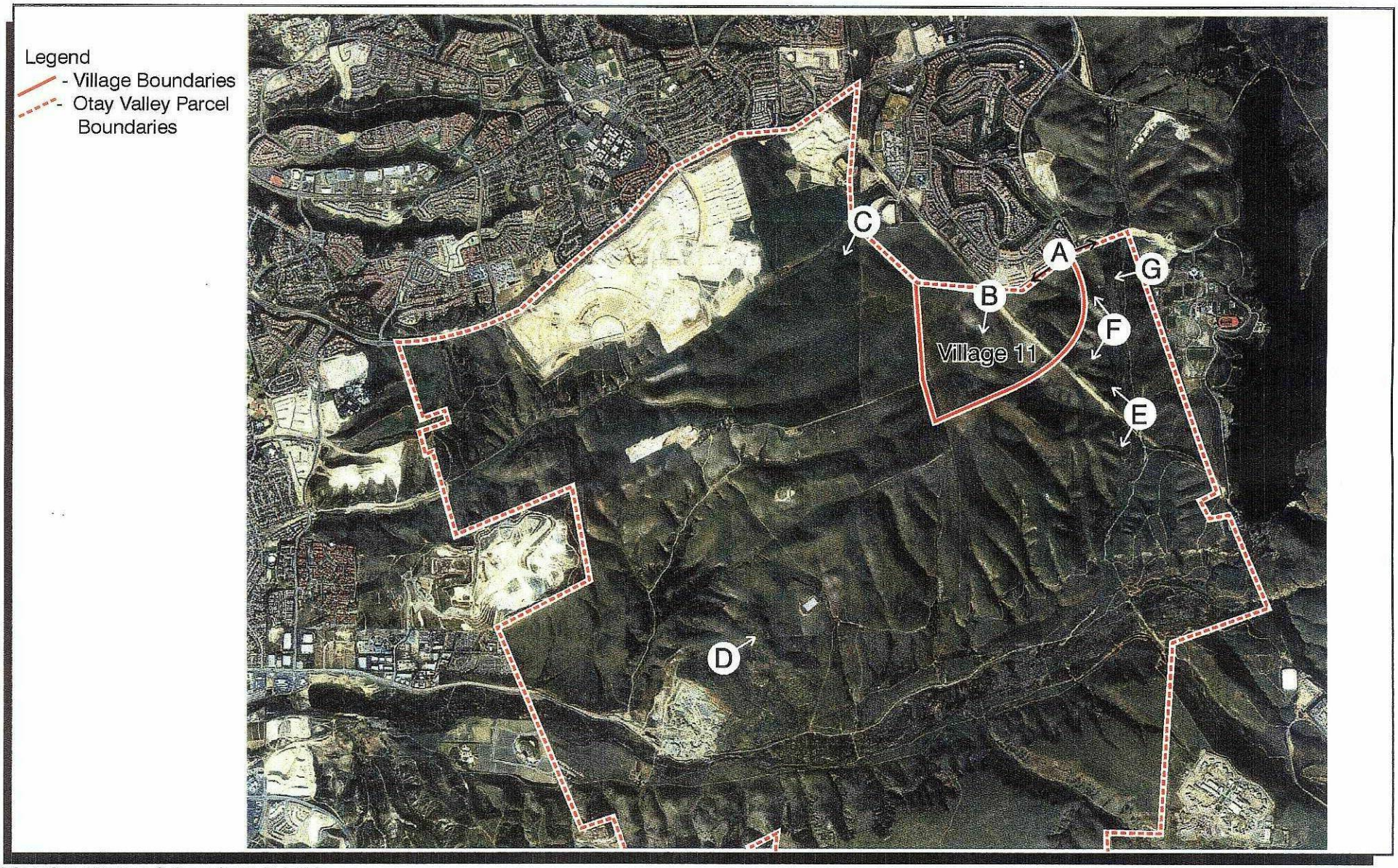
N

Not to Scale

**Steep Slopes**

*figure 5.2-1*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR




SOURCE: Mooney & Associates (2-1-01)

Not To Scale

**Vantage Point Locations**

*Figure 5.2-2*

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

Looking West From Vantage Point A

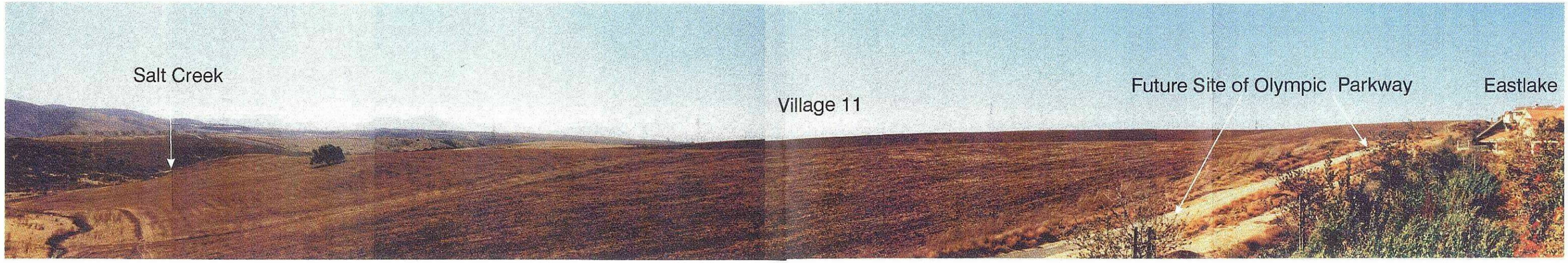
Looking East From Vantage Point A

SOURCE: Mooney & Associates (2-1-01)

**Views Along Olympic Parkway**

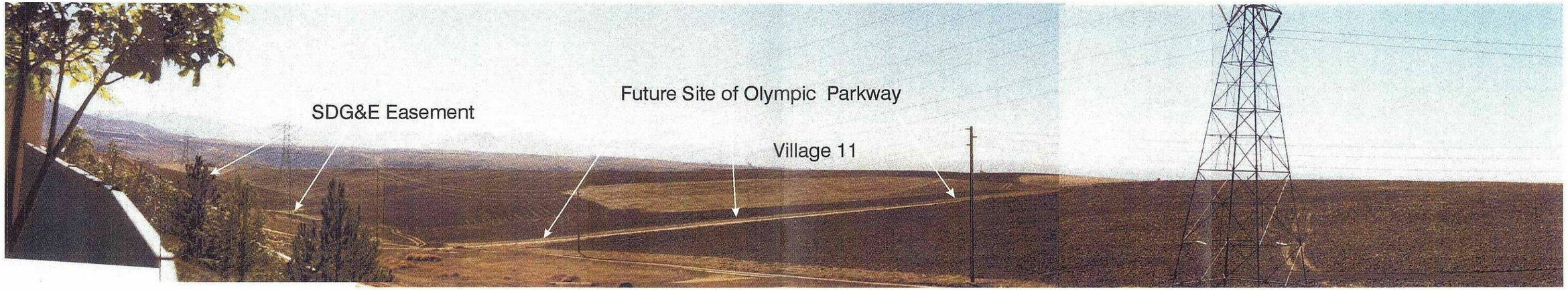
*Figure 5.2-3*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR




Southeast South West

Vantage Point A




Southeast South Southwest

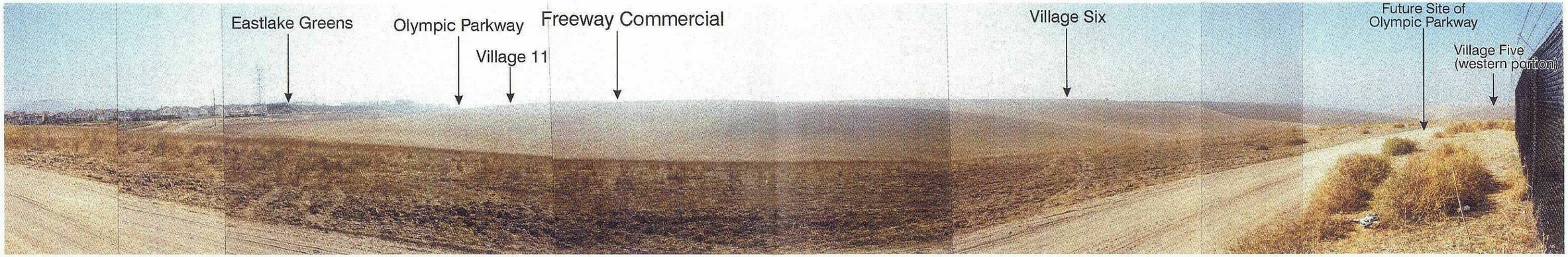
Vantage Point B

SOURCE: Mooney & Associates (2-1-01)

**Views from Eastlake Community**

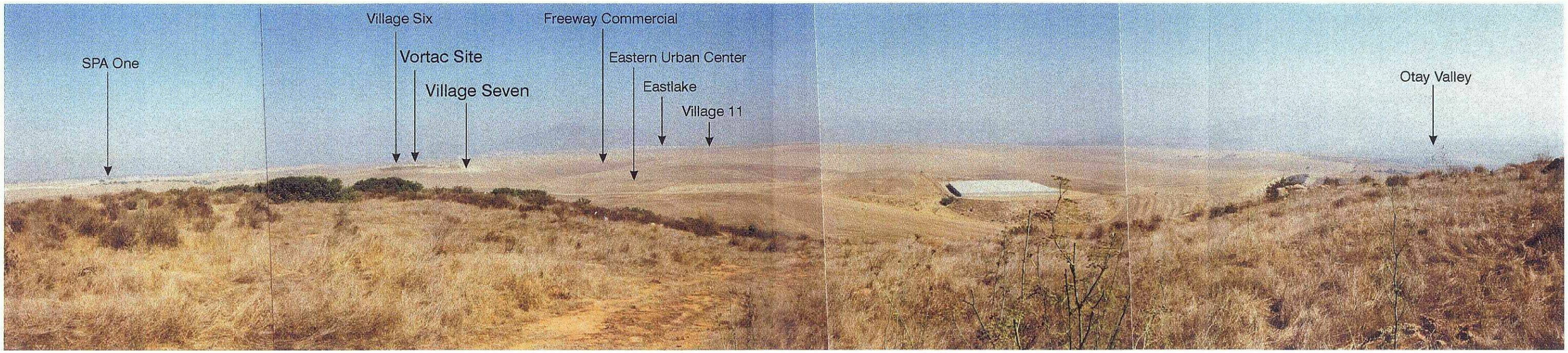
*figure 5.2-4*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR




East Southeast South Southwest West

Vantage Point C - View from Village Five near eastern boundary



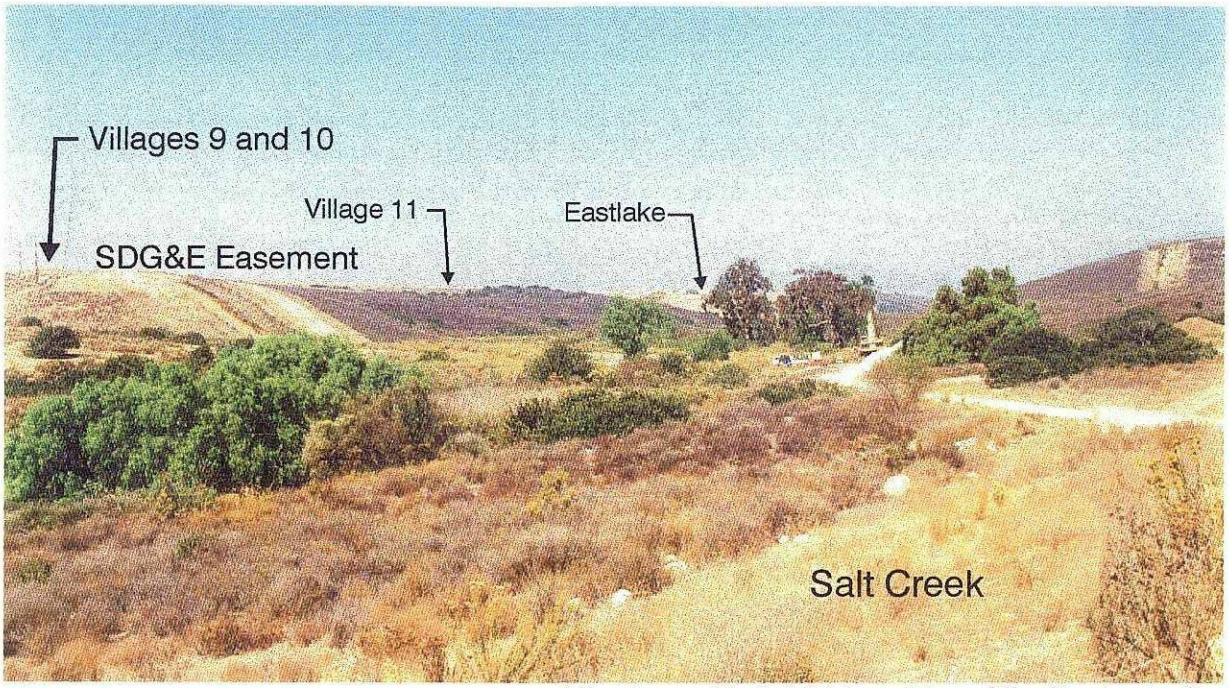

Northwest North Northeast East Southeast

Vantage Point D - View from Rock Mountain

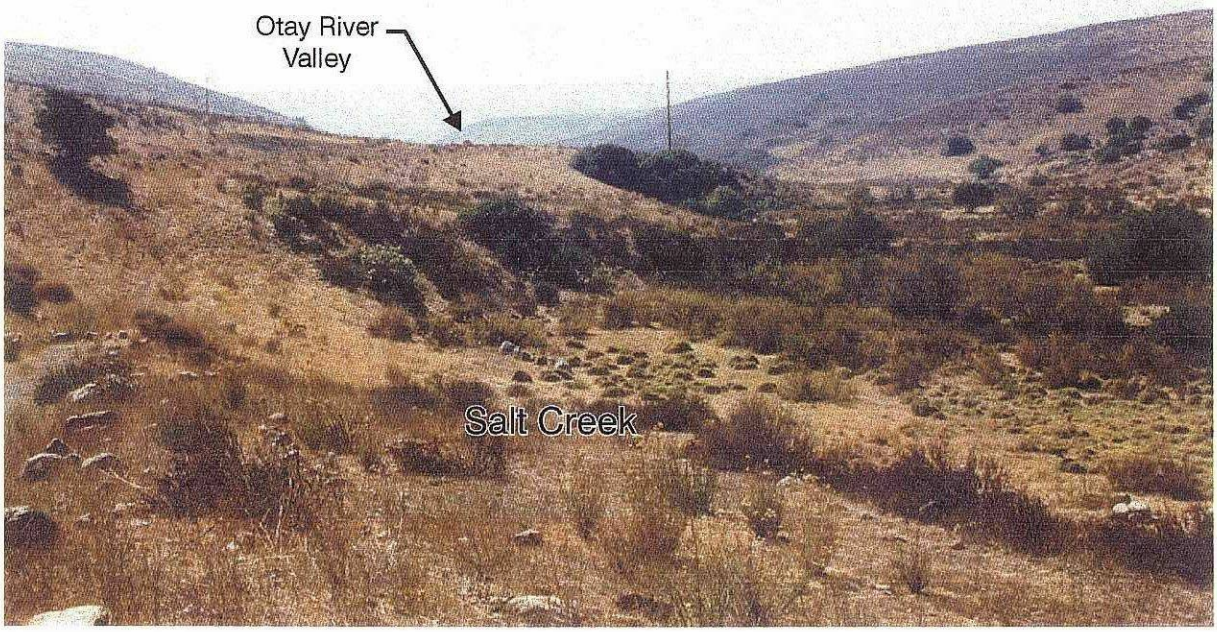
SOURCE: Mooney & Associates (2-1-01)

**Views from the West**

*Figure 5.2-5*




Vantage Point E Looking Northwesterly

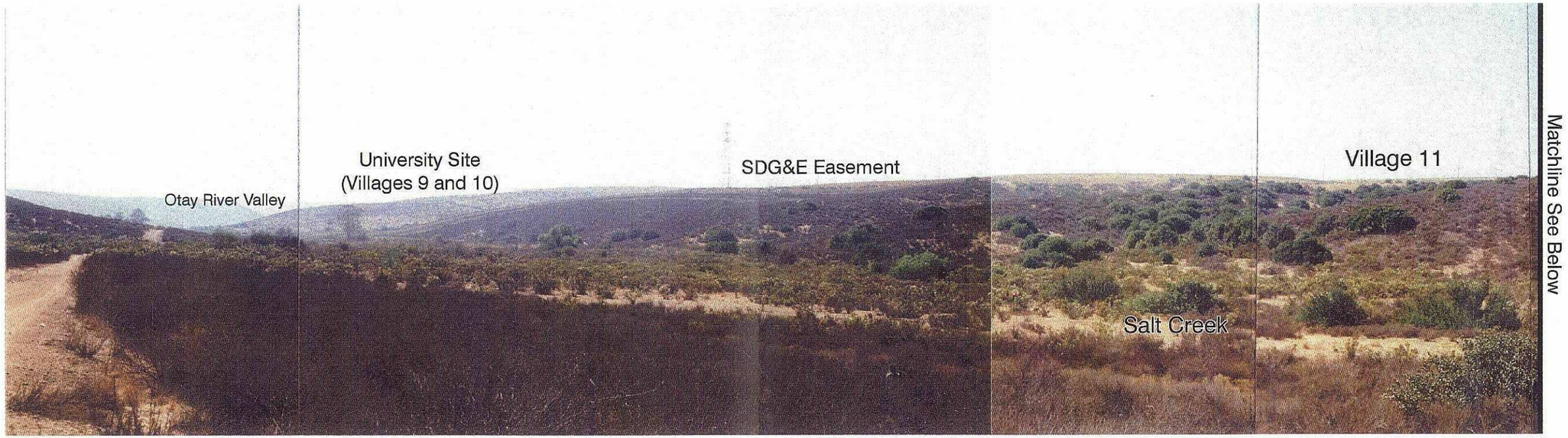


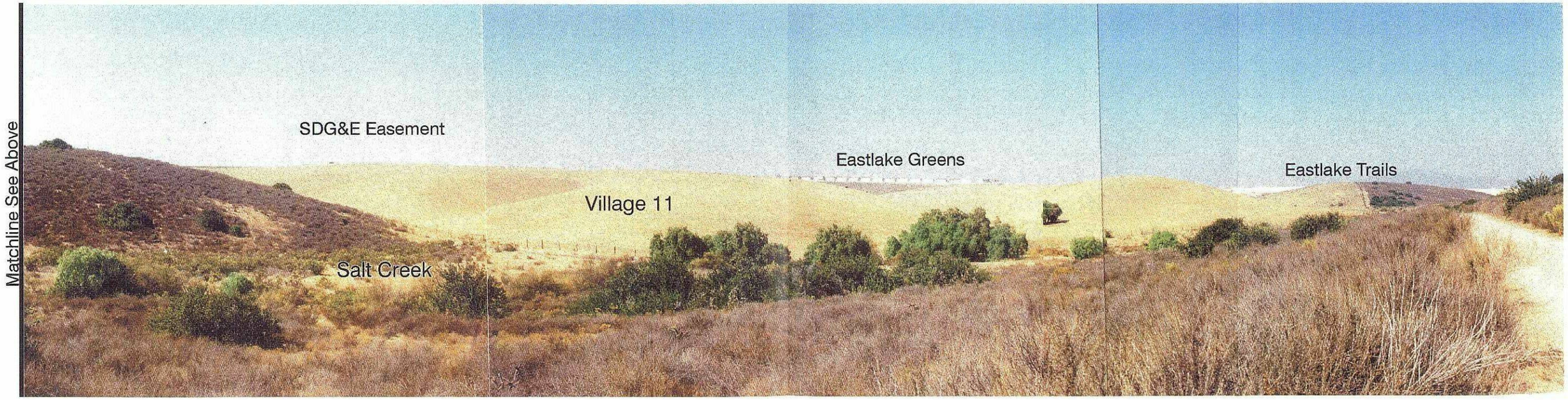

Vantage Point E Looking Southwesterly

SOURCE: Mooney & Associates (2-1-01)

**Views from Salt Creek Approaching from Otay River Valley**

*Figure 5.2-6*

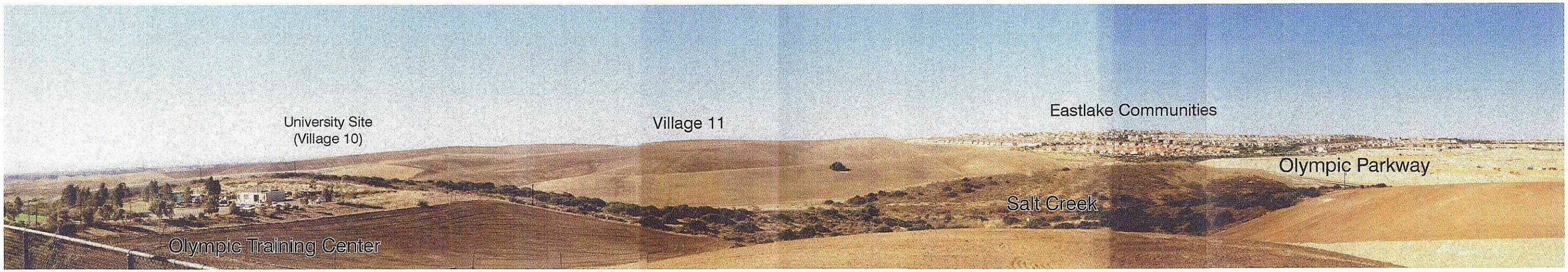



SOURCE: Mooney & Associates (2-1-01)

**View From Salt Creek,**
**East of Village 11**
**Vantage Point F**

*Figure 5.2-7*




South West North

SOURCE: Mooney & Associates (2-1-01)

**View from Olympic Training Center**
**Vantage Point G**

*Figure 5.2-8*

The southern portion of the Village 11 Project Area is visible from agricultural use areas within future Village Nine and 10, and natural open space areas of Salt Creek to the east. The designated use for the land immediately to the south is a University campus, or alternatively, residential village development. Distant views of the Village 11 Project Area currently exist from Rock Mountain approximately two miles to southwest (*Figure 5.2-5 d*) and Salt Creek southeast of the University parcel (*Figure 5.2-7*). A mixture of natural vegetation, cultivated land, utility facilities, and maintenance roads are part of the mid-distant and foreground features. The Village 11 Project Area is screened from Otay Valley by intervening topography.

The project area is visible from Salt Creek Canyon directly to the east (*Figure 5.2-8*). The vista is typically undeveloped except along the northern mid-distance where developed, and developing portions of the Eastlake communities are apparent.

## GDP AMENDMENTS

### *Landform and Visual Policies*

The adopted GDP, as amended contains policies related to visual resources that are applicable to the proposed GDP Amendments. These include the following:

- Design development to protect the visual value of scenic highways and open spaces;
- Preserve significant views of major physical features such as the Otay River Valley and its major canyons; and
- 83 percent of the steep slopes (steeper than 25 percent) shall be preserved (within the entire Otay Ranch project).

## VILLAGE 11 SPA/TM

### *Landform and Visual Policies*

The City's General Plan and the Otay Ranch GDP contains goals and policies related to visual resources and landform modification that are applicable to the Village 11 SPA Plan. These policies include the following:

## Steep Slopes

- Geotechnical investigations shall be provided with each SPA Plan;
- Roadways shall be designed to follow the natural contours of hillsides and minimize visibility of road cuts and manufactured slopes;
- Excessive use of manufactured slopes in the Otay River Valley, Jamul, and San Ysidro Mountains, and the area around Otay Lakes shall not be permitted; natural buffering (e.g., undeveloped open space) shall be provided between development and significant land forms, including the Jamul and San Ysidro Mountains;
- Encroachment into areas of steep slope are limited to 18.5 acres for Village 11;
- Various slope ratios not exceeding 2:1 shall be utilized when developing grading plans;
- As development occurs on steep lands, as defined by the governing jurisdictions, contour grade to reflect the natural hillside forms as much as possible, and round the top and toe of slopes to simulate natural contours; and
- Areas shall be rehabilitated and graded in conformance with grading regulations of the governing jurisdiction. Proper drainage, slope stability, and ground cover revegetation shall be ensured in conformance with applicable land use regulations.

## Visual Resources

- Develop a comprehensive signage program;
- Design development to protect the visual value of scenic highways and open spaces;
- Underground visually disruptive utilities to the extent feasible;
- Conduct additional analysis of conceptual grading plans for all development at the SPA level to protect and preserve significant visual resources; and
- Preserve significant views of major physical features such as Lower Otay Lake and the San Ysidro foothills and mountains, as well as the Jamul Mountains, San Miguel Mountain, and the Otay River Valley and its major canyons.

## Scenic Resources

The Land Use Element of the City of Chula Visa General Plan (Section 8, Scenic Highways and Roads) includes the following policies:

- Along scenic highways and roads, the use of large scale advertising signs, tall pole signs, or billboards should be prohibited and existing signs of this type eliminated.
- Advertising or identification signs should be of high-quality materials and graphics, large enough to clearly identify or convey information, but not of a size, color, or lighting so as to be obtrusive or out of character with the scale or design of the building, roadway, or general neighborhood.
- All development proposed adjacent to scenic routes should be subject to design review to insure that the design of the development proposal would enhance the scenic quality of the highway. This review should include architectural design, siting, and height of structures, landscaping, signs, and utilities.
- With the exception of properties in the R-1 zone, all properties adjacent to scenic routes shall have the "P" Precise Plan Modifying District or other districts requiring design review attached to the underlying zone.
- In connection with any tentative map submitted on R-1 properties abutting a scenic route, each applicant shall be required to submit a proposal for beautification of the portion of the scenic route adjacent to the development.
- Whenever possible, all slopes or common areas adjacent to a scenic route shall be placed in an Open Space Maintenance District pursuant to City Ordinance No. 1400 to insure a consistent plan of landscaping and a level of maintenance compatible with the scenic quality of the route.
- Otay Valley Road and Hunte Parkway should be characterized by lower density residential development, open space, and public facilities.

## Lighting/Astronomical Dark Sky

Two major observatories are located within 50 miles of the Village 11Project Area; the Mt. Laguna and Mt. Palomar observatories. The County of San Diego has adopted a Light Pollution Code (Title 5, Division 9) that covers the installation and use of outdoor light

fixtures within the unincorporated areas of the county. Areas within a 15-mile radius both observatories are more strictly regulated than the rest of the unincorporated areas. The Village 11 Project Area is outside the jurisdiction of the County of San Diego. The City of Chula Vista does not have a dark skies ordinance.

## 5.2.2 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines, Appendix G, Environmental Checklist, the proposed project would have a significant impact on landform and visual quality if it would:

- Have substantial adverse effect on a scenic vista, or obstructs or substantially alters the visual character of a designated public view;
- Substantially damages scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Conflict with the goals and policies established for preserving scenic highways and roads;
- Result in architecture, urban design, landscaping, and/or landforms that negatively detract from the prevailing aesthetic character of the site or surrounding area; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

## 5.2.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR 90-01 identified the following significant impacts to landform and aesthetics resulting from the adoption of the GDP, that are relevant to the proposed GDP:

- A change in the overall visual character of the Project area.
- Alteration of significant or sensitive landforms, including steep slopes; and
- Development in highly visible areas.

No feasible mitigation measures were identified to reduce these impacts to less than significant levels.

### SPHERE OF INFLUENCE UPDATE EIR

No significant adverse impacts related to aesthetics and landform alteration were identified because inclusion of the Otay Ranch into the City of Chula Vista's Sphere of Influence would not result in a physical change.

### OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the assumptions or conclusions or mitigation measures of the Program EIR 90-01 that are relevant to the proposed GDP Amendments.

### AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan or annexation altered any of the assumptions or conclusions or mitigation measures of the Program EIR 90-01 that are relevant to the proposed GDP Amendments.

## 5.2.4 IMPACTS

### GDP AMENDMENTS

Impacts related to the proposed GDP Amendments are determined based on the consistency of the amendments with the stated objective and policies of the adopted GDP and analysis of the impacts of the proposed Amendments on visual and landform conditions.

None of the proposed GDP Amendments directly change or conflict with the objective and policies of the GDP for visual resources. Future SPA Plans in the Amendment Area would have the ability to blend development with the natural features of the land. The proposed reconfiguration of Villages and circulation roadways would not preclude development that could respect natural topographical grades and other visual features. In addition, preservation

of views of the Otay River Valley is still achievable with the proposed GDP Amendments, since no changes in land use or circulation would prevent preservation of these views, and the Amendments do not propose development in any areas not previously contemplated for development. There are also no changes in the type, height, bulk or character of land uses in areas of sensitive visual resources.

The Program EIR 90-01 contains an analysis of visual resources and landforms and discusses the impacts associated with implementation of the GDP. That analysis is incorporated by reference. The proposed Amendments would not result in any new significant adverse impacts nor would they result in intensification of any adverse impacts previously identified. The proposed GDP Amendments would, however, still result in significant impacts related to: (1) a change in the overall visual character of the Amendment Area; (2) alteration of significant or sensitive landforms, including steep slopes; and (3) development in highly visible areas.

The GDP adopted in 1993 included a ranch-wide limitation to impacts on steep slopes of 83%. The SPA One analysis and related Phase 2 RMP amended the GDP to include an allocation of impacts to steep slopes on a Village-by-Village basis, as presented in *Table 5.2-1.*

The proposed GDP Amendments would result in the realignment of EastLake Parkway. The realignment would shift 28 acres from Village 11 to the Freeway Commercial. There are no steep slopes in the area of the realignment, therefore there would be no increase in the impacts to steep slope allocation for the shift in land from the Village 11 to the Freeway Commercial area. The Eastlake Parkway realignment also shifts 35 acres of land from the EUC to Village 11. There are no steep slopes in the EUC, therefore, the realignment and shift of land area does not impact steep slopes in this area either.

The realignment of Hunte Parkway through the EUC does not impact steep slopes since there are no identified steep slopes in the EUC. The realignment of Hunte Parkway through Village 11 impacts approximately 13 acres of steep slopes with an additional 5 acres associated with offsite grading (totaling 18 acres). The RMP authorized up to 18.5 acres of steep slope allocation within Village 11. While the total acreage of Village 11 increases with the proposed GDP Amendments, the Village 11 steep slope analysis indicates only 18 acres of steep slopes would be impacted by the Village 11 SPA.

## TABLE 5.2-1
## STEEP SLOPE ALLOCATION BY VILLAGES
## (PHASE 2 RMP AS MODIFIED BY SPA ONE IMPLEMENTATION)

| Project Area | Permitted Disturbed Acres |
|---|---|
| Village One | 99.1 |
| Village Two | 88.0 |
| Village Three | 30.1 |
| Village Four | 67.8 |
| Village Five | 6.6 |
| Village Six | 8.9 |
| Village Seven | 16.1 |
| Village Eight | 29.8 |
| Village Nine | 66.1 |
| Village Ten | 55.7 |
| Village 11 | 18.5 |
| Planning Area 12 | 0.0 |
| Village 13 | 111.4 |
| Village 14 | 159.3 |
| Village 15 | 209.3 |
| Planning Area 16 | 94.2 |
| Planning Area 17 | 219.8 |
| Planning Area 18 a | 0.0 |
| Planning Area 18 b | 0.8 |
| Planning Area 19 | 0.0 |
| **TOTAL** | **1,281.5** |

Source: SPA One EIR

The configuration of Village Nine would not be altered by the proposed GDP Amendments, therefore, the steep slope impacts allocated for Village Nine would not be changed. The portion of Village Ten that is proposed to be included in Village 11 under the proposed GDP Amendments does not contain any steep slopes. Therefore, the Village Ten reconfiguration would not result in any changes to the steep slope allocation of the adopted GDP, as amended in the SPA One/RMP2 actions.

## VILLAGE 11 SPA/TM

### *Views*

The Village 11 SPA Plan would implement a portion of the GDP for Otay Ranch. The Program EIR 90-01 identified significant impacts related to a change in the overall visual character of the area. The contribution of the Village 11 SPA Plan to this impact is considered significant.

Existing views from the future Olympic Parkway include single-family residential development along the roadway's north slope. Village 11 would alter the view along the western and the southern ridgelines from agriculture to high density residential structures at the corner and single-family homes along the remainder of the Olympic Parkway frontage. The one- and two-story, single-family development would be similar to the existing EastLake development, east of the power line easement, on the opposite side of Olympic Parkway. Views of Village 11 along future Olympic Parkway would be consistent in character with existing development to the north, and would be buffered by a 75-foot landscaped parkway. Therefore, no significant impacts to the views from future Olympic Parkway would result. The residential structures in the foreground would range in height from 28 to 60 feet above the building pads which are similar in elevations to the adjacent roadway. The highest structures (four stories) would be limited to the western end of Olympic Parkway, incorporating the desired GDP objective for Village 11 to provide the transition between the more intense Freeway Commercial/Eastern Urban Center uses to the west and Salt Creek on the east. A 75-foot (average) landscaped parkway would be located along the Village 11 border adjacent to the future Olympic Parkway.

Views along the future Hunte Parkway would consist of Salt Creek natural open space to the east and single-family homes to the west. As the proposed roadway alignment curves westerly, the views of Village 11 would transition from residential to institutional (University). The views to the south would be the future University project area as the

primary land use designation or Villages Nine and 10 as the secondary land use. The views from the proposed scenic route would on the west side within Village 11 would be buffered by a 75-foot (average) landscaped slope. The provision of the landscape buffer would result in views from future Hunte Parkway that would be consistent with the scenic route designation of Hunte Parkway. Therefore, impacts to views from Hunte Parkway would not be significantly impacted by the proposed Village 11 design.

The extent of Village 11 visibility from the Salt Creek Preserve area would depend on trail alignments and view point locations within the vicinity of Salt Creek. Intervening topography and angle of sight would block out portions of the Village 11 Project Area. The portion of Village 11 near the northern, upstream section of Salt Creek would be be similar in visual character to the existing development, further north. From directly east of Village 11, the westerly view beyond the natural creek area would include a landscape buffer and major roadway backed by a ridgeline of single-family homes. As viewers approach the Village 11 boundaries from the south, the foreground of development would become more prominent but the view orientation would be directed more towards the east and southeast in the direction of Salt Creek. Overall, the lower and middle canyon views of Village 11 would be converted from open space in character to urban in the vicinity of Village 11. This impact is considered significant.

The Olympic Training Center would have essentially a village-wide vista of the Village 11 Project Area from across Salt Creek Canyon, from a vantage point of approximately one mile away. The views would include manufactured slopes up to 75 feet in height. The change from rolling topography to terraced landforms and residential development would create a continuum of the existing northern portion of the viewshed. The foreground view of Salt Creek Canyon would remain buffered from the mid-ground single-family homes by a landscaped open-space area. The more distant views would include multi-story buildings, completely surrounded by roadways. Since the foreground views would consist of existing or revegetated native vegetation and because background views already include residential development, westerly views from the Olympic Training Center would not be significantly impacted by development of Village 11.

Foreground views of Village 11 from the University project area would include Hunte Parkway and its landscape buffer, a junior high school campus and single-family residential development. Visibility farther up the hillside would vary depending on intervening school structures both within Village 11 and on the University campus. The change in uphill views from farmland to foreground school use and residential development at the future University project area is not considered significant since these are compatible uses requiring similar landform modifications.

Views from the existing homes in EastLake developments would be across the planned Olympic Parkway into similar single-family residential neighborhoods. Since Village 11 steps down to the south and southeast from its northern boundary, manufactured slopes would be faced away from the existing homes within EastLake. The EastLake views of Village 11 development would have limited depth as building pads terrace down to lower elevations. In some cases the elevation of the building pads would be higher than the existing topography, which may slightly affect views from existing residences from the north. However, the change in view adjacent to an existing neighborhood from vacant to similar homes across the street is not considered a significant impact.

In addition to the impacts created by grading and development, Village 11 would increase nighttime lighting in an area that is currently only exposed to nighttime lighting from the adjacent EastLake development. The incremental increase to the general night sky illumination and in proximity to Salt Creek preserve area is considered a significant impact.

### *Landform and Visual Policies*

The Village 11 grading concept is based on the following objectives which are set forth in the SPA Plan:

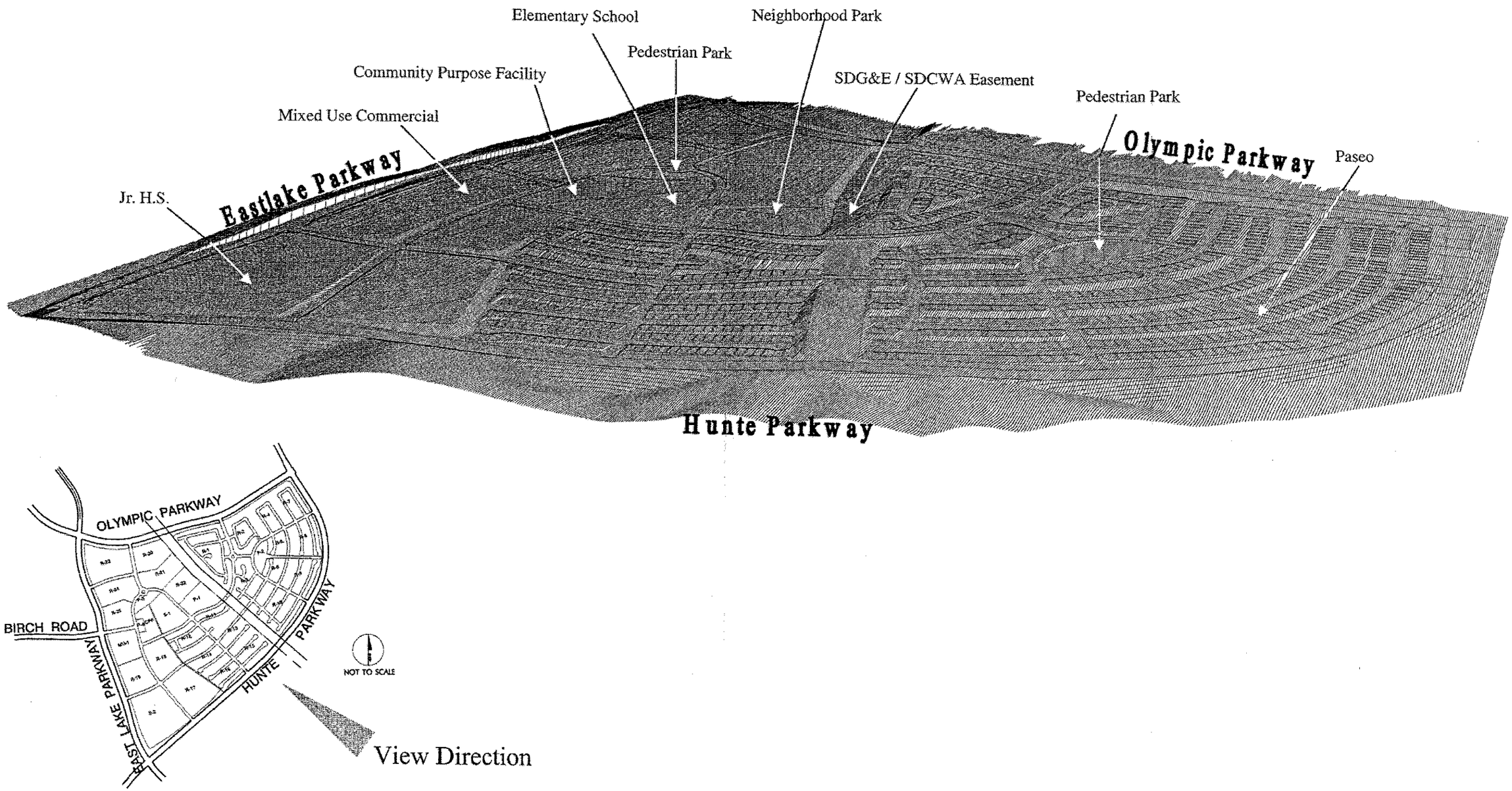
- Preservation of 83 percent of the existing steep slopes overall for Otay Ranch, and limitation of impact to steep slopes of 18.5 acres for Village 11;
- Contour grading adjacent to Salt Creek shall be limited to rounding of tops and toes of slopes to avoid encroachment into the preserve;
- Balance earthwork, utilizing an equal amount of cut for an equal amount of fill;
- When significant land forms are modified for project implementation, round the land form as much as possible to blend into the natural grade;
- When slopes cannot be rounded, utilize vegetation to alleviate sharp angular appearances;
- Relate development to topography and natural features and strive to retain the character of the land forms to the extent feasible; and
- Utilize grading that is sensitive to significant and/or sensitive vegetation and habitat areas.

Development of the Village 11 SPA Plan would result in a change to the existing character of the property from that of agricultural use to an urbanized condition. Grading within the Village 11 Project Area involves approximately 565 acres including slopes and infrastructure beyond the boundaries. Approximately 10.5 million cubic yards of cut and fill would be necessary to implement the grading plan. *Figures 3-13 and 3-14* show the proposed conceptual grading and cut and fill plan.

The conceptual grading plan retains the general sloping trend across the land from northwest to southeast in conformance with the GDP criteria relating to natural terrain characteristics. The east and southeast facing slopes would be a series of manufactured banks daylighted into natural intervening knolls and slopes, avoiding the creation of excessively long, uniform slopes that would be visible from the Salt Creek and Olympic Training Center as provided for in the Otay Ranch Overall Design Plan. The conceptual grading plan provides for preservation of sensitive areas of Salt Creek along the project area's eastern boundary and a side canyon of Salt Creek on the southern boundary consistent with the GDP criteria for contour grading adjacent to Salt Creek. A wide landscaped parkway would be graded along Hunte Parkway to provide the required naturalized buffering as a transition between development and significant existing landforms. An oblique view of the conceptual grading plan from Hunte Parkway uses the flattest areas of the property to accommodate uses requiring large level areas including the village core, a junior high school, and multi-family project areas *(Figure 5.2-9, Proposed Landform Alteration).*

The proposed grading is designed to create and maintain on-site and off-site views, useable building and yard areas, minimize potential conflicts between public and private uses and, where possible, provide barriers or physical separation from traffic noise sources. The proposed grading is consistent with the Otay Ranch Overall Design Plan guidelines for careful modulation and softened blending of graded slopes within defined scenic corridors and avoidance of sharp or unnatural corners where cut and fill slopes intersect natural canyons and slopes.

The proposed grading would involve cuts up to approximately 75 feet, and fills up to a maximum depth of approximately 85 feet. The proposed project design places the larger building pads within the flatter portions of the project area, thereby avoiding excessive amounts of grading. The more adaptable single-family development grading is located in the areas of steeper topography. Grading would create exposed slope faces of up to approximately 45 feet cut and 45 feet fill. The higher cut faces would be seen only within the subdivisions except at the southwest corner which would be visible from the adjacent ridgeline within Planning Area 12 - EUC. The easterly and southeasterly facing fill slopes




SOURCE: Brookfield Shea Otay, LLC, (2-1-01)

**Proposed Landform Alteration**

*Figure 5.2-9*

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

proposed adjacent to Hunte Parkway, and off-site, would have exposures ranging from approximately 45 to 65 feet and would be revegetated with native vegetation. Southerly slopes adjacent to the University property are temporary and range from approximately 55 feet cut to 75 feet fill.

The steep impact slope allocation for Village 11 is 18.5 acres. As indicated above in the discussion of GDP Amendment impacts to steep slopes, the total acreage of steep slope to be impacted by the proposed grading for Village 11 is 13 acres within the Village boundaries, and an additional 5 acres of offsite impacts. The total of 18 acres of impact to steep slopes within the Village 11 Project Area, would be within the amount allocated to Village 11. Therefore, no significant impacts to steep slope alteration would result. In addition, the grading plan for Village 11 is consistent with all other policies of the GDP related to landform and visual resources, including the use of contour grading, balanced earthwork, naturalized and/or revegetated slopes, retention of natural grades, and sensitivity to Preserve areas. No significant impacts to landform/visual policies would result from the proposed grading plan for Village 11.

### *Design Guidelines*

The Otay Ranch GDP requires that a Village Design Plan be prepared for each village at the SPA Plan level of planning. The Village Design Plan guides planning and development by defining the intended character of the village. It provides guidance for developers and designers in creating the village and it will be used by regulators to evaluate the village design. The Village 11 Design Plan guides the site, building and landscape design within the village to ensure that the quality of the adopted urban design and architectural concepts established for the overall Otay Ranch community are maintained. The Design Plan identifies a theme for the village and delineates that identity through streetscape and landscape design, signage programs, and architectural and lighting guidelines. The Design Plan also identifies the village core design concepts that would implement Otay Ranch's planned pedestrian orientation.

Access to the village core would be through the village entry streets. The entry streets provide a transition from the main streets to smaller village streets. The Village 11 design guidelines identify the character of the village through each street's thematic arbor and wall signage. There are three primary village entries coming into the village core; one leading west to Birch Road and two (one leading east, one leading north) to Olympic Parkway. Secondary village entries are proposed as more modestly designed roadways with a theme wall monument, consistent with the village themes of lighting and landscaping.

The Village 11 Design Plan and Planned Community District Regulations, have been developed to be consistent with the Otay Ranch Overall Design Plan. Therefore, no significant impacts related to village design consistency with the GDP would result.

## 5.2.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 identified significant impacts to landforms and visual resources from implementation of the plan. Significant impacts identified in the Program EIR 90-01 that would apply to the proposed GDP Amendments include: (1) a change in the overall visual character of the Amendment Area; (2) alteration of significant or sensitive landforms, including steep slopes; and (3) development in highly visible areas. These impacts would remain significant with the approval of the proposed GDP Amendments. No feasible mitigation has been identified for these impacts. No new or additional significant impacts have been identified for the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

Conversion of the visual character of the proposed Village 11 Project Area would result in significant impacts to visual resources of the site, which are unavoidable.

Development of Village 11 would result in significant impacts to views of the site from adjacent areas. This impact can be mitigated to a less than significant level.

The proposed Village 11 SPA Plan and TM may have direct, long-term potentially significant nighttime view impacts. This impact can be mitigated to a less than significant level.

## 5.2.6 MITIGATION MEASURES

### GDP AMENDMENTS

The proposed GDP Amendments would result in similar significant impacts to landform and visual resources as those identified in Program EIR 90-01, and would be subject to all of the applicable measures identified in the Program 90-01. An inventory of those measures is contained in *Appendix B.*

## VILLAGE 11 SPA/TM

**5.2-1** Prior to approval of grading plans, the Director of Planning and Building and City Engineer shall review the grading plans to confirm that the grading guidelines contained in the proposed Village 11 SPA have been integrated into the grading plans.

**5.2-2** Prior to approval of grading plans, the applicant shall submit documentation to the satisfaction of the Director of Planning and Building which demonstrates that the anticipated steep slope encroachment would not exceed 18.5 acres.

**5.2-3** Prior to approval of grading plans, landscape screening shall be designed by a licensed landscape architect that is consistent with the standards established by the Village 11 SPA Plan, and shall be installed pursuant to the landscape plan approved by the Director of Planning and Building and the Department of Parks and Recreation. Plants and landscape elements as described in the Edge Plan shall be incorporated to buffer the Salt Creek open space area from the urban setting of Village 11 SPA Plan.

**5.2-4** Prior to the approval of improvement plans, the applicant shall prepare a plan which shows the proposed height, location, and intensity of street lights on site. The plan shall comply with the minimum standards for roadway lighting and shall be submitted for review and subject to approval by the Director of Planning and Building and the City Engineer.

# 5.2.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

## GDP AMENDMENTS

The proposed GDP Amendments would result in the same significant and unmitigated impacts as identified in Program EIR 90-01:

- An unavoidable change in the overall visual character of the project area.
- An unavoidable impact to significant or sensitive landforms
- An unavoidable impact related to development in highly visible areas.

## VILLAGE 11 SPA/TM

The Village 11 SPA Plan would contribute to the significant unavoidable change in the overall visual character of the Otay Ranch area.

All other significant impacts to landform and visual resources related to Village 11 would be mitigated to less than significant levels. Mitigation measures 5.2-1 and 5.2-2 would provide review of all grading plans for Village 11 to assure that implementation of the project conforms to the guidelines and standards set forth for the Village 11 SPA Plan, the Village 11 GDP and the Otay Ranch Overall Design Plan. Verification would be made that steep slope encroachment would not exceed that anticipated in the approved GDP and appropriate buffering between development and preserve areas would be retained. Mitigation measure 5.2-3 would ensure that a landscape plan is reviewed and implemented consistent with the Village 11 SPA Plan. Mitigation measure 5.2-4 would reduce the effects of nighttime lighting from the development to an insignificant level.

# 5.3 BIOLOGICAL RESOURCES

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to biological resources for the entire Otay Ranch project area. Section 4.9.4 of the Program EIR 90-01 included an analysis of biological impacts related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of biological issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to biological resources that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

The Otay Ranch RMP 1, which was adopted with the GDP, provides a framework conservation of biological resources. The RMP 2, which was adopted with SPA One, compiles resource studies, plans and programs required by the RMP 1 to be performed prior to the adoption of the initial Otay Ranch SPA (June 1996). SPA-level biological surveys for Village 11 were conducted by Dudek & Associates, Inc. during January through July 1999, including vegetation mapping, wetlands delineation, California gnatcatcher surveys and quino checkerspot butterfly surveys. The results of those surveys are included in Appendix C.

As discussed in Section 3.0, Project Description, the Village 11 Project Area consists of 565 acres, which includes the 489-acre SPA. However, offsite improvements, including Eastlake Parkway, offsite drainage facilities and sewer laterals. The total disturbance area, including these improvements is 565 acres.

# 5.3.1 EXISTING CONDITIONS

## GDP AMENDMENTS

### *Existing Habitats and Species*

The Program EIR 90-01 characterized habitat types for the entire Otay Ranch project area. Habitat types found within the GDP Amendment Area are primarily agriculture, but also include coastal sage scrub, maritime succulent scrub, non-native grasslands and disturbed habitat. The biological study area for the Program EIR 90-01 included approximately 23,088 acres, including the Otay River Parcel, the San Ysidro Parcel, and the Proctor Valley Parcel. The Amendment Area is within the Otay River Valley Parcel. The biological data base used for the analysis in the Program EIR 90-01 included general biological survey reports, sensitive plant surveys, vernal pool surveys, sensitive animal surveys, and a wildlife corridor study, all conducted within the time frame ranging from 1989 to 1992. The Program EIR summarized the results of these studies, compiled composite mapping of habitat and species data, and described the habitat types and species occurrence distribution.

Within the Amendment Area, onsite conditions for vegetation, natural habitats and wildlife, including sensitive plant and animal species have not substantially changed since the certification of the Program EIR 90-01. This is primarily due to the continuation of dry farming and cattle grazing over the land that had historically supported those uses. In addition, there has been little additional disturbance or development within the Amendment Area since the certification of the Program EIR 90-01. However, the status of two sensitive species that have the potential to occur in the Amendment Area have changed since the certification of the Program EIR 90-01. These changes include the listing of the following species: quino checkerspot butterfly (federally endangered), and Otay tarplant (federally threatened). Potential habitat for the quino checkerspot butterfly exists within the Amendment Area, but no butterflies have been observed in focused surveys that have been conducted in portions of the Amendment Area over the past several years. Butterflies have been observed in recent surveys in Preserve areas in the Otay River Valley. Otay tarplant is known to occur in the Amendment Area, however, since the majority of the Amendment Area consists of agricultural fields, the potential for the species to occur is limited.

Olympic Parkway is currently under construction along the northern boundary of the Amendment Area. The majority of the disturbance area for Olympic Parkway, within the

Amendment Area, had been historically used in agricultural production. Within the Amendment Area, farming and livestock grazing have continued, since the adoption of the GDP. As referenced above, more recent and SPA-level studies of the Village 11 and Salt Creek area have been conducted since the adoption of the GDP (contained in Appendix C), in conjunction with the proposed SPA Plan for Village 11. The following discussion provides a summary of the information collected in those studies.

## *Relevant Resource Planning Documents*

### Otay Ranch Resource Management Plan

The Otay Ranch Resource Management Plan (RMP 1) was established in the 1993 GDP in order to establish a permanent preserve within Otay Ranch. The purpose of the Otay Ranch Preserve is to protect and enhance biological, paleontological, cultural and scenic resources. Plan objectives include biological diversity and promotion of the survival and recovery of native species and habitats. The RMP identifies an open space system of 11,375 acres dedicated within the Otay Ranch. The Otay Ranch Preserve would also connect large areas of open space through a series of wildlife corridors. The Preserve would cover portions of Salt Creek Canyon to Otay Valley. The Preserve boundaries from the RMP have been incorporated into the adopted GDP. The Preserve/development boundary of the GDP is consistent with the objectives, policies and criteria established in the RMP.

The RMP incorporates a Preserve Conveyance Plan as a transfer mechanism for land with high quality resources. The RMP identifies vernal pools, coastal sage scrub habitat, coastal California gnatcatcher populations and potential wetlands restoration areas as important target lands for the Preserve. The RMP includes conveyance procedures for dedicating parcels of land to the Resource Preserve and for determining the proportionate share for each village. The Otay Ranch GDP identified that the entire Otay Ranch area contained 9,575 developable acres. The estimated conveyance obligation of 11,375 acres to the Otay Ranch Preserve would be met on a village-by-village basis. The conveyance ratio for all development is 1.188 acres for each acre of project area. Conveyance is required prior to the approval of final maps. The RMP also identifies that Otay Ranch includes maritime succulent scrub and coastal sage scrub which provide natural vegetation and habitat to the California gnatcatcher. The RMP requires that 85 percent of coastal sage scrub be protected, 70 percent through preservation and 15 percent through restoration. The RMP establishes that 1,300 acres of coastal sage scrub and 56 acres of maritime succulent scrub be restored as Otay Ranch is built out. The plan identifies the obligation to restore coastal sage scrub on a village-by-village basis. Under

this approach, for every one acre of coastal sage scrub habitat destroyed, the applicant is required to restore 0.4 acre of coastal sage scrub elsewhere in Otay Ranch. For every one acre of maritime succulent scrub destroyed, one acre of maritime succulent scrub must be restored.

### City of Chula Vista Draft MSCP Subarea Plan

The MSCP is a comprehensive, long-term habitat conservation plan which addresses the needs of a variety of biological resources. The MSCP will cover approximately 900 square miles in southwest San Diego County including Otay Ranch.

The primary goal of the MSCP is to identify large preserve systems which can be set aside to offset impacts from development throughout the area covered by the MSCP. The MSCP is intended to create a process for the take of covered plant and wildlife species under the state and federal Endangered Species Acts. Local governments which have adopted Subarea Plans detailing how the goals of the MSCP will be achieved and have entered into an Implementing Agreement with the U.S. Fish and Wildlife Service are entitled to issue permits to take any species which is specifically covered under the MSCP.

The City of San Diego's MSCP Final EIR/EIS analyzed a draft Subarea Plan for the City of Chula Vista. The Draft Subarea Plan for Chula Vista was based on the future preserve boundaries contained in the Otay Ranch RMP. On October 17, 2000, the City of Chula Vista City Council adopted the Draft Subarea Plan and is in the process of obtaining permit authority from the resource agencies through the signing of an Implementing Agreement.

For the Otay Ranch, the Draft Subarea Plan relies on the Preserve design and policies contained in the Otay Ranch RMP as the framework for conservation and management of biological resources within Otay Ranch.

## VILLAGE 11 SPA

### *Vegetation*

The Village 11 Project Area has been continually used for agriculture with approximately 97 percent of the site dedicated to agricultural use. Other grasses, mainly non-native annuals, occur on the site, especially within low drainages. The Village 11 Project Area supports small

areas of native vegetation, and non-agricultural disturbed areas. Native vegetation communities occurring within the grading limits of the Village 11 SPA are concentrated along the eastern boundary of the site. *Figure 5.3-1, Biological Resources,* provides the overall distribution of the vegetation communities in the Village 11 Project Area and surrounding Preserve areas. *Figure 5.3-2, Biological Resources with Proposed Limits of Grading,* provides an overlay of the proposed Village 11 SPA Plan development envelope on the biological resources map.

## Habitat Descriptions

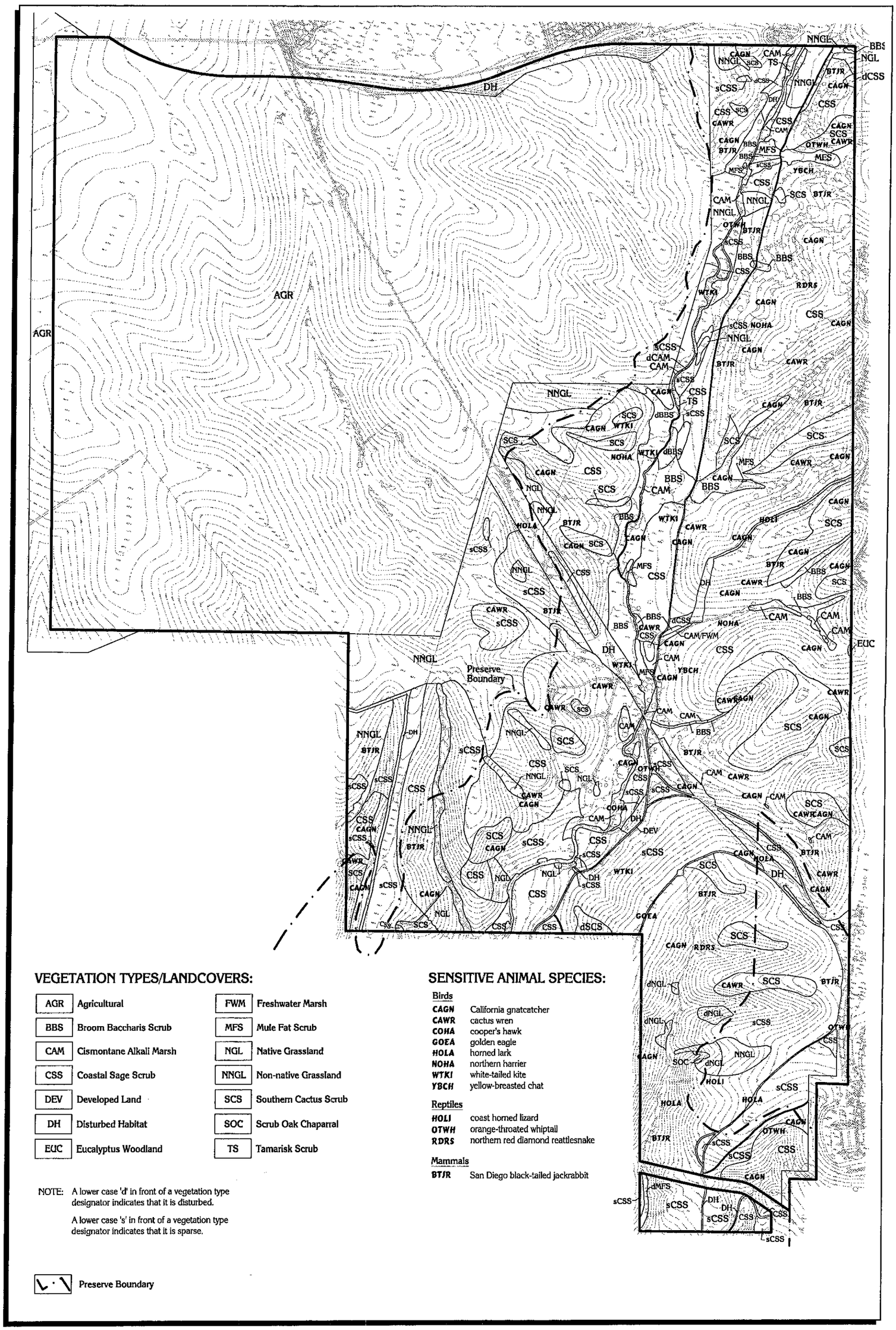
**Agriculture.** The Village 11 Project Area contains approximately 510 acres of agricultural fields. The agricultural fields are actively cultivated and/or grazed. These areas do not support native habitat. They are planted with barley, and also contain field and black mustards.

