Otay Ranch Resort Village

Alternative H

January 2019

Public Facility Finance Plan

OTAY RANCH RESORT VILLAGE ALTERNATIVE H

Otay Ranch Resort Village
GPA 04-03, SP 04-002, REZ 04-009, VTM 5361
ER # 04-19-005

TABLE OF CONTENTS

LIST OF EXHIBITS

LIST OF TABLES

Executive Summary

A. Overview

The Growth Management Chapter of the *Otay Subregional Plan Volume 2* (Otay SRP) contains goals, policies, objectives, and implementation measures governing the development of Otay Ranch to assure the efficient and timely provision of public facilities concurrent with demand and in compliance with facility-specific policies and thresholds. Processing and approval of this Public Facilities Financing Plan (PFFP) is required in conjunction with preparation of the Otay Ranch Resort Village Alternative H SPA to ensure the Resort Village Alternative H Project is consistent with the overall goals and policies of the Otay SRP. This PFFP is consistent with the overall Village Phasing Plan adopted by the County Board of Supervisors in October 1993, which includes the Project. The Village Phasing Plan provides that the Resort Village Alternative H is within the First Eastern Phase.

As a developer receives each succeeding development approval, the Otay SRP requires the applicant perform specific steps leading to the timely provision of the required facilities. The concept is illustrated below (Otay SRP, p. 348):

Performance of Facility Thresholds:

OTAY SRP

- *Goals, objectives, and policies established.*
- *Facility thresholds established.*
- *Processing requirements established.*

SPECIFIC PLAN

- *Facility financing refined and funding source identified consistent with Otay SRP goals, objectives, and policies.*
- *Facility demand and costs calculated consistent with adopted land uses and Otay SRP-defined methodologies.*
- *Specific facility financing and phasing analysis performed to assure compliance with Growth Management Thresholds.*
- *Facilities sited and zoning identified.*

TENTATIVE MAP

- *Subdivision approval conditioned upon assurance of facility funding.*
- *Subdivision approval conditioned upon payment of fees, or the dedication, reservation, or zoning of land for identified facilities.*
- *Subdivision approval conditioned upon construction of certain facility improvements.*

FINAL MAP

- *Tentative Map conditions.*
- *Performed lots created.*

BUILDING PERMIT

- *Impact fees paid as required.*

The PFFP analysis begins by assessing the demand for facilities based upon the demand from existing development and those projects with approved final and tentative maps. Public facility demands of The Otay Ranch Resort Village Alternative H, pursuant to a phasing projection of the future development of the project, are then analyzed to estimate how much, and at what time additional or upgraded facilities will be needed to ensure a particular facility does not fall beneath the adopted facility performance threshold. When specific thresholds are projected to be reached or exceeded, the PFFP provides recommended remedial action necessary for continued compliance with the Otay SRP.

B. Information Provided in this PFFP

The PFFP requires the preparation and approval of phasing schedules showing how and when facilities and improvements necessary to serve the Resort Village Alternative H will be installed or financed to meet the thresholds, including (Otay SRP, pp. 348-349):

- *An inventory of present and future requirements for each facility.*
- *A summary of facilities cost.*
- *A facility phasing schedule establishing the timing for installation or provisions of facilities.*
- *A financing plan identifying the method of funding for each facility required.*
- *A fiscal impact report analyzing Specific Plan consistency with the requirements and conclusions of the Otay Ranch Service Revenue Plan.*

C. General Conditions of this PFFP

1. All development within the proposed Project shall conform to the provisions and conditions of this PFFP.

2. All development within the proposed Project shall be required to pay applicable development impact fees for public facilities and other applicable fees pursuant to the most recently adopted programs by the County Board of Supervisors and applicable service agencies or districts, and as amended from time-to-time.

3. This PFFP shall be implemented in accordance with the Otay SRP.

4. Approval of this PFFP does not constitute prior discretionary review or approval for projects within the boundaries of the Plan. All future projects within the boundaries of the proposed Project shall undergo development review and approval in accordance with County regulations.

5. The facilities and phasing requirements identified in this PFFP are based on an assumed projection of development. If a less intense development or fewer residential units are actually constructed, facility and phasing requirements shall be adjusted accordingly.

6. This PFFP includes a phasing plan. This forecast is not to be considered absolute. Alternative phasing may occur. The actual number of dwelling units and other uses to be constructed in any particular phase will vary depending upon economic and other external conditions.

D. Proposed Public Facility Improvements

This PFFP analysis concludes that a number of public facility improvements will be required of the developer of the Resort Village Alternative H in order to achieve compliance with the adopted thresholds. These improvements are listed in the following Table. Please refer to Table 2 of the Resort Village Alternative H Specific Plan for a list of construction responsibilities for the following improvements.

Table 1: Summary of Project Public Facility Improvements

Improvement
DRAINAGE FACILITIES
· Storm Drains in internal streets. · Six (6) Water Quality Basins. · Upgrade culverts (14) under Otay Lakes Road
SEWERAGE FACILITIES
· Onsite Lift Stations (3) · Onsite Force main · Offsite Force main · Offsite Gravity Sewer · Sewer Lines in internal streets
TRANSPORTATION SYSTEM FACILITIES
· Signalized intersection at Otay Lakes/Wueste Roads · Widen Otay Lakes Road from 2 lanes to 4 lanes from Lake Crest Drive to Piazza Urbino (Phases 1 and 2) · Improve Otay Lakes Road from Piazza Urbino to eastern limits of subdivision as a two-lane roadway (Phase 3)
URBAN RUN-OFF FACILITIES
· Six (6) Water Quality Basins. · Culverts (14) under Otay Lakes Road · 36 Modular wetland units along Otay Lakes Road
WATER FACILITIES
· 980-3 Reservoir (4.0 million-gallon capacity) · Extend 20" Water Transmission line in Otay Lakes Road to 908-3 Reservoir. · Extend 20" Water line in Strada Piazza to Via Terni to Strada Campanelle · Water lines in internal streets
FIRE PROTECTION AND EMERGENCY FACILITIES
Enter into a "Fire Service Agreement" · Reserve a Public Safety, On-Site
LAW ENFORCEMENT FACILITIES
· Reserve Public Safety, On-Site or location with Mixed-Used District.
PARKS AND RECREATION FACILITIES
· Dedicate parkland and provide improvements consistent with San Diego County Park Land Dedication Ordinance
SCHOOL FACILITIES
· Reserve an Elementary School Site · Pay state mandated school fee or enter into mitigation agreement(s) with District(s)

[1] Any reference to Building Permit refers to production building permits and not building permits for model homes.

Table 2: Construction and Responsibilities for Facilities and Infrastructure

	Acquisition	Construction	Maintenance	Ownership	Access
Public Roads	Developer(s)	Developer(s)	County	County	Public
Private Roads	Developer(s)	Developer(s)	HOA	HOA	HOA
Resort Private Driveway	Developer(s)	Developer(s)	Private	Private	Private
Off Site Road Improvements	Developer(s) and/or Fair Share Contribution	Developer(s) and/or Fair Share Contribution	County/City of Chula Vista	County/City of Chula Vista	Public
On Site Trails / Pathways	Developer(s)	Developer(s)	County/District	County/District	Public
Landscaped Parkways	Developer(s)	Developer(s)	HOA or County/District	HOA or County/District	Public
Public Road Lighting	Developer(s)	Developer(s)	County	County	N/A
Specialty Village Lighting	Developer(s)	Developer(s)	HOA	HOA	N/A
MU Parking Lot	Developer(s)	Developer(s)	Private	Private	Public
Otay Ranch Preserve	Preserve Dedication	NA	POM Assessment	POM	Public
Internal Open Space (HOA)	Developer(s)	Developer(s)	HOA	HOA	N/A
Internal Open Space (Public)	Developer(s)	Developer(s)	County/District	County/District	N/A
Public Parks	Developer(s)	Developer(s)	County/District	County	Public
Private Parks	Developer(s)	Developer(s)	HOA	HOA	HOA
Water System	Developer(s)	Developer(s)	OWD	OWD	N/A
Sewer System	Developer(s)	Developer(s)	County/District	County/District	N/A
Drainage System	Developer(s)	Developer(s)	County/District	County	N/A
Fire Station	Developer(s)/District	Developer(s)/District	County/District	Fire District	Public
School	Developer(s)/District	Developer(s)/District	School District	School District	Public

Definitions	
Developer and Fair Share Contribution	Obligation will be satisfied through a combination of developer(s) performance and payment of impact fees.
Preserve Dedication	Obligation will be satisfied through compliance with the RMP 2 dedication requirements.
POM Assessment	Obligation will be satisfied through compliance with the RMP 2 requirement to establish an assessment mechanism.
Developer/District	Acquisition and Construction may be performed by the Developer(s) but funded through an assessment mechanism.
County/District	Performance or title may be held by the County but funded through an assessment mechanism.
HOA	Obligation will be satisfied through performance by the Home Owners Association (HOA).

1.0 Introduction

1.1 Overview

The purpose of this PFFP is to address the demand and adequacy of planned public facilities associated with the anticipated development of the Resort Village Alternative H. This PFFP has been prepared in compliance with the requirements of the Otay SRP. Part II of the Otay SRP identifies thirteen (13) areas of public facility analysis required for implementation of the Project. The list of facilities and services evaluated in this PFFP are as follows [2] .

Drainage Facilities	Fire Protection/Emergency Facilities
Sewerage Facilities	Transportation System Facilities
Urban Run-off Facilities	Water Facilities
Water Reclamation Facilities	Civic Facilities
Law Enforcement Facilities	Library Facilities
Parks and Recreation Facilities	School Facilities
Animal Control Facilities	

In addition to analyzing these thirteen facilities, the Otay SRP requires a PFFP to include Regional Facility Report for the following regional facilities.

Arts and Cultural Facilities	Cemetery Facilities
Health and Medical Facilities	Social and Senior Services Facilities
Correctional Facilities	Justice Facilities

Other facilities required to be addressed at the Specific Plan level are Solid Waste and Childcare facilities. This PFFP includes analysis of these facilities in Chapter 15.

1.2 Otay SRP Thresholds

The Otay SRP identifies public facilities and services with related thresholds and implementation measures. These public facilities and services are described in the Otay SRP and the Otay Ranch Facility Implementation Plan. The thresholds contained in Part II, Chapter Five of the Otay SRP, are used to evaluate if the demand generated by new development complies with the adopted threshold.

2 Listed in SRP Part II, p. 351.

This PFFP identifies new or upgraded facilities or services needed to comply with the threshold.

1.3 Facility Analysis

This PFFP analyzes facility adequacy for each of the applicable facilities and services. Each analysis is based upon the Resort Village Alternative H processing requirements for that facility. These establish the requirements for evaluating Project consistency with the threshold ordinance at various stages of entitlement action (General Plan, Specific Plan/Public Facilities Finance Plan, Tentative Map, Final Map, and Building Permit) in the development review process. A service analysis section is also included in this PFFP which identifies and provides background information on the service provided by each specific facility. An existing conditions inventory is then integrated into the analysis of each facility. The demand created by the Project is then assessed for each facility. This PFFP is based upon the assumptions of a ten-phased, non-sequential development scenario of the Project. Based upon this development projection, an adequacy analysis of proposed facility improvements is conducted.

The adequacy analysis provides a determination of whether or not compliance with the threshold will occur and be maintained, and the finance section provides a determination of whether funds are available to assure the improvement. The analysis includes remedial actions which will be necessary to bring the facility into conformance with the threshold.

In addition, this PFFP addresses Regional Facility Plans to ensure compliance as required by the Otay SRP.

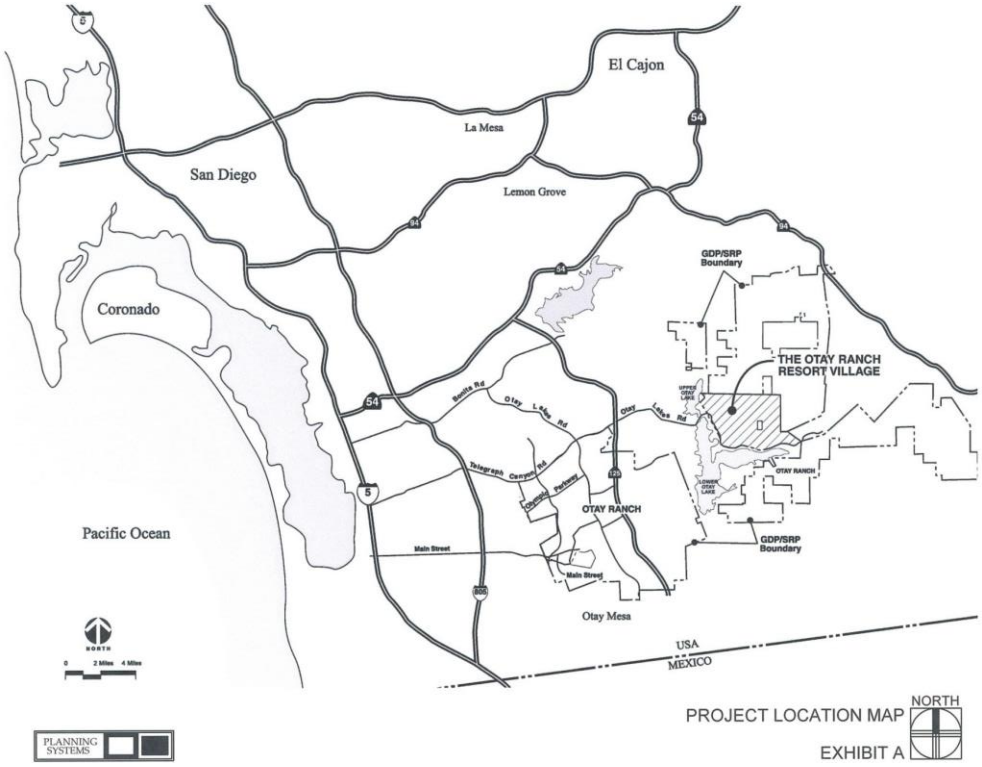

Exhibit A – Project Location Map

2.0 Land Use Assumptions

2.1 Purpose

The purpose of this section is to quantify the manner in which the Resort Village Alternative H will be developed, and to analyze the development pattern in relationship to existing urban development and infrastructure in the area, as well as all other projects at some stage of the development process in the County of San Diego and the City of Chula Vista. Public facility demand associated with the Project is added to this existing demand in order to assess facility adequacy through build-out.

2.2 Existing Development

This PFFP considers all existing and approved development up to October 2014 as the base condition. This information is based upon input from the County of San Diego, Department of Planning and Development Services and the City of Chula Vista Planning Department.

The Resort Village Alternative H project is within the boundaries of the Proctor Valley Parcel of the Otay Ranch and the Otay Ranch General Development Plan Subregional Plan (Otay Ranch GDP/SRP, Volume II). The policies contained within the Otay Ranch GDP/SRP text apply to the areas of the Otay Ranch within the Proctor Valley. With regard to the unincorporated area of Otay Ranch, it should be noted that no development has been developed or approved at the time of preparation of this PFFP.

2.3 Otay Ranch Resort Village Development Summary

A summary of the anticipated land uses for the Resort Village Alternative H is shown in Table 3. The total number of homes planned is 1,938 (1,881 single-family homes and 57 multi-family homes). Also included within the Project are approximately 16.6-acres of resort complex use, a 2.3-acre public safety site, 10.1-acres for an elementary school site, 31.2-acres of parks and recreational uses, roughly 1,107-acres of open space and Preserve, roughly 69-acres of Conserved Open Space, and approximately 32.3-acres of circulation facilities.

The Project is divided into Planning Areas. These areas are identified on the following land use summary and phasing tables, and are depicted in Exhibit B, Site Utilization Plan.

Table 3: Proposed Project Land Use Summary

Land Use		Acres[1]	Units	Density
Single-Family Residential				
R-1		**32.9**	**147**	**4.0**
R-2		**37.6**	**213**	**4.7**
R-3		**89.1**	**288**	**3.2**
R-4		**115.3**	**284**	**2.5**
R-5		**18.1**	**54**	**3.0**
R-6		**39.8**	**145**	**3.7**
R-7		**30.5**	**187**	**6.1**
R-8		**66.0**	**249**	**3.8**
R-9		**59.0**	**205**	**3.5**
R-10		**28.6**	**109**	**3.6**
	Single-Family Total[2]	**516.9**	**1,881**	**3.6**
Mixed-Use				
MU-1		**2.7**		
MU-2		**3.9**	**57**	**14.6**
	Mixed-Use Total[3]	**6.6**	**57**	**8.6**
	Residential Total	**523.5**	**1,938**	**3.7**
Parks				
P-1		**10.5**		
P-2		**2.7**		
P-3		**3.7**		
P-4		**2.7**		
P-5		**3.1**		
P-6		**2.4**		
	Parks Total	**25.1**		
Resort/HOA				
Resort[4]		**16.6**		
HOA Facility		**6.1**		
	Resort/HOA Total	**22.7**		
Public Uses				
Public Safety (PS)		**2.3**		
School		**10.1**		
	Public Uses Total	**12.4**		
Open Space & Preserve				
Open Space[5]		**145.8**		
Preserve		**1,107.2**		
	Open Space & Preserve Total	**1,253.0**		
Circulation				
Circulation		**32.3**		
	Circulation Total	**32.3**		
	GRAND TOTALS	**1,869.0**	**1,938**	

[1] Rounded to one tenth of an acre.
[2] Single-Family residential includes residential streets and internal slopes.
[3] Mixed-Use includes up to 20,000 square-feet of commercial/office space.
[4] Resort includes up to 200 rooms and up to 20,000 square-feet of ancillary commercial/office space.
[5] Conserved Open Space includes an additional 76.5-acres comprised of manufactured slopes, basin lots, and HOA open space. The remaining 69.3-acres is habitat land for conservation. These areas are outside of the Single-Family Residential and associated internal slopes.

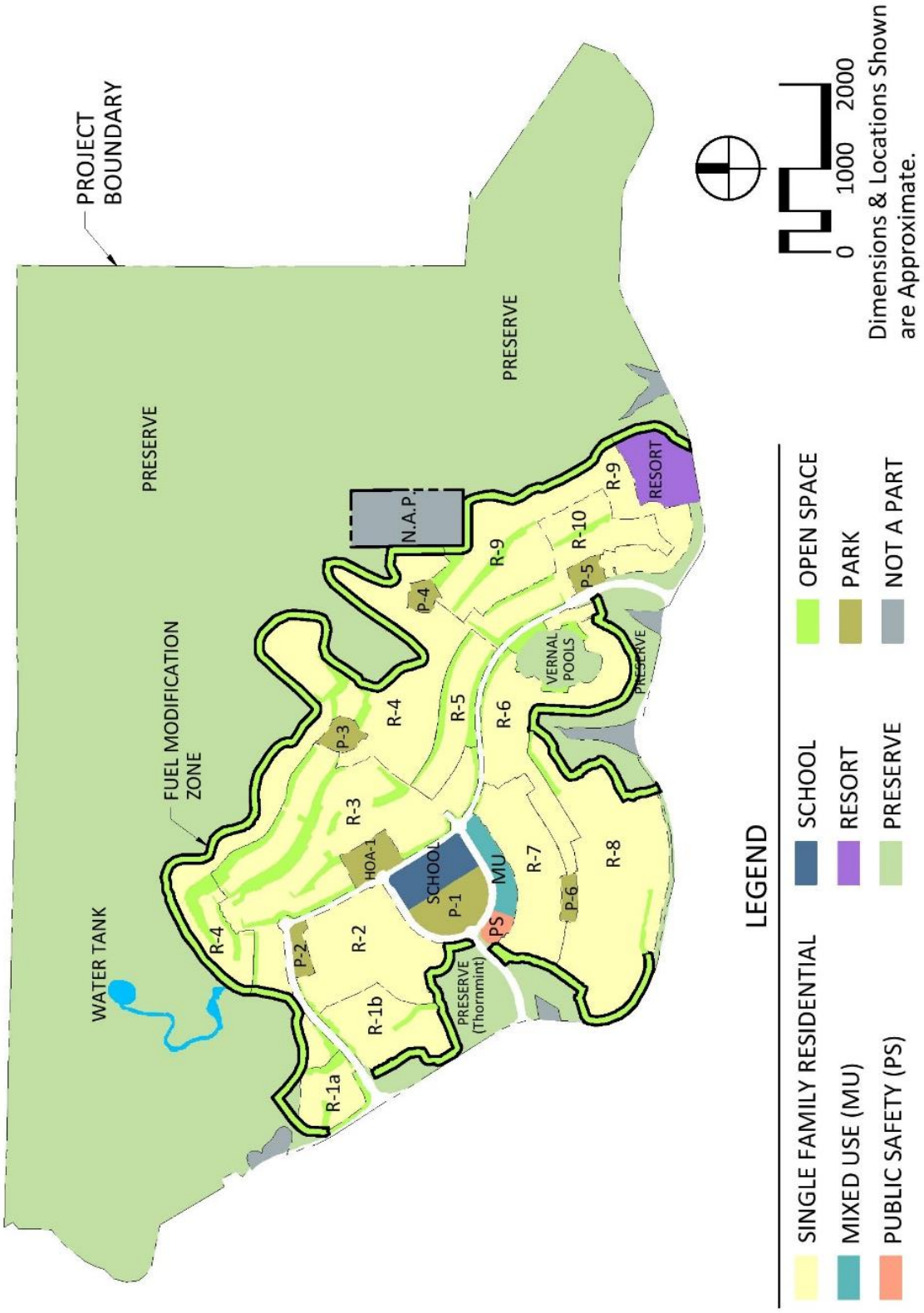

Exhibit B – Site Utilization Plan

2.4 Conceptual Project Phasing

For purposes of this PFFP analysis, development of the Resort Village Alternative H is assumed to occur in non-sequential geographic phases. The projected phasing forecast is not to be considered absolute. The actual number of homes and other uses to be constructed in the Project will vary depending upon economic and other external conditions. Such changes will not necessitate an amendment to this plan as long as actual development complies with the Otay SRP, the Resort Village Alternative H Specific Plan and the applicable public facilities thresholds.

A Phasing Forecast Summary for the Project is provided in Table 4 and a Conceptual Phasing Plan is shown on Exhibit C. This plan recognizes that any sequential phasing forecast is subject to variations due to market changes or regulatory complications. Therefore, this PFFP allows for non-sequential phasing by identifying facilities requirements in relation to phasing based on the geographical location of the phased development. Thus, the Project is assumed to be developed in ten phases over an approximate ten-year build-out period. This phasing is identified more specifically as shown on Table 4.