**Disturbed Habitat**. Disturbed habitat includes major dirt roads greater than 5 feet wide, and areas where vegetation has been cleared. Within the disturbed areas, there are unvegetated drainage channels that occur mostly along canyons in the eastern portion of the property, with fewer channels found within the agricultural fields of the Village 11 Project Area.

**Non-Native Grassland.** Non-native grassland occurs in areas that have been left fallow for a long period, and have been repeatedly burned and grazed by cattle. Typical species include barley, slender wild oat and black mustard, sometimes interspersed with a low cover of native grasses.

**Coastal Sage Scrub.** The coastal sage scrub habitat within the Village 11 Project Area are characterized by a mix of California sagebrush and flat-top buckwheat, with co-occurring species including California everlasting, white sage, saw-toothed goldenbush and laurel sumac. Sparse coastal sage scrub areas occur along the eastern edge of the proposed development areas. These areas have been recently burned and also contain non-native vegetation (mainly non-native grasses).

**Southern Cactus Scrub.** Southern cactus scrub also occurs within the Village 11 Project Area. The species composition is similar to coastal sage scrub, but contains a large element of prickly-pear, cholla cactus and coast barrel cactus.



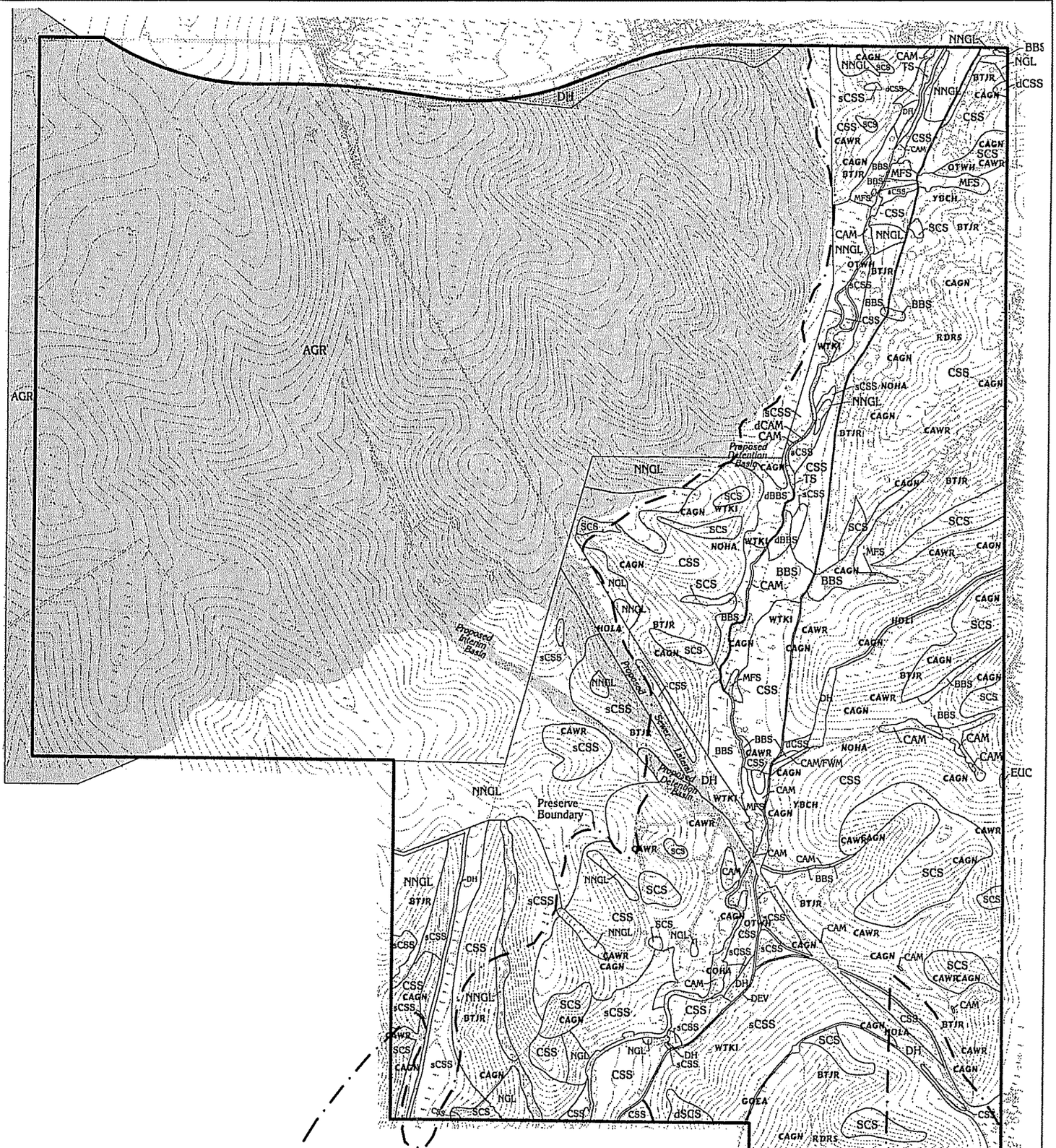

SOURCE: Dudek & Associates (Nov. 2000)

0 400' 800'

**Biological Resources**

*Figure 5.3-1*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR




## VEGETATION TYPES/LANDCOVERS:

| | | | |
|---|---|---|---|
| AGR | Agricultural | FWM | Freshwater Marsh |
| BBS | Broom Baccharis Scrub | MFS | Mule Fat Scrub |
| CAM | Cismontane Alkali Marsh | NGL | Native Grassland |
| CSS | Coastal Sage Scrub | NNGL | Non-native Grassland |
| DEV | Developed Land | SCS | Southern Cactus Scrub |
| DH | Disturbed Habitat | SOC | Scrub Oak Chaparral |
| EUC | Eucalyptus Woodland | TS | Tamarisk Scrub |

NOTE: A lower case 'd' in front of a vegetation type designator indicates that it is disturbed.

A lower case 's' in front of a vegetation type designator indicates that it is sparse.

## SENSITIVE ANIMAL SPECIES:

**Birds**

| | |
|---|---|
| CAGN | California gnatcatcher |
| CAWR | cactus wren |
| COHA | cooper's hawk |
| GOEA | golden eagle |
| HOLA | horned lark |
| NOHA | northern harrier |
| WTKI | white-tailed kite |
| YBCH | yellow-breasted chat |

**Reptiles**

| | |
|---|---|
| HOLI | coast horned lizard |
| OTWH | orange-throated whiptail |
| RDRS | northern red diamond rattlesnake |

**Mammals**

| | |
|---|---|
| BTJR | San Diego black-tailed jackrabbit |

Preserve Boundary

Proposed Limits of Grading

SOURCE: Dudek & Associates (Nov. 2000)

N 0 400' 800'

**Biological Resources With Proposed Limits of Grading**

*figure 5.3-2*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR

**Cismontane Alkali Marsh.** The cismontane alkali marsh that occurs within the Village 11 Project Area contains mariposa rush and cattails with an understory of sedges, perennial ryegrass and sow thistle. Cismontane alkali marsh/freshwater marsh is considered a wetland community and is under the jurisdiction of the California Department of Fish and Game (CDFG) and the U.S. Army Corps of Engineers (ACOE).

## *Sensitive Habitats*

Sensitive habitats are those that are considered rare within the region, support sensitive plant and/or wildlife species, or function as corridors for wildlife movements. Sensitive habitats occurring within Village 11 Project Area include coastal sage scrub, southern cactus scrub and wetlands within the Salt Creek drainage (cismontane alkali marsh). The Chula Vista Draft MSCP Subarea Plan has been conditionally approved by the City of Chula Vista, City Council, but has not yet been approved by the U.S. Fish and Wildlife Service (USFWS) or CDFG (the "wildlife agencies"); therefore, the City does not currently have take authorization under the MSCP, and project applicants must obtain individual permits for impacts to listed species from the USFWS and CDFG. However, if the Subarea Plan is approved by the wildlife agencies and an Implementing Agreement is adopted, the City will have the ability to issue its own take authorizations for covered species.

## *Sensitive Plants*

Since biological surveys for the Village 11 SPA were conducted in late spring (January to July 1999) during the optimal time of year, it is assumed that a high percentage of plant species were observed. Those surveys revealed that no plant species listed as threatened or endangered by the USFWS or as rare, threatened or endangered by the CDFG were observed within the Village 11 Project Area. <u>However, subsequent surveys conducted for the Salt Creek Sewer within the Hunte Parkway alignment in the Village 11 Project Area in 2001 revealed 175 individual Otay tarplant.</u> Nine species recognized as regionally sensitive were found within the Village 11 Project Area (*Table 5.3-1*). Due to the relatively low percentage of natural habitat within the Village 11 Project Area, few sensitive plant species are expected to occur. *Table 5.3-1* lists those plants with a potential to occur within the Village 11 project area, because of their known proximity to the site.

## TABLE 5.3-1. SENSITIVE PLANT SPECIES WITH THE POTENTIAL FOR OCCURRENCE

| Species | Federal/ State Status | CNPS List | MSCP Status[1] | Typical Habitat/Comments |
|---|---|---|---|---|
| South coast salt-scale *Atriplex pacifica* | None | 1B | None | Exposed open habitat with other colonizers of open clay habitat. Only occurrence on the sides of Salt Creek. Unlikely to occur within the Village 11 Project Area. |
| Variegated dudleya *Dudleya variegata* | None | 1B | Narrow endemic Covered species | Chaparral, coastal sage scrub. Several substantial populations southeast of Salt Creek on west facing slopes. Unlikely to occur within the Village 11 Project Area in the limited area of coastal sage scrub since all on eastern facing slopes. |
| Coast [San Diego] barrel cactus *Ferocactus viridescens* | None | 2 | Covered species | Chaparral, coastal sage scrub, valley and foothill grassland. Common on south facing slopes along the east sides of Salt Creek. More common in southern cactus scrub habitat. Potential to occur within the Village 11 Project Area southern cactus scrub. |
| Palmer's grappling-hook *Harpagonella palmeri* var. *palmeri* | None | 2 | None | Clay soils and burns. Distributed in small populations throughout many of the open clay soil habitats within adjacent areas. Low to moderate potential to occur within the Village 11 Project Area. |
| San Diego marsh-elder *Iva hayesiana* | None | 2 | None | Riparian playas. Patchy distribution along Salt Creek. Unlikely to occur within the Village 11 Project Area. |
| [Southwestern] spiny rush *Juncus acutus* ssp. *leopoldii (Juncus acutus* ssp. *sphaerocarpus*) | None | 4 | None | Coastal dunes (mesic), meadows (alkaline), coastal salt marsh. Observed along Salt Creek. Unlikely to occur within the Village 11 Project Area. |
| Munz's sage *Salvia munzii* | None | 2 | None | Coastal sage scrub. One population found on west facing slopes on east side of Salt Creek. Unlikely to occur within the Village 11 Project Area's limited area of coastal sage scrub since all on eastern facing slopes. |
| Ashy spike-moss *Selaginella cinerascens* | None | 4 | None | Coastal chaparral, coastal sage scrub. Very common component of ground cover in southern cactus scrub. Greater densities south facing slopes and hilltops. Potential to occur within the Village 11 Project Area southern cactus scrub habitat. |
| San Diego County viguiera *Viguiera laciniata* | None | 2 | None | Chaparral, coastal sage scrub. Observed in the Salt Creek area. Low potential to occur within the Village 11 Project Area. |
| Otay tarplant *Deandandra conjugens* | Federally threatened/ State endangered | 1B | Narrow endemic Covered species | Observed in adjacent open space Preserve areas immediately east of the Village 11 Project Area. Potential to occur in limited coastal sage scrub areas in the far eastern portions of the Village 11 Project Area. |

[1] Source for MSCP species, City of Chula Vista Draft Subarea Plan

## Sensitive Wildlife

Appendix C provides a list of wildlife species observed and/or detected within the surveyed area. Appendix C also lists butterflies, moths and birds seen during the quino checkerspot butterfly flight survey performed along the eastern half of the property. The agricultural fields were not surveyed, as they are classified as "excluded" areas in the survey protocol for the species.

*Table 5.3-2* lists sensitive wildlife species known to occur, or potentially occurring, within the Village 11 Project Area, the adjacent Salt Creek open space and University site (Villages Nine and 10). *Figure 5.3-1* includes the location of sensitive species. Of the sensitive species listed in *Table 5.3-2*, the horned lark, cactus wren and the California gnatcatcher were observed within the Village 11 Project Area, all within native vegetation communities in the eastern portion of the project area, adjacent to Salt Creek. The orange-throated whiptail, white-tailed kite, northern harrier, and San Diego black-tailed jack rabbit are listed as sensitive and were observed in native habitat to the south and east of the grading limits (offsite).

The golden eagle and other sensitive raptor species such as northern harrier, white-tailed kite, and cooper's hawk could forage within the Village 11 Project Area. These species are protected under the California Fish and Game Code 3503.5.

Directed surveys for **California gnatcatchers** were performed in May, June and July 1999 and included all suitable habitat outside, and within, the Village 11 Project Area including coastal sage scrub, disturbed coastal sage scrub, sparse coastal sage scrub, southern cactus scrub, disturbed broom baccharis scrub. The Village 11 Project Area include approximately 6.4 acres total of these habitats. One California gnatcatcher location was noted within these impact areas. The California gnatcatcher is an MSCP covered species.

The **San Diego horned lizard**, another MSCP covered species, frequents a variety of habitats throughout most of California west of the desert and Cascade-Sierran highlands, and throughout Baja California except for the extreme northeast portion. This species was common in San Diego County until about 10 years ago. Loss of habitat, over collecting and the introduction of exotic ants displacing native harvester ants, the horned lizards primary food source, have been factors in the population decline.

## TABLE 5.3-2 SENSITIVE WILDLIFE SPECIES KNOWN, OR POTENTIALLY OCCURRING

| Species | Status[1] | Habitat | Occurrence/Comments |
|---|---|---|---|
| **Invertebrates** | | | |
| Quino checkerspot butterfly *Euphydryas editha quino* | Federally endangered | Coastal sage scrub, grassland and chaparral with principal host plant *plantago erecta* or others and natural crytogamic soil crust. | None observed during 1999 flight surveys. One individual observed in 1999 approximately 4,000 feet south of the Village 11 Project Area. |
| Hermes copper butterfly *Lycaena hermes* | Otay Ranch GDP Performance Standard species | Spiny redberry for larvae. Flat-top buckwheat, San Diego sunflower and other nectar sources | Low potential due to very limited habitat within the Village 11 Project Area. |
| **Reptiles** | | | |
| San Diego horned lizard *Phrynosoma coronatum blainvillii* | State species of special concern MSCP covered species | Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage. | Few individuals distributed throughout native scrub habitats and very little appropriate habitat existing within the Village 11 Project Area. |
| Orange-throated whiptail *Cnemidophorus hyperythrus beldingi* | State species of special concern MSCP covered species | Chaparral, coastal sage scrub with coarse sandy oils and scattered brush. | Observed low number of individuals off-site. Expected throughout high quality coastal sage scrub, grassland and in high numbers in disturbed portions of vegetation communities, including areas of the Village 11 Project Area. |
| Northern red-diamond rattlesnake *Crotalus ruber ruber* | State species of special concern | Chaparral, desert and thorn scrub | A few individuals observed within native habitats. Moderate to high potential to occur within the Village 11 Project Area. |
| **Birds** | | | |
| Coastal California gnatcatcher *Polioptila californica californica* | Federally threatened State species of special concern MSCP covered species | Coastal sage scrub, maritime succulent scrub. Resident. | One individual observed within the grading limits, 4 others observed nearby. Potential to utilize native habitats within the SPA Area. |
| Coastal cactus wren *Campylorhynchus branneicapillus cousei* | State species of special concern MSCP covered species | Cactus thickets supporting the cactus wren, primarily in maritime sage scrub, coastal sage scrub and Venturan sage scrub communities. | One territory observed within the Village 11 Project Area. Others occur on east side of Salt Creek. Potential to use southern cactus scrub and adjacent habitat within the Village 11 Project Area. |
| White-tailed kite *Elanus leucurus* | State fully protected species | Nest in riparian woodland, oaks, sycamores. Forage in open, grassy areas. Year-round resident. | Juveniles observed congregating along Salt Creek. Adults foraging. Likely to forage into the Village 11 Project Area from adjacent sightings. |

## TABLE 5.3-2 SENSITIVE WILDLIFE SPECIES KNOWN, OR POTENTIALLY OCCURRING

| Species | Status[1] | Habitat | Occurrence/Comments |
|---|---|---|---|
| Northern harrier<br>*Circus cyaneus* | State species of special concern<br>MSCP covered species | Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident. | Observed through breeding season. Likely breeding occurred. Has potential to nest in the Village 11 Project Area agricultural fields. |
| Cooper's hawk (wintering)<br>*Accipiter cooperi* | State species of special concern<br>MSCP covered species | Mature forest, open woodlands, wood edges, river groves. Parks and residential areas. Migrant and winter visitor. | Species observed using woodlands along Salt Creek. No suitable habitat exists within the Village 11 Project Area. |
| Golden eagle<br>*Aquila chrysaetos* | Bald and Golden Eagle Protection Act species<br>State fully protected species<br>State species of special concern<br>MSCP covered species | Require vast foraging areas in grassland, broken chaparral, or sage scrub. Nest in cliffs and boulders. Uncommon resident. | Observed flying over and walking along ground of agricultural areas to west. Highly likely to use project area for foraging due to large size of territory. |
| California horned lark<br>*Eremophila alpestris actia* | State species of special concern | Sandy shores, mesas, disturbed areas, grasslands, agricultural lands, sparse creosote bush scrub | Observed to use disturbed areas (roadways) within Village 11 Project Area boundaries. Likely to breed on site. |
| Southern California rufous-crowned sparrow<br>*Aimorphila ruficeps canescens* | State species of special concern<br>MSCP covered species | Primarily coastal sage scrub. | Low number of pairs found to breed within the coastal sage scrub. Potential to use the Village 11 Project Area's scrub habitat. |
| Yellow-breasted chat<br>*Icteria virens* | State species of special concern | Uncommon, localized summer resident. Breeds riparian woodlands | A few observed along Salt Creek where probably breed. No suitable habitat within the Village 11 Project Area grading limits. |
| Western burrowing owl (burrow sites)<br>*Speotyto cunicularia hypugaea* | State species of special concern<br>MSCP covered species | Grassland, agricultural land, coastal dunes. Require rodent burrows. Declining resident. | Given habitat and distribution, the burrowing owls could be considered to have high potential to occur and breed within the Village 11 Project Area. Since no owls were observed during the many survey visits in 1999, this species is given low potential to occur. |
| **Mammals** | | | |
| San Diego black-tailed jackrabbit<br>*Lepus californicus bennettii* | State species of special concern | Open areas of scrub, grasslands, agricultural fields. | Numerous individuals observed throughout native habitat, Highly likely breeds in the Village 11 Project Area. Potential for species to use native habitat areas within the Village 11 Project Area. |

[1] Source for MSCP species: City of Chula Vista Draft Subarea Plan.

Source: Dudek & Associates, Inc.

The **orange-throated whiptail lizard**, also on MSCP covered species, is a small, slender, insectivorous lizard. This lizard species ranges from coastal southern California south to the tip of the Baja California peninsula. As an active forager, the species frequents dry, often rocky hillsides, ridges, valleys and washes that support broken coastal sage scrub, chaparral, mule fat scrub and grassland mixed with sage scrub species. The species is declining in California with the conversion of coastal sage scrub and dry wash habitats for agriculture and urban development.

The **cactus wren** is a widespread and common species of the southwestern deserts, extending to the Pacific coast in southern California and Baja California. The "San Diego" subspecies, *sandiegensis*, is restricted to the coastal slopes of San Diego County and extreme southern Orange County. The coastal cactus wren is a highly sensitive species with its habitat having been depleted by housing and associated urban development. The coastal cactus wren is an MSCP covered species.

The **white-tailed kite** is a State fully protected species and is regarded as a locally sensitive raptor. This resident bird nests in woodland areas adjacent to open areas used for foraging. The southern California populations have declined due to the loss of nesting and foraging habitat. The northern harrier is also a State species of special concern and an MSCP covered species. These birds are rare summer residents and are uncommon to fairly common migrant and winter visitors in San Diego County. Urbanization and agricultural development have led to population decline. The northern harrier uses agricultural fields as foraging and nesting grounds.

The **San Diego black-tailed jackrabbit** is a State species of special concern. This species occupies open or semi-open habitats, such as coastal sage scrub and chaparral and is found in the Upper Sonoran life zone along the coast to western base of the coastal mountains. This subspecies is of concern because of its occurrence in diminishing coastal sage scrub habitat.

The **quino checkerspot butterfly** is a federally endangered species. Preferred habitats for the butterfly are coastal sage scrub, grasslands and chaparral that contains its principal host plant dwarf plantain (*Plantago erecta*). Directed surveys were conducted for the quino checkerspot butterfly in all suitable habitat areas (occurrence of host plant, nectar plant, hilltops, ridge lines, native or sparsely vegetated areas). There is very little potential habitat for the quino checkerspot butterfly within the Village 11 Project Area. Surveys for the quino checkerspot butterfly have been conducted for the proposed project in spring, 2001. Quino

surveys will be required every year, prior to construction of the project. Therefore, if there is no construction of the project by the beginning of the flight season, new surveys will be required the following year.

### *Wildlife Movement Corridors*

A regional corridor for local bird species is designated offsite along the Salt Creek Canyon open space. Despite nearby development, effectively confining wildlife movement, Salt Creek Canyon continues to be important in its support of gnatcatchers and cactus wrens as shown by recent surveys (Appendix C). The Village 11 Project Area does not contain any identified wildlife movement corridor and no movement corridors were assigned within the area by the Otay Ranch Wildlife Corridor Study (Ogden 1992).

### *Jurisdictional Waters of the U.S.*

The Village 11 Project Area contains several ephemeral drainages which occur within existing agricultural fields on the project site, as well as other areas impacted by project development. No sensitive plants or animals were found within these areas during the biology survey. The drainages lack indicator vegetation and do not have the hydrology to be considered wetlands, but are considered Jurisdictional Waters of the U.S. by the ACOE.

### *Relevant Resource Planning Documents*

### Otay Ranch Resource Management Plan

The Otay Ranch RMP addresses the preservation, enhancement and management of sensitive natural resources on the entire Otay Ranch property. This plan designates natural open space areas, such as the Salt Creek Canyon, be set aside for long-term conservation. The Otay Ranch RMP has a number of target species, for which the preserve design aims to conserve. As long as preservation is secured in the planned areas, development may occur since it is presumed that target species will be successfully conserved through the implementation of open space management.

### City of Chula Vista Draft MSCP Subarea Plan

As stated previously, the Draft Subarea Plan for the City of Chula Vista is a document prepared to meet the guidelines of the USFWS and the CDFG. The Draft Subarea Plan implements the goals of the MSCP for the region and forms the basis for federal and state "take" permits. Upon adoption of the Implementing Agreement for the approved Subarea Plan, the City would be authorized to take a species described as "covered" in the Subarea Plan. Under this scenario, the Village 11 SPA Plan would need to obtain an Incidental Take Permit (ITP) from the City for impacts to one gnatcatcher location. However, if the City Subarea Plan is not adopted, and has not received take authority from the Wildlife Agencies, the Village 11 SPA Plan would need to obtain the ITP from the USFWS and/or CDFG for the impacts to listed species.

The Draft Subarea Plan allows for infrastructure within the Preserve to support development outside of the Preserve, subject to specific conditions. The conditions that have affected Village 11 include siting criteria for proposed drainage facilities to be located in the Preserve. An analysis of the Village 11 Project's conformance with the siting criteria is contained in the following *Section 5.3.3, Impacts*.

The Salt Creek Interceptor Sewer EIR analyzed impacts for scenarios both with, and without, an adopted Subarea Plan. The Salt Creek EIR also analyzes four different pipe placements or "Policy Options" within the Salt Creek open space preserve. Policy Options 1 and 3 would traverse sensitive upland habitats in the Salt Creek open space area. Policy Options 2 and 4 would generally be placed within the future alignment of Hunte Parkway. Policy Options 2 and 4 are within the Village 11 Project Area. The analysis did not show substantial differences in the level of impacts to sensitive vegetation communities. Any potential impacts from the four options are considered mitigable in the Salt Creek EIR document.

## 5.3.2 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines, Appendix G, impacts to biological resources would be significant if the proposed project:

- Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;

- Has a substantial adverse effect on any riparian habitat or other sensitive natural community (including, but not limited to marsh, jurisdictional vernal pools, coastal, etc.) identified in local or regional plans, policies, regulations or by the CDFG or USFWS;
- Has a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites;
- Conflicts with the provisions of adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state conservation plan; or
- Conflicts with the adjacency guidelines and policies of the City's MSCP.

## 5.3.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR analyzed biological impacts by examining the minimum standards of biological preservation for project development established in the Otay Ranch RMP. It also required that individual SPA Plans address effects upon the environment which are peculiar to the parcel or to the project. The Program EIR identified significant impacts to biological resources, the following of which are pertinent to the proposed GDP Amendments:

- Sensitive uplands (including coastal sage scrub), wetlands, and vernal pool habitat would be impacted. No feasible measures were identified to lessen the level of significance for: Diegan coastal sage scrub, maritime succulent scrub, non-native

grasslands, Valley needlegrass grassland, alkali meadow and vernal pools, although the Findings of Fact required certain mitigation measures as a condition of SPA Plan approval. Other mitigation measures reduced the impacts to: woodlands, scrub, southern willow scrub, and aquatic freshwater marsh to a level below significance.

- State-listed endangered plant species would be impacted. No feasible mitigation measures were identified at the program level of planning to lessen the impact to a level below significance for: San Diego button-celery. Other mitigation measures lessened the impacts to a level below significance for: San Diego thorn-mint, Otay tarplant, and willowy monardella.

- Second, third, and fourth priority plant species would be impacted. No feasible measures were identified to lessen the level of significance for: San Diego goldenstar and Munz's sage. Other mitigation measures lessened the impacts to a level below significance for all other second, third, and fourth priority plant species.

- Impact to least Bell's vireo, tricolored blackbird, and the southwestern willow flycatcher habitat. Mitigation measures were required that would reduce the impacts to a level below significance.

- Cactus wren and California gnatcatcher habitat would be impacted. No feasible mitigation measures were found to lessen the environmental impact to a level below significance because the preservation standard for these species is 100% in lieu of an approved MSCP, although mitigation measures were required as a condition of SPA Plan approval.

- Riverside fairy shrimp habitat would be impacted. Mitigation measures were required that would reduce the impacts to a level below significance.

- San Diego vernal pool fairy shrimp habitat would be impacted. No feasible mitigation measures were identified that would reduce the impacts to a level below significance, although required mitigation measures were required.

- Harbison's dun skipper, Hermes copper, Thornes' hairstreak and quino checkerspot butterfly habitat would be impacted. Mitigation measures that would reduce the impacts to a level below significance were required.

- California red-legged frog and southwestern pond turtle would be impacted. Mitigation measures that would reduce the impacts to a level below significance were required.

- Forty-nine (49) other sensitive wildlife species may be impacted. No feasible mitigation measures were identified at the program level of planning to reduce the impacts to a level below significance, although required mitigation measures were required.

- Regional raptor-foraging areas would be impacted. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

- Regional and local wildlife corridors would be impacted. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

## SPHERE OF INFLUENCE UPDATE EIR

The Sphere of Influence EIR concluded that, despite the impacts to biological resources already identified in the Otay Ranch GDP, the inclusion of the Otay Ranch parcels into the City's sphere would not itself result in any physical change in the environment, and that the impact to biological resources is less than significant.

## OTAY RANCH SPA ONE EIR

The SPA One EIR amended the Otay Ranch GDP and the performance standards. Those amendments included:

- Modifying page 121 of the Findings of Fact for the Program EIR, and thereby changing the mitigation measures for the Otay Ranch GDP, as follows: "Impacts to least Bell's vireo shall be mitigated to achieve a level of 60 dBA Leq or below."

- Adding the following performance standards to page 362 of the Otay Ranch GDP:

  **"Performance Standard:**

  - Impacts to Least Bell's Vireo habitat shall be mitigated to achieve a level of 60 dBA Leq or below.
  - Noise levels within gnatcatcher habitat shall, to the extent feasible, achieve 65 dBA. However, for the purpose of achieving the gnatcatcher preservation standard of 52%, those gnatcatchers impact by the 65 dBA or greater shall not be counted as preserved."

  The noise related amendments are explained in the SPA One EIR as follows: "No Least Bell's Vireo habitat will be affected by the proposed project. Gnatcatcher habitat will be affected by SPA One. In particular, Gnatcatcher habitat will experience noise levels exceeding the 60 dBA Leq standard. The area of potentially affected habitat, however is elevated above the future roadways, rendering the placement of sound walls or berms in these areas ineffective. No other feasible mitigation measures have been identified to reduce the noise levels in this area to below the 60 dBA Leq standard."

The SPA One EIR found that the annexation of land into the Otay Ranch GDP would result in potential impacts to biological resources, and that no feasible mitigation measures were available to reduce this impact to a level below significance.

## AMENDED SPA ONE EIR

The Amended SPA One EIR focused the discussion of biological impacts on specific actions and circumstances related to the SPA One West development. No impacts related to the GDP Amendment Area were discussed.

## 5.3.4 IMPACTS

### GDP AMENDMENTS

#### *Sensitive Habitats and Species*

The proposed GDP Amendments would not result in changes to the Preserve boundary, as identified in the adopted GDP and RMP. The proposed GDP Amendments would reconfigure Village and Planning Area boundaries, and roadway alignments within the development areas of the adopted GDP. No additional development is proposed in the Preserve areas. Additionally, as stated above in *5.3.1, Existing Conditions,* biological resources and vegetation land covers have not substantially changed since the adoption of the GDP, and certification of Program EIR 90-01. The Program EIR discussed the significant impacts from the adopted GDP on sensitive species and habitats. Those impacts are summarized in Section 5.3.3. The listing of the Otay tarplant and quino checkerspot butterfly would not substantially change the analysis or findings of the Program EIR 90-01, since the GDP and the RMP included conservation measures for those species and their habitats.

Neither biological conditions on the site, nor the boundaries of the areas proposed to be disturbed have changed since the certification of the Program EIR 90-01 and adoption of the GDP. Therefore, no new additional impacts, or substantial changes in the character or intensity of impacts to biological impacts would result from adoption of the proposed GDP Amendments. Adoption of the proposed GDP Amendments would result in the same significant impacts identified in the Program EIR 90-01 and summarized in Section 5.3.3 of this EIR.

#### *Relevant Resource Planning Documents*

#### Otay Ranch Resource Management Plan

The proposed GDP Amendments would not change the boundaries of the Preserve identified in the RMP. All of the proposed changes to the GDP are within the development area identified in the RMP, and as such, no new or additional impacts to sensitive biological resources would result from adoption of the proposed GDP Amendments. The proposed GDP Amendments would also not affect the conveyance of land into the Preserve. Development in accordance with the proposed GDP Amendments would still be subject to the conveyance

requirements of 1.188 acres of preserve per acre of developed land into the Preserve. The management structure and maintenance requirements of the RMP would not be affected by the proposed GDP Amendments. In addition, all of the policies and standards set forth in the RMP would apply to the proposed GDP Amendments. Overall, the proposed GDP Amendments would not result in any significant adverse impacts to the Otay Ranch Resource Management Plan, or in any way adversely affect its implementation. Therefore, the proposed GDP Amendments would not result in significant impacts on the RMP.

## City of Chula Vista Draft MSCP Subarea Plan

As stated in *Section 5.1.1, Existing Conditions*, the Chula Vista MSCP Draft Subarea Plan relies extensively on the Otay Ranch Resource Management Plan for conservation of sensitive habitats and species, as well as for long-term Preserve management, for the portions of the Preserve encompassed within the Amendment Area. As stated above, the proposed GDP Amendments would not have a significant adverse effect on the RMP. Similarly, and for the reasons discussed in the previous section related to the RMP, the proposed GDP Amendments would not result in significant impacts to the Draft Subarea Plan.

## VILLAGE 11 SPA/TM

### *Sensitive Habitats*

The Program EIR 90-01 identified significant impacts to sensitive upland habitats that were not fully mitigated. Significant impacts resulting from implementation of the Village 11 SPA Plan include: direct impacts to disturbed broom baccharis scrub, coastal sage scrub, sparse coastal sage scrub, cismontane alkali marsh, non-native grassland, southern cactus scrub and direct impacts to three sensitive bird locations. Sensitive habitats within the Village 11 Project Area would be directly impacted as shown in *Table 5.3-3*. These totals are based on a worse-case scenario for improvements to major arterials, the creation of off-site drainage facilities and the extension of a sewer lateral.

A total combined 6.6 acres of coastal sage scrub (including broom baccharis scrub) and sparse coastal sage scrub, 0.33 acre of southern cactus scrub, 8.8 acres of non-native grassland and 0.02 acres of cismontane marsh would be permanently removed during development.

TABLE 5.3-3
SUMMARY OF IMPACTS TO
VEGETATION COMMUNITIES - VILLAGE 11 PROJECT AREA

| Vegetation (Habitat) Type | Village 11 Project Area, Including Off-site Grading Limits, Sedimentation Basins, Access Roads, Arterial Improvements and Sewer Line Extension |
|---|---|
| **Natural Upland Communities:** | |
| Disturbed Broom Baccharis Scrub | 0.16 |
| Coastal Sage Scrub | 1.27 |
| Sparse Coastal Sage Scrub | 5.16 |
| Southern Cactus Scrub | 0.33 |
| **Natural Wetland Communities** | |
| Cismontane Alkali Marsh | 0.02 |
| **Non-Natural Land Covers:** | |
| Agriculture | 538.17 |
| Non-Native Grassland | 8.8 |
| Disturbed Habitat | 10.8 |
| **TOTAL ACRES[1]** | **565.0** |

[1] Totals may not be precise due to rounding.

Source: Dudek and Associates

Indirect impacts could result within areas where sensitive habitats occur adjacent to the Village 11 Project Area. Short-term indirect impacts during construction, or from adjacent urban uses, may include dust, noise, soil erosion and runoff. Indirect impacts could temporarily disrupt habitat vitality. Long-term, negative effects could result from human and domestic pet intrusions, noise, lighting, invasion by exotic plant and wildlife species and urban runoff.

## Sensitive Plants

Approximately 97 percent of the Village 11 project site is highly disturbed due to years of agricultural use. Although detailed surveys for sensitive plants were not conducted within the disturbed agricultural areas, it is presumed that sensitive plants do not occur in these areas. Within the non-agricultural areas of the Village 11 Project Area, individual listed sensitive plants were not found during surveys conducted for the project. However, sensitive plant surveys conducted for the Salt Creek Sewer project in spring, 2001 revealed approximately ~~71~~ 175 individual Otay tarplant within the grading area for Hunte Parkway. In addition to Otay tarplant, other annual plants, whose populations fluctuate from year to year, have the potential to occur within the Village 11 Project Area. Conservation of sensitive plant species is provided through the RMP Preserve design and management.

The Program EIR 90-01 identified all impacts to sensitive plant species as being mitigated with the required RMP1 and RMP2 measures, with the exception of San Diego button-celery, San Diego goldenstar and Munz's sage. There is no suitable habitat for San Diego button-celery, San Diego goldenstar or Munz's sage within the Village 11 Project Area; therefore, no impacts to these species are anticipated. Potential direct impacts to the other identified sensitive plant species are mitigated through the RMP. It should be noted, however, that listed plant species found to occur within the Village 11 Project Area (such as Otay tarplant) as a result of pre-construction surveys, permitting for take of those species (in lieu of an approved Subarea Plan) may be subject to additional mitigation required by the permitting agency(ies). Indirect impacts are difficult to quantify, but can be reasonably predicted by the proximity of the proposed development and the sensitivity of affected resources. Indirect impacts would result from adverse "edge effects" as described above for indirect sensitive habitat impacts. While performance standards for sensitive plants have been met by the proposed project for preservation and management under the RMP, indirect impacts would be significant.

## Sensitive Wildlife

Three sensitive animal point (individual sighting) locations would be directly impacted by the proposed development: one California horned lark, one cactus wren and one California gnatcatcher. Impacts to these species were identified as significant and unmitigable in the Program EIR 90-01. The impacts represented by Village 11 development would be significant.

One of the potentially significant indirect impacts to California gnatcatchers is noise. The Chula Vista MSCP Subarea Plan contains specific noise adjacency requirements for development and construction next to the Preserve. Specifically, uses adjacent to the Preserve should be designed to minimize noise impacts. The Subarea Plan noise adjacency language reads:

> *Excessively noisy uses or activities adjacent to breeding areas, including temporary grading activities, must incorporate noise reduction measures or be curtailed during the breeding season of sensitive bird species. Where noise associated with clearing, grubbing or grading will negatively impact, as determined by the City's biologist, an occupied nest for . . . the California gnatcatcher between February 15 and August 15 (During the breeding season), clearing, grubbing or grading activities will be modified if necessary, to prevent noise from negatively impacting the breeding success of the pair. If an occupied . . . California gnatcatcher nest is identified in a preconstruction survey, noise reduction techniques shall be incorporated into construction plans.*

Potential indirect impacts associated with noise from project-related activities could result in a significant impact to sensitive bird species, including California gnatcatcher.

Implementation of the Village 11 SPA Plan and Conceptual TM would eliminate approximately 539 acres of agricultural fields and grasslands used for foraging by northern harrier, white-tailed kite, golden eagle and other raptor species. The Program EIR 90-01 identified loss of raptor foraging habitat as a significant impact. The Village 11 SPA Plan would contribute to this significant impact.

## Otay Ranch Resource Management Plan

The following discussion describes the status of the Village 11 SPA/TM must meet to comply with the RMP:

- The performance standards for Diegan coastal sage scrub would be met through the preservation of coastal sage scrub within the Otay Ranch preserve, including areas of Salt Creek Canyon;

- To meet the required 0.4 acre to 1 coastal sage scrub restoration requirement of the RMP, ~~2.72~~ 2.77 acres would need to be restored elsewhere within the Otay Ranch;

- Indirect impacts would result from adverse "edge effects" as described above for indirect sensitive habitat impacts, the project is required to submit an Edge Plan to address these potential impacts;

- Performance standards for sensitive plants have been met by the proposed project for preservation and management under the RMP.

- Performance standards for sensitive animals would be met by off-site preservation in accordance with the Otay Ranch RMP; and

- Indirect impacts to sensitive wildlife species would not be significant because adjacent open space areas would be actively managed per the RMP guidelines.

The Village 11 SPA/TM would comply with the Preserve design and conservation standards of the RMP. The Village 11 SPA Plan will be required to demonstrate compliance with the RMP standards for control of edge effects approval of an Edge Plan, and would also be required to meet the restoration requirements for coastal sage scrub. Without compliance with the Edge Plan and restoration requirements of the RMP, development of Village 11 would result in significant impacts to implementation of the RMP. The RMP includes conveyance procedures for dedicating parcels of land to the Resource Preserve and for determining the proportionate share for each village. The Otay Ranch GDP identified that the entire Otay Ranch area contained 9,575 developable acres. The estimated conveyance obligation of 11,375 acres to the Otay Ranch Preserve would be met on a village-by-village basis. The conveyance ratio for all development is 1.188 acres for each acre of project area. Conveyance is required prior to the approval of final maps. For Village 11, conveyance responsibility is calculated based on the 489-acre SPA area, less common areas, including schools, parks, and roadways,(totaling 106 acres), leaving 383 acres to which the 1.188-acre multiplier is applied. The resulting conveyance responsibility for Village 11 would be 455 acres.

## City of Chula Vista Draft MSCP Subarea Plan

The development of Village 11 would be within the area designated for development under the RMP and the MSCP Subarea Plan (which is based on the RMP in the Otay Ranch area) with the exception of some offsite grading which encroaches into the Preserve. The Village 11 project proposes construction of three drainage facilities, two of which would impact the Preserve. The Subarea Plan contains siting criteria for "future facilities" that are to be located within the Preserve. The northernmost facility would impact approximately 0.9 acre within

the Preserve and the southernmost facility would impact an area 1.8 acre in size *(Figure 5.3-2)*. These facilities are considered in the Chula Vista Subarea Plan as "future facilities" and as such are a permitted use within the preserve area given certain implementation and siting criteria, as outlined in the Subarea Plan (City of Chula Vista 2000). Construction of each drainage facility would not exceed impact thresholds, and the facility has been designed with consideration to Subarea Plan criteria. The drainage facilities would result in impacts to 0.5 acre of covered habitats (coastal sage scrub and disturbed broom baccharis scrub).

The siting of future facilities within the Salt Creek Preserve would not exceed the 2.0 acre limit per facility as allowed by the *Future Facilities Siting Criteria* of the City's MSCP Subarea Plan. The Facilities Siting Criteria section of the City's adopted MSCP Subarea Plan details siting criteria for both planned and future facilities. The Subarea Plan details criteria for the engineering of roads and other infrastructure, revegetation, corridor requirements and City review and permitting procedures. The Village 11 SPA Plan includes a requirement that the project design and future maintenance procedures comply with the City's Subarea Plan criteria for adjacency and siting. The following is a statement of those criteria and an analysis of the drainage facilities' compliance:

1. **Such facilities shall be located in the least environmentally sensitive location feasible.** The location for drainage facilities is dependent on topographic conditions, and must be located at natural low points related to the areas to be drained. The two detention facilities located within the preserve have been located and designed in portions of the drainages with minimal natural resources, in an effort to maximize impacts to disturbed areas, and minimize impacts to undisturbed habitat.

2. **Such facilities shall avoid impacts to covered species and wetlands.** Impacts to wetland habitats and covered species have been avoided to the greatest extent feasible.

3. **Roads crossing the Preserve should provide for wildlife movement in areas that are depicted on and listed in the MSCP Subregional Plan Generalized Core Biological Resource Areas and Linkages map.** This criterion is not applicable to the drainage facilities.

4. **Roads shall be located in the least environmentally sensitive location feasible and road and/or right-of-way widths shall be narrowed from existing City standards to the greatest extent feasible.** This criterion is not applicable to the drainage facilities.

5. **The City may authorize Take of covered species and habitats resulting from the construction of future facilities within the Preserve, subject to a limitation of two (2) acres of impact per facility**. Each of the facilities is less than two acres in size.
6. **Facilities must avoid impacts to covered narrow endemic species to the greatest extent feasible.** The facilities have been designed to avoid impacts to narrow endemic species.

Because the drainage facilities comply with the siting criteria of the Draft Subarea Plan, no significant impacts to the Draft Subarea Plan would result from the drainage facilities associated with the Village 11 SPA Plan.

The City's Subarea Plan also contains specific criteria for adjacency management issues (edge effects). Specific criteria are described under the *Adjacency Guidelines for Controlling Drainage*, which include methods for the placement and shielding of lighting, placement of buffers, and for avoidance of impacts from toxins, noise impacts to sensitive wildlife, and the introduction of invasive plants. Implementation of the Village 11 SPA/TM would introduce development adjacent to the Preserve. This development could result in potentially significant edge effects to the Preserve.

## Permits/Wetlands

The proposed project would impact wetlands in one small (0.02 acre) area of cismontane alkali marsh. This impact would require both federal and state permits. This impact to cismontane alkali marsh is considered significant. Several ephemeral drainages within existing agricultural fields would also be directly impacted by the project. These drainages total approximately 0.77 acre in size. Impacts are attributable to the various components of the Village 11 as follows:

- SPA development area — 0.44 acre
- Sewer lateral — 0.028 acre
- Hunte Parkway — 0.22 acre
- Detention basins — 0.085 acre

Because the affected drainages are all ephemeral in nature, the impacts are not considered significant. However, they do qualify as Jurisdictional Waters of the U.S. and they would require a permit from the ACOE (404).

As stated in Section 5.9, *Water Resources and Water Quality,* the Village 11 drainage facilities would detain the first 0.6 inch of runoff from the development area, to reduce impacts to water quality from first flush and dry-weather runoff. The proposed drainage facilities would avoid potential indirect impacts to wetland habitats by precluding non-precipitation flows from the Village 11 Project Area associated with irrigation and other sources. Since detention of dry-weather and first flush runoff would be detained with the proposed drainage facilities, no significant impacts to wetland habitats related to water quality or increased dry-weather flow would result from implementation of the Village 11 SPA/TM.

As further discussed in Section 5.9, surface runoff from the Village 11 Project Area would be collected in drainage inlets and catch basins, then conveyed through storm drain facilities to the discharge points into Salt Creek. Implementation of the Village 11 SPA/TM would result in an increase in the amount of runoff during storms due to the overall increase in impervious surface areas. In accordance with City policy, existing and planned development upstream of the Village 11 Project Area that is within the Salt Creek watershed is required to detain storm water flows in order to avoid increasing the peak storm flow volume in Salt Creek. The detention of upstream flows within the Salt Creek drainage would have the effect of delaying the peak flow in Salt Creek, at the point where the Village 11 storm water flows would be added. The Village 11 SPA/TM, as well as upstream development, would have the cumulative effect of increasing the total quantity of water flowing in Salt Creek during and immediately following storm events. However, this increase in storm flow volumes and duration would be limited to approximately 24 to 72 hours following a storm event (EastLake III Final EIR).

Increased volumes for the short duration would not result in a substantial change in the type of habitat found in the Salt Creek area. Salt Creek contains sensitive wetland habitats in and around the stream course, and sensitive upland habitats on the slopes of the canyon. The sensitive upland habitats, including coastal sage scrub and maritime succulent scrub habitats would not be adversely affected by increased storm flows in Salt Creek because they occur at elevations that are above the stream course. Wetland habitats within the Salt Creek drainage may derive benefits from increased storm flow durations and volumes, as further evidenced by a letter report prepared by RECON (June, 2001, Appendix C) that similarly concludes that increased storm flows volumes and duration would provide more lush growth of perennial wetland species, and longer life for annual wetland species.

## 5.3.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

Neither biological conditions on the site, nor the boundaries of the areas proposed to be disturbed would be changed by the proposed GDP Amendments. In addition, the proposed GDP Amendments would not affect any of the objectives, policies, or standards addressed in either the Otay Ranch RMP or the City of Chula Vista Draft Subarea Plan. A summary of significant impacts to biological resources identified in the Program EIR 90-01 is contained in Section 5.3.3. No new additional impacts, or substantial changes in the character or intensity of impacts to biological impacts would result from adoption of the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The proposed Village 11 SPA Plan would result in significant impacts resulting from project implementation including: direct impacts to disturbed broom baccharis scrub, coastal sage scrub, sparse coastal sage scrub, cismontane alkali marsh, non-native grassland, southern cactus scrub and direct impacts to locations determined to be occupied by coastal California gnatcatcher, cactus wren and California horned lark. In addition, impacts from edge effects such as invasive plant species and lighting would cause significant indirect impacts to wildlife species in adjacent Preserve areas.

## 5.3.6 MITIGATION MEASURES

### GDP AMENDMENTS

The Program EIR 90-01 mitigation measures would still apply to the proposed GDP Amendments, and are listed in *Appendix B*. No new or additional significant impacts have been identified with the proposed GDP Amendments. No additional mitigation measures are required beyond those identified in the Program EIR.

### VILLAGE 11 SPA/TM

**5.3-1** Prior to recordation of each final map, the applicant shall either convey land within the Otay Ranch RMP Resource Preserve at a ratio of 1.188 acres for each acre of development area as defined in the RMP, for a total of 455 acres, or shall pay in-lieu-

of-conveyance fees as prescribed by the RMP. The preserved open space would either be annexed to an existent Community Facilities District (CFD) or a separate CFD would be created. In addition, to comply with the RMP coastal sage scrub restoration requirements, 2.77 acres of coastal sage scrub shall be restored within Otay Ranch. Restoration shall incorporate salvaged soil, seed and plant materials from impacted areas within the Village 11 Project Area.

**5.3-2** Prior to issuance of grading permit(s) which would impact coastal sage scrub or southern cactus scrub, the applicant shall furnish the City with copies of the appropriate permits from the state and federal wildlife agencies, or shall provide evidence demonstrating that no permits are required or shall secure "take" authorization from the City of Chula Vista under the MSCP.

**5.3-3** Prior to issuance of grading permit(s), the applicant shall have approved by the City a program for restoration of 0.02 acre of cismontane alkali marsh in the vicinity of the project area. The details of the mitigation shall be provided following consultation with wetland resource agencies.

**5.3-4** If the City of Chula Vista has received take authority from the Wildlife Agencies, the Village 11 SPA project would need to obtain an Incidental Take Permit (ITP) from the City for impacts to one gnatcatcher location. However, if the City has not received take authority from the Wildlife Agencies, the Village 11 SPA project would need to obtain the Incidental Take Permit from the USFWS for the impacts to one gnatcatcher location.

**5.3-5** Prior to issuance of grading permit(s), a third-party biologist acceptable to the City would evaluate potentially significant noise impacts to nesting gnatcatchers both on and off-site. If significant noise impacts would occur, the applicant would be required to reduce the impact to a level below significant through either modification of construction activities or avoiding clearing, grubbing, grading or construction activities within 500 feet of an occupied gnatcatcher nest.

**5.3-6** Prior to approval of the first Tentative Map for construction of Hunte Parkway adjacent to the Salt Creek preservation area, an "edge plan" shall be prepared in consultation with a qualified biologist to include a list of plant species that may and may not be used for landscaping. The edge plan shall be submitted for, and is subject to, the approval of the Director of Planning and Building.

**5.3-7** During construction, and continuing after project completion, the proposed project shall meet all Adjacency Management guidelines as listed in Section 6.3.2 of the City's MSCP Subarea Plan.

**5.3-8** Surveys for the quino checkerspot butterfly shall be conducted every year, prior to construction, starting with the current surveys conducted in the spring, 2001 season. If the project is not constructed in 2001, then surveys shall be performed in the year prior to construction. If quino checkerspot butterflies are detected within development areas, avoidance of this area, or mitigation consisting of purchase of suitable offsite habitat at a ratio of 3:1 shall be provided.

**5.3-9** In accordance with the requirements of the Draft Subarea Plan, no clearing of occupied coastal sage scrub habitat may occur from February 15 through August 15.

**5.3-10** Surveys for Otay tarplant shall be conducted in the year prior to grading to determine population characteristics at the time of impact. Mitigation for Otay tarplant under CEQA is provided through conservation provided by the Otay Ranch RMP. Additional mitigation may be required by the USFWS and CDFG under their permitting jurisdiction

**5.3-11** Focused surveys for burrowing owl shall be conducted in the year prior to grading. If occupied burrows are detected, passive relocation of the species shall be conducted to avoid impacts from grading.

**5.3-12** Focused surveys for active nests of northern harriers shall be conducted in the year prior to grading. If active nests are detected, and if construction activities occur between March 1 and July 31, construction activities shall be restricted within 900 feet of the active nest sites.

## 5.3.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

Significant and unmitigable biological impacts identified in the Program EIR 90-01, that are applicable to the proposed GDP Amendments include: impacts to sensitive upland habitats and impacts to sensitive wildlife species (as further detailed and summarized in Section 5.3.3). No new or additional significant impacts would result from the implementation of the proposed GDP Amendments beyond those identified in the Program EIR 90-01.

## VILLAGE 11 SPA/TM

Mitigation measures 5.3-1 through 5.3-8 would reduce the identified significant impacts to less than significant levels, with the exception of those impacts identified as significant and unmitigable in the Program EIR 90-01, including:

- Cactus wren and California gnatcatcher habitat would be impacted. No feasible mitigation measures were found to lessen the environmental impact to a level below significance because the preservation standard for these species is 100% in lieu of an approved MSCP, although mitigation measures were required as a condition of SPA Plan approval.

- Forty-nine (49) other sensitive wildlife species may be impacted. No feasible mitigation measures were identified at the program level of planning to reduce the impacts to a level below significance, although required mitigation measures were required.

- Regional raptor-foraging areas would be impacted. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

- Regional and local wildlife corridors would be impacted. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

# 5.4 CULTURAL RESOURCES

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to cultural resources for the entire Otay Ranch project area. Section 4.9.5 of the Program EIR 90-01 included an analysis of cultural resource impacts related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of cultural resource issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to cultural resources that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review. A more detailed analysis of Village 11 project impacts was conducted by Brian F. Smith and Associates as part of this EIR (*Evaluation of Cultural Resources for the Otay Ranch Village 11 Project*, Appendix D).

## 5.4.1 EXISTING CONDITIONS

### GDP AMENDMENTS

A complete description of existing cultural resources within the entire Otay Ranch was provided in the Program EIR 90-01 for the Otay Ranch GDP. That discussion and analysis is hereby incorporated by reference. The Program EIR 90-01 discussion was derived from a variety of records and literature searches and from cultural resource surveys conducted on the Otay Ranch. Principal among these studies was an archaeological overview prepared in 1987. A second major study was an initial planning survey conducted in 1990. This included a record search for the Otay Ranch planning area. A third study was conducted in 1991/1992, that included an intensive survey of approximately 6,000 acres and a spot check study. The intensively surveyed areas were limited to those areas most likely to be subject to development. The intent of the investigations conducted at the program-level of analysis was to identify the potential for resources. Further study and significance testing of archaeological resources was intended to occur at subsequent stages of analysis.

The proposed Amendment Area is within the same development boundaries of the adopted plan. No additional areas outside of those contemplated to be developed under the adopted plan are proposed for development with the proposed GDP Amendments. The following is a summary of the general characteristics of the Amendment Area.

The cultures that have been identified in the general vicinity of the project consist of the possible Paleo-Indian manifestation of the San Dieguito Complex, the Archaic and Early Milling Stone horizons represented by the La Jolla Complex and the Late Prehistoric Kumeyaay culture. The area was used for ranching and farming following the Hispanic intrusion into the region and extending into the historic period. The most common prehistoric site type in the Otay Ranch area is that of sparse lithic scatter. About 10 percent of the 181 sites identified in the Program EIR 90-01 include a small proportion of ground stone tools, often represented by a single mano or metate fragment, associated with the lithic scatter. The remaining sites vary in type. The distribution of site types suggest that prehistorically this area of Otay Ranch was utilized primarily for short-term resource procurement. No lithic quarry sites, beyond an occasional tested cobble, or large-scale camp or habitation sites have been identified within one mile of the Amendment Area.

## VILLAGE 11 SPA/TM

Brian F. Smith and Associates conducted the review of previous research, testing programs, site updates and significance evaluation of the archaeological resources for the Village 11 Project Area. The testing program conducted at each archaeological site included the collection of all surface artifacts, a shovel test series, the excavation of one or two one-meter-square test units and an evaluation for significance. Testing and site evaluation was conducted between August 17 and 23, 1999.

A total of 134 cultural resources has been documented as located within one mile of the Village 11 Project Area. Of the 134 documented resources, 48 resources are cultural isolates, comprised primarily of one or two lithic artifacts and not considered archaeological sites. Of the remaining, 70 are prehistoric, 15 are historic, and one exhibits components of both a prehistoric and historic site.

Five cultural resource sites within the Village 11 Project Area have been identified in several surveys for Otay Ranch. The sites were recorded as a historic site (W-4255) and five prehistoric artifact scatters. Each site located within the Village 11 Project Area is described below.

### Site W-4255

The mapped location of this site was examined during the site surveys. No indication of a historic structure was found during the field investigation; however, a prehistoric site, consisting of a scatter of marine shell, was identified. In general, the area has experienced a considerable amount of disturbance related primarily to agricultural activities. The dimensions of the site based on the extent of surface scatter is 60 meters by 150 meters. Plowing of the field over the last century has likely scattered the remains of the site beyond its original boundaries. In addition to the marine shell, a single lithic artifact was found on the surface. None of the shell material appeared burned. The site includes a subsurface component with decreasing resource concentration below 20 centimeter. The plow zone (depth of an agricultural disc) appears to extend to a depth of at least 30 centimeters and could account for the recovery below 10 centimeters. Marine shell and two lithic artifacts were found in the subsurface testing. Site function appears to have centered around food processing.

### Site SDI-8651

Extensive plowing over the last century and construction of transmission lines along the northeastern edge of the site have substantially reduced the integrity of the site. The surface manifestation of the site consists of a sparse scatter of lithic artifacts including lithic production waste. A lithic scatter is a resource made up of stone flaking debris, cores, and possibly tools left behind as refuse from a short term use of this location for either manufacturing or resharpening stone tools. The cultural evidence indicates that the site represents a resource processing area. Based on the surface distribution, the site measures 53 meters by 35 meters. Four flakes, one piece of debitage, one core, one hammerstone, one mano fragment and one quartz crystal were found. The subsurface component of this site appears to be confined to the upper 10 centimeters with sterile soil encountered below this level. Only two test excavation units yielded cultural material with a metavolcanic core and metavolcanic debitage found.

### Site SDI-12,277

This area has also been extensively plowed over the last century. The site was recorded as a lithic scatter, covering approximately 800 square meters. Evidence suggest that this represents a resource extraction site which is a site developed at the location of a source for raw material for stone tool making. This site generally consists of primary reduction debris

(the outer surface of a rock) that was removed to reduce the weight of desirable nodules of material for transport to other locations for additional use. A single surface artifact, metavolcanic debitage, was found in the most recent evaluation. Fire-affected rock was noted as a non-cultural constituent, probably representing rocks burned during episodes of brush fire, rather than remains of hearths. The poor quality of the rocks, their small size and the fact that they were observed along the length of the ridge suggest that they do not represent cultural features. No evidence of subsurface cultural resources were found.

### *Site SDI-12,278*

The surface manifestation of Site SDI-12,278 consists of three lithic artifacts, including a metavolcanic flake, debitage and core. The dimensions of the site, based on the surface artifact distribution, are 40 meters by 14 meters. However, site integrity is poor due to intense erosion and deflation. Generally the quality of the raw material available at the site is poor although some medium-grained metavolcanics are present. The exposed cobble lens and the presence of lithic production waste suggest that this site represents a limited-use lithic procurement and production location. Several burned rocks were also identified in this area, but as discussed above, likely represent rocks burned during brush fires. All subsurface test units were negative for cultural remains.

### *Site SDI-12,285*

The surface component consists of a scatter of highly fragmented marine shell and a single lithic artifact. The site was previously described as a prehistoric temporary camp which is an impermanent camping location where food resources were gathered and/or initially processed for use at a more permanent camp or simply as a stop over on a journey to another location (e.g., from the mountains to the coast). A camp fire may have been used for overnight stays and/or to prepare meals while working in this location. The discarded tools and food remains from this short-term use created a sparse deposit of refuse from these limited activities. The area has been disturbed by agricultural activities. The current evaluation of evidence suggest that SDI-12,285 represents a resource processing site with the presence of marine shell indicating that nutrition was provided in part by food procured at the coast. A resource processing site is an impermanent camping location where food resources were gathered and/or initially processed for use at a more permanent camp or simply as a stop over on a journey to another location (e.g., from the mountains to the coast). The presence of a core suggest lithic production may have occurred at the site. Based on the surface distribution, the site measures approximately 150 meters by 80 meters.

Subsurface testing yielded marine shell remains, but no additional lithic artifacts were recovered. No cultural artifacts were found at the 20 to 30-centimeter depth. While 20 centimeters is well within the plow zone and thus lacks integrity, the increased depth of recovery in four of the shovel tests may indicate the original location of the prehistoric site.

### *Site SDI-7217B*

Site SDI-7217B is identified as a prehistoric site composed of a lithic scatter that occurs within the grading area associated with the southernmost proposed drainage facility. Construction of the drainage facility would affect a portion of SDI-7217B.

## 5.4.2 THRESHOLDS OF SIGNIFICANCE

The following threshold standards are based on Appendix G of the CEQA Guidelines, with additional section references provided where appropriate:

- Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5. This includes:
  - -- Resources that are eligible for the California Register of Historic Resources and the National Register of Historic Places; and
  - -- Resources that are locally designated as historically significant; and/or the City of Chula Vista finds the resource historically significant based on substantial evidence.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5 of the CEQA Guidelines. This includes:
  - -- Resources that are associated with an event or person of recognized significance in California or American History or recognized scientific importance in prehistory;
  - -- Resources that can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;

- -- Resources that have a special or particular quality such as the oldest, best example, largest, or last surviving example of its kind; and

- -- Resources that are least 100 years old and possess substantial stratigraphic integrity; and/or involve important research questions and historical research has shown can be answered only with archaeological methods.

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

- Disturb any human remains, including those interred outside of formal cemeteries.

## 5.4.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR 90-01 found significant impacts to cultural resources which are pertinent to the proposed GDP Amendments and Village 11 SPA, including disturbance of significant prehistoric and historic resources. The Program EIR 90-01 found that the cumulative impact for the region would reduce the database for cultural resources by approximately 86 percent. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

### SPHERE OF INFLUENCE UPDATE EIR

Even though the Sphere of Influence EIR reiterated that the Program EIR 90-01 found impacts to cultural resources to be unmitigable, it concluded that inclusion of the Otay

Ranch parcels into the City's sphere would not in itself result in physical changes to the environment.

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the cultural resource assumptions or conclusions of the Program EIR 90-01. As required by the Program EIR 90-01, in conjunction with the approval of SPA One, a comprehensive cultural resource study was prepared to assess cultural resources throughout the Otay Valley parcel. (Results of an Archaeological Survey of the Otay Valley Parcel of the Otay Ranch, Brian F. Smith and Associates, (February 29, 1996.) That document serves as a "Stage 1" baseline study for cultural resources for subsequent SPA plans.

## AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the cultural resource assumptions or conclusions of the Program EIR 90-01.

# 5.4.4 IMPACTS

## GDP AMENDMENTS

The Program EIR 90-01 found that, since the significance of potentially impacted cultural resource sites was not fully known at the program-level of analysis, impacts to cultural resources would be significant. To determine significance at subsequent planning stages, EIR 90-01 required the testing of potentially impacted cultural resource sites with each SPA Plan. The proposed GDP Amendments are entirely within the development boundaries identified for the adopted GDP, and therefore, no new sites or areas of potential cultural resources impacts would result from the proposed GDP Amendments. Therefore, the same conclusions of the Program EIR 90-01 would apply to the proposed GDP Amendments; impacts to cultural resources related to the proposed GDP Amendments would be potentially significant at the program-level of analysis.

## VILLAGE 11 SPA/TM

The implementation of grading plans associated with the Village 11 SPA and TM would eliminate six identified cultural resources sites within the Village 11 Project Area. However, these cultural resource were tested and evaluated for significance during the course of the 1999 study, and all were found not to be significant. The following are discussions of the findings of the analyses for each of the sites.

### *Site W-4255*

The site function appears to have centered around food processing. No cultural features, diagnostic artifacts or unique elements were identified. Furthermore, no indisputable intact deposits were observed at the site. Given the extensive disturbance to Site W-4255 caused by continued plowing, as well as the sparse nature of the deposit, it has been determined that the testing program has exhausted the research potential of the site. It is unlikely that any significantly different information would be gathered from further investigation. Therefore, no significant impacts to cultural resource would result from disturbance of this site.

### *Site SDI-8651*

The cultural evidence gathered indicates that this site represents a resource processing site. No features, ecofacts or diagnostic artifacts were identified at the site. An uncommon lithic artifact (quartz crystal) was recovered from the surface. The circumstances leading to its deposition and its intended function are unknown. The subsurface prominence of the two artifacts recovered from shovel tests likely resulted from the continued agricultural activities in the area. Since no raw material was observed on site, either in bedrock or cobble form, the light material appears to have been procured elsewhere and brought to this small knoll area to be utilized. Additional testing is unlikely to reveal additional information due primarily to the nature of the site and extensive disturbance observed. Therefore, no significant impacts to cultural resource would result from disturbance of this site.

### *Site SDI-12,277*

The surface expression of the site identified during the testing program was limited to a single lithic artifact in a heavily plowed context. No features, ecofacts, or diagnostic artifacts were identified. Ecofacts are a natural item (animal bone, shells, plant remains) associated

with an archaeological site that typically has been altered in some manner by human activity, such as cooking, crushing, cutting (sawing). The effect was not a deliberate modification. Diagnostic artifact is a term used to designate those artifacts that can provide a general time period of manufacture or a specific manufacturing technique, based on their attributes. Fire-affected rocks were determined to have likely resulted from brush fires. The surface collection and subsurface testing have exhausted the research potential for this site. Therefore, no significant impacts to cultural resource would result from disturbance of this site.

### *Site SDI-12,278*

The small assemblage recovered from the site and the lack of culturally diagnostic artifacts necessarily limits interpretations regarding site function and cultural affiliations. The site exhibits a moderate level of disturbance and no subsurface deposits were found. Therefore, the level of information already obtained from the site likely represents the extent of the research potential. Therefore, no significant impacts to cultural resource would result from disturbance of this site.

### *Site SDI-12,285*

Testing of the site determined that it consists of a sparse, primarily surficial scatter of marine shell that has been disturbed by plowing. No features or diagnostic artifacts were identified which limits interpretations regarding cultural affiliations. Site SDI-12,285 exhibits a high level of disturbance and does not appear to retain any intact deposits. The material collected from the site during the testing program likely represents the extent of the research potential of the site. It is unlikely that any substantially different information would be gathered from further investigation at this site. Therefore, no significant impacts to cultural resource would result from disturbance of this site.

### *Site SDI-7217B*

Site SDI-7217B is identified as a prehistoric lithic scatter that occurs within the offsite grading area of the SPA Area. The southernmost proposed drainage facility, which is located within the Salt Creek open space would affect a portion of SDI-7217B. No subsurface deposits have been identified in the area affected by the detention basin, and the portion of the site that would be affected by the SPA Plan offsite grading has been determined to be not

significant. Therefore, no significant impacts to cultural resource would result from disturbance of this site.

## 5.4.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 for the adopted GDP concluded that the impacts related to the disturbance of prehistoric and historic resources would be significant and that no feasible mitigation was available at a program-level of analysis. The same conclusions would be applicable to the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

Based on the information derived from the testing program required at the SPA level, six sites that occur within the Village 11 Project Area, were determined to be not significant. This determination was based on several factors. First, all six sites within the Village 11 Project Area have been heavily disturbed by past agricultural activities, or have not yielded artifacts that would be useful in addressing scientifically consequential and reasonable research questions. Lastly, the sites do not contain any substantial research potential, since previous mitigation efforts appear to have provided all information available from the sites.

## 5.4.6 MITIGATION MEASURES

### GDP AMENDMENTS

The Program EIR 90-01 required mitigation consisting of further analysis and significance testing at subsequent stages of planning. These measures are listed in Appendix B of this EIR. No additional mitigation measures are required for the proposed GDP Amendments beyond those identified in the Program EIR 90-01.

### VILLAGE 11 SPA/TM

Since no significant impacts have been identified, no additional mitigation measures are required.

## 5.4.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 for the adopted GDP concluded that the impacts to cultural resources would be significant and unmitigable at a program-level of analysis. The proposed GDP Amendments would not change this conclusion.

### VILLAGE 11 SPA/TM

The six identified cultural sites existing within the Village 11 Project Area were found not to be significant.

# 5.5 GEOLOGY AND SOILS

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to geology and soils for the entire Otay Ranch project area. Section 4.9.6 of the Program EIR 90-01 included an analysis of geology and soils impacts related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of geology and soils issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to geology and soils that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

A *Preliminary Geologic/Geotechnical Feasibility Study* prepared specifically for the Village 11 Project Area dated February 2000, by Geocon Inc., Geotechnical Consultants was used in the analysis for Village 11,and is included as Appendix E of this EIR.

## 5.5.1 EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 identified and described existing geologic and soils conditions for the entire Otay Ranch project area, including the proposed Amendment Area. That discussion and analysis is hereby incorporated by reference. No development has occurred within the Amendment Area, and no changes in geologic or soils conditions have taken place since the adoption of the Otay Ranch GDP. The following is a summary of general geologic conditions within the Amendment Area, as identified in the Program EIR 90-01.

#### *Geologic Setting*

The Amendment Area is located on the coastal plain of San Diego county and northwestern Baja California, in the western region of the Peninsular Ranches geomorphic province. The Peninsular Ranges geomorphic province extends from approximately Riverside, California

south to central Baja California, Mexico. The stratigraphy of the coastal plan consists of a thick sequence of relatively undisturbed Upper Cretaceous, Eocene, Oligocene, Miocene, Pliocene and Pleistocene age sedimentary rocks underlain by Peninsular Range batholith and pre-batholith rocks.

The Amendment Area is on the Santa Ana structural block, which extends southeast from the central Traverse Ranges to beyond the United States-Mexico border region. The Santa Monica-Raymond fault generally forms the northern boundary of the Santa Ana block. In southern California, the Newport-Inglewood-Rose Canyon and Whittier-Elsinore fault systems form the southwest and northeast boundaries of the Santa Ana block, respectively.

The bedrock units underlying the Amendment Area consist of the upper gritstone and lower sandstone-mudstone members of the Oligocene Otay Formation. Surficial units include alluvium and both uncompacted artificial fill and compacted artificial fill. Bedding of the Otay Formation is typically undulatory and ranges in orientation from horizontal to southwest-southeast dipping at approximately five to 13 degrees, consistent with the regional bedding orientation.

## *Seismicity*

The Amendment Area is located east of the La Nacion fault zone. This fault zone consists of several north-south trending faults with branching, minor faults. This fault zone has been shown to be potentially active. The closest reported occurrence of the La Nacion Fault zone to Village 11 is approximately 8,000 feet from the western boundary. No evidence was found of the fault zone presence any closer to Village 11 during the geotechnical investigation for Villages One, Two and Five (Cotton-Beland 1996).

The most significant credible seismic event with respect to the Amendment Area would be a 6.9 magnitude event on the Rose Canyon fault zone (*Table 5.5-1*).

Ground rupture due to active faulting is not evident in the vicinity of Amendment Area. The distance and elevation separation between the Amendment Area and the coast preclude the possibility of seismically- induced waves (tsunamis) or seiches.

TABLE 5.5-1 SUMMARY OF FAULT PARAMETERS

| Fault | Approx. Distance (km) | Source Type (A,B)[1] | Maximum Magnitude (Mw) | Slip Rate (mm/yr) |
|---|---|---|---|---|
| Rose Canyon | 19.2 | B | 6.9 | 1.5 |
| Coronado Banks | 32.9 | B | 7.4 | 3.0 |
| Elsinore-Julian | 63.7 | A | 7.1 | 5.0 |
| Elsinore-Coyote Mountain | 67.2 | B | 6.8 | 4.0 |
| Earthquake Valley | 69.1 | B | 6.5 | 2.0 |
| Newport-Inglewood (Offshore) | 74.1 | B | 6.9 | 1.5 |
| Elsinore-Temecula | 84.0 | B | 6.8 | 5.0 |
| San Jacinto-Coyote Creek | 95.6 | B | 6.8 | 4.0 |
| San Jacinto-Borrego | 95.8 | B | 6.6 | 4.0 |

Source: Neblett & Associates, Inc. (Table 1, Appendix B)

[1] Type A faults generally have slip rates greater than 5 mm/yr and have well-constrained paleoseismic data. Type B faults lack paleoseismic data necessary to constrain recurrence intervals of large events.

## VILLAGE 11 SPA/TM

The existing conditions discussion for geology and seismicity for the proposed GDP Amendments also applies to the Village 11 Project Area. Additional information taken from the Preliminary Geologic/Geotechnical Feasibility Study prepared specifically for the Village 11 Project Area is also provided. *Figure 5.5-1, Geologic Map,* depicts the geologic formations found within the Village 11 Project Area.

### *Soils*

#### Artificial fill-compacted (afc)

Compacted (appearing) artificial fill associated with the EastLake Greens subdivision, Hunte Parkway and future Olympic Parkway extend into the main drainages in the northeastern portion of the Village 11 Project Area. This artificial fill was not excavated or tested but appears compacted and probably locally derived, consisting of surficial soils and Otay Formation materials similar to that observed on-site.

**LEGEND**

| | |
|---|---|
| **Qudf** | Undocumented Fill |
| **Qlsf** | Surficial Landslide Debris |
| **Qc** | Colluvium |
| **Qal** | Alluvium |
| **Qt** | Terrace Deposit (Dotted Where Buried) |
| **Tos** | Otay Formation (Sandstone-Mudstone Member) (Dotted Where Buried) |
| **Tog** | Otay Formation (Gritstone Member) (Dotted Where Buried) |
| ..... | Approx. Location of Geologic Contact (Dotted Where Buried, Queried Where Uncertain) |
| **B-10** | Approx. Location of Exploratory Boring |
| **NB-7** | Approx. Location of Previous Exploratory Boring (Neblett & Associates, Inc.) |
| **T-68 (7)** | Approx. Location of Exploratory Trench ((7) Depth of Surficial Soil) |
| **NT-28** | Approx. Location of Exploratory Trench (Neblett & Associates, Inc.) |

SOURCE: GEOCON, February 2000

N

Not to Scale

**Geologic Map**

*Figure 5.5-1*

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

### Artificial fill-Uncompacted (afu)

Un-compacted artificial fill consists of spoil material associated with the excavation and grading for the aqueduct/utilities easement and associated access road in the central portion of the Village 11 Project Area. This material consists of loose, silty sand with cobble to boulder size blocks of sandstone derived from the Otay Formation.

### Soil (no map symbol)

Soil covers the majority of the Village 11 Project Area and is typically dark brown and consists of fine- to coarse grained clayey sand and silty sand. The soil is moderately dense, slightly moist to moist, rooted and porous. The soil is typically 2.0 to 3.0 feet thick throughout the Village 11 Project Area.

### Alluvium (Qal)

Alluvium exists within drainage courses throughout the Village 11 Project Area. The alluvium is typically dark brown and consists of fine- to coarse-grained clayey sand and silty sand. The alluvium is moderately dense, slightly moist to moist, rooted, and porous. The alluvium is up to approximately 12 feet thick in the deeper drainage areas.

### Otay Formation, Sandstone-Mudstone Member (Oo Ss-md)

The sandstone-mudstone member of the Otay Formation is found throughout the Village 11 Project Area and is generally medium grayish-brown and consists of inter-bedded fine-grained silty and clayey sandstone, clayey siltstones, and silty claystones. Reddish-brown and pinkish-gray bentonite beds occur locally. The bentonite beds range from a few inches to approximately 2.5 feet in thickness. The sandstone-mudstone member is generally moderately dense (hard). Locally, the unit is well cemented and very hard. Lithologic units within the sandstone-mudstone member are typically massive or finely laminated and have moderately sharp to gradational contacts.

### Otay Formation, Gritstone Member (Oo gr)

The gritstone member of the Otay Formation is found throughout the Village 11 Project Area and is generally medium reddish-brown and pale orangish-brown and consists of inter-bedded, fine- to coarse-grained, silty and clayey sandstones and gravelly coarse-grained sandstones. The matrix in the coarser grained lithologies is typically fine-grained clayey and

silty sand, and locally bentonitic. The gritstone is well cemented and very hard. Lithologic units within the gritstone member are typically massive or weakly bedded and have moderately sharp to gradational contacts.

### Landslides

Areas prone to landslide do not appear to be present on, or adjacent, to the Village 11 Project Area. The potential for earthquake-induced, large-scale, landsliding within the Village 11 Project Area is low based on the following conditions:

- Lithologic units commonly grade laterally into each other and show moderately sharp to gradational contacts, thus generally eliminating the potential for large-scale bedding discontinuities and possible block glide failures.
- Shear planes were not observed in the borings.
- Bedding in the Otay Formation is typically undulatory and does not dip steeply (less than 13 degrees, generally).
- The Village 11 Project Area exhibits gentle topographic relief and is located in an area in which known landslides are rare and there is a low risk of sliding due to gentle topographic relief.

### Groundwater and Surface Water

Only minor surface and subsurface water was found to occur within the limits of the Village 11 Project Area. The only surface water noted was flowing in the northeastern most drainage. The source of this water appeared to be landscape drainage from the EastLake Greens subdivision to the north. Subsurface water occurred at 10.0 to 14.0 feet below the surface within the alluvium at the eastern boundary of the Village 11 Project Area. Minor seepage was observed in the Otay Formation at approximately 48.0 to 50.0 feet below the surface along the northern border in the northeast corner.

### Liquefaction

Based on field mapping and the subsurface exploration, the soil and alluvium at the Village 11 Project Area are generally unsaturated, cohesive, clayey sands. These materials are

generally considered as having a very low potential for liquefaction. The soil and alluvium are relatively shallow deposits.

### *Expansive Soils*

The bentonite beds found within the Village 11 Project Area, which range from a few inches to approximately 2.5 feet in thickness exhibit very high expansion potential.

## 5.5.2 THRESHOLDS OF SIGNIFICANCE

According to the Environmental Checklist contained in Appendix G of the CEQA Guidelines, impacts to geology and soils would be significant if the proposed action would result in any of the following:

- Exposes people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Map issued by the State Geologist for the area or based on other substantial evidence of a known fault,
  - Strong seismic ground shaking,
  - Seismic-related ground failure, including liquefaction, or
  - Landslides;
- Results in substantial soil erosion or the loss of topsoil;
- Is located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on, or off-site, landslide, lateral spreading, subsidence, liquefaction or collapse;
- Is located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating a substantial risk to life or property.

## 5.5.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed

GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR 90-01 found significant geologic and soils impacts including slope instability, development proposed on metavolcanic bedrock, and seismic hazards. Soils impacts include expansive soils, erosion, and liquefaction. Mitigation measures that would reduce the impacts to a level below significance were required in the Program EIR 90-01.

### SPHERE OF INFLUENCE UPDATE EIR

The Sphere of Influence EIR concluded that, because the mitigation measures required by the Program EIR 90-01 mitigated any impacts to geology and soils for parcels within Otay Ranch, the inclusion of the Otay Ranch parcels into the City's sphere would not itself result in any physical change in the environment.

### OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the geology and soils assumptions or conclusions of the Otay Ranch Program EIR 90-01.

### AMENDED SPA ONE EIR (GDP AMENDMENTS, AMENDED SPA ONE)

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the geological resource assumptions or conclusions of the Otay Ranch GDP Findings of Fact.

## 5.5.4 IMPACTS

### GDP AMENDMENTS

The Program EIR 90-01 evaluated potential impacts related to geological and soils conditions, and seismicity for the entire Otay Ranch project area, including the proposed Amendment Area and concluded that significant, but mitigable impacts related to slope instability,

development on metavolcanic bedrock, seismic hazards, expansive soils, erosion and liquefaction would result. That analysis is hereby incorporated by reference. The mitigation measures in the Program EIR 90-01 required that SPA Plan level studies to be conducted prior to actual development. The proposed GDP Amendments are proposed within the same development area as the adopted GDP, and would affect the same geologic and soil resources as evaluated in Program EIR 90-01. No new or additional significant impacts would result from the proposed GDP Amendments. The proposed GDP Amendments would, therefore result in significant impacts related to slope instability, development proposed on metavolcanic bedrock, seismic hazards, development on expansive soils, erosion, and liquefaction.

## VILLAGE 11 SPA/TM

### *Faulting and Seismicity*

No active faults or potentially active faults are known to exist in the Village 11 Project Area. Reconnaissance mapping, subsurface evidence obtained from the exploratory excavations and a review of published geologic maps and reports indicate that the Village 11 Project Area is not located on any known *active* fault trace. However, an unnamed fault trace was mapped approximately 1.5 miles northwest of the Village 11 Project Area in a field guidebook published by the San Diego Association of Geologists dated 1976. It is highly likely that this fault represents an inactive branch or splinter. The Rose Canyon and the La Nacion Fault are the nearest active and potentially active faults, being located approximately 11 miles and 3 miles, respectively, from the Village 11 Project Area.

The results of the study indicates that the Rose Canyon fault zone in the dominant source of potential ground shaking at the Village 11 Project Area. The Rose Canyon Fault is estimated to have the capability to generate a maximum credible earthquake event of magnitude 6.9 and a maximum probable seismic event of 5.7. The "maximum credible earthquake" is defined as the maximum earthquake that appears capable of occurring under the presently known tectonic framework, while the "maximum probable earthquake" is the maximum earthquake that is considered likely to occur during a 100-year time interval (California Division of Mines and Geology, Note Number 43).

Potential seismic-related impacts would be reduced to less than significant level by adherence to standard required seismic safety design measures. No significant impacts would be anticipated.

### *Soils*

Liquefaction is limited to granular soil deposits located below the groundwater table which are in a relatively loose, unconsolidated condition that are subjected to ground accelerations from a large earthquake. Liquefaction is typified by a complete loss of shear strength within the deposit due to a very rapid buildup in pore water pressures where the soil behaves as a liquid rather than a solid. Impacts associated with liquefaction include surface rupture, sand boils and settlement.

Since loose surficial deposits will be removed and recompacted, and subdrains will be installed within canyon drainages to prevent buildup of groundwater, and due to the very dense nature of the geologic units on-site, the potential for liquification of the subsoils occurring within the Village 11 Project Area is considered to be very low and is, therefore, not considered to be a significant impact to construction on the site.

Potentially significant impacts could result from construction on unstable, expansive soils. Additionally, construction in areas of unstable slopes could result in potentially significant impacts related to property loss and human safety.

## 5.5.5 LEVELS OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The proposed GDP Amendments would result in the same significant impacts identified in the Program EIR 90-01 related to slope instability, development proposed on metavolcanic bedrock, seismic hazards, development on expansive soils, erosion, and liquefaction. The Program EIR 90-01 identified these impacts as significant and mitigable.

### VILLAGE 11 SPA/TM

Construction of the proposed Village 11 SPA Plan/TM on unstable or expansive soils would have a direct, long-term potentially significant impact. Failure of slopes manufactured under the proposed Village 11 Project Area would be a direct, long-term potentially significant impact.

## 5.5.6 MITIGATION MEASURES

### GDP AMENDMENTS

Program EIR 90-01 included mitigation measures for all identified significant impacts to geologic and soils conditions. Those measures are listed in Appendix B. No additional mitigation measures are required beyond those identified in the Program EIR 90-01.

### VILLAGE 11 SPA/TM

**5.5-1** During construction, soils containing alluvium and un-compacted artificial fill shall be removed completely and replaced with engineered compacted fill. Anticipated removal depths are on the order of 4.0 to 11.0 feet. Evidence that such soils have been adequately engineered shall be provided to the City Engineer for approval prior to approval of grading plans.

**5.5-2** Grading plans shall indicate that all unstable slopes shall be buttressed during rough grading.

**5.5-3** Grading plans shall indicate that cut pads on highly expansive soils shall be over-excavated to provide a minimum depth of five feet of engineered fill. Bentonite beds should not be left within eight feet of finished grade. If bentonite beds are encountered in cut areas and shallow fill areas, a minimum over-excavation of eight feet and replacement with engineered fill shall be provided. Pot holes shall be excavated eight feet as grading approaches final grade to ascertain existence of bentonite beds and need for over-excavation. In addition to over-excavation of the highly expansive soils, measures such as the use of post-tensioned slabs, additional concrete reinforcement, pre-saturation of sub-grade soils, and/or other methods to limit the introduction of stormwater and irrigation into the subgrade soils may be taken.

**5.5-4** Drainage devices such as berms, concrete swales, splash walls, catchment fills, and debris walls shall be shown, as appropriate on final grading and/or improvement plans to protect structures and infrastructure at the toe of slopes and on stabilization fills. Existing outlets in the existing fill slopes at the northern portion of the Village 11 Project Area boundary will need to be connected and tied into the proposed storm drain system or out-letted to the natural drainage area to the east of the Village 11 Project Area. Subdrains shall be installed in canyon areas after removals have been

performed and generally should extend throughout the canyon areas. The building pads shall be properly finish-graded after the buildings and other improvements are in place so that drainage water is directed away from foundations, pavements, concrete slabs, and slope tops to controlled drainage devices.

**5.5-5** Grading plans shall indicate that, for slopes steeper than 3:1, to the maximum extent practical: (a) disturbed/loosened surficial soils shall be either removed or properly recompacted, (b) irrigation systems shall be periodically inspected and maintained to eliminate leaks and excessive irrigation, and (c) surface drains on and adjacent to slopes shall be periodically maintained to preclude ponding or erosion.

## 5.5.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 found that, with the implementation of required mitigation measures, impacts would be less than significant. The proposed GDP Amendments require those same measures and would not result in any new or additional impacts to earth resources beyond those identified in the Program EIR 90-01. Therefore, impacts associated with the proposed GDP Amendments would also be mitigated to a less than significant level.

### VILLAGE 11 SPA/TM

Impacts related to construction on unstable or expansive soils, as well as slope failure would be reduced to less than significant levels with implementation of the required mitigation measures.

# 5.6 PALEONTOLOGICAL RESOURCES

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to paleontological resources for the entire Otay Ranch project area. Section 4.9.7 of the Program EIR 90-01 included an analysis of impacts to paleontological resources related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of paleontological issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to paleontological resources that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review. The Otay Ranch RMP 2 compiles the resource related studies plans and programs required to be performed for paleontological resources (June 1996).

## 5.6.1 EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 provides a description of the geologic formations occurring on the entire Otay Ranch project and assesses their relative resource bearing potential. That description and analysis is hereby incorporated by reference. The analysis contained in the Program EIR 90-01 was based on field surveys of selected portions of the Otay Ranch and literature review.

The following is a general discussion and summary of information contained in the Program EIR 90-01 for paleontological resources found within the Amendment Area.

Paleontological resources are fossil remains of prehistoric plant and animal life. Fossils are found in the geological deposits where they were originally buried. Fossils provide a portion of the scientific record for the geologic and biota history of the region in which they are found. Fossils may be exposed in drainage cuts or where the bedrock surfaces. No fossil

remains have been identified within the Amendment Area. More often, paleontological resources are not seen until earthwork begins. Scientists predict the locations of fossils based on the geology of the area and known productivity of the rock formations. The Program EIR 90-01 identifies the entire Amendment Area to be underlain by the Otay formation, which has a high paleontological resource bearing potential.

The Amendment Area is within the same development boundaries of the adopted GDP. No additional areas outside of those contemplated to be developed under the adopted GDP are proposed for development with the proposed GDP Amendments. Additionally, there have been no changes in environmental conditions that would affect paleontological resources since the adoption of the GDP and certification on the Program EIR 90-01 that would warrant additional discussion of the existing potential for such resources.

## *Recent Paleontological Monitoring of Otay Ranch Development*

The following discussion provides a summary of paleontological resources found in other areas of the Otay Ranch that have been graded, and have had paleotological monitoring occur during grading. The purpose of this discussion is to characterize the type of resources that may be encountered within the Amendment Area.

## *Village One, Phase 1B*

Grading for this project produced significant fossil remains from both the San Diego Formation and the Otay Formation. The grading actually cut through the ancient sea cliff of the San Diego Formation and exposed both beach and non-marine deposits of this formation. The non-marine deposits produced the first all-terrestrial mammal assemblage known from the San Diego Formation. This assemblage includes rabbit (represented by a skull and numerous isolated teeth), cat (represented by a jaw and isolated limb bones), and horse (represented by a partial skull and isolated limb bones). Grading in the Otay Formation resulted in the discovery and recovery of bones and teeth of terrestrial mammals including oreodonts (extinct hoofed mammals) and canids (dogs).

## *Village One, Phase 2B*

Grading of this project area produced several fossil marine invertebrates and vertebrates from the San Diego Formation. This rock unit is approximately 2 to 4 million years old and was deposited in a large marine embayment during the Pliocene Epoch. Particularly significant

fossil specimens recovered on this project include partial skulls and jaws of a new small species of baleen whale, a partial skeleton (without a skull) of a medium-sized species of baleen whale, ribs and vertebrae of a giant dugong sirenian (*Hydrodamalis cuestae*), and a nearly complete skeleton of puma-sized cat (*Felis rexroadensis*). Other significant discoveries on this project include a moderately diverse assemblage of invertebrate fossils consisting of shells and/or molds and casts of marine clams, scallops, snails, crabs, and sand dollars, and estuarine clams, oysters and snails.

### Village Five

Grading of this project area produced fossil remains from the Otay Formation. This rock unit is approximately 28 to 30 millions years old and was deposited in a broad coastal river floodplain. Noteworthy fossils recovered on this project include a limb bone of a short-faced dog (*Mesocyon*) and egg-cases of an unidentified insect.

### McMillin-Otay Ranch, SPA One, Phase 2

Grading of this project produced fossil remains from the Otay Formation. Noteworthy fossils recovered on this project include a partial skeleton of a small fox-like dog (*Hesperocyon*), partial skulls and jaws of a small oreodont (*Sespia*), and jaws of a small chevrotain (hoofed mammal).

## VILLAGE 11 SPA/TM

As discussed in *Section 5.5 Geology and Soils*, the Village 11 Project Area is underlain by gritstone and sandstone-mudstone members of the Otay Formation. The surface unit is composed of alluvium and compacted, and un-compacted, artificial fill. The following discussion describes the potential for fossil remains in each of these formations and soils.

### Quaternary Alluvium (Qal)

Fossil discoveries in Quaternary alluvium are rare. No fossils from the Quaternary alluvial deposits have been observed in the Otay Ranch area. It is unlikely that fossils would be discovered within this formation.

### *Otay Formation (To)*

The Otay formation is primarily a non-marine sedimentary rock of late Oligocene age. Typical exposures consist of gray-white, medium-grained, tuffaceous sandstone. Other exposures include claystones, bentonites, gritstones and cobble to boulder fanglomerates. A variety of well-preserved terrestrial vertebrates remains were salvaged from the Otay Formation within the Eastlake community development. These fossil resources have provided significant scientific information about the climatic, geomorphologic and biologic conditions at the time of deposition. The upper sandstone portion is considered to possess a high paleontological resource sensitivity.

### *Artificial Fill*

It is unlikely that fossils would be found in these disturbed soils of unknown origin since human placement of the materials would have occurred in a relatively recent time frame.

## 5.6.2 THRESHOLDS OF SIGNIFICANCE

According to the Environmental Checklist contained in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on paleontological resources if it would directly or indirectly destroy a unique paleontological resource, site or unique geologic feature.

## 5.6.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR found significant impacts to paleontological resources related to disturbance of potentially significant paleontological resources, based on the existence of resource-bearing geologic units. Mitigation measures identified in the Program EIR 90-01 including SPA-level recovery programs were determined to reduce impacts to less than significant levels.

## SPHERE OF INFLUENCE UPDATE EIR

Even though the Sphere of Influence EIR reiterated that the Program EIR found impacts to paleontological resources to be unmitigable, it concluded that inclusion of the Otay Ranch parcels into the City's sphere would not in itself result in physical changes to the environment and that the impact is less than significant.

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the paleontological resource assumptions or conclusions of the Otay Ranch GDP Program EIR 90-01.

## AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the paleontological resource assumptions or conclusions of the Otay Ranch GDP Program EIR 90-01.

# 5.6.4 IMPACTS

## GDP AMENDMENTS

The Program EIR 90-01 found that, due to the potential for significant paleontological resources to occur, significant impacts to those resources could result from grading and excavation for development. The proposed GDP Amendments are entirely within the development boundaries identified for the adopted GDP and potentially contain paleontological resources. Impacts to significant paleontological resources resulting from implementation of the proposed GDP Amendments would still be considered significant.

## VILLAGE 11 SPA/TM

Although the grading for the Village 11 SPA Plan/TM would not impact any known paleontological resources, fossils may be buried in the underlying formations. The occurrence of fossils within the covered bedrock cannot be evaluated prior to exposure. Development of the Village 11 Project Area would remove large areas underlain with Quaternary alluvium.

Although this formation has not yielded any known paleontological resources within the immediate vicinity, there is potential for producing fossils because of the formation's sedimentary origin. The proposed grading for the project would potentially result in direct, long-term significant impacts because the alluvium has an unknown sensitivity.

The proposed mass grading of the Otay Formation sandstone would move material with high sensitivity for paleontological resources. Destruction of the paleontological resources for this formation would be a direct, long-term potentially significant impact.

No impacts are anticipated from grading within the artificial fill areas of the Village 11 Project Area. These disturbed soils would have been placed within the project area in recent time, and would not have the potential to contain paleontological resources.

## 5.6.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 for the adopted GDP concluded that the impacts related to the potential disturbance of paleontological resources would be significant but mitigable. The same conclusions would be applicable to the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The proposed grading for the project would potentially result in direct, long-term significant impacts because the alluvium has an unknown sensitivity. Destruction of the paleontological resources from the Otay Formation would be a direct, long-term potentially significant impact to resources with high sensitivity.

## 5.6.6 MITIGATION MEASURES

### GDP AMENDMENTS

The Program EIR 90-01 included measures to be implemented at the SPA-level to mitigate potentially significant impacts to less than significant levels. No additional mitigation measures are required beyond those identified in the Program EIR 90-01 for the adopted GDP, as listed in Appendix B.

## VILLAGE 11 SPA/TM

In compliance with the Program EIR 90-01 mitigation measures, the following mitigation measures are required for the development in the Village 11 Project Area:

**5.6-1** Prior to issuance of grading permits, the applicant shall confirm to the City of Chula Vista that a qualified paleontologist (as defined in the Otay Ranch GDP/SRP) has been retained to carry out an appropriate mitigation program. The paleontologist shall attend pre-grade meetings to consult with grading and excavation contractors. (A qualified paleontologist is defined as an individual with a M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques.)

**5.6-2** During grading operations, a paleontological monitor shall be on-site at all times during the original cutting of previously undisturbed sediments of highly sensitive geologic formations (Otay formation) to inspect cuts for contained fossils. The paleontological monitor shall work under the direction of a qualified paleontologist. The monitor shall periodically (every several weeks) inspect original cuts in deposits with an unknown resource sensitivity (Quaternary alluvium). (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.)

In the event that fossils are discovered in unknown sensitive formations, it may be necessary to increase the per-day field monitoring time. Conversely, if fossils are not discovered, the monitoring effort may be reduced.

**~~5.6-3~~** When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them. In instances where recovery requires an extended salvage time, the paleontologist (or paleontological monitor) shall be allowed to direct, divert, or halt grading to allow recovery of fossil remains. Where deemed appropriate by the paleontologist (or paleontological monitor), a screen-washing operation for small fossil remains shall be set up.

**~~5.6-4~~** Prepared fossils along with copies of all pertinent field notes, photos and maps shall be deposited in a scientific institution with paleontological collections such as the San Diego Natural History Museum. A final summary report shall be completed which outlines the results of the mitigation program. This report shall include discussion of

the methods used, stratigraphy exposed, fossils collected and significance of recovered fossils.

## 5.6.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 for the adopted GDP concluded that the impacts to paleontological resources would be reduced to a less than significant level after mitigation. The proposed GDP Amendments would not change this conclusion.

### VILLAGE 11 SPA/TM

Identification and recovery of presently unknown, but important, fossil remains, as proposed by mitigation measures 5.6-1 and 5.6-2, would assure that significant paleontological resources are recovered for their scientific and intrinsic value and would provide for the long-term preservation of the fossils in conjunction with the scientific documentation of the context in which they were initially deposited. This level of resource and information preservation reduces the impact to a less than significant level.

# 5.7 AGRICULTURAL RESOURCES

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to agricultural resources for the entire Otay Ranch project area. Section 4.9.8 of the Program EIR 90-01 included an analysis of agricultural impacts related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of agricultural issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to agricultural resources that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

## 5.7.1 EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 provides a summary of historic and existing agricultural activities that were in place at the time that the Program EIR 90-01 was certified. In addition, the Program EIR 90-01 discusses soil suitability and California Department of Conservation farmland designation status of lands within the Otay Ranch. The following is a summary of the discussion of existing conditions contained in the Program EIR 90-01 that is relevant to the Amendment Area.

Historically, the Amendment Area was used for dry farming, as well as cattle and sheep grazing. Crop production was limited to hay and grains due to limited water availability. Once there was increased availability of water, there was the cultivation of tomatoes and introduction of truck farming.

The Agricultural Management Map for Otay River, Jamul-Proctor Valley, and San Ysidro Mountains (Baldwin Vista 1989) delineates different levels of existing allowed agricultural use within the entire Otay Ranch. According to this map, cultivation and cattle grazing

activities are allowed on the majority of Amendment Area. The property is actively tilled for cattle grazing. No grain production activities are presently occurring within the Amendment Area.

Land utilized for agricultural activity in the region has decreased, mostly from the conversion of farmland into urban uses as a result of increases in property values. The high cost of importing water has also resulted in many agricultural activities becoming prohibitive.

No additional areas outside of those contemplated to be developed under the adopted GDP are proposed for development with the proposed GDP Amendments. Additionally, there have been no substantial changes in agricultural activities on the portion of the Otay Ranch affected by the proposed GDP Amendments since the adoption of the GDP and certification on the Program EIR 90-01.

## APPLICABLE AGRICULTURAL POLICIES

The City of Chula Vista has policies that address agricultural lands. These policies are discussed in detail in *Section 3.7, Agricultural Resources* of Program EIR 90-01 and are briefly summarized below:

### *City of Chula Vista*

Goal 2, Objective 5 of the Open Space and Conservation Element in the City of Chula Vista's General Plan strives to "maintain agriculture as a viable land use." The Open Space and Conservation Element acknowledges that rising land values, water costs, and taxes, as well as land use conflicts and urbanization pressures present difficulties to maintaining existing agricultural activities.

### *Otay Ranch General Development Plan/Subregional Plan*

The Otay Ranch GDP establishes goals, objectives, policies and implementation measures relative to the protection of agricultural resources. While the goals, policies and objectives are general in nature and apply to all portions of the overall planned community of Otay Ranch, implementation measures are provided to define specific actions to be taken in the overall context of the GDP. The Program EIR 90-01 requires that an Agricultural Plan be prepared by the project applicant prior to approval of any SPA plans.

## VILLAGE 11 SPA/TM

The following discussion provides more specific detail of the soil conditions for agriculture within the Village 11 Project Area. The United States Department of Agriculture, Soil Conservation Service (SCS), has published a soil survey for the San Diego area which is used by the County of San Diego in determining the location and significance of Prime Farmland in the County. The SCS Important Farmlands Inventory designates three separate agricultural categories on the basis of soil properties: Prime Farmland, Statewide Important Farmland, and Local Important Farmland. These categories are based on the soils' physical and chemical characteristics as described further below. These classifications w ere adapted for California agriculture by the California Department of Food and Agriculture (CDFA) in 1981. The California Department of Conservation (CDC) established the Farm Mapping Monitoring Program (FMMP) in 1982 to carry on the Important Farmland mapping efforts initiated in 1975 by the SCS.

The Important Farmland Map Categories are defined below:

**Prime Farmland.** Land with the best combination of physical and chemical features able to sustain long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date by the SCS.

**Farmland of Statewide Importance.** Land similar to Prime Farmland but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date by the SCS.

**Farmland of Local Importance.** Land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee. The County of San Diego defines Farmland of Local Importance as land that meets all the characteristics of Prime and Statewide, with the exception of irrigation. Approximately 455 acres within the Village 11 Project Area is considered "Farmland of Local Importance."

## 5.7.2 THRESHOLDS OF SIGNIFICANCE

According to CEQA Guidelines, Appendix G, impacts to agricultural resources would be significant if the proposed project:

- Converts Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the FMMP of the California Resources Agency to non-agricultural use;
- Conflicts with existing zoning for agricultural use, or a Williamson Act contract;
- Involves other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use.

## 5.7.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR 90-01 found that the following significant impacts to agricultural resources would result from implementation of the GDP:

- Conversion of prime farmlands and elimination of existing crop production. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.
- Inconsistency with existing City of Chula Vista plans and policies and State policies regarding the loss of agricultural resources and prime agricultural soil. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

- Land use interface impacts associated with agricultural activities and urban uses. Mitigation measures that would reduce the impacts to a level below significance were required.

### SPHERE OF INFLUENCE UPDATE EIR

The agricultural impacts associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence were determined to be not significant.

### OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the agricultural resource assumptions or conclusions of the Program EIR 90-01. The SPA One EIR found that the annexation of land into the Otay Ranch GDP would result in a potentially significant impact on agricultural resources, and that no feasible mitigation measures would reduce the impact to less than significant. Mitigation measures described in the Program EIR 90-01 were made conditions of approval, but were not found to reduce impacts to less than significant levels.

### AMENDED SPA ONE EIR

The Amended SPA One EIR found that expanding the footprint of the SPA One area and allowing irrigation in the Preserve did not pose any new significant impacts not previously identified.

## 5.7.4 IMPACTS

### GDP AMENDMENTS

The Program EIR 90-01 identified impacts to agriculture resulting from conversion of agricultural land to urban uses, inconsistency with policies regarding the loss of agriculture and land use adjacency. The proposed GDP Amendments are entirely within the development boundaries identified for the adopted GDP. Impacts to agricultural resources and activities resulting from the proposed GDP Amendments would be the same as those identified for the adopted GDP and would still remain significant with the proposed GDP Amendments. Impacts related to the conversion of agricultural land and inconsistency with agricultural policies would be unmitigable.

## VILLAGE 11 SPA/TM

According to the FMMP July 1988 San Diego County Important Farmlands Map, the Village 11 Project Area is considered "Farmland of Local Importance." Development of the Village 11 Project Area would result in the direct conversion of approximately 455 acres of "Farmland of Local Importance" to urban uses. This conversion to urban uses will result in an incremental loss to countywide agricultural land. The conversion of "Farmland of Local Importance" would preclude the potential production of coastal-dependent crops.

Continued conversion of agricultural lands to urban development in the maritime and coastal area climates will eventually result in the loss of ability to produce and market off-season fresh tomatoes, vegetables, and field-grown flora crops, most of which have state and national importance. The loss of agricultural land within the County and land suitable for the potential production of coastal-dependent crops would result in a significant impact due to the incremental and irreversible loss or impairment of a limited agricultural resource. The phased development of the proposed project will incrementally convert ongoing agriculture uses to urban development.

Grading and development of the Village 11 Project Area would eventually eliminate all agricultural and grazing activity on-site. However, the proposed University site (alternatively Villages Nine and 10) borders the Village 11 Project Area to the south and will not be developed concurrently. Agricultural activities which occur within the University site may continue to exist during development of the Village 11 Project Area and possibly after its completion. Short-term, significant impacts to land uses within Village 11 resulting from continued agricultural activity on the adjacent proposed University site or alternatively, Villages Nine and 10, could include noise, odor, insects, rodents, and chemicals. An Agriculture Plan has been prepared that includes buffering requirements intended to reduce potentially significant impacts at the land use interface between residential uses and agricultural uses to below a level of significance.

# 5.7.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 concluded that the following impacts to agricultural resources would occur:

- Conversion of prime farmlands and elimination of existing crop production. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

- Inconsistency with existing City of Chula Vista plans and policies and State policies regarding the loss of agricultural resources and prime agricultural soil. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

- Land use interface impacts associated with agricultural activities and urban uses. Mitigation measures that would reduce the impacts to a level below significance were required.

The same conclusions would be applicable to the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The contribution of the development of the Village 11 Project Area to significant unmitigable impacts related to the loss of agricultural land is considered significant. Noise, odor, insects, rodents, and chemicals associated with agricultural operations would create indirect, short-term potentially significant impacts between the agricultural uses and the urban uses through buildout as urban uses replace agricultural uses.

## 5.7.6 MITIGATION MEASURES

### GDP AMENDMENTS

The Program EIR 90-01 includes mitigation measures to reduce impacts to agricultural resources, including preparation of an Agricultural Plan. Program EIR 90-01 mitigation measures are listed in Appendix B, and would still apply with the proposed GDP Amendments. No additional mitigation measures would be required.

### VILLAGE 11 SPA/TM

**5.7-1** As development proceeds within the Village 11 Project Area, the following measures as listed in the SPA Agricultural Plan shall be implemented:

(1) A 200-foot distance buffer shall be maintained between developed property and ongoing agriculture operations,

(2) In those areas where pesticides are to be applied, vegetation shall be utilized to shield adjacent urban development (within 400 feet) from agriculture activities,

(3) The applicant shall notify adjacent property owners of potential pesticide application through advertisements in newspapers of general circulation, and

(4) Fencing shall be placed, where The Director of Planning and Building deems necessary for appropriate separation of agricultural and urban land uses.

## 5.7.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 concluded that the impacts related to the loss of agricultural land and inconsistency with City of Chula Vista plans and policies and State policies regarding the loss of agricultural land would remain significant after mitigation. The proposed GDP Amendments would not change this conclusion.

### VILLAGE 11 SPA/TM

An Agricultural Plan has been prepared to reduce short-term significant impacts between urban uses and agricultural operations to a level less than significant. Roadways and adjacent designed landscape areas would provide adequate buffers between development and any ongoing adjacent agriculture. The Agricultural Plan provides separation between urban uses and adjacent agricultural operations, and includes a requirement for notification of adjacent property owners of pesticide use and other potentially harmful activities, plus physical barriers if warranted.

The cumulative loss of important agricultural lands is considered a significant impact, and no mitigation measures are available to reduce this impact below the level of significance (also see *Section 6.0, Cumulative Impacts*).

# 5.8 HOUSING AND POPULATION

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to growth inducement that would be caused by the implementation of the Otay Ranch GDP. Section 7 of the Program EIR 90-01 included an analysis of growth inducing impacts which is hereby incorporated by reference. The following discussion uses the analysis of housing and population growth from the Program EIR 90-01 as a basis for the discussion and analysis of housing and population impacts related to the proposed GDP Amendments and development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

## 5.8.1 EXISTING CONDITIONS

The following discussion of housing and population applies to both the proposed GDP Amendments and the Village 11 SPA/TM. The total number of housing units in the City of Chula Vista, as of January 1, 2000, was 59,333 (SANDAG). Between 1990 and 2000, approximately 9,480 dwelling units were added to the housing stock. The number of units increased 19.0 percent over the ten-year period. A total of 23,483 dwelling units was approved under the adopted GDP/SRP, as analyzed in Program EIR 90-01.

The City of Chula Vista General Plan Housing Element contains the following objectives and policies regarding affordable housing:

- Achievement of a balanced residential community through the integration of low and moderate-income housing throughout the City and the adequate dispersal of such housing to preclude establishment of specific low income enclaves.
- The Affordable Housing Policy shall require a minimum of 10 percent of each housing development to be affordable to low and moderate-income households, with at least one-half of those units (5 percent of project total units) being designated for low-income households.

The Housing Element also includes Affordable Housing Program Implementation Guidelines which offer flexibility in meeting affordable housing goals by considering alternatives to actual developer built-in production. These alternatives include land set asides, off-site projects, and in-lieu contributions.

Additionally, the Otay Ranch GDP established a 5-year objective that requires each village to proportionately assist the City of Chula Vista to meet or exceed the Otay Ranch's share of the 5-year regional allocation as provided by Chula Vista's Housing Element. The GDP requires that prior to or concurrent with the approval of a SPA Plan, an Affordable Housing Plan and Agreement shall be approved by the City which addresses the type and location of housing to be provided pursuant to the regional share allocation.

The total population of the City of Chula Vista, as of January 1, 2000, was 173,556 (SANDAG). Chula Vista grew by approximately 28.4percent or 31,735 persons from 1990 to 2000. This represents an annual average increase of 2.8 percent. Buildout of the entire Otay Ranch GDP will result in an estimated population of 70,684. The population estimate is based on the 1999 population generation factor derived from the California Department of Finance of 3.01 persons per dwelling unit. SANDAG has projected that from 1995 to 2020, the City of Chula Vista's population will increase by 82 percent. It is also projected that civilian employment will increase by 90 percent within the same time frame. It is projected that the increase in housing units from 1995 to 2020 will increase by 79 percent.

## GDP AMENDMENTS

No housing exists on the site within the Amendment Area, either currently or at the time of certification of the Program EIR 90-01. Development has occurred in portions of the Otay Ranch outside of the Amendment Area, and in other surrounding areas of Chula Vista. A discussion of current housing and population within the City is contained in the previous discussion.

## VILLAGE 11 SPA/TM

No housing exists within the Village 11 SPA Area.

## 5.8.2 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines, Appendix G, impacts to housing and population would be significant if the proposed project:

- Induces substantial population growth in an area, either directly or indirectly;
- Displaces substantial numbers of existing housing, necessitating the construction or replacement housing elsewhere; or
- Displaces substantial numbers of people, necessitating the construction or replacement housing elsewhere.

## 5.8.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR did not specifically address Housing and Population, but the Findings of Fact for the Program EIR did address growth inducement. The Program EIR identified a significant effect due to the substantial increase in population that would be generated by development of Otay Ranch. Mitigation that would reduce this significant effect included provision of adequate facilities, as proposed in the GDP, to accommodate the growth provided

### SPHERE OF INFLUENCE UPDATE EIR

The Sphere of Influence EIR acknowledged that the Otay Ranch GDP would have a significant, unavoidable growth-inducing impact. However, the inclusion of the Otay Ranch parcels into the City's sphere would not in itself result in physical changes.

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation appear to alter any of the housing and population assumptions or conclusions of the Otay Ranch GDP Program EIR.

## AMENDED SPA ONE EIR

The SPA One Amendments EIR does not contain any discussion of housing and population, either regarding the GDP amendments or the Amended SPA One Plan.

# 5.8.4 IMPACTS

## GDP AMENDMENTS

The Program EIR 90-01 found that the implementation of the Otay Ranch GDP would result in significant growth inducing impacts at the program level of analysis. The proposed GDP Amendments would result in an increase of 236 residential dwelling units over the adopted GDP (based on the selection of the Village Eight high school site). Growth inducing impacts would be significant with the proposed GDP Amendments.

*Table 3-1* includes a summary of the proposed changes in the total number of dwelling units, and the corresponding changes in projected population for the Otay Ranch associated with the proposed GDP Amendments. The proposed increase of 236 dwelling units is estimated to generate an increase in population of 710 residents., This corresponds to a 1% increase in housing and population over the adopted GDP. The additional residential development proposed by the proposed GDP Amendments would take place within the same development area as identified in the adopted GDP. The proposed GDP Amendments would be consistent with the adopted GDP in terms of the type and character of housing to be provided. The proposed GDP Amendments do not propose any changes to housing policies of the GDP or the General Plan.

## VILLAGE 11 SPA/TM

### *Housing*

The Village 11 SPA and Conceptual TM would provide housing and increase the housing stock of the City of Chula Vista by 2,304 (996 single family and 1,308 multi-family) dwelling units. The proposed project is part of the adopted plans of the City of Chula Vista. The project represents a future housing supply for the region. Phasing will occur in response to market conditions, which will help to fulfill the demand for housing.

SANDAG has adopted a series of plans and policies to address regional growth within the county of San Diego. One of the projects adopted by SANDAG is the Regional Transportation Plan, which includes the Growth Management Plan. The Growth Management Plan incorporates population, housing and transportation forecasts. Particularly, the forecasts have identified specific projections for the City of Chula Vista. The Growth Management Plan stresses maintaining a prosperous economy, while providing an adequate and equitable transportation system, preserving open space and habitat, increasing the rate of home ownership, and reforming the state-local tax system to assist and sustain all of the above. SANDAG encourages compliance with a transit design which promotes pedestrian activity and interconnected public transportation through buses, metro, and trolleys.

Village 11 SPA would implement the SANDAG policies by implementing a bus system, providing a pedestrian-oriented development, preserving open space adjacent to the project, offering new homes and increasing the tax base for the City of Chula Vista. Therefore, implementation of Village 11 would not result in any significant impacts to housing supply or housing policies.

### *Affordable Housing*

The Village 11 development would provide 5 percent low-income and 5 percent moderate-income housing (*Table 5.8-1*). The proposed 10 percent affordable housing is consistent with the objectives of the City's Affordable Housing Plan and the Program EIR 90-01requirement that each village proportionately assist in meeting regional allocation. No significant impact to the affordable housing programs would result from implementation of the Village 11 SPA Plan.

**TABLE 5.8-1 ESTIMATED AFFORDABLE HOUSING OBLIGATION**

| | Low Income Units | Moderate Income Units | Total Affordable Units |
|---|---|---|---|
| Village 11 SPA Plan | 115 | 115 | 230 |

Source: Village 11 SPA Plan

### *Population*

The population increase anticipated as a result of the proposed project, is estimated by multiplying the number of project proposed dwelling units to be constructed by 3.01 persons per dwelling unit. This rate is based on 1999 published by the Department of Finance. *Table 5.8-2* includes the Program EIR forecasts from the GDP for comparison. SANDAG has forecasted that the City of Chula Vista will have an increase of over 41,000 people to accommodate by 2005.

**TABLE 5.8-2 POPULATION AND HOUSING MIX**

| Land Use | Dwelling Units | Generation Factor | Estimated Population |
|---|---|---|---|
| Village 11 | | | |
| Single-Family | 996 | 3.01/DU | 2,998 |
| Multi-Family | 1,308 | 3.01/DU | 3,937 |
| **Total** | **2,304** | | **6,935** |

Source: Village 11 SPA Plan

Buildout of Village 11 would result in a population increase of approximately 6,935 persons. The buildout of Village 11 would provide housing for approximately 9.8% of the population generated by the Otay Ranch. This is consistent with the growth anticipated by the GDP, and does not represent a significant impact to population.

## 5.8.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01 regard to significant growth inducing impacts. The Program EIR 90-01 stated that, while the

Otay Ranch would foster new growth, the Otay Ranch would provide adequate infrastructure and facilities to accommodate the growth. Significant impacts related to population growth would be mitigated by the provision of infrastructure and public services provided by the GDP, both as it is currently adopted and with the proposed GDP Amendments. The proposed GDP Amendments would not result in significant impacts to housing, since the type and character of housing to be provided with the proposed GDP Amendments would be consistent with the adopted GDP and with the policies related to housing in the City's General Plan.

### VILLAGE 11 SPA/TM

The anticipated growth in population and dwelling units within Village 11 is consistent with the growth forecasted by SANDAG and the Growth Management Program adopted by the City, and would not present significant population or housing impacts.

## 5.8.6 MITIGATION MEASURES

### GDP AMENDMENTS

Growth inducing impacts identified at the program-level of analysis would be mitigated by the provision of adequate public services and facilities as provided for in the adopted GDP and with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

No impacts to population and housing are anticipated with the proposed Village 11 SPA Plan; therefore, no mitigation measures are required.

## 5.8.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

The proposed amendments to the GDP would not result in any significant unmitigated growth inducing impacts.

## VILLAGE 11 SPA/TM

There are no impacts to housing and population that would result from implementation of the Village 11 SPA Plan.

# 5.9 WATER RESOURCES AND WATER QUALITY

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to water resources and water quality for the entire Otay Ranch project area. Section 4.9.10 of the Program EIR 90-01 included an analysis of impacts to water resources and water quality related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of water resources and water quality issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to water resources and water quality that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

A more detailed drainage study analysis specifically addressing development proposed for Village 11 was conducted by Hunsaker & Associates on January 25, 2001, and is included as part of this SEIR (Appendix F). Groundwater conditions were evaluated in the *Preliminary Geologic/Geotechnical Feasibility* prepared by Geocon, Inc. (Appendix E).

## 5.9.1 EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 provides a summary of surface and groundwater characteristics, including water quality, for the Otay Ranch project area, including the Amendment Area. The following is a summary of the discussion of existing conditions relevant to the Amendment Area contained in the Program EIR 90-01.

Otay Ranch is located in the southwestern portion of the San Diego Planning Basin. The San Diego Basin has been divided into 11 hydrographic units and 54 hydrographic subunits [Regional Water Quality Control Board (RWQCB) 1975]. The hydrographic divisions are based primarily on surface water drainage basins. The Amendment Area is located within

the Otay Hydrographic Unit. Throughout the region, the landscape is predominantly rolling hills with arroyos draining to canyons that flow west and south away from the Otay Reservoir basin.

### Groundwater Hydrogeology

Groundwater occurs in all sedimentary units and the various surficial deposits present on Otay Ranch. Regional groundwater flow is from east to west. The direction of local groundwater flow is controlled by the orientation of the drainage basins and topography. The quantity and quality of groundwater varies according to the permeability of the geologic formation and location's topography. Groundwater recharge occurs in upland areas with springs most common in the mountainous regions. Permeability rates within the Otay Valley Parcel are greatest in the Otay River Valley.

### Groundwater Quality

The Amendment Area is within the Otay Subunit which contains groundwater rated generally poor to very poor due to high levels of total dissolved solids (TDS). The groundwater contains sodium-calcium chloride levels, as reported in the Program EIR 90-01, that exceed established standards. Groundwater samples from both Salt Creek on the east and Otay River Valley to the south exceeded Federal Secondary Drinking Water Standards as reported in the Program EIR 90-01. This situation is caused, at least partially, by imported water, with its higher salt concentrations, used in irrigation and from water containing dissolved salts entrapped at the time the sedimentary rocks were deposited.

### Surface Water and Hydrological Setting

The major drainage offsite courses that the Amendment Area drains to are Salt Creek, Poggi Canyon and Otay River. Salt Creek eventually discharges into the Otay River approximately, ½ mile downstream.

### Surface Water Quality

Surface water in the Otay Subunit downstream from Otay Lakes is ephemeral (temporary). The RWQCB rates the surface water in the subunit as having beneficial uses for agriculture,

non-contact recreational sport, wildlife, rare and endangered species and potential beneficial uses for industry as reported in the Program EIR 90-01.

No development or substantial disturbance has occurred within the Amendment Area since the certification of the Program EIR 90-01. No additional areas outside of those contemplated to be developed under the adopted plan are proposed for development with the GDP Amendments. The following is a general discussion of surface water, groundwater and water quality issues in the Amendment Area.

### VILLAGE 11 SPA/TM

The drainage from the Village 11 Project Area flows easterly and southeasterly into the Salt Creek which then returns flow to the regional drainage pattern from east to west, via Otay River. Unnamed tributaries from the Village 11 Project Area drain easterly and southeasterly into Salt Creek. A small portion of the Village 11 Project Area (36 acres in the northwest corner) currently drains to Poggi Canyon to the west. The only surface water found within the Village 11 Project Area during field observations in late September 1999 was flowing in the northeastern-most drainage. The source of this water appeared to be landscape drainage from the EastLake Greens development to the north. Salt Creek occurs just offsite, along the eastern border of the Village 11 Project Area.

Only minor subsurface water exists within the limits of the Village 11 Project Area. Groundwater occurs at 3.0 to 3.5 feet below the surface within the alluvium at the eastern most point of the property. Minor seepage was observed in the Otay Formation at approximately 48 to 50 feet below the surface along the northern boundary.

## 5.9.2 THRESHOLDS OF SIGNIFICANCE

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on water resources and water quality if it:

- Violates any water quality standards or waste discharge requirements as set by the San Diego RWQCB;

- Substantially depletes groundwater or interferes substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- Substantially alters the existing drainage pattern of the project area or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on, or off-site;
- Substantially alters the existing drainage pattern of the project area or area, including through the alteration of the course of a stream or river, or substantially increases the rate or amount of surface runoff in a manner which would result in flooding on, or off-site;
- Creates or contributes runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provides substantial additional sources of polluted runoff;
- Alters an existing 100-year floodplain or flood regime;
- Places housing within a 100-year flood hazard area with structures which would impede or redirect flood flows;
- Potentially degrades the water quality associated with a sensitive wetland or hydrologic resource; or
- Otherwise substantially degrades water quality.

## 5.9.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

## OTAY RANCH PROGRAM EIR

The Program EIR 90-01 found the following significant impacts to water resources and water quality:

- Increases in surface water runoff due to an increase in impervious surfaces could increase potential for downstream flooding, cause potential safety impacts, and increase erosion and siltation. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

- Development may encroach into the 100-year floodplain. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

## SPHERE OF INFLUENCE UPDATE EIR

The water supply impacts associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence were determined to be not significant because the demand within Otay Ranch would be indistinguishable under the City's land use designations. The incorporation of some non-Otay Ranch parcels into the City's sphere also was deemed less than significant by the Sphere of Influence EIR because the corresponding increase in demand of 209,156 gallons per day (gpd) was considered in the Program EIR 90-01, and the Program EIR 90-01 still concluded that impacts would be less than significant.