Table 4: Resort Village Alternative H Phasing Forecast Summary

Phase	Units	Hotel Rooms	Retail (sf)	Parks/HOA	Civic Uses
PH1	371			2.7	
PH2	208			6.1	
PH3	144				
PH4	220			3.7	
PH5	257			13.0	12.4
PH6	282				
PH7	99				
PH8	177			2.7	
PH9	180		20,000	3.0	
Resort		200	20,000		
TOTAL	**1,938**	**200**	**40,000**	**31.2**	**12.4**

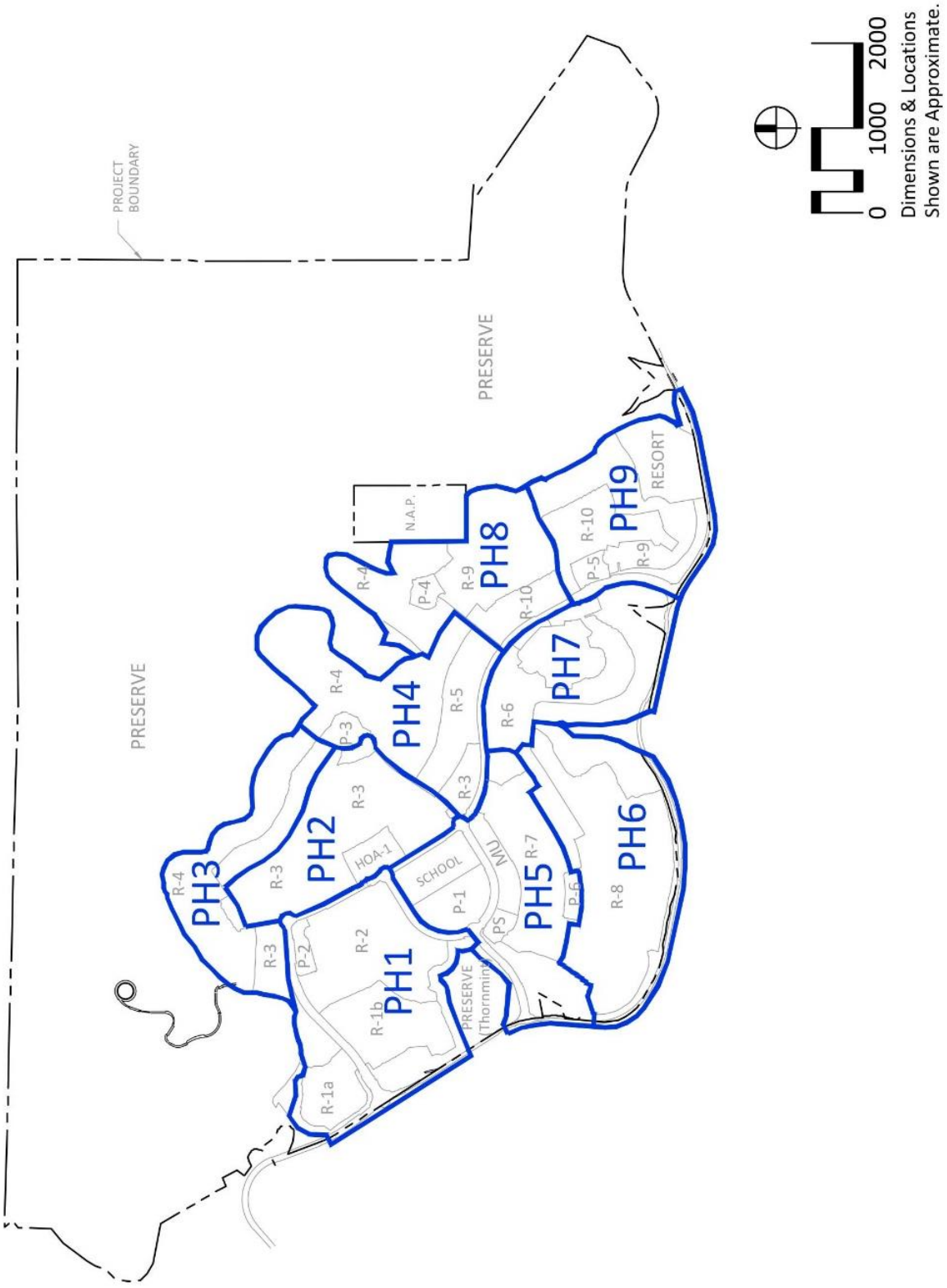

Exhibit C – Phasing Plan

2.5 Population-based Analysis

Several of the public facilities thresholds are based on providing a quantity of facilities per sum of population. As a result, it is necessary to determine a population projection for each assumed phase. For the 91914 zip code, SANDAG estimates the average persons per home to be 3.59.

Table 5: Proposed Project Population Projection

Phase	Homes	Projected Population
PH1	371	1,332
PH2	208	747
PH3	144	517
PH4	220	790
PH5	257	923
PH6	282	1,012
PH7	99	355
PH8	177	635
PH9	180	646
TOTAL	**1,938**	**6,957**

3.0 Drainage Facilities

3.1 Otay SRP Threshold

Storm water flows and volumes shall not exceed Engineering Standards of the governing land use jurisdiction (County of San Diego).

3.2 Service Analysis

The San Diego County Flood Control District is responsible for ensuring safe and efficient storm water drainage control systems are provided concurrent with development in the unincorporated portions of the County of San Diego. The County Board of Supervisors acts as the Board of Directors for the district. District staff reviews individual projects to ensure that improvements are provided consistent with the drainage master plan(s) and that development projects comply with all County engineering drainage standards.

The *Drainage Study: Otay Ranch Resort Village 13 – Alternative H,* prepared by Hunsaker & Associates, June 2018 assess the existing (Pre-Development) and developed (Post- Development) drainage conditions of the Project site. The purpose of the Drainage Study is to quantify both existing and developed hydrologic condition peak flows from the Project site to Lower Otay Reservoir, located immediately south of the Project site. Additionally, the report addresses the adequacy of the receiving conveyance systems to which the Project drains. The total drainage study area encompasses 2,462 acres.

3.3 Project Processing Requirements

1. Identify drainage demand.
2. Identify locations of facilities for on-site and off-site improvements.
3. Provide cost estimates.
4. Identify financing methods.

3.4 Existing Conditions

The Resort Village Alternative H project site is currently in an undeveloped state. The topography is characterized by rolling moderate and steep hills sloping from north down to the south. Elevations on the project watershed range from a high of approximately 1,500-feet average mean sea level (AMSL) near the northeast corner of the property, to the approximate 500-feet AMSL surface of Lower Otay Reservoir.

Run-off from the site drains via the twenty-three (23) existing culverts under Otay Lakes Road, which extends the length of the northern shore of Lower Otay Reservoir and defines the lowest elevations of the site. Development of the site will not cause any diversion to or from the Lower Otay Reservoir watershed. Water from Lower Otay Reservoir (and, thus, from the entire catchment of the reservoir) rarely discharges to the Otay River downstream of Savage Dam. Water from Lower Otay Reservoir is conveyed in a pipeline to the Otay Water Treatment Plant, treated to drinking water standards, and distributed as potable water to homes and businesses in the City of San Diego and neighboring communities. The only time any water is released from Lower Otay Reservoir to the Otay River downstream is when the reservoir fills up and overflows, which has happened only seven times since 1917.

The on-site drainage watersheds and a summary of the existing condition drainage flows are as identified and shown graphically in the *Drainage Study: Otay Ranch Resort Village 13 – Alternative H*. Table 6 illustrates, the existing culverts under Otay Lakes Road are undersized in the existing condition and will require upgrades to prevent roadway overtopping during the design flow event. Specifically, 70% of the analyzed existing culverts under Otay Lakes Road (15 of 22) are undersized in the existing condition and require upgrades to prevent roadway overtopping during the design flow event. Eight of the culverts have enough capacity to avoid overtopping in Pre-Development conditions during a 100-year storm event.

3.5 Project Demand and Proposed Facilities

3.5.1 Post Development Watersheds

Development of the Resort Village Alternative H site will include the construction of single-family residential homes, multi-family homes, a resort hotel complex, parks, an elementary school site, a public safety site, 20,000 square-feet of retail/commercial space, and the accompanying roads and infrastructure improvements.

Roughly 761-acres of the 1,889-acre[3] property will be developed.[4] The balance (approximately 1,253-acres) will remain open space, including both natural Preserve, Conserved Open Space, and non-preserve open space (e.g. – fuel management zones, etc.).

Natural run-off from most areas north of the Project site will be separated from the developed site run-off via separate storm drain systems. Thus, run-off from natural (undeveloped) areas would continue to drain directly to the Lower Otay Reservoir, and not mix with run-off from the development until downstream of the proposed water quality basins or other structural BMPs (after low-flows from the development areas have been treated).

[3] The 1,889 acres includes the 20-acre "NAP" out parcel.

[4] Compared to Section 6.0, which includes an additional approximately 45 acres of analysis due to impacts associated with Otay Lakes Road widening for totals of approximately 795-acres of impacts and 1,917 total acres. The Otay Ranch Resort Village 13 Alternative H Drainage Study does include the required improvements to culverts off-site for Otay Lakes Road; however, since no drainages are disturbed, the study focuses only on-site.

Exhibit D depicts the Project Watersheds and Drainage Control Facilities.

Table 6: Project Onsite Watersheds (Existing Condition)

Culvert No.	100-Year Existing Peak Flow (cfs)	Existing Culvert Capacity "C" (cfs)	Roadway Overtopping Potential in 100-Year Storm
1A	43.9	28.9	Yes, minor
1B	11.1	28.9	No
2	49.7	45.9	Yes, minor
4	172.0	37.14	Yes, significant
5	48.4	41.07	Yes, minor
6	194.94	42.52	Yes, significant
7	479.9	135.0	Yes, significant
8	34.4	3.5	Yes, significant
9	121.9	49.0	Yes, significant
10	18.8	19.7	No
11	10.9	13.0	No
12	22.1	13.8	Yes, minor
13	14.9	17.0	No
14	20.4	19.7	Yes, minor
15	296.5	25.7	Yes, significant
16	97.8	35.2	Yes, significant
16A	14.2	15.4	No
17	30.6	44.57	No
17A	11.0	10.2	Yes, minor
18	896.5	443.4	Yes, significant
18A	16.5	12.6	Yes, minor
19	89.53	42.0	Yes, significant
20	68.95	540.4	No

All run-off from the developed Otay Ranch Resort Village Alternative H site will be released to the Lower Otay Reservoir. The run-off from the 85th percentile storm as defined by the *San Diego County Hydrology* Manual (SDCHM) and drier weather run-off from developed areas of the Project site will be diverted to the six (6) Water Quality/bio-filtration Basins or through the proprietary BMPs along Otay Lakes Road. Development of the site will not cause any diversion to or from the Lower Otay Reservoir watershed.

Run-off in excess of the run-off volume produced by the 85th percentile storm will discharge to the Otay Lakes Road culverts and into Lower Otay Reservoir. The performance of the Water Quality Basins is described in depth in the *Priority Development Project (PDP) SWQMP for Otay Ranch Village 13 TM-EIR Alternative H,*

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Exhibit D – Project Watersheds and Drainage Control Facilities

prepared by Hunsaker & Associates, June 2018. Since the capacity of Lower Otay Reservoir is sufficient to convey the proposed peak flow increases, and since the culverts will be upsized as necessary to convey the projected 100-year peak flow from the developed areas under Otay Lakes Road, no run-off detention basins will be required as part of this development. Post-development watersheds are described in Table 7.

At the downstream end of the internal storm drain systems, the culvert crossings under Otay Lakes Road will be upsized to prevent roadway overtopping during the 100-year design event. The following table summarizes the 100-year developed condition peak flows to each of the discharge locations at Otay Lakes Road. All flows listed in the table were generated using the AES-2015 computer program and the Rational Method as explained in Chapter 3 of the SDCHM. Flows for culvert 18 were generated using the Natural Resources Conservation Service (NRCS) Unit Hydrograph Method as explained in Chapter 4 of the SDCHM.

Table 7: Post-Development Watershed Area

Culvert No.	Total Post-Developed Area to Culvert (acres)	100-Year Developed Peak Flow (acres)
1A	24.7	39.4
1B	none	80.7
2	43.22	188.6
4	120.7	227.2
6	180.5	461.7
7	216.5	740.6
9	386.1	15.2
12	4.9	14.5
14	4.3	470.8
15	208.4	472.8
16	254.1	223.31
18	896.4	1,209.8*
19	68.1	82.33
20	54.3	58.65
TOTAL	**2,462.2***	**4,062.3**

* Culvert 18 analyzed with HEC HMS software

3.5.2 Rational Method – 100 Year Storm

As mentioned, all methodology used in this analysis is consistent with standards set forth by the SDCHM. Since the total contributing watershed area to each discharge culvert is less than one square mile in Pre-Development conditions (except for culvert 18 where the contributing area is over 1.0 square-miles), the Rational Method was used to determine peak flow rates. The NRCS Unit Hydrograph Method was used to determine peak flow rates at culvert 18. Per County of San Diego methodology, all hydrologic results correspond to the 100-year storm design.

In accordance with County of San Diego drainage criteria for the Post-Developed condition and following the recommendations of the County of San Diego's comments in the original Master Drainage Study, the Rational Method has also been used to determine peak design flow rates since all the contributing drainage areas are less than 1.0-square mile (except for culvert 18). The AES-2003 computer software was used to model the run-off response per the Modified Rational Method. Methodology used for this computation of design rainfall events, run-off coefficients, and rainfall intensity values are consistent with criteria set forth in the most current SDCHM. The areas draining to culvert 18 are greater than 1.0- square mile for both the existing and proposed conditions. The NRCS Unit Hydrograph was developed using the HEC- HMS software program. All input for this program is consistent with Chapter 4 of the SDCHM. A more detailed explanation of methodology and model development used for this analysis is listed in the *Drainage Study: Otay Ranch Resort Village 13 – Alternative H*.

Details addressing the treatment of storm water run-off are discussed in the *Priority Development Project (PDP) SWQMP for Otay Ranch Resort Village 13 – Alternative H*.

As mentioned, the 100-Year peak flow event analysis concludes that multiple culverts under Otay Lakes Road, which transport the developed area drainage from the water quality basins to the reservoir, will require upgrading due to the increased peak flow from the developed condition.

3.5.3 Adequacy of Culverts under Otay Lakes Road

In accordance with County storm water control policy, the sizing of these proposed water quality basins was analyzed to determine an adequate basin size, as the calculated first flush run-off volume must be routed through each of the extended detention basins. In addition, the capacity of the existing culverts under Otay Lakes Road was analyzed to determine whether the existing culvert structures will be of sufficient size to convey the post-development condition peak flow rates without roadway overtopping. Table 8 details the major culvert upgrades required to accommodate the 100-year flow under Otay Lakes Road. Minor culvert upgrades may also be required at the lesser culverts within the Project site to ensure safe and efficient conveyance of the 100-year storm. These upgrade sizes may be reduced at the final engineering stage if it is concluded through a detailed hydrologic analysis that a reduced size will provide the necessary protections.

Regarding the peak flow comparison from Pre and Post-Development conditions, seven discharge locations out of 22 will increase their peak flows, and only four of those significantly (more than 80%: culverts 9, 15, 16, and 18). Table 8 also shows the velocity of discharge in Pre and Post-Development conditions for the respective 100-year peak flows. The Post-Development culverts will avoid overtopping and the excessive erosion associated with it and will discharge the 100-year peak flow with reduced velocity when compared to Pre-Developed conditions.

The hydrologic analysis concludes that it will be necessary to construct storm drain systems throughout the Project to adequately convey run-off to the locations of the proposed water quality basins and the downstream culverts. The basins are designed of an adequate size to handle the necessary volumes identified for each watershed. Installation of the six water quality basins will ensure that the downstream drainage system will not be adversely affected by the Project.

Additional analysis specific to storm water detention is discussed in the Urban Run-off section (Section 6.0) of this PFFP.

Table 8: Post Development 100-Year Peak Flows

Culvert #	*100- Year Existing Peak Flow (cfs) and discharged velocity (ft/s)**	*100- Year Developed Peak Flow (cfs) & Discharge Velocities (ft/s)* **, ***, ****	*Existing Culvert size*	*Proposed Culvert Size*
1A	43.9 / *11.6*	46.9 / 10.4 / 11.5 / 10.0	24″ CMP pipe	30″ RCP pipe
1B	11.1 / 9.3	0 (diverted to 2)	24″ CMP pipe	none
2	53.7 / *14.7*	80.7 / 11.9 / 11.9 / 11.9	24″ CMP pipe	36″ RCP pipe
3	Not affected by Development	Not affected by Development	2 – 10′ x 10′ boxes	Extension of the 2 – 10′ by 10′ boxes
4	172.0 / *11.9*	188.6 / 15.0 / 15.0 / 15.0	24″ CMP pipe	48″ RCP pipe
5	48.4 / *13.1*	0 (diverted to 6)	24″ CMP pipe	none
6	194.9 / *13.6*	**227.16 / 10.9 / 10.9 / 10.9**	24″ CMP pipe	72″ RCP pipe
7	568.6 / *20.3*	**461.72 / 15.0 / 15.0 / 15.0**	36″ RCP pipe	78″ RCP
8	34.4 / *5.2*	0 (diverted to 7)	12″ CMP pipe	none
9	121.9 / *15.6*	**740.6 / 22.5 / 22.5 / 22.5**	24″ RCP pipe	78″ RCP pipe
10	18.8 / *8.3*	0 (diverted to 12)	21″ CMP pipe	none
11	10.9 / *10.5*	0 (diverted to 12)	18″ CMP pipe	none
12	22.1 / *15.5*	15.2 / 10.0 / 10.0 / 6.4	18″ CMP pipe	24″ RCP pipe
13	14.9 / *13.7*	0 (diverted to 14)	18″ RCP pipe	none
14	20.4 / *13.6*	**14.49 / 10.0 / 9.0 / 6.4**	18″ RCP pipe	24″ RCP pipe
15	296.5 / *14.5*	470.78 / 16.6 / 16.6 / 16.6	18″ RCP pipe	72″ RCP pipe
16	97.8 / 11.2	**472.82 / 17.2 / 16.7 / 16.7**	24″ CMP pipe	72″ RCP pipe
16A	14.2 / *11.6*	0 (diverted to 16)	18″ CMP pipe	none
17	30.6 / *9.8*	0 (diverted to 16)	24″ CMP pipe	none
17A	11.0 / *12.6*	0 (diverted to 18)	15″ PVC pipe	none
18	896.5 / *18.7*	**1,209.8 / 14.3 / 11.6 / 9.8**	66″ CMP pipe	Contech 23A6-6
18A	16.5 / *7.6*	0 (diverted to 18)	18″ HDPE pipe	none

* Discharge velocity assumes that overtopping of Otay Lakes Road will occur at locations where existing pipes that do not have the capacity to convey 100-year existing flows.

** 1st value for discharge velocity is based on free outfall scenario, i.e. no tailwater assumed. Analysis conducted using FlowMaster software.

*** 2nd value for discharge velocity is based on tailwater elevation of 490.7 which corresponds to 100-year water surface elevation of Lower Otay Reservoir. Analysis conducted using CulvertMaster software except culverts 2, 4, 6, and 16 which used Hydroflow Express software.

**** 3rd value for discharge velocity is based on a tailwater elevation of 491.3 which corresponds to the top of the Savage Dam spill way gates (additional calculation prepared per request of the City of San Diego). Analysis conducted using HydraFlow Express software.

Table 8 provides details of the major culvert upgrades under Otay Lakes Road. From an analysis of Table 8, ten culverts will be abandoned (culverts 1B, 5, 8, 10, 11, 13, 16A, 17, 17A, and 18A), one culvert will remain the same size but improved (Culvert 3), one culvert will be extended (Culvert 3, corresponding with the double 10′x10′ box), and ten culverts will be greatly improved.

3.5.4 Hydro-modification

According to the October 2008 Final Hydro-modification Management Plan, Lower Otay Reservoir is listed as a facility that is exempt from hydro-modification. However, according to the City of San Diego MSCP Subarea Plan page 35, the City has reserved the right to maintain "the area of Otay Lake and Dam, including the shoreline are from the high-water level of the spillway (with gates closed) at 490.7 feet for water quality purposes." All of the proposed storm drain outlets (with the exception of four culverts) that cross Otay Lakes Road have been designed to outlet at or below this 490.7 high-water elevation. These outfalls are therefore exempt from hydro-modification requirements, while the watersheds draining to the four remaining culverts are subject to hydro-modification.

In an effort to emphasize the anticipated erosion-reducing characteristics resulting from the Project, the following discussion is provided:

- The velocity of many potentially erodible reaches of intermittent creeks will be reduced as a consequence of the development.

- Of the 22 analyzed culverts, ten existing culverts will be abandoned, and no erosion that could be currently taking place will occur in post-development conditions from their current existing discharge points to the reservoir.

- Of the remaining 12 culverts, ten culverts will be constructed with outlet invert elevations at or below the Reservoir high water level of elevation 490.7 erosion at these points will therefore be minimal.

- Two additional watershed areas with no existing culverts were subject to hydro-modification. Both areas proposed new culverts, which might create hydro-modification impacts within the watershed.

- Rip-rap improvements will occur in all discharges as a consequence of the development, resulting in an even greater reduction in erosive potential.

3.6 Adequacy Analysis

The threshold dictates that storm water flows and volumes shall not exceed the adopted standards of the County of San Diego. The hydrologic analysis concludes that construction of the post-development storm drain systems throughout the Project to the proposed water quality basins, and the downstream culverts, will result in storm drain infrastructure that is in compliance with County standards. This proposed drainage control infrastructure program also minimizes the opportunity for downstream pollution. The analysis concludes that the basins and culverts will be designed of an adequate size to handle the necessary volumes, consistent with the standards. Subject to installation of the storm drain system, the Project will consist of an adequate program of storm drain collection.

In addition, the following conditions shall be required of the developer of the Project:

1. The Project will be designed to avoid violation of any water quality standards or waste discharge requirements. Storm water treatment design is further discussed in the *PDP Storm Water Quality Management Plan: Otay Ranch Resort Village 13 – Alternative H*.

2. Development of the Project site will not degrade potential beneficial uses of downstream water bodies as designated by the Regional Water Quality Control Board, including water bodies listed on the Clean Water Section 303d list.

3. Minor alterations of the existing drainage pattern, required as part of the development, will be mitigated in a manner that would prevent substantial erosion or siltation onsite or offsite. Energy dissipater systems will be designed at all proposed culvert outfalls.

4. Development of the Project site does not encroach on any 100-year flood hazard areas as defined by Federal Emergency Management Agency (FEMA). All proposed structures will be elevated above the anticipated 100-year water surface elevation. As such no Conditional Letter of Map Revision (CLOMR) is required.

5. Prior to recordation of the final map, 100-year flood lines will be established for any lot encumbered by drainage channel conveying a watershed area in excess of 25-acres. Any such floodplain boundary shall be clearly delineated on the non-title information sheet of the final map.

6. On-site and off-site drainage easements shall be provided to the satisfaction of the Director of Public Works.

7. A flowage easement shall be granted to the San Diego County Flood Control District for all portions of lots subject to inundation by a 100-year flood from a drainage area in excess of one square mile.

8. The Drainage Study and SWQMP for this Project will be submitted to the City of San Diego and County of San Diego for review.

3.7 Inventory and Estimated Costs of Future Required Drainage Facilities

Table 9 lists the major drainage trunk facilities that will be required as a condition of the Project.

Table 9: Inventory of Major Drainage Trunk Facilities

Drainage Facility	Number	Responsibility
Storm Drains in internal streets	As required by S.D. County Engineering Standards	Developer
Water Quality Basins	6	Developer
Upgrade Culverts under Otay Lakes Road	10	Developer

3.8 Threshold Compliance

Subject to phased developer installation of the above-referenced drainage facilities as described in this PFFP, the planned development of the Resort Village Alternative H will not adversely impact the existing natural drainage condition of the Project site. The increased run-off resulting from the development will be mitigated through installation of the required drainage infrastructure, including six water quality basins, and the upgrading of outflow drainage culverts under Otay Lakes Road. The Project shall be responsible for the conveyance of ultimate storm water flows in accordance with County of San Diego standards. The County Department of Public Works and the County Flood Control District shall review all plans to ensure compliance with County Engineering Standards. Satisfaction of drainage conditions of approval associated with subdivision of the site will constitute compliance with the adopted threshold.

3.9 Drainage Facilities Phasing

Table 10 describes the phasing for drainage facility improvements in Resort Village Alternative H. In addition to the facilities described in the table, storm drains will be required to be installed in internal streets prior to the issuance of building permits. Phasing of the culverts under Otay Lakes Road will be implemented with improvements to Otay Lakes Road.

For the phasing of the required water quality basins, refer to Section 6.9, Table 27.