The water quality impacts associated with the inclusion of Otay Ranch into the City's sphere were determined not to be significant because the extension of the City's sphere would not, by itself, result in physical change.

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the water quality and resource assumptions or conclusions of the Otay Ranch Program EIR 90-01.

## AMENDED SPA ONE EIR

The Amended SPA One EIR found that the implementation of the Amended SPA One Plan would have significant impacts on downstream drainage facilities, urban runoff, and pollutants associated with urban runoff, but that mitigation measures as described in the Amended SPA One EIR would reduce the impacts to a level of insignificance.

# 5.9.4 IMPACTS

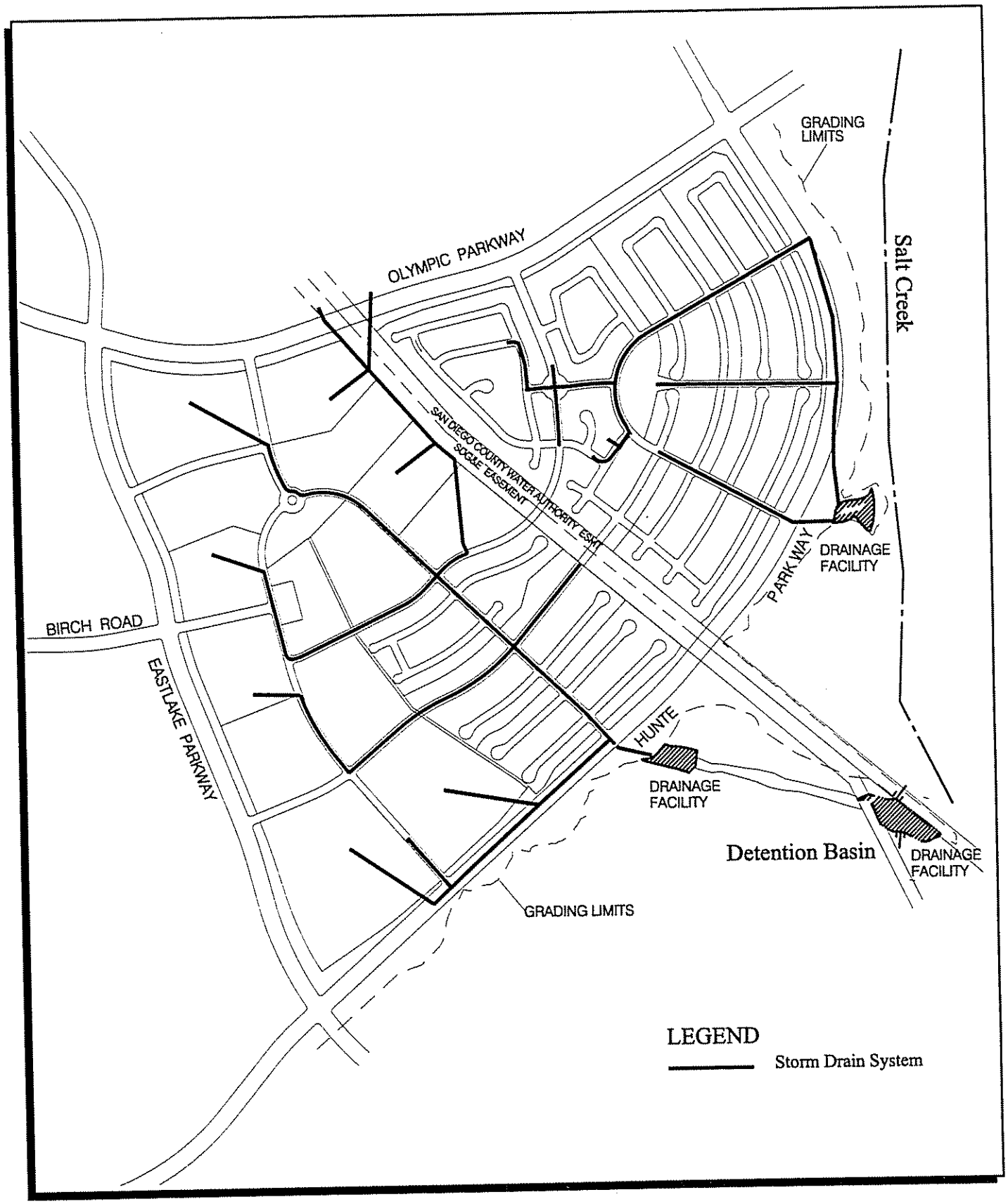
## GDP AMENDMENTS

The Program EIR 90-01 identified impacts to surface water runoff, groundwater recharge and water quality issues for the adopted GDP plan. The proposed GDP Amendments are entirely within the development boundaries identified for the adopted GDP, and development proposed under the GDP Amendments would have similar characteristics related to surface permeability and water quality (i.e., similar density of development and type of use proposed). The proposed GDP Amendments would not result in substantial changes in the direction of flow of surface water, compared to the adopted GDP Plan. The GDP Amendments would, therefore, result in the same significant impacts related to increased surface water runoff, decreased groundwater recharge, erosion and siltation.

## VILLAGE 11 SPA/TM

### *Hydrology*

The Village 11 SPA/TM proposes a drainage system that has been conceptually designed to adequately convey all storm water generated from the Village 11 Project Area (*Figure 5.9-1, Drainage Plan*). Potentially significant impacts related to flooding and water quality could result without implementation of the proposed storm drain system, as approved in its final design by the City Engineer.




SOURCE: Brookfield Shea Otay, LLC (May 2001)

**Drainage Plan**

*Figure 5.9-1*

**Not to Scale**

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

## Groundwater Hydrogeology

Implementation of the proposed Village 11 SPA/TM would increase the amount of impermeable surfaces which would result in increased runoff and reduced on-site water percolation. Because locally the groundwater is perched, flowing laterally rather than into a regional groundwater table, the effects from decreased percolation would be limited to the Village 11 Project Area. The Otay River Valley, as the principal aquifer within Otay Valley Parcel, would ultimately receive the additional surface runoff to replenish groundwater to the basin. Therefore, while groundwater quantities may be altered locally within the Village 11 Project Area, no significant impacts to regional groundwater quantities are anticipated.

## Groundwater Quality

The increased exposure to urban pollutants could affect the quality of water that recharges groundwater. The Village 11 Project Area has not been identified as a source of significant groundwater recharge. However, the Village 11 SPA/TM includes water quality Best Management Practices (BMPs), including three detention basins as described in the following subsections that are designed to capture the first 0.6 inch of runoff from the Village 11 Project Area, consistent with the proposed revisions to water quality regulations of the Regional Water Quality Control Board. Control of surface water quality would also have a beneficial effect on groundwater quality. With the proposed measures to avoid water quality impacts proposed as a part of the Village 11 SPA/TM, no significant impacts to groundwater quality are anticipated.

## Surface Water Quality

Surface runoff from the Village 11 Project Area would be collected in drainage inlets and catch basins, then conveyed through storm drain facilities to the discharge points primarily into Salt Creek. Small portions of the site would drain to Poggi Canyon and Otay River as well (10 and 14 acres, respectively). Implementation of the Village 11 SPA/TM would result in an increase in the amount of runoff during storms due to the overall increase in impervious surface areas. In accordance with City policy, existing and planned development upstream of the Village 11 Project Area that is within the Salt Creek watershed is required to detain storm water flows in order to avoid increasing the peak storm flow volume in Salt Creek. The detention of upstream flows within the Salt Creek drainage would have the effect of

delaying the peak flow in Salt Creek, at the point where the Village 11 storm water flows would be added. Development of the Village 11 Project Area would introduce impervious surfaces to the site which would accelerate flows coming from the site. The developed storm water flows from Village 11 would reach Salt Creek faster than the existing flows, and in advance of the detained upstream flows. This would have the effect of decreasing the peak volume of runoff at the downstream end of Salt Creek, as shown in *Table 5.9-1*.

**TABLE 5.9-1**
**100-YEAR VILLAGE 11 DISCHARGE QUANTITIES**

| Existing Condition Runoff at Downstream End, Salt Creek | Post -Development Runoff at Downstream End, Salt Creek |
|---|---|
| 2,301 cfs | 2,165 cfs |

Source:Hunsaker and Associates

Therefore, implementation of the Village 11 SPA/TM would not have a significant impact on peak storm water flows within Salt Creek.

Development of the site would have the effect of reducing erosion and sedimentation potential through the increase in impervious surfaces. However, erosion potential would exist at the locations where runoff is ultimately released from the Village 11 Project Area. To avoid potentially significant impacts related to erosion, the Village 11 SPA/TM has been designed to include energy dissipation structures ,including a series of weir structures upstream of the southerly detention basin, to reduce runoff flow velocities to pre-development conditions (no net increase in storm flow velocities coming from the Village 11 Project Area) in accordance with City policy. Therefore, impacts related to erosion would be reduced to a less than significant level, through project design.

Implementation of the Village 11 SPA/TM would result in the potential for urban pollutants accumulating in the surface runoff. Particularly the potential impact would occur from paved areas and chemicals from landscaping areas. Accumulated hydrocarbons such as fuels, solvents, oils and grease would enter runoff flowing over the paved areas. Excess pesticides and herbicides generated from landscaped areas would also be picked up in runoff. The greatest concentration of urban-derived pollutants would be expected to occur during the

early stages of a rainfall event ("first flush"), or as a result of dry-weather flows associated with irrigation and other sources of non-natural flow. The first flush and dry-weather flows contain high concentrations of contaminants that are washed from areas such as roadways, roofs, curbs and parking lots. The proposed drainage facilities for Village 11 will be required to include interception and detention of all possible dry weather flows. Post-construction BMPs are included in the design of the Village 11 SPA/TM. The BMP facilities include, a basin located at the storm drain system outfall just south of the Hunte Parkway – Quiet Creek Circle South intersection, will collect and treat the first flush runoff volume (defined by San Diego Regional Water Quality Control Board Order No. 2000-01 as the runoff generated from the first 0.6 inches of rainfall) from site area east of the SDGE easement. Another basin, located near the divergence of the SDG&E power utility easement and the San Diego County Water Authority easement and roughly 2,000 feet downstream of the proposed 84-inch RCP under Hunte Parkway, will collect and treat the first flush runoff volume from site area west of the easement.

With implementation of the proposed facilities, as demonstrated through the engineering design-level mitigation measures to collect and treat all first flush and dry-weather flows from the Village 11 Project Area, no significant impacts to surface water quality would result from either first flush or dry-weather runoff sources.

In addition to the aforementioned water quality basins, the RWQCB regulations require that a Storm Water Pollution Prevention Plan (SWPPP) be prepared for development within the Village 11 Project Area. The SWPPP would address water quality impacts associated with construction and operation of the project. To mitigate impacts from "first flush" runoff and flow, all BMPs identified in the SWPPP would be implemented. The SWPPP shall be consistent with the requirements of the Clean Water Act and the BMPs of the RWQCB. BMPs identified in the SWPPP shall include, but are not limited to the following:

a) Existing vegetation shall be retained where possible. To the extent feasible, grading activities shall be limited to the immediate area required for construction.

b) Temporary erosion control measures shall be employed for disturbed areas.

c) No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months.

d) Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures.

e) Storm drains will be equipped with silt and oil traps to remove oils, debris and other pollutants. Storm drain inlets shall be labeled "No Dumping-Drains to Ocean."

f) The parking lots shall be designed to allow storm water runoff to be directed to vegetative filter strips and/or oil-water separators to control sediment, oil, and other contaminants.

g) Permanent energy dissipaters shall be included for drainage outlets.

h) The project area drainage basins shall be designed to provide effective water quality control measures. Design and operational features of the drainage basins will include design features to provide maximum detention time for settling of fine particles; maximize the distance between basin inlets and outlets to reduce velocities; and establish maintenance schedules for periodic removal of sedimentation, excessive vegetation and debris.

In addition to the permanent drainage facilities, temporary desiltation basins to control construction related water quality impacts would be constructed within the Village 11 Project Area with each grading phase to control sedimentation during construction. The interim desiltation basins would be designed to prevent discharge of sediment from the project grading operations into the natural drainage channel and would incorporate water quality control features to comply with Regional Water Quality Control Board 401 Certification requirements. The exact size, location and component elements of these interim basins would be identified during preparation of and be shown on the grading plans, subject to the approval of the City of Chula Vista. The proposed temporary basins would reduce short-term impacts related to erosion and sedimentation to less than significant levels.

With implementation of the proposed facilities, as demonstrated through the engineering design-level mitigation measures to collect and treat all first flush and dry-weather flows from the Village 11 Project Area, in addition to the required BMPs, no significant impacts to surface water quality would result from either first flush or dry-weather runoff sources.

## 5.9.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 concluded that the following impacts to water resources would be significant but mitigable:

- Increases in surface water runoff due to an increase in impervious surfaces could increase potential for downstream flooding, cause potential safety impacts, and increase erosion and siltation. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

- Development may encroach into the 100-year floodplain. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

The GDP Amendments would not substantially change the character or intensity of impacts to water resources, and would result in the same significant impacts related to increased surface water runoff, decreased groundwater recharge, erosion and siltation as the adopted GDP.

### VILLAGE 11 SPA/TM

Potentially significant impacts related to flooding and water quality could result without implementation of the proposed storm drain system, as approved in its final design by the City Engineer.

## 5.9.6 MITIGATION MEASURES

### GDP AMENDMENTS

The Program EIR 90-01 requires that additional study of water-related issues be conducted at the SPA-level of analysis, and requires specific standards to be met. These mitigation measures are included in Appendix B and would still apply under the amended GDP. No additional mitigation measures would be required.

### VILLAGE 11 SPA/TM

**5.9-1** Prior to approval of Tentative Map, the final design for the Village 11 drainage facilities shall be approved by the City Engineer. The design shall demonstrate the following:

a) First flush/dry-weather detention facilities shall be demonstrated to contain the dry-weather flows from all sources, as well as first flush runoff from the Village 11 Project Area;

b) Each inlet, outlet, interceptor, concentration or confluence point, shall be demonstrated to handle the peak runoff for post-development conditions;

c) The proposed system shall be integrated with existing and proposed downstream drainage facilities to effectively control flows within the entire system;

d) Main lines and detention/desilting facilities shall be designed pursuant to Section 3-202-1 of the Chula Vista Subdivision Manual; and

**5.9-2** The applicant shall provide interim drainage facilities, within Village 11, downstream of each development phase, in compliance with RWQCB regulations. These interim facilities shall be shown on grading plans, to be submitted and approved by the City Engineer, and shall be required until such time that the permanent drainage facilities can be completed per the Village 11 Master Drainage Study (Hunsaker 2001).

**5.9-3** Upon completion of all drainage facilities, the applicant shall obtain approval from the Federal Emergency Management Agency (FEMA) for the update of the Salt Creek floodplain boundary. This mitigation measure shall be satisfied by a letter of map revision from FEMA.

**5.9-4** The applicant shall submit a SWPPP including assignment of maintenance responsibilities for review and approval by the City Engineer prior to issuance of grading permits. The SWPPP shall be consistent with the requirements of the Clean Water Act and the BMPs of the RWQCB. BMPs identified in the SWPPP shall include, but shall not be limited to the following:

a) Existing vegetation shall be retained where possible. To the extent feasible, grading activities will be limited to the immediate area required for construction.

b) Temporary erosion control measures will be employed for disturbed areas.

c) No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months.

d) Sediment will be retained on-site by a system of sediment basins, traps, or other appropriate measures.

e) Storm drains will be equipped with silt and oil traps to remove oils, debris and other pollutants. Storm drain inlets shall be labeled "No Dumping-Drains to Ocean."

f) The parking lots shall be designed to allow storm water runoff to be directed to vegetative filter strips and/or oil-water separators to control sediment, oil, and other contaminants.

g) Permanent energy dissipaters will be included for drainage outlets.

h) The project area drainage basins will be designed to provide effective water quality control measures. Design and operational features of the drainage basins will include design features to provide maximum detention time for settling of fine particles; maximize the distance between basin inlets and

outlets to reduce velocities; and establish maintenance schedules for periodic removal of sedimentation, excessive vegetation and debris.

## 5.9.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 concluded that the impacts to water resources are significant but would be mitigated at the SPA-level of analysis, with the completion of the required studies and implementation of the required mitigation measures. The GDP Amendments would not change any of the conclusions of the Program EIR 90-01 related to water resources and water quality. With implementation of mitigation measures to be developed at the SPA-level of analysis, impacts would be mitigated to less than significant levels.

### VILLAGE 11 SPA/TM

The proposed mitigation measures and project design would mitigate all significant impacts related to water resources to a less than significant level.

# 5.10 TRANSPORTATON, CIRCULATION, AND ACCESS

The following section provides a summary of two studies prepared by Linscott, Law & Greenspan (LLG) including the *Traffic Impact Analysis Village 11, dated July 5, 2001* and the *Traffic Impact Analysis General Plan/Otay Ranch General Development Plan Amendments, dated July 5, 2001*. The Village 11 traffic analysis evaluates the potential impacts generated resulting from short-term, long-term and buildout of the proposed Village 11 SPA Plan/TM. The GDP traffic study analyzes the potential effects of the proposed GDP Amendments as compared to the adopted GDP analyzed in the Otay Ranch Program EIR 90-01. Both traffic reports assume the University land use as the primary land use for Villages Nine and Ten. Please refer to Appendix G for more detailed technical information. Appendices to the Village 11 traffic impact analysis study are on file with the City of Chula Vista City Clerk.

## 5.10.1 EXISTING CONDITIONS

### GDP AMENDMENTS

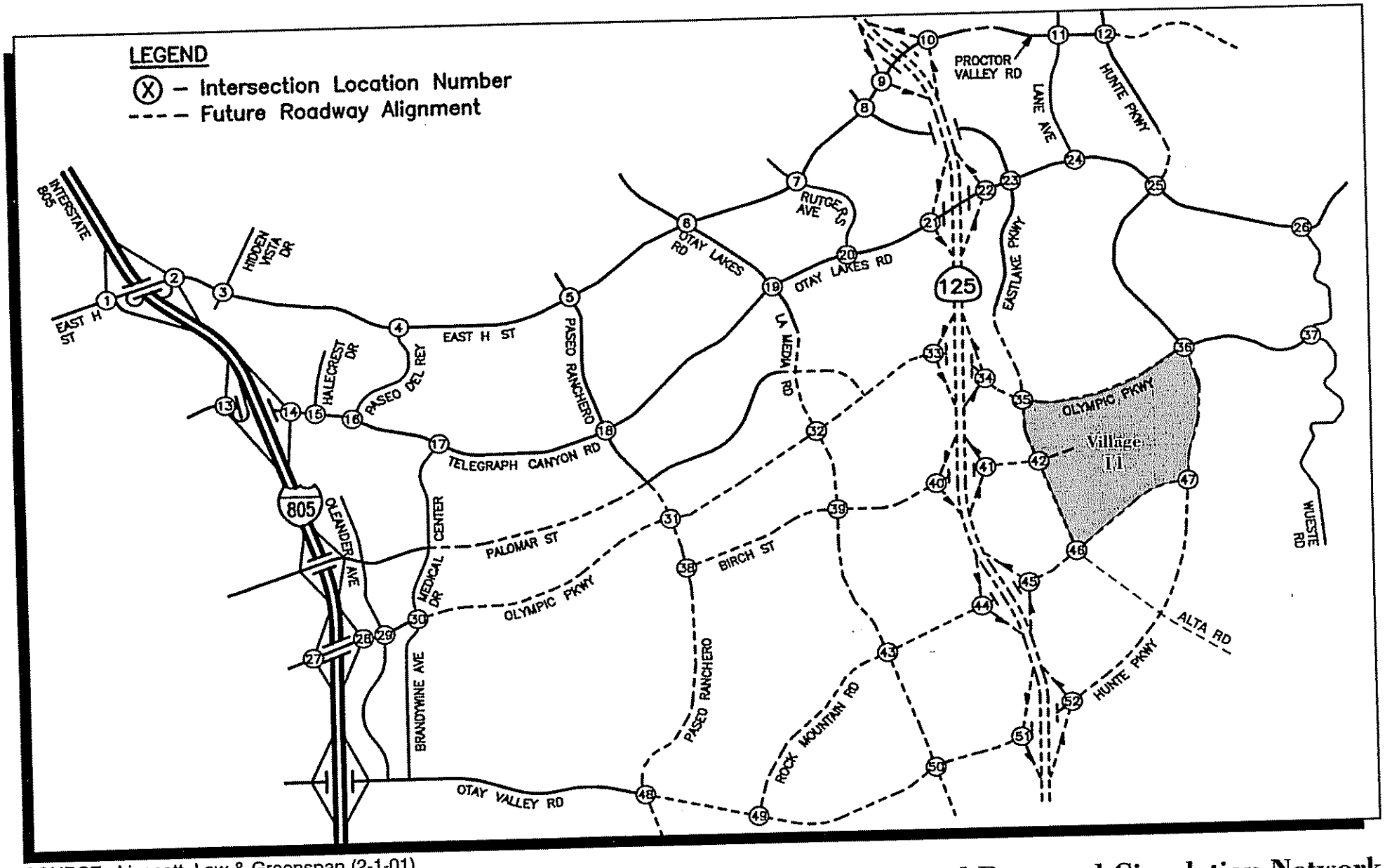
Currently, the Amendment Area consists of undeveloped land. Regional access to the Amendment Area is provided by I-805, which is located approximately four miles to the west of the Amendment Area. *Figure 3-4* shows the adopted Circulation Element Roads in the Amendment Area.

### VILLAGE 11 SPA/TM

The Village 11 Project Area is located in the eastern portion of the Amendment Area. Similarly, regional access to the Amendment Area is provided by I-805. *Figure 5.10-1, Existing and Proposed Circulation Network*, provides a map of the existing and proposed roadways and intersections studied for the proposed Village 11 SPA/TM (study area). The study area roughly encompasses the Otay Ranch and adjacent areas between I-805 to the west, Lower Otay Reservoir to the east, H Street to the north and Otay Valley Road to the south.

#### *Primary Roadways*

The existing street system in the study area is described below, and *Table 5.10-1, Existing Street Segment Operations*, identifies the existing street segment operations in the Amendment Area.




SOURCE: Linscott, Law & Greenspan (2-1-01)

**Existing and Proposed Circulation Network**
**Village 11 Study Area**

*Figure 5.10-1*

Not To Scale

## TABLE 5.10-1
## EXISTING STREET SEGMENT OPERATIONS

| STREET SEGMENT | ROADWAY CLASS | CAPACITY AT LOS C | EXISTING | |
|---|---|---|---|---|
| | | | Vol | LOS |
| **"H" STREET** | | | | |
| I-805 to Hidden Vista Dr. | 6-Lane Prime Arterial | 50,000 | **64,270** | **F** |
| Hidden Vista Dr. to Paseo Del Rey | 6-Lane Prime Arterial | 50,000 | 4,410 | C |
| Paseo Ranchero to Otay Lakes Rd. | 6-Lane Prime Arterial | 50,000 | 26,520 | A |
| Otay Lakes Rd. to Rutgers Rd. | 4-Lane Major Street | 30,000 | 18,540 | A |
| Rutgers Rd. to Mount Miguel Rd. | 4-Lane Major Street | 30,000 | 14,770 | A |
| **PROCTOR VALLEY ROAD** | | | | |
| Mount Miguel Rd. to Lane Ave. | 6-Lane Major Street | 50,000 | 4,080 | A |
| **TELEGRAPH CANYON ROAD** | | | | |
| I-805 to Halecrest Dr. | 6-Lane Major Arterial | 40,000 | **50,800** | **F** |
| Halecrest Dr. to Paseo Del Rey | 6-Lane Prime Arterial | 50,000 | 47,200 | C |
| Paseo Del Rey to Medical Center Dr. | 6-Lane Prime Arterial | 50,000 | 42,000 | B |
| Medical Center Dr. to Paseo Ranchero | 6-Lane Prime Arterial | 50,000 | 40,990 | B |
| Paseo Ranchero to Main Street | 6-Lane Prime Arterial | 50,000 | 34,480 | A |
| **OTAY LAKES ROAD** | | | | |
| "H" St. to Telegraph Canyon Rd. | 4-Lane Major Street | 33,000 | 20,760 | A |
| Telegraph Canyon Rd. to Rutgers Rd. | 6-Lane Prime Arterial | 50,000 | 31,120 | A |
| Rutgers Rd. to Eastlake Pkwy. | 6-Lane Prime Arterial | 50,000 | 28,300 | A |
| Eastlake Pkwy. to Lane Ave. | 6-Lane Prime Arterial | 50,000 | 12,420 | A |
| Lane Ave. to Hunte Pkwy. | 6-Lane Prime Arterial | 50,000 | 6,830 | A |
| Hunte Pkwy. to Wueste Pkwy. | 6-Lane Prime Arterial | 50,000 | 3,620 | A |
| **PASEO RANCHERO** | | | | |
| "H" St. to Telegraph Canyon Rd. | Class I Collector | 22,000 | 10,420 | A |
| **EASTLAKE PARKWAY** | | | | |
| N/O Otay Lakes Rd. | 4-lane Major Arterial | 30,000 | 8,760 | A |
| S/O Otay Lakes Rd. | 4-lane Major Arterial | 30,000 | 16,590 | A |
| **LANE AVENUE** | | | | |
| N/O Otay Lakes Rd. | Class I Collector | 22,000 | 3,900 | A |
| **HUNTE PARKWAY** | | | | |
| Otay Lakes Rd. to Clubhouse Dr. | 4-lane Major Arterial | 30,000 | 3,590 | A |
| **WUESTE ROAD** | | | | |
| Otay Lakes Rd. to Olympic Parkway | Class III Rural Collector | 7,500 | 3,600 | A |

Levels of service E and F indicated in bold with shading.

Cap - Roadway facility capacity at LOS D based on City of Chula Vista Standards

Vol - Average daily traffic volumes.

Nom = Nominal

**Interstate 805.** I-805 is a north-south freeway, which originates in South County and terminates at its connection with the I-5 Freeway in Sorrento Valley. Local interchanges in the project vicinity are at Olympic Parkway, Telegraph Canyon Road, and East H Street. I-805 is generally an eight-lane freeway between I-805 and SR 54 with auxiliary lanes present between some interchanges. Two segments of I-805 that would serve the Amendment Area and Village 11 Project Area, currently operate at level of service (LOS) E or F.

**East H Street.** East H Street traverses the northern boundary of the study area. East H Street is classified as a Six-Lane Prime Arterial from I-805 to Otay Lakes Road, and as a Four-Lane Major east of Otay Lakes Road. Six lanes of divided travel exist today, narrowing to four lanes of divided travel east of Otay Lakes Road. All of the arterials, and all but one of the street segments studied currently operate at LOS D or better. The single exception is East H Street from I-805 to Hidden Vista Drive, which operates at LOS F during the morning and afternoon peak hours.

**Olympic Parkway.** Olympic Parkway provides direct access into the study area and Village 11 upon completion of an ongoing extension. It is classified as a Six-Lane Prime Arterial from I-805 to Hunte Parkway, and as a Four-Lane Major east of Hunte Parkway. Olympic Parkway currently terminates at Brandywine Avenue, just east of I-805 and is a Four-Lane Major Street with bike lanes on both sides from I-805 to Oleander Avenue. East of Oleander Avenue, this road is a two-lane roadway with improvements along the south side only. On-street parking is prohibited. The posted speed limit is 35 mph east of Oleander Avenue. Extension of this facility to the east is planned to be completed by the year 2002.

**Telegraph Canyon Road/Otay Lakes Road.** Telegraph Canyon Road/Otay Lakes Road provides east-west access though the northern portions of the study area. Telegraph Canyon Road/Otay Lakes Road is classified as a Six-Lane Major west of Paseo del Rey, and as a Six-Lane Prime Arterial east of Paseo del Rey. It is generally a six-lane facility that transitions into a Two-Lane Collector to the east of Hunte Parkway. Bike lanes exist on both sides of the road and bus stops are located intermittently along Telegraph Canyon Road/Otay Lakes Road. On-street parking is prohibited. The posted speed limit is 40 mph from I-805 to Crest Drive/Oleander Avenue, 45 mph from Crest Drive/Oleander Avenue to Old Telegraph Canyon Road, and 50 mph from Old Telegraph Canyon Road to Hunte Parkway.

**Paseo Ranchero.** Paseo Ranchero is classified as a Class 1 Collector and currently extends from Rancho del Rey Parkway to Telegraph Canyon Road. Currently, the section of Paseo Ranchero from Telegraph Canyon Road to East Palomar Street is a Six-Lane Prime Arterial. Four lanes of travel are provided in the remaining section of Paseo Ranchero. Bike lanes exist today on both sides of the road; therefore, curbside parking is prohibited. The posted speed limit is 35 mph north of East H Street and 40 mph south of East H Street. Paseo Ranchero is planned to extend south of Telegraph Canyon Road to the future Olympic Parkway extension and beyond to Otay Valley Road as a Six-Lane Prime Arterial.

**Otay Lakes Road.** Otay Lakes Road is classified as a Six-Lane Prime Arterial. Otay Lakes Road is a four-lane major arterial providing north-south access between Bonita Road and Telegraph Canyon Road, at which point it turns to the east. East of La Media Road, Otay Lakes Road transitions into a Six-lane Prime Arterial, and eventually into a Class 2 Collector (two lanes) east of Hunte Parkway. Bike lanes exist on both sides of the road and the posted speed limit is 50 mph from Telegraph Canyon Road/La Media Road to the easterly city limits, east of Lane Avenue. La Media Road is planned to extend to the south from the intersection of Telegraph Canyon Road/Otay Lakes Road.

**Corral Canyon Road/Rutgers Avenue.** Corral Canyon Road/Rutgers Avenue provides access between Central Avenue and Telegraph Canyon Road. Corral Canyon Road is classified as a Two-Lane Collector within the County of San Diego and becomes a Class 2 (Three-Lane) Collector within City of Chula Vista limits. Corral Canyon Road becomes Rutgers Avenue, also a Class 2 (Three-Lane) Collector, south of East H Street. Two lanes of travel are provided north of East H Street and four lanes of travel on the portion south of East H Street to Gotham Street. Bike lanes exist on either side of the street on both Corral Canyon Road/Rutgers Avenue. No curbside parking is available. The posted speed limit north of East H Street is 40 mph and 25 mph south of East H Street. Curbside parking is prohibited north of Gotham Street.

**EastLake Parkway.** EastLake Parkway is classified as a Four-Lane Major Street and as a Six-Lane Prime Arterial south of the SDG&E easement in EastLake Greens. Currently, it provides four lanes (two lanes in each direction). Bike lanes exist on either side of the road and curbside parking is prohibited. The posted speed limit is 40 mph. This Four-Lane Major Arterial would be extended south to the future Olympic Parkway extension.

**Hunte Parkway.** Hunte Parkway is classified as a Four-Lane Prime Arterial from Otay Lakes Road to Olympic Parkway. Currently, it extends south of Otay Lakes Road as a Four-Lane Major Street arterial with a posted speed limit of 45 mph. Bike lanes exist on either side of the road and curbside parking is prohibited. This facility connects to Olympic Parkway to the south.

**State Route 125 (SR-125).** SR-125 is proposed to be completed between SR-54 and State Route 905 (SR-905) initially as a four-lane tollway. It may be constructed by 2004, but the current status is unclear.

**Alta Road.** Alta Road is planned to be constructed as a Six-Lane Prime Arterial between Hunte Parkway and SR-905.

**Wueste Road.** Wueste Road is classified as a Class 3 Collector. It is currently a narrow, winding two-lane road extending between Otay Lakes Road and the south city limits.

As shown in *Table 5.10-1*, all key street segment operations are calculated to currently operate at Level of Service (LOS) C or better under existing conditions except the following (Note: A description of LOS thresholds is provided in Appendix G):

- East H Street from I-805 to Hidden Vista Drive (LOS F); and
- Telegraph Canyon Road from I-805 to Oleander Avenue (LOS D).

## *Intersections*

A total of 52 intersections within the study area were evaluated for traffic impacts. These intersections are shown in *Figure 5.10-1*. Twenty-seven of these intersections exist today, while the remaining 25 will be built in the future. Of the 27 existing intersections, 21 are signalized and 6 are unsignalized. The intersections studied were chosen based on the amount of project traffic expected to utilize these intersections.

The existing operations at signalized and unsignalized intersections were determined for the morning (AM) and afternoon (PM) peak hours. AM peak hours are generally between the hours of 7:00 a.m. and 8:00 a.m., and PM peak hours are typically 5:00 p.m. to 6:00 p.m. All but three signalized intersections operate at LOS D or better. The three signalized intersections that currently operate at below LOS D are:

- H Street/I-805 southbound ramp: LOS F during the PM peak hour;
- Telegraph Canyon Road/I-805 northbound ramp: LOS E during the AM and PM peak hours; and
- Olympic Parkway/I-805 southbound ramp: LOS E during the PM peak hour.

All of the six unsignalized intersections currently operate at LOS C or better.

### Arterials

The City of Chula Vista's Traffic Monitoring Program (TMP) assesses the operating performance of the City's arterial street system for compliance with the Threshold Standards of the City's Growth Management Oversight Committee (GMOC). The City of Chula Vista's significance criteria dictates that if a volume/capacity analysis indicates LOS D, E or F conditions, the GMOC TMP method shall be utilized in the analysis of those segments in the short-term (0-4 year horizon). Based on the GMOC TMP methodology described in Appendix G, East H Street and Telegraph Canyon Road were analyzed in the near-term condition (0-4 year horizon) because these arterials are the only sections or links of roadways located within GMOC arterial street segments calculated to operate at LOS D or worse *(see Table 5.10-1)*. Using the TMP methodology, both arterial segments are calculated to operate at LOS C or better:

- East H Street: I-805-South Western College
- Telegraph Canyon Road: Halecrest Avenue to Medical Center Drive
  Medical Center Drive to Otay Lakes Road

### Freeway Segments

Existing operations on two segments of I-805 were analyzed, including Bonita Road to East H Street and East H Street to Telegraph Canyon Road. The two segments analyzed currently operate at LOS E or F.

## 5.10.2 THRESHOLDS OF SIGNIFICANCE

The City of Chula Vista has developed traffic standards, which were used to evaluate the potential traffic impacts of the proposed GDP Amendments and Village 11 SPA Plan/ TM. The significance thresholds depend upon whether intersections, street segments, or freeways are being analyzed and whether the analysis addresses the short-term (study horizon years 0-4 or pre-year 2005), long-term (study horizon years 5 and beyond or year 2005 or later). The project significance criterion then determines whether the project impact is cumulative or direct. The following provides the significance thresholds for each of these conditions:

### INTERSECTIONS (Study Horizon Years 0-4)

A) A direct project impact would occur if both of the following criteria are met:

- An intersection operates at LOS E or F; and
- Project trips comprise 5 percent or more of entering volume

B) A cumulative impact would occur if only #1 is met.

### STREET SEGMENTS (Study Horizon Years 0-4)

If ADT methodology indicates LOS C or better, the impact is not significant. If ADT methodology indicates LOS D, E, or F, the Growth Management Oversight Committee (GMOCGrowth Management Oversight Committee (GMOC ) method should be utilized. The following criteria would then be utilized:

A) The project would have a direct project impact if all of the following criteria are met:

- LOS is LOS D for more than 2 hours or LOS E/F for 1 hour GMOC criteria;
- Project trips comprise 5 percent or more of the segment volume; and
- Project adds greater than 800 ADT to segment.

B) A cumulative impact would occur if only #1 is met.

## FREEWAYS (Study Horizon Years 0-4)

A) A direct project impact would result if both the following criteria are met:

- Freeway segment is LOS E or LOS F; and
- Project constitutes 5 percent or more of the total forecasted ADT on that freeway segment.

B) A cumulative impact would occur if only #1 is met.

## INTERSECTIONS (Study Horizon Year 2005 and Beyond)

A) A direct project impact would occur if both of the following criteria are met:

- An intersection operates at LOS E or F; and
- Project trips comprise 5 percent or more of entering volume

B) A cumulative impact would occur if only #1 is met.

## STREET SEGMENTS (Study Horizon Year 2005 and Beyond)

Using the ADT methodology:

A) The project would have a direct project impact if all of the following criteria are met:

- LOS is LOS D, LOS E, or LOS F;
- Project trips comprise 5 percent or more of total segment volume; and
- Project adds greater than 800 ADT to the segment.

B) A cumulative impact would occur if only #1 is met.

However, if the intersections along a LOS D or LOS E operating segment all operate at a LOS D or better, the segment impact is considered not significant since intersection analysis is more indicative of actual roadway system operations than street segment analysis. If the segment LOS is LOS F, the impact is significant regardless of the intersection LOS. The

impact is direct if the project is responsible for over 5 percent and cumulative if less than 5 percent.

Notwithstanding the foregoing, if the impact identified above occurs at study horizon year 10 or later, and is offsite and not adjacent to the project, the impact is considered cumulative.

In the event a direct project-specific impact identified above occurs at the study horizon year 5 or earlier, and the impact is offsite and not adjacent to this project, but the property immediately adjacent to the identified project-specific impact is also proposed to be developed in approximately the same time frame, an additional analysis may be required to determine whether or not the identified project-specific impact would still occur if the development of the adjacent property does not take place. If the additional analysis concludes that the identified project-specific impact is no longer a direct impact, then the impact shall be considered cumulative.

## FREEWAYS *(Study Horizon Year 2005 and Beyond)*

A) A direct project impact would result if both the following criteria are met:

- Freeway segment is LOS E or LOS F; and
- Project constitutes 5 percent or more of the total forecasted ADT on that freeway segment.

B) A cumulative impact would occur if only #1 is met.

## CONGESTION MANAGEMENT PROGRAM

Project traffic and roadway improvements must be in compliance with San Diego Association of Government's (SANDAG) Congestion Management Program, (CMP) which was adopted on November 22, 1991 by SANDAG, and is intended to directly link land use, transportation and air quality through Level of Service Performance. The CMP requires an Enhanced CEQA Review of all large projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips.

In 1993, the Institute of Transportation Engineers California Border Section and the San Diego Region Traffic Engineer's Council established a set of guidelines to be used in the

preparation of traffic impact studies that are subject to the Enhanced CEQA review process. This published document, which is titled *1993 Guidelines for Congestion Management Program Transportation Impact Reports for the San Diego Region*, requires that a project study area be established as follows:

- All streets and intersections on CMP roadways or on "regionally significant arterials" where the project would add 50 or more peak hour trips in either direction.

- Mainline freeway locations where the projects would add 150 or more peak hour trips in/either direction.

Per these guidelines, the following regional arterials and freeways were analyzed in this EIR, as required to satisfy the CMP:

- East H Street
- Telegraph Canyon Road
- I-805
- SR-125

## 5.10.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR 90-01. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR 90-01.

### OTAY RANCH PROGRAM EIR

The Program EIR 90-01 found a number of significant impacts to transportation, circulation and access and required a traffic analysis for each proposed SPA. The SPA-level traffic studies were anticipated to identify additional transportation mitigation measures for the construction of new roads, bridges and roadway improvements, and to implement

transportation demand management (TDM) programs or other measures necessary to mitigate traffic impacts on Circulation Element Roads.

Program EIR 90-01 included a standard to be achieved at the SPA-level such that subsequent SPA development projects avoid reducing the existing level of service on street segments to below LOS C with the exception that LOS D may occur on signalized arterial segments for a period not to exceed a total of two hours per day. Internal streets/roads are not required to meet these standards. The specific impacts addressed in the Program EIR 90-01 include:

- Impacts to the road network in the South Bay, including proposed SR-125;
- Impacts to road segments and intersections due to increase in traffic associated with Otay Ranch; and
- Potential secondary impacts related to offsite roadway improvements.

No feasible mitigation measures were identified at the program-level of analysis to reduce the secondary impacts to a level below significance.

## SPHERE OF INFLUENCE UPDATE EIR

The Sphere of Influence Update EIR concluded that the inclusion of Otay Ranch parcels into the City's sphere would not affect the conclusion in the Program EIR, namely that impacts to traffic and circulation would remain significant and unavoidable in some respects. Nevertheless, because the Sphere of Influence Update would not by itself result in physical change, there would be no significant impact.

## OTAY RANCH SPA ONE EIR

Two of the amendments made to the Otay Ranch GDP to implement the SPA One Plan and annexation modified the alignment of the transit corridor within Villages 1 and 5, and required that each SPA Plan locate and dedicate a transit stop as a condition of tentative map approval.

## AMENDED SPA ONE EIR

The SPA One West EIR found that the GDP Amendments would not impose any new traffic impacts not previously identified.

## 5.10.4 IMPACTS

### GDP AMENDMENTS

A traffic analysis was conducted to determine if the implementation of the proposed Otay Ranch GDP Amendments would result in any new traffic impacts, which were not identified in the previous Otay Ranch Program EIR 90-01. The purpose of the analysis was also to determine if significant impacts and corresponding mitigation measures previously identified in the Program EIR 90-01 would be still relevant and applicable to the proposed project.

The methodology utilized for determining buildout segment average daily trips (ADT) and intersection peak hour volumes is explained in the following paragraphs.

#### *Segments*

The buildout street segment ADTs were obtained from a Series 9 Model Run prepared by SANDAG. This Model assumes the proposed roadway network, proposed Otay Ranch Village 11 SPA Plan land uses and adopted land uses for other adjacent communities. The following is a description of how the street segments were chosen to be analyzed.

A review of the conclusions of the 1993 adopted GDP traffic analysis indicated that the following 15 segments within the Amendment Area were determined to have a significant traffic impact at buildout. For the purposes of this analysis, these 15 critical segments were evaluated to determine if current methodologies would indicate that significant impacts may still occur.

- Sweetwater Rd. from Bonita Center Pkwy. to Willow St. [1]
- Sweetwater Rd. from Bonita Rd. to SR 54 [1]
- Central Ave from Bonita Rd. and Corral Canyon Rd. [1]
- Bonita Rd. from I-805 to Plaza Bonita Rd. [1]
- Bonita Rd. from Plaza Bonita Rd. to Willow St. [1]
- Bonita Rd. from Willow St. to Otay Lakes Rd. [1]
- Bonita Rd. from Otay Lakes Rd. to Central Ave. [1]
- Bonita Rd. from Central Ave. to San Miguel Rd. [1]
- La Media Rd. from Otay Mesa Rd. to SR 905 [2]
- La Media Rd. from SR 905 to Airway Rd. [2]
- Camino Maquiladora from Otay Mesa Rd. to Heritage Rd. [2]

- Millar Ranch Rd. from SR 94 to Proctor Valley Rd. [1]
- Oleander Ave. from Telegraph Canyon Rd. to Naples Ave.[3]
- Brittania Boulevard from SR 905 to Airway Rd. [2]
- Otay Lakes Rd. from SR-125 to EastLake Pkwy. [3]

**Notes:** [1] County of San Diego roadway.
[2] City of San Diego roadway.
[3] City of Chula Vista roadway.

In addition to the above segments, the following segments were also analyzed. These segments were selected since they have historically carried high volumes and/or are near freeways, where traffic is most constrained.

- East H St. w/o Otay Lakes Rd.
- East H St. w/o Mount Miguel Rd.
- Telegraph Canyon Rd. e/o I-805
- Telegraph Canyon Rd. w/o Otay lakes Rd.
- Telegraph Canyon Rd. w/o SR-125
- Olympic Pkwy. e/o I-805
- Olympic Pkwy e/o Hunte Pkwy.
- Otay Lakes Rd. e/o Hunte Pkwy.
- Paseo Ranchero s/o Olympic Pkwy.
- Otay Lakes Rd. n/o Telegraph Canyon Rd.
- La Media Rd. s/o Olympic Pkwy.
- EastLake Pkwy. s/o Telegraph Canyon Rd.
- Hunte Pkwy. n/o Olympic Pkwy.
- Hunte Pkwy. s/o Olympic Pkwy.

The street segments were assessed on a daily basis by comparing the daily street segment volume (ADT) to the theoretical capacity of the roadway. Capacity standards for each roadway were determined by jurisdiction.

*Table 5.10-2, Segment Operations,* summarizes the selected segment operations. All the segments selected from the traffic analysis contained in the Program EIR 90-01 are calculated to operate at LOS D or worse except the following:

- Central Avenue from Bonita Road to Corral Canyon Road,
- Olympic Parkway from Hunte Parkway to Eastlake Vista,
- Hunte Parkway from Otay Lakes Road to Eastlake Greens,
- Hunte Parkway from Eastlake Trails to Olympic Parkway.

## TABLE 5.10-2 — SEGMENT OPERATIONS

| SEGMENT | ROADWAY CLASS | CAPACITY AT LOS C | ALT 4 | |
|---|---|---|---|---|
| | | | VOLUME | LOS |
| **SEGMENTS IDENTIFIED IN THE OTAY RANCH TRAFFIC ANALYSIS, JULY 1992** | | | | |
| Sweetwater Rd. from Bonita Center Pkwy. to Willow St. [1] | Light Collector | 7,100 | 13,000 | F |
| | 6-Ln Road | 44,600 | | A |
| Sweetwater Rd. from Bonita Rd. to SR 54 [1] | Town Collector | 9,500 | 20,000 | F |
| | 4-Ln Major Road | 29,600 | | B |
| Central Ave from Bonita Rd. and Carrol Canyon Rd. [1] | Town Collector | 9,500 | 7,000 | C |
| Bonita Rd. from I-805 to Plaza Bonita Rd. | 6-Ln Major | 40,000 | 44,000 | D |
| | 6-Ln Prime | 44,000 | | C |
| Bonita Rd. from Plaza Bonita Rd. to Willow St. [1] | Major Road | 29,600 | 40,000 | F |
| | 6-Ln Major | 44,600 | | C |
| Bonita Rd. from Willow St. to Otay Lakes Rd. [1] | 4-Ln Major Road | 29,600 | 34,000 | E |
| | 6-Ln Prime | 44,600 | | B |
| Bonita Rd. from Otay Lakes Rd. to Central Ave. [1] | Town Collector | 9,500 | 30,000 | F |
| | 6-Ln Major | 44,600 | | B |
| Bonita Rd. from Central Ave. to San Miguel Rd. [1] | Town Collector | 9,500 | 19,000 | F |
| | 4-Ln Major Road | 29,600 | | B |
| La Media Rd. from Otay Mesa Rd. to SR 905 [2] | Collector | 7,500 | 15,000 | F |
| | 6-Ln Major Arterial | 40,000 | | A |
| La Media Rd. from SR 905 to Airway Rd. [2] | Collector | 7,500 | 20,000 | F |
| | 6-Ln Prime Arterial | 50,000 | | A |
| Camino Maquiladora from Otay Mesa Rd. to Heritage Rd. [2] | Collector | 5,000 | 6,000 | D |
| | 4-Ln Collector | 10,000 | | B |
| Millar Ranch Rd. from SR 94 to Proctor Valley Rd. [1,3] | Rural | 7,100 | 10,000 | D |
| | 4-Ln Major Road | 29,600 | | A |
| Oleander Ave. from Telegraph Canyon Rd. to Naples Ave. | Class III Collector | 7,500 | 8,000 | D |
| | Class I Collector | 22,000 | | A |
| Brittania Boulevard from SR 905 to Airway Rd. [2] | Collector | 7,500 | 30,000 | F |
| | 6-Ln Major Arterial | 40,000 | | C |
| Otay Lakes Rd. from SR 125 to Eastlake Pkwy. | 6-Lane Prime | 50,000 | 59,000 | E |
| | 7-Ln Prime | 59,000 | | C |
| Camoustie Road between Harvest Rd. and Domoch Ct. [2,4] | 2-Ln Collector | 5,000 | 7,000 | E |
| | Collector | 10,000 | | B |
| **KEY SEGMENTS IDENTIFIED FOR MONITORING** | | | | |

TABLE 5.10-2 — SEGMENT OPERATIONS (*Continued*)

| SEGMENT | ROADWAY CLASS | CAPACITY AT LOS C | ALT 4 | |
|---|---|---|---|---|
| | | | VOLUME | LOS |
| East H St. w/o Otay Lakes Rd. | 6-Lane Prime | 50,000 | 36,000 | A |
| East H St. w/o Mount Miguel Rd. | 6-Lane Prime | 50,000 | 31,000 | A |
| Telegraph Canyon Rd. e/o I-805 | 6-Lane Prime | 50,000 | 43,000 | B |
| Telegraph Canyon Rd. w/o Otay lakes Rd. | 6-Lane Prime | 50,000 | 36,900 | A |
| Telegraph Canyon Rd. w/o SR 125 | 6-Lane Prime | 50,000 | 30,900 | A |
| Olympic Pkwy. e/o I-805 | 6-Lane Prime | 50,000 | 46,700 | C |
| Olympic Pkwy e/o Hunte Pkwy. | 4-Lane Major | 30,000 | 30,000 | C |
| Otay Lakes Rd. e/o Hunte Pkwy. | 6-Lane Prime | 50,000 | 33,000 | A |
| Paseo Ranchero s/o Olympic Pkwy. | 6-Lane Prime | 50,000 | 30,000 | A |
| Otay Lakes Rd. n/o Telegraph Canyon Rd. | 6-Lane Prime | 50,000 | 29,500 | A |
| La Media Rd. s/o Olympic Pkwy | 6-Lane Major | 40,000 | 20,000 | A |
| Eastlake Pkwy. s/o Telegraph Canyon Rd. | 6-Lane Prime | 50,000 | 24,000 | A |
| Hunte Pkwy. n/o Olympic Pkwy | 4-Lane Major | 30,000 | 17,000 | A |
| Hunte Pkwy. s/o Olympic Pkwy | 6-Lane Prime | 50,000 | 37,000 | A |

**Notes:**

1. County of San Diego roadway and capacity threshold.
2. City of San Diego roadway and capacity threshold.
3. ADT obtained from SANDAG 2020 Cities/County Forecast.
4. Estimated volume.
5. City of Chula Vista roadway and capacity threshold if not noted.
6. Shading indicates unacceptable LOS (D, E OR F).
7. **Bold** indicates mitigated capacity and LOS.

The Program EIR 90-01 identified several mitigation measures to reduce significant impacts to roadway segments that were projected to operate at unacceptable levels of service. Appendix G provides a summary of the mitigations measures originally required for the adopted GDP Program EIR and provides an explanation of those measures that would no longer apply with the proposed GDP Amendments. No mitigation is found necessary on the aforementioned segments since these segments are calculated to operate at LOS C or better with the existing roadway classification under buildout conditions.

All other key segments analyzed are calculated to operate at LOS C or better. Thus, no new mitigation is required. A complete list of mitigation measures that are still applicable to the proposed GDP Amendments is contained below in Section 5.10.6.

## Intersections

### Determining Volumes

The SANDAG model output is not as accurate in determining peak hour intersection turn movements. SANDAG recommends that these output volumes should never be used directly. Therefore, peak hour turning movement volumes were estimated using buildout ADTs and the relationship between existing peak hour turn movements and the existing ADTs. The construction of SR-125 was taken into account in terms of changing directionality. The ADT segment volumes were utilized to determine the AM and PM peak hour intersection turning volumes.

For intersections that do not exist today, a peak hour percentage of 8 to 10 percent was generally assumed. Directionality was estimated based on the proximity of each intersection to a freeway.

### Intersections Analyzed

The following 10 intersections were analyzed in the GDP Amendments analysis since they were determined to have significant impacts in the 1993 adopted GDP traffic analysis. Grade separation was recommended in the Program EIR 90-01 at the intersections with an asterisk (*) due to entering volumes exceeding thresholds developed at that time. Mitigation at the other eight intersections consisted of special at grade geometric designs.

- EastLake Parkway/EUC North (Birch Road)
- EastLake Parkway/Olympic Parkway
- La Media Road/EUC North (Birch Road)
- La Media Road/Olympic Parkway
- Paseo Ranchero/Olympic Parkway
- Paseo Ranchero/Otay Valley Road
- EastLake Parkway/Otay Lakes Road
- La Media Road/Otay Lakes Road *
- La Media Road/Otay Mesa Road
- East H Street/Otay Lakes Road *

It should be noted that significant impacts at these intersections would continue to exist if the proposed amendments are implemented. In addition, as currently required under the adopted GDP, it should be noted that more detailed intersection assessments are required to be completed at the SPA level of analysis. This condition is still applicable with the proposed GDP Amendments.

The Program EIR 90-01 required grade separation at two intersections in the City of Chula Vista (Otay Lakes Road/La Media Road and Otay Lakes Road/East "H" St.). The intersection analysis conducted for the proposed GDP Amendments determined that the intersections at Otay Lakes Road/La Media Road and Otay Lakes Road/East H Street would operate at LOS D or better. Therefore, grade separation is not required at either of these intersections.

### *High School Analysis*

This GDP buildout traffic analysis assesses the traffic impacts of a proposed high school location in Village Seven. The GDP traffic analysis also evaluates an alternative high school location in Village Eight. In either location, the proposed high school would generally serve Village 11, the EUC area, the southern portion of Village Seven, the northern portion of Village Eight, and Village Four.

### Village Seven High School Scenario

The proposed GDP Amendments would relocate the high school planned for Village 11 to Village Seven. The currently adopted GDP permits the development of 1,303 single-family units in Village Seven. Under this scenario, the proposed GDP would locate a 50-acre high school in Village Seven, thereby reducing the permitted number of single-family units to 1,053, for a total reduction of 250 units. The residential acreage would similarly decrease by 50 acres.

### Village Eight High School Scenario

An alternative high school site is being considered in Village Eight as part of the proposed GDP Amendments. The currently adopted GDP permits the development of 1,021 single-family units in Village Eight. Under this scenario, the proposed GDP Amendments would locate a 50-acre high school in Village Eight, thereby reducing the permitted number of single-family units to 781, for a total reduction of 240 units. The residential acreage would similarly decrease by 50 acres.

## School Site Traffic Generation

*Table 5.10-3, Net Trip Generation – High School Analysis*, summarizes the net traffic generation for the proposed Village Seven high school location and the Village Eight alternative. As seen in *Table 5.10-3*, the Village Seven high school is calculated to generate an additional 2,000 daily trips, with 880 trips in the AM peak hour (696 in and 184 out) and 240 PM peak hour trips (48 less trips in and 288 more trips out). The Village Eight alternative is calculated to generate an almost identical number of net trips. The net ADT generated in the Village Eight alternative is calculated to be 2,100 daily trips, with 888 trips in the AM peak hour (698 in and 190 out) and 252 PM peak hour trips (40 less trips in and 292 more trips out).

**TABLE 5.10-3**
**ALTERNATIVE HIGH SCHOOL LOCATIONS NET TRIP GENERATION**

| | | DAILY | | AM PEAK HOUR | | | | | PM PEAK HOUR | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LAND USE | QUANTITY | Rate | Total | Rate | In:Out | Total | In | Out | Rate | In:Out | Total | In | Out |
| **VILLAGE SEVEN HIGH SCHOOL SCENARIO** | | | | | | | | | | | | | |
| High School | 2,500 students | 1.80/ student | 4,500 | 24% | 7:3 | 1,080 | 756 | 324 | 0.12 | 3:7 | 540 | 162 | 378 |
| Single-Family | 250 DU | 10.00/ unit | (2,500) | 8% | 3:7 | (200) | (60) | (140) | 0.12 | 7:3 | (300) | (210) | (90) |
| **Net Increase** | | | **2,000** | | | **880** | **696** | **184** | | | **240** | **(48)** | **288** |
| **VILLAGE EIGHT HIGH SCHOOL SCENARIO** | | | | | | | | | | | | | |
| High School | 2,500 students | 1.80/ student | 4,500 | 24% | 7:3 | 1,080 | 756 | 324 | 0.12 | 3:7 | (540) | 162 | 378 |
| Single Family | 240 DU | 10.00/ Unit | (2,400) | 8% | 3:7 | (192) | (58) | (134) | 0.12 | 7:3 | (288) | 202 | 86 |
| **Net Increase** | | | **2,100** | | | **888** | **698** | **190** | | | **252** | **(40)** | **292** |

Source: SANDAG, July 1998.
Note: (xxx) means trips to be removed if a high school is constructed.

## School Site Traffic Assignment

The traffic assignment for either high school site in Village Seven or Eight is almost identical. The net traffic volumes generated by the proposed Village Seven high school location, or the Village Eight alternative location, are very similar. Since volumes are similar for either high

school location, segment and intersection analyses were conducted for the proposed Village Seven site.

## Analysis

A high school generates traffic much more locally than residential uses. Therefore, while a high school will add more traffic to the street system in the very immediate area, constructing a high school instead of residential uses will actually decrease traffic in the vast majority of Chula Vista and within adjoining portions of the City and County of San Diego.

### SEGMENT ANALYSIS

Since a high school generates traffic in only a very localized area, only one road segment would experience increased traffic due to the high school. The ADT on La Media Road south of Olympic Parkway would increase from 20,000 to 20,100 at buildout, but the LOS would remain at LOS A with or without the additional high school traffic. Therefore, no additional significant segment impacts would result from the high school.

### INTERSECTION ANALYSIS

*Table 5.10-4, Intersection Operations – High School Analysis* summarizes the AM and PM peak hour intersection analysis results. Since a high school generates traffic in only a very localized area, only two intersections would have a net increase in traffic and are the only ones analyzed. These intersections are Eastlake Parkway/EUC North (Birch Road) and La Media Road/EUC North (Birch Road). As seen in *Table 5.10-4,* the two intersections are calculated to continue to operate at LOS D or better at buildout with the increased traffic due to the high school. No significant intersection impacts would result from the high school.

**TABLE 5.10-4**
**INTERSECTION OPERATIONS – HIGH SCHOOL ANALYSIS**

| INTERSECTION | PEAK HOUR | DELAY[1] | LOS[2] |
|---|---|---|---|
| 1. Eastlake Parkway/EUC North (Birch Road) | AM | 31.3 | C |
| | PM | 53.5 | D |
| 2. La Media Road/EUC North (Birch Road) | AM | 54.6 | D |
| | PM | 54.8 | D |

SOURCE: LLG, 2001
Notes: [1] Delay in seconds.
[2] LOS = Level of Service

## Proposed SPA/TM Circulation System

The Village 11 traffic analysis has evaluated the capacity of the proposed roadways, as well as existing roadways beyond the boundaries of the Village 11 Project Area. While the generation rates and associated traffic volumes are different for each project, the circulation system needs to meet the buildout requirement of the Village 11 Project Area. The roadways to be constructed or portions thereof, as a part of Village 11 are as follows:

- Olympic Parkway
- EastLake Parkway
- Birch Road
- Hunte Parkway
- La Media Road
- Otay Lakes Road

## Project Trip Generation

The SANDAG 2020 City/County Forecast Traffic Model was used to estimate the traffic volumes for each proposed land use. The traffic model calculates freeway and street segment ADTs. These ADTs were utilized directly as calculated by the model, meaning that no manual adjustments were made to any of the calculated traffic volumes. SANDAG trip generation rates were utilized to determine the amount of traffic the project would generate. The project trip generation for Village 11 is estimated at 30,060 ADT. Of this total amount, 8,930 ADT would be generated by non-residential uses.

The proposed Village 11 project is designed in such a manner as to keep a portion of the traffic internal to the project, since schools, commercial uses and recreational uses are planned within the project. Calculations were conducted to determine how much of the project traffic would remain internal to the project site and therefore, not add traffic to the regional street system. The internal trip generation calculations were made with a base assumption that given the land use classification of the non-residential uses, about 15 percent of the residential uses would remain internal to the site. Subtracting the internal trip generation from the total trip generation yields the external trip generation. As shown in *Table 5.10-5, External Trips Proposed Project,* the external trip generation is calculated at 23,720 ADT on the surrounding street system at project buildout. Since the project is expected to be completed prior to 2010, this traffic generation was assumed for the year 2010, 2015, 2020 and buildout

analysis. Only a portion of the residential uses (639 single family and 197 multi-family), commercial, church, park and elementary school are proposed by 2005.

**TABLE 5.10-5**
**OTAY RANCH – VILLAGE 11**
**EXTERNAL TRIPS — PROPOSED PROJECT**
**YEARS 2010, 2015, 2020 AND BUILDOUT**

| USE | % OF TRIPS WHICH ARE EXTERNAL | EXTERNAL TRIPS (ADT) |
|---|---|---|
| A. Residential | 85% | 17,960 |
| B. Non-Residential | | |
| Elementary School | 30% | 200 |
| Park | 20% | 20 |
| Commercial | 74% | 5,200 |
| Church | 20% | 30 |
| Middle School | 30% | 310 |
| Subtotal Non-Residential | | 5,760 |
| TOTAL ADT | | 23,720 |

NOTE: External trips obtained by subtracting Internal Trips (Table 11) from Total Trips (Table 10).

## *Adopted vs. Proposed Analysis*

For comparison purposes, an analysis of the study years outlined above was also conducted assuming adopted land uses for all projects in the area. As shown in *Table 5.10-5,* the proposed Village 11 project is calculated to generate 23,720 external ADT.

By comparison, the proposed Village 11 project would generate approximately 3,220 more daily trips than the adopted Village 11 land uses. Overall, Year 2020 traffic volumes are very similar with adopted and proposed land uses. Traffic is forecasted to be slightly higher on Olympic Parkway and Hunte Parkway with the proposed Village 11 land uses.

## *Existing Plus Project Analysis*

The existing plus project analysis was conducted by adding project traffic to existing traffic and also assuming Olympic Parkway was extended from its current terminus to Hunte Parkway. Olympic Parkway is fully funded and will be extended prior to project completion. However, no other circulation improvements were assumed to be constructed in the short-term in this scenario including SR-125.

The addition of project traffic does not cause any existing intersection LOS to degrade from LOS D (or better) operations to LOS E or F. The intersection at East H Street and I-805 southbound ramps would remain LOS F in the PM peak hour with or without the project. The intersection at Telegraph Canyon Road and I-805 northbound ramps would remain LOS E in the AM peak hour with or without the project. Some of the delays improve along East H Street and Telegraph Canyon Road due to the extension of Olympic Parkway.

The addition of project traffic also does not cause any existing road segment LOS to degrade from LOS C (or better) operations to LOS D, E or F. H Street from I-805 to Hidden Vista Drive would remain LOS F with or without the project because no project trips generated from Village 11 contribute to this segment. The volume on this segment is the same with or without the project. Telegraph Canyon Road from I-805 to Halecrest Drive would also remain LOS F with or without the project. Project trips comprise less than 5 percent of the segment volume; therefore no significant impact on this segment would result from the proposed project.

As discussed in Section 5.10.1, East H Street and Telegraph Canyon Road were identified as TMP arterials. The short-term TMP analysis indicates that the two TMP arterial road segments would operate at LOS C or better. Only a small amount of speed degradation is calculated on the TMP segments in the existing plus project condition.

Therefore, based on the established significance criteria, no new significant traffic impacts are calculated in the existing plus project condition.

### *Near-term Cumulative Analysis (Pre-year 2005)*

The near-term cumulative traffic analysis is similar to the existing plus project analysis in that it includes the proposed project; however, the near-term scenario also includes all projects in the eastern territories of Chula Vista as currently proposed. As traffic increases in the eastern territories of Chula Vista, the LOS on the key east/west streets (East H Street, Telegraph Canyon Road, Olympic Parkway) would exceed City standards unless SR-125 or other capacity-enhancing improvements are constructed. This represents a significant impact; however, this impact would be mitigated by the completion of SR-125 or other network improvements, which would increase system capacity in the Village 11 Project Area.

The time frame when the standards would be exceeded is dependent on the number of housing units constructed per year. LLG completed an analysis in June 2000, which estimated the total number of housing units that could be constructed east of I-805 before the City roadway LOS standards would be exceeded. It was determined that East H Street and Telegraph Canyon Road just east of I-805 would be the "constraint" in the area street system. These roadways were studied using the City's Traffic Monitoring Program Methodology in terms of average travel speed.

The City thresholds are approached as travel speeds decrease. Historical traffic data (speed and volumes) were collected and a linear regression equation was developed to form a relationship between speed and volume. Traffic models were run by SANDAG for the Years 2001, 2002, 2003 and 2004 to forecast future traffic volumes. Olympic Parkway was assumed to be extended to Hunte Parkway, and SR-125 was assumed not to be constructed.

The 2001-2004 volumes were utilized to determine how much traffic volume would result in City thresholds being exceeded. This volume was then correlated to the number of dwelling units that could be constructed without exceeding the threshold. City thresholds would be exceeded on Telegraph Canyon Road in the near future if SR-125 is not built. The impact on Telegraph Canyon Road was calculated to occur when the total number of new dwelling units in the Eastern Territories exceeded 9,429 units beginning January 1, 2000. Appendix G provides the complete analysis used to determine the dwelling unit threshold.

### *Long-term Cumulative Analysis (Year 2005 or Later)*

A long-term cumulative analysis was conducted to determine the impact of not only Village 11, but all other proposed projects in the eastern territories. The long-term cumulative analysis consists of a future traffic analysis in 5-year increments including 2005, 2010, 2015, 2020 and buildout with all projects constructed as proposed.

All key intersections were analyzed as signalized intersections under future conditions. Intersections west of Otay Lakes Road/La Media Road were not analyzed for the future scenarios with SR-125, as the majority of the traffic from the Village 11 Project Area would be expected to utilize SR-125. The long-term cumulative analysis also considered a scenario where SR-125 is not completed.

*Table 5.10-6, Future Street Segment Operations,* provides a summary of the street segments evaluated in the project study area. A summary of the levels of service and a determination of significance is provided below in the following discussion.

## TABLE 5.10-6
## FUTURE STREET SEGMENT OPERATIONS

| STREET SEGMENT | ROADWAY CLASS | CAPACITY AT LOS C | YEAR 2005 WITHOUT SR 125 | | YEAR 2005 WITH SR 125 | | YEAR 2010 | | YEAR 2015 | | YEAR 2020 | | BUILD-OUT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS |
| **"H" STREET** | | | | | | | | | | | | | | |
| I-805 to Hidden Vista Dr. | Prime Arterial | 50,000 | **65,000** | F | **62,000** | E | **57,000** | E | **57,000** | E | **62,000** | E | **60,000** | E |
| Hidden Vista Dr. to Paseo Del Rey | Prime Arterial | 50,000 | 46,000 | C | 44,000 | C | 40,000 | B | 40,000 | B | 43,000 | B | 41,000 | B |
| Paseo Del Rey to Paseo Ranchero | Prime Arterial | 50,000 | 45,000 | C | 42,000 | B | 40,000 | B | 40,000 | B | 45,000 | B | 43,000 | B |
| Paseo Ranchero to Otay Lakes Road | Prime Arterial | 50,000 | 38,000 | B | 36,000 | A | 35,000 | A | 35,000 | A | 39,000 | B | 39,000 | B |
| Otay Lakes Road to Rutgers Rd. | Major Arterial (4L) | 30,000 | 23,000 | B | 19,000 | A | 24,000 | B | 23,000 | B | 23,000 | B | 24,000 | B |
| Rutgers Rd. to SR 125 | Major Arterial (4L) | 30,000 | 19,000 | A | 14,000 | A | 15,000 | A | 15,000 | A | 14,000 | A | 20,000 | A |
| SR 125 to Mount Miguel Rd. | Prime Arterial | 50,000 | 11,000 | A | 17,000 | A | 19,000 | A | 20,000 | A | 18,000 | A | 30,000 | A |
| **PROCTOR VALLEY ROAD** | | | | | | | | | | | | | | |
| Mount Miguel Rd. to Lane Ave. | Prime Arterial | 50,000 | 14,000 | A | 15,000 | A | 18,000 | A | 17,000 | A | 15,000 | A | 23,000 | A |
| Lane Ave. to Hunte Pkwy. | Prime Arterial | 50,000 | 13,000 | A | 14,000 | A | 25,000 | A | 24,000 | A | 22,000 | A | 29,000 | A |
| East of Hunte Pkwy. | Major Arterial (4L) | 30,000 | 13,000 | A | 13,000 | A | 22,000 | A | 21,000 | A | 17,000 | A | 21,000 | A |
| **TELEGRAPH CANYON ROAD** | | | | | | | | | | | | | | |
| I-805 to Paseo Del Rey | Prime Arterial [1] | 50,000 | **55,000** | D | **51,000** | D | **57,000** | E | **55,000** | D | **52,000** | D | 42,000 | C |
| Paseo Del Rey to Paseo Ranchero | Prime Arterial | 50,000 | **53,000** | D | 49,000 | C | **56,000** | D | **55,000** | D | **52,000** | D | 42,000 | B |
| Paseo Ranchero to Main Street | Prime Arterial | 50,000 | 50,000 | C | 45,000 | C | 45,000 | C | 46,000 | C | 45,000 | C | 34,000 | A |
| **OTAY LAKES ROAD** | | | | | | | | | | | | | | |
| North of "H" St. | Prime Arterial | 50,000 | **42,000** | F [2] | **32,000** | D [2] | **43,000** | F [2] | 40,000 | B | 41,000 | B | 37,000 | A |
| "H" St. to Telegraph Canyon Rd. | Prime Arterial | 50,000 | **44,000** | F [2] | **36,000** | E [2] | **45,000** | F [2] | 43,000 | B | 41,000 | B | 39,000 | B |
| Telegraph Canyon Rd. to Rutgers Rd. | Prime Arterial | 50,000 | 50,000 | C | 41,000 | B | 41,000 | B | 43,000 | B | 44,000 | C | 33,000 | A |
| Rutgers Rd. to SR 125 | Prime Arterial | 50,000 | 49,000 | C | 37,000 | A | 37,000 | A | 41,000 | B | 40,000 | B | 41,000 | B |
| SR 125 to Eastlake Pkwy. | Prime Arterial | 50,000 | 50,000 | C | 49,000 | C | 45,000 | C | 49,000 | C | **52,000** | D | **64,000** | F |
| Eastlake Pkwy. to Lane Ave. | Prime Arterial | 50,000 | 32,000 | A | 32,000 | A | 31,000 | B | 33,000 | A | 39,000 | B | 45,000 | C |
| Lane Ave. to Hunte Pkwy. | Prime Arterial | 50,000 | 16,000 | A | 16,000 | A | 17,000 | A | 22,000 | A | 25,000 | A | 33,000 | A |

## TABLE 5.10-6 (*Continued*)
## FUTURE STREET SEGMENT OPERATIONS

| STREET SEGMENT | ROADWAY CLASS | CAPACITY AT LOS C | YEAR 2005 WITHOUT SR 125 | | YEAR 2005 WITH SR 125 | | YEAR 2010 | | YEAR 2015 | | YEAR 2020 | | BUILD-OUT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS |
| Hunte Pkwy. to Wueste Rd. | Prime Arterial | 50,000 | 10,000 | A | 10,000 | A | 14,000 | A | 27,000 | A | 31,000 | A | 33,000 | A |
| E/O Wueste Rd. | Prime Arterial | 50,000 | 5,000 | A | 5,000 | A | 13,000 | A | 30,000 | A | 31,000 | A | 32,000 | A |
| **PALOMAR STREET** | | | | | | | | | | | | | | |
| Paseo Ranchero to La Media Rd. | Class I Collector | 22,000 | 11,000 | A | 10,000 | A | 14,000 | A | 13,000 | A | 15,000 | A | 16,000 | A |
| **OLYMPIC PARKWAY** | | | | | | | | | | | | | | |
| Oleander Ave. to Brandywine Ave. | Prime Arterial | 50,000 | 50,000 | C | 47,000 | C | 49,000 | C | 48,000 | C | 52,000 | C | 46,000 | C |
| Brandywine Ave. to Paseo Ranchero | Prime Arterial | 50,000 | 46,000 | C | 38,000 | B | 45,000 | C | 43,000 | B | 47,000 | C | 41,000 | B |
| Paseo Ranchero to La Media Rd. | Prime Arterial | 50,000 | 31,000 | A | 27,000 | A | 42,000 | B | 42,000 | B | 55,000 | B | 40,000 | B |
| La Media Rd. to Palomar St. | Prime Arterial | 50,000 | 27,000 | A | 23,000 | A | 31,000 | A | 29,000 | A | 35,000 | A | 27,000 | A |
| Palomar St. to SR 125 | Prime Arterial | 50,000 | 40,000 | B | 34,000 | A | **52,000** | **D** | 48,000 | C | 50,000 | C | 46,000 | C |
| SR 125 to Eastlake Pkwy. | - | 7,500 | **40,000** | **F** | **41,000** | **F** | **62,000** | **F** | **59,000** | **F** | **61,000** | **F** | **75,000** | **F** |
| Eastlake Pkwy. to Hunte Pkwy. | - | 7,500 | **20,000** | **F** | **22,000** | **F** | **36,000** | **F** | **38,000** | **F** | **41,000** | **F** | **40,000** | **F** |
| Hunte Pkwy to Wueste Rd. | Major Arterial (4L) | 30,000 | 7,000 | A | 7,000 | A | 25,000 | B | **32,000** | **D** | **36,000** | **E** | 30,000 | C |
| **BIRCH ROAD** | | | | | | | | | | | | | | |
| La Media Rd. to SR 125 | Major Arterial (4L) | 30,000 | 300 | A | 7,000 | A | **36,000** | **E** | **34,000** | **E** | 30,000 | C | 24,000 | B |
| SR 125 to Eastlake Pkwy. | Prime Arterial | 50,000 | 600 | A | 8,000 | A | 32,000 | A | 39,000 | B | 28,000 | A | 28,000 | A |
| **ROCK MOUNTAIN ROAD** | | | | | | | | | | | | | | |
| Main St. to La Media Rd. | Class I Collector | 22,000 | — | — | — | — | — | — | 6,000 | A | 11,000 | A | 12,000 | A |
| La Media Rd. to SR 125 | Class I Collector | 22,000 | — | — | — | — | 8,000 | A | 11,000 | A | 22,000 | C | **24,000** | **D** |
| **MEDICAL CENTER DRIVE** | | | | | | | | | | | | | | |
| Telegraph Canyon Rd. to Palomar St. | Class I Collector | 22,000 | 18,000 | B | 18,000 | B | 16,000 | A | 16,000 | A | 17,000 | B | 17,000 | B |
| **MAIN STREET** | | | | | | | | | | | | | | |
| Paseo Ranchero to Rock Mountain Rd. | Major Arterial (6L) | 40,000 | — | — | — | — | — | — | 12,000 | A | 31,000 | B | 28,000 | A |
| Rock Mountain Rd. to La Media Rd. | Major Arterial (6L) | 40,000 | — | — | — | — | — | — | 6,000 | A | 22,000 | A | 20,000 | A |
| La Media Rd. to SR 125 SB Ramps | Major Arterial (6L) | 40,000 | — | — | — | — | — | — | 7,000 | A | 11,000 | A | 10,000 | A |

## TABLE 5.10-6 (*Continued*)
## FUTURE STREET SEGMENT OPERATIONS

| STREET SEGMENT | ROADWAY CLASS | CAPACITY AT LOS C | YEAR 2005 WITHOUT SR 125 | | YEAR 2005 WITH SR 125 | | YEAR 2010 | | YEAR 2015 | | YEAR 2020 | | BUILD-OUT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS |
| **BRANDYWINE AVENUE** | | | | | | | | | | | | | | |
| Palomar St. to Olympic Pkwy. | Class I Collector | 22,000 | 18,000 | B | 17,000 | B | 16,000 | A | 16,000 | A | 16,000 | A | 14,000 | A |
| Olympic Pkwy. to Main St. | Class I Collector | 22,000 | 18,000 | A | 15,000 | A | 18,000 | B | 18,000 | B | 18,000 | B | 19,000 | B |
| **PASEO RANCHERO** | | | | | | | | | | | | | | |
| "H" St. to Telegraph Canyon Rd. | Class I Collector | 22,000 | 8,000 | A | 8,000 | A | 14,000 | A | 14,000 | A | 17,000 | B | 16,000 | A |
| Telegraph Canyon Rd. to Palomar St. | Prime Arterial | 50,000 | 23,000 | A | 21,000 | A | 36,000 | A | 36,000 | A | 35,000 | A | 30,000 | A |
| Palomar St. to Olympic Pkwy. | Prime Arterial | 50,000 | 19,000 | A | 18,000 | A | 39,000 | B | 40,000 | B | 50,000 | C | 40,000 | B |
| Olympic Pkwy. to Birch Rd. | Prime Arterial | 50,000 | 800 | A | 800 | A | 27,000 | A | 29,000 | A | 30,000 | A | 36,000 | A |
| Birch Rd. to Main St. | Prime Arterial | 50,000 | — | — | — | — | 25,000 | A | 28,000 | A | 36,000 | A | 36,000 | A |
| S/O Main St. | Prime Arterial | 50,000 | — | — | — | — | **52,000** | **D** | 46,000 | C | 38,000 | B | 36,000 | A |
| **LA MEDIA ROAD** | | | | | | | | | | | | | | |
| Telegraph Canyon Rd. to Palomar St. | Prime Arterial | 50,000 | 22,000 | A | 19,000 | A | 35,000 | A | 33,000 | A | 33,000 | A | 28,000 | A |
| Palomar St. to Olympic Pkwy. | Prime Arterial | 50,000 | 4,000 | A | 8,000 | A | 23,000 | A | 21,000 | A | 25,000 | A | 19,000 | A |
| Olympic Pkwy. to Birch Rd. | Prime Arterial | 50,000 | 300 | A | 7,000 | A | 20,000 | A | 18,000 | A | 30,000 | A | 20,000 | A |
| Birch Rd. to Rock Mountain Rd. | Prime Arterial | 50,000 | — | — | — | — | 10,000 | A | 10,000 | A | 27,000 | A | 22,000 | A |
| Rock Mountain Rd. to Main St. | Prime Arterial | 50,000 | — | — | — | — | — | — | 8,000 | A | 31,000 | A | 25,000 | A |
| **EASTLAKE PARKWAY** | | | | | | | | | | | | | | |
| N/O Otay Lakes Road | Major Arterial (4L) | 30,000 | **33,000** | **D** | **34,000** | **E** | **35,000** | **E** | **36,000** | **E** | **32,000** | **D** | **31,000** | **D** |
| Otay Lakes Road to Olympic Parkway | Prime Arterial | 50,000 | 26,000 | A | 27,000 | A | 35,000 | A | 35,000 | A | 35,000 | A | 28,000 | A |
| Olympic Parkway to Birch Rd. | Major Arterial (6L) | 40,000 | 17,000 | A | 22,000 | A | **41,000** | **D** | **48,000** | **E** | **50,000** | **E** | **45,000** | **D** |
| Birch Rd. to Hunte Pkwy. | Prime Arterial | 50,000 | 1,000 | A | 1,000 | A | 11,000 | A | 22,000 | A | 30,000 | A | 34,000 | A |
| **LANE AVENUE** | | | | | | | | | | | | | | |
| S/O Proctor Valley Rd. | Class I Collector | 22,000 | 21,000 | C | 21,000 | C | 20,000 | C | 19,000 | B | 19,000 | B | 18,000 | B |
| N/O Otay Lakes Road | Class I Collector | 22,000 | 15,000 | A | 15,000 | A | 21,000 | C | 19,000 | B | 20,000 | C | 18,000 | B |

TABLE 5.10-6 (*Continued*)
FUTURE STREET SEGMENT OPERATIONS

| STREET SEGMENT | ROADWAY CLASS | CAPACITY AT LOS C | YEAR 2005 WITHOUT SR 125 | | YEAR 2005 WITH SR 125 | | YEAR 2010 | | YEAR 2015 | | YEAR 2020 | | BUILD-OUT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS | Volume | LOS |
| **HUNTE PARKWAY** | | | | | | | | | | | | | | |
| Proctor Valley Rd. to Otay Lakes Road | Major Arterial (4L) | 30,000 | 19,000 | A | 19,000 | A | 29,000 | C | 28,000 | C | 30,000 | C | 29,000 | C |
| Otay Lakes Road to Olympic Parkway | Major Arterial (4L) | 30,000 | 10,000 | A | 11,000 | A | 21,000 | A | 19,000 | A | 23,000 | B | 21,000 | A |
| Olympic Parkway to SDG&E. | Prime Arterial | 50,000 | 3,000 | A | 300 | A | 20,000 | A | 21,000 | A | 42,000 | B | 28,000 | A |
| SDG&E to SR 125 [3] | Prime Arterial | 50,000 | — | — | — | — | 21,000 | A | 28,000 | A | **57,000** | E | 48,000 | C |
| **WUESTE ROAD** | | | | | | | | | | | | | | |
| Otay Lakes Road to Olympic Parkway | Class III Collector | 7,500 | 700 | A | 900 | A | 2,000 | A | 4,000 | A | 6,000 | B | 4,000 | A |

Source: SANDAG Cities/County Transportation Forecast, October 2000.

**Notes:**

[1] Classified as a 6-lane Major Arterial but functions as a Prime Arterial.

[2] Four-lane major arterial until 2015.

[3] Classification is 6-lane Prime Arterial South of SDG&E easement

Levels of service D, E and F indicated in bold with shading.

## *2005 Without SR-125*

As shown below, all but the following four intersections were calculated to operate at LOS D or better in the AM and PM peak hours without the construction of SR-125:

| | LEVEL OF SERVICE (LOS) | SIGNIFICANCE CONCLUSION |
|---|---|---|
| **INTERSECTIONS** | | |
| East H Street/ I-805 Southbound Ramps | LOS E (AM)/LOS F (PM) | Cumulative impact |
| East H Street/ Hidden Vista Drive | LOS F (PM) | Cumulative impact |
| Telegraph Canyon Road/ I-805 Southbound Ramps | LOS F (PM) | Cumulative impact |
| Telegraph Canyon Road/ I-805 Northbound Ramps | LOS E (AM) | Cumulative impact |

In the Year 2005 without SR-125 condition and with proposed land uses, all key segments are calculated to operate at LOS C or better except the following segments:

| | LEVEL OF SERVICE (LOS) | SIGNIFICANCE CONCLUSION |
|---|---|---|
| SEGMENTS | | |
| East H Street: I-805 to Hidden Vista Drive | LOS F | Cumulative impact |
| Telegraph Canyon Road: I-805 to Paseo Del Rey | LOS D | Not significant |
| Telegraph Canyon Road: Paseo Del Rey to Paseo Ranchero | LOS D | Not significant |
| Otay Lakes Road: north of H Street | LOS F | Cumulative impact |
| Otay Lakes Road: H Street to Telegraph Canyon Road | LOS F | Project impact |
| Olympic Parkway: I-805 to Oleander | LOS E | Not significant |
| Olympic Parkway: SR-125 to Eastlake Parkway | LOS F | Project impact |
| Olympic Parkway: Eastlake Parkway to Hunte Parkway | LOS F | Project impact |
| EastLake Parkway: north of Otay Lakes Road | LOS D | Not significant |

Additionally, I-805 (between Bonita Road and Telegraph Canyon Road) is calculated to operate at LOS F in the year 2005 without the construction of SR-125. A significant cumulative impact is calculated on I-805 (between Bonita Road and Telegraph Canyon Road) in the Year 2005 without the construction of SR-125.

## *Year 2005 With SR-125*

All intersections were calculated to operate at LOS D or better in the AM and PM peak hours with the construction of SR-125 in year 2005.

In the Year 2005 with SR-125 condition and with proposed land uses, all key segments are calculated to operate at LOS C or better except the following segments:

| | LEVEL OF SERVICE (LOS) | SIGNIFICANCE CONCLUSION |
|---|---|---|
| SEGMENTS | | |
| East H Street: I-805 to Hidden Vista Drive | LOS E | Not significant |
| Telegraph Canyon Road: I-805 to Paseo Del Rey | LOS D | Not significant |
| Otay Lakes Road: north of H Street | LOS D | Not significant |
| Otay Lakes Road: H Street to Telegraph Canyon Road | LOS E | Not significant |
| Olympic Parkway: I-805 to Oleander | LOS D | Not significant |
| Olympic Parkway: SR-125 to EastLake Parkway | LOS F | Project impact |
| Olympic Parkway: EastLake Parkway to Hunte Parkway | LOS F | Project impact |
| EastLake Parkway: north of Otay Lakes Road | LOS E | Not significant |

I-805 is calculated to operate at LOS F (between Bonita Road and Telegraph Canyon Road) and SR-125 at LOS B in the year 2005. A significant cumulative impact is calculated on I-805 (between Bonita Road and Telegraph Canyon Road) in the Year 2005 with the construction of SR-125.

### Year 2010

All intersections were calculated to operate at LOS D or better in the AM and PM peak hours in the year 2010 with SR-125 scenario.

In the Year 2010 with SR-125 and with proposed land uses, all key segments are calculated to operate at LOS C or better except the following segments:

| | LEVEL OF SERVICE (LOS) | SIGNIFICANCE CONCLUSION |
|---|---|---|
| SEGMENTS | | |
| East H Street: I-805 to Hidden Vista Drive | LOS E | Not significant |
| Telegraph Canyon Road: I-805 to Paseo Del Rey | LOS E | Not significant |
| Telegraph Canyon Road: Paseo Del Rey to Paseo Ranchero | LOS D | Not significant |
| Otay Lakes Road: north of H Street | LOS F | Cumulative impact |
| Otay Lakes Road: H Street to Telegraph Canyon Road | LOS F | Cumulative impact |
| Olympic Parkway: I-805 to Oleander | LOS E | Not significant |
| Olympic Parkway: Palomar Street to SR-125 | LOS D | Not significant |
| Olympic Parkway: SR-125 to EastLake Parkway | LOS F | Cumulative impact |
| Olympic Parkway: EastLake Parkway to Hunte Parkway | LOS F | Project impact |
| Birch Road: La Media to SR-125 | LOS E | Not significant |
| Paseo Ranchero: South of Main Street | LOS D | Not significant |
| EastLake Parkway: north of Otay Lakes Road | LOS E | Not significant |
| EastLake Parkway: Olympic Parkway to Birch Road | LOS D | Not significant |

A specific analysis was not conducted for Year 2010 since I-805 would operate at LOS F in Year 2005 with SR-125, and the volumes on I-805 would increase by Year 2010. A significant cumulative impact is calculated on I-805 (between Bonita Road and Telegraph Canyon Road) in the Year 2010.

### Year 2015

All intersections were calculated to operate at LOS D or better in the AM and PM peak hours in the year 2015 with SR-125 scenario.

In the Year 2015 with SR-125 and with proposed land uses, all key segments are calculated to operate at LOS C or better except the following segments (*Table 5.10-6*):

| | LEVEL OF SERVICE (LOS) | SIGNIFICANCE CONCLUSION |
|---|---|---|
| **SEGMENTS** | | |
| East H Street: I-805 to Hidden Vista Drive | LOS E | Not significant |
| Telegraph Canyon Road: I-805 to Paseo Del Rey | LOS D | Not significant |
| Telegraph Canyon Road: Paseo Del Rey to Paseo Ranchero | LOS D | Not significant |
| Olympic Parkway: I-805 to Oleander | LOS D | Not significant |
| Olympic Parkway: SR-125 to EastLake Parkway | LOS F | Cumulative impact |
| Olympic Parkway: EastLake Parkway to Hunte Parkway | LOS F | Project impact |
| Olympic Parkway: Hunte Parkway to Wueste Road | LOS D | Not significant |
| Birch Road: La Media to SR-125 | LOS E | Not significant |
| EastLake Parkway: North of Otay Lakes Road | LOS E | Not significant |
| EastLake Parkway: Olympic Parkway to Birch Road | LOS E | Not significant |

A specific analysis was not conducted for Year 2015 since I-805 would operate at LOS F in Year 2005 with SR-125, and the volumes on I-805 would increase by Year 2015. A significant cumulative impact is calculated on I-805 (between Bonita Road and Telegraph Canyon Road) in the Year 2015.

## Year 2020

All intersections were calculated to operate at LOS D or better in the AM and PM peak hours in the year 2020 with SR-125 scenario.

In the Year 2020 with SR-125 and with proposed land uses, all key segments are calculated to operate at LOS C or better except the following segments:

| | LEVEL OF SERVICE (LOS) | SIGNIFICANCE CONCLUSION |
|---|---|---|
| **SEGMENTS** | | |
| East H Street: I-805 to Hidden Vista Drive | LOS E | Not significant |
| Telegraph Canyon Road: I-805 to Paseo Del Rey | LOS D | Not significant |
| Telegraph Canyon Road: Paseo Del Rey to Paseo Ranchero | LOS D | Not significant |
| Otay Lakes Road: SR-125 to EastLake Parkway | LOS D | Not significant |
| Olympic Parkway: I-805 to Oleander | LOS E | Not significant |
| Olympic Parkway: SR-125 to Eastlake Parkway | LOS F | Cumulative impact |
| Olympic Parkway: EastLake Parkway to Hunte Parkway | LOS F | Project impact |
| Olympic Parkway: Hunte Parkway to Wueste Road | LOS E | Not significant |
| EastLake Parkway: North of Otay Lakes Road | LOS D | Not significant |
| EastLake Parkway: Olympic Parkway to Birch Road | LOS E | Not significant |
| Hunte Parkway: SDG&E Easement to SR-125 | LOS E | Not significant |

A specific analysis was not conducted for Year 2020 since I-805 would operate at LOS F in Year 2005 with SR-125, and the volumes on I-805 would increase by Year 2020. A significant cumulative impact is calculated on I-805 (between Bonita Road and Telegraph Canyon Road) in the Year 2020.

## Buildout

All intersections are calculated to operate at LOS D or better in the AM and PM peak hours except:

| | LEVEL OF SERVICE (LOS) | SIGNIFICANCE CONCLUSION |
|---|---|---|
| **INTERSECTIONS** | | |
| Olympic Parkway/Wueste Road | LOS F (PM) | Cumulative |

At buildout with SR-125 and with proposed land uses scenario, all key segments are calculated to operate at LOS C or better except the following segments:

| | LEVEL OF SERVICE (LOS) | SIGNIFICANCE CONCLUSION |
|---|---|---|
| **SEGMENTS** | | |
| East H Street: I-805 to Hidden Vista Drive | LOS E | Not significant |
| Otay Lakes Road: SR-125 to EastLake Parkway | LOS F | Cumulative impact |
| Olympic Parkway: I-805 to Oleander Avenue | LOS D | Not significant |
| Olympic Parkway: SR-125 to EastLake Parkway | LOS F | Cumulative impact |
| Olympic Parkway: EastLake Parkway to Hunte Parkway | LOS F | Project impact |
| Rock Mountain Road: La Media Road to SR-125 | LOS D | Not significant |
| EastLake Parkway: North of Otay Lakes Road | LOS D | Not significant |
| EastLake Parkway: Olympic Parkway to Birch Road | LOS D | Not significant |

At buildout, I-805 is calculated to operate at LOS F, and SR-125 is calculated to operate at LOS C (East H Street to Telegraph Canyon Road) and LOS D (north of H Street). A significant cumulative impact is calculated on I-805 (between Bonita Road and Telegraph Canyon Road) at buildout.

## Congestion Management Program Compliance

The CMP was adopted on November 22, 1991 by SANDAG and is intended to directly link land use, transportation and air quality through Level of Service performance. Local agencies are required by statute to conform to the CMP. The CMP requires an Enhanced CEQA

Review of all large projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips. Since the project is calculated to generate over 2,400 ADT and over 200 peak hour trips, this level of review is required of the proposed project. As stated previously, the following regional arterials and greenways were analyzed to satisfy the CMP:

- East H Street
- Telegraph Canyon Road
- I-805
- SR-125

The Regional Growth Management Strategy Regional Growth Management Strategy (RGMS objective is LOS D (applies to East H Street and Telegraph Canyon Road) and the CMP LOS standard is LOS E (applies to I-805 and SR-125). The CMP LOS standard of LOS E is not met for I-805. This is considered to be a significant traffic impact. LOS D or better is maintained in the existing plus project scenarios. LOS D would not be maintained, if over 9,429 total units are built prior to construction of SR-125, or other improvements in lieu of its construction. Buildout of Village 11 under the SPA Plan would not exceed this number of units.

## 5.10.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

No new significant impacts were identified due to the proposed GDP Amendments. In addition, all street segments previously identified as having a significant impact would remain significant except for the following:

- Central Avenue between Bonita Road and Corral Canyon Road.
- Olympic Parkway between Hunte Parkway and Eastlake Vista
- Hunte Parkway between Otay Lakes Road and Eastlake Greens
- Hunte Parkway between Eastlake Trails and Olympic Parkway

Mitigation recommended in the Program EIR 90-01 for these segments is no longer necessary since LOS C or better operations are calculated.

The Otay Lakes Road/La Media Road and Otay Lakes Road/East H Street intersections were recommended to be grade separated in the 1993 adopted GDP traffic analysis. Since LOS D operations are calculated using current methodologies, grade separation is no longer required for these intersections.

Development of a high school in Village Seven, or alternatively in Village Eight, would not result in additional significant traffic impacts beyond those impacts identified in Program EIR 90-01.

## VILLAGE 11 SPA/TM

Impacts to traffic are not significant in the existing plus project traffic condition.

A near term significant cumulative impact would occur on Telegraph Canyon Road in the near future if SR-125 is not built. The impact on Telegraph Canyon Road was calculated to occur when the total number of new dwelling units in the Eastern Territories exceeded 9,429 units beginning January 1, 2000.

Significant long-term (2005 and beyond) project-specific impacts were identified on the following road segments by analysis year:

***Year 2005, Without SR-125***

| | |
|---|---|
| Olympic Parkway: | SR-125 to EastLake Parkway |
| | EastLake Parkway to Hunte Parkway |
| Otay Lakes Road: | H Street to Telegraph Canyon Road |

***Year 2005, With SR-125***

| | |
|---|---|
| Olympic Parkway: | SR-125 to EastLake Parkway |
| | EastLake Parkway to Hunte Parkway |

***Year 2010***

| | |
|---|---|
| Olympic Parkway: | EastLake Parkway to Hunte Parkway |

***Year 2015***

| | |
|---|---|
| Olympic Parkway: | EastLake Parkway to Hunte Parkway |

***Year 2020***

| | |
|---|---|
| Olympic Parkway: | EastLake Parkway to Hunte Parkway |

***Buildout***

| | |
|---|---|
| Olympic Parkway: | EastLake Parkway to Hunte Parkway |

Significant long-term cumulative impacts were identified at the following road segments by analysis year:

***Year 2005, Without SR-125***

| | |
|---|---|
| East H Street: | I-805 to Hidden Vista Dr. |
| Otay Lakes Road: | North of H Street |

***Year 2010***

| | |
|---|---|
| Otay Lakes Road: | North of H Street |
| | H Street to Telegraph Canyon Road |
| Olympic Parkway: | SR-125 to EastLake Parkway |

***Year 2015***

| | |
|---|---|
| Olympic Parkway: | SR-125 to EastLake Parkway |

***Year 2020***

| | |
|---|---|
| Olympic Parkway: | SR-125 to EastLake Parkway |

***Buildout***

| | |
|---|---|
| Otay Lakes Road: | SR-125 to EastLake Parkway |
| Olympic Parkway: | SR-125 to EastLake Parkway |

Significant cumulative impacts were identified on the following intersections by analysis year:

***Year 2005 without SR-125***

East H Street/I-805 Southbound Ramps
East H Street/ Hidden Vista Drive
Telegraph Canyon Road/I-805 Southbound Ramps
Telegraph Canyon/I-805 Northbound Ramps

Significant short- and long- term impacts were identified for I-805 between Bonita Road and Telegraph Canyon Road.

## 5.10.6 MITIGATION MEASURES

### GDP AMENDMENTS

The following mitigation measures amend the mitigation measures that apply to the Amendment Area identified in the Program EIR 90-01, based on the analysis contained in this EIR (see Appendix G):

**5.10-1** A traffic analysis shall be conducted within the study area of the proposed SPA to identify additional transportation mitigation measures for the construction of new roads, bridges and roadway improvements, and shall implement transportation demand/system management programs and/or facilities or other measures necessary to mitigate traffic impacts on circulation element roads. The standard to be achieved shall be in conformance with the City of Chula Vista's project significance criteria and GMOC criteria applicable at the time of SPA preparation.

- Arterial segment LOS measurements shall be for the average weekday peak hours, excluding seasonal and special circumstance variations.
- Urban and suburban arterials are defined as surface highways having signal spacing of less than 2 miles with average weekday traffic volumes greater than 10,000 vehicles per day.
- Arterial segments shall be stratified into three classifications - Class I, Class II, Class III.
- The LOS measurement of arterial segments and freeway ramps shall be a growth management consideration in situations where proposed developments have significant impact at interchanges.
- Circulation improvements shall be implemented prior to anticipated deterioration of LOS below established standards.

- The criteria for calculating arterial LOS and defining arterial lengths and classifications shall follow the procedures detailed in Chapter 11 of the 1985 Highway Capacity Manual (HCM) and shall be confirmed by the City or County Traffic Engineer, as appropriate.

- During the preparation of future Traffic Monitoring Program field surveys, intersections experiencing significant delays would be identified. The information generated by the field surveys would be used to determine possible signal timing changes, geometric and/or traffic operational improvements for the purpose of reducing intersection delay.

- Level of Service values for arterial segments shall be based on the Highway Capacity Manual, Special Report 209, Transportation Research Board, National Research Council, Washington, D.C. 1985.

**5.10-2** To the extent that Otay Ranch contributes to the need for a facility outside of its boundaries, the Project shall contribute (at the level at which it impacts the facility) to the mitigation of the impact by participating in impact fee programs or other means identified at the SPA or tentative map level.

**5.10-3** Applicants on the Otay Valley Parcel shall contribute their "fair share" to the capital and operating costs associated with the new transit system. This shall be done through provisions in facility financing plans at the SPA level. Further, benefit assessment districts shall be established to fund new transit routes under MTDB Board Policy No. 40 Non-Transit Funding of Transit Services. (This final requirement cannot be mandated because the Lead Agency cannot mandate MTDB to take this action; because this finding is not within the jurisdiction of the Lead Agency it should be interpreted as a mandate for the Applicant to work with MTDB).

**5.10-4** For each SPA, the Applicant shall prepare a detailed analysis of peak hour turning movement volumes and intersection capacity for all major affected intersections as determined by the traffic engineer representing the reviewing jurisdiction or agency.

**5.10-5** The Applicant shall construct as a condition of approval to the SPA, new roads, bridges and roadway improvements and shall implement transportation

demand/system management programs and/or facilities, or other measures necessary to fully mitigate traffic impacts (related to traffic impacts of the Project) per the City of Chula Vista's project significance criteria and GMOC criteria applicable at the time of SPA preparation.

**5.10-6** No more than 15,000 dwelling units or 4,000,000 square feet of commercial may be constructed within the Otay Ranch Project until funding and construction for light rail transit (LRT) is assured. Applicants in the Otay River Parcel shall contribute their "fair share" to the funding of these facilities and operating costs.

**5.10-7** The Applicant shall participate in fair share funding and implementation of the following general mitigation measures:

- Prepare Transportation Demand Management (TDM) Mitigation Strategies
- Update General Plans
- Prepare Transportation Phasing Plans
- Provide Parallel Arterial System
- Improve Mode Split
- Increase Local/Regional Trip Capture
- Regional Freeway System Mitigation - Increase Freeway Capacities
- Arterial Segment Mitigation - Increase Segment Capacities
- Arterial Intersection Mitigation - Increase Intersection Capacities
- Other Mitigation Strategies including: Implement Transportation System Management Strategies and Implement Traffic Control Strategies

**5.10-8** The following project-specific measures shall be required for individual on-site and off-site segments and intersections to mitigate significant impacts associated with the project.

***On-site Network***

- Upgrade EastLake Parkway between Orange Avenue and EUC north from 4-lane major to 6-lane major and provide special at-grade intersection design or grade separated intersection design.

- Upgrade Village Two Local between EUC north (La Media Road) and EUC north (Village Two Loop Road) from 2-lane local collector to 4-lane collector.
- Upgrade Village Three Local between Village Three Local (Village Three Loop Road) and Paseo Ranchero from 2-lane local collector to 3-lane collector.
- Upgrade Village Three Local (Village Three Loop Road) from 2-lane local collector to 3-lane collector.
- Upgrade Village Seven Local between Village Seven Collector and Village Seven Major from 2-lane local collector to 3-lane collector.
- Upgrade Village Seven Local between Village Seven Major and Village Seven Collector from 2-lane local collector to 3-lane collector.

***Off-site Network***

The Applicant shall participate in fair share funding and implementation of the following:

- Upgrade Bonita Road between Plaza Bonita Road and Willow Street by providing at-grade intersection design
- Upgrade Bonita Road between Willow Street and Otay Lakes Road by providing special at-grade intersection design
- Upgrade Bonita Road between Otay Lakes Road and Central Avenue by providing special at-grade intersection design
- Upgrade Camino Maquiladora between Otay Mesa Road and Heritage Road from 2-lane local collector to 4-lane collector.
- Upgrade Camoustie Road between Harvest Road and Domoch Court from 2-lane local collector to 3-lane collector.
- Upgrade Del Sol Road west of Paseo Ranchero from 2-lane local collector to 3-lane collector.
- Upgrade East 'H' Street between I-805 and Terra Nova Road from 6-lane prime to 8-lane prime.
- Upgrade EastLake Parkway between Palomar Street and Orange Avenue from 4-lane major to 6-lane prime and provide special at-grade intersection design
- Upgrade La Media Road between SR-905 and Airway Road from 4-lane major to 6-lane prime.

- Upgrade Oleander Avenue between Telegraph Canyon Road and Naples Avenue from 2-lane local collector to 4-lane collector.
- Upgrade Otay Lakes Road between East 'H' Street and Telegraph Canyon Road by providing special at-grade intersection design or grade separated intersection design.
- Upgrade Otay Lakes Road between SR-125 and EastLake Parkway from 6-lane prime to 7-lane prime, and by providing special at-grade intersection design or grade separated intersections.
- Upgrade Paseo del Rey between East 'H' Street and Telegraph Canyon Road from 2-lane local collector to 4-lane collector.
- Upgrade Sweetwater Road between Bonita Mesa Road and Willow Street from 4-lane collector to 6-lane major.
- Upgrade Sweetwater Road between Bonita Road and SR-54 from 4-lane collector to 4-lane major.

**5.10-9** If forecasted reductions in traffic activity resulting from village design and TDM analysis do not occur, additional mitigation described below would be required on the following segments:

- Upgrade EUC North between Village Two Local and La Media Road from a 4-lane collector to a 4-lane major, and by providing special at-grade intersection design or grade separated intersection design.
- Upgrade La Media Road between Otay Mesa Road and SR-905 from a 4-lane major to a 6-lane major and by providing special at-grade intersection design.
- Upgrade Brittania Boulevard between SR-905 and Airway road from 4-lane major to 6-lane major.
- Upgrade Millar Ranch Road between SR-94 and Proctor Valley Road from 4-lane collector to 4-lane major.
- Upgrade Otay Lakes Road between Bonita road and East 'H' Street by providing special at-grade intersection design.
- Upgrade Paseo Ranchero between Otay Valley Road and Del Sol Road by providing special at-grade intersection design.

**5.10-10** If forecasted reductions in traffic resulting from village design and TDM analysis do not occur, additional segment mitigation, beyond special at-grade intersection upgrades as identified previously would be required including:

- Bonita Road between I-805 and Plaza Bonita Road from 4-lane major to 6-lane prime.
- Bonita Road between Plaza Bonita Road and Willow Street from 4-lane major to 6-lane major.
- Bonita Road between Willow Street and Otay Lakes Road from 4-lane major to 6-lane prime.
- Bonita Road between Otay Lakes Road and Central Avenue from 4-lane major to 6-lane major.
- Bonita Road between Central Avenue and San Miguel Road from a 4-lane collector to a 4-lane major.

## VILLAGE 11 SPA/TM

### *Project Impacts*

**5.10-11** Construct Olympic Parkway from SR-125 to Hunte Parkway to six-lane Prime Arterial standards at the time the first project dwelling unit is constructed.

**5.10-12** If development exceeds 944 units without SR-125, Otay Lakes Road between H Street and Telegraph Canyon Road shall be widened to six lanes or construction of intersection improvements on Otay Lakes Road, which provides additional capacity to the satisfaction of the City Engineer.

**5.10-13** Prior to the approval of the first final map, which triggers the installation of related street improvements, developer shall enter into an agreement to construct and secure a fully activated traffic signal including interconnect wiring at the following intersections:

a) EastLake Parkway/Driveway B
b) EastLake Parkway/Birch Road
c) EastLake Parkway/Driveway F
d) Olympic Parkway/Driveway A
e) Olympic Parkway/Driveway E
f) Hunte Parkway/Driveway C
g) Hunte Parkway/Driveway D
h) Hunte Parkway/Driveway H
i) Hunte Parkway/Driveway I

Developer shall fully design the aforementioned traffic signals as part of the improvement plans for the related street. Developer shall install underground improvements, standard and luminaries in conjunction with the construction of the related street improvements. In addition, developer shall install mast arms, signal heads, and associated equipment when traffic signal warrants are met as determined by the City Engineer.

**5.10-14** All non-residential projects (with the exception of schools) shall comply with the City's GMOC standards and other applicable traffic policies and standards. The City Engineer shall review all site plans for non-residential uses, (with the exception of schools), and require a project-specific traffic study if the project has the potential for resulting in circulation impacts. Recommendations to reduce potentially significant impacts, pursuant to the GMOC standards and City traffic standards and policies, shall be incorporated into the site plan and/or required as a condition of project approval. Should the analysis determine that additional capacity is possible through improvements, such identified improvements may be subject to future environmental review.

Potential traffic impacts resulting from development and operation of the schools shall be reviewed by the respective school districts when specific projects are under consideration. Any street improvements shall be coordinated with the City and shall comply with applicable City street standards and policies. The City shall request review on all draft plans.

## *Cumulative Impacts*

**5.10-15** The General Plan shall be amended to designate Olympic Parkway from SR-125 to EastLake Parkway as an Enhanced Prime Arterial with eight lanes. The required amendment shall be adopted no later than the first General Plan Amendment considered for adoption in 2002. The applicant shall contribute a fair share towards the construction of the two additional lanes.

**5.10-16** The General Plan shall be amended to designate Otay Lakes Road from SR-125 to EastLake Parkway as an Enhanced Prime Arterial with seven-lanes (additional lane westbound). The required amendment shall be adopted no later than the first General Plan Amendment considered for adoption in 2002. The applicant shall contribute a fair share towards the construction of the additional lane.

**5.10-17** The applicant shall contribute a fair share towards the widening of Otay Lakes Road from H Street to Telegraph Canyon Road to six lanes or towards an intersection improvement, which provides additional capacity along Otay Lakes Road to the satisfaction of the City Engineer.

**5.10-18** The applicant shall contribute a fair share towards the widening of Otay Lakes Road from Bonita Road to H Street to six lanes or towards an intersection improvement, which provides additional capacity along Otay Lakes Road to the satisfaction of the City Engineer.

**5.10-19** Prior to the construction of SR-125, the City shall stop issuing new building permits for Village 11 when the City, in its sole discretion determines either:

a) Building permits for a total of 9,429 dwelling units have been issued for projects east of I-805 or,

b) An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance.

The start date for counting the 9,429 dwelling units is January 1, 2000. Notwithstanding the foregoing, the City may issue building permits if the City decides in its sole discretion that either traffic studies demonstrate, to the satisfaction of the City Engineer, that the circulation system has additional capacity without exceeding the GMOC traffic threshold standards; other improvements are constructed which provide additional necessary capacity; or the City selects an alternative method of implementing the GMOC standards. These traffic studies would not require additional environmental review under CEQA. However, any improvements proposed in these traffic studies would be subject to additional environmental review as required.

**5.10-20** Additional lanes would be required to maintain acceptable levels of service on I-805. Construction of the additional lanes on I-805 is the responsibility of Caltrans. Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG will determine mitigation strategies for the regional freeway system.

**5.10-21** The applicant shall contribute a fair share towards the future signalization of the intersection of Olympic Parkway and Wueste Road.

### *Secondary Impacts Associated with Offsite Traffic Mitigation Improvements*

The off-site traffic improvements described above for direct and cumulative traffic impacts could create secondary impacts associated with land use, biological resources, noise, and cultural resources. Although these off-site roadway improvements have not been designed or engineered, the area potentially affected by the widening is described below along with an evaluation of potential impacts.

### Otay Lakes Road: H Street to Telegraph Canyon Road

The widening of Otay Lakes Road to six lanes along this segment would increase the road width by twelve feet on both sides. This segment of Otay Lakes Road, which is approximately one mile in length, exists within an existing developed setting and is characterized by residential, commercial, and public/quasi-public uses such as an educational facility and church. The land adjacent to the roadway is largely landscaped with grass or other ornamental vegetation. No significant biological resources were identified by RECON biologists during a survey for the EastLake III Woods and Vistas Replanning Program EIR (EIR #01-01) of the improvement area, and cultural resource impacts would not be anticipated. Widening of the roadway to six-lane standards could create increased noise impacts for the existing houses with frontage on the roadway by placing the noise source closer to the homes. At the time such improvements are proposed, additional environmental review would be required to determine potential impacts and the need/feasibility of noise mitigation measures.

### Olympic Parkway: SR-125 to EastLake Parkway

Construction of this roadway segment to its current six-lane Prime arterial standard was studied in several previous environmental documents. These include both the EastLake Greens and EastLake Trails Final EIR, and the Final Mitigated Declaration for the Olympic Parkway extension. An amendment to the General Plan to designate Olympic Parkway as an eight-lane roadway on the segment between SR-125 and EastLake Parkway has not been addressed and would increase the width of the segment by 12 feet on both sides. Given the disturbed condition (agricultural) of the land on either side of the planned six-lane roadway,

impacts to biological resources would be anticipated to be minimal. Land uses along the segment are planned to be largely residential and commercial. With adequate setbacks and, if needed, screening, noise and land use impacts could create impacts to cultural/ paleontological resources and construction-related water quality and traffic impacts. At the time such improvements are designed and proposed, additional environmental review may be required to determine potential impacts and the need for specific mitigation measures.

## Otay Lakes Road: SR-125 to EastLake Parkway

Mitigation for cumulative impacts on this segment (which requires an amendment to the General Plan to designate Otay Lakes Road as a seven-lane roadway) would increase width of the road by 12 feet on the north side (westbound). The land adjacent to this segment of roadway is landscaped on both sides of the existing sidewalk. Beyond the landscaping, the potential area of impact is graded and devoid of vegetation. No significant biological resources were identified in a review by RECON biologists, and impacts to cultural resources would not be anticipated. In addition, adverse land use and noise impacts would not be expected given the approved business center uses. However, at the time such improvements are designed and proposed, additional environmental review may be required to determine potential impacts related to construction, including water quality, traffic, and impacts to paleontological resources and the need for specific mitigation measures to address these potential impacts.

## Otay Lakes Road: Bonita Road to H Street

Mitigation on this segment requires either an intersection improvement to provide additional capacity along Otay Lakes Road or widening of the road to six lanes. Widening to six lanes would increase the width by 12 feet on both sides. This segment of road is largely characterized by commercial, public/quasi-public uses (Scripps Medical Center), and residential uses, and therefore much of the adjacent land is landscaped with grass or other ornamental vegetation. No significant biological resources were identified in a review by RECON biologists and impacts to cultural resources would not be anticipated. However depending on specific design considerations for the improvement, grading to widen the roadway to this standard could create impacts to cultural/paleontological resources, construction-related water quality and traffic impacts. In addition, widening of the roadway to six lane standards could create landform alteration impacts and increased noise impacts for the existing houses with frontage on the roadway by placing the noise source closer to the

homes. At the time such improvements are proposed, additional environmental review may be required to determine potential impacts and the need for specific mitigation measures.

## Mitigation Measures for Secondary Impacts from Off-site Traffic Improvements

Application of the following program-level mitigation measures shall be implemented at the discretion of the Director of Planning and Building at the time the roadway improvements are proposed to reduce the potential significant impacts to below a level of significance. Depending on the detailed design of the off-site traffic improvements to the above-referenced segments of Olympic Parkway and Otay Lakes Road, additional environmental review may be required. The program-level mitigation measures include the following:

**5.10-21** Prior to approval of a roadway improvement project, a biological reconnaissance based on detailed grading and design plans shall be conducted to document any impacts to sensitive biological resources. Any impacts to sensitive biological habitats shall be mitigated pursuant to the mitigation ratios described in the Draft Chula Vista MSCP Subarea Plan.

**5.10-22** Prior to issuance of any grading permits for a roadway improvement, a detailed acoustical study for the affected roadway segment shall be prepared to determine the need for any noise attenuation measures for adjacent sensitive land uses.

**5.10-23** Prior to the approval of the design plans for a roadway improvement, a detailed landscaping plan shall be prepared to ensure that potential aesthetic impacts associated with any grading necessary for the improvement are mitigated.

**5.10-24** As a condition of any off-site roadway improvement approval, monitoring of any grading for the presence of cultural and paleontological resources shall be required. If such resources are encountered during grading operations, the protocol described in Section 5.6 of this EIR shall be required.

**5.10-25** As a condition of any off-site roadway improvement approval, applicable construction-related water quality mitigation measures shall be required by the City Engineer.

**5.10-26** As a condition of any off-site roadway improvement approval, preparation of a traffic control plan for delays and hazards associated with construction impacts shall be prepared and approved by the City Engineer.

**5.10-27** For the widening of Otay Lakes Road between H Street and Telegraph Canyon Road, plans prepared for the improvements shall be designed to avoid impacts to the church and the library.

## 5.10.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

With the required mitigation measures, impacts to intersections and street segments would be reduced below a level of significance. As identified in Program EIR 90-01, secondary impacts associated with offsite roadway improvements would still be significant and unmitigable at the program-level of analysis. At the time such offsite improvements are proposed, additional environmental review would be required to determine potential impacts and the need for mitigation measures.

### VILLAGE 11 SPA/TM

With the required mitigation measures, impacts to intersections and street segments would be reduced below a level of significance. Traffic impacts to I-805 remain significant and unmitigable.

# 5.11 AIR QUALITY

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to air quality for the entire Otay Ranch project area. Section 4.9.12 of the Program EIR 90-01 included an analysis of air quality impacts related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of air quality issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to air quality that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

The following air quality section also provides a summary of the *Air Quality Impact Analysis* that was prepared by Giroux & Associates (Giroux & Associates 2000) specifically for the Village 11 Project Area. The complete air quality technical report can be found as Appendix H to this document.

## 5.11.1 EXISTING CONDITIONS

### GDP AMENDMENTS AND VILLAGE 11 SPA/TM

The Program EIR 90-01 contains a description of existing regional air quality conditions in the Otay Ranch project area. The following discussion provides an update and summary of the information contained in the Program EIR 90-01. The analysis contained in the Program EIR 90-0-1 is hereby incorporated by reference. Since air quality existing conditions are discussed in a sub-regional context, this discussion applies to both the proposed GDP Amendments and the Village 11 SPA/TM.

#### *Meteorology/Climate*

Air quality can be greatly affected by the climate of the area being studied. The climate of Chula Vista, as with all of Southern California, is largely controlled by the strength and

position of the semi-permanent high pressure center over the Pacific Ocean. This high pressure center and the resultant weather patterns combine to limit the ability of the atmosphere to disperse the air pollution. Air pollution becomes trapped in the coastal zone by a temporary inversion that prevents the transport of pollutants over the inland mountains. The abundant sunshine found in Chula Vista and elsewhere in San Diego County causes a number of reactive pollutants to undergo photochemical reactions and form smog.

## *Air Quality Standards*

While emissions control programs have created a substantial improvement in regional air quality within the last several decades, clean air standards are still often exceeded in parts of the San Diego Air Basin (SDAB). The project area is close enough to the coast to benefit from cleansing ocean breezes and is distant enough from major sources of pollution to avoid areas of localized violations of clean air standards. The fact that the project area is currently undeveloped contributes to the good local air quality. Except for the occasional influx of air pollution from the Los Angeles air basin (LAAB), air quality in the project vicinity is considered acceptable.

Some air quality concern has been raised about pollutant transport from Mexico with its considerably less stringent pollution control laws. An air quality station was established on Otay Mesa in part to monitor this phenomenon. Some slight differences in ozone distribution on Otay Mesa are seen compared to Chula Vista. These differences are not so dramatic, however, as to indicate any substantial cross-border pollution transport.

Nitrogen oxides ($NO_x$) and reactive organic gases (ROG) are the two precursors to photochemical smog formation. In San Diego County, 66 percent of the ROG emitted come from mobile (cars, ships, planes, heavy equipment, etc.) sources. For $NO_x$, 87 percent comes from mobile sources. Computer modeling of smog formation has shown that all existing programs to reduce $NO_x$ and ROG would allow the San Diego Air Basin to meet the federal ozone standard by 1999 on days when there is no substantial transport of pollution from the South Coast Air Basin or other airshed. In 1999, there was not a single violation of the federal ozone standard anywhere within the entire SDAB.

The nearest air quality measurements to the project site are made in downtown Chula Vista by the San Diego County Air Pollution Control District (APCD), the agency responsible for air quality planning, monitoring and enforcement in the SDAB. A review of the last seven

years of published monitoring data from the Chula Vista (80 East J Street) air quality monitoring station reveals that progress toward cleaner air is seen in almost every pollution category. The only federal clean air standard that was exceeded throughout the 7-year monitoring period was the hourly ozone standard which was exceeded less than once per year (six violations in seven years, none since 1995, once per year is allowable under federal "attainment" guidelines). The more stringent State standards for ozone and for 10-micron diameter respirable particulate matter (PM-10) were exceeded on a somewhat higher frequency; but overall air quality in Chula Vista, as representative of the Otay Ranch area, is nonetheless very good in comparison to other areas of the SDAB.

## 5.11.2 THRESHOLDS OF SIGNIFICANCE

Based on the thresholds identified in Appendix G of the CEQA Guidelines, the proposed project would result in a significant impact to air quality if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
4. Expose sensitive receptors to substantial pollutant concentrations such as ozone or respirable particulates (PM-10); or
5. Create objectionable odors affecting a substantial number of people.

In addition, the San Diego APCD has recommended using the following thresholds *(Table 5.11-1)*, adopted from the South Coast Air Quality Management District (SCAQMD):

**TABLE 5.11-1 SCAQMD THRESHOLDS**

| | Project Construction | Project Operation |
|---|---|---|
| Carbon Monoxide | 550 pounds/day | 550 pounds/day |
| Reactive Organic Compounds | 75 pounds/day | 55 pounds/day |
| Nitrogen Oxide | 100 pounds/day | 55 pounds/day |
| Sulfur Dioxide | 150 pounds/day | 150 pounds/day |
| Particulates | 150 pounds/day | 150 pounds/day |

Source: SCAQMD

Exceedance of these thresholds, either during project construction or upon buildout and occupancy, would result in a significant air quality impact.

## 5.11.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR Findings of Fact found the following significant impacts to air quality:

- Air quality impacts would exceed the State Implementation Plan (SIP) air quality attainment regulations that were based on SANDAG Series 7 growth projections. Also Project emissions of NOx, reactive organic gases (ROG), CO, and PM-10 from vehicular and stationary sources would add to existing violations of federal and state ozone standards. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

- Short-term emissions would occur during project construction. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

### SPHERE OF INFLUENCE UPDATE EIR

The Sphere of Influence EIR concluded that the inclusion of Otay Ranch parcels into the City's sphere would not affect the analysis in the Program EIR which concluded that impacts to air quality would remain significant and unavoidable. Nevertheless, because the Sphere of Influence Update would not by itself result in physical change, there would be no significant impact.

## OTAY RANCH SPA ONE EIR

One of the amendments made to the Otay Ranch GDP to implement the SPA One Plan altered assumptions made in the air quality discussion in Otay Ranch Program EIR 90-01. The Otay Ranch GDP required for the use of solar energy systems, and the amendment now only calls for the use of solar energy systems "as practical." The SPA One EIR did not analyze what incremental effect this GDP amendment would have on air quality, either from a quantitative or a significance perspective. This amendment would not change the significance conclusion of the Program EIR, because that document concluded that despite feasible mitigation measures, impacts to air quality could not be reduced to a level below significance.