Table 10: Drainage Facilities Improvements

Phase	Drainage Facilities Improvements
PH1	Concurrent with the improvements to Otay Lakes Road detailed in Section 5.9, the project applicants shall upgrade the culverts under Otay Lakes Road
PH2	
PH3	
PH4	
PH5	
PH6	
PH7	
PH8	
PH9	
Resort	

3.10 Drainage Facilities Financing

3.10.1 On-Site Facilities

County of San Diego policy requires that all development provide for the conveyance of storm waters throughout the Project to comply with County engineering standards. This will be accomplished by installing drainage infrastructure, by phase, and thus ensuring that needed facility is in place prior to or concurrent with development of the area which is affecting the natural drainage.

3.10.2 Off-Site Facilities

The Project site is not located within a County Special Drainage Area and therefore will not be responsible for payment of drainage fees to fund off-site facilities. Off-site improvements which are part of the construction of Otay Lakes Road will be funded by the developers. No other off-site drainage facilities are required.

4.0 Sewerage Facilities

4.1 Otay SRP Threshold

Provide a healthful and sanitary sewerage collection and disposal system for the residents of Otay Ranch, including a system designed and constructed to use reclaimed water where allowed by the authority having jurisdiction and ensure that sewer collections do not exceed capacity.

4.2 Service Analysis

The Resort Village Alternative H is located in the unincorporated area of the County of San Diego and is not currently within the boundaries of a sewer service district. Service is proposed to be provided by the San Diego County Sanitation District entering into a flow transfer agreement with the City of Chula Vista for service via the Salt Creek Interceptor.

The *Otay Ranch Facility Implementation Plan* assumed the Project would utilize the Salt Creek Interceptor and sewer lines downstream from the Project site. More recent sewer service analysis, The *Otay Ranch Resort Village Overview of Sewer Service*, prepared by Dexter Wilson Engineering, Inc., March 2015 and *Overview of Sewer Service for the Supplemental Analysis: Otay Ranch Resort Village 13 – Alternative H*, prepared by Dexter Wilson Engineering, Inc. May 2018 examined both the Salt Creek sewer routing and an alternative routing for downstream distribution of sewage to the Spring Valley Sanitation District (SVSD). The 2015 analysis looked at downstream conveyance to the Spring Valley Sanitation District as an alternative but concluded that the preferred alignment is for sewer service to be provided by the Salt Creek Interceptor. The City of Chula Vista and San Diego County negotiated and signed an agreement to utilize the Salt Creek Interceptor in 2016; therefore, that sewer route is included in this PFFP.

Sewage from the Project will flow through the San Diego Metropolitan Sewerage System (Metro) and be treated at the Point Loma Wastewater Treatment Plant. The County of San Diego currently purchases capacity for wastewater treatment through the City of San Diego Metro System. The County of San Diego has treatment capacity through the Metro system for the project.

4.3 Project Processing Requirements

1. Identify location of facilities for on-site and off-site improvements, including reclaimed water facilities in conformance with The *Otay Ranch Resort Village Overview of Sewer Service*, prepared by Dexter Wilson Engineering, Inc., March 2015 and *Overview of Sewer Service for the Supplemental Analysis: Otay Ranch Resort Village 13 – Alternative H*, prepared by Dexter Wilson Engineering, Inc. May 2018.

2. Provide cost estimates for all facilities and proposed financing responsibilities.

3. Identify financing methods for required improvements.

4.4 Existing Conditions

4.4.1 Existing On-site Sewer Conditions

The subject property is presently in an undeveloped state. No sewer facilities presently exist within the site.

4.4.2 Existing Off-site Sewer Conditions

The Salt Creek Interceptor, located west of the Project site has been selected to provide sewer service to the Project. This Interceptor Line is owned and operated by the City of Chula Vista. This interceptor begins in Hunte Parkway, near the southern boundary of the Rolling Hills Ranch project and follows Salt Creek drainage and the Otay River Valley to the City of San Diego's Metropolitan Interceptor. The Salt Creek Interceptor ranges in size from a 15-inch to a 48-inch line. The Salt Creek Interceptor has been sized to accommodate ultimate development in the service area, including the Project. The existing location of the Salt Creek Interceptor is shown in Exhibit E.

A November 1994 Salt Creek Basin study estimated that 2,253 equivalent dwelling unit (EDU) from the Project would convey flow to the Salt Creek Interceptor. The 2,205 total EDUs proposed by the Project (using City of Chula Vista criteria) are 48 fewer EDU than the previous projection.

4.5 Project Demand and Proposed Facilities

4.5.1 Projected Project Demand

Resort Village Alternative H is projected to create sewage demand of 2,205 EDU's. The land use breakdown for this projection is shown on the following table along with average projected sewer flows in gallons per day (gpd).

4.5.2 Proposed On-site Sewage Facilities

The Project will construct an onsite sewer system to serve development in the community. This system will include onsite gravity sewer lines and three onsite lift stations and associated force mains. The lift stations are necessary to convey sewerage to the existing off-site sewer trunk lines. The lift station sites and necessary easements will be conveyed to the County of San Diego.

The County of San Diego does not have established detailed design standards for lift stations. On recent projects, the County has used City of San Diego Guidelines for lift stations as a reference. Some of the pertinent criteria from the City of San Diego 2015 Sewer Design Guide are as follows:

- Dual force mains are required.
- Redundant pumping units are required.

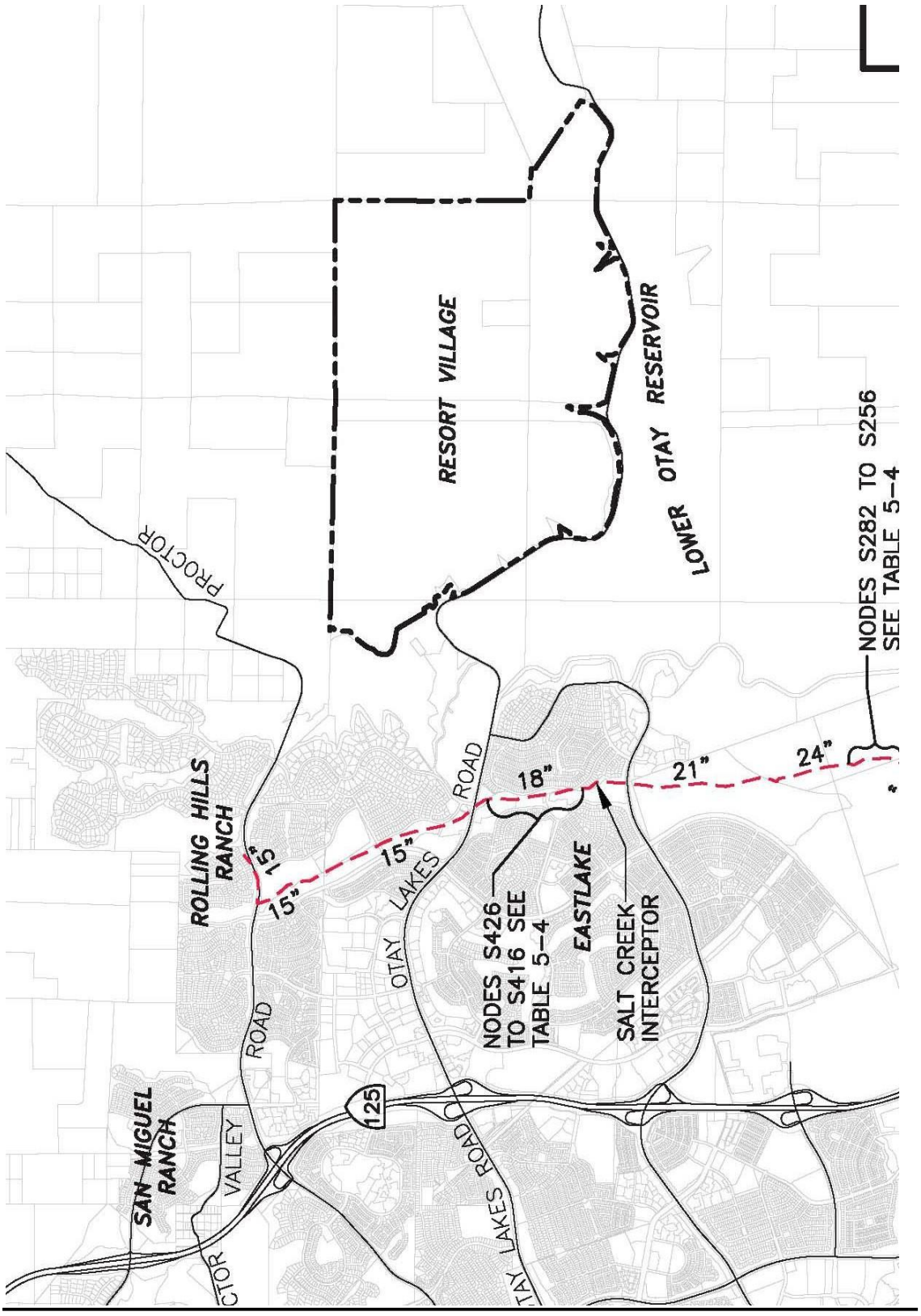


Exhibit E - Existing Off-site Sewer Facilities

- Pumping units shall be sized for peak wet weather gravity flow plus pumped flow of upstream lift stations, if any.
- Redundant power source such as diesel generator is required.
- Stations to include SCADA system to remotely notify County of station status and alarms.
- Overflow storage equivalent to 6-hours of peak influent gravity flow is required. Two-hours are standard, but he City of San Diego requires six hours where maximum protection from spillage is required.
- Odor control system, Bioxide or equal, is required.
- Station to include adequate access and turn around space for large vehicles.

Table 11: Project EDU Projections (City of Chula Vista factors)

Description	Quantity	EDU's	Generation Factor	Average Flow (gpd)
Single-Family	1,881 units	1,881	230 gpd/unit	432,630
Multi-Family Residential	57 units	45.1	182 gpd/unit	10,374
Mixed Use Commercial[5]	2.0 ac.	12.2	1,401 gpd/ac.	2,802
Resort	200 units	158.3	182 gpd/unit	36,400
Resort Retail	2.0 ac	12.2	1,401 gpd/ac.	2,802
Public Safety Site	2.7 acres	15.4	1,313 gpd/ac.	3,545
School	10.1 acres	51.9	1,181 gpd/ac.	11,928
Park (P-1)	10.5 acres	18.7	500 gpd/ac.	4,305
HOA	6.0 acres	10.7	410 gpd/ac.	2,460
Total		**2,205**		**507,246**

The easterly lift station (Lift Station 3), will collect flows from the south central and eastern portions of the Project and pump to Lift Station 2. This station will require a capacity of approximately 560 gallons per minute (gpm) and dual 8-inch force mains. Lift Station 2 will collect gravity flows from the western and north central portion of the Project (and flows from Lift Station 3) and will require a capacity of approximately 940 gpm with dual 10-inch force mains. Lift Station 1 will collect flows from the western portion of the Project with all flows and from Lift Station 2. This station would require a capacity of approximately 950 gpm and require dual 10-inch force mains. These facilities are shown on Exhibit F.

5 Retail up to 20,000 square-feet including possible 100 seat restaurant and other retail uses.

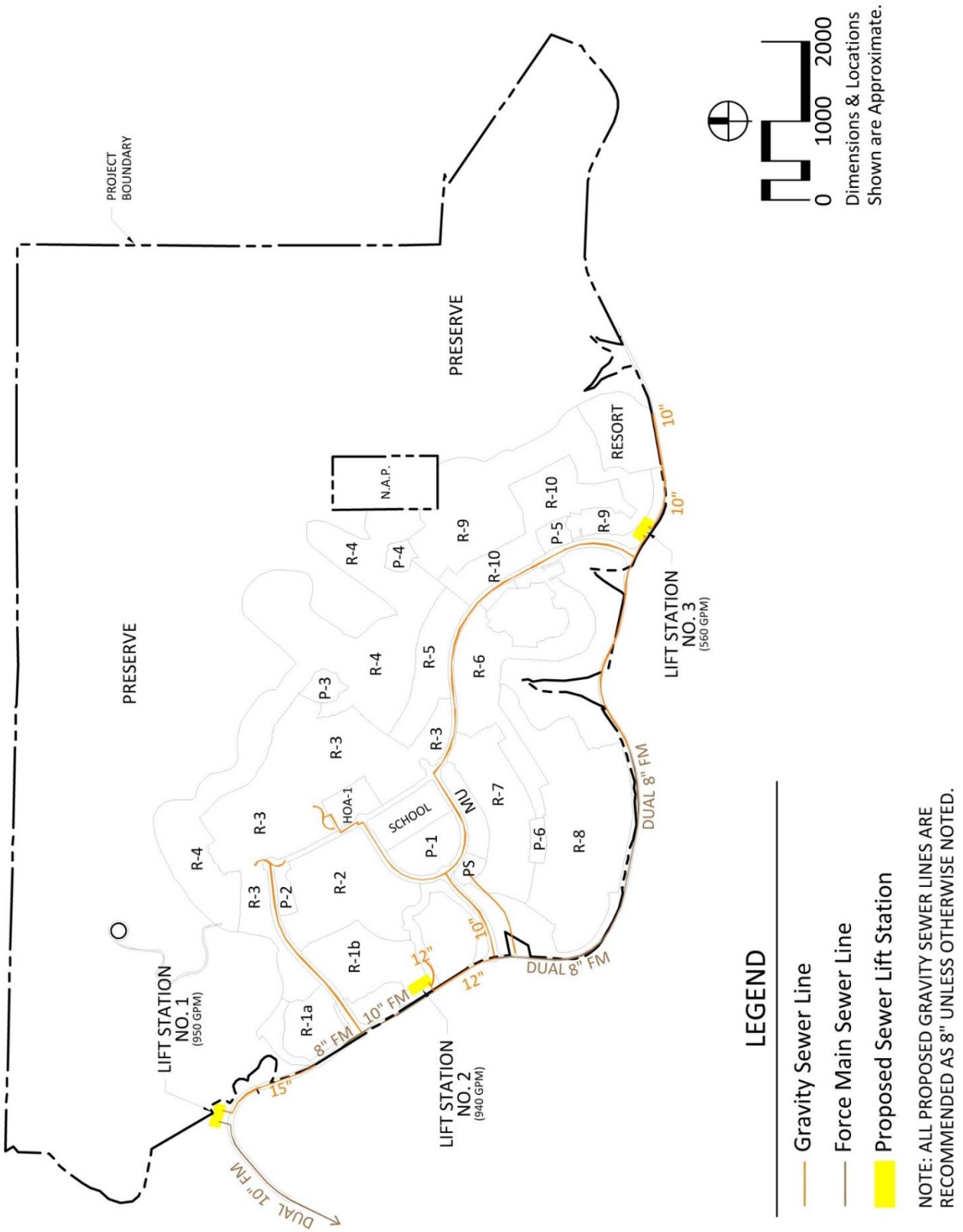


Exhibit F - Proposed Sewer Facilities

4.5.3 Proposed Off-site Sewage Facilities

The City of Chula Vista and San Diego County have negotiated and signed an agreement in 2016, which allows the Project to utilize the Salt Creek Interceptor to convey effluent. The Project is required to pay sewer connection and impact fees to the City of Chula Vista at the time of building permit issuance. In order to convey flows from the Project site to the Salt Creek Interceptor, three on-site permanent sewage lift stations and force mains would be required. From Lift Station 1, sewage flows would be conveyed to the existing Salt Creek Sewer Interceptor along Otay Lakes Road. Sewer mains would be installed within the existing right-of-way and be a combination of 10-inch force mains and a 15-inch gravity main. Exhibit G shows the anticipated location and sizes of the proposed facilities.

A Salt Creek Basin Study was prepared in November 1994 by Dexter Wilson Engineering to determine a fee funding program for future improvements to the Salt Creek Interceptor System in order to ensure that system could serve the future development of the basin area. This fee analysis estimated that 2,253 EDUs from the Project site would convey flow to the Salt Creek Interceptor line. As shown in Table 11, the Project would generate 2,205 EDU, which is 48 EDU less than that which had been previously assumed and will not negatively impact the capacity of the Salt Creek Interceptor.

4.5.3 Wastewater Treatment

Sewage from the Project will ultimately be treated at the Point Loma Wastewater Treatment Plant. The San Diego County Sanitation District (SDCSD) has sufficient capacity rights in the Metro sewer system to serve the Project. The Project will bring Metro treatment capacity from the SDCSD through a Flow Transportation Agreement. The SDCSD has provided the conditions listed below in Section 4.6 to secure Metro capacity.

4.5.4 Trunk Sewers

The design capacity is a standard for peak flows based on the sewer line's size. The design capacity flow rate is lower than actual sewer pipe capacities. Sizing facilities for design capacity as opposed to the actual flow capacity, establishes a conservative approach in the planning and design of the system.

4.6 Adequacy Analysis

Sewerage facilities necessary to accommodate projected sewer flows have been identified in conjunction with The *Otay Ranch Resort Village Overview of Sewer Service*, prepared by Dexter Wilson Engineering, Inc., March 2015 and *Overview of Sewer Service for the Supplemental Analysis: Otay Ranch Resort Village 13 – Alternative H*, prepared by Dexter Wilson Engineering, Inc. May 2018. County of San Diego policy does not allow the design capacity of trunk sewer to be exceeded by flow volumes.

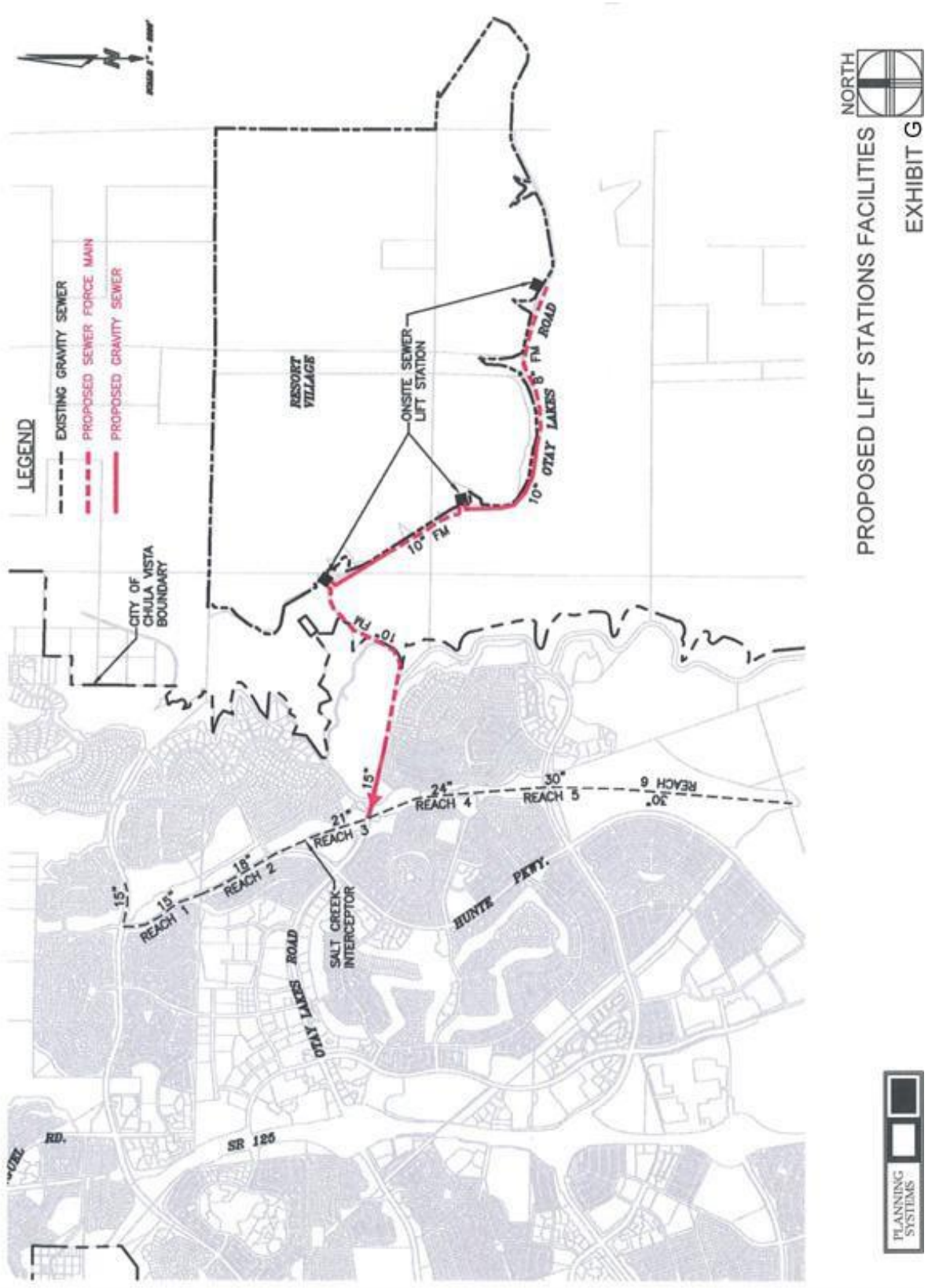


Exhibit G – Proposed Lift Station Facilities

The construction of new sewer trunk lines within the Resort Village Alternative H site will be phased along with the construction of streets. As such, the facilities identified in this PFFP shall be required of the developer either as constructed facilities, or through the payment of fees, which in turn will obligate the County to construct the necessary facilities.

In addition, the following conditions shall be required of the developer of the Project.

1. Annexation into the San Diego County Sanitation District and Sphere of Influence by LAFCO (Government Code, 56000 et seq).

2. District approval of a project sewer study that specifies the estimated project sewage generation; proposed on-site and off-site sewerage infrastructure locations, alignments, and sizes; hydraulic analysis of the proposed sewerage facilities and existing downstream City of Chula Vista sewerage system; and impacts to existing downstream sewerage facilities.

3. Satisfaction of all conditions of map approval and improvement agreements, including construction by the developer and acceptance by the District of on-site and off-site sewerage facilities, property, and easements.

4. Payment for all costs associated with easement acquisition, District formation or annexation, and sewer studies to serve the Project.

5. Payment for all District and City of Chula Vista sanitation fees and charges, as applicable.

4.7 Inventory of Future Required Facilities

Main sewer facilities necessary to accommodate the Project are listed on the following table.

Table 12: Inventory of Major Sewerage Facilities

Sewerage Facility	Size	Funding
SALT CREEK		
On-site Sewer Lift Stations (3)	Various	Developer
On-site Force Mains (3)	Dual 8″ – 10″	Developer
Off-site Force Main	Dual 10″	Developer
Off-site Gravity Sewer to Salt Creek Interceptor	15″	Developer
ON-SITE SEWER LINES		
Sewer Lines in internal streets	Various	Developer

4.8 Threshold Compliance

Construction of the listed facilities and the payment of sewerage connection fees in accordance with the County ordinances will ensure compliance of the Resort Village Alternative H with the adopted threshold. The construction of new sewer trunk lines must be phased with construction.

4.9 Sewerage Facilities Improvement Phasing

Table 13 describes the phasing for sewerage facilities improvements in Resort Village Alterative H. In addition to the facilities described in the table, sewer lines will be required to be installed in streets prior to the issuance of building permits

Table 13: Phasing of Sewerage Facility Improvements

Phase	Sewerage Facilities Improvements (Pump Stations)
PH1	Secure and Enter an Agreement to Construct Pump Stations #1 and #2 prior to issuance of the First Final Map in each phase.
PH2	
PH3	
PH4	Secure and Enter an Agreement to Construct Pump Stations #1, #2, and #3 prior to issuance of the First Final Map in each phase.
PH5	
PH6	Secure and Enter an Agreement to Construct Pump Stations #1, #2, and #3 prior to issuance of the First Final Map in each phase.
PH7	
PH8	Secure and Enter an Agreement to Construct Pump Stations #1, #2, and #3 prior to issuance of the First Final Map in each phase.
PH9	
Resort	

4.10 Financing Sewerage Facilities

On-site improvements will be funded by the developers of Resort Village Alternative H in accordance with the procedures and conditions applicable to the approved specific plan, tentative subdivision maps, final maps, and/or plot plans. The developers will enter into an agreement with the County to secure and construct these necessary improvements. Sewer service for Resort Village Alternative H requires annexation, by San Diego Local Agency Formation Commission (LAFCO).