## AMENDED SPA ONE EIR

The Amended SPA One EIR and Findings of Fact found no significant impacts to air quality from the proposed GDP Amendments beyond those previously identified.

# 5.11.4 IMPACTS

## GDP AMENDMENTS

The Otay Ranch Program EIR 90-01 found that impacts to air quality would exceed the State Implementation air quality attainment regulations which were based on SANDAG growth projections. Also, project emissions of NOx, reactive organic gases (ROG), CO, and PM-10 from vehicular and stationary sources would add to existing violations of federal and state ozone standards. These impacts were found to be significant and unmitigable. Mitigation measures were adopted to reduce air quality impacts to the greatest extent practicable. Many of the air quality impacts, however, do not originate with the Otay Ranch Project and cannot be avoided by project-level mitigation.

The proposed GDP Amendments would not substantially increase the level of development allowed within the Amendment Area, nor would they substantially change the character of the uses proposed in the adopted GDP. *Section 5.10, Transportation, Circulation and Access* indicates that the total volume of traffic resulting from the amendments, as well as the traffic impacts at critical intersections and roadway segments would not substantially increase over those projected for the adopted GDP. In addition, short-term impacts related to construction

would be similar, since the type and quantity of development under the proposed GDP Amendments would not be substantially different from that proposed under the adopted GDP.

## Village 11 SPA/TM

A SPA-level air quality technical report was prepared by Giroux and Associates (Appendix H), to calculate air quality impacts directly related to the construction and buildout of the Village 11 Project Area. In order to gauge the significance of the air quality impacts associated with implementation of the proposed Village 11 SPA/TM, those impacts, together with existing background air quality levels, have been compared to the applicable ambient air quality standards.

## Construction

Construction activities would create a temporary addition of pollutants to the local airshed. These pollutants would be principally associated with site clearing, grading, excavating, and travel on unpaved roadways. Secondary project-related atmospheric impacts derive from a number of other small, growth-connected emissions sources such as temporary emissions of dusts and fumes during project construction, increased fossil-fuel combustion in power plants from project electricity requirements, evaporative emissions at gas stations or from paints, thinners or solvents used in construction and maintenance, increased air travel from area visitors, dust from tire wear and re-suspended roadway dust, etc.

*Table 5.11-2* shows maximum calculated single-quarter emissions relative to the above thresholds. Each pollutant analyzed would exceed the adopted threshold. Exceedances of the adopted thresholds represents a significant impact that would require the implementation of mitigation measures.

Small reductions in equipment exhaust emissions can be attained through regular tuneups and enhanced combustion technologies. Such emissions reductions, however, are 5-10 percent of the total NOx burden which exceeds significance thresholds by several thousand percent. More substantial emissions reductions can be achieved from grading activities using best available control measures (BACMs). While particulate emissions can perhaps be reduced by an additional 50 percent, it would still not be sufficient to reduce the "excess" emissions relative to the significance threshold to a less-than-significant level. Construction activity air quality impacts from Village 11 development, individually and cumulatively with

other Otay Ranch development, would therefore have a significant and non-mitigable air quality impact.

**TABLE 5.11-2 MAXIMUM QUARTER SHORT-TERM CONSTRUCTION EMISSIONS***
**(Tons of Emissions)**

| | ROC | NOx | CO | PM-10 |
|---|---|---|---|---|
| Building Construction | 5.84 | 5.84 | 18.67 | 6.09 |
| Grading Equipment | 1.36 | 19.37 | 6.43 | 1.94 |
| Grading Dust | ---- | ---- | ---- | 168.44 |
| **TOTALS** | **7.20** | **105.21** | **25.10** | **176.47** |
| Significance Threshold | 2.50 | 2.50 | 24.75 | 6.75 |
| Percent of Threshold | 288% | 4,208% | 101% | 2,614% |

* = SOx emissions are negligible with low sulfur diesel fuel

Source: Giroux and Associates

## *Operational Mobile Source Emissions*

The development of Village 11 would impact air quality almost exclusively through the vehicular traffic generated by project residents. Regionally, site-related travel would add to regional trip generation within the local airshed. There is a potential for the formation of micro-scale air pollution "hot spots" in the area immediately around points of congested traffic. With continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, air pollution "hot spot" potential is steadily decreasing. Standards for carbon monoxide (CO), the most typical indicator of any "hot spot" potential, have not been exceeded at any air basin monitoring station since 1990.

Locally, air quality "hot spots" (especially carbon monoxide, or "CO") would be likely to form if project implementation were to create highly congested intersections where vehicles sit idling through several traffic light cycles. With cleaner cars and declining background CO levels, major intersections must currently operate almost at LOS="F" before hot spot formation is generated. With continued vehicular emissions reductions from newer cars, future hot spot formation is even less likely than any near-term concerns.

A screening analysis was conducted for all intersections studied in the traffic analysis operating at LOS = D or worse for existing conditions, or forecast to experience such congestion in the future. Maximum one-hour CO concentrations were calculated at 25 feet from the roadway edge during p.m. rush hour conditions with worst-case meteorological conditions (strong temperature inversion and near-calm winds). The maximum one-hour background CO concentration in Chula Vista is 4 ppm. It would require a local contribution of 16 ppm if worst-case local exposures were to occur simultaneously with the maximum background in order to equal the most stringent California one-hour standard of 20 ppm. No existing or future intersections would begin to approach a local exposure that would possibly cause a "hot spot." Micro-scale air quality concerns relative to project implementation are, therefore, less than significant.

Project-related mobile source emissions for development within the Village 11 Project Area were calculated using the ARB computer model URBEMIS7G. The year 2010 was selected as the earliest feasible buildout year. The current phasing estimate is that Otay Ranch would likely be only 50 percent built out by 2010. *Table 5.11-3* summarizes the emissions calculations that show emissions would exceed established thresholds by a large percentage for ROC, CO and $NO_x$, the three principal exhaust pollutants. PM-10 is also forecast to exceed thresholds, but at a smaller level. These projected exceedances are considered significant air quality impacts. Mobile source emissions calculations were also made for buildout years of 2015 and 2020 using the URBEMIS7G model. Although future emissions are anticipated to be lower as cars become progressively cleaner, future mobile source emissions would continue to exceed the adopted significance thresholds seen in *Table 5.11-3*.

**TABLE 5.11-3 TOTAL LONG-TERM OPERATION EMISSIONS***
**(Pounds/day in 2010)**

| | ROC | NOx | CO | PM-10 |
|---|---|---|---|---|
| Mobile Sources | 135.2 | 196.5 | 1,322.8 | 181.0 |
| Stationary Sources | 1.7 | 47.2 | 9.9 | 0.9 |
| **TOTALS** | **136.9** | **243.7** | **1,332.7** | **181.9** |
| SCAQMD Threshold | 55 | 55 | 550 | 150 |
| Percent of Threshold | 249% | 443% | 242% | 121% |

SOURCE: URBEMIS7G Computer Model for mobile source emissions
Note: Stationary source emissions were estimated from the SPA One DEIR adjusted for smaller Village 11 size and only partial buildout by 2010.
* = $SO_x$ emissions are negligible for mainly passenger automobiles comprising the project-related travel fleet.

Even with a cleaner vehicle fleet for a later buildout year, thresholds would be exceeded by several hundred percent for NOx, and by 50 percent for ROG and/or CO. Mobile source emissions would remain significant and not mitigable.

### *Operational Stationary Sources*

Stationary sources comprise a very small fraction of the total project air pollution emissions burden. Energy consumption was estimated based upon a ratio of development within the Village 11 Project Area to comparable development within Otay Ranch. This estimate was based upon electrical consumption estimates and assumed that such demand would be met by fossil-fuel combustion at SDG&E power plants in the basin. With electricity deregulation, there is no longer a direct nexus between the locations of the resource generation and its subsequent consumption. As noted below, however, the energy consumption fraction is only a small part of the total project burden which is dominated by mobile source emissions. Therefore, air quality impacts related to stationary sources are not considered to be significant.

## 5.11.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 identified the following significant impacts to air quality:

- Air quality impacts would exceed the State Implementation Plan (SIP) air quality attainment regulations that were based on SANDAG Series 7 growth projections. Also Project emissions of NOx, reactive organic gases (ROG), CO, and PM-10 from vehicular and stationary sources would add to existing violations of federal and state ozone standards. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

- Short-term emissions would occur during project construction. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

The proposed amendments to the GDP would not change the conclusions of the Program EIR 90-01 related to air quality impacts.

## VILLAGE 11 SPA/TM

Short-term construction-related emissions and long-term impacts associated with mobile-source emissions would exceed the significance thresholds. Therefore, air quality impacts would be significant.

## 5.11.6 MITIGATION MEASURES

## GDP AMENDMENTS

The mitigation measures required in the Program EIR 90-01, as listed in Appendix B, would still be required by the proposed GDP Amendments. No additional mitigation measures beyond those required in the Program EIR 90-01 would be required of the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

**5.11-1** The following mitigation measures shall be requirements of construction operations:

- Minimize simultaneous operation of multiple construction equipment units.
- Use low pollutant-emitting construction equipment
- Use electrical construction equipment as practical
- Use catalytic reduction for gasoline-powered equipment
- Use injection timing retard for diesel-powered equipment
- Water the construction area twice daily to minimize fugitive dust
- Stabilize graded areas as quickly as possible to minimize fugitive dust
- Pave permanent roads as quickly as possible to minimize dust

- Apply chemical stabilizer or pave the last 100 feet of internal travel path within a construction site prior to public road entry
- Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads
- Remove any visible track-out into traveled public streets within 30 minutes of occurrence
- Wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces has occurred
- Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads.
- Cover haul trucks or maintain at least 12 inches of freeboard to reduce blowoff during hauling.
- Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 mph.

## 5.11.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 concludes that long-term impacts to air quality would be significant and not mitigable. The same conclusion is applicable to the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

Short-term construction-related emissions and long-term, mobile source air quality impacts are considered significant. Mobile emissions would have a temporary significant and unavoidable air quality impact due to emissions of $NO_x$ and PM-10. Emissions would exceed the identified significance threshold for $NO_x$ and PM-10. There are no known mitigation measures considered feasible for construction of a project of this magnitude, and air quality impacts are considered significant and unmitigable.

# 5.12 NOISE

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to noise for the entire Otay Ranch project area. Section 4.9.13 of the Program EIR 90-01 included an analysis of noise impacts related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of noise issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts related to noise that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review. In addition, a *Noise Technical Report* prepared specifically for Village 11 Project Area, prepared by Dudek & Associates, Inc. in June 2001.

## 5.12.1 EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 for the adopted GDP includes a description of the existing noise environment within the Amendment Area. The analysis and discussion of noise impacts from Program EIR 90-01 is hereby incorporated by reference. The Program EIR 90-01 described existing noise sources to be primarily generated by the four main roadways passing through or adjacent to the Otay Ranch: Telegraph Canyon Road, Otay Lakes Road, Proctor Valley Road and Otay Valley Road. Sound levels measures from 50 feet of the centerline of these roadways indicated noise levels ranging from 51 to 73 dBA, Leq (one hour average taken at the peak hour of traffic). Development that has occurred in other portions of Otay Ranch and in EastLake since the time that the Program EIR 90-01 was certified has slightly modified the existing environment for portions of the Amendment Area that are proximal to these changed areas. The following discussion provides an update and summary of regional environmental conditions for the Amendment Area. The updated discussion of existing noise conditions for Village 11 provides an adequate characterization of existing noise conditions for the Amendment Area.

## VILLAGE 11 SPA/TM

The Otay Ranch Village 11 Project Area is located south of the EastLake planned community development in the eastern portion of the City of Chula Vista. The site is located within an undeveloped portion of Otay Ranch and is surrounded by undeveloped land. The existing roadways adjacent to the site are Hunte Parkway, Olympic Parkway and Eastlake Parkway.

Presently, Otay Lakes Road is a six lane Prime arterial west of Hunte Parkway and a two-lane road just east of Hunte Parkway. Otay Lakes Road will be expanded from a four- to six-lane Prime arterial adjacent to the project site. Hunte Parkway is a four-lane street running north from its termination at Olympic Parkway. Olympic Parkway is a six-lane street north of the project which is currently under construction. Wueste Road is a two-lane road terminating at Otay Lakes Road on the eastern edge of the project. Proctor Valley Road, north of the project, is currently a gravel road which will be expanded to a Class I Collector with the development of the eastern portions of Rolling Hills Ranch.

Currently, the primary sources of noise in the project area consist of vehicular traffic on surrounding local streets, including Otay Lakes Road, Hunte Parkway, Olympic Parkway, and to a lesser extent Wueste Road and Proctor Valley Road as indicated above. Olympic Parkway and Hunte Parkway provide the primary access to the project area. The site is located within an undeveloped portion of Otay Ranch. Thus, there are no significant noise sources that currently affect the site.

### *Applicable Standards*

The City of Chula Vista has not adopted any specific numerical noise/land use compatibility levels. As a matter of policy, the City of Chula Vista employs the noise guideline levels set forth in the Noise Element of the City of San Diego Progress Guide and General Plan which identifies sound levels compatible with various land uses. All land uses are considered incompatible with noise levels in excess of 75 dB CNEL. A limit of 70 CNEL has been established for office, business and professional uses, and for churches and auditoriums. More sensitive land uses such as residences, schools, parks and libraries are considered significantly impacted by noise in excess of 65 dB CNEL. These standards are typically applied to exterior use areas adjacent to transportation noise sources such as roadways and railways. A noise exposure level of 65 dB CNEL is therefore the appropriate guideline for all land uses in the Village 11 project area. An additional standard of 50 dB CNEL is required for the interior of commercial and professional offices.

The City of Chula Vista Noise Ordinance restricts times of construction activities from 7:00 a.m. to 7:00 p.m., Monday through Saturday, and prohibits construction on Sundays and holidays. Furthermore, the noise levels from construction activities to residential receptors are not to exceed 75 dB, averaged over a 12-hour period.

Fixed source and/or operational noise is also governed by the City of Chula Vista Noise Ordinance. The applicable sound level is a function of the time of day and land use zone. Sound levels are measured at the property line of the noise source. Title 24 of the California Administrative Code requires that multi-family residences' interior noise levels, due to exterior sources, not exceed 45 dB CNEL. This is also considered a desirable noise exposure standard for single-family residences. Title 24 further specifies that if the exterior noise level exceeds 60 dB CNEL, an acoustical analysis shall demonstrate that the design would achieve the prescribed interior noise standard. Structural attenuation of noise from the exterior to interior is found in standard construction practices to be 15 dB or higher if windows are closed. With little additional noise reduction design, a noise reduction of 20 dB can be achieved. Exterior levels of up to 65 dB can therefore be accommodated before double-paned windows and other acoustical upgrades are needed to meet the 45 dB CNEL interior standard.

A noise level of 65 dB CNEL is also the threshold where noise interferes noticeably with an ability to carry on a quiet conversation. An exterior noise exposure of 65 dB is, therefore, the most common noise/land use compatibility guideline for new residential dwellings in California. Because commercial or industrial uses are not occupied on a 24-hour basis, the exterior noise exposure standard for such less sensitive land uses are generally less stringent according to the City of San Diego Noise Ordinance.

Fixed source and/or operational noise is also governed by the City of Chula Vista Noise Ordinance. The applicable sound level is a function of the time of day and land use zone. Sound levels are measured at the property line of the noise source. Title 24 of the California Administrative Code requires that multi-family and single-family residences' interior noise levels do not exceed 45 dB CNEL. According to Title 24, under standard construction practices, this regulation can be achieved if the exterior noise level exceeds 60 dB CNEL. With little additional noise reduction design, a noise reduction of 20 dB can be achieved. Exterior levels can therefore be accommodated before mitigation is needed to meet the 45 dB CNEL interior standard.

### Ambient Noise Environment

The site is located within an undeveloped portion of Otay Ranch. Thus, there are no significant noise sources, other than traffic noise, as previously discussed, that currently affect the site.

### Sensitive Receptors

Noise sensitive receptors are generally considered to be human activities or land uses that may be subject to the stress of significant interference from noise. Land uses which are associated with sensitive receptors often include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, education facilities, libraries, and CPF uses. Noise sensitive receptors may also include wildlife. Currently, there are no sensitive receptors or land uses on the project site.

## 5.12.2 THRESHOLDS OF SIGNIFICANCE

The City of Chula Vista has not adopted any specific numerical noise/land use compatibility levels to establish significance criteria. However, as a matter of policy, the City employs the noise guideline levels set forth in the Noise Element of the City of San Diego Progress Guide and General Plan (see *Table 5.12-1*).

Based on *Table 5.12-1*, the proposed project would result in a significant impact originating from noise if it would:

- Result in exterior noise levels that exceed 65 CNEL in residential areas and outdoor recreational areas and 70 CNEL in office and commercial districts;
- Result in interior noise levels that exceed 45 dB CNEL for single-family and multi-family residential homes;
- Create a substantial or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- Result in noise levels that violate the City's Noise Ordinance (Chapter 19.68.010 of the Municipal Zoning Code).

## TABLE 5.12-1. NOISE LAND USE COMPATIBILITY CHART

| Land Use | Annual Community Noise Equivalent Level in Decibels | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 50 | | 55 | | 60 | | 65 | | 70 | | 75 | |
| 1. Outdoor Amphitheater (may be suitable for certain types of music) | | | | | | | | | | | | |
| 2. Schools, Libraries | | | | | | | | | | | | |
| 3. Nature Preserves, Wildlife Preserves | | | | | | | | | | | | |
| 4. Residential — Single Family, Multi-Family, Mobile Homes, Transient Housing | | | | | | | | | | | | |
| 5. Retirement Home, Intermediate Care Facilities, Convalescent Homes | | | | | | | | | | | | |
| 6. Hospitals | | | | | | | | | | | | |
| 7. Parks, Playgrounds | | | | | | | | | | | | |
| 8. Office, Buildings, Business and Professions | | | | | | | | | | | | |
| 9. Auditoriums, Concert Halls, Indoor Arenas, Churches | | | | | | | | | | | | |
| 10. Riding Stables, Water Recreation Facilities | | | | | | | | | | | | |
| 11. Outdoor Spectator Sports, Golf Courses | | | | | | | | | | | | |
| 12. Livestock Farming, Animal Breeding | | | | | | | | | | | | |
| 13. Commercial-Retail, Shopping Centers, Restaurants, Movie Theaters | | | | | | | | | | | | |
| 14. Commercial-Wholesale, Industrial Manufacturing, Utilities | | | | | | | | | | | | |
| 15. Agriculture (except Livestock), Extractive Industry, Farming | | | | | | | | | | | | |
| 16. Cemeteries | | | | | | | | | | | | |

Compatible: The average noise level is such that indoor and outdoor activities associated with the land use may be carried out with essentially no interference from noise.

Incompatible: The average noise level is so severe that construction costs to make the indoor environment acceptable for performance of activities would probably be prohibitive. The outdoor environment would be intolerable for outdoor activities associated with the land use.

## 5.12.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR found a significant impact from noise. Noise levels in many areas of the Otay Ranch project area were projected to exceed the 60 CNEL standard for residential uses. Also, indirect roadway and construction noise were projected to exceed the 60 dBA Leq for least Bell's vireos habitat and California gnatcatcher. No feasible mitigation measures were identified to reduce the impacts to a level below significance, although mitigation measures were required.

### SPHERE OF INFLUENCE UPDATE EIR

The Sphere of Influence EIR concluded that the inclusion of Otay Ranch parcels into the City's sphere would not affect the analysis in the Program EIR that impacts from noise would remain significant and unavoidable. Nevertheless, because the Sphere of Influence Update would not by itself result in physical change, there would be no significant impact.

### OTAY RANCH SPA ONE EIR

Two of the amendments made to the Otay Ranch GDP to implement the SPA One Plan and annexation altered the assumptions and conclusions of the Otay Ranch GDP Program EIRwith regard to noise impacts.

The first amendment modified the performance standard regarding noise impacts on habitat for Least Bell's Vireo and California gnatcatcher. The effect of this amendment is discussed in Section 5.3, *Biological Resources*.

The second amendment modified the mandatory mitigation measures for the Otay Ranch GDP by increasing the allowable exterior noise within residential development from 60 CNEL to 65 CNEL.

### AMENDED SPA ONE EIR

The amended SPA One EIR found no additional noise impacts from the proposed GDP Amendments.

## 5.12.4 IMPACT ANALYSIS

### GDP AMENDMENTS

The Program EIR 90-01 identifies the primary source of noise impacts as vehicular traffic, for the portion of the project within the Amendment Area. Traffic noise is anticipated to impact sensitive receptors both on and offsite, and potentially could affect wildlife activities in areas adjacent to the preserve. Construction noise is not addressed at the GDP level of analysis. The Program EIR 90-01 requires that subsequent, site-specific noise studies be prepared to address specific localized impacts, including construction noise. This requirement would remain with the proposed GDP Amendments. No feasible measures were identified at the program-level of analysis to mitigate significant noise impacts to less than significant levels.

The proposed GDP Amendments are within the same development boundaries as the adopted GDP. The proposed GDP Amendments would not cause a decrease in the levels of service at any of the critical intersections or roadway segments analyzed (refer to *Section 5.10* of this EIR). In addition, Main Street is proposed to be discontinued through Villages Nine and 10, eliminating a major road in an area in close proximity to the Preserve. The proposed GDP Amendments would not increase noise levels, or place noise generating uses or in areas that would have the potential to result in increased noise levels to sensitive receptors or resources. Therefore, the proposed GDP Amendments would not result in any substantial increase in noise impacts, over those analyzed and addressed in the Program EIR 90-01. The mitigation measures required by the Program EIR 90-01 would be still apply to the proposed GDP Amendments and no new or additional mitigation would be required. The impacts to noise would still be considered significant and unmitigable with the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

### *Construction Noise*

Construction noise would be generated by diesel engine driven construction equipment which is commonly used for site preparation and grading. Additional noise would be generated by normal construction activities, such as the use of power saws and drills and hammers. Construction noise levels range widely as a function of the equipment used and the activity level. Earth-moving equipment may produce temporary noise levels ranging from 75 to 90 dB CNEL at a distance of 50 feet from the equipment for short periods during site preparation and grading. After site preparation, noise levels would likely average 65-75 dB CNEL at a distance of 50 feet from operating construction equipment. These impacts would be considered significant.

Construction noise sources are not strictly relatable to a noise standard because they occur only during selected times and source strength varies sharply with time. The penalty associated with noise disturbance during quiet hours and the nuisance factor accompanying such disturbance usually leads to time limits on grading activities imposed as conditions on grading permits. The hours from 7:00 a.m. to 7:00 p.m. from Monday through Saturday have been identified in the City of Chula Vista Noise Ordinance as mitigating construction activity noise impacts to the extent feasible. Limitations on construction activity is considered to mitigate short-term impacts to less than significant.

### *Traffic-Generated Noise*

The future traffic noise levels along Hunte Parkway, Olympic Parkway, and Eastlake Parkway were determined using Caltrans' SOUND32 Traffic Noise Prediction Model (Caltrans 1983) with California noise emission factors (Caltrans 1987). Input used in the noise model included future year 2020 traffic volume with vehicle speeds of 45 mph. The truck mix used was 3.0 percent medium trucks and 2.0 percent heavy trucks based on the parameters of the Caltrans model.

The primary noise source in the future would be traffic noise along Hunte Parkway, Olympic Parkway, and Eastlake Parkway. Single- and multi-family residences located adjacent to Hunte Parkway, Eastlake Parkway, and portions of Olympic Parkway would be exposed to future noise levels exceeding the City's 65 dB (CNEL) exterior noise criteria. The future year 2020 traffic volume along these roads adjacent to the project site would be approximately

42,000 ADT along Hunte Parkway, 41,000 ADT along Olympic Parkway, and 30,000 to 50,000 ADT along Eastlake Parkway (LLG 2001).

Noise modeling of future site conditions indicate that the on-site noise level would exceed a CNEL of 65 dB at lots adjacent to Hunte Parkway, Olympic Parkway, and Eastlake Parkway. The approximate distances to various future first floor exterior CNEL noise contours are depicted in *Figure 5.12-1, Future DNL Noise Contours*. The noise contours do not include the effects of intervening shielding from topography, and the proposed residences that would provide excess noise attenuation beyond the first row of homes.

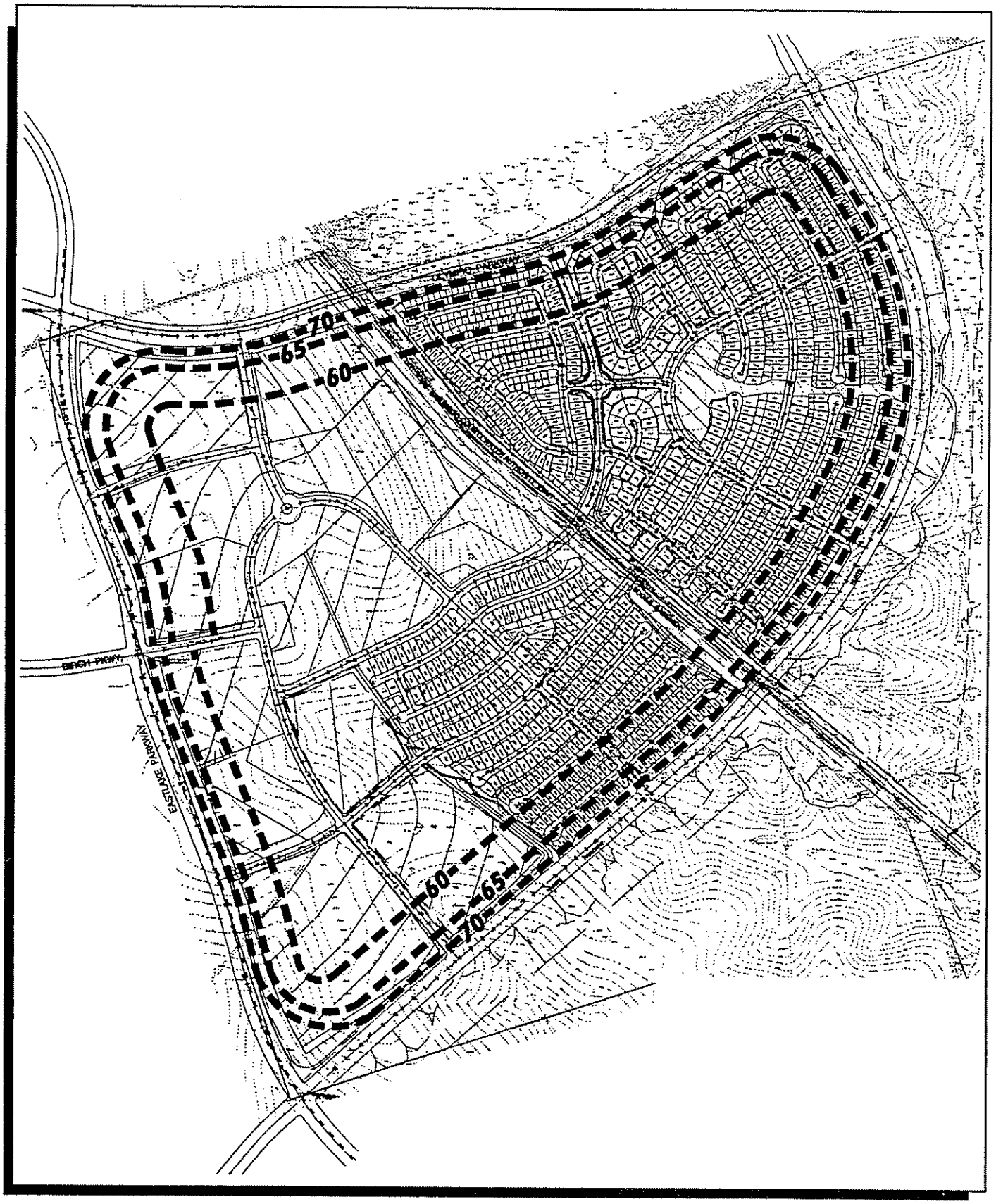
Without noise barriers, the single-family lots adjacent to Hunte Parkway would be exposed to a future CNEL greater than 65 dB. The first floor CNEL would range up to approximately 70 dB at the backyards of the closest homes adjacent to Hunte Parkway. The future noise levels along Hunte Parkway would exceed the City's noise guidelines by up to 5 dB. Unless mitigation measures are implemented, a significant noise impact would result.

The backyards of approximately eight single-family homes located adjacent to the western portion of Olympic Parkway would be exposed to a future noise levels exceeding the 65 dB DNL threshold level. The backyards of the remaining single-family lots adjacent to Olympic Parkway would be located approximately 10 to 20-feet below the elevation of Olympic Parkway. The proposed grade elevation difference, in conjunction with the proposed setback distances, would provide adequate topographic shielding along Olympic Parkway and attenuate the traffic noise at the backyards at these lots to 65 dB CNEL or less. This noise level would comply with the City's exterior CNEL noise criteria and would not be significant.

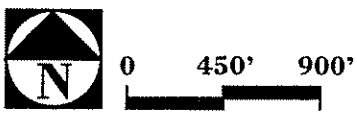
The noise level at the multi-family lots located adjacent to Hunte Parkway, Olympic Parkway, and Eastlake Parkway would exceed a CNEL of 65 dB and would be significant. Mitigation measures would be required if exterior usable space areas, such as common use recreation areas or private patios, are constructed adjacent to these roads.

## *Interior Noise Levels*

The noise guideline levels implemented by the City of Chula Vista and the State require that interior noise levels not exceed a CNEL 45 dB within multi-family units. Typically, with the windows open, and using standard California construction materials and methods, the building shells provide approximately 15 dB of noise reduction. Therefore, multi-family units exposed to an exterior CNEL greater than 60 dB could result in an interior CNEL greater than




SOURCE: Dudek (2-1-01)




**Future DNL Noise Contours**

*Figure 5.12-1*

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

45 dB. The exterior CNEL at the proposed multi-family residences adjacent to Hunte Parkway, Olympic Parkway and Eastlake Parkway would exceed 60 dB CNEL noise threshold resulting in a significant impact.

### *Commercial Noise*

The proposed project would develop commercial uses adjacent to residential uses at the village core area, as well as at a commercial lot located at the southeast corner of Eastlake Parkway and Birch Parkway. Sources of commercial noise typically include activities at loading docks and parking lots; heating/ventilation and air conditioning equipment (HVAC); maintenance activities; and additional heavy truck traffic along adjacent roads. Noise levels associated with the commercial activities would vary depending on the number of delivery trucks, loading dock areas, and customer traffic generated by the commercial sites. Similarly, HVAC equipment noise would vary depending on the number and type of equipment selected. Typical roof-top HVAC packaged units generate noise levels of approximately 70 dB at 10 feet from the source which would be considered a significant impact. Prior to approval of commercial development plans, the commercial sites would have to be designed so that noise levels would comply with the City's noise ordinance.

## 5.12.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 identified traffic noise in excess of 60 CNEL as a significant impact to residential uses and to sensitive wildlife species. No feasible mitigation measures were identified at the program-level of analysis to reduce the impacts to a less than significant level, even though mitigation was required. Subsequent amendments to the GDP increased the standard for residential noise to 65 CNEL. The proposed Amendments to the GDP would not change this conclusion.

### VILLAGE 11 SPA/TM

Potential sources of noise related to the proposed Village 11 SPA/TM include construction noise, traffic-generated noise, and commercial noise. Construction activities, especially heavy equipment, would create short-term noise increases that would exceed significance thresholds. Upon completion of construction, if left unmitigated, project-related traffic would cause a significant increase in noise levels in the Village 11 Project Area.

## 5.12.6 MITIGATION MEASURES

### GDP AMENDMENTS

The Program EIR 90-01 for the adopted GDP requires that site-specific noise studies be prepared for individual SPA Plans at subsequent stages of development. The Program EIR 90-01 also contains standards for noise mitigation for residential uses. The proposed GDP Amendments would require the same measures, and since no new significant impacts related to the proposed amendments have been identified, no additional mitigation is required.

### VILLAGE 11 SPA/TM

The mitigation measures are based on the conceptual tentative map and grading plan for Village 11 and are in compliance with the noise guideline levels implemented by the City of Chula Vista.

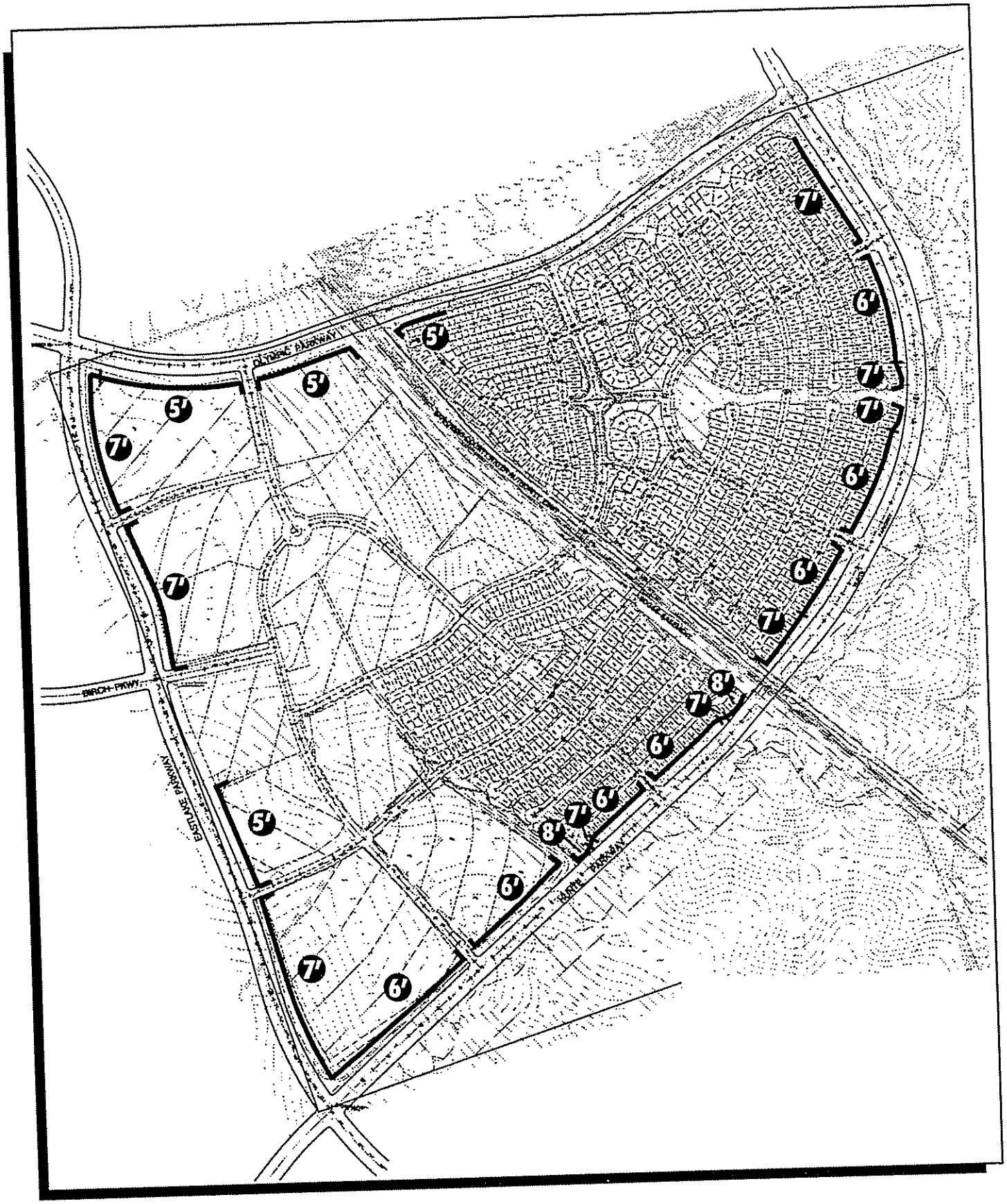
**5.12-1** Project construction shall be required to adhere to the time limitations for construction activities identified in the Chula Vista Municipal Code. Those limitations restrict construction activity to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday.

**5.12-2** Traffic Generated Noise

a) Exterior Noise

(1) Noise barriers ranging from 5 to 8 feet in height shall be shown on Improvement Plans for single-family residences located adjacent to Hunte Parkway and Olympic Parkway, and shall be installed concurrent with development. Noise barrier locations and heights are depicted in *Figure 5.12-2, Preliminary Noise Barrier Heights and Locations.*

(2) Noise barriers ranging from 6 to 7 feet in height shall be shown on Improvement Plans at the multi-family lots adjacent to Hunte Parkway, Olympic Parkway and Eastlake Parkway, if exterior usable space areas (i.e., common use areas and private patio areas) are located adjacent to these roads. Exterior noise levels at the usable space areas of single- and multi-family residences would have to be mitigated to a




SOURCE: Dudek (2-1-01)

**Preliminary Noise Barrier Heights and Locations**

*figure 5.12-2*

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

N 0 450' 900'

CNEL of 65 dB or less. The height of the noise barriers shall be reduced or eliminated through site design measures, such as incorporating setbacks, orienting the buildings to shield exterior usable space areas, or locating non-noise sensitive uses such as parking/carports adjacent to the roads. Noise barriers shall be installed concurrent with development.

(3) Noise barriers as shown on Improvement Plans where required, shall be constructed as a wall, berm, or combination of both. Construction of the barriers shall be concurrent with development of the impacted uses. The materials used in the construction of the barrier shall have a minimum surface density of 3.5 pounds per square foot. Barriers shall consist of masonry material, plexiglass, tempered glass or a combination of these materials. The barriers shall be designed so that there are no openings or cracks.

b) Interior Noise

(1) Prior to issuance of grading permits, an interior noise analysis shall be required for the project to comply with the City's interior noise standard. The acoustical analysis shall be required for the multi-family homes located adjacent to Hunte Parkway, Olympic Parkway and Eastlake Parkway to ensure that the interior noise levels would not exceed a CNEL of 45 dB.

**5.12-3** Commercial/Mixed Use

a) Prior to issuance of grading permits, an acoustical study shall be required for all commercial and mixed use development plans, to ensure that potential noise impacts are assessed and mitigation measures are incorporated into the project design. Noise abatement measures may include noise barriers, setbacks, selecting quieter equipment or limiting the hours or operation.

## 5.12.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 identifies noise impacts resulting from the project to be significant and potentially unmitigable at the program-level of analysis. Final determination of significance is to be determined at the SPA-level. The proposed Amendments to the GDP would not change this conclusion.

### VILLAGE 11 SPA/TM

Mitigation measure 5.12-1 would mitigate construction noise to less than significant levels. Mitigation measures listed under 5.12-2 would mitigate significant exterior and interior noise impacts to a level below 65 dB CNEL, and 45 dB CNEL respectively. Mitigation measure 5.12-3 would ensure that studies were conducted to identify measures to avoid significant noise impacts generated by commercial uses.

# 5.13 PUBLIC SERVICES AND UTILITIES

This section discusses the availability of public services and utilities for the proposed Amended GDP and for the Village 11 SPA Plan. The Otay Ranch GDP/SRP Program EIR analyzed the existing conditions, such as water availability and demand; wastewater and sewer service; integrated waste management; police protection; fire protection; emergency medical services; schools; library service; parks, recreation and open space; gas and electricity; health and medical facilities; social and senior service facilities; and other public services (cemeteries, child care, and animal control).

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to: water availability and demand; wastewater and sewer service; integrated waste management; police protection; fire protection; emergency medical services; schools; library service; parks, recreation and open space; gas and electricity; health and medical facilities; social and senior service facilities; and other public services (cemeteries, child care, and animal control) for the entire Otay Ranch project area. Section 4.9.14 of the Program EIR 90-01 included an analysis of public services and utilities impacts related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of public services and utilities issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to public services and utilities that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

This section is also based on a variety of public service reports which were prepared for the Village 11 SPA/TM, including the *Conceptual Master Plan for Potable and Recycled Water* (September 2000) and the *Overview of Sewer Service for Village 11* (February 2001). The public services and utilities analysis for Village 11 is based on a population figure of 3.01 persons per dwelling unit based on 1999 Department of Finance figures. Based on this figure, the 2,304 proposed dwelling units would generate a population of 6,935.

## PUBLIC FACILITIES FINANCE PLAN

A PFFP has been developed for Village 11 SPA Plan by Burkett & Wong. The PFFP is a separate document that supports the Village 11 SPA Plan. The PFFP provides the nature, sizing, extent and timing for the construction of public facilities and addition of public services which would be necessary for the development of the Village 11. The PFFP contains a Facility Threshold Analysis, Capital Financing Plan, Phasing Plan and Fiscal Impact Analysis. The requirements identified in the PFFP become conditions of approval for all subsequent SPA entitlements. The implementation of Village 11 is contingent upon the prior approval and adoption of the PFFP.

# 5.13.1 WATER

## EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 GDP provides a discussion of existing water service providers and summarizes the analysis of existing facilities from the Public Facilities Plans, which were included as appendices to the Program EIR 90-01. The proposed GDP Amendments are within the same service area as identified in the Program EIR 90-01 for the adopted GDP. No changes in service providers or service availability would be associated with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

#### Regional

The Program EIR 90-01 discusses the County's regional and local water supply system including existing regional capacities, and future planning efforts of Federal, State, and Local agencies to increase the water supply in the region. Approximately 90 percent of the San Diego region's water is imported, while 10 percent is supplied from water produced locally through a system of reservoirs and pipelines. Imported water is supplied to San Diego County by the Metropolitan Water District (MWD). The MWD's primary sources of water are the State Water Project (SWP) and the Colorado River.

#### Otay Water District

The Village 11 Project Area is located within the Otay Water District (OWD) service area. The OWD has established five pressure zones within the Otay Ranch to provide adequate water pressure to different pad locations. The OWD refers to the Village 11 Project Area as being within the Central Service Area. Potable water is provided to the Central Service Area by the San Diego County Water Authority (SDCWA) via the Second San Diego Aqueduct. Water is delivered at aqueduct connections No. 10 and No. 12, and is conveyed to the OWD's emergency/operating reservoirs at a grade of 624 feet AMSL. There are currently three 624 pressure zone reservoirs in the Central Service Area. These reservoirs are the 12.4 million gallon (mg) 624-1 Patzig Reservoir located adjacent to the Otay Ranch SPA One project, the

8.0 mg 624-2 Reservoir located in the EastLake I development, and the 30 mg 624-3 EastLake Greens Reservoir located adjacent to the EastLake Parkway. Emergency storage for the pressure zones 711 and 980 is provided in the pressure zone 624 Reservoirs. Water is then pumped to the 711 and 980 zones. The Village 11 Project Area is located in pressure zones 711 and 980.

Water service for Village 11 Project Area would be provided by the OWD. Annexation into Improvement Districts 22 and 27 would be required prior to water service being provided. The OWD has existing and planned facilities in the vicinity of the project. The existing and proposed water facilities that would service the Village 11 Project Area are shown in *Figure 5.13-1, Existing and Proposed Water Facilities*.

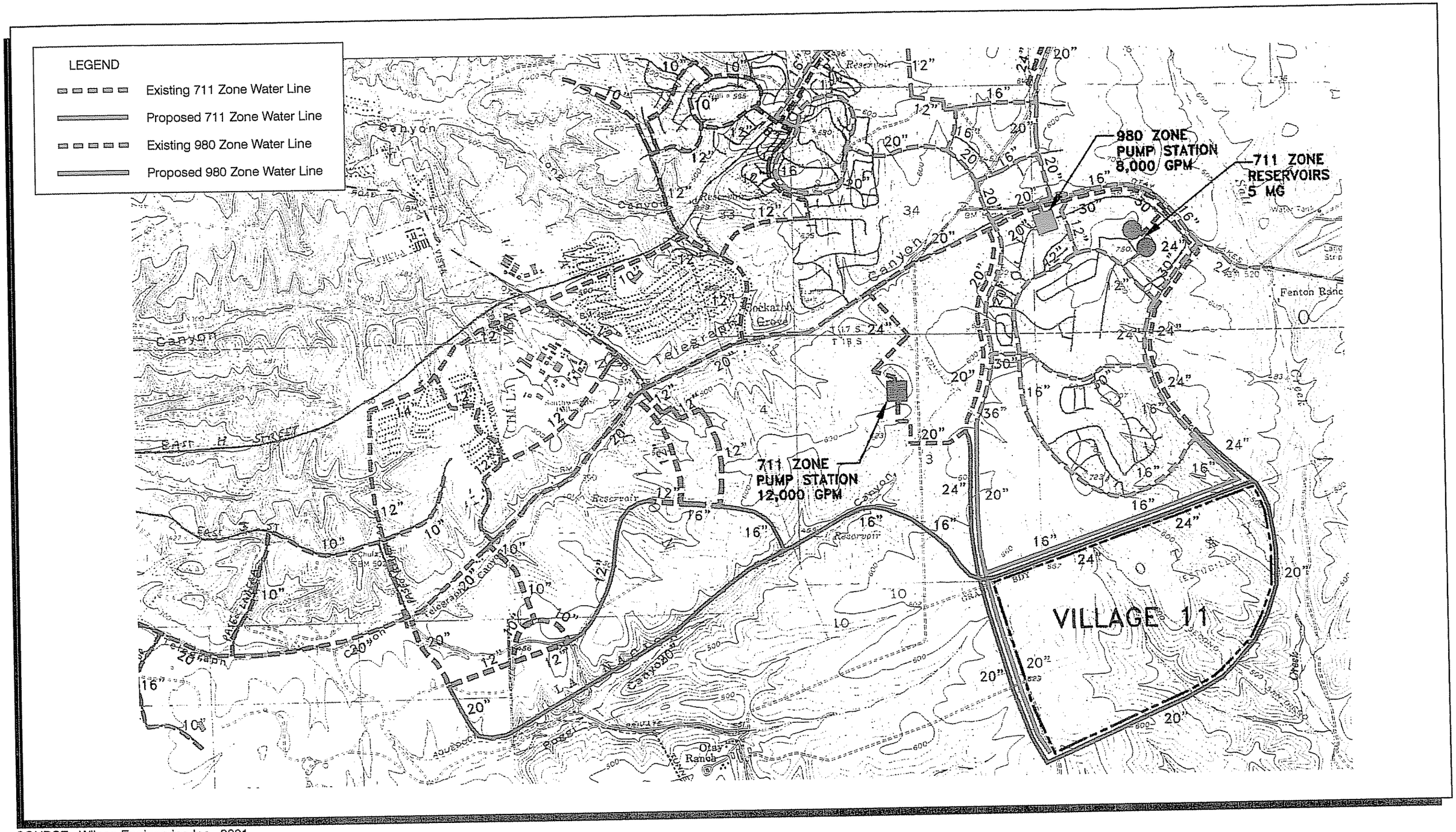
## Chula Vista

The City of Chula Vista has adopted a Growth Management Ordinance (Chapter 19.09) which imposes water service standards. These standards are established to ensure that adequate storage, treatment and transmission facilities are constructed concurrently with planned growth.

## Water Storage and Supply

The 711 Zone has two existing reservoirs located at the same site within the EastLake Greens development. The reservoirs have capacities of 2.8 and 2.2 mg for a total of 5.0 mg. There are two existing reservoirs in the 980 Zone. These reservoirs are located within the District's Use Area north of the Rolling Hills Ranch subdivision. The reservoirs have a capacity of 5 mg each for a total of 10 mg. *Table 5.13-1* presents a summary of the existing reservoir capacity in the 711 and 980 Zones.

There are currently three 624 Zone reservoirs in the Central Service Area. These reservoirs are the 12.4 mg 624-1 (Patzig) Reservoir located adjacent to the Otay Ranch SPA One project, the 8.0 mg 624-2 Reservoir located in the EastLake I development, and the 30 mg 624-3 (EastLake Greens) Reservoir located adjacent to EastLake Parkway. Emergency storage for the 711 and 980 Zones is provided in the 624 Zone Reservoirs.




SOURCE: Wilson Engineering Inc., 2001

**Existing and Proposed Water Facilities**

*Figure 5.13-1*

Otay Ranch GDP Amendments and Village 11 SPA/TM EIR

N 0 1000' 2000'

TABLE 5.13-1
EXISTING OPERATIONAL RESERVOIRS

| Reservoir Name | Capacity |
|---|---|
| **711 Zone** | |
| 711-1 (22-1) | 2.78 mg |
| 711-2 (22-1A) | 2.22 mg |
| **Total 711 Zone** | **5.00 mg** |
| **980 Zone** | |
| 980-1 (22-4) | 5.00 mg |
| 980-2 (22-5) | 5.00 mg |
| **Total 980 Zone** | **10.00 mg** |

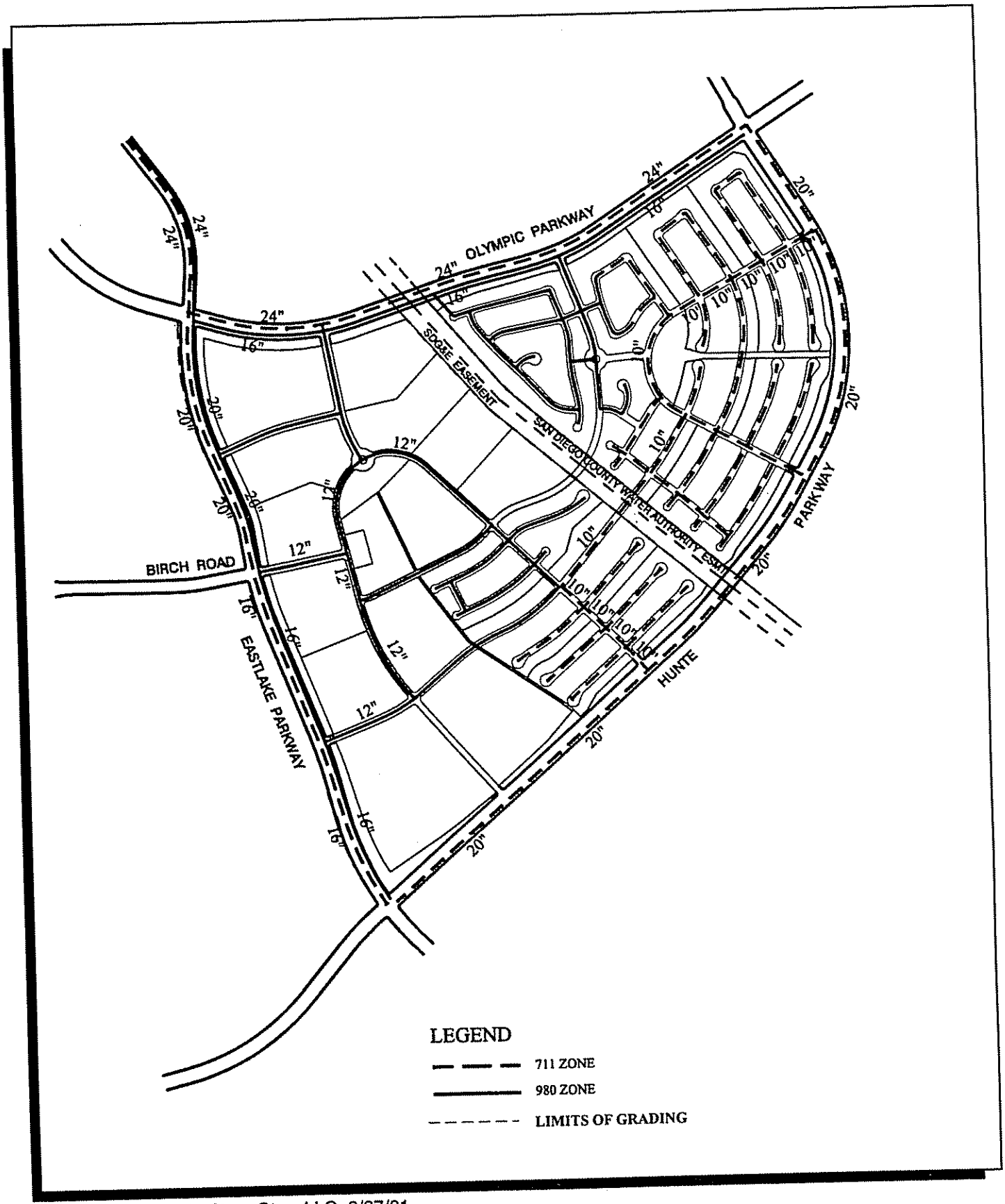
Source: Dexter Wilson Engineering

## Pipelines/Potable Water

Existing 20-inch 711 Zone transmission mains are located in Telegraph Canyon Road and Eastlake Parkway along the northern and eastern boundaries of Otay Ranch SPA One. Current development of the SPA One project would include extension of 16-inch transmission mains in La Media Road and East Palomar Street. An existing 980 Zone transmission main, ranging in size from 20 to 36 inches, is located in Eastlake Parkway (*Figure 5.13-2, Potable Water*). Future 20 to 24-inch 711 Zone pipes would be located in Eastlake Parkway, Hunte Parkway and Olympic Parkway. The proposed village core area would be served by a system of 12-inch lines in the commercial zone and 10-inch lines in residential areas.

## Pumping Facilities

The Central Area Pump Station, located at the Patzig Reservoir site, pumps water from the 624 Zone to the 711 Zone distribution system. The pump station currently has four pumps (including one standby), each rated for approximately 4,000 gpm which results in a firm capacity of 12,000 gpm. There is space for the addition of a fifth pump in the future.




SOURCE: Brookfield Shea Otay, LLC, 2/27/01

Not to Scale

**Proposed Potable Water Facilities**

*Figure 5.13-2*

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

The 980 Zone receives potable water from the EastLake Pump Station, which lifts water from the 711 Zone to the 980 Zone distribution system. This pump station is located on the south side of Otay Lakes Road at Lane Avenue and contains three 4,000 gpm pumps (including one standby) for a total capacity of 8,000 gpm.

## Recycled Water Supply

An important method of supplementing the water supply is water reclamation. Reclamation is the process of utilizing treated wastewater effluent for specific uses regulated by various agencies. The treated wastewater must meet at a minimum, secondary treatment standards as required by the federal government in the Clean Water Act of 1972 (revised in 1987) in order to be used a reclaimed water for golf courses, cemeteries, freeway or landscape medians and other areas of similar public access. The California State Health Department (Title 22) requires further treatment of the secondary effluent for irrigation of public parks, schools, and playgrounds. By utilizing reclaimed water, the demand for potable water is decreased by an equal amount. The San Diego RWQCB must approve all reclamation projects.

The OWD is the purveyor of reclaimed water for areas within the OWD's jurisdiction. Recycled water supply is currently available to the Otay Ranch area from the 1.3 million gallons per day (mgd) capacity Ralph W. Chapman Water Recycling Facility (WRF) located near the intersection of Singer Lane and Highway 94. This facility can be expanded to an ultimate capacity of 3.84 mgd. Recycled water is delivered from the WRF to two storage ponds located in the District Recycled Use Area located near the two existing 980 Zone potable water tanks. The storage ponds have a high water line of approximately 950 feet and provide the storage and supply for the 950 Zone distribution system.

A planned 2.2 mg capacity storage reservoir to be located in the EastLake Greens development is currently under design by the OWD. The reservoir, with a high water level of 680 feet, would initially receive recycled water from the 950 Recycled Zone distribution system and serve as an operational storage reservoir for a planned 680 Recycled Zone.

Supplemental recycled water supply would be available from the City of San Diego's planned 7.0 mgd capacity South Bay Water Reclamation Plan (SBWRP), to be located in the Tijuana River Valley near the Mexican border. Completion of the SBWRP is anticipated in the year 2001. Deliveries to the District would be pumped up to the planned 680 Recycled Zone reservoir. The District would have the option of pumping recycled water from the 680 Recycled reservoir to supply 950 Recycled Zone demands.

### Recycled Water Reservoirs

A 2.2 MG capacity, 680 recycled zone reservoir is currently under design by OWD. The reservoir would be located within the EastLake Greens subdivision between South Greensview Drive and the Second San Diego Aqueduct right-of-way. The reservoir would have a connection to a planned 680 Recycled Zone transmission main within the Aqueduct right-of-way. This main would tie into planned transmission mains in Telegraph Canyon Road and Olympic Parkway.

Two existing 16.3 mg capacity lined and covered ponds located within the District Use Area provide operational storage for the 980 Recycled Zone. The ponds are connected to an existing 20-inch transmission main in Lane Avenue which runs south to the existing main in Otay Lakes Road.

## THRESHOLDS OF SIGNIFICANCE

Based on Apendix G of the CEQA Guidelines, the proposed project would have significant impacts to water resources if it would:

- Encourage activities which result in the use of large amounts of water, or use of water in a wasteful manner;
- Result in substantial need for new, altered, or expanded services; or
- Result in insufficient water supplies available to serve the project from existing entitlements and resources, or if new expanded entitlements are needed.

In addition, according to City of Chula Vista threshold standards, impacts to water resources would be significant if the proposed project:

- Exceeds City of Chula Vista threshold standards to ensure that adequate supplies of quality water, appropriate for intended use, are available. The standards require the following actions:
  (1) The applicant must request and deliver to the City service availability letters from the appropriate water district for each project at the Tentative Map level.
  (2) The project applicant is required to submit a Water Conservation Plan (WCP) along with a SPA Plan application.

(3) The project plans shall ensure an adequate supply of water on a long-term basis, prior to the development of each Otay Ranch SPA.

## IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program found project-generated water requirements would result in significant impacts related to the capability of local jurisdictions to provide adequate water. No feasible mitigation measures were identified at this level of planning to reduce the impacts to a level below significance, although mitigation measures were required.

### SPHERE OF INFLUENCE UPDATE EIR

The Sphere of Influence Update EIR did not contain a discussion of water service impacts.

### OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the public service assumptions or conclusions of the Otay Ranch GDP Program EIR.

### AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the public service assumptions or conclusions of the Otay Ranch GDP Findings of Fact.

# IMPACTS

## GDP AMENDMENTS

The proposed GDP Amendments include land uses that are similar in type, quantity and intensity as those associated with the adopted GDP, with respect to the delivery of water services. No substantial change in water demand over what was previously analyzed for the adopted GDP would result from implementation of the proposed GDP Amendments since the total population increase represented by the proposed amendments is approximately 1.0%. No new impacts or increases in the intensity of previously identified impacts would result from implementation of the proposed GDP Amendments. However, impacts related to water supply would remain significant and unmitigable with the proposed GDP Amendments, at the program-level of analysis.

## VILLAGE 11 SPA/TM

Appendix J includes the "*Overview of Water Service for Otay Ranch Village 11*," dated November 2000, has been prepared for the Village 11 SPA/TM by Dexter Wilson Engineering. The study provides information regarding projected potable water demands, recycled water and infrastructure, as outlined in this section.

### Water Supply and Storage

Average annual day (AAD) water demands for the planned development were estimated through application of the way duty method as specified in the OWD's Master Plan. The method involves assigning a representative unit water demand to each land use type in the planning area. Demand projections for the project are then computed by multiplying the gross acreage planned for each land use category by the corresponding water duty (*Table 5.13-2*). Environmental impacts resulting from OWD's planned supply and storage improvements cannot be determined until the facilities are designed, and therefore any potential impacts may be significant.

Two existing 711 Zone reservoirs are located within the EastLake Greens development. Combined capacity for both reservoirs is 5.0 million gallons. Two existing 980 Zone reservoirs are located on OWD property north of the Rolling Hills Ranch project. The reservoirs have a capacity of 5.0 mg each for a total capacity of 10.0 mg.