Agencies providing sewer services have a limited variety of funding sources to expand and/or upgrade their facilities to meet the increasing needs being placed on them.

Among the funding options are sewer capacity charges, development fees, bonds, developer infrastructure financing including Community Financing Districts and other similar assessment mechanisms, and grants. Other sources of revenues for sewer facilities include establishment of a benefit assessment fee, redevelopment funds, special taxes, private donations, and lease revenues.

Table 14: LAFCO Annexation Fee

Jurisdiction	Fee Amount	Ac's	Estimated Fees
Sphere of Influence (Flat fee 1st 200-acres)	$9,060	200 Ac.	$9,060.00
Sphere of Influence (subsequent acreage)	$90/100Ac.	493 Ac.	$443.70
Annexation (Flat fee 1st 200-acres)	$9,060	200 Ac.	$9,060.00
Annexation (subsequent acreage)	$90/100Ac.	493 Ac.	$443.70
Total		693 Ac.	**$19,007.40**

4.10.1 Salt Creek Interceptor

The required impact fees that would be paid by the Project are shown in Table 15. Salt Creek Basin Impact Fees involve fees to be paid by all future developments within the Salt Creek Drainage Basin, in order to fund improvements required to serve ultimate development within the basin. City of Chula Vista Ordinance No. 2617 established the fees to be paid for development within the basin.

Table 15: Salt Creek Basin Impact Fees

Land Use	Fee Amount	Units/ Ac.	Estimated Total Fee
Single-Family Residential	$1,330/unit	1,881 units	$2,501,730.00
Multi-Family Residential	$997.50/unit	57 units	$56,857.50
Resort	$997.50/unit	200 units	$199,500.00
Commercial (Mixed-Use)	$12,541.90/ac	2.0 acres	$25,083.80
Commercial (Resort)	$12,541.90/ac	2.0 acres	$25,083.80
Public Safety Site	$12,541.90/ac	2.7 acres	$33,863.13
Schools	$79.80/student	794 students	$63,361.20
Park	$2,513.70/acre	10.5 acres	$26,393.85
Salt Creek Basin Total			**$2,931,873.28**

In addition, projects flowing through the City of Chula Vista are required to pay a Wastewater Capacity Fee. This fee includes the costs for treatment capacity and Pipeline Expansion. Because Resort Village Alternative H is receiving treatment capacity through the SDCSD, the project is only subject to the Pipeline Expansion portion of the Wastewater Capacity Fee. This fee is shown in Table 16.

Table 16: City of Chula Vista Wastewater Capacity Fees

Fee Amount (Pipeline Expansion)	EDU	Estimated Fee
$174.80/EDU	2,205	$385,434.00

5.0 Transportation Systems Facilities

5.1 Otay SRP Threshold

Maintain Level of Service (LOS) "C" or better, as measured by observed average travel speed on all signalized arterial segments, except that during peak hours a LOS of "D" can occur for no more than any two hours of the day.

5.2 Service Analysis

5.2.1 Levels of Service Standards

The County of San Diego, through the Department of Public Works, is responsible for ensuring that traffic improvements are provided to maintain a safe and efficient street system within the County. Through project review, County staff ensures the timely provision of adequate local circulation system improvements in response to planned development while maintaining acceptable levels of service. Planned new roadway segments and signalized intersections will maintain acceptable standards at the build-out of the *San Diego County General Plan Mobility Element*. General coordination on traffic assignments, improvements, and volumes with adjacent jurisdictions is necessary in order to properly assess compliance with the threshold.

The traffic threshold will be analyzed by the following:

1. LOS measures shall be for the average weekday peak hour, excluding seasonal and special circumstance variations.

2. The measurement of LOS shall be by the *Highway Capacity Manual* (HCM) method of calculation, using the County's published Mobility Element design standards.

3. Intersection of arterials with freeway ramps shall be excluded from this policy.

4. Circulation improvements shall be implemented prior to the anticipated deterioration of LOS below established standards.

5.2.2 Background Traffic Studies

The *San Diego County General Plan Mobility Element* serves as the overall facility master plan. County transportation planning has been, and continues to be, coordinated with the City of Chula Vista and other cities in the region to ensure regional-serving roadways common to multiple agencies are planned to meet the anticipated demand in all areas, and that widths and alignments are compatible.

The *Otay Ranch Resort Village Traffic Impact Study*, prepared by Chen Ryan, March 2015 and *Traffic Impact Study Supplemental Analysis: Otay Ranch Resort Village 13 Alternative H*, prepared by Chen Ryan, June 2018, addresses both existing and planned circulation system conditions. The studies detail necessary improvements and outlines the incremental circulation improvements based upon planned Resort Village Alternative H phasing. The study also includes an evaluation of impacts that are considered significant as a result of the Project development.

5.2.3 Freeway Segments

The California State Department of Transportation (Caltrans) recommends LOS C or better as acceptable for freeways. Caltrans is currently planning and implementing ramp meters at freeway on-ramps to assist in maintaining acceptable traffic flow on the freeway network. The mitigation of impacts on arterial segments as a result of the implementation of these meters will be the responsibility of Caltrans.

5.2.4 Arterial Roadway Segments

The County of San Diego and the City of Chula Vista recommend that arterial segments located in largely undeveloped areas maintain LOS C or better.

5.2.5 Peak Hour Intersections

While roadway LOS based on daily traffic volumes are useful as a general indication of traffic operating conditions, peak hour operations at major signalized intersections provide a more definitive measure of the actual functional capacity of the circulation network. It is for this reason that intersection performance, which relates to the ability of signalized intersections to operate at acceptable LOS during peak hours, is considered the primary determinant of adequate operations. For peak hour intersection operations, LOS D or better is considered acceptable.

5.3 Project Processing Requirements

1. Identify phased traffic demand and demonstrate compliance with the *San Diego County General Plan Mobility Element.*
2. Identify on-site and off-site impacts and improvements by phase of development.
3. Provide cost estimates for all improvements.

5.4 Existing Conditions

Resort Village Alternative H is situated in the County of San Diego, along Otay Lakes Road, north of Lower Otay Reservoir and east of SR-125. Existing Otay Lakes Road forms the southern boundary of the Project site (parallel and adjacent to the north shore of the reservoir) traveling in an east-west direction. This roadway is presently in a substandard design condition; however, a portion of this roadway will be upgraded in conjunction with development of the Alternative H project site.

Otay Lakes Road provides access to the City of Chula Vista and SR-125. To the east, Otay Lakes Road connects to SR-94 which provides access to the unincorporated communities of Jamul, Dulzura, Campo and points east. Much of the build-out roadway network in the vicinity of the Project site has yet to be constructed to its planned configuration.

The *San Diego County General Plan Mobility Element* classifies Otay Lakes Road (or a future parallel street of sufficient design to handle projected build-out traffic levels) as an ultimate 4-Lane Major Road between the City/County boundary and the second Project access point (Piazza Urbino). East of this point to SR-94, Otay Lakes Road is classified as a 2-Lane Community Collector. These classifications include bike lanes on both sides of the roadway along its full extent.

Exhibit H demonstrates the San Diego County General Plan Mobility Element for the Otay Network, which is the region including the Project site.

5.5 Project Demand and Proposed Facilities

5.5.1 Trip Generation and Assignment

Resort Village Alternative H includes residential development, resort hotel uses, an elementary school site, parks, and residential support uses. Four access points along Otay Lakes Road would provide vehicle access to and from the residential areas and the Resort Area. The second Project access point (Piazza Urbino) is provides access to the Mixed-Use District. The Resort Planning Area would primarily be served via the fourth Project access point in the eastern portion of the Community. The planned Project roadway network will provide for internal circulation between the residential areas.

Table 17 demonstrates the estimated daily weekday vehicle trips projected from the land uses proposed on the site.

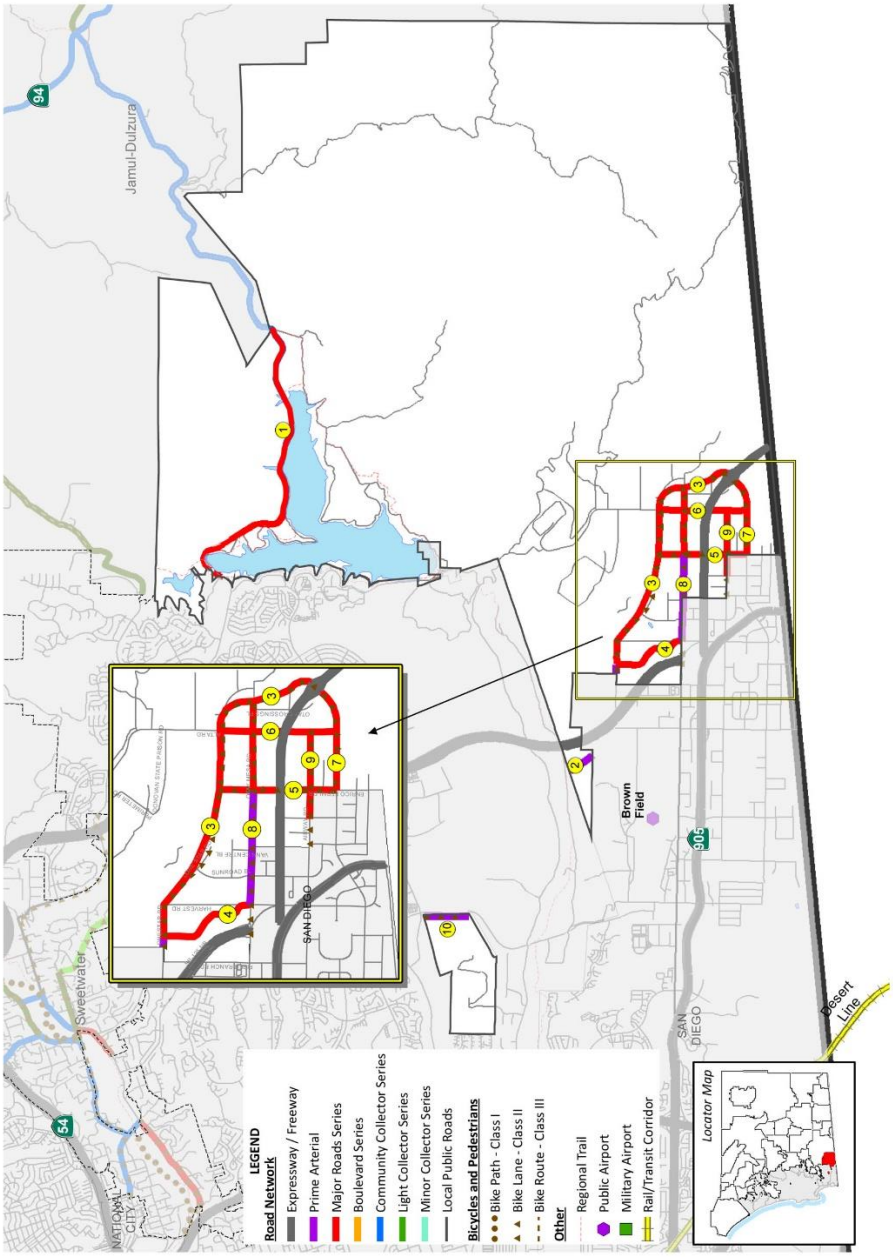


Exhibit H – Otay Mobility Element Network

Table 17: Project Model Land Use Assumptions & Trip Generation

Land Use	Units/ Ac's	Note	Weekday Vehicle Trips
Single Family	1,881 DU	10 ADT/DU	18,810
Multi-Family	57 DU	8 ADT/DU	456
Resort Hotel	200 Rooms	8 ADT/Room	1,600
Commercial	40,000 SF	120 ADT/1,000 SF	4,800
Elementary School	10.1 Acres	90 ADT/Ac.	909
Active Park	31.3 Acres	5 ADT/Ac.	156*
Public Safety	2.1 Acres	229 ADT/Ac.	481*
Total Trips Generated for the Project			**27,191**

- Note: Under Resort Village Alternative H, much of the previously proposed land uses (analyzed in the traffic impact study, dated March 2015 and EIR) would remain the same, with two minor exceptions including a small reduction in acreage for public parks from 28.6-acres to 25.1-acres and a slight increase in public safety-related uses from 2.1-acres to 2.3-acres. It is important to note that while the acreage for public safety-related uses slightly increased, the actual proposed uses in terms of building size or number of staff on-site would remain the same as previously analyzed. Therefore, it can be concluded that the total project trip generation for Resort Village Alternative H will be equal to or less than what was studied in the original Proposed project traffic impact study.

As demonstrated in the table above, it is anticipated that the Project will result in a total building vehicular trip generation of 27,191 average daily trips (ADT). Given the nature of the land uses, trips were disaggregated into those which would remain within the Project site (internally captured) and those which would leave the Project site (external trips). Estimates for internal versus external trip generation percentages were developed based upon likely origins/destinations of each land use type. These estimates were then cross-checked with project trip generation estimated by the SANDAG model. Internal capture was estimated at 5,275 ADT. Only external trips (estimated at 21,916) were distributed and assigned to the study area roadways.

5.5.2 Future Volumes and Planned Roadway Classifications

Pursuant to the *San Diego County General Plan Mobility Element*, Otay Lakes Road (or a future parallel street of sufficient design to handle projected build-out traffic levels) is classified as an ultimate 4-Lane Major Road with Raised Median between the City/County boundary and the second Project access and will be improved to this classification with the Project. East of this point to SR-94, Otay Lakes Road is classified as a 2-Lane Community Collector and will be improved to this classification with the Project.

In order to the minimize the potential environmental impacts to the City of San Diego MSCP Cornerstone Lands along Otay Lakes Road, the Project is proposing to reclassify Otay Lakes Road, between Lake Crest Drive and the planned Project Driveway #2 (Piazza Urbino) from 4-Lane Major Road with Raised Median to 4-Lane Boulevard with Raised Median. The Boulevard classification has a lower design speed and less horizontal radius for curves, which can reduce the footprint impact of an expanded road while still providing increased capacity. Exhibit I shows the amended General Plan Mobility Element Circulation Map for the Otay Community Plan Area proposed by the Project.

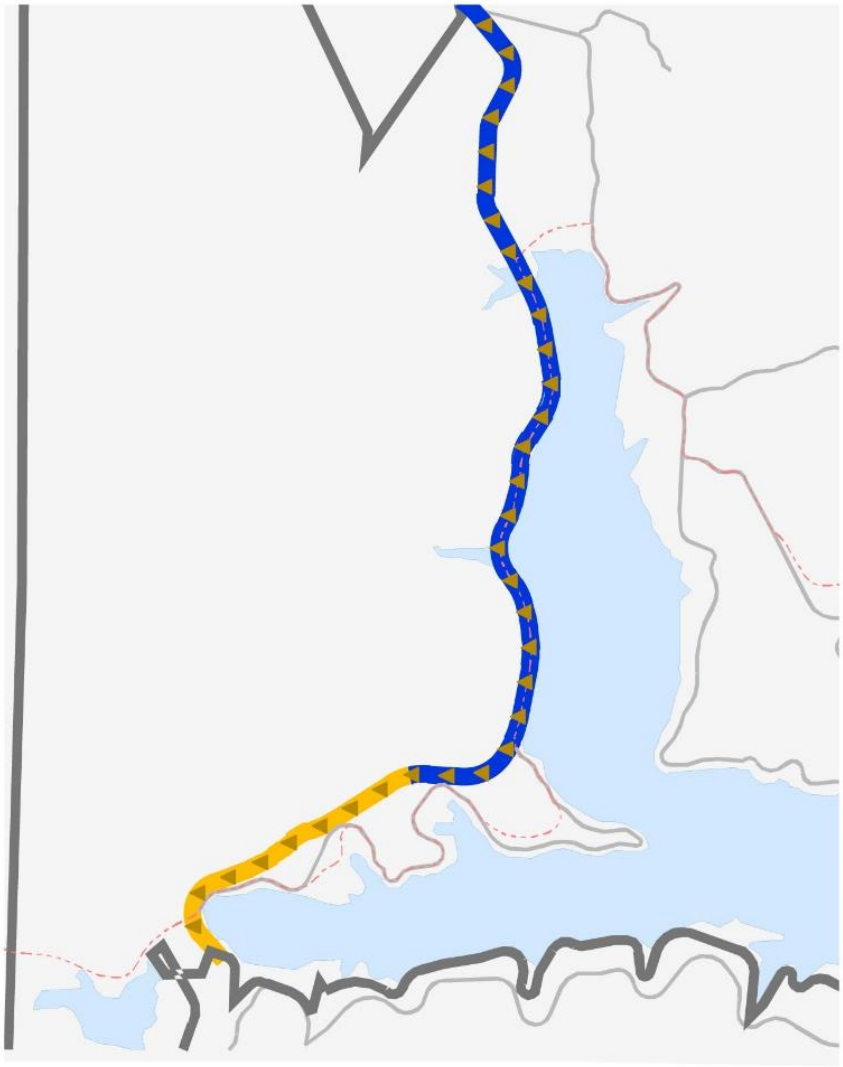


Exhibit I – Proposed General Plan Mobility Element Roadway Map (Otay)

5.6 Adequacy Analysis

The adequacy of the traffic system is based upon The *Otay Ranch Resort Village Traffic Impact Study*, prepared by Chen Ryan, March 2015, and *Traffic Impact Study Supplemental Analysis: Otay Ranch Resort Village 13 Alternative H*, Prepared by Chen Ryan, June 2018. The studies provide a cumulative analysis of the existing and anticipated traffic volumes in the region in order to provide for increased traffic levels that will result from development of the Resort Village Alternative H in combination with other planned land uses. This analysis is based upon a computer generated "Select Zone" study utilizing the adopted SANDAG Year 2030 Transportation Model.[6]

5.6.1 Street Segments Influenced by the Otay Ranch Resort Projected Traffic

Utilization of the arterial performance standards presented in the Traffic Impact Analysis and the required adherence to the traffic thresholds result in full conformance with the requirements of the mitigation measures described in the Findings of Fact adopted for the Otay Ranch Program EIR related to Transportation, Circulation, and Access.

The Select Zone assignment generated by the SANDAG Year 2030 model results in a distribution of the total number of projected Project vehicular trips anticipated to utilize freeway and arterial roadway segments within the area of influence of the Project.

The Select Zone model output from SANDAG shows future year 2030 daily segment volumes on all facilities in the vicinity of the Project. The SANTEC/ITE guidelines require delineation of a project study area based on the following criteria:

- All local roadway segments, including all State surface routes, intersections, and mainline freeway locations where the proposed Project will add 50 or more peak-hour trips in either direction to the existing roadway traffic.

- All freeway entrance and exit ramps where the proposed Project will add a significant number of peak-hour trips that cause traffic queues to exceed ramp storage capacities.

In addition to the SANTEC/ITE requirements, the project study area also includes all County mobility elements roadways and intersections where the Project is projected to add 25 or more peak hour trips.

5.6.2 Future Year 2030 Analysis (Intersections Over Volume Threshold)

All study area intersections would operate at acceptable LOS D or better during the AM and PM peak hours, with the exception of the intersection of Otay Lakes Road/Wueste Road, which would operate at an unacceptable LOS F during the PM peak hour. This intersection would be considered to be a direct impact by the Project traffic.

5.6.3 Future Year 2030 Analysis (Street Segments Over Volume Threshold)

Nine roadway segments within the study area would operate at LOS D, E, or F as follows: *(From p. 117 of the TIS)*

- Telegraph Canyon Rd, between Oleander Ave and Medical Center Drive (LOS E)
- Telegraph Canyon Rd, between Medical Center Drive and Paseo Ladera (LOS E)
- Telegraph Canyon Rd, between Paseo Ladera and Paseo Ranchero/Heritage Road (LOS E)
- Telegraph Canyon Rd, between Paseo Ranchero/Heritage Road and La Media Rd (LOS E)
- Otay Lakes Rd, between La Media Road and Rutgers Ave (LOS D)
- Otay Lakes Rd, between the SR-125 SB Ramps and SR-125 NB Ramps (LOS D) Olympic Pkwy, between SR-125 NB Ramps and Eastlake Pkwy (LOS D)
- Otay Valley Road, between SR-125 NB Ramps and Main Street Main Street, between SR-125 NB Ramps and Eastlake Pkwy (LOS D)

However, the Project's contribution to most of these segments would not be more than 5% of the total traffic volume, nor would the Project contribute more than 800 ADT. In the case where roadway segments are projected to operate at LOS D or E with Project traffic comprising 5% of the total entering volume and more than 800 ADT, all intersections along these segments are projected to operate at LOS D or better. Since peak hour intersection operations are considered a better indicator of the true roadway operating conditions (since intersections typically control the traffic flow along roadway segments). All intersections along these segments are projected to perform at LOS D or better at Year 2030, thus, the roadway segment impacts would not be considered significant.

5.6.4 Future Year 2030 (Freeway and State Highway Segments Operating Over Volume Threshold)

All study freeway and state highway segments would continue to operate at LOS D or better under the worst-case scenario with the exception of the following two (2) segments:

- I-805, between Bonita Road and East H St (LOS E)
- I-805, between East H St and Telegraph Canyon Rd (LOS E)

However, the Project traffic would increase the V/C ratio by 0.009 (less than .01); therefore, the Project does not have a significant impact to this freeway segment.

For modeling purposes Otay Lakes Road was modeled at a 4-lane design to the 2nd driveway of the Project, and two-lanes for the balance of the roadway through the Project.

5.6.5 Future Year 2030 (Freeway Ramp Meter Over Volume Threshold)

The demand during the AM peak hour at the I-805 NB On-Ramp at Telegraph Canyon Road would be greater than the capacity provided by the ramp meter under Future Year 2030 Base Plus Project traffic conditions. However, based upon SANTEC/ITE Guidelines, the projected delay of 8.9 minutes (less than 15 min.) would be acceptable. The Project would not result in any significant impact at this on-ramp.

5.7 Inventory of Required Traffic Improvements

As a result of the build-out traffic impacts analysis above, the following table demonstrates the traffic improvements required for intersections impacted by Resort Village Alternative H related traffic under Future Year 2030 "worst case" assumptions. Subject to installation of these improvements, the Project will comply with the thresholds for transportation service facilities.

Based upon the results of the above analysis, improvements to the intersection of Otay Lakes and Wueste Roads would be required of the Project. Intersection improvements are listed on Table 18.

Table 18: Required Build-out Intersection Improvements

Intersection	LOS Before Mitigation	Mitigation	LOS After Mitigation
Otay Lakes Road at Wueste Road	F	Secure and enter an agreement with the City of Chula Vista for construction of signalized intersection by the 910th building permit	A

The Project would have a direct impact on one (1) roadway segment located in the City of Chula Vista and two (2) roadway segments located in the County of San Diego under Existing Plus Project (Build-out) conditions. The following roadway improvements would be required to mitigate these impacts:

- Otay Lakes Road, between Lake Crest Drive and Wueste Road (City) – Secure and enter an agreement with the City of Chula Vista to widen from 2 lanes to 4 lanes by the 910th building permit. This significantly impacted roadway segment would operate at LOS B with the roadway widening.

- Prior to recordation of the first final map, the Project applicant shall enter into an agreement with the County of San Diego to secure and construct, or cause to be constructed, the widening of Otay Lakes Road between the City/County Boundary and Driveway #2. Due to phasing of construction, the Project applicant shall prepare a supplemental traffic study prior to recordation of the first final map to determine the existing traffic plus EDU timing threshold, satisfactory to the County Engineer, such that the improvements are operational prior to the determination of the supplemental traffic study or construction of the 896th EDU, whichever is sooner.

5.8 Threshold Compliance

Based upon the traffic analysis prepared for Resort Village Alternative H, threshold compliance is projected to be maintained with implementation of the improvements identified in this PFFP.

5.9 Phasing Transportation Facilities

Improvements to existing roads and construction of new roadways are required for implementation of Resort Village Alternative H. The following phasing tables describe the phasing of improvements for each transportation facility required by the Project.

Otay Lakes Road (Phases 1 and 2)

Phase 1 is comprised of Otay Lakes Road from the Lake Crest Drive to the first project entry at Strada Piazza (west end). This segment will be widened from two to four lanes to meet County standards.

Phase 2 is comprised of Otay Lakes Road from Strada Piazza to Piazza Urbino. This segment will also be widened from two to four lanes to meet County standards. Depending on the actual phasing of the Project, the following table describes the approximate schedule for when these improvements will be required.

Table 19: Required Build-out Street Segment Improvements – County of San Diego

Phase	Transportation Facilities Improvements (Otay Lakes Road Phases 1 and 2)*
PH1	Prior to recordation of the first final map, the Project applicant shall enter into an agreement with the County of San Diego to secure and construct, or cause to be constructed, the widening of Otay Lakes Road between the City/County Boundary and Driveway #2. Due to phasing of construction, the Project applicant shall prepare a supplemental traffic study prior to recordation of the first final map to determine the existing traffic plus EDU timing threshold, satisfactory to the County Engineer, such that the improvements are operational prior to the determination of the supplemental traffic study or construction of the 896th EDU, whichever is sooner.
PH2	
PH3	
PH4	
PH5	
PH6	
PH7	
PH8	
PH9	
Resort	

Otay Lakes Road (Phase 3)

Otay Lakes Road from the Piazza Urbino entrance to the Resort site entrance of the Project site will be improved to County standards for a 2-lane Community Collector pursuant to the following phasing table.

Table 20: Required Build-out Street Segment Improvements – County

Phase	Transportation Facilities Improvements (Otay Lakes Road Phase 3)*
PH1	Prior to recordation of the first final map, the Project applicant shall enter into an agreement with the County of San Diego to secure and construct, or cause to be constructed, the widening of Otay Lakes Road between Piazza Urbino and the entrance to the Resort site. Due to phasing of construction, the Project applicant shall prepare a supplemental traffic study prior to recordation of the first final map to determine the existing traffic plus EDU timing threshold, satisfactory to the County Engineer, such that the improvements are operational prior to the determination of the supplemental traffic study or construction of the 896th EDU, whichever is sooner.
PH2	
PH3	
PH4	
PH5	
PH6	
PH7	
PH8	
PH9	
Resort	

On-site Road Improvements

Implementation of the Project will require the construction of on-site roads. The following table describes the phasing for the onsite road improvements.

Table 21: On-Site Transportation Facilities Improvements Phasing

Phase	Transportation Facilities Improvements (Otay Lakes Road Phase 1 and 2)
PH1	Secure and Enter into an Agreement to Construct Strada Piazza from Otay Lakes Road (first entry/roundabout) to Via Termi prior to recordation of first final map in each phase.
PH2	
PH3	
PH4	Secure and Enter into an Agreement to Construct Strada Piazza from Otay Lakes Road (first entry/roundabout) to Strada Ravenna prior to recordation of first final map in phase.
PH5	Secure and Enter into an Agreement to Construct Piazza Urbino, Circulo Almalfi, and Strada Piazza (between the Circulo Almalfi/Strada Piazza roundabouts) prior to recordation of first final map recordation in phase.
PH6	Secure and Enter into an Agreement to Construct Piazza Urbino, Circulo Almalfi, and Strada Piazza (between the northern roundabout with Circulo Almalfi and Piazza Sovana) prior to recordation of first final map recordation in phase.
PH7	Secure and Enter into an Agreement to Construct Strada Piazza from Otay Lakes Road (third entry/roundabout) to Piazza Sovana prior to recordation of first final map in phase.
PH8	Secure and Enter into an Agreement to Construct Strada Piazza from Otay Lakes Road (third entry/roundabout) to Via Arbruzzo prior to recordation of first final map in phase.
PH9 Resort	Secure and Enter into an Agreement to Construct Strada Piazza from Otay Lakes Road (third entry/roundabout) to Via Arbruzzo prior to recordation of first final map in phase.

5.10 Financing Transportation Facilities

Construction of the above listed improvements will constitute the necessary financing of transportation facilities. These improvements will be funded through the developer(s) entering into agreements to secure and construct the improvements prior to recordation of the applicable Final Map. All on-site transportation facilities will be funded and constructed by the Project developers.

Some project area roads are included in the County of San Diego Transportation Impact Fee (TIF) program. Otay Lakes Road is a TDIF eligible facility. The developers will enter an agreement with the County to secure and construct Otay Lakes Road subject to the triggers identified above. The project developers may be eligible for reimbursement of eligible costs based on the parameters for developer constructed road improvements described in the TIF Program and Ordinance.

6.0 Urban Run-off Facilities

6.1 Otay SRP Threshold

An urban run-off diversion system shall be designed to ensure the protection of water quality within Otay Reservoirs.

6.2 Service Analysis

The County of San Diego is responsible for ensuring all run-off water conveyed in the proposed storm drain systems will be treated in compliance with Regional Water Quality Control Board (RWQCB) regulations and National Pollution Discharge Elimination System (NPDES) minimum criteria prior to discharging into natural watercourses.

In accordance with RWQCB Order No. R9-2013-0001, dated May 8, 2013, waste discharge requirements for discharges of urban run-off from municipal storm drainage systems shall not contain pollutant loads which cause or contribute to a violation of receiving water quality objectives or which have not been reduced to the maximum extent practicable. Post-construction Best Management Practices (BMPs), which refer to specific storm water management techniques, are required for each project within the jurisdiction of San Diego County. BMPs are necessary to manage construction and post-construction site run-off and minimize soil erosion and other pollutants from being transported downstream once they have been loosened by storm water. Post-construction pollutants are a result of the urban development of property and the effects of automobile use. Run-off from paved surfaces can contain soil sediment and a variety of pollutants transported by the water and sediment. Landscape activities and chemicals used by homeowners and commercial enterprises are an additional source of sediment and pollutants.

Compliance with the requirements of the RWQCB and the NPDES are a particularly important matter for the Resort Village Alternative H due to its proximity and upstream relationship to Lower Otay Reservoir. Lower Otay Reservoir is owned and operated by the City of San Diego, and development projects upstream of the reservoir have been required to provide the design and structural measures necessary to protect it from storm water pollution.

Detailed analysis of projected urban run-off impacts for the Project has been conducted, *Drainage Study for Otay Ranch Village 13 (EIR Alternative H)* and *Priority Development Project (PDP) SWQMP Otay Ranch Village 13 TM – EIR Alternative H*, prepared by Hunsaker and Associates, dated June 2018. The observations, analysis, and conclusion of these studies are incorporated into this PFFP.

6.3 Project Processing Requirements

1. Identify urban run-off facility demand (by phase).

2. Identify locations of facilities for on-site and off-site improvements.

3. Provide cost estimates.

4. Identify financing methods.

6.4 Existing Conditions

The Lower Otay Reservoir watershed consists of approximately 62,720-acres. The Resort Village Alternative H covers approximately 1,889-acres (3%) of this area and is located on the northern flanks of the foothills directly above Lower Otay Reservoir. The entirety of the Project drains into this reservoir.

The Project site is currently undeveloped. The topography is characterized by rolling moderate and steep hills sloping from north down to the south, and vegetation consists mainly of low-profile scrub and brush. A number of unpremitted dirt roads cross the site. Run-off from the natural (existing) site drains via one of 23 existing culverts under Otay Lakes Road into Lower Otay Reservoir. No desiltation, water detention or other pollution protection facilities exist on the site in the existing condition.

The Lower Otay Reservoir is a source of drinking water to the water customers of the City of San Diego. Any development of the Project site will necessitate a water quality protection program to ensure that the run-off from the developed watershed does not degrade water quality in the reservoir.

Based on data from the County of San Diego Flood Control Department, the 80-year average annual rainfall rate for the vicinity of the Project is 11.44-inches per year, and the average evaporation rate is 55-inches per year. The actual run-off generated during any particular storm event is a function of rainfall intensity and duration as well as soil type and antecedent moisture conditions for the soil at the time of the storm.

The City of San Diego has compiled extensive data for Lower Otay Reservoir. This data was utilized to estimate the average annual run-off volume expected for the study area. The 98-year average run-off within the Lower Otay Drainage Basin is 6,819-acre-feet per year. The drainage basin is approximately 98 square miles. This equates to an average annual run-off of 0.109 acre-feet per acre. Applying this run-off rate to the 1,889-acre study area concludes that approximately 205 acre-feet of run-off can be expected on an annual basis for the undeveloped Project site in an average rainfall year.

6.5 Project Demand and Proposed Facilities (Developed Condition)

6.5.1 Post Development Run-off

Development of Resort Village Alternative H will result in an increase in run-off from the site. The balance of the increase in water is due to the increased impervious area within the development. This post-development run-off will be degraded to some degree and will need treatment to ensure that the site does not contribute to pollution in the reservoir. The acreage of post-development Project run-off characteristics are estimated on the following table:

Table 22: Proposed Project Run-off Characteristics

Description of Area	Acres
Designated Open Space and Preserve (including 20-acre NAP parcel)	1,253
Developed Area (including off-site Otay Lakes Road)	761
Total	**2,014**

Natural run-off from most areas north of the Project site will be separated from the developed site run-off via separate storm drain systems. Thus, run-off from natural (undeveloped) areas would continue to drain directly to the Lower Otay Reservoir, and not mix with run-off from the development until downstream of the proposed water quality basins or the other structural BMPs (after low flows from the development areas have been treated). However, in an effort to optimize storm drain efficiency, and to avoid double, parallel storm drain systems in many streets of the development, some run-off from natural areas will mix with run-off from developed areas.

All run-off from the developed Otay Ranch Resort Village Alternative H site will drain to the Lower Otay Reservoir. The run-off from the 85th percentile storm as defined by the SDCHM and drier weather run-off from developed areas of the Project will be diverted to the six Water Quality Basins or through the proprietary BMPs along Otay Lake Road. Development of the site will not cause any diversion to or from the Lower Otay Reservoir watershed.

Run-off in excess of the run-off volume produced by the 85th percentile storm will discharge to the Otay Lakes Road culverts and into Lower Otay Reservoir. The performance of the Water Quality Basins is described in depth in the *Priority Development Project (PDP) SWQMP Otay Ranch Village 13 TM – EIR Alternative H*. Since the capacity of Lower Otay Reservoir is sufficient to convey the proposed peak flow increases, and since the culverts will be upsized as necessary to convey the projected 100-year peak flow from the developed areas under Otay Lakes Road, no run-off detention basins will be required as part of this development. Post-development watersheds are shown graphically on Exhibit D.

At the downstream end of the internal storm drain systems, the culvert crossings at Otay Lakes Road will be upsized to prevent roadway overtopping during the 100-year design event. Table 22 summarizes the 100-year developed condition peak flows to each of the discharge locations at Otay Lakes Road. All flows listed in Table 22 were generated using the AES-2015 computer program and the Rational Method as explained in the SDCHM.

Table 23: Post Development Volume Based 85th Percentile Calculations

Watershed	Drainage Area	85th Percentile Rainfall (Inches)	Run-off Coefficient C	85th Percentile Volume (Acre Feet)
Basin 1	168.43	0.66	0.46	4.26
Basin 2	138.40	0.66	0.46	3.50
Basin 3	102.37	0.66	0.44	2.48
Basin 4	87.31	0.66	0.45	2.16
Basin 5	31.27	0.66	0.31	0.53
Basin 6	91.08	0.66	0.44	2.20

6.5.2 Post-Development Pollutant Impacts

Urban run-off from the developed condition of the Project site will increase the quantity of run-off from the site, and thus has the potential to contribute pollutants into Lower Otay Reservoir. These pollutants could include sediment, oil, grease, suspended solids, metals, nutrients, pesticides, bacterial viruses, other organic compounds, and other debris.

Run-off from the developed portion of the Project site will drain towards one of six water quality basins via internal storm drain systems or one of the proposed proprietary biofiltration BMPs. Run-off in excess of the 85th percentile flow will discharge directly to the Otay Lakes Road culverts and drain to the reservoir.

Run-off would be detained in the water quality basins and treated during the time it takes to drain completely. Treatment would include the settling of pollutants within the basins and filtering through the heavy vegetation at the bottom of each basin. A trash and debris rack would be fitted to the base of each structure to prevent clogging of the low-flow orifices. In this way, storm water pollutant, trash and debris removal would occur prior to discharge into Lower Otay Reservoir. Outlet structures at each basin would be sized and designed to convey run-off from the 100-year storm event.

Due to topographic constraints that make water quality basins infeasible, run-off from the remainder of the Project's developed/disturbed area, including run-off from certain portions of Otay Lakes Road would be treated via 36 Filterra Units or equivalent storm drain inlet treatment control devices and then discharged into natural drainages conveying flows into Lower Otay Reservoir. A Filterra Unit is flow-based storm drain inlet treatment control device that is a stand-alone system that accepts surface sheet flow from both streets and parking lots. A standard Filterra Unit treats the 85th percentile rainfall event and includes a by-pass structure for higher flows.

The Project's biofiltration water quality basins (biofiltration basins and swales), provide a high removal efficiency for course sediment, trash and debris, a high removal efficiency for pollutants that tend to associate with fine particles during treatment including fine sediment, undissolved nutrients, heavy metals, organic compounds, oxygen demanding substances, bacteria, oil and grease, and pesticides, while providing medium pollutant removal efficiency for dissolved nutrients. The Project's proprietary biofiltration BMPs, provide a high removal efficiency for course sediment, trash and debris, a medium pollutant removal efficiency for pollutants that tend to associate with fine particles during treatment including fine sediment, un-dissolved nutrients, heavy metals, organic compounds, oxygen demanding substances, bacteria, oil and grease, and pesticides, and low pollutant removal efficiency for dissolved nutrients. Finally, the remainder of the Project's developed/disturbed areas consisting of vegetated and irrigated slopes within the Project's development footprint that will not receive run-off from the Project's streets and roads and will be self-mitigating and natural landscaped slopes.

The Project's biofiltration basins and proprietary biofiltration BMPs (Filterra Units or equivalent) constitute the Project's storm water capture and treatment BMPs (Treatment Control BMPs). Internally, the Project's proposed drainage system and storm water capture and treatment BMPs for on-site areas and the improvements to Otay Lakes Road are designed to prevent a substantial increase in erosion on-site. Under the developed condition, the Project's streets are designed to drain directly into the Project's storm drain system. The storm drain system is designed to capture run-off from the developed portions of the Project area, including graded home sites/building pads and impervious surfaces such as roads, and parking lots and direct that run-off into the Project's storm water capture and treatment BMPs. Prior to discharge, most of the Project's run-off is directed into biofiltration basins and the remainder of the Project's run-off is directed into swales or proprietary biofiltration BMPs (Filterra Units or equivalent) prior to discharge into the reservoir or into natural drainages feeding the reservoir.

6.5.3 Volume-based Best Management Practices

The Project includes six volume-based BMPs. Volume-based BMPs shall be designed to mitigate the volume of run-off produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record. Such facilities are usually designed to store the first flush run-off event below the principle spillway elevation (riser, weir, etc.) while providing a means for low flow dewatering.

The run-off volumes contained below the overflow elevation of the basin riser will be slowly discharged from the treatment control basin via low flow orifice(s) in the basin riser. After passing through the riser, an outlet pipe will dewater the basin and discharge run-off to the receiving storm drain.

Run-off will be collected and treated in the Water Quality Basin within the area between the basin bottom elevation and the peak flow riser opening. Treatment will be addressed primarily through the settling of pollutants within in the basin and filtering through the heavy vegetation at the bottom of the basin.

Dewatering will occur via one or more low-flow orifice built into the side of the riser structure within each basin. Such orifices, located at various invert elevations relative to the basin bottom elevation, will provide the run-off with a 24 to 72-hour residence time prior to full basin dewatering. A trash and debris rack will be fitted to the base of the structure to prevent clogging of the low flow orifice.

Outlet structures will be designed to convey run-off from the basins during the occurrence of the 100-year frequency storm. Storm water treatment should occur prior to discharge to any downstream receiving water body supporting beneficial uses.

The elevations for the orifices within the basins have been preliminary determined for attainment of the appropriate water quality volume for each basin.

The basins have been designed such that run-off in excess of the first flush volume will bypass the basin via either a large diameter riser opening or a diversion structure located upstream of the basin. Further, natural drainage courses downstream of the outlet will be protected from erosive velocities with appropriately designed velocity control structures such as rip rap aprons or energy dissipaters.

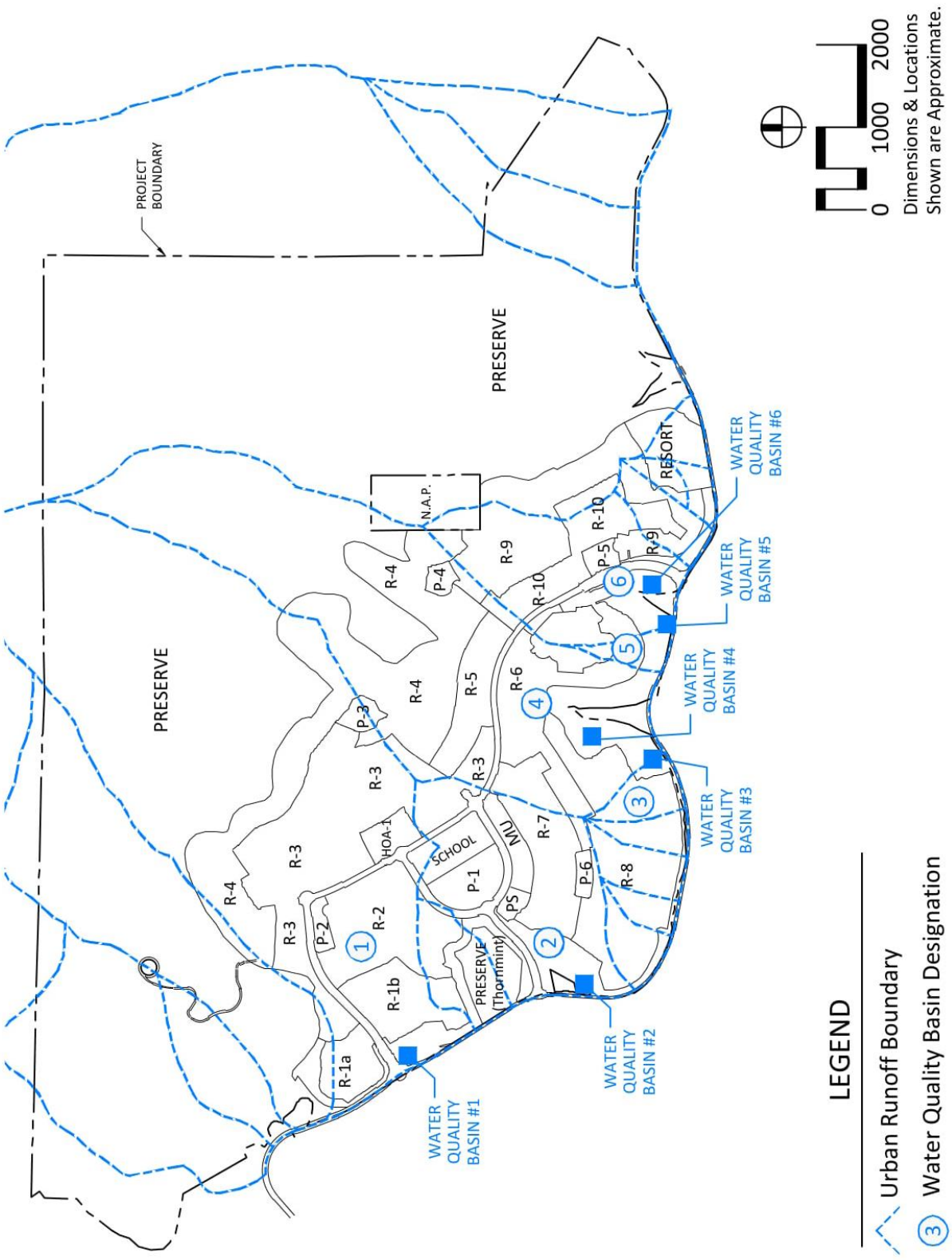


Exhibit J – Urban Pollution Control Basin Facilities Plan

6.5.4 Flow-based Best Management Practices

The Project will also include flow-based BMPs. These apparatuses will be designed to treat run-off produced from a rainfall intensity of 0.2-inches per hour. Such BMP's utilize non-mechanical devices (based on weir hydraulics and custom-designed filters) to promote settling and removal of pollutants from the drainage water.

6.5.5 Urban Run-off Control Basins

The Project residential development will cover approximately 761-acres. Approximately 1,239-acres will remain in their natural, undeveloped condition within the area. Elevations for this area range from a low of approximately 500-feet AMSL at the edge of Lower Otay Reservoir, to 1,500-feet AMSL on the ridge at the north end of the Project site.

Six water quality basins are proposed to control run-off from the developed portion of the Project site. These basin locations are shown on Exhibit J. Each of these basins will be subject to the BMP maintenance program articulated in this PFFP. Basin design data is depicted in the following table.

Table 24: Urban Run-off Basin Design Data

BMP Name	Total Drainage Area (acres)	85th Percentile Rainfall (inches)	Run-off Coefficient C	85th Percentile Volume (ac-ft)
Basin 1	168.43	0.66	0.46	4.26
Basin 2	138.40	0.66	0.46	3.50
Basin 3	102.41	0.66	0.44	2.48
Basin 4	87.30	0.66	0.45	2.16
Basin 5	31.27	0.66	0.31	0.53
Basin 6	91.08	0.66	0.44	2.20

Additional detailed information of exactly how the Project will comply with water quality requirements will be provided as part of the final engineering review process. In this manner, the type, location, cost and maintenance obligation of the selected BMPs will be given consideration during the project planning and design. The County requires that prior to approval of any tentative map and/or site plan for the project, the applicant shall obtain the approval of a water quality technical report containing specific information and analysis on how the project will meet the requirements of the County Watershed Protection Ordinance (WPO) by the County Engineer. Ultimate development of the Project will incorporate a Post-Construction Storm Water Operation and Management Plan.

6.5.6 Construction

During the construction phase, the Project will be subject to the requirements of the Construction General Permit (CGP). Development of the Project will comply with the requirements of this permit through implementation of a site-specific Storm Water Pollution Prevention Plan (SWPPP) for each planning area and by incorporating temporary BMPs for the control of sediment and other pollutants.

6.6 Adequacy Analysis

Development of the Resort Village Alternative H site, and the associated downstream culverts, will result in the necessary protection of Lower Otay Reservoir from urban pollution emanating from the Project site. Six water quality basins will be designed of an adequate size to handle the necessary treatment volumes and thus will adequately address pollutants generated by the Project. Subject to installation of these water quality basins, the Project will consist of an adequate program of urban run-off protection.

As a result of the fact that the capacity of Lower Otay Reservoir has been determined to be sufficient to convey the proposed peak flow increases, and since culverts will be upsized to convey the projected 100-year peak flow from the developed areas under Otay Lakes Road, no detention basin of storm water will be required in conjunction with development of the Project.

As a result of the above factors, the following conditions shall be required of the developer of the Project:

1. The Project shall be responsible for the conveyance of ultimate storm water flows into water quality basins in accordance with County of San Diego standards. Off-site drainage will be conveyed through a separate system directly to the Lower Otay Reservoir. The County Department of Public Works and the County Flood Control District shall review all plans to ensure compliance with County Engineering Standards. Satisfaction of drainage conditions of approval associated with subdivision of the site will ensure protection of water quality within Lower Otay Reservoir, and thus constitutes compliance with the adopted threshold.