TABLE 5.13-2
PROJECTED DAILY POTABLE WATER DEMANDS

| Land Use | Gross Area (Acre) | Units | Unit Demand (Gpd/ac) | Total Demand (Gpd) |
|---|---|---|---|---|
| SF Residential | 195.8 | 996 | 1,785 | 349,503 |
| MF Residential | 109.1 | 1,193 | 2,232 | 243,288 |
| Schools | 36.6 | _ | 2,232 | 81,690 |
| Town Square Comm./CPF | 15.5 | _ | 1,785 | 27,670 |
| Multiple Use (MU) | 10.0 | 115 | 2,232 | 22,320 |
| **TOTAL** | | | | **724,471** |

gpd = gallons per day
ac = acres
Unit Demand Factors from 1995 OWD Water Resource Master Plan
Source: Dexter Wilson Engineering

Emergency storage capacity for the proposed project would be provided by the EastLake Greens Reservoir (624-3). Based on an average annual day (AAD) demand of 1.91 mgd, the required emergency storage for the proposed project is 6.03 mg, therefore, sufficient capacity exists within the service area to meet the emergency storage needs of the project. OWD is currently processing storage capacity upgrades in Zones 711 and 980 and the district would be the lead agency for environmental review prior to the consideration of those improvements. Without provision of the proposed reservoirs, significant impacts to water pressure and flow would result.

## Pipelines

The southeastern portion of the Village 11 Project Area would be served by the 711 Zone. There are several proposed 711 Zone transmission lines surrounding the Village 11 Project Area that are included in the OWD's Capital Improvement Program (CIP). These facilities include 20-inch lines in Hunte Parkway and Eastlake Parkway and a 24-inch line in Olympic Parkway. The northwestern portion of the Village 11 Project Area would be served by the 980 Zone. This would be accomplished by making several connections to transmission lines in Eastlake Parkway and Olympic Parkway. Water pipelines and transmission facilities are planned within proposed streets adjacent to the Village 11 Project Area, or are located in existing roadways, and have been evaluated in previous environmental documents.

Therefore, impacts related to the placement of the pipelines are included in the impacts analyzed for the roadways. No significant impacts would result from construction of the pipelines themselves. Significant impacts to water delivery would result without construction of the pipelines.

## Pumping Facilities

The proposed project would be served by the 711 and 980 Zones and, therefore, would place additional demand on the existing Central Area (711) and EastLake (980) Pump Stations. Design criteria for the pump stations is based on providing sufficient capacity to convey the maximum day demands for all higher zones to which the station pumps. As shown on the following table (*Table 5.13-3*), new development, plus existing development and the proposed project, is expected to have a combined maximum day demand of approximately 12,600 gpm in the 711 Zone and 5,900 gpm in the 980 Zone. Based on these demands, existing 711 Zone pumping capacity would require expansion, either through the installation of an additional pump at the Central Area Pump Station or construction of the planned EastLake Greens Pump station. These improvements would be undertaken by the OWD and would be funded, in part, by connection fees provided by development in the Village 11 Project Area. Without provision of the required facilities, significant impacts to water delivery would result.

### TABLE 5.13.3
### SHORT-TERM PUMPING CAPACITY BALANCE

| | | Proposed Development Storage Requirements (gpm) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Zone | Existing Pumping Need[1] | Sunbow[2] | Rolling Hills Ranch[3] | Otay Ranch SPA One[4] | EastLake Trails[5] | McMillin Otay Ranch Proposed Projects | Otay Ranch Village 11 | Total Pumping Need | Existing Pumping Capacity | Pumping Capacity Deficiency |
| 711 | 2,833 | 319 | NA | 2,130 | 292 | 1,132 | 8,758 | 12,631[6] | 12,000 | 631 |
| 980 | 2,180 | NA | 1,849 | NA | 583 | 1,313 | 2,180 | 5,925 | 8,000 | NA |

[1] Per 1995 OWD Water Master Plan
[2] Sub-Area Water Master Plan for Sunbow II, John Powell & Associates, Inc. August 1997
[3] Sub-Area Master Plan of Potable and Recycled Water for Salt Creek Ranch, Dexter Wilson Engineering, April 1997
[4] Sub-Area Master Plan of Potable and Recycled Water for Otay Ranch SPA 1, Dexter Wilson Engineering, April 1998
[5] Sub-Area Master Plan for EastLake Trails and the Land Swap Areas, John Powell & Associates, September 1998
[6] Includes 980 Zone Demands

Source: Dexter Wilson Engineering

## Recycled Water Supply

The only source of recycled water for the OWD is the Ralph W. Chapman WRF. This facility has a capacity of 1.3 mgd, and can be expanded to an ultimate capacity of 3.84 mgd. Storage of the effluent is provided by two ponds in the OWD's Recycled Use Area near the two existing 980 Zone potable water tanks. Supplemental recycled water supply through Zone 680 would be available from the City of San Diego's planned 15 mgd capacity SBWRP, to be located in the Tijuana River Valley near the Mexican border. Completion of the SBWRP is anticipated by 2001.

Projected recycled water demands, based on the estimated acreage shown and the recycled water duties specified above, are shown in *Table 5.13-4*. The recycled water supply would meet projected recycled water demands. Therefore, no significant impacts to recycled water supplies are anticipated.

**TABLE 5.13-4 PROJECTED RECYCLED WATER DEMANDS**

| Land Use | Area (ac) | Percent to be Irrigated | Irrigated Area (ac) | Recycled Water Irrigation Factor, gpd/ac | Average Recycled Water Demand, gpd |
|---|---|---|---|---|---|
| Public Park | 16.7 | 100 | 16.7 | 2,232 | 37,300 |
| CPF/COMM | 15.5 | 20 | 3.1 | 2,232 | 6,900 |
| School | 36.6 | 20 | 7.32 | 2,232 | 16,300 |
| Open Space/Graded Slopes | 49.2 | 100 | 49.2 | 2,232 | 109,800 |
| **Subtotal** | **118** | | **138.12** | **1.55** | **170,300** |

*gpd = gallons per day
Source: Dexter Wilson Engineering

# LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 identified significant impacts to water service demand that were identified as significant and unmitigable. Although the population increases represented by the proposed Amendments are relatively minor (1.0%),. the proposed GDP Amendments would not change the conclusions of the Program EIR 90-01 and impacts related to water supply would still be significant and unmitigable at the program-level of analysis.

## VILLAGE 11 SPA/TM

The Village 11 SPA/TM would result in an incremental increase in water consumption and place additional demands on water storage and pumping facilities. The increase in demand for water would not have a significant impact on the ability of OWD to provide service to the Village 11 Project Area. However, the impact to water storage and pumping facilities would be significant if construction of facilities does not coincide with the anticipated growth associated with the Village 11 SPA/TM.

# MITIGATION MEASURES

## GDP AMENDMENTS

The mitigation measures required by Program EIR 90-01, that are listed in Appendix B of this EIR, would still be applicable to the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

**5.13-1** Prior to approval of the first Tentative Map, the applicant shall provide to the City a letter from the OWD stating that adequate storage, delivery and pumping facilities are available or would be available concurrent with need because an additional pump is under installation at Central Area Pump Station or the EastLake Greens Pump Station is under construction.

**5.13-2** Prior to approval of the first Tentative Map, the applicant shall provide to the City a letter from the OWD stating that adequate storage capacity exists, or would be available, concurrent with need.

**5.13-3** A complete Subarea Master Plan shall be submitted to the City for review and must be approved by OWD prior to the approval of the Tentative Map. The Master Plan shall include the design of water system infrastructure including timing and cost by phase of development and must be in compliance with the OWD Water Master Plan.

**5.13-4** Water facilities improvements shall be financed and/or installed on-site and off-site in accordance with the fees and phasing in the approved PFFP for the Village 11 SPA Plan and TM.

# LEVEL OF SIGNIFICANCE AFTER MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 identifies impacts related to water supply that are significant and not mitigated at the program-level of analysis. The proposed GDP Amendments would not change this conclusion.

## VILLAGE 11 SPA/TM

Mitigation Measures 5.13-1 through 5.13-4 would assure that adequate water supply and facilities are provided in accordance with OWD standards concurrent with need at the SPA-level, reducing impacts below the level of significance.

# 5.13.2 SEWER

## EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 provides a discussion of existing sewer service and summarizes the analysis of existing facilities from the Public Facilities Financing Plans, which were included as appendices to the Program EIR 90-01. The Program EIR 90-01 identified the Salt Creek Interceptor Sewer, Wolf Canyon Sewer and Poggi Canyon Sewer as providing sewer service to the Amendment Area. The proposed GDP Amendments are within the same service area as identified in the Program EIR 90-01. No changes in service providers or service availability would be associated with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The existing topography in the Village 11 Project Area ranges in elevation from a low of approximately 470 feet to a high of approximately 650 feet. Natural drainage on the site is generally from northwest to southeast. Nearly all of the Village 11 Project Area is located within the Salt Creek drainage basin, while the northwestern corner (approximately 391 equivalent dwelling units) is within the Poggi Canyon drainage basin. Sewer service in the Poggi Canyon drainage basin is provide by the existing Poggi Canyon Sewer. The Salt Creek drainage basin would be served by the proposed Salt Creek Interceptor Sewer, which is currently in the planning stage.

There are three existing sewer interceptors that collect and convey flow from the Otay Ranch area: the Telegraph Canyon Interceptor, located in Telegraph Canyon Road north of the proposed development; the proposed Poggi Canyon Interceptor, located in Olympic Parkway west of the proposed development; and the Main Street Trunk Sewer which ends just west of the Otay Ranch GDP boundary. These interceptors, which are owned and maintained by the City of Chula Vista, convey westerly to the San Diego Metropolitan Sewerage System (Metro), which collects and treats sewage at the Point Loma Wastewater Treatment Plant. Under the federal Clean Water Act, the City of San Diego is required to provide secondary wastewater treatment. From the Point Loma facility, treated effluent is discharged into the ocean approximately 2 miles off the coast.

Alternatives for providing new water reclamation facilities to serve the South Bay area are being considered. If a water reclamation facility is constructed in this area, the sewage flows from Otay Ranch may be redirected from the Point Loma facility to the South Bay facility.

## Sewer Basins

The three sewer interceptors that serve the Otay Ranch property follow natural drainage basins and function by gravity flow. It is a City of Chula Vista policy that gravity flow is preferable to pumping due to the added costs associated with the construction, operation and maintenance of pump stations. Pumping sewage flows from one basin to another is allowed as an interim solution until capital improvements can be completed to provide adequate capacity in the gravity flow system. Pumping may be a long term solution to sewage disposal needs in some cases where the cost of installing a gravity flow system would exceed the cost of pumping to the adjacent gravity flow basin. The following paragraphs describe the existing and proposed sewer interceptors that would serve the Village 11 Project Area.

## Poggi Canyon Interceptor

The northwest corner of the Village 11 Project Area area is within the Poggi Canyon Basin. The existing Poggi Canyon Interceptor has been extended easterly in Orange Avenue to Brandywine Avenue, approximately 5 miles west of the proposed project. Plans have been prepared for the extension of the Poggi Canyon Interceptor in Olympic Parkway to future SR-125. This line is currently connected to the Date-Faivre Trunk Sewer, but would ultimately be reconnected to Reach 9B of the Salt Creek Sewer Interceptor upon completion of Reach 9B construction. Operation of Reach 9B is anticipated in early 2002. The City of Chula Vista has estimated capacity thresholds for Poggi Canyon Sewer. These thresholds are outlined in the Department of Public Works Technical Letter Report attached in the Appendix K.

## Salt Creek Basin

The Village 11 Project Area is almost entirely within the Salt Creek Basin. The conceptual grading plan indicates that upon completion of grading, the entire development area of Village 11 would be within the Salt Creek Basin. Future development within this basin would ultimately be served by the Salt Creek Interceptor, or an alternative alignment; in either case, Village 11 cannot be fully developed without the approval of a permanent sewer facility to serve the project. Only a small segment of the upstream reaches of the proposed

Salt Creek Interceptor have been installed as part of other projects. The remainder of the proposed Salt Creek Interceptor is the subject of a detailed design study being performed for the City of Chula Vista by Dudek & Associates (February 2001). Once all environmental review is completed and the City has approved a permanent sewer facility to serve the Salt Creek Basin, including Village 11, detailed design drawings for the interceptor would be prepared.

## THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines, Appendix G, Environmental Checklist, the proposed project would have a significant sewer impact if it would:

- Exceed wastewater treatment requirements of the San Diego Regional Water Control Board;
- Exceed the City Engineering Standards;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Create a public health risk; or
- Contributes to a capacity deficiency in a regional facility.

Based on a review of sewer plans submitted to the City of Chula Vista for development projects east of I-805, City engineers have determined the maximum capacity of the existing sewer system, as well as the capacity that would be added by planned facilities. *Table 5.13-5* and *Table 5.13-6* list the maximum number of EDUs that can be added to the existing sewer system, as well the additional capacity provided by each project. These sewer capacity thresholds apply not only to Village 11, but also to all other projects in the vicinity proposing to connect to the Poggi Canyon Sewer Basin.

### TABLE 5.13-5. POGGI CANYON SEWER BASIN IMPROVEMENTS REQUIRED FOR BOTH GRAVITY AND PUMPED FLOWS

| EDUs | Improvements Required |
|---|---|
| 948 | Improvement P-1 (Completion of Salt Creek Interceptor Reach 9B - City CIP project) must be completed to proceed beyond 947 EDUs. |
| 3,770 | Improvement P-2 (Upsizing the Poggi Canyon line beneath I-805) must be completed to proceed beyond 3,769 EDUs. |

Source: City of Chula Vista

### TABLE 5.13-6 POGGI CANYON SEWER BASIN IMPROVEMENTS REQUIRED ONLY FOR PUMPED FLOWS[1]

| EDUs | Improvements Required |
|---|---|
| 1,694 | Improvement P-3 (Upsizing the Poggi Canyon line in Olympic Parkway between East Palomar and La Media) must be completed to pump beyond 1,693 EDUs. |
| 3,651 | Salt Creek Interceptor must be completed for development to pump beyond 3,650 EDUs. |

[1] - EDUs can occur from any source.
Source: City of Chula Vista, February, 2001

# IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

## OTAY RANCH PROGRAM EIR

The Program EIR Findings of Fact found that facilities to accommodate additional sewage flow and wastewater would be required to avoid significant impacts to sewer service. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

## SPHERE OF INFLUENCE UPDATE EIR

The sewer service impacts associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence were determined to be not significant because the demand was virtually indistinguishable under the City's land use designations. The incorporation of some non-Otay Ranch parcels into the City's sphere also was deemed less than significant by the Sphere of Influence EIR because the corresponding increase in demand of approximately 285,000 gallons per day (gpd) was considered in the Program EIR, and the Program EIR still concluded that impacts could be reduced to a level of insignificance because sewer service provider could meet the increased demand.

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the public service assumptions or conclusions of the Otay Ranch GDP Program EIR.

## AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the public service assumptions or conclusions of the Otay Ranch GDP Findings of Fact.

# IMPACTS

## GDP AMENDMENTS

The proposed GDP Amendments include land uses that are similar in type, quantity and intensity as those associated with the adopted GDP. No substantial change in sewage generation over what was previously analyzed for the adopted GDP would result from implementation of the proposed GDP Amendments. The proposed Amendments do not represent a substantial increase in population (1.0% increase) which would translate into a substantial increase in sewer demand. No new impacts or increases in the intensity of previously identified impacts would result from implementation of the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

The *Poggi Canyon Basin Gravity Sewer Basin* plan was prepared for the City of Chula Vista by Dexter Wilson Engineering in July 1997. The purpose of this study was to identify future developments within the Poggi Canyon gravity sewer basin. Projected flows from these developments were used to provide the recommended improvements to the existing Poggi Canyon Interceptor and provide recommended sizing for the extension of the interceptor easterly to future SR-125 to accommodate ultimate development. In the study, 391.4 EDUs from the Village 11 SPA/TM project were included.

A February 2001 *Sewer Diversion Analysis*, performed by Dexter Wilson Engineering, found that if the Salt Creek Interceptor were not constructed in time to accept sewage from Village 11, that the Poggi Canyon Interceptor could accept sewage from Village 11 on an interim basis, until such time as the Salt Creek Interceptor was completed. For planning purposes, it was assumed that no more than 500 EDUs would utilize the interim option of pumping sewage to the Poggi Canyon Interceptor. Sewage flows generated in the Poggi Canyon Basin would be conveyed to a planned extension of the Poggi Canyon Interceptor trunk sewer. The Poggi Canyon Interceptor extension would be a 15-inch diameter pipeline located in Olympic Parkway, and a downstream upgrade to an 18-inch diameter pipe. This sewer would be designed and constructed as part of the City's Olympic Parkway extension improvement project.

The Program EIR 90-01 anticipated that any sewage generated in the Salt Creek Basin, including Village 11, would flow by gravity into a sewer interceptor located in Salt Creek. In November 1994, the City of Chula Vista developed a Gravity Sewer Analysis of the Salt Creek Basin that established a Developer Impact Fee (DIF) to fund construction of the Salt Creek Interceptor. The Salt Creek Interceptor is currently under preliminary design by the City of Chula Vista. The City released a Final EIR analyzing the Salt Creek Interceptor and other alternative alignments in June 2001; that document is incorporated in this EIR by reference to cover all off-site sewer improvements within the Salt Creek Basin. Construction of a sewer facility to serve planned development in the Salt Creek Basin within Otay Ranch is slated for 2001, with the pipeline being in operation by 2003. The Salt Creek Interceptor includes three lateral connections between Village 11 and the main pipeline. These lateral connections would be placed beneath roadways within the village and would extend through the Salt Creek Open Space area, as necessary, to connect with the Salt Creek Interceptor Sewer.

The study *Overview of Sewer Service for Village 11* of the Otay Ranch Project dated March 2001 (Appendix K) has been prepared for the proposed Village 11 SPA/TM by Dexter Wilson Engineering. The study provides information on sewage requirements, recommended on site sewer facilities, and recommended off-site sewer improvements. The following discussion summarizes the findings of that study.

All proposed onsite sewer lines internal to Village 11 have been sized based on street grades and sewer alignments (*Figure 5.13-3 Proposed On-site Sewer Facilities*). The exact sizing would be verified once the pipe slopes have been verified. *Figure 5.13-3* provides recommended sewer line sizing of 8-inch and 10-inch gravity sewers.

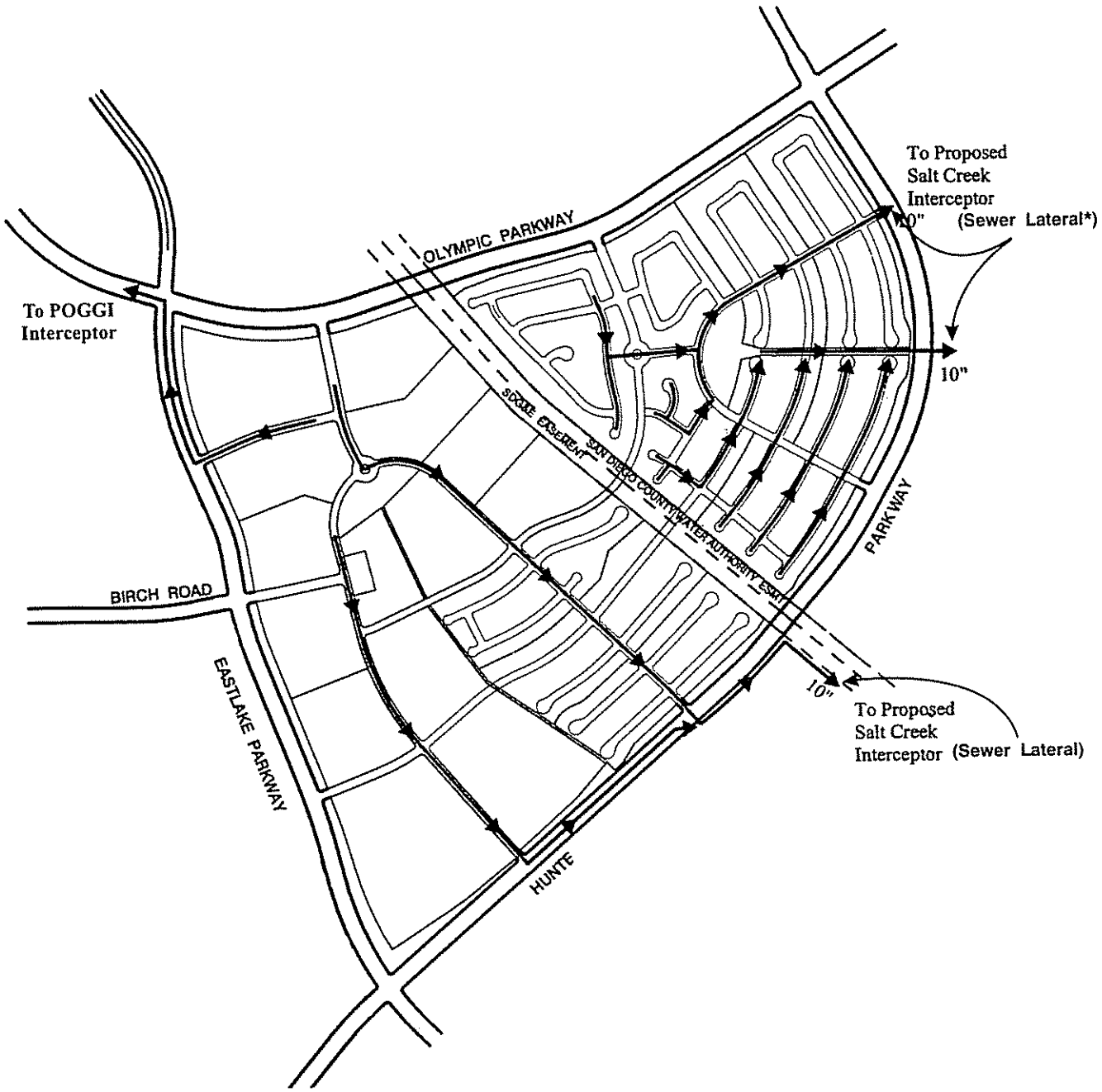
It was assumed that the planned elementary school would have approximately 800 students, and the junior high school would have approximately 1,400 students. Commercial/Industrial areas are assumed to generate 2,500 gpd/acre. Based on these assumptions, the total sewage generation for the proposed project was computed and is shown in *Table 5.13-7*.

**TABLE 5.13-7 PROJECTED SEWAGE GENERATION**

| Land Use | No. of Units | Gross Acres | Generation Rate (gpd) | Total Average Flow (gpd) |
|---|---|---|---|---|
| Single-family Residential | 996 | 195.8 | 265 /unit | 263,940 |
| Multi-family Residential | 1,308 | 109.1 | 199/unit | 260,292 |
| Elementary School | --- | 11.0 | 12,000/site | 12,000 |
| Junior High School | --- | 25.6 | 28,000/site | 28,000 |
| Community Purpose Facilities / Commercial | | 15.5 | 2,500/acre | 38,750 |
| Parks | | 16.7 | 500/acre | 8,350 |
| **Total** | | **373.7** | | **611,332** |

Source: Dexter Wilson Engineering, March 2001

Village 11 SPA/TM would require ultimate completion of the Salt Creek Sewer Interceptor to dispose of project-generated sewage. In the interim, the Poggi Canyon Interceptor would accept a pumped sewage flow from the Village 11 Project Area. The sewage generated by the proposed Village 11 SPA/TM would be treated at the Point Loma wastewater treatment facility, which has adequate capacity, to accommodate flows from Village 11. Sewage flows may ultimately be diverted to the City of San Diego's South Bay Water Reclamation Plant,




* Lateral locations and need subject to change (for the two northern laterals only) based on approval of selected option presented in the Salt Creek EIR (dated June 2001).

SOURCE: Brookfield Shea Otay, LLC, 2/27/01

**Proposed On-Site Sewer Facilities**

*Figure 5.13-3*

Not to Scale

**Otay Ranch GDP Amendments and Village 11 SPA/TM EIR**

which is currently under construction. Impacts to land use and biological resources associated with construction of the Salt Creek Interceptor are fully considered by the analysis and alternative alignment identified in the Final EIR for the Salt Creek Interceptor Sewer prepared by Dudek & Associates (June 2001).

The *Gravity Sewer Analysis for the Salt Creek Interceptor* anticipated that flows from the proposed project would be 1.34 mgd. Assuming that 90 percent of the total proposed project sewage flow would be generated in the Salt Creek Basin, the revised land use information used in this study results projected in basin flows of approximately 1.14 mgd.

If needed, two interim pump station are proposed to handle up to 500 EDUs of sewage from Village 11 during the early phases of construction. These pump stations would be located at elevations lower than the areas that they would serve, near the eastern and western project boundaries. There would not be any areas of additional disturbance, as both pump stations would be located within future development areas. Each lift station site would require the following major components: packaged pump station, standby generators, odor control system, telemetry, dual force mains and overflow storage. A diesel-driven standby generator would be provided at the lift station to provide power in the vent of an outage. The generator would have a sub-base diesel fuel tank to supply fuel for up to 24 hours of continuous generator operation. The odor control system for the stations would consist of the addition of bioxide, an odor control liquid. The station would be required to have overflow storage. The minimum volume of overflow storage is equivalent to six hours of ultimate average projected flow to the station. This storage would be accomplished by constructing a concrete structure adjacent to the wet well. Though the location of the lift station is not sited at this time, the pad to be graded would be approximately 5,000 square feet, with a minimum distance of 100 feet from any adjacent residences. The lift station shall have a fiberglass shed covering and would include noise attenuation. The footprint of the station would not exceed 500 square feet and would include landscape screening. Both pump stations would be removed upon completion of the Salt Creek Interceptor. Provision of the proposed facilities would result in less than significant impacts to sewage facilities.

The City of Chula Vista has identified three capital improvement projects needed to upgrade existing or proposed sewer facilities in the Poggi Canyon basin in order to serve the projected sewage flows associated with buildout of the Eastern Territories. These projects have been identified by the City Engineering Department as P1, P2, and P3. Project P1 consists of improvements to Reach 9B of the Poggi Canyon Interceptor. P2 consists of improvements to Reach 200 of the Poggi Canyon Interceptor where it passes under Interstate 805. P3

consists of an increase in pipe size from 15-inch diameter to 18-inch diameter within a soon to be constructed section of the Poggi Canyon Interceptor within Olympic Parkway in the vicinity of East Palomar Street. As shown in *Tables 5.13-5* and *5.13-6,* thresholds have been established on development until each capital improvement can be completed. The combination of P1 - P3 with the construction of the Salt Creek Interceptor would provide the capacity necessary to handle all projected sewage flows within the Poggi Canyon and Salt Creek sewer basins and no significant impacts to sewer facilities would result.

# LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 identified significant impacts to sewer service that were anticipated to be mitigated to less than significant levels with the provision of adequate facilities to serve development. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01.

## VILLAGE 11 SPA/TM

The Village 11 SPA Plan and Tentative Map cannot be guaranteed sufficient capacity in a sewage disposal system without the ultimate construction of the Salt Creek Interceptor, or a sewer line in an alternative location. In the interim, with the completion of Reach 9B of the Salt Creek gravity Sewer Interceptor (project P1), the Poggi Canyon Trunk Sewer could accept pumped sewage flows from the project site given the EDU thresholds discussed above.

# MITIGATION MEASURES

## GDP AMENDMENTS

The mitigation measures required in Program EIR 90-01, as listed in Appendix B, would still be required with the proposed GDP Amendments. No additional measures would be required.

## VILLAGE 11 SPA/TM

**5.13-5** Prior to recordation of any Final Maps, the City Engineer shall be satisfied that the Salt Creek Interceptor, or other acceptable alternative location, is under construction, and that the Poggi Canyon Interceptor has adequate capacity in the interim. The calculations of existing and anticipated sewage flows have determined thresholds at which three capital improvement projects must be completed. These thresholds are 947 EDUs for P1, 3,770 EDUs for P2, and 1,693 EDUs for P3. At the sole discretion of the City Engineer, the thresholds for Poggi Canyon can be amended, if determined that the additional flows, beyond what is currently allowed under these EDU thresholds, can be accommodated as evidenced by monitoring.

**5.13-6** Sewer facilities improvements shall be financed and/or installed on-site and off-site in accordance with the fees and phasing in the approved PFFP for the Village 11 SPA Plan, and shall comply with City of Chula Vista Policy No. 570-03.

# LEVEL OF SIGNIFICANCE AFTER MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 identifies impacts that are significant, but mitigated to a less than significant level with mitigation measures that would be undertaken at the SPA-level.

## VILLAGE 11 SPA/TM

Mitigation Measures 5.13-5 through 5.13-8 would reduce impacts to below the level of significance because there would be adequate capacity for sewage flows concurrent with need. The phasing of development within the Village 11 Project Area allows for early hookup with the Poggi Canyon Interceptor, while allowing time for eventual hookup with the Salt Creek Interceptor, or a sewer line in an alternative location, when completed.

# 5.13.3 INTEGRATED WASTE MANAGEMENT

## EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 provides a discussion of existing waste disposal facilities and systems and summarizes the analysis of existing facilities from the Public Facilities Plans, which were included as appendices to the Program EIR 90-01. The Program EIR 90-01 also identifies waste management and waste reduction strategies and practices to reduce waste generation. The discussion and analysis from the Program EIR is hereby incorporated by reference. The proposed GDP Amendments are within the same service area as identified in the Program EIR 90-01 for the adopted GDP. No changes in service providers or service availability would be associated with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The Integrated Waste Management Act of 1989, enacted by Assembly Bill 989 (AB 939), requires each city and county within the State of California to recycle or divert 25 percent of its current waste stream from landfills by the year 1995 and 50 percent (or as much as possible) by the year 2000. The term "integrated waste management" refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the lest adverse impact on human health and the environment. The act has established waste management prioritization as follows:

- Source Reduction
- Recycling
- Composting
- Energy Recovery
- Landfilling
- Household Hazardous Waste Management

Existing solid waste disposal facilities in the area include the Otay Landfill and several recycling facilities in proximity to the landfill. The Otay Landfill is expected to be in operation until 2028.

## THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines, Appendix G, impacts to integrated waste management would be significant if the project:

- Is served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Does not comply with federal, state, and local statutes and regulations relates to solid waste.

## IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR Findings of Fact found that project-generated solid waste would significantly impact the landfill capacity in the region. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance

### SPHERE OF INFLUENCE UPDATE EIR

The solid waste service impacts associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence were determined to be not significant because the waste generation within Otay Ranch would be indistinguishable under the City's land use designations. The incorporation of some non-Otay Ranch parcels into the City's sphere also was deemed less than significant by the Sphere of Influence EIR because the corresponding increase in waste generation of 2,508 tons per year was offset by the finding the solid waste generation for the entire area would be only slightly greater under the City's land use designations than under the County's.

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the public service assumptions or conclusions of the Otay Ranch GDP Program EIR.

## AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the public service assumptions or conclusions of the Otay Ranch GDP Findings of Fact.

# IMPACTS

## GDP AMENDMENTS

The proposed GDP Amendments include land uses that are similar in type, quantity and intensity as those associated with the adopted GDP. As identified in the Program EIR 90-01, this issue requires further study of the issue at the SPA-level of analysis. No substantial change in waste generation over what was previously analyzed for the adopted GDP would result from implementation of the proposed GDP Amendments. No new impacts or increases in the intensity of previously identified impacts would result from implementation of the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

The Village 11 Project Area would be served by the Otay Landfill. Currently the landfill has adequate capacity for potential waste generated by proposed development within the Village 11 Project Area. To further reduce solid waste impacts, the City of Chula Vista would limit solid waste that reaches the landfill by implementing a curbside recycling program. The curbside recycling program is currently run by Laidlaw Waste Systems and has been active since February of 1997. Participation in the curbside recycling program is mandatory and has helped in reaching the goal of AB 939, 50 percent solid waste reduction by the year 2000.

# LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 identified significant impacts related to landfill capacity in the region, that were anticipated to be mitigated at the SPA-level with measures identified in Appendix B. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01 and impacts would be significant at the program-level of analysis.

## VILLAGE 11 SPA/TM

Measures required by the Program EIR 90-01 have been implemented on a city-wide basis. Therefore, no significant waste impacts have been identified for the Village 11 Project Area.

# MITIGATION MEASURES

## GDP AMENDMENTS

The mitigation measures required in Program EIR 90-01 would still be applicable to the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

No additional mitigation measures are required.

# LEVEL OF MITIGATION AFTER MITIGATION

## GDP AMENDMENTS

Impacts to waste disposal would be significant and unmitigated at the program-level of analysis.

## VILLAGE 11 SPA/TM

Mitigation measures that have been applied on a city-wide basis mitigate the impacts from Village 11 to less than significant levels.

# 5.13.4 LAW ENFORCEMENT

## EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 provides a discussion of existing law enforcement services and facilities and summarizes the analysis of existing facilities from the Public Facilities Plans, which were included as appendices to the Program EIR 90-01. The proposed GDP Amendments are within the same service area as identified in the Program EIR 90-01 for the adopted GDP. Since the adoption of the GDP, the Otay Valley Parcel area of the Otay Ranch, including the Amendment Area, has been annexed to the City of Chula Vista. While the analysis in the Facilities Plans appended to the Program EIR 90-01 for the adopted GDP contemplated that law enforcement services could be provided by the City in this area, it is now certain that the Amendment Area would be serviced by the City. No changes in service availability would be associated with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The following provides a summary of police facilities and services as outlined in the PFFP.

The Chula Vista Police Department (CVPD) currently provides police protection in the City of Chula Vista. CVPD has one main police station, currently located at the Civic Center at 276 Fourth Avenue. There are approximately 213 sworn officers and 108 civilian staff for a total of 321 staff members. CVPD has approximately 59 vehicles on patrol including motorcycles. A standard response provides one officer per patrol car. Chula Vista's law enforcement work load is based on approximately 358 patrol calls per 1,000 residents west of I-805 and 268 patrol calls per 1,000 residents east of I-805.

In January 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a Development Impact Fee (DIF) to pay for various public facilities within the City of Chula Vista. The facilities are required to support future development within the City and the fee schedule has been adopted in accordance with the Government Code Section 66000. The current fee established by Ordinance is $2,618 per EDU. The ordinance applies to a variety of infrastructure include law enforcement, fire and emergency medical, and libraries. The Village 11 Project Area is subject to the public facilities DIF program. At the current fee rate, the Village 11 Project Area obligation at build-out is $735 per EDU for police services.

## THRESHOLDS OF SIGNIFICANCE

According to the City's *Growth Management Thresholds*, the proposed project would have a significant impact on police services if it would:

- Exceeds threshold standards, such as the ability to respond to Priority One emergency calls throughout the city within 7 minutes in 84 percent of the cases and the ability to maintain an average response time of 4.5 minutes or less for all Priority One calls, thereby interfering with other police protection performance objectives.

- Exceed threshold standards for Priority Two urgent calls, which require police units to respond to 62 percent of the calls within 7 minutes. An average response time of 7 minutes or less is required.

## IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR found that the Otay Ranch population would result in the need for additional staff and facilities to provide police services. Mitigation measures were identified that, if implemented at the SPA-level of review, would reduce the impacts to a level below significance.

### SPHERE OF INFLUENCE UPDATE EIR

The law enforcement service impacts associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence were determined to be not significant because the mitigation measures adopted by the Program EIR would mitigate these impacts below the level of significance. This finding was based in part on the fact that Chula Vista service levels "would be assured through compliance with the City's Quality of Life Threshold/Growth Management Program."

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the public service assumptions or conclusions of the Otay Ranch GDP Program EIR.

## AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the public service assumptions or conclusions of the Otay Ranch GDP Findings of Fact.

# IMPACTS

## GDP AMENDMENTS

The proposed GDP Amendments include land uses that are similar in type, quantity and intensity as those associated with the adopted GDP. No substantial change in law enforcement demand over what was previously analyzed for the adopted GDP would result from implementation of the proposed GDP Amendments. Impacts to law enforcement staff and facilities associated with the proposed GDP Amendments would, therefore, remain significant and unmitigable. No new impacts or increases in the intensity of previously identified impacts would result from implementation of the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

The PFFP identifies the need for police facilities and staff, as well as the timing of their implementation. The PFFP relies on past evaluations such as the *Report on Police Threshold Performance 1990-1999* (April 13, 2000) and *A Master Plan for the Chula Vista Civic Center Solving City Space Needs Through Year 2010* (May 8, 1989). In order to identify facility and equipment demand, a field patrol staffing model was used to determine staffing requirements. Development of the proposed project would require eight (8) law enforcement officers needed to serve this portion of the Otay Ranch.

# LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

## GDP AMENDMENTS

As concluded in the Program EIR 90-01, impacts to law enforcement staff and facilities associated with the proposed GDP Amendments would, remain significant and unmitigable.

## VILLAGE 11 SPA/TM

Development of the proposed project would result in potentially significant impacts to law enforcement services if additional personnel and facilities are not provided to sufficiently handle the increased demand. Implementation of the PFFP would reduce potential impacts to law enforcement to less than significant levels.

# MITIGATION MEASURES

## GDP AMENDMENTS

The mitigation measures required in Program EIR 90-01 would still be applicable to the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

**5.13-8** Police facilities and services shall be financed and/or provided in accordance with the fees and phasing in the approved PFFP for the Village 11 SPA Plan.

# LEVEL OF SIGNIFICANCE AFTER MITIGATION

## GDP AMENDMENTS

The proposed GDP Amendments would not change the conclusion of the Program EIR 90-01, that significant impacts to law enforcement staff and facilities would result and would not be mitigated at the program-level of analysis.

## VILLAGE 11 SPA/TM

Mitigation measure 5.13-8 would reduce the impacts to a level below the level of significant because the addition of personnel and facilities concurrent with need would allow the law enforcement agency to sufficiently handle increases in demand.

# 5.13.5 FIRE PROTECTION

## EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 for the adopted GDP provides a discussion of existing fire protection services and facilities and summarizes the analysis of existing facilities from the Public Facilities Plans, which were included as appendices to the Program EIR 90-01. The proposed GDP Amendments are within the same service area as identified in the Program EIR 90-01 for the adopted GDP. Since the adoption of the GDP, the Otay Valley Parcel of the Otay Ranch, which includes the Amendment Area, has been annexed to the City of Chula Vista. While the analysis in the Facilities Plans appended to the Program EIR 90-01 for the adopted GDP contemplated that fire protection services could be provided by the City in this area, it is now certain that the Amendment area would be serviced by the City, as discussed and analyzed in the Sphere of Influence EIR for Otay Ranch. No changes in service availability would be associated with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The Chula Vista Fire Department (CVFD) provides fire protection services for the Otay Ranch, including the Village 11 Project Area. The existing CVFD fire station network consists of six Chula Vista based stations. The CVFD currently employs 85 people, including firefighters and administrative staff. The Fire Station Master Plan for the City of Chula Vista proposes nine fire stations at buildout. Station No. 4 is being completed at Rancho Del Rey. Another station is planned to be located in Village Two (Station No. 7) and Interim Fire Station No. 6, located at 975 Lane Avenue, would also serve the Village 11 Project Area.

The nearest station to the Village 11 Project Area project would be Fire Station No. 3, which is located at 1410 Brandywine Avenue, in the Sunbow development. This station would provide first-in coverage to the project area until Planned Fire Station No. 7, to be located in Village Two, is completed. In the future, however, once Hunte Parkway is completed, Planned Fire Station No. 6 would be the station to provide first-in coverage to Village 11.

Emergency medical services to the Village 11 Project Area are currently provided by American Medical Response, which provides contract emergency medical services for the City of Chula

Vista. There are two American Medical Response units which provide paramedic with EMT services to the City of Chula Vista exclusively.

In January 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a DIF to pay for various public facilities within the City of Chula Vista. The facilities are required to support future development within the City and the fee schedule has been adopted in accordance with Government Code Section 66000. The proposed project would be subject to the payment of the fee at the rate in effect at the time building permits are issued.

## THRESHOLDS OF SIGNIFICANCE

The proposed project would have a significant impact on fire services if it would reduce the ability to respond to calls throughout the Otay Ranch community within seven minutes in 85 percent of the cases.

## IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR 90-01 found that the Otay Ranch population would result in the need for additional staff and facilities to provide fire services. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

## SPHERE OF INFLUENCE UPDATE EIR

The fire protection service impacts associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence were determined to be not significant because the mitigation measures adopted by the Program EIR would mitigate these impacts below the level of significance. This finding was based in part on the fact that Chula Vista service levels "would be assured through compliance with the City's Quality of Life Threshold/Growth

Management Program," and based on the acknowledgment that two additional fire stations would be needed to serve the Otay Ranch area. Still, no new mitigation measures were imposed in the Sphere of Influence EIR, since the Sphere of Influence Study "did not itself result in physical change and so would not result in significant fire protection impacts."

### OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the public service assumptions or conclusions of the Otay Ranch GDP Program EIR.

### AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the public service assumptions or conclusions of the Otay Ranch GDP Findings of Fact.

## IMPACTS

### GDP AMENDMENTS

The proposed GDP Amendments include land uses that are similar in type, quantity and intensity as those associated with the adopted GDP, with respect to fire protection services and facilities. No substantial change in fire protection demand over what was previously analyzed for the adopted GDP would result from implementation of the proposed GDP Amendments. No new impacts or increases in the intensity of previously identified impacts would result from implementation of the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The additional demand created by the Village 11 SPA/TM would have an adverse effect on response times due to the geographical separation between the project area and the nearest fire station. The demand for fire services would increase because the land use is changing from vacant land to commercial, residential, school, park and CPF. The ability to respond to Otay Ranch urban community calls within 7-minutes in 85 percent of the cases would not be possible from the existing fire stations. The Otay Ranch GDP/SRP plans for the location of fire stations in Otay Ranch Villages Two and Nine of the Otay Valley Parcel and within

Village 13 of Proctor Valley. These villages are all undeveloped at this time. Station #7 within Village Two is expected to be constructed and operational by July 2003. Without the provision of adequate fire facilities and staffing, significant impacts to fire service would result from implementation of the Village 11 SPA/TM.

The Village 11 Project Area occurs adjacent to wildlands in the Salt Creek Open Space. However, residential development proposed within Village 11 would be separated from the native vegetation within Salt Creek by the 75-foot landscape buffer and 104 to 128-foot right-of-way of Hunte Parkway. This separation provides adequate protection from fire in the natural open space area. Therefore, no significant impacts related to hazards from wildland fires would result from the implementation of the Village 11 SPA/TM.

## LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 identified significant impacts related to provision of fire protection services related to potential deficiencies in staff and facilities. Mitigation measures to be implemented at the SPA-level were anticipated to reduce impacts to less than significant levels. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01.

### VILLAGE 11 SPA/TM

Lack of adequate fire protection facilities, staffing and planning concurrent with need would have a potentially significant fire protection impact.

## MITIGATION MEASURES

### GDP AMENDMENTS

The mitigation measures required in Program EIR 90-01 (Appendix B) would still be applicable to the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

**5.13-7** Fire service facilities shall be financed, and/or provided in accordance with the fees and phasing in the approved PFFP for the Village 11 SPA Plan.

**5.13-8** The City shall continue to monitor Fire Department responses to emergency fire and medical calls and report the results to the Growth Management Oversight Committee (GMOC) on an annual basis.

# LEVEL OF SIGNIFICANCE AFTER MITIGATION

## GDP AMENDMENTS

The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01, that impacts to five service staff and facilities would be significant and unmitigable at the program-level of analysis.

## VILLAGE 11 SPA/TM

Mitigation Measures 5.13-7 through 5.13-8 would reduce the fire service and hazard impacts to below the level of significance. The addition of facilities and staff concurrent with need would allow the fire department to sufficiently handle increases in demand.

# 5.13.6 SCHOOLS

## EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 provides a discussion of existing school service areas. The GDP Amendment Area is within the Chula Vista Elementary School District and the Sweetwater High School District. The service areas for the school districts have not changed since the adoption of the GDP. The Program EIR 90-01 summarizes the analysis of existing school facilities from the Public Facilities Plans, which were included as appendices to the Program EIR 90-01. The proposed GDP Amendments are within the same service area as identified in the Program EIR 90-01. No changes in service providers would be associated with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The Village 11 SPA Plan is located within the jurisdictions of the Chula Vista Elementary School District and the Sweetwater Union High School District. Capacity as defined by the State of California is 33 students per kindergarten classroom, 32 students per first through third grade classroom, and the 1969 statewide student average of 29.9. A student generation factor for the school districts serving this project are provided (*Table 5.13-8*).

**TABLE 5.13-8**
**STUDENT GENERATION RATES**

| District | K-6 | 7-8 | 9-12 | Total |
|---|---|---|---|---|
| Chula Vista | .335 | | | .335[1] |
| Sweetwater | | .11 | .21 | .32[1] |

[1] Same for Single- and Multi-family

Source: Burkett and Wong, May 2001

## THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidleines Environmental Checklist, Appendix G and the Otay Ranch GDP, the proposed project would have significant impacts on educational facilities if it would:

- Result in a residential population that would exceed the current school facility capacity, requiring the construction of new facilities; or
- Results in the need for new, altered, or expanded school services.

## IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR Findings of Fact found that the Otay Ranch student population would generate the need for additional schools. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

### SPHERE OF INFLUENCE UPDATE EIR

The schools impacts associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence were determined to be not significant because the mitigation measures adopted by the Program EIR would mitigate these impacts below the level of significance. This finding was based in part on the acknowledgment that the need for additional schools to serve the Otay Ranch area would be more fully analyzed at the time of annexation. No new mitigation measures were imposed in the Sphere of Influence EIR, since the Sphere of Influence Study "did not itself result in physical change and so would not result in significant school impacts."

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the public service assumptions or conclusions of the Otay Ranch GDP Program EIR.

## AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the public service assumptions or conclusions of the Otay Ranch GDP Findings of Fact.

# IMPACTS

## GDP AMENDMENTS

The proposed GDP Amendments would result in a net increase of 236 residential units over what was approved in the existing GDP. Applying the student generation factors used in the Program EIR 90-01, the additional units would equate to an increase of a total of 140 new students, including: 60 K-5$^{th}$ grade students; 10 6$^{th}$ grade students; 24 7-8$^{th}$ grade students; and 45 9-12$^{th}$ grade students. The proposed GDP Amendments replace the site designated for a high school in Village 11 with a middle school site, that was originally proposed for Village Ten, and relocate the high school site from Village 11 to Village Seven, or to the alternative location within Village Eight. The additional school site acreage and rearrangement of school locations is anticipated to be consistent with intent of the adopted GDP, to provide land that would be exclusively available for school facilities. The adopted GDP requires that school issues be studied further at the SPA-level of development. That requirement would remain under the proposed GDP Amendments.

Since the adoption of the GDP and certification of the Program EIR 90-01, legislation has been passed limiting the City's ability to require school mitigation beyond the required mitigation fees. The intent of the GDP was to provide a land use designations of appropriate size and locations to allow for school facilities to be provided to serve development. The school districts are ultimately responsible for providing facilities. Based on the City's analysis of land use, phasing and population projections, it is anticipated that provision of the high school site in Village Seven or alternatively in Village Eight would provide adequate

opportunities for facilities to be constructed as demand is generated, consistent with the policies of the adopted GDP. The proposed relocation of the high school site from Village 11 to Village Seven is consistent with recent discussions between the city and the Sweetwater Union High School District to accommodate the needs and timing considerations of the District.

## VILLAGE 11 SPA/TM

Otay Ranch Program EIR 90-01 identified significant impacts to school services with the implementation of the Otay Ranch General Development Plan. Mitigation measures adopted in the Program EIR 90-01 required that a master plan for the provision of school facilities be prepared at the SPA-level, the general locations of proposed school facilities be identified, the funding and phasing of all proposed facilities be identified, and a PFFP be prepared. These components have been addressed in the proposed SPA Plans and the PFFP.

The maximum allowed dwelling units to be constructed under the proposed Village 11 SPA Plan is 2,304. A forecast of the students estimated to be generated by the proposed project upon buildout was developed based on the current student generation factors used by each of the school districts. This forecast considered the number of new housing units proposed within the service boundaries of each school district.

According to the Chula Vista Elementary School District and Sweetwater Union High School District student generation rates, the buildout of Village 11 SPA Plan would create the need to house approximately 772 Elementary students, 253 middle school students and 484 high school students.

Presently, EastLake High School is approximately 189 students below of capacity (*Table 5.13-9*). Prior to construction of the proposed high school in Village Two, EastLake High School would be able to absorb Village 11 high school students. By 2002, a new high school would be built in Village Two before the first phase of Village 11 is constructed. The high school development site is scheduled construction in the SPA Plan for the Third Western Phase and has already been graded. Additionally, another high school site is proposed for Village Seven, or alternatively for Village Eight. It is anticipated that the planned high schools within the Otay Ranch would be able to accommodate the approximate 484 high school students generated by Village 11 SPA.

The anticipated high school student generation within Village 11 would be accommodated

with the construction of the new high school in Village Two and the remaining capacity available at EastLake High School.

TABLE 5.13-9
HIGH SCHOOLS SERVICING THE PROJECT AREA

| School | Grade | 1999-2000 Enrollment | 1999--2000 Capacity | Remaining Capacity |
|---|---|---|---|---|
| EastLake High School | 9-12 | 2,424 | 2,235 | 189 |

Source: Bukett and Wong, May 2001

# LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 identified significant impacts related to school services that required more specific study at subsequent SPA-level planning stages. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01, and would be consistent with the policies of the adopted GDP related to the siting of school facilities.

## VILLAGE 11 SPA/TM

A potentially significant impact related to inadequate facilities for new student demands could result without the construction of new school facilities in Otay Ranch. EastLake High can accommodate Village 11 students initially, however, another high school must be built in Otay Ranch to avoid significant cumulative impacts for the future. The additional site within Otay Ranch has been identified in the proposed GDP Amendments to be within Village Seven, or alternatively within Village Eight.

# MITIGATION MEASURES

## GDP AMENDMENTS

No new impacts to school services would result from implementation of the GDP Amendments, therefore, no mitigation is required.

- Prior to approval of the first SPA Plan in Phase 3, the location of the high school site proposed for Village Seven or alternatively within Village Eight Nine shall be re-evaluated, to determine the appropriate location for the site. and if found to be necessary in Phase 3, included in one of the Villages in Phase 3.

## VILLAGE 11 SPA/TM

**5.13-9** The applicant shall pay all required school mitigation fees.

# LEVEL OF SIGNIFICANCE AFTER MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 identifies impacts that are significant, but mitigated to a less than significant level with mitigation measures that would be undertaken at the SPA-level. The proposed GDP Amendments would provide the designation of school sites consistent with the policies of the adopted GDP, and therefore no significant impacts to school facilities would result from the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

Mitigation measure 5.13-9 would reduce the impact to below a level of significant because the construction of new school facilities would accommodate increases in the student population.

# 5.13.7 LIBRARY SERVICE

## EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 for the adopted GDP provides a discussion of existing library services and facilities and summarizes the analysis of existing facilities from the Public Facilities Plans, which were included as appendices to the Program EIR 90-01. The proposed GDP Amendments are within the same service area as identified in the Program EIR 90-01 for the adopted GDP. Since the adoption of the GDP, the Otay Valley Parcel of the Otay Ranch, including the Amendment Area, has been annexed to the City of Chula Vista. While the analysis in the Facilities Plans appended to the Program EIR 90-01 for the adopted GDP contemplated that library services could be provided by the City in this area, it is now certain that the Amendment Area would be serviced by the City. No changes in service availability would be associated with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The City of Chula Vista currently provides library and media services for the Otay Ranch area. The City of Chula Vista currently has four library facilities. The main library, the Chula Vista Public Library, is located at 365 F Street and is a two-story, 55,000-square foot facility with circulation of over one million books per year. The library's collection has 220,000 books and other materials as well as a 152-seat auditorium space and two conference rooms. This library is a multi-use facility and provides auditorium space and limited exhibition space. A branch library, Castle Park/Otay, is located at 1592 Third Avenue. This facility has 1,720 square feet of leased space and has a collection of 14,000 books. A second branch library facility is a 508-square-foot room in the Woodlawn Park Community Center at 115 Spruce Street. The city recently built a 35,000-square foot facility at 4$^{th}$ and Orange Avenues.

For the fiscal year dating to June 1999, the City of Chula Vista provided 2.6 books/capita, which is 0.4 books/capita short of the adopted minimum. Additionally, in January 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a DIF to pay for nine categories of public facilities within the City of Chula Vista. The facilities are required to support future development within the City. The current fee adopted in accordance with

Government Code Section 66000 is $2,163 per equivalent dwelling unit. The portion of the fee attributable to libraries is $638 per dwelling unit.

## THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines, Appendix G, impacts to libraries would be significant of the proposed project:

- Exceeds current facility capacity requiring the construction of new facilities

According to the City of Chula Vista's adopted threshold standard for library service, impacts to libraries would be significant if the proposed project:

- Exceeds the threshold standard of 600 gross square feet of library space, adequately equipped and staffed, per 1,000 population.
- Exceeds minimum planning guidelines for space requirements and size of collection of library facilities which are outlined in the Pubic Facilities Element of the Chula Vista General Plan (Chapter 3, Section 5.6):
  1) Library space of 0.5 gross square feet per capita
  2) Three books per capita
  3) One periodical subscription per each 150-200 residents.

## IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR Findings of Fact found that additional library facilities would be required to serve the Otay Ranch population. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

## SPHERE OF INFLUENCE UPDATE EIR

The library services impacts associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence were determined to be not significant because the mitigation measures adopted by the Program EIR would mitigate these impacts below the level of significance. This finding was based in part on the fact that, while the addition of the non-Otay Ranch parcels into the City's sphere would generate the need for new library facilities, the Program EIR requires a Master EIR plan for libraries. No new mitigation measures were imposed in the Sphere of Influence EIR, since the Sphere of Influence Study "did not itself result in physical change and so would not result in significant library services impacts."

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the public service assumptions or conclusions of the Otay Ranch GDP Program EIR.

## AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the public service assumptions or conclusions of the Otay Ranch GDP Findings of Fact.

# IMPACTS

## GDP AMENDMENTS

The proposed GDP Amendments include land uses that are similar in type, quantity and intensity as those associated with the adopted GDP, with respect to library services and facilities. No substantial change in library service demand over what was previously analyzed for the adopted GDP would result from implementation of the proposed GDP Amendments and the resultant minor (1.0%) increase in population. No new impacts or increases in the intensity of previously identified impacts would result from implementation of the proposed GDP Amendments. However, the conclusions of the Program EIR 90-01, that impacts would be significant at the program-level of analysis, would still apply with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

Implementation of the Village 11 SPA Plan would result in a demand on existing library services. Based on the estimate of 6,935 residents generated by the Village 11 Plan, a total of 3,467 additional square feet of library facilities would be needed to meet library demand. The Otay Ranch GDP provides for the location of a 36,758 square foot main library in the Eastern Urban Center. Prior to construction of the EUC Library, interim demand on library facilities would be met by the existing EastLake Library.

## LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 determined that additional environmental review at the SPA-level of analysis would be required to adequately determine the level of significance of impacts to library services. Impacts were determined to be significant and not mitigated at the program-level of analysis. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01.

### VILLAGE 11 SPA/TM

Without the construction of new library facilities, there would be a potentially significant impact because of inadequate library space and book standards for new residents.

## MITIGATION MEASURES

### GDP AMENDMENTS

The mitigation measures adopted for the approved GDP, including additional study of library service delivery at the SPA-level, as listed in Appendix B, would still be applicable to the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

**5.13-10** Library facilities, supplies and services shall be financed in accordance with the approved fees and phasing as established in the PFFP for Village 11.

## LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

Impacts to library services would be significant and not mitigated at the program-level of analysis.

### VILLAGE 11 SPA/TM

Mitigation measure 5.13-10 would reduce impacts to library services to below the level of significance because the PFFP would delineate funding and phasing of new library facilities and services concurrent with need.

# 5.13.8 PARKS AND RECREATION

## EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01provides a discussion of existing park and recreation services and facilities and summarizes the analysis of existing facilities from the Public Facilities Plans, which were included as appendices to the Program EIR 90-01. The proposed GDP Amendments are within the same service area as identified in the Program EIR 90-01 for the adopted GDP. Since the adoption of the GDP, the Otay Valley Parcel of the Otay Ranch, which includes the Amendment Area, has been annexed to the City of Chula Vista. While the analysis in the Facilities Plans appended to the Program EIR 90-01 for the adopted GDP contemplated that park and recreation services could be provided by the City in this area, it is now certain that the Amendment Area would be serviced by the City. No changes in service availability would be associated with the proposed GDP Amendments.

### VILLAGE 11 SPA/TM

The Village 11 Project Area is currently undeveloped agricultural land. The Otay Ranch GDP provides standards for parks for each village and planning area. The GDP further anticipates that specific park acreage and locations would be identified at the SPA level. Parks, recreation, open space and trails are addressed in the Otay Ranch Parks, Recreation, Open Space and Trails Master Plan. The City of Chula Vista is currently preparing a Parks Master Plan to address park facilities.

## THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines, Environmental Checklist, Appendix G, the proposed project would have a significant impact on park and recreation facilities if it would:

- Result in a residential population that exceeds the capacity of existing and/or planned park and recreation facilities;
- Not conform to the park dedication standards of three acres of neighborhood and community parkland per 1,000 residents;

- Be inconsistent with the goals and policies of the General Plan and other adopted plans addressing parks, trails, and other recreational amenities;
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

## IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR 90-01 found that Otay Ranch would generate additional demand for regional and local parkland, open space, and recreational facilities. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

### SPHERE OF INFLUENCE UPDATE EIR

The parks and recreation impacts associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence were determined to be not significant because the mitigation measures adopted by the Program EIR would mitigate these impacts below the level of significance. This finding was based on the fact that the impacts on parks and recreation would remain essentially the same if Otay Ranch were in the City's sphere. No new mitigation measures were imposed in the Sphere of Influence EIR, since the Sphere of Influence Study "did not itself result in physical change and so would not result in significant parks and recreation impacts."

## OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the public service assumptions or conclusions of the Otay Ranch GDP Program EIR.

## AMENDED SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the Amended SPA One Plan altered any of the public service assumptions or conclusions of the Otay Ranch GDP Findings of Fact.

# IMPACTS

## GDP AMENDMENTS

The proposed GDP Amendments include land uses that are similar in type, quantity and intensity as those associated with the adopted GDP, with respect to park and recreation services and facilities. No substantial change in park and recreation service demand over what was previously analyzed for the adopted GDP would result from implementation of the proposed GDP Amendments. No new impacts or increases in the intensity of previously identified impacts would result from implementation of the proposed GDP Amendments.

## VILLAGE 11 SPA/TM

The total park land obligation for Village 11 is 20.8 acres, based on the City of Chula Vista and State of California standard of 3 acres per 1,000 residents, multiplied by the projected population for Village 11 of 6,935. The inclusion of a 7.0 net acre public neighborhood park and a 1.0 net acre private town square would provide 8.0 net acres of parkland within Village 11. The City of Chula Vista does not typically apply park credit to private parks, therefore, the project's 3.0 acre and 3.8 acre private common useable open space areas do not qualify for park credit toward the overall parkland obligation for the Village 11. This results in a residual obligation of 12.8 acres of local parkland would be satisfied through the payment of parkland dedication fees which include both acquisition and park development fees toward community parks in Otay Ranch. With the provision of park land within Village 11 and the payment of fees, no significant impacts to parks and recreation facilities would result from the implementation of the Village 11 SPA/TM.

# LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 determined that preparation of a parks and recreation master plan at the SPA-level of analysis would be required to adequately determine the level of significance of impacts to park and recreation services. Impacts to parks and recreation would be significant and not mitigated at the program-level of analysis. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01.

## VILLAGE 11 SPA/TM

The Village 11 SPA/TM would provide a total of 8.0 acres of total park land within Village 11 and would pay fees to contribute to the funding for regional park acquisition and facilities development that would satisfy the remaining 12.8 acre park obligation of Village 11. Therefore, no significant impacts related to the provision of parks and open space are anticipated with the implementation of the proposed project.

# MITIGATION MEASURES

## GDP AMENDMENTS

The mitigation measures adopted for the approved GDP, including preparation of a parks and recreation master plan at the SPA-level (Appendix B) would still be applicable to the proposed GDP Amendments. No additional mitigation measures would be required.

## VILLAGE 11 SPA/TM

**5.13-11** Total local parkland obligation of 20.8 acres (consisting of on-site parks and off-site parks) shall be financed and constructed in accordance with the fees and phasing approved in the PFFP for the Village 11 SPA Plan.