2. The applicants shall demonstrate compliance with the County of San Diego WPO and the NPDES Municipal Permit. The applicants shall also obtain approval of the County Engineer of a report that includes the following elements:

    a. Description of project characteristics, site conditions, flow patterns, pollutants emanating from the project site, and conditions of concern.

    b. Description of site design and source control BMPs considered to be implemented.

    c. Description of applicable treatment control BMPs.

    d. Justification for selection of the proposed BMPs including; (a) targeted pollutants, justification and alternatives analysis, (b) design criteria (including calculations), (c) pollutants removal information, and (d) literature references.

    e. Site plan depicting locations of the proposed BMPs.

    f. Operation and maintenance plan for the proposed BMPs.

3. The Project shall be designed to avoid violation of any water quality standards or waste discharge requirements.

4. Development of the Project site shall not degrade potential beneficial uses of downstream water bodies as designated by the RWQCB, including water bodies listed on the Clean Water Act Section 303d List.

5. Development of the Project site shall not substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be net deficit in aquifer volume or a lowering of the local groundwater table.

6.7 Inventory and Estimated Costs of Future Required Urban Run-off Facilities

The following list of major urban run-off protection facilities will be required as a condition of Resort Village Alternative H.

Table 25: Inventory of Urban Run-off Protection Facilities

Urban Run-off Facility	No.	Phase	Responsibility
Water Quality Basins	6	Various	Developer
Proprietary modular BMPs (Filterra units or Equivalent)	36	Various	Developer

6.8 Threshold Compliance

Subject to phased developer installation of the above-referenced urban run-off facilities and fulfillment of the referenced conditions, including the condition to secure and construct the facilities prior to issuance of grading permits, Resort Village Alternative H will be in compliance with the adopted threshold.

6.9 Urban Run-off Facilities Phasing

The following Table describes the phasing for run-off facility improvements in Resort Village Alternative H.

Table 26: Run-off Facilities Improvements

Phase	Run-off facilities Improvements
PH1	Secure and Enter an Agreement to Construct Basins #1 and #2 prior to issuance of grading permit for each phase. Construct prior to issuance of First Final Map in each phase.
PH2	
PH3	
PH4	Secure and Enter an Agreement to Construct Basins#1, #2, and #3 prior to issuance of grading permit in phase. Construct prior to issuance of First Final Map in each phase.
PH5	Secure and Enter an Agreement to Construct Basins #2, #3, and #4 prior to issuance of grading permit in phase. Construct prior to issuance of First Final Map in each phase.
PH6	Secure and Enter an Agreement to Construct Basins #2, #3, and #4 prior to issuance of grading permit in phase. Construct prior to issuance of First Final Map in each phase.
PH7	Secure and Enter an Agreement to Construct Basin #4 prior to issuance of grading permit in phase. Construct prior to issuance of First Final Map in each phase.
PH8	Secure and Enter an Agreement to Construct Basins #4, #5, and #6 prior to issuance of grading permit in phase. Construct prior to issuance of First Final Map in each phase.
PH9 Resort	Secure and Enter an Agreement to Construct Basins #4, #5, and #6 prior to issuance of 1st grading permit in phase. Construct prior to issuance of First Final Map in each phase.

6.10 Financing Urban Run-off Facilities

County of San Diego policy requires that onsite drainage facilities necessary to support Resort Village Alternative H be funded and constructed as a portion of the development construction operation. As such, the Project will be required to enter into an agreement to secure and construct those facilities identified in this section prior to the issuance of grading permits in accordance with County Grading Ordinance.

The financing and construction of urban run-off facilities required by the Project will be provided by either developer funding or bond debt financing. Off-site improvements which are part of the construction of Otay Lakes Road will be funded by the developers.

7.0 Water Facilities

7.1 Otay SRP Threshold

Ensure an adequate supply of water on a long-term basis, prior to development of each Otay Ranch SPA.

7.2 Service Analysis

Water service is anticipated to be provided to the Resort Village Alternative H site by the Otay Water District (OWD). OWD is a member agency of the San Diego County Water Authority (SDCWA) which receives a portion of its supply from the Metropolitan Water District (MWD). It is the policy of these districts to ensure new growth will not reduce the availability of adequate water supplies or jeopardize water quality standards. Each district is responsible for providing the capital facilities necessary to accommodate existing development and future growth.

The Project site is not currently located within the boundaries of the OWD. Upon certification of the Environmental Impact Report (EIR) for the Project, the applicant will be required to initiate annexation into the Otay Water District service area and the SDCWA and MWD as appropriate. Annexation into OWD Improvement Districts 22 and 27 will be required prior to the provision of water service to the Project site. OWD presently has adopted plans for existing and planned facilities in the vicinity of the Project, and water service can be provided by expanding the existing system. These improvements will be needed in the OWD 980 Zone, within the Central Area System of the OWD.

OWD has prepared and utilizes the 2015 *Urban Water Management Plan*. The UWMP includes the Project's water demands. Anticipated water service for the Project site is analyzed in The *Otay Ranch Resort Village Overview of Water Service*, prepared by Dexter Wilson Engineering, Inc., and *Overview of Water Service for the Otay Ranch Village 13 (Alternative H)*, prepared by Dexter Wilson Engineering, Inc., date March 2018.

On May 7, 2014 and on May 9, 2018, the OWD Board of Directors approved the Project's *Water Supply Assessment and Verification Report* (WSA&V). The report identifies the water demand projections for the Project and states that this demand is included in the water demand and supply forecasts of the SDCWA and MWD Urban Water Management Plans and other water resource planning documents of those water agencies. The report also identifies existing water supply entitlements, water rights, water service contracts, water supply projects, and other agreements relevant to the identified water supply needs for the Project. The report documents that sufficient water supplies are planned for and intended to be available over a 20-year planning horizon, in normal, single dry, and multiple dry years, to meet the Project's projected water demand, in conjunction with all other existing and other planned development in OWD's service area.

Pursuant to OWD policy, the applicants will be required to prepare a Subarea Master Plan (SAMP) for review and approval by OWD. The SAMP will provide more detailed information on the Project such as detailed design, phasing, pump station and reservoir capacity requirements, and extensive computer modeling to justify recommended water pipe sizes.

7.3 Project Processing Requirements

1. Identify phased demands in conformance with street improvements and in coordination with the construction of sewer facilities.

2. Identify locations of facilities for on-site and off-site improvements in conformance with the master plan of the Water District serving the Project.

3. Provide cost estimates.

4. Identify financing methods.

5. Prepare a Water Conservation Plan.

6. Annex the property to MWD, CWA, and OWD, if appropriate.

7. Assure adequate water supply in accordance with the phasing plan.

8. Prepare a Water Master Plan in conformance with the water standards of the appropriate district.

7.4 Existing Conditions

The majority of the water used in the San Diego County Water Authority (SDCWA) area is imported from the MWD. MWD receives its water supply through the State Water Project and the Colorado River Aqueduct. The SDCWA conveys water from the MWD to local water districts within San Diego County.

Potable water is provided to OWD's Central Service Area by SDCWA via the Second San Diego Aqueduct. Water is delivered at Aqueduct connections No. 10 and No. 12 and is conveyed by gravity to OWD's terminal reservoirs at a grade of approximately 624-feet. One hundred percent of OWD's demand is satisfied by purchases from the CWA together with use of recycled water from the Ralph W. Chapman Water Recycling Facility (RWCWRF). A small amount of recycled water is also purchased from the Helix Water District (HWD).

OWD possesses several connections to SDCWA Pipeline No. 4 which delivers filtered water from MWD's filtration plant at Lake Skinner in Riverside County. OWD also possesses a connection to the La Mesa – Sweetwater Extension Pipeline, which delivers filtered water from the R.M. Levy Water Treatment Plant in the Helix Water District. This connection currently supplies water to the northern portion of the OWD only.

Additionally, OWD has a connection to the City of San Diego's water system in Telegraph Canyon Road and has an agreement that allows it to receive water from the Lower Otay Filtration Plant.

No water service is currently provided to the Resort Village Alternative H site. The Project will ultimately be served by the Central Service Area of the OWD. The 980 Zone is within the Central Service Area and is supplied water from Connection No. 10 and 12, to the SDCWA aqueduct which fills the 624 Zone reservoirs. Water is then distributed within the 624 Zone and pumped to the 711 and 980 Zone storage and distribution systems.

Two pump stations presently exist within the 980 Zone. One station is referred to as the 980-1 Eastlake Pump Station, which is located on the south side of Otay Lakes Road at Lane Avenue. This station pumps water from the 711 Zone system into the 980 Zone distribution system and into two existing 980 Zone reservoirs located in the OWD Use Area property. The 980-1 Zone Pump Station currently has three pumps (one standby), each rated for 4,000 gpm, which results in a firm station capacity of 8,000 gpm. The 980-2 Pump Station, located north of Olympic Parkway on the east side of Eastlake Parkway, pumps water from the 624 Zone to the 980 Zone and currently has three duty pumps, one standby pump, and two spare pump cans for future expansion. This station is rated a firm pumping capacity of 12,000 gpm.

In addition, there are currently two reservoirs within the 980 Zone. These reservoirs are located at the same site within the OWD Use Area property north of Rolling Hills Ranch. These reservoirs each have a capacity of 5.0 million gallons, which equals a total of 10.0 million gallons total storage capacity.

The major 980 Zone pipelines in the vicinity of the Project are all located west of the Project site and include transmission lines in Hunte Parkway and Otay Lakes Road. The 24-inch transmission line in Otay Lakes Road presently extends to just east of Hunte Parkway.

7.5 Project Demand and Proposed Facilities

7.5.1 Potable Water Design Program

In order to receive potable water service, Resort Village Alternative H will require expansion of the existing 980 Zone system. In general, the potable water distribution system is designed to maintain static pressures between 65-psi and 200-psi. This criterion is used to initially divide a project between water service zones. Potable water distribution systems are also typically designed to yield a minimum of 40-psi residual pressure at any location under peak hour demand flows, and a minimum residual pressure of 20-psi during maximum day demand plus fire flow conditions. Potable water mains are sized to maintain a maximum velocity of 10-feet per second under a maximum day plus fire flow scenario and a maximum velocity of 6-feet per second under peak hour flow conditions.

7.5.2 Duty Factors and Peaking Factors

Table 27 represents the water duty factors used in projecting the total average day water demand for the Project. The required fire flows and durations are also listed. To convert average day potable water demands to maximum day demands, the conversion policy of the OWD Water Resources Master Plan has been utilized. The same Master Plan has been utilized to convert average day potable water demands to peak hour demands.

Table 27: Water Duty Factors

Land Use Designation	Unit Domestic Demand	Required Fire Flow (gpm)	Required Fire Flow Duration (hours)
Single-Family (Medium Density 3-8 DU/Ac.)	435 gpd/unit	2,500	2
Multi-Family (<8 DU/Ac.)	200 gpd/unit	2,500	2
Commercial	1,785 gpd/ac.	3,500	3
Public Safety	1,785 gpd/ac.	3,500	4
School	1,785 gpd/ac.	3,500	4
Park	1,900 gpd/ac.	---	---

7.5.3 Projected Water Demands

Utilizing the water duty factors identified above, the projected potable water demands for the Project are as shown on Table 28.

The Project is expected to receive water service by expanding the existing 980 Zone water system. This expansion program will involve installation of several major 980 Zone Water System improvements that are presently identified in the OWD Capital Improvement Program. The existing 24-inch transmission pipeline in Otay Lakes Road is proposed to be extended as a 20-inch transmission pipeline in Otay Lakes Road, turning easterly into the project at the second project driveway (Piazza Urbino) and ultimately connecting to a new 980 Zone reservoir located on a high-point north of Planning Area R-1. This reservoir is referred to as the 980-3 Reservoir and will have a capacity of 4.0 million gallons. All other facilities will be sized to meet only the needs of the Project and will comply with OWD's looping criteria and pressure requirements.

Table 28: Proposed Project Projected Potable Water Demands

Neighborhood	Land Use Designation	Gross Acres	Quantity Units	Water Duty Factor	Total Average Water Demand (gpd)
R-1	Single-Family Residential	33.0	149	435 gpd/unit	64,815
R-2	Single-Family Residential	38.3	211	435 gpd/unit	91,785
R-3	Single-Family Residential	89.2	288	435 gpd/unit	125,280
R-4	Single-Family Residential	115.4	281	700 gpd/unit	196,700
R-5	Single-Family Residential	18.1	55	435 gpd/unit	23,925
R-6	Single-Family Residential	38.6	149	435 gpd/unit	64,815
R-7	Single-Family Residential	30.3	184	435 gpd/unit	80,040
R-8	Single-Family Residential	65.8	249	435 gpd/unit	108,315
R-9	Single-Family Residential	58.6	206	435 gpd/unit	89,610
R-10	Single-Family Residential	29.1	109	435 gpd/unit	47,415
MU-R	Mixed-Use Residential	3.9	57	200 gpd/unit	11,400
MU-C	Mixed-Use Commercial	2.0		1,785 gpd/acre	3,750
P-1	Park	10.5		1,900 gpd/acre	19.950
P-2	Park	2.5		1,900 gpd/acre	4,750
P-3	Park	3.6		1,900 gpd/acre	6,840
P-4	Park	2.6		1,900 gpd/acre	4,940
P-5	Park	2.9		1,900 gpd/acre	5,510
P-6	Park	2.5		1,900 gpd/acre	4,750
	Public Safety	2.7		1,785 gpd/acre	4,820
S-1	School	10.1		1,785 gpd/acre	18,030
HOA	HOA	6.0		1,900 gpd/acre	11,400
Resort	Resort/Hotel	14.5	200	200 gpd/unit	40,000
Resort	Resort Commercial	2.0		1,785 gpd/acre	3,570
Irrigated Areas		76.3		1,900 gpd/acre	144,970
Preserve	Open Space	1,133.0		0	0
Circulation	Open Space	32.5		0	0
	TOTAL		2,138[6]		**1,177,200**

7.5.4 Provision of Water Service

Ultimate development pads for the Project are expected to range in elevation from approximately 528-feet to 540-feet. As such, service from the 980 Zone will result in maximum static pressures ranging from 61 psi to 196 psi. In locations where pipeline pressures exceed Otay Water District's standards for the use of PVC piping, ductile iron or steel pipe will be utilized.

1 [6] Residential units and Hotel rooms

7.5.5 Water Conservation Plan

The Otay SRP requires the preparation of a Water Conservation Plan for proposed projects, which has been prepared by AECOM for Alternative H. The Water Conservation Plan provides an analysis of water usage requirements of the Project, as well as a detailed plan of proposed measures for water conservation and other means of reducing per capita water consumption from the Project. This Water Conservation Plan identifies the measures needed to reduce water use in the Resort Village Alternative H by 30%. Implementation of the Water Conservation Plan would further reduce potable water use by approximately 146,718 gpd; therefore, total average daily water use is approximately 1,272,200 gpd.

In addition, the Resort Village Alternative H includes water conservation strategies for internal potable water usage. These strategies include:

1. Hot Water Pipe Insulation. This measure involves the insulation of hot water pipes with 1-inch walled pipe insulation and separation of hot and cold-water piping. This measure is estimated to result in annual savings of 2,400-gallons per residential unit.

2. Pressure Reducing Valves. Setting the maximum service pressure to 60 psi reduces any leakage present and prevents excessive flow of water from all appliances and fixtures. This measure is estimated to result in annual water savings of 1,800-gallons per residential unit.

3. Water Efficient Dishwashers. There are a number of water efficient dishwashers available that carry the Energy Star label. These units result in an estimated yearly water savings of 650-gallons per residential unit.

4. Dual Flush Toilets. The developer will install dual flush toilets within the Project. This measure is estimated to result in annual water savings of 4,000-gallons per unit.

The above listed indoor water conservation measures would result in a daily reduction of 24.25-gallon of potable water per unit. For the 1,938-unit Project plus the 200 rooms in the Resort, this would result in a total savings of approximately 95,000 gpd, bringing the overall water usage for the Resort Village Alternative H down to 1,177,200 gpd.

7.5.6 Water Storage Capacity

OWD's policy is to provide emergency, operational, and fire flow storage capacity in local storage reservoirs. Based on the demands for the project, the required storage for build-out of the Project is 3.82-million gallons. Construction of the proposed 4.0-million-gallon reservoir, on-site, will meet the needs of the project and provide regional benefit to OWD.

7.6 Adequacy Analysis

On May 7, 2014 (original application), and May 9, 2018 (Alternative H), OWD approved a Water Supply and Verification Report which evaluates and verifies that sufficient water supplies are being planned to serve the Resort Village Alternative H as well as existing and other reasonably foreseeable planned projects within the OWD in both normal and single and multiple dry year forecasts for a 20-year planning horizon. Upon annexation into the OWD, water will be available to the Project site, considering both short and long-term perspectives. Also, the amount of current capacity, including storage capacity, now used or committed can be modified or otherwise made available by authorities of these districts. These forecasts of water and water storage capacity will indicate the ability of the affected facilities to absorb forecasted growth, including the phased development projected in this PFFP. Thus, subject to installation of the backbone infrastructure water distribution system identified in this PFFP, the Project will provide an adequate program of water infrastructure.

7.7 Inventory and Estimated Costs of Future Required Water Facilities

Table 29 lists of major water distribution facilities will be required as a condition of proposed development of Resort Village Alternative H. Exhibit K illustrates the major water facilities.

Table 29: Inventory of Major Water Distribution Trunk Facilities

Water Distribution Facility	No.	Size	Phase/ Trigger	Responsibility
980-3 Reservoir	1	4 mg		OWD CIP
Extend 20" Transmission line in Otay Lakes Road	1	20" line	Widening of Otay Lakes Road	OWD CIP
Extend 20" Transmission line to the on-site reservoir	1	20" line	Any phase in the western or central portion of the project site	OWD CIP
Water Lines in internal streets			All	Developer

7.8 Threshold Compliance

The *Otay Water District 2015 Water Facilities Master Plan Update* and the *Overview of Water Service for Otay Ranch Resort Village (EIR Alternative H)*, prepared by Dexter Wilson Engineering, Inc., dated March 2018, identify water facilities necessary to provide the appropriate level of water service consistent with OWD requirements. As such, the facilities identified in the plans are required to be constructed in conjunction with development of Resort Village Alternative H. Additionally, the developers shall request and deliver to the County a service availability letter from the OWD prior to approval of each final map.

Water improvements shall be constructed in accordance with the report entitled *Overview of Water Service for The Otay Ranch Resort Village (Alternative H)*, prepared by Dexter Wilson Engineering, Inc., date March 2018, and as subsequently amended or otherwise modified by OWD.

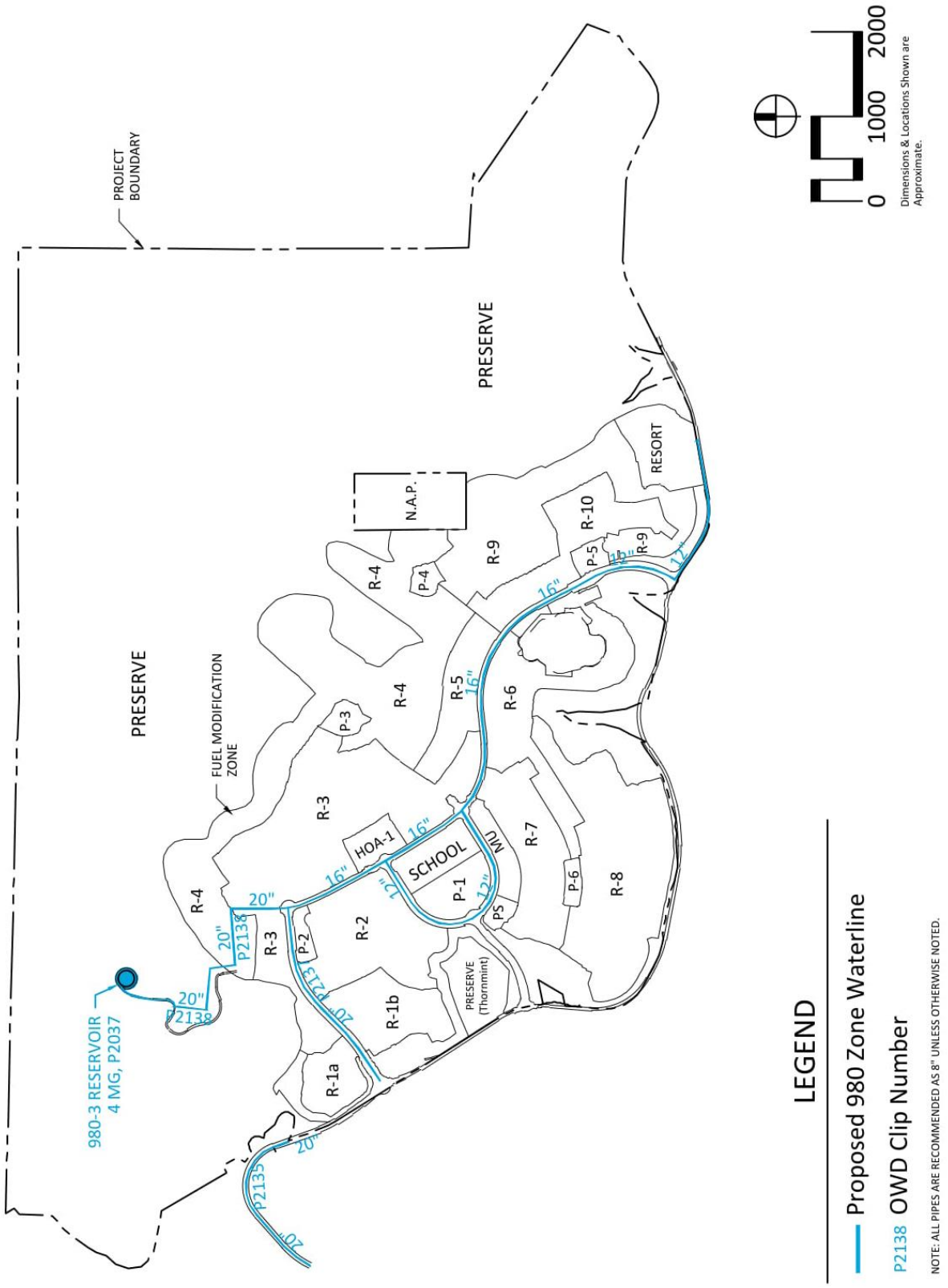


Exhibit K – Water Facilities

7.8 Phasing Water Facilities

Resort Village Alternative H includes improvements to water facilities necessary for implementation of the Project. Certain facilities are required to be constructed concurrent or prior to construction of the Project before service to the project site may begin.

Water Reservoir and extension of 24" transmission line - while it has been identified by OWD as part of the OWD CIP Plan, it cannot be assured that OWD will act to construct the Water Reservoir prior to the Project creating demand for the facility. The developers shall enter an agreement to construct the 4.0-million-gallon water reservoir and extension of the transmission line with the first final map and shall complete construction of these facilities prior to the issuance of the first occupancy permit if OWD has not commenced construction of the reservoir.

7.9 Financing Water Facilities

The financing and construction of potable water facilities will be provided by either developer funding, capacity fees or bond debt financing.

7.9.1 Developer Funding

On-site water distribution improvements within individual planning areas will be funded and provided by the developer in conjunction with the development improvement construction operation. The Developer will enter into an agreement to secure and construct the water facilities consistent with the Resort Village 13 Alternative H Phasing Plan.

7.9.2 Capacity Fees

OWD's Capital Improvement Program (CIP) wherein OWD facilitates design and construction of facilities and collects an appropriate share of the cost from developers through collection of capacity fees from water meter purchases. Capital Improvement Program projects typically include supply sources, pumping facilities, operational storage, terminal storage, transmission mains and rerouting of existing mains. CIP projects are paid for by capacity fees collected on the sale of water meters after building permit issuance.

7.9.3 Annexation Fees

Annexation of the Project into OWD is currently anticipated. A condition of annexation will be the payment of annexation fees to any applicable water distribution districts.

7.9.4 Bond Debt Financing

OWD may use bond debt financing from Improvement District 27 to assist in the financing of the District's CIP program. The Project site will be annexed into the boundaries of Improvement District (ID) 22 and 27.

8.0 Civic Facilities

8.1 Otay SRP Threshold

Make provisions for general governmental facilities, including regional and municipal administrative facilities and operation center(s).

8.2 Service Analysis

The County of San Diego, in conjunction with special districts, is the current provider of municipal services to unincorporated areas, including the Resort Village Alternative H site.

8.3 Project Processing Requirements

Demonstrate conformance with the County General Plan Public Facility Element and the *Otay Ranch Facility Implementation Plan*.

8.4 Existing Conditions

No civic administrative facilities are presently located in Otay Ranch. The areas surrounding Otay Ranch are currently served by the County of San Diego, the City of Chula Vista, and the City of San Diego.

Resort Village Alternative H is located within the jurisdiction of the County of San Diego. The County's central civic administrative offices are located in the County Administrative Center located at 1600 Pacific Highway, in downtown San Diego. The main County annex, including the Development Services Department, is located on Overland Avenue in Kearney Mesa, in the City of San Diego. The County Courthouse and Hall of Justice are located on W. Broadway in the City of San Diego. The division headquarters for the County's field operations is located in the Spring Valley area. That facility is supplemented by two small adjacent operation centers, and three additional stations located in Alpine, Campo, and Descanso.

Major County facilities in the vicinity of the Project site are shown on table 30.

Table 30: County Civic Facilities Inventory

Facility	Address
County Administration Center	1600 Pacific Highway, San Diego, CA 92101
Health Services Complex	3851 Rosecrans Street., San Diego, CA 92110
Hall of Justice	330 W. Broadway, San Diego, CA 92101
County Courthouse	220 W. Broadway, San Diego, CA 92101
County Operations Center	5510 Overland Avenue San Diego, CA 92123
East County Regional Center	250 Main Street, El Cajon, CA 92020
South County Regional Center	500 Third Avenue, Chula Vista, CA 91910

8.5 Project Demand and Proposed Facilities

Build-out of the Resort Village Alternative H (1,938 DU at 3.59 persons/du) will result in a projected total of 6,957 residents. This increase in population on the site, in conjunction with the proportional regional growth of the area, could result in the need for additional or expanded civic administrative facilities. Pursuant to the *Otay Ranch Facility Implementation Plan*, a ratio objective of 420 square-feet of civic administrative facility per 1,000 projected residents should be utilized in assessing project demand.

The calculation of projected population times the adopted civic administrative facilities ratio results in a projected demand from the Project totaling 2,922 square-feet of gross floor area. This demand will be satisfied through the use of existing County civic facilities as identified in Figure L.

8.6 Adequacy Analysis

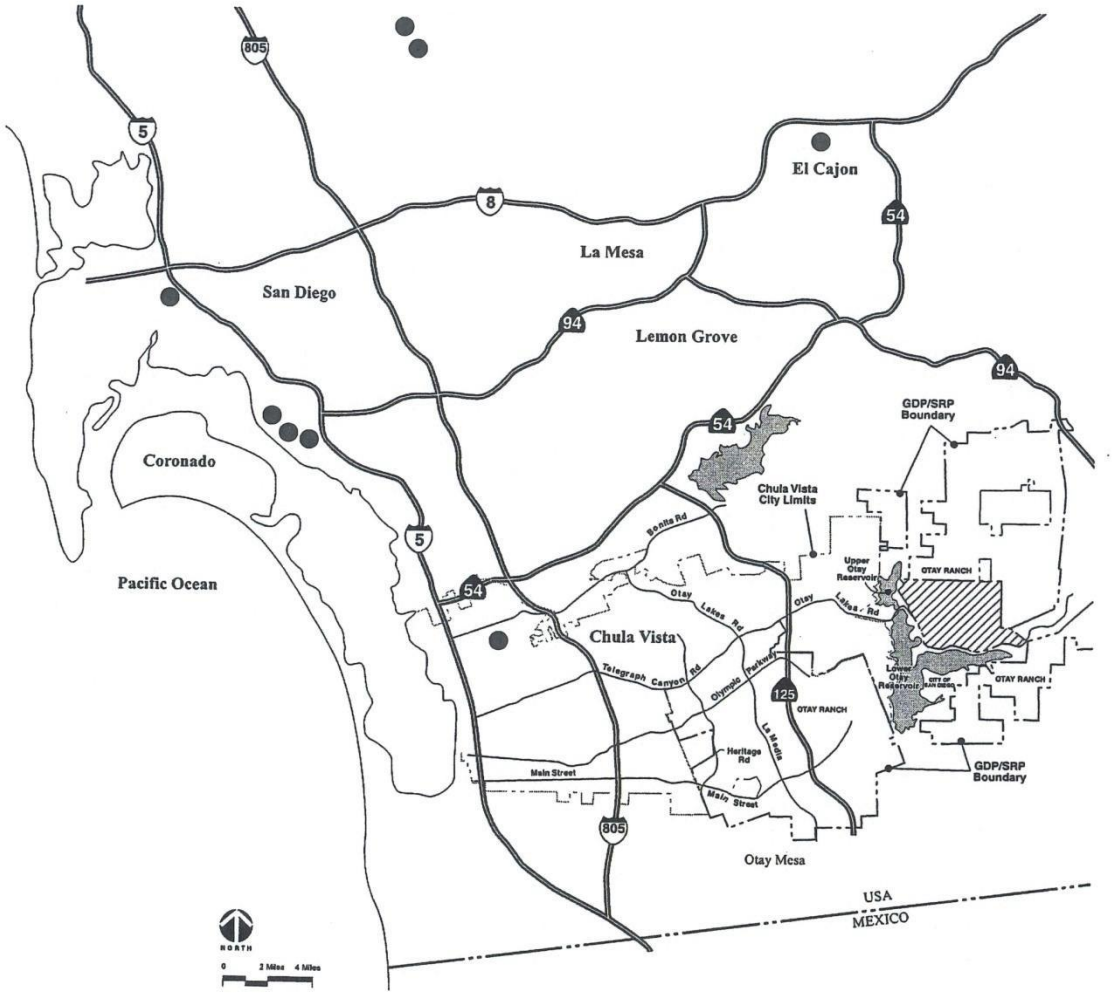
No specific civic facilities will be required of Resort Village Alternative H. Civic facility improvements are made through the County CIP, funded by the County General Fund. Payment of general taxes which contribute to the County General Fund from which civic facilities improvements are funded to the County CIP satisfies the demand created by the Project.

8.7 Threshold Compliance

Based upon the analysis contained in this PFFP, it is projected that the civic facilities threshold will be maintained throughout the development of Resort Village Alternative H.

8.8 Financing Civic Facilities

Civic facilities serving the unincorporated area have been funded from the County General Fund and service revenues. The Fiscal Impact Analysis (FIA) portion of this PFFP forecasts that development of Resort Village Alternative H would generate surplus tax revenues to the County, that is, more tax revenues than are necessary to serve demand generated by the Project. The FIA concluded that the Project will result in a net fiscal annual surplus at build-out of an estimated $3,305,127. Should the County elect, these revenues could be budgeted to fund additional facilities to meet the incremental increase in demand generated by this Project. Additionally, the Otay SRP obligates the proposed Project to contribute its proportionate fair share to any regional impact fee program, if one were to be established. Thus, the Project is projected to result in sufficient tax revenues to accommodate the demand for Civic Facilities.



LEGEND

Otay Ranch Preserve & Resort Community

Major County Administration Facility

PLANNING SYSTEMS

COUNTY ADMINISTRATION CIVIC FACILITIES

NORTH

Exhibit L – County Administrative Civic Facilities

9.0 Fire and Emergency Protection Facilities

9.1 Otay SRP Threshold

County of San Diego: Provide sufficient fire and emergency service facilities to respond to calls within single-family communities with residential lots of less than two-acres, or more intensive uses such as multi-family residential and all commercial development except neighborhood commercial, in a five-minute travel time.

9.2 Service Analysis

Fire protection and emergency services are among the most vital and basic community services provided. Generally, firefighters are the first responders to fires, medical emergencies, hazardous materials incidents, floods, earthquakes, and other emergencies and disasters. In addition, firefighters perform fire prevention and public education activities.

9.2.1 Regional Context

Resort Village Alternative H is located within the jurisdiction of the San Diego County Fire Authority (SDCFA). The SDCFA covers 1.5-million acres of unincorporated San Diego County.

The SDCFA provides both fire protection services and emergency medical services to the Project site. Under current circumstances, fire equipment and paramedic ambulance are stationed in Jamul, a 12-14-minute travel time to the Project site. Each SDCFA engine includes a paramedic with advanced life support capabilities.

9.2.2 Project Context

The SDCFA responds to all calls for service within the boundaries of its service area, regardless of the nature of the call. However, Advanced Life Support (ALS) transportation services are provided via a contract between the County of San Diego and American Medical Services. Under current circumstances, fire equipment and paramedic ambulance are stationed (FS No. 36) in Jamul within a 12-14-minute travel time to the Project site.

Dudek prepared *Otay Ranch Resort Village Fire Protection Plan* (FPP); March 2015 and *Otay Ranch Resort Village 13 Alternative H, Fire Protection Plan,* June 2018, for the Project. These plans include an analysis of existing conditions and potential fire risks, establishes a 100-foot Fuel Management Zone and makes recommendations for vegetation management and construction strategies to reduce the risk of wildland fires. The FPP also analyzes the demand for services generated by the Project and makes recommendations regarding fire resources and facilities required to meet the Project's projected demand for fire and emergency medical services.

Additionally, the Otay SRP originally located a fire station facility within Otay Ranch Village 15, south of Lower Otay Reservoir. However, because Village 15 has been acquired for open space/conservation purposes, the Project proposes to amend the Otay SRP to relocate the Village 15 fire station to a 2.3-acre public safety site within the Project.

9.3 Project Processing Requirements

Specific Plan

- Specify facility site refined Equipment needs identified
- Identify alternative financing methods
- Timing of construction consistent with GDP/SRP project requirements Determine response times standards have been met
- Develop project-specific guidelines
- Review fuel modification plans by fire department(s)
- Assure appropriate water pressures and supply for fire control

Tentative Map

- Conditioned to dedicate or reserve site, as appropriate Funding identified

9.4 Existing Conditions

An inventory of the SDCFA fire stations is shown on Table 31.

Table 31: SDCFA Fire Station Inventory

SDCFA Existing Facilities	Location
Station 10 – CAL FIRE Red Mountain	3660 E. Mission Road, Fallbrook, CA 92028
Station 11 – Deer Springs 11	8709 Circle R Drive, Escondido, CA 92026
Station 12 – Deer Springs 12	1321 Deer Springs Rd., San Marcos, CA 92069
Station 13 – Deer Springs 13	10308 Meadow Glen Way E., Escondido, CA 92026
Station 15 – CAL FIRE Miller	9127 W. Lilac Rd., Escondido, CA 92025
Station 16 – CAL FIRE De Luz	39431 De Luz Rd., Fallbrook, CA 92028
Station 18 – De Luz	39524 Daily Rd., Fallbrook, CA 92028
Station 20 – CAL FIRE Monte Vista	2249 Jamacha Rd. El Cajon, CA 92019
Station 21 – CAL FIRE Flinn Springs	9711 Flinn Springs Rd., El Cajon, CA 92021
Station 24 – Harbison Canyon	551 Harbison Canyon Rd., El Cajon, CA 92019
Station 30 – CAL FIRE Dulzura	17304 Highway 94, Dulzura, CA 91917
Station 31 – CAL FIRE Potrero	25130 Highway 94, Potrero, CA 91963
Station 32 – CAL FIRE Lyons Valley	17759 Skyline Truck Trails, Jamul, CA 91935
Station 36 - Jamul	14024 Peaceful Valley Ranch Rd., Jamul, CA 91935
Station 37 - Deerhorn	2383 Honey Springs Rd., Jamul, CA 91935

SDCFA Existing Facilities	Location
Station 38 - Otay	446 Alta Rd., Building 32, San Diego, CA 92154
Station 40 - CAL FIRE Campo	31577 Highway 94, Campo, CA 91906
Station 42 – Lake Morena	29690 Oak Drive, Campo, CA 91906
Station 43 - Jacumba	1255 Jacumba, Jacumba, CA 91934
Station 44 – Pine Valley	28850 Old Highway 80, Pine Valley, CA 91962
Station 45 - Descanso	24592 Viejas Grade Rd. Descanso, CA 91916
Station 46 – Campo	437 Jeb Stuart Rd., Campo CA 91906
Station 47 – Boulevard	40080 Ribbonwood Rd., Boulevard, CA 91905
Station 49 – Mount Laguna	10385 Sunrise Highway, Mt. Laguna, CA 91948
Station 50 – CAL FIRE Julian	1587 Highway 78, Julian, CA 92036
Station 51 – CAL FIRE Cuyamaca	34520 Engineers Rd., Julian, CA 92036
Station 52 – CAL FIRE Warner Springs	31049 Highway 79, Warner Springs, CA 92086
Station 53 – Shelter Valley	72160 Great Southern Overland, Julian, CA 92036
Station 54 – Ocotillo Wells	5841 Highway 78, Borrego Springs, CA 92004
Station 58 – Ranchita	37370 Montezuma Way, Ranchita, CA 92025
Station 59 – Sunshine Summit	35227 Highway 79, Warner Springs, CA 92086
Station 70 – CAL FIRE Rincon	16971 Highway 79, Pauma Valley, CA 92061
Station 71 – CAL FIRE Valley Center	14946 Vesper Rd., Valley Center, CA 92082
Station 77 – CAL FIRE Del Dios	2323 Felicita Ave., Escondido, CA 92029
Station 79 – Palomar Mountain	21610 Crestline Rd., Palomar Mountain, CA 92060
Station 80 – Ramona 80	829 San Vicente Rd., Ramona CA 92065
Station 81 – Ramona 81	24462 San Vicente Rd., Ramona CA 92065
Station 82 – Ramona 82	3410 Dye Rd., Ramona CA 92065
Station 84 – San Pasqual	17707 San Pasqual Valley Rd., Escondido, CA 92025
Station 85 – Intermountain	25858 A Highway 78, Ramona, CA 92065
Station 86 – CAL FIRE Mount Woodson	16310 Highway 67, Ramona, CA 92065
Station 87 – CAL FIRE Witch Creek	27330 Highway 78, Ramona, CA 92065

9.5 Project Demand and Proposed Facilities

Development of Resort Village Alternative H is projected to result in a build-out residential population of approximately 6,957 persons. Using the SDCFA's estimate of 82 annual calls per 1,000 residents (which is consistent with CVFD call data of 80 annual calls per1,000 residents), the Project's estimated 6,957 residents, 400 resort guests and 450 on-site employees at the retail center, hotel and school, would generate

approximately 640 calls per year (about 1.75 calls per day). Eighty-five percent of calls (544 calls/year, or 1.5 calls per day) are expected to be medical emergency calls. Based upon the current per capita fire call generation rate, the Project could generate 96 fire calls per year (.25/day).

The call volume (1.8 calls per day) generated by Resort Village Alternative H represents 25% of the fire station's capacity and is not considered enough of an increase to require additional resources. However, to meet the County's General Plan 5-minute emergency travel time standard, Resort Village Alternative H will require the provision of a fire station within the site. As previously described, the Resort Village Alternative H will be built in phases. Based on the response analysis conducted in the FPP, the initial phases of the Resort Village Alternative H may be served with emergency services from the City of Chula Vista (Woods Valley Station No. 8) per an interim interagency service agreement. The interagency service agreement must be in place prior to issuance of the first certificate of occupancy and will provide the timeframe and/or number of units occupied for construction of the on-site fire station (Mixed-Use District).

The permanent on-site Fire Station No. 33 shall be constructed on the 2.3-acre Public Safety site identified in the Resort Village Alternative H Specific Plan and Tentative Map. The fire station will be constructed to the standards of SDCFA for typical station. If prior to completion of the facility it is determined the facility needs to be expanded to serve other areas within the SDCFA, the Resort Village Alternative H shall contribute its fair-share of the cost to construct and equip the facility; however, subsequent expansion costs shall not be the responsibility of the Resort Village Alternative H developers or homeowners. In addition, the Resort Village Alternative H will contribute its fair-share of ongoing maintenance and operation costs associated with the fire station, based upon increased demand from the surrounding area.

9.6 Adequacy Analysis

Response times from the existing SDCFA Fire Station (No. 36) in Jamul to the Resort Village 13 Alternative H would result in a 12-14-minute travel time to the Project site. This level of service is inconsistent with the Otay SRP and County of San Diego threshold. Accordingly, additional facilities, staffing, and equipment are necessary to serve the Project. Table 32 summarizes the results of the emergency response analysis included in the FPP.

Table 32: Emergency Travel Times from Proposed On-Site Fire Station No. 33

5 Minute Travel Time	Units Reached	Percentage of Residential Units Reached (%)
On-Site Public Safety Site	1,938	100%

To avoid potential degradation of services, meet the anticipated increased demand in accordance with County emergency travel times, and respond to the on-site risks, the Project will be required to provide firefighting capabilities. The additional resources required to serve the Project are outlined below, including the public safety site (land), fair share funding for facilities, staff and equipment and the staffing resources necessary to meet the demand for fire and emergency medical services generated by the Project.

9.7 Inventory of Future Required Facilities and Staffing

The discussion below outlines estimated facilities, equipment, and staffing which would be necessary to serve Resort Village Alternative H at build-out

- 2.3-acre Public Safety
- Construct an On-Site Fire Station No. 33
- 4 career firefighters, including 1 ALS medic firefighter
- Type I Structure Engine
- Type III Interface Engine/Brush Rig
- Quint Ladder Truck (Resort Village Alternative H to pay its fair-share of cost of SDCFA ladder truck if required due to if Resort or Mixed-Use buildings are over 3 stories).

Table 33 provides a summary of the capital costs needed to service the Project (including land).

Table 33: Capital Costs

Land (@ $400,000/acre)	$840,000
Facilities	
Temporary Fire Station (Pre-fab home w/ stick built)	$285,000
Permanent Fire Station (6,400 SF @ $350/SF)	$2,240,000
Equipment	
Type I Structure Engine	$600,000
Type III Interface Engine/Brush Rig	$450,000-500,000
Quint Ladder Truck*	Fair share
Total Capital Costs	**$4,440,000**

*only required if resort buildings are over 3 stories and the size best suited for the final height.

The SDCFA projected staffing costs at approximately $1.5-million/year (4 Full-time Career Firefighters) when the Project completes build-out and is fully staffed. In the interim condition, when the Project is served from a temporary on-site fire station, the staffing is anticipated to consist of 2 full-time, career fire fighters and 1 volunteer. Final staffing levels and annual costs will be determined and documented in the Fire Service Agreement between SDCFA and the Applicant(s). These figures are shown in Table 34 below.

Table 34: SDCFA Operational Costs

Temporary Fire Station (2 career, 1 reserve)	$541,156
Permanent Fire Station (4 career; including ALS medic)	$1.5-million

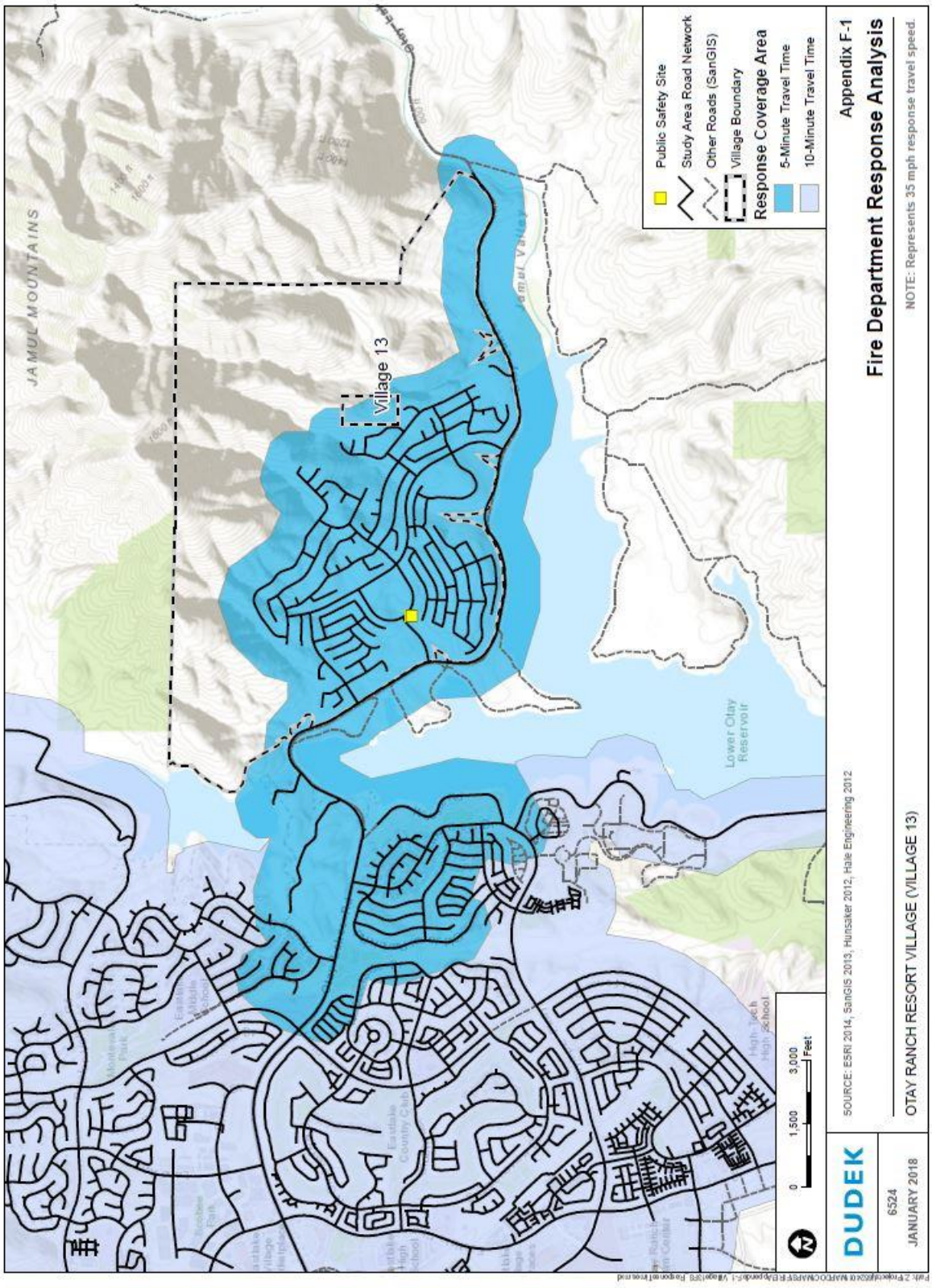


Exhibit M - Fire Response Modeling

9.8 Threshold Compliance

Currently, crews, and apparatus from the Jamul SDCFA station (FS No. 36) would result in a 12-14-minute travel time to the Resort Village Alternative H site. This response timeframe exceeds the adopted threshold. However, the City of Chula Vista and the SDCFA have negotiated an interagency service agreement to provide interim fire services to Resort Village Alternative H. Interim response will be provided from Woods Valley (Fire Station No. 8) in the City of Chula Vista until a permanent fire and emergency service are provided from an on-site Public Safety facility which will be built in the Village Core, per the interagency service agreement. Implementation of the interim service and construction of the permanent station will result in response times of less than five minutes, as shown above in Table 32 and Figure M, for Resort Village Alternative H which meets the County's travel time standard.

9.9 Financing Fire Service Facilities

LAFCO recognized the difficulty of funding fire protection in its 2003 report, *Funding Fire Protection*. This report identifies a number of strategies, including, "Encourag[ing] fire protection providers to investigate increased cooperative arrangement if doing so would produce efficiencies that could decrease dependence on property tax-supported operating budgets."