# LEVEL OF SIGNIFICANCE AFTER MITIGATION

## GDP AMENDMENTS

The Program EIR 90-01 identifies impacts that are significant and not mitigated at the program-level of analysis. The proposed GDP Amendments would not change this significance conclusion.

## VILLAGE 11 SPA/TM

Mitigation measure 5.13-11 would reduce the impact of the Village 11 SPA/TM to below the level of significance, because the PFFP would delineate funding and phasing of new park facilities concurrent with need.

# 5.14 HAZARDS/RISK OF UPSET

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01), analyzed the existing conditions, potential impacts, and mitigation measures related to gazards and risk of upset for the entire Otay Ranch project area. Section 4.9.15 of the Program EIR 90-01 included an analysis of hazards related to the Phase II Progress Plan Alternative (as amended), which ultimately was selected. The analysis and discussion of hazard issues from the Program EIR is hereby incorporated by reference. References to analysis in the Program EIR 90-01 in this EIR pertain specifically to the analysis of the selected Phase II Progress Plan alternative. The following discussion focuses on the project specific impacts to hazards and risk of upset that would result from the proposed GDP Amendments and with development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

This section describes the use, storage, transport, and disposal of hazardous materials and hazardous wastes within and surrounding the Amendment Area and the Village 11 SPA Area. The purpose of the description is to identify conditions in which an accident or upset could adversely affect human health or the environment.

## 5.14.1 EXISTING CONDITIONS

### GDP AMENDMENTS

The Program EIR 90-01 discussed existing conditions related to potential hazards associated with the entire Otay Ranch. The following is a summary of the discussion of existing conditions contained in the Program EIR 90-01.

Historically, the proposed project site was used for dry farming, as well as cattle and sheep grazing. Crop production was limited to hay and grains due to limited water availability. Once there was increased availability of water, there was the cultivation of tomatoes and introduction of truck farming. Pesticides were used on irrigated portions of the Otay Valley Parcel after 1950. Based on an analysis of historical and existing uses, there are no known areas within the project site that potentially contain hazardous wastes of soil contamination which exceed the state or federally regulatory threshold levels. A hazardous waste site

assessment conducted as part of the Program EIR 90-01 found that random soil samples in areas "associated with former irrigated farming showed low levels of residual pesticides [in] concentrations that do not exceed hazardous waste standards."

The proposed GDP Amendments are within the same development boundary as the adopted GDP, and there has been no substantial change to environmental conditions that would affect potential hazards.

### VILLAGE 11 SPA/TM

The Village 11 Project Area was included in the hazardous waste site assessment conducted as part of the Program EIR 90-01. Due to the fact that Village 11 has been used for dry farming and grazing, similar to the remainder of the Amendment Area, it is likely that the only potential hazardous waste issue within the Village 11 Project Area would be low levels of residual pesticides in the soil.

## 5.14.2 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines, Appendix G, impacts from hazards and hazardous materials would be significant if the proposed project:

- Creates a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emits hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, a significant hazard to the public or the environment would be created;
- Is located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and would result in a safety hazard for people residing or working in the project area;

- Is located within the vicinity of a private airstrip and would result in a safety hazard for people residing or working in the project area;
- Impairs implementation of or physically interferes with an adopted emergency response plan or emergency evacuation plan;
- Exposes people or structures to a significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas.

In addition, the potential for significant impacts would occur if project implementation would result in an interference with the City of Chula Vista emergency response plans.

## 5.14.3 IMPACT ANALYSIS SUMMARIES FROM PREVIOUS EIRS

The following are summaries from previous EIRs for the Otay Ranch, including the Program EIR 90-01 and subsequent EIRs that were tiered from the Program EIR. The purpose of these summaries is to provide a context for the determination of impacts related to the proposed GDP Amendments and the Village 11 SPA, including changes that have been made to the conclusions and analysis contained in the Program EIR.

### OTAY RANCH PROGRAM EIR

The Program EIR found the significant impacts from hazards and the risk of upset, including an increase in urbanization would result in an increase in the use, transport, storage, and disposal of hazardous materials and an associated increase in the risk of an upset condition in the area. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance.

### SPHERE OF INFLUENCE UPDATE EIR

The risk of upset associated with the inclusion of Otay Ranch into the City of Chula Vista's Sphere of Influence was determined to be not significant because the mitigation measures adopted by the Program EIR would mitigate these impacts below the level of significance. No new mitigation measures were imposed in the Sphere of Influence EIR, since the Sphere

of Influence Study did not itself result in physical change and so would not result in significant risk of upset.

### OTAY RANCH SPA ONE EIR

None of the amendments made to the Otay Ranch GDP to implement the SPA One Plan or annexation altered any of the assumptions or conclusions about hazards or risk of upset of the Otay Ranch GDP Program EIR.

### AMENDED SPA ONE EIR

The Amended SPA One EIR did not discuss whether the project would cause any impacts from hazards or risk of upset.

## 5.14.4 IMPACTS

### GDP AMENDMENTS

The proposed GDP Amendments are entirely within the same development area as proposed under the adopted GDP. The types of uses and activities proposed under the Amended GDP would be consistent with the adopted GDP Plan. Therefore, no new impacts, or intensification of impacts related to hazards would be anticipated to result from the proposed Amendments, over what was previously analyzed for the adopted GDP in the Program EIR 90-01.

### VILLAGE 11 SPA/TM

The Program EIR 90-01 identified surrounding land uses which may potentially create risk of upset for the Otay Ranch. They are the former Ranch Operations Center, the Otay Landfill, Brown Field and Rock Mountain Quarry. The Ranch Operations Center had historically been utilized for the storage of hazardous materials. The Otay Landfill was the former site of a hazardous waste reprocessing operation and still provides solid wastes disposal services. Brown Field historically maintained numerous storage tanks and a bombing range. The quarry operation represents a potential source of contamination from waste oil, fuel spillage, residual blasting chemical and air emissions. Village 11 is not proposed in the vicinity of these facilities.

Villages Two West and Village Three include planned industrial land uses, but they are located at least 1.5 miles to the west of the Village 11 Project Area. In addition to industrial land use, the Program EIR 90-01 identified that there could be risks from future Otay Ranch development where research facilities, university laboratories and major retail centers are developed. The Village 11 Project Area is adjacent to the FC, EUC and University sites where such land uses are anticipated.

No contaminated soils above state and federal threshold levels, or hazardous materials are known to exist within the Village 11 Project Area. The land uses associated with the Village 11 SPA would not involve the use, storage, or transport of hazardous materials typically associated with manufacturing or industrial land uses. The proposed residential, park, community purpose facilities, commercial/retail sales, school and open space uses are not anticipated to utilize hazardous material that would result in the creation of a public health hazard.

The proposed project would utilize construction materials and methods which are standard in the industry. These materials and methods are closely monitored and controlled by State and Federal agencies including: the EPA and Cal-OSHA.

The nearest airport is Brown Field, which is approximately 3 miles from the project site. The risk for wildfire is very low, as the project itself would be mostly graded for development. Adjacent land uses would eventually be developed, although the Salt Creek open space at the eastern boundary of the project site would have uninterrupted native vegetation.

The project places residential units and schools near major arterial roads that have the potential to have trucks carrying hazardous materials. There is a potential for traffic accidents to occur in the project area involving hazardous materials, although the probability of such an occurrence is low. Unless the use, transport, storage, and disposal of hazardous materials would be conducted in compliance with the relevant regulations of federal, state, and local agencies, including the EPA, California Department of Heath Services (DHS), and Caltrans, a potentially significant impact could result.

## 5.14.5 LEVEL OF SIGNIFICANCE PRIOR TO MITIGATION

### GDP AMENDMENTS

The Program EIR 90-01 identified significant impacts related to hazards on the property, related to and increase in urbanization would result in an increase in the use, transport, storage, and disposal of hazardous materials and an associated increase in the risk of an upset condition in the area. Mitigation measures were identified that, if implemented at the SPA level of review, would reduce the impacts to a level below significance. The proposed GDP Amendments would not change the conclusions of the Program EIR 90-01.

### VILLAGE 11 SPA/TM

Potentially significant impacts related to the transport of hazardous materials could result from implementation of the Village 11 SPA Plan.

## 5.14.6 MITIGATION MEASURES

### GDP AMENDMENTS

The Program EIR 90-01 included mitigation measures that are listed in Appendix B. Those same measures would apply to the GDP Amendments.

### VILLAGE 11 SPA/TM

**5.14-1** The use, transport, storage, and disposal of hazardous materials shall be conducted in compliance with the relevant regulations of federal, state, and local agencies, including the EPA, California Department of Heath Services (DHS), and Caltrans

## 5.14.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

### GDP AMENDMENTS

Significant impacts, as identified in the Program EIR 90-01 related to hazards would result from the GDP Amendments that would not be mitigated at the Program-level of analysis.

## VILLAGE 11 SPA/TM

With the application of the required mitigation measure, the Village 11 SPA Plan would not result in any significant impacts.

# SECTION 6.0
# CUMULATIVE IMPACTS

Section 15130 of CEQA requires that an EIR address cumulative impacts when "the project's incremental effect is cumulatively considerable." "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQ Statutes 21083). A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in an EIR together with other projects causing related impacts. If the combination of the project's incremental effect and the related effects from the other projects is not significant, the EIR should briefly explain why the cumulative effects is not significant (CEQA Guidelines, 15130(a)(2)).

Under CEQA Guidelines Sections 15130(a)(1), (2), (3), the discussion of cumulative impacts is to be based on either:

(A) A list of past, present, and probable projects producing related or cumulative impacts, including those projects outside the control of the agency, or

(B) A summary of projects contained in an adopted general plan or related planning document which is designed to evaluate regional or area-wide conditions. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency.

The cumulative analysis is required to include a summary of expected environmental effects and a reasonable analysis of the cumulative impacts of the relevant projects, references for additional information on individual projects, and reasonable options for avoiding or mitigating any significant cumulative effects of a proposed project.

## GDP AMENDMENTS

The Program EIR 90-01, the Otay Ranch Annexation EIR, the SPA One EIR and the Amended SPA One EIR provided a comprehensive examination of the cumulative impacts associated with buildout of the entire Otay Ranch in conjunction with other related projects. As discussed in detail in Section 5 of this EIR for each environmental issue area, the proposed GDP Amendments would not substantially change the conclusions of the cumulative impact analysis from the previous EIRs, since the proposed GDP Amendments are considered to be

consistent with the overall intent of the adopted GDP. The following discussion summarizes the significant cumulative impacts discussed in the Program EIR 90-01 and discusses the cumulative impacts related to the Village 11 SPA Plan.

## VILLAGE 11 SPA/TM

The potentially significant cumulative impacts associated with the proposed Village 11 SPA Plan/TM are in the areas of: land use, planning and zoning, paleontological resources, cultural resources, landform alteration/aesthetics, biological resources, agricultural resources, water resources and water quality, transportation, circulation and access, public services and utilities and hazards/risk of upset.

The following analysis of cumulative impacts is based on a list of specific projects as well as regional plans. Other cumulative impacts are based on a list of implemented, concurrently processing and future projects in and around the Otay Ranch (*Table 6-1* and *Figure 6-1, Major Projects in Vicinity of Village 11 SPA*).

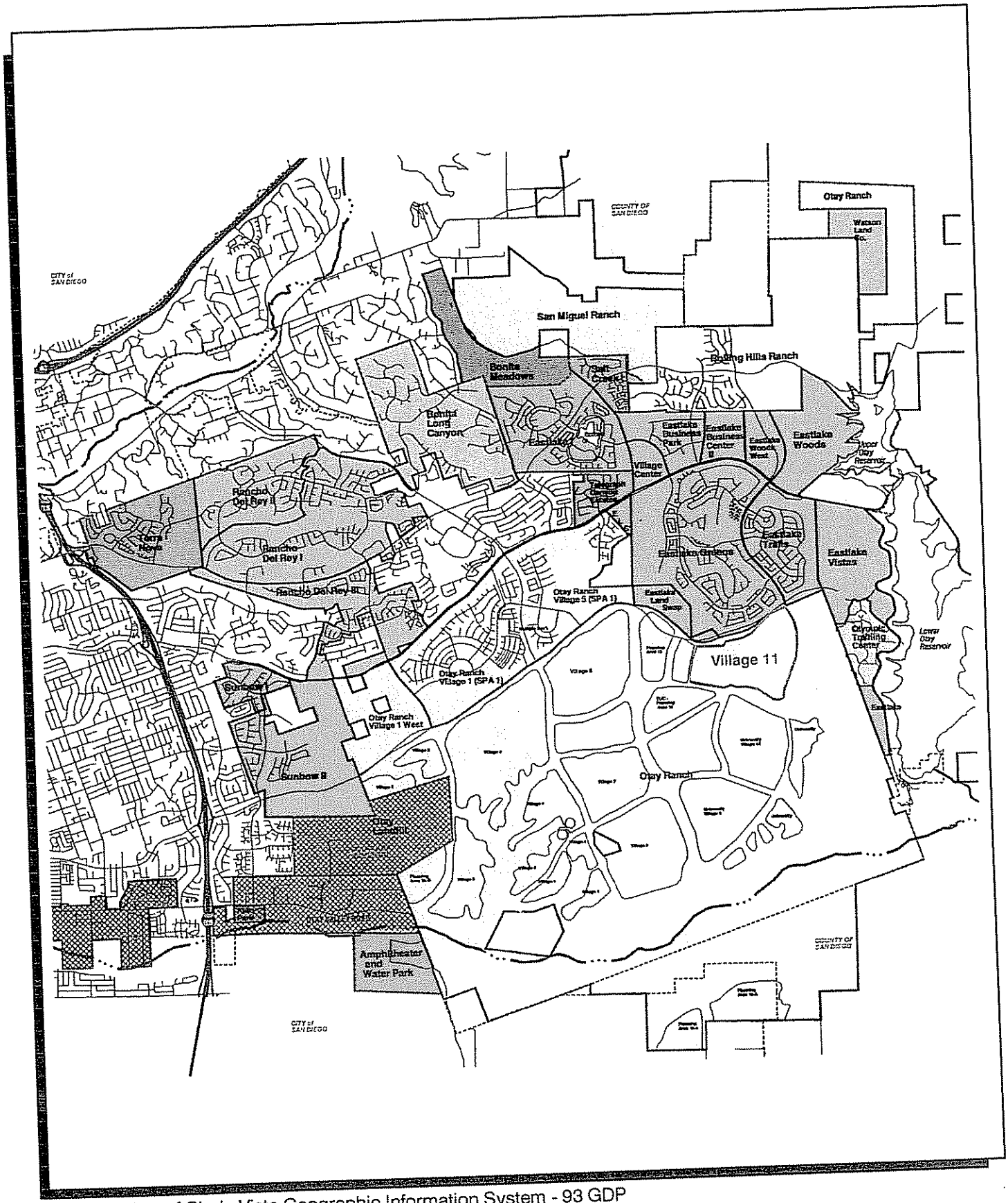
### TABLE 6.1 CUMULATIVE PROJECTS

| Project Name | Land Use | Status | Dwelling Units |
|---|---|---|---|
| Terra Nova | Planned Community | Completed | 529 single-family<br>739 multi-family<br>Includes: church, elementary school, neighborhood park, and community commercial uses, open space. |
| Rancho Del Rey I, II | Planned Community | Completed | 2,535 single-family<br>148 multi-family<br>Includes: community and other commercial, neighborhood park, community purpose facility, 20-acre jr. High, middle school |
| Rancho Del Rey III | Planned Community | Developing | 2,512 single-family<br>298 multi-family<br>Includes: neighborhood park, 108-acre open space preserve and 26-acre jr high/middle school |
| Sunbow SPA Plan | Planned Community | Developing | 1,382 single-family<br>1,073 multi-family<br>Includes: neighborhood park, elementary school, community commercial, industrial park, veterans home, 28-acre hospital and 176-acre open space |

## TABLE 6.1 CUMULATIVE PROJECTS (*Cont.*)

| Project Name | Land Use | Status | Dwelling Units |
|---|---|---|---|
| Bonita Long Canyon | Planned Community | Developed | 341 single-family<br>153 multi-family(future phase)<br>Includes: 43-acre open space preserve, 47-acre senior high school, neighborhood commercial uses. |
| Bonita Meadows | Subdivision | Planned | 300 single-family |
| San Miguel Ranch | Planned Community | Planned | 1,394 low, low-medium, medium and medium-high density residential units.<br>Includes: commercial and industrial uses, and 50 acres for SR-125. |
| EastLake III GDP/Olympic Training Center | Planned Community | Developing/ Completed | 300 multi-family units / 150-acre Olympic training center.<br>Includes: neighborhood commercial, commercial tourist, community purpose facility, and possible public/quasi-public use |
| EastLake I and Business Park | Industrial Park | Developing | 130 acres industrial park<br>55 acres light industrial<br>Includes: low rise office, neighborhood park, fire or police station |
| EastLake Woods/Vistas | Planned Community | Planned | 2,061 single-family<br>Includes: commercial tourist, commercial retail uses, schools, park and recreation areas and a fire station site. |
| EastLake Trails/Greens | Planned Community | Developing | 2,788 single-family<br>2,100 multi-family<br>Includes: Senior high school, 2 elementary schools, 158-acre golf course/clubhouse, community commercial, freeway commercial, 2 neighborhood parks, low rise office, church, community purpose facility and private park |
| Salt Creek I | Subdivision | Completed | 163 single-family<br>337 multi-family |
| Rolling Hills Ranch | Planned Community | Developing | 2,099 single-family<br>284 multi-family<br>Includes: community purpose facility, 2 elementary schools, a fire/police station and 20-acre community park. |
| College Estates | Planned Community | Completed | 949 |
| Southwestern College Estates | Planned Community | Completed | 599 |
| Salt Creek Interceptor and Wolf Canyon Trunk Sewer | Sewer | Under Review | N/A |
| Telegraph Canyon Estates | Planned Community | Developing | 344 Single-family units |
| Vista Mother Miguel | Planned Community | Under Review | 40 Single-family units |
| SR-125 | Transportation Corridor | Under Review | Toll Road/Freeway |

SOURCE: City of Chula Vista, 2001




SOURCE: City of Chula Vista Geographic Information System - 93 GDP

**Major Projects in Vicinity of Village 11 SPA**

*Figure 6-1*

Not to Scale

## LAND USE, PLANNING AND ZONING

The proposed Village 11 SPA Plan and Conceptual Tentative Map, in conjunction with buildout of the Otay Ranch and other nearby projects, would contribute to the conversion of over 30,000 acres of vacant land to urban uses. The overall loss of open space associated with the conversion of the proposed Village 11 SPA, in conjunction with buildout of cumulative projects listed in *Table 6.1* would have a significant cumulative land use impact. The City Council found in adopting the Findings of Fact to approve the Otay Ranch GDP/SRP that there are no feasible measures that would mitigate the impact of conversion of land to urban uses to below a level of significance. Therefore, the Village 11 SPA Plan, as a project that implements the GDP, would contribute to this cumulatively significant unmitigable impact.

## LANDFORM ALTERATION/AESTHETICS

Development of the proposed Village 11 SPA Plan and TM would contribute to an overall change in the visual quality of the region. The visual quality would be affected by the change in character from a rural to an urban setting. Open expanses of rolling hills used for agricultural purposes would be developed with clustered residential, and commercial areas separated by open space. Impacts to the nighttime visual setting would also occur from the cumulative addition of lights as Otay Ranch and other nearby projects are implemented. Application of the mitigation measures contained in the Program EIR 90-01 to all of Otay Ranch and surrounding projects would reduce the cumulative effect of night lighting to below a level of significance.

The Village 11 conceptual grading plan proposes grading in conformance with the Otay Ranch goal for preserving 83 percent steep slopes overall, and limits impacts to 18 acres of the maximum 18.5 acres of steep slopes for Village 11. Implementation of the mitigation measures described in the Program EIR and Section 5.2 of this EIR would further reduce Village 11's incremental contribution to significant cumulative landform impacts. However, cumulative visual impacts related to the change in visual character for the Otay Ranch and other major projects in the region would remain significant. No mitigation has been identified for the Village 11 SPA Plan to reduce this impact, and therefore, the Village 11 SPA Plan would result in significant cumulative impacts related to a change in the visual character of the Village 11 Project Area that cannot be feasibly mitigated.

## PALEONTOLOGICAL RESOURCES

Discovery and recovery of significant paleontological resources have occurred on developments within Otay Ranch. Cumulative buildout of the Otay Ranch and surrounding planned development would result in an increased probability of disturbance to paleontological resources, causing potentially significant cumulative impacts. A positive effect of development is the potential discovery of significant fossils during required monitoring for project brushing and grading. Fossil resources would otherwise go undiscovered. Mitigation measures, including monitoring by a qualified paleontologist would be implemented to protect these resources thereby reducing potential impacts to below a level of significance. Thus, with the implementation of project-specific mitigation measures detailed in Section 5.6, no cumulatively significant impacts to paleontological resources would occur as a result of the proposed project.

## CULTURAL RESOURCES

There are over 450 known locations of cultural resources within the cumulative impact projects region. Six of these locations, or sites, have been identified with the Village 11 Project Area. The Program EIR 90-01 found that the cumulative impact for the region would reduce the database for cultural resources by approximately 86 percent, resulting in a significant cumulative impact to cultural resources at the program-level of analysis. Mitigation measures required by the Program EIR included testing of resources at the SPA-level of planning. Such testing performed for the Village 11 Project Area revealed no significant cultural resources. Therefore, since the Village 11 Project Area contains no significant cultural resources, cumulative impacts to cultural resources would not be considered significant for the Village 11 SPA.

## BIOLOGICAL RESOURCES

The entire Otay Ranch area is becoming more urbanized. Future plans for the City of Chula Vista and the City of San Diego show increased urban and industrial development for the region. The Program EIR 90-01 identified significant cumulative impacts to biological resources. The biological survey for the Village 11 Project Area identified potential significant impacts to sensitive habitats and species.

The cumulative loss of sensitive habitats and species from the project and other cumulative projects within the City is addressed through participation in a regional conservation

planning effort, the San Diego Multiple Species Conservation Program (MSCP). This planning effort provides a regional plan for preservation and mitigation of sensitive biological resources within San Diego County. The City is currently finalizing their MSCP Subarea Plan, a plan which will outline specific preserve areas, implementation techniques and management parameters unique to lands within City boundaries consistent with the MSCP. The City's Subarea Plan will serve as the implementation tool for the Chula Vista portion of the overall San Diego County preserve system. Preservation of habitat, planning in accordance with the biological resource conservation goals of the MSCP and limitation of impacts in accordance with the City's Subarea Plan is intended to mitigate cumulative biological resource impacts. The Village 11 SPA has been planned in consideration of the RMP and the MSCP. Conformance with the measures included in these plans ensures that sensitive habitats would be preserved in large, contiguous areas of habitat in perpetuity and impacts would be reduced to less than significant.

In the absence of the Subarea Plan, the Resource Management Plan (RMP) for Otay Ranch, combined with the project-specific mitigation measures listed in Section 5.3, would provide similar mitigation for cumulative impacts for projects included in the Otay Ranch GDP/SRP planning area, resulting in no significant cumulative impacts.

## AGRICULTURAL RESOURCES

The cumulative development of the 36-square mile Otay Ranch, and surrounding properties, would result in the permanent loss, or impairment, to lands historically used for the production of coastal dependent crops. Although the area is not currently being used for agricultural production, the region represents an agricultural resource because of its coastal climatic conditions. Currently, agricultural activities of the Otay region consist of mostly cattle ranching.

Commitment to urban uses resulting from the Village 11 SPA Plan would be contribute to significant impacts related to the permanent loss of agricultural land, as identified in the Program EIR 90-01. Mitigation measures identified in the Program EIR 90-01 were not found to be sufficient to reduce impacts to agriculture to less than significant. No additional measures are available for the Village 11 SPA Plan to reduce the impacts, and therefore, the cumulative impacts related to the loss of agricultural land represented by the Village 11 SPA Plan remain significant and unmitigable.

## WATER RESOURCES AND WATER QUALITY

Cumulatively, existing and proposed development would result in substantial areas of new impervious surfaces. These additional impervious surfaces would reduce the amount of infiltration of storm water. A decrease in potential recharge to the groundwater basin and an increase in runoff would result. Urban activities including, but not limited to, construction would add contaminated materials to the increased volume of surface water runoff. The overall quality of the surface water would be adversely impacted, particularly in Salt Creek and the Otay River. The increase in runoff and decrease in water quality associated with the Village 11 SPA Plan would have a significant cumulative impact on these drainage basins. Features of the Village 11 SPA/TM design, as well as mitigation measures required in Section 5.9, and application of these standards to other projects would reduce the potential cumulative impacts to a less than significant level.

It should be noted that existing water quality regulations require, as a condition of this and other cumulative project approvals, engineering and design features to ensure that the volume, rate and quality of runoff does not exceed existing pre-development levels. The Village 11 SPA/TM would also require maintenance of on-site drainage facilities. In combination, implementation of these features would ensure that the project and other cumulative projects would not contribute to a cumulative impact to hydrology and off-site drainage.

## TRANSPORTATION, CIRCULATION AND ACCESS

The Series 9 modeling for the Otay Ranch adopted GDP buildout, in conjunction with other anticipated regional projects, shows that overall the forecasted traffic volumes would be approximately 12 percent lower than the traffic volumes as forecasted in the Program EIR 90-01. However, there would be isolated streets where the volumes would be higher. Regardless of the forecasted decrease in buildout traffic impacts, the street and freeway improvements to provide capacity at buildout would require major costs and funding in addition to the project's contribution of Transportation DIF fees. The construction of SR-125 and the widening of I-805 would be needed as part of these improvements.

The traffic and circulation impacts from the proposed Village 11 development have been addressed for the near-term (pre-2005), long-term (2005 and beyond) and buildout conditions. As discussed in Section 5.10, project-level and cumulative mitigation measures are required to reduce short-term impacts to below a level of significance. One such measure to reduce

cumulative impacts prior to construction of SR-125, requires the City to stop issuing building permits once a total of 9,429 dwelling units have been issued for projects east of I-805, or until another measure has been adopted in order to ensure that the circulation system has additional capacity without exceeding the GMOC traffic threshold standards.

Street improvements have been made conditions of approval for the Village 11 SPA/TM and other cumulative development, and would be phased with development through adopted PFFP's (section 5.10). Cumulative impacts associated with streets would be reduced to a level below significance through implementation of the mitigation measures included in Section 5.10

The analysis contained in Section 5.10 and Appendix G found that cumulative impacts on I-805 would remain significant and unmitigated. All required improvements for SR-125 and I-805 are the responsibility of Caltrans and SANDAG and would likely be infeasible due to funding constraints. Each proposed project would only contribute a relatively small percentage of traffic onto these regional freeways. However, when added together, they represent a significant amount. The associated improvements and DIF fees would be insufficient to resolve the larger problems. Therefore, cumulative traffic impacts to I-805 would remain significant and unmitigated.

## AIR QUALITY

The analysis of air quality impacts contained in Section 5.11, and Appendix H included an analysis of cumulative impacts to air quality and found that the cumulative impacts related to long-term mobile emissions would be significant. No mitigation is available to reduce this cumulatively significant impact to less than significant levels.

## NOISE

The analysis of noise impacts contained in Section 5.12 and Appendix I are based on regional cumulative traffic data from the most recent Series 9 regional growth forecasts. The analysis contained in Section 5.12, is therefore, inclusive of cumulative effects. Impacts related to noise are determined to be mitigable with the application of feasible mitiagtion measures contained in Section 5.12.6.

## PUBLIC SERVICES AND UTILITIES

### Water

Water supplies in Southern California fluctuate with precipitation, climatic conditions and disputes over water rights from imported sources. Cumulative impacts to water supply associated with ongoing development on a regional scale are anticipated. The additional demand for water associated with the Village 11 development in conjunction with the other proposed and approved projects within the Chula Vista area would be approximately 77.2 mgd. The proposed project, plus cumulative development would incrementally increase regional water consumption, however, this increased demand for service has been anticipated and planned for by the City of Chula Vista. The use of reclaimed water for irrigation purposes and the proposed conservation measures for reducing potable water consumption would reduce water consumption and would result in a less than significant cumulative impact.

### Sewer

The 1996 Otay Ranch SPA One Plan and Annexation Final Second-Tier EIR (the most recent estimate of Ranch-wide sewer demand) estimated that the combined effect of buildout of the Otay Ranch GDP/SRP with other surrounding projects would result in an approximate total sewage flow of 35.6 mgd. The same document found that the combined effect of SPA One and surrounding developments would require additional wastewater transmission and treatment facilities to handle cumulative flows. The cumulative impact is considered potentially significant. The increased demand for service has been anticipated and planned for by the City of Chula Vista. The proposed Village 11 SPA Plan combined with planned projects in the surrounding area could have a cumulatively significant impact upon the City of Chula Vista's sewer infrastructure if not mitigated through improvements to existing facilities and extension of facilities under existing roadways as described in Chapter 5.13. These improvements would be made according to City requirements and would reduce the project-specific impacts and the project's contribution to cumulative impacts to a less than significant level.

## Integrated Waste Management

Buildout of the southern portion of San Diego County would result in a substantial increase in the generation of solid waste. Landfill capacity in the region is limited. The cumulative impact is potentially significant. All new development within the region would have to comply with the City of Chula Vista and County of San Diego programs and regulations concerning long-term solid waste disposal. An Integrated Waste Management Plan was prepared for the Otay Ranch. The Village 11 SPA Plan, along with other Otay Ranch villages and planning areas, would also be guided by this Plan. The waste management program would include curbside recycling, neighborhood recycling/buyback centers, a materials recovery facility, a composting facility and a household waste collection facility. The cumulative impact could also be reduced by provision of additional solid waste facilities, recycling facilities, transporting trash outside the region to less impacted areas, and/or by meeting state-mandated recycling goals. The required PFFP for new developments would establish the fees and phasing associated with contribution toward the cost of construction of any regional facilities. The cumulative impact would be reduced to a level below significant, through compliance with the City and County programs and regulations for solid waste disposal, the Otay Ranch Integrated Waste Management Plan and the Village 11 PFFP.

## Law Enforcement, Fire Protection and Emergency Medical

The overall population growth would substantially increase demands on law enforcement, fire protection and emergency medical services. The cumulative impact would be potentially significant. Staffing and new facilities would be required to adequately accommodate the population increase expected at buildout. A draft PFFP has been prepared for the Village 11 SPA which addresses this issue. The PFFP would be implemented at the time of development, and would provide these services incrementally and concurrent with need. The cumulative impacts would be reduced to a level below significant, through compliance with the PFFP.

## Schools

The residential development proposed for Village 11 would increase demand for public schools. The region would require new schools, staff, and supplies in order to accommodate the growing student population, causing a potentially significant impact on Chula Vista Elementary School District (CVESD) and Sweetwater Union High School District (SUHSD).

The development would temporarily increase class sizes in Eastlake High School. However, the implementation of phased development would disperse elementary students from Village 11 evenly amongst the surrounding Otay Ranch schools until the completion of the elementary and junior high schools in Village 11. The elementary and junior high sites have been identified within the project area and are specifically designated under the proposed GDP Amendments. EastLake High school will be able to accommodate a portion of the Village 11 high school population. The Village Two high school will be completed in time to accommodate the additional 438 high school students generated by Village 11 without exceeding the 2500 student capacity level stated in the Program EIR (1992). In addition, a new high school to be located in either Village Seven or Eight is also proposed in Otay Ranch, which will accommodate cumulative school demand. The provision of land and financing mechanisms under the PFFP requirements, plus development of a School Master Plan, would mitigate the cumulative impact on schools to below a level of significance.

### *Library Services*

Population growth in the project area would result in the need for substantial additional library space, books and staff. The impact would be potentially cumulatively significant. The Otay Ranch GDP provides for the establishment of a "main library" as part of the Eastern Urban Center development. Payments to the DIF established for libraries would reduce the cumulative impact on library services to a level of insignificance.

### *Parks and Recreation*

Cumulatively, the proposed and approved projects in the region would place substantial demands on neighborhood, community and regional parks. The cumulative impacts on local and regional park and recreational facilities would be potentially significant. Regional park and community park financing would be provided through the PFFP requirements. Project specific neighborhood and community park improvements would be installed in communities as needed. The cumulative impacts would be reduced to below the level of significance with the long-term provision of both local and regional parks.

## *HAZARDS/RISK OF UPSET*

The potential risk of adverse health effects associated with the use, transport and storage of hazardous materials and generation of hazardous waste would increase with cumulative

buildout. The potential significant cumulative impact would be reduced to a level less than significant with the implementation of the Program EIR 90-01 identified mitigation measures and adherence to applicable laws and regulations. The Program EIR 90-01 requires all Otay Ranch developments, and major nearby projects, to evaluate the need for emergency evacuation routes and other emergency facilities at the SPA level based on the presence of onsite industrial uses as well as the presence of offsite industrial uses. Where land uses associated with an Otay Ranch development would involve the use and transport of hazardous materials (such as light industry, biotech and University research), the Program EIR 90-01 mitigation measures require that the transport of hazardous waste by the Applicant, subcontractors, and future businesses on existing and future roadways shall be conducted in accordance with the California Code of Regulations (CCR) and the Code of Federal Regulations (CFR). These regulations identify Department of Transportation (DOT) approved methods for packaging and containing hazardous waste. DOT approved methods also cover site appropriate options and procedures relative to the handling and transportation of these wastes. Adherence with these regulations would reduce the cumulative impacts of Village 11 to less than significant levels.

## CUMULATIVE EFFECTS CONSIDERED NOT SIGNIFICANT

### *Geology and Soils*

Geologic and soils impacts associated with development of the proposed Village 11 SPA Plan are site specific. These site specific impacts are not considered cumulative with other projects.

### *Housing and Population (Community Social Factors)*

The cumulative development area was initially vacant land. No displacement of existing housing stock has, or would, occur. The cumulative increase in housing stock would make a variety of dwelling unit types available to accommodate forecasted growth. SANDAG's Growth Management Plan incorporates population, housing and transportation forecasts. Particularly, the forecasts have identified specific projections for the City of Chula Vista. The Growth Management Plan stresses maintaining a prosperous economy, while providing an adequate and equitable transportation system, preserving open space and habitat, increasing the rate of home ownership, and reforming the state-local tax system to assist and sustain all of the above. SANDAG encourages compliance with a transit design which promotes

pedestrianism and interconnected public transportation through buses, metro, and trolleys. As shown in *Table 6.1-1*, the cumulative projects in the region, as well as the proposed project have incorporated mixed-use projects to accommodate the goals and policies as set forth in the Growth Management Plan. Therefore, there will be no significant impacts to housing and population.

# SECTION 7.0
# GROWTH INDUCING IMPACTS

As defined in Section 15126.2(d) of the CEQA Guidelines, the growth-inducing impact analysis is intended to address the potential for the project to "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Project elements which would remove obstacles to population growth are included in this analysis. Also, population increases which would tax existing community service facilities and require construction of new facilities are evaluated where these actions could cause significant effects. Characteristics of the project which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively, are also considered.

The Otay Ranch GDP/SRP Program EIR (Program EIR 90-01) analyzed the existing conditions, potential impacts, and mitigation measures related to growth inducement that would be caused by the implementation of the Otay Ranch GDP. Section 7 of the Program EIR 90-01 included an analysis of growth inducing impacts which is hereby incorporated by reference. The following discussion uses the analysis of housing and population growth from the Program EIR 90-01 as a basis for the discussion and analysis of housing and population impacts related to the proposed GDP Amendments and development of the Village 11 SPA Plan. It should be noted that the discussion of the Village 11 SPA Plan assumes that the proposed GDP Amendments, as described in *Section 3.0* of this EIR, are approved in advance of, or concurrently with the approval of the SPA Plan. If the proposed GDP Amendments are not approved, the SPA Plan would need to be revised and would require additional environmental review.

The Otay Ranch Program EIR concluded that the Otay Ranch GDP/SRP would foster construction of new housing and subsequent population growth. The Otay Ranch GDP/SRP was determined to be growth-inducing because the overall project would increase the population, housing and employment opportunities within the Otay Ranch area in excess of the growth as occurring in 1992 and, as projected in 1992, for the year 2010. Overall development of Otay Ranch would also contribute cumulatively to regional growth by providing economic opportunities in the area.

## 7.1 GDP AMENDMENTS

The development area for the proposed GDP Amendments would not change from that analyzed for the adopted GDP. Therefore, the discussion in this EIR is limited to the change

in the amount of development that would be allowable under the proposed GDP Amendments, as compared to the adopted GDP. Table 3-1 includes a summary of the proposed changes in the total number of dwelling units, and the corresponding changes in projected population for the Otay Ranch associated with the proposed GDP Amendments. A net increase of 236 dwelling units, and an increase of 710 additional residents (1.0%) would result from the change (based on the 1999 California Department of Finace population generation factor of 3.01 residents per dwelling unit). The Program EIR 90-01 found that impacts related to growth would be significant, but would be mitigated by the provision of adequate public facilities and services, to be provided by the project. The additional residential development proposed by the proposed GDP Amendments would take place within the same development area as identified in the adopted GDP, with reductions in University acreage and commercial acreage. With the provision of additional public facilities, to be provided at the SPA-level of development, and in consideration of the overall scope of the Otay Ranch Project, the proposed changes that would result in residential unit counts and projected population are not anticipated to be significant, and are considered to be consistent with the overall intent of the adopted GDP.

## 7.2 VILLAGE 11 SPA/TM

The City of Chula Vista's Growth Management Plan calls for directing growth in and around the City in an orderly fashion and avoiding leapfrog development. The Village 11 Project Area is adjacent to existing urban communities and would not create leap frog development. Village 11 is currently in Phase Three of the Otay Ranch Village Phasing Plan. The applicant has applied to amend the Village Phasing Plan to move Village 11 into Phase Two of the Second Western Phase. Phasing changes refer to the order that the villages of Otay Ranch may be constructed. The Village Phasing Plan indicates that the project was placed in the third phase based on the extension of public services. At the time of adoption, no other public facilities were adjacent to this area of the Otay Ranch. Since adoption of the GDP, EastLake Greens has been developed and Olympic Parkway is under construction. Now that public facilities can be logically extended from EastLake and Olympic Parkway, it is rational, under the GDP phasing policies, to include Village 11 in the Second Western Phase. Since the remaining surrounding land is concurrently proposed for development, being placed in permanent open space, or being banked as the initial commitment to the future University, approval of the phasing change would not encourage premature construction of housing in surrounding areas.

The implementation of SR-125 is independent of the growth-inducing effects of Otay Ranch. SR-125 was planned to create a north/south corridor to connect Tierra Santa to the Mexican border/ inland region of San Diego County. SANDAG added SR-125 to the Regional Transportation Plan in 1984, prior to the decision to develop Otay Ranch. The Draft EIR was approved in 1996 and the Final EIR underwent public review in 2000. SR-125 would not use project funds in order to reach completion. The State of California entered into a franchise agreement with California Transportation Ventures (CTV), a private consortium which would control and fund the road for 35 years. After that period of time, Caltrans would regain control of SR-125.

# SECTION 8.0
# SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) requires the evaluation of the uses of nonrenewable resources during the initial and continued phases of a project when a large commitment of such resources makes removal or non-use thereafter unlikely. Approval of the proposed development of Village 11 would commit the site to a development area of urban uses including housing, commercial, community services, and public facilities; however, the change in use is both planned and projected. The proposed project would require commitment of nonrenewable resources associated with construction and long-term operation, including but not limited to, lumber and other related forest products; sand, gravel and concrete; asphalt; petrochemical construction materiels; steel, copper, lead and other metals; water; fuels; and energy. Uses of these resources would represent an incremental effect on the regional consumption of these commodities. Implementation of the Village 11 SPA would involve consumption of energy resources, such as electricity and natural gas, derived from non-renewable sources such as fossil fuels.

The most notable nonrenewable resources identified by the Otay Ranch GDP and Program EIR are related to biological resources. While implementation of the Otay Ranch Resource Management Plan would compensate for this loss by setting aside comparable biological resources within the planned Otay Ranch Preserve, the net loss of these resources would be irreversible. The biological resources occurring within the boundaries of the Village 11 development envelope are limited and do not represent a large commitment of the Otay Ranch's overall resources to development. Approximately 3 percent of the Village 11 Project Area contains natural vegetation, while approximately 97 percent of the site contains non-native grassland and disturbed habitat. Implementation of the Village 11 SPA Plan would eliminate a portion of the Otay Ranch's agricultural fields used by foraging raptors.

# SECTION 9.0
# EFFECTS FOUND NOT TO BE SIGNIFICANT

## MINERAL RESOURCES

The Program EIR 90-01 identified mineral resources of economic value on the Otay Ranch property include sand, gravel, crushed rock (known collectively as construction aggregate), and bentonitic clay. Sand, gravel, and crushed rock materials are important to the local construction industry for such uses as concrete (especially Portland Cement concrete, also known as PCC), fill, road base, and building materials. Bentonitic clay is highly expansive clay derived from the alteration of volcanic ash and is commonly found within the Otay Formation, and has been reported to occur as relatively thin, discontinuous deposits within Telegraph, Poggi and Wolf Canyons. No mineral resources of economic value occur within the Village 11 Project Area. Therefore, no significant impacts with respect to mineral resources would occur with implementation of the proposed project.

## GAS/ELECTRIC SERVICE

Gas and electric services are being extended within the grading for Olympic Parkway. Lateral connection to Village 11 would be accomplished by under grounding within the Village 11 street network. Installation of gas and electric infrastructure within street grading is consistent with current design plans and would not create impacts beyond the grading required for the road system. The Village 11 SPA has been included in regional growth forecasts and energy demand projections, and therefore energy supply and regional infrastructure needs are anticipated in long-range energy planning. Therefore, no significant impacts due to the increased demand on installation of gas and electric infrastructure and supply to serve the proposed project would occur.

# SECTION 10.0
# PROJECT ALTERNATIVES

In order to fully evaluate proposed projects, CEQA mandates that alternatives be discussed. Section 15126.6 of the State CEQA Guidelines requires the discussion of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The alternatives discussion is intended to "focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives as listed in Section 3.0 of this SEIR.

The Alternative discussion in this EIR focuses on alternative development scenarios for Village 11, and not the proposed GDP Amendments. The reason for not analyzing alternatives for the proposed GDP Amendments is that an extensive alternatives analysis for the GDP is contained in the Program EIR 90-01. That document analyzed nine on-site alternatives, including the no project alternative, at equal levels of detail. The purpose of the proposed GDP Amendments is to accommodate changes in circulation and village configurations for future SPA planning efforts, including the Village 11 SPA Plan. If the Village 11 SPA Plan were not proposed at this time, the proposed GDP Amendments would not be proposed.

Given the previous environmental review and the measures which have been incorporated into the proposed project to substantially lessen the project's direct impacts, this SEIR includes a discussion of the No Project/No Development Alternative and a Reduced Density Alternative. The No Project/No Development Alternative consists of not adopting the Village 11 SPA Plan, not approving the Conceptual TM, and not developing the property per the GDP/SRP. The Reduced Density Alternative provides a modified land use plan with reduced residential densities that would reduce the number of dwelling units and the ultimate population of Village 11. Offsite alternatives are not considered in this report because offsite alternatives for the Otay Ranch GDP/SRP were addressed in the GDP/SRP Program EIR(90-01).

# 10.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

## PROJECT DESCRIPTION

The No Project/No Development Alternative assumes that the area within the Village 11 SPA Plan would not be developed. The Village 11 Property would continue to be used for limited agriculture or for livestock grazing. Project-level impacts would be avoided as would all contributions to cumulative impacts.

## ENVIRONMENTAL ANALYSIS

### *Land Use*

The No Project/No Development Alternative would retain existing agricultural uses on the site. Significant impacts related to conversion of uses from undeveloped to urban would be avoided.

### *Landform Alteration/Aesthetics*

Landform Alteration/Aesthetic impacts would be avoided by the No Project/No Development Alternative. The terrain of the Village 11 project site would remain unchanged from its current conditions. Significant impact to landform alteration would be avoided with the No Project/No Development Alternative.

### *Biological Resources*

Significant impacts to biological resources would be avoided under the No Project/No Development Alternative. However, because the Village 11 Project Area is nearly all used for agriculture, impacts to sensitive biological resources within the Village 11 Project Area are limited to 6.6 acres of coastal sage scrub, 0.33 acre of southern cactus scrub, 8.8 acres of non-native grassland and 0.02 acres of cismontane marsh.

### *Cultural and Paleontological Resources*

Potentially significant impacts to cultural resources and paleontological resources would be avoided under the No Project/No Development Alternative. This would be a minor reduction in impacts as the cultural resources within the Village 11 Project Area has already been

determined to be not significant. The significance of the paleontological resources cannot be determined without grading. Therefore, the No Project/No Development Alternative provides a potential reduction on significant impacts to paleontological resources.

### Geology and Soils

Potential geologic impacts related with ground shaking from earthquakes and localized unstable soils conditions would be avoided under the No Project/No Development Alternative as no development and no public access would be provided.

### Agricultural Resources

Agricultural resources would be preserved under the No Project/No Development Alternative. This could lead to incompatible uses between urban development and continuing agricultural activity. Continued agricultural activity could result in nuisance complaints regarding noise, odor, insects, rodents, and chemicals. The nuisance factors would create indirect, short-term potentially significant impacts between the agricultural operations and the urban uses. The impact to agricultural resources would be reduced. The impacts from agricultural uses to adjacent urban development would be increased.

### Housing and Population

The No Project/No Development Alternative would reduce impacts on housing and population as there would be no development within the Village 11 Project Area. This is considered to be a negative impact, as the project would not accomplish several of the goals and objectives of the proposed project such as the provision of housing and employment opportunities.

### Water Resources and Water Quality

Potential impacts associated with increased urban runoff, such as the introduction of petroleum products from paved surfaces, would be avoided under the No Project/No Development Alternative. However, no structural systems are currently in place to control the pollutants associated with the existing land uses of dry farming and grazing, such as organic matter, animal wastes, pesticides, and fertilizer. Based on the proximity to Salt Creek, the potential hazards to runoff and water quality are considered moderate to high. Also, erosion of agricultural land would be likely to exceed the siltation impacts associated

with development of the Village 11 Project Area. The overall impacts to water resources and water quality are expected to be greater under the No Project/No Development Alternative due to the lack of drainage improvements.

### Transportation, Circulation and Access

The No Project/No Development Alternative would avoid the generation of traffic from Village 11. This Alternative would also complicate the completion of the Otay Ranch circulation network in compliance with the Circulation Element of the General Plan. Regional traffic impacts would still be significant without the completion of Eastlake Parkway, Hunte Parkway, Olympic Parkway. Regional traffic impacts would also remain significant without the construction of SR-125.

### Air Quality

The No Project/No Development Alternative would avoid the air quality impacts associated with construction, vehicular emissions, and building operations. There would also be no demand for electricity associated with Village 11, thus preventing an increase in emissions from power plants to serve the project. Finally, there would be no operational air quality impacts from residential, commercial, or institutional land uses. The air quality impacts associated with farm equipment and the dust associated with agricultural lands would remain.

### Noise

The significant noise impacts associated with the proposed project would be avoided by the No Project/No Development Alternative. This is because no sensitive receptors would be added to the Village 11 Project Area. Noise would continue to be generated by traffic from other development in the region. There would not be any traffic generated by Village 11. The overall noise level within Otay Ranch would therefore be reduced through a reduction in regional traffic.

### Public Services and Utilities

The elimination of development within the Village 11 Project Area would reduce the demand for public services and utilities. There would be an approximate 611,332 gpd reduction in the demand for sewer service within the Poggi Canyon and Salt Creek Basins.

### *Hazards/Risk of Upset*

The potential for hazards and the risk of upset would be avoided by the No Project/No Development Alternative as no people would be introduced to the Village 11 SPA Plan area. The site would continue to be used for limited agricultural operations.

## PROJECT OBJECTIVES

The No Project/No Development Alternative would not meet the following project objectives as each of these objectives requires development:

- Establish a pedestrian-oriented village with an urban core to reduce reliance on the automobile and promote walking and the use of bicycles, buses, and public transit.
- Promote synergistic uses between Village 11, the neighborhoods of Eastlake and adjacent Otay Ranch villages to balance activities, services, and facilities.
- Implement the goals, objectives, and policies of the Chula Vista General Plan, particularly the Otay Ranch General Development Plan, the Resource Management Plan, the Facility Implementation Plan, the Village Phasing Plan, and the Service/Revenue Plan.
- Implement the City of Chula Vista's Growth Management Program to ensure that the public facilities are provided in a timely manner and financed by the parties creating the demand for, and benefitting from, the improvements.
- Foster development patterns which promote orderly growth and prevent urban sprawl.
- Develop, maintain, and enhance a sense of community identity.
- Accentuate the relationship of the land use plan with its natural setting and the physical character of the region and promote effective management of natural resources by concentrating development into less sensitive areas while preserving large contiguous open space areas with sensitive resources.
- Establish a land use and facility plan which assures the viability of Village 11 in consideration of existing and anticipated economic conditions.

The No Project/No Development Alternative could meet the following project objectives on a regional basis, but not for the Village 11 property:

- Add to the creation of a unique Otay Ranch image and identity which differentiates Otay Ranch from other communities.
- Wisely manage limited natural resources.

The preservation of additional agricultural land could create a unique Otay Ranch image and identity. The preservation of additional agricultural land and the proximity to the Salt Creek Open Space could contribute to the wise management of limited natural resources. The No Project/No Development Alternative does not, however, meet the majority of the project objectives and is not consistent with the Otay Ranch GDP/SRP as amended.

## 10.2 REDUCED DENSITY ALTERNATIVE

### PROJECT DESCRIPTION

Under the Reduced Density Alternative, the intensity of development would be reduced by approximately 26 percent by decreasing the density of all multi- and single-family residential development. The Reduced Density Alternative retains 10 acres of commercial development, but eliminates the residential component of what was planned as mixed use. The junior high school remains in the southwest corner of the Village 11 project site. This Alternative would result in 1,707 residential units on 304.9 acres. This represents a 3 percent reduction in land area combined with a 26 percent reduction in dwelling units. The number of single family residential units would increase by 5 percent (54 units), while the number of multi family residential units would decrease by 45 percent (536 units). The 16.7 acres of park land, 36.6 acres of school land, 66.2 acres of roadways, and 49.2 acres of open space would remain unchanged from the proposed project. *Table 10-1* presents the Reduced Density Alternative. The Reduced Density Alternative reduces the projected build-out population of Village 11 by approximately 2,440 individuals.

## TABLE 10-1
## OTAY RANCH VILLAGE 11. DRAFT ALTERNATIVE SPA LAND USE PLAN

| Neighborhood Area | Land Use | Acreage | Dwelling Units | Target DUs/Acre |
|---|---|---|---|---|
| R-1 | SF | 26.7 | 129 | 4.8 |
| R-2 | SF | 14.2 | 46 | 3.2 |
| R-3 | SF | 15.3 | 46 | 3.0 |
| R-4 | SF | 12.4 | 45 | 3.6 |
| R-5 | SF | 7.5 | 32 | 4.3 |
| R-6 | SF | 7.5 | 30 | 4.0 |
| R-7 | SF | 11.4 | 58 | 5.1 |
| R-8 | SF | 11.2 | 52 | 4.6 |
| R-9 | SF | 11.6 | 55 | 4.7 |
| R-10 | SF | 18.0 | 66 | 3.7 |
| R-11 | SF | 7.7 | 24 | 3.1 |
| R-12 | SF | 11.1 | 46 | 4.1 |
| R-13 | SF | 11.4 | 41 | 3.6 |
| R-14 | SF | 11.0 | 44 | 4.0 |
| R-15 | SF | 10.3 | 56 | 5.4 |
| R-16 | SF | 8.5 | 50 | 5.9 |
| R-17 | SF | 18.5 | 93 | 5.0 |
| R-20 | SF | 10.6 | 53 | 5.0 |
| R-23 | SF | 16.8 | 84 | 8.0 |
| SUBTOTAL | SF | 241.7 | 1,050 | |
| R-18 | MF | 12.5 | 100 | 8.0 |
| R-21 | MF | 10.5 | 84 | 8.0 |
| R-22 | MF | 8.4 | 67 | 8.0 |
| R-19 | MF | 11.6 | 139 | 12.0 |
| R-24 | MF | 10.2 | 122 | 120.0 |
| R-25 | MF | 10.0 | 145 | 14.5 |
| SUBTOTAL | MF | 63.2 | 657 | |
| TOTAL | RES. | 304.9 | 1,707 | |
| MU-1[1] | MU | 10.0 | | |
| SUBTOTAL | MU | 10.0 | | |
| CPF | CPF | 5.5 | N/A | |
| SUBTOTAL | CPF. | 5.5 | N/A | |
| P-1[2] | PARK | 7.0 | N/A | |
| P-2[3] | PARK | 3.8 | N/A | |
| P-3[3] | PARK | 3.0 | N/A | |
| P-4[3] | PARK | 1.0 | N/A | |
| SUBTOTAL | PARK | 14.8 | N/A | |
| S-1/K-6 | SCHOOL | 11.0 | N/A | |
| S-2/Jr. HS | SCHOOL | 25.6 | N/A | |
| SUBTOTAL | SCHOOL | 36.6 | N/A | |
| Hunte Parkway | ROAD | 24.2 | N/A | |
| Olympic Parkway | ROAD | 9.3 | N/A | |
| Eastlake Parkway | ROAD | 7.2 | N/A | |
| W* Circulation Streets | ROAD | 17.4 | N/A | |
| E* Circulation Streets | ROAD | 8.1 | N/A | |
| SUBTOTAL | ROAD | 66.2 | N/A | |
| Green Buffer | O.S. | 27.6 | N/A | |
| Easement thru Property | O.S. | 18.8 | N/A | |
| Paseo Area in West | O.S. | 1.5 | N/A | |
| Paseo Area in East | O.S. | 1.3 | N/A | |
| SUBTOTAL | OTHER | 49.2 | N/A | N/A |

1 MU-1 assigned 10.0 acres for both residential and commercial, but as a mixed use area, the 10.0 acres is included only once in overall total.
2 public park
3 private park
Source: City of Chula Vista

## ENVIRONMENTAL ANALYSIS

### *Land Use*

Development of the Otay Ranch is based on the Village Concept, which plans for a Village core with land uses that will meet the day-to-day needs of the village residents. The Village core is required to have a mixed-use center that is pedestrian oriented and served by transit. The mixed-use center will have shops, schools, parks and multifamily housing to support the other uses. The villages are to have a wide variety of housing types for all income levels. Multi-family housing is a key component to the Village Concept.

The Reduced Density Alternative reduces the amount of multi-family dwelling within the Village core. The Reduced Density Alternative does not provide the required multi-family housing to meet the housing needs of future residences as well as support the commercial and public uses in the village core. The Reduced Density Alternative does not meet the Village Concept goals of the Otay Ranch GDP.

### *Housing and Population (Community Social Factors)*

The Reduced Density Alternative would reduce the amount of housing available within Village 11 by approximately 26 percent. This would reduce the ability of the City of Chula Vista to meet the projected need for an additional 13,500 dwelling units by 2005. Approximately 26 percent of the projected population would not be accommodated. The Reduced Density Alternative would not be in conformance with those policies as outlined in SANDAG's Growth Management Plan. The lack of housing concurrent with needs as shown in SANDAG forecasts and in the Growth Management Plan would result in a potentially significant impact.

### *Water Resources and Water Quality*

The Reduced Density Alternative would have little effect on the increase in runoff created by the proposed Village 11 project. This is because the 26 percent reduction in the number of dwelling units would be accomplished by slightly increasing the number of single family homes and substantially decreasing the density of the multi family homes. The overall acreage of development would only be reduced by approximately 3 percent, or 10 acres. This reduction would not be expected to result in a measurable reduction in the volume or quality of the runoff from the site. Water resource and water quality impacts would remain essentially unchanged with those associated with the proposed project.

## Transportation, Circulation and Access

The traffic generated by the Village 11 Reduced Density Alternative would be reduced by approximately 5,374 ADT, for a total of 18,346 ADT. The significant traffic impacts associated with the implementation of the proposed Village 11 SPA Plan would be reduced, but would not be avoided. The traffic mitigation measures would be unchanged from those required of the proposed project as the 26 percent reduction in ADTs would not bring significant traffic impacts below the thresholds for significance.

## Air Quality

Air quality impacts associated with vehicular trips would be reduced by approximately 26 percent under the Reduced Density Alternative. Short-term air quality impacts associated with construction would not be reduced as the area and extent of grading would remain essentially the same as that for the proposed project. There could be a slight decrease in overall long-term air quality impacts associated with power generation and the operation of on-site commercial facilities due to the reduced population. Overall, the reduction in air quality impacts would be minor and the cumulative impact would remain significant and unmitigable.

## Noise

The grading plan for the Reduced Density Alternative would be very similar to the grading plan required for the proposed project. The proximity of future development to major roadways would remain unchanged. The mitigation measures for noise impacts to future development areas would also be expected to remain unchanged. Mitigation measures for noise impacts associated with construction would remain unchanged. The Reduced Density Alternative, therefore, does not avoid or lessen noise impacts.

## Public Services and Utilities

The water and sewer demands would be reduced by approximately 26 percent. The police, fire, library, schools, and parkland impacts would also be reduced by approximately 26 percent. While the need for new and improved infrastructure would be reduced, it would not be avoided. Public service and utility impacts would remain significant but mitigable.

### *Hazards/Risk of Upset*

The hazards/risk of upset impacts would be reduced slightly under the Reduced Density Alternative, in accordance with the reduced population at buildout. There would be little change overall in the severity of this less than significant impact.

When compared to the proposed project, the Reduced Density Alternative would not modify the development footprint or the need for off-site infrastructure improvements. It is for this reason that impacts to cultural and paleontological resources, potential conflicts between urban and agricultural uses, and impacts to landforms affecting scenic views would not be reduced or avoided under the Reduced Density Alternative.

## PROJECT OBJECTIVES

The following project objectives would continue to be achieved by the Reduced Density Alternative:

- Promote synergistic uses between Village 11, the neighborhoods of Eastlake and adjacent Otay Ranch villages to balance activities, services, and facilities.
- Implement the City of Chula Vista's Growth Management Program to ensure that the public facilities are provided in a timely manner and financed by the parties creating the demand for, and benefitting from, the improvements.
- Foster development patterns which promote orderly growth and prevent urban sprawl.
- Develop, maintain, and enhance a sense of community identity.
- Accentuate the relationship of the land use plan with its natural setting and the physical character of the region and promote effective management of natural resources by concentrating development into less sensitive areas while preserving large contiguous open space areas with sensitive resources.
- Add to the creation of a unique Otay Ranch image and identity which differentiates Otay Ranch from other communities.

The Reduced Density Alternative would not meet the following goals and objectives:

- Implement the goals, objectives, and policies of the Chula Vista General Plan, particularly the Otay Ranch General Development Plan, the Resource Management Plan, the Facility Implementation Plan, the Village Phasing Plan, and the Service/Revenue Plan.
- Establish a pedestrian-oriented village with an urban core to reduce reliance on the automobile and promote walking and the use of bicycles, buses, and public transit.
- Establish a land use and facility plan which assures the viability of Village 11 in consideration of existing and anticipated economic conditions.
- Wisely manage limited natural resources.

The GDP/SRP envisions higher residential densities than proposed by the Reduced Density Alternative. The purpose of the higher densities is to promote pedestrian, bicycle and transit oriented development and to wisely manage limited natural resources through the concentration of development in the least environmentally sensitive areas while preserving large tracts of open space. Reduction in density, as proposed under the Reduced Density Alternative, would provide insufficient density in the village core to support transit facilities and to promote pedestrian oriented land use design.

# SECTION 11.0
# REFERENCES

This list of references documents identifies the reports and studies used in the preparation of the EIR. These documents are incorporated by references and available for review by contacting the City of Chula Vista Planning Department.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# SECTION 12.0
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