9.9.1 Capital Improvements

The County of San Diego has enacted a Fire Mitigation Fee program which is applicable to Resort Village Alternative H. The Fire Mitigation Fee is presently calculated at $0.46/square-foot the dedication of land for the public safety site may be credited against the total Fire Mitigation Fee. Table 35 estimates the Fire Mitigation Fees to be paid by the Project.

Table 35: Estimated SDCFA Fire Mitigation Fee

Land Use	Avg. sq. ft.	Homes	Subtotal sq. ft.	Fire Mitigation Fee
Single-Family Residential	3,600	1,881	6,611,715	$ 3,041,389
Mixed-Use Residential	2,000	57	114,000	$ 52,440
Commercial	40,000		40,000	$ 18,400
Resort	120,000		120,000	$ 55,200
Total		**1,938**	**6,885,715**	**$ 3,167,429**

It should be noted that while the anticipated Fire Mitigation Fee is approximately $3.17m, the actual costs to provide fire service are roughly $4.44m. The project will pay over $1.0m more than would be required by the Fire Mitigation Fee because it is funding more than its fair share of the cost of each of the separate facilities.

9.9.2 Operational Funding

In addition to the fee programs described above, the SDCFA will receive 1% of property taxes generated from the Resort Village Alternative H, or $289,505 per year to fund staffing and operations. Other sources

for funding fire and EMS facilities and ongoing staffing and maintenance costs include local, state, and federal grants and loans, establishment of a County Service Area assessment district and/or formation of a CFD. The Developer Agreement between the SDCFA and the Applicant(s) will include the final funding strategy for the Project.

10.0 Law Enforcement Facilities

10.1 Otay SRP Threshold

1. Respond to 84 percent of "Priority One" emergency calls within seven minutes and maintain an average response time to all "Priority One" emergency calls of 4.5-minutes or less.

2. Properly equipped and staffed police units shall respond to 62 percent of "Priority Two Urgent" calls within seven minutes and maintain an average response time to all "Priority Two" calls of seven minutes or less measured annually.

10.2 Service Analysis

The County of San Diego Sheriff's Department provides law enforcement services for all unincorporated areas of the County, including the Resort Village Alternative H site.

Law enforcement facilities and services are addressed as part of the Otay SRP in the *Facility Implementation Plan* (p.198) and in the Resort Village Alternative H SPA. The San Diego County General Plan Public Facilities Element also addresses law enforcement facilities.

10.3 Project Processing Requirements

Demonstrate conformance with the County General Plan Public Facility Element and the *Otay Ranch Facility Implementation Plan*.

10.4 Existing Conditions

The County Sheriff's Department currently provides law enforcement services to the County's unincorporated area and by contract to the cities of Del Mar, Encinitas, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, and Vista. Services include general patrol, traffic enforcement, criminal investigation, crime prevention, juvenile services, communications dispatch, and various management support services.

As San Diego County's Chief Law Enforcement Officer, the Sheriff also provides regional law enforcement services for the entire County. These services include investigation, aerial support, emergency planning, and response, law enforcement training and the operation of six County detention facilities.

Law enforcement service is provided to the Resort Village Alternative H site through the Imperial Beach Sheriff's Station. This station also serves the City of Imperial Beach, the community of Bonita and portions of East Otay Mesa. Per the County General Plan Public Facility Element, the response time threshold for urban unincorporated areas is eight minutes for priority calls (life threatening situations or felonies in progress) and 15 minutes for non-priority calls. However, the Project is held to the stricter thresholds stated above, as defined by the Otay SRP stated above.

The Imperial Beach Sheriff's Station presently has 44 sworn, 11 non-sworn, 7 clerical/front-counter and 4 Community Service Officer's (66 total) employees. There are 18 patrol units each day, including general patrol, traffic enforcement, and community service officers.

10.5 Project Demand and Proposed Facilities

Resort Village Alternative H will increase the demand for police service through the addition of residential and other uses in an area that is presently vacant and demands relatively few law enforcement services.

The San Diego Sheriff Department has analyzed the projected demand of the Project and submitted a staffing projection, dated March 16, 2017, for the Project. The Department stated:

> *"The development would consist of 1,938 housing units as well shopping, business and school facilities. Based on Chula Vista's statistics for calls for service (CFS) in adjacent communities with similar development patterns, it is estimated that Village 13 will receive 1.38 CFS per housing unit, for a total of approximately 2,674 annual calls for service. This level of service demand would require six (6) additional patrol deputies as stated in the Otay Ranch Preserve and Resort Supplemental Environmental Impact Report (SEIR) and the attached the Inter-Departmental Correspondence, dated May 22,2008. As part of their review of the Village 13 project, Law Enforcement Service Bureau (LESB) and Facilities and Special Projects staff identified the need for a storefront with public counter and suspect processing area due to the travel time from Village 13 to the IB and RSD Stations. The proposed project was approved with a designate 2.1 acre Public Safety Site that could house a Sheriff's Storefront with approximately 300 square feet of space. An alternative site was also provided within a Multiple Use area of the project."*

In addition to the six sworn field personnel, an unidentified number of support staff will be required. Using the *Otay Ranch Facilities Implementation Plan* standard of 1.74 support staff to every 1.67 officers, the projected demand for law enforcement support staff is six staff members.

10.6 Adequacy Analysis

Payment of general taxes contributes to the County General Fund through which law enforcement facilities improvements are constructed pursuant to the County CIP. Therefore, tax revenues collected from Resort Village Alternative H will assure provision of future required facilities. Additionally, a 2.3-acre public safety site will be reserved within the Project. The site could accommodate a Sheriff's "storefront," along with a fire station. A storefront could also be accommodated in the commercial space within the Mixed-Use District of the project.

The Sheriff's letter provides the following recommendation:

> *"A Sheriff's storefront is needed within both the Village 13 and Village 14 Projects. It is recommended that the proposed (for Village 14) and approved (for Village 13) 300 square feet storefronts each be increased by 200 square feet to allow for suspect processing and short term holding for detainees. The attached "Space Plan 500 SQ.FT. Storefront" diagram illustrates the how the proposed space would be utilized for two deputy work stations, a public counter, holding bench and processing area."*

This correspondence concludes that the provision of a location accommodating a Sheriff's "storefront" in conjunction with the public safety site is adequate to serve the Project.

10.7 Inventory of Future Required Facilities

A 2.3-acre public safety site is reserved within Resort Village Alternative H. A Sheriff's storefront may be located within the Public Safety Site or within the commercial component of the Mixed-Use District in the Project. The Sheriff Department has indicated (letter dated March 16, 2017), that a "storefront" safety office would be approximately 500 square-feet in floor area.

10.8 Threshold Compliance

A 2.3-acre Public Safety Site is provided within Resort Village Alternative H. A Sheriff's storefront may be located within the Public Safety structure. Based upon the analysis contained in this PFFP, it is projected that the law enforcement threshold will be maintained throughout the development of Resort Village Alternative H.

10.9 Financing Law Enforcement Facilities

The Sheriff's law enforcement facilities serving the unincorporated area have been funded through the County General Fund. Based upon the analysis contained in this PFFP, it is projected that the law enforcement facilities threshold will be maintained throughout the development of Resort Village Alternative H.

The FIA portion of this PFFP forecasts that development of Resort Village Alternative H would generate a $3,305,127 annual surplus to the County of San Diego, at build-out. This surplus exists even after the FIA model assumes a County cost of $1,853,455 per year for law enforcement protection to serve the Project's expected demand as calculated by the Sheriff's office.

11.0 Library Facilities

11.1 Otay SRP Threshold

Provide 350 square-feet (gross) of adequately equipped and staffed regional/area library facilities per 1,000 population.

11.2 Service Analysis

The County of San Diego, City of Chula Vista, and the City of San Diego provide library and media services for the Otay Ranch area.

The San Diego County Library Department provides services to the unincorporated areas (including Resort Village Alternative H) and eleven of the surrounding cities. The County Library Department presently operates 33 branch libraries throughout the county, plus a mobile library. One additional library is proposed at this time. The *Otay Ranch Facilities Implementation Plan* identifies the Eastern Urban Center in the City of Chula Vista as the future location of a library serving the needs of the entire Otay Ranch planning area.

11.3 Project Processing Requirements

- Identify phased demand in relation to supply.

11.4 Existing Conditions

The County of San Diego has five library facilities serving the South County area. The facilities are located in Bonita, Imperial Beach, Lincoln Acres, Spring Valley, and Rancho San Diego. Bookmobile service provides circulation and distribution in rural areas. The locations of the 33 County branch libraries are identified in Table 36 and Figure N. Resort Village Alternative H site lies within the service area of the Rancho San Diego County library.

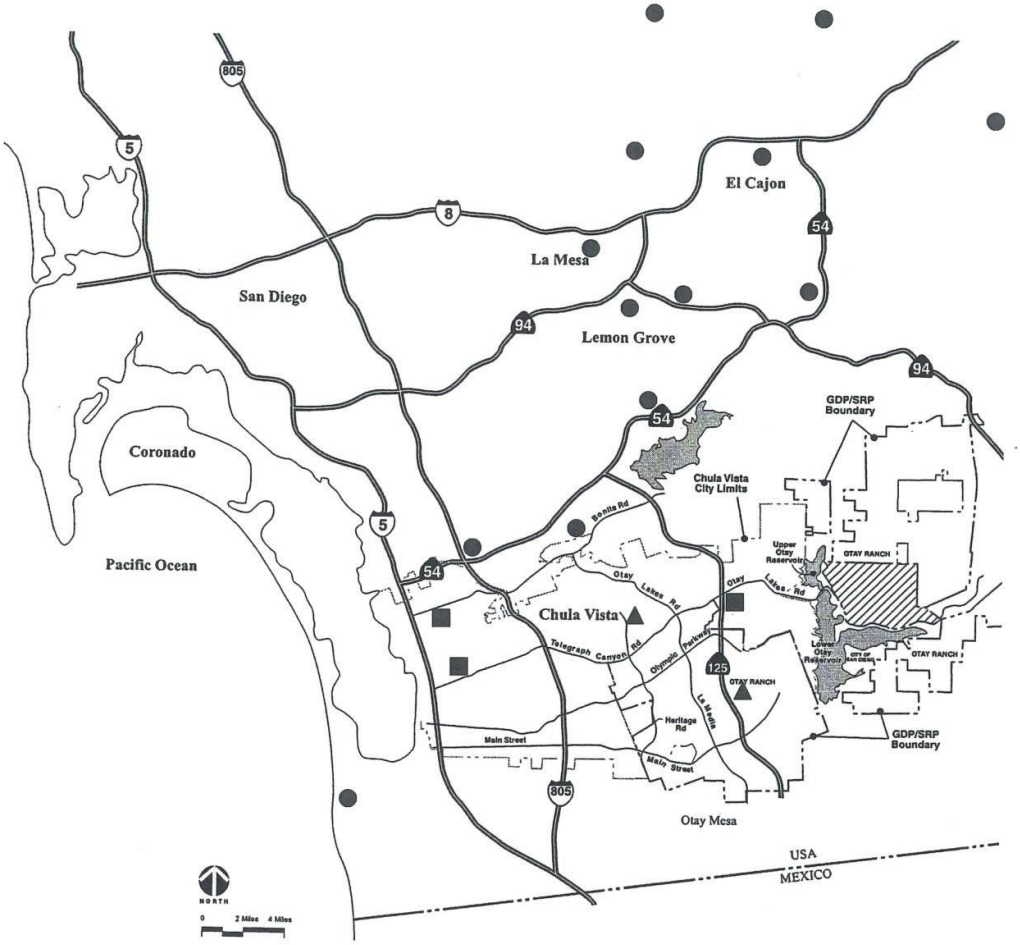
Table 36: Existing San Diego County Library Facilities

Library Branch	Address
Mobile Library	North County: 760-643-5125 East County: 619-660-6329
4S Ranch	10433 Reserve Dr., San Diego, CA 92127
Alpine	2130 Arnold Way, Alpine, CA 91901
Bonita	4375 Bonita Rd., Bonita, CA 91902
Borrego Springs	571-A Palm Canyon Drive, Borrego Springs 92004
Campo	31356 Highway 94, Campo, CA 91906
Cardiff-by-the-Sea	2081 Newcastle Ave., Cardiff-by-the-Sea, CA 92007

Casa de Oro9805	576 Garfield Ave., El Cajon, CA 92020
Imperial Beach	810 Imperial Beach Blvd., Imperial Beach, CA 91932
Jacumba	44605 Old Hwy. 80, Jacumba, CA 91934
Julian	1850 Highway 78, Julian, CA 92036
Lakeside	9839 Vine Street, Lakeside, CA 92040
La Mesa	8074 Allison Ave., La Mesa, CA 91941
Lincoln Acres	2725 Granger Ave., National City, CA 91950
Lemon Grove	8073 Broadway, Lemon Grove, CA 91945
Pine Valley	28804 Old Hwy. 80, Pine Valley, CA 91962
Potrero	24883 Potrero Valley Road, Potrero, CA 91963
Poway	13137 Poway Rd., Poway, CA 92064
Ramona	1406 Montecito Rd., Ramona, CA 92065
Rancho San Diego	11555 Via Rancho San Diego, El Cajon, CA 92019
Rancho Santa Fe	17040 Avenida de Acacias, Rancho Santa Fe, CA 92067
San Marcos	#2 Civic Center Drive, San Marcos, CA 92069
Santee	9225 Carlton Hills Blvd. #17, Santee, CA 92071
Solana Beach	157 Stevens Ave., Solana Beach, CA 92075
Spring Valley	836 Kempton Street, Spring Valley, CA 91977
Valley Center	29200 Cole Grade Road, Valley Center, CA 92082
Vista	700 Eucalyptus Ave., Vista, CA 92084

11.5 Project Demand

The Otay Ranch Facility Implementation Plan requires 350 square-feet (gross) of adequately equipped and staffed regional/area library facilities per 1,000 population. The projected population for Resort Village Alternative H is 6,957 people; therefore, the Project will have a total library demand of 2,435 square-feet.



LEGEND

- Otay Ranch Preserve & Resort Community
- County Library
- Chula Vista Library
- Planned Facility

COUNTY LIBRARY FACILITIES

NORTH

EXHIBIT N

PLANNING SYSTEMS

Exhibit N – County Library Facilities

11.6 Adequacy Analysis

The demand for library facilities generated by the build-out of the Resort Village Alternative H site will ultimately be satisfied by the existing libraries within the vicinity of the development and any new libraries constructed in the future. The Otay SRP plans for the location of a 36,758 square-foot main library in the Eastern Urban Center (EUC). The demand for library facilities generated by the build-out of the Resort Village Alternative H project will ultimately satisfied by the EUC library, along with existing libraries within the vicinity of Resort Village Alternative H

11.7 Inventory of Future Required Facilities

No specific library facilities will be required of Resort Village Alternative H.

11.8 Threshold Compliance

Resort Village Alternative H will have a total library demand of 2,435 square-feet. The Rancho San Diego library has capacity to serve the Project. In addition, the Otay SRP plans for the location of a 36,758 square-foot main library in the EUC. The demand for library facilities generated by the build-out of the Project will ultimately be satisfied by this main library, along with existing libraries within the vicinity of the Project site.

11.9 Financing Library Facilities

Funding for construction of new library facilities throughout the County comes from a variety of sources, including redevelopment tax increment financing within some cities, general fund contributions from cities, private contributions and federal Library Services and Construction Act (LSCA) Title II grants. Since the County Library has its own property tax share (approximately 3.2 percent of the one percent property tax), funding library facilities has not been funded from the County General Fund. Funding of City library facilities in the eastern part of the City comes from the Public Facilities Development Impact Fee Program. These facilities have been identified and fully funded to serve the Project.

The Otay SRP obligates Resort Village Alternative H to contribute its proportionate fair share to any regional impact fee program, if one were to be established. The Project is not within the boundaries of any current public facilities DIF program. The County Library has its own property tax share; thus, Project mitigation is achieved through the payment of property taxes. The FIA concluded that the Project will generate approximately $515,405 annually at build-out for the County Library fund. Thus, the Project is projected to result in sufficient tax revenues to accommodate the demand for Library Facilities. Based upon the analysis contained in this PFFP, it is projected that the library threshold will be maintained throughout the development of the Project. As a result, no new facilities will be required of the Project.

12.0 Parks and Recreation Facilities

12.1 Otay SRP Threshold

The County Park Lands Dedication Ordinance (PLDO) and the Otay Ranch SRP are based on the standard that three (3) acres of local parkland be provided per 1,000 residents. In addition, the Otay SRP requires 12-acres of other active and passive recreation and open space per 1,000 residents and 15-acres of regional park land per 1,000 residents

12.2 Service Analysis

The Otay SRP identifies four levels of parks. Town square or pedestrian parks average one acre in size and may contain small play grounds or picnic areas. They can be publicly of privately owned and are eligible for park credit. Neighborhood parks are typically sized between 5 and 20-acres and located to meet the needs of an individual village or planning area. Community parks should be at least 20-acres in size and programmed with intense recreational facilities designed to serve the needs of multiple villages or planning areas. Regional parks are typically larger than 200-acres and contain regional recreational facilities such as camping and hiking amenities.

The County Park Lands Dedication Ordinance requires 373.74 square-feet of local parkland be provided per lot or unit, whichever is greater, in the Otay Planning Area (based on 3-acres per 1,000 resident standard). Town square/pedestrian parks, neighborhood parks, and community parks with active recreational uses can satisfy this requirement. The PLDO requirement can be satisfied through the dedication of land, the payment of fees, the provision of private or public recreation facilities, or a combination of these methods.

The County Parks and Recreation Department is responsible for the planning and acquisition of County parkland and responsible for addressing compliance with the adopted thresholds.

12.3 Project Processing Requirements[7]

- Provide a Parks Master Plan.
- Specific facility site identified and reserved including consideration of areas adjacent to public schools and other public lands where co-location is feasible and desirable.
- Equipment needs identified.
- Alternative financing methods refined.
- Alternative maintenance entities and funding identified.

[7] From the Otay SRP.

- Timing of construction consistent with Otay Ranch Park and Recreation Implementation Plan identified.
- Sites for special purpose parks reviewed.
- Design criteria for land adjacent to regional parks prepared.

12.4 Existing Conditions

Resort Village Alternative H is located within the Otay Local Park Planning Area. Currently, no County Master Local Park Plan has been created for this area. One County park currently exists within the boundaries of the Otay Local Park Planning Area, Otay Lakes County Park. The Otay Lakes County Park is 78-acres and is located approximately two miles south of the Project site. Additionally, the Otay Valley Regional Park (OVRP) is a future planned park within the Otay Local Park Planning Area.

In addition to the two parks located and planned within the Otay Park Planning Area, numerous County of San Diego and City of Chula Vista parks exist within the vicinity of the Project. These parks are identified in the following four tables.

Table 37: Existing Parks within Otay Local Park Planning Area

Park	Jurisdiction	Acres
Otay Lakes County Park (Existing)	S.D. County	78.0
Total		**78.0**

Table 38: Existing Regional Park Inventory

Park	Jurisdiction	Acre
Otay Valley Regional Park – Open Space Preserve [8]	OVRP JEPA	3,000+
Sweetwater Park	S. D. County	571
Total Existing Regional Acres		**3,571+**

Table 39: Existing Chula Vista Community Park Inventory

Park	Jurisdiction	Acres
Chula Vista Community Park	Chula Vista	14.9
Greg Rogers Park	Chula Vista	43.4
Rohr Park	Chula Vista	59.5
Discovery Park	Chula Vista	20.4
Montevalle	Chula Vista	29.0
Salt Creek	Chula Vista	19.8
Veterans Park	Chula Vista	10.5
Total Existing Community Acres:		**197.5**

[8] Only a portion of the OVRP is available for public use currently.

Table 40: Future Otay Ranch Community Parks

Park	Jurisdiction	Acres
Otay Ranch Community Park (Village 8)	Chula Vista	51.5
Otay Ranch Community Park (Village 4)	Chula Vista	75.0
Total		**126.5**

12.5 Project Demand and Proposed Facilities

12.5.1 Local Park Compliance

The amount of park lands required in association with the Resort Village Alternative H is based on the number of homes or lots (whichever is greater) in the village. For the Otay Local Park Planning Area, the PLDO requires the dedication of 373.74 square-feet of improved park land for each new unit or lot, whichever is greater. The Project includes 1,938 units; therefore, the total requirement is 16.63-acres of improved park land (1,938 x 373.74 sf/unit) divided by 43,560 sf/acre = 16.63-acres.

To meet this requirement, the Project proposes six parks totaling 25.1-acres, ranging in size from 1.3-acre to 10.5-acres. The parks included in the Project are identified in Table 43 below. As indicated in this table, public parks will be maintained by the County of San Diego through an assessment mechanism such as a CFD. Maintenance of private parks will be the responsibility of the HOA.

12.5.2 Open Space Compliance

The Otay SRP also requires 12-acres of "other passive or active recreation and open space areas," per 1,000 residents and 15-acres of "regional park and open space" land per 1,000 residents.

Based on an estimated Project population of 6,957 residents, the 12-acre standard requires 83.5 acres of open space and the 15-acre standard requires 104.4-acres of dedicated open space. This combined open space requirement of 187.8-acres is satisfied two ways. First, the Project contains 76.4-acres of internal open space, 69.3-acres of Conserved Open Space, and approximately 1,107-acres of Preserve land. Second, as part of the Otay Ranch RMP Phase 2 conveyance obligation, the Project will convey approximately 786.7-acres of Preserve land to public ownership.

It should be noted there is a distinction between the amount of Preserve acres in the Project site (roughly 1,107-acres) and the conveyance obligation (roughly 887-acres). The two figures are not related to each other. The conveyance obligation is calculated by multiplying the Project's development footprint (minus circulation element roads, public schools, and public parks) by 1.188. This determines the number of Preserve acres which must be conveyed into public ownership as final maps are approved for the Project. The Preserve land conveyed may or may not be Preserve land within the Project boundaries but must be within the boundaries of the Otay Ranch Preserve.

Table 41: Projected Conveyance Requirement

Land Use	Developable Acres
Single Family Residential	516.9
MU	6.6
Private Parks	17.6
Resort	16.6
Manufactured Open Space	76.4
Internal Circulation	28.1
Total Developable Acres (Per Otay Ranch RMP Phase 2)	**662.2**
Conveyance Factor	*1.188*
Acres to be Conveyed to Preserve (666.4 x 1.188)	**786.6**

The majority of the natural open space within Otay Ranch is governed by the *Otay Ranch Resource Management Plan* (RMP), which established the 11,375-acres Otay Ranch Preserve open space system. The RMP requires Preserve land to be incrementally conveyed to a "Preserve Owner/Manager" (POM) in acreage proportionate to actual development of Otay Ranch property. The POM will be responsible for the maintenance, enhancement and restoration of the land within the Preserve. The on-going maintenance and operation of Preserve land and resources is funded through an assessment imposed upon Otay Ranch development.

12.5.3 Trails

A system of local bicycle and pedestrian pathways and multi-use trails is planned within the Project site. The pathway and trail system are shown on Exhibit O and additional details can be found in the *Otay Ranch Resort Parks, Recreation, Open Space and Trails Master Plan* and the *Resort Village Design Plan*.

Pathways will be phased in conjunction with adjacent circulation improvements. Pathways will be constructed by the developer and maintained by a homeowner association or other appropriate entity. Existing trails in the Otay Ranch Preserve will be maintained by the Preserve Owner/Manager.

12.6 Adequacy Analysis

Based upon the analysis contained in this section of the PFFP, Resort Village Alternative H is projected to meet the demand generated by the ultimate residential development. The inventory of proposed park facilities is provided in Table 42. Therefore, the park and open space demands are satisfied through implementation of the Project.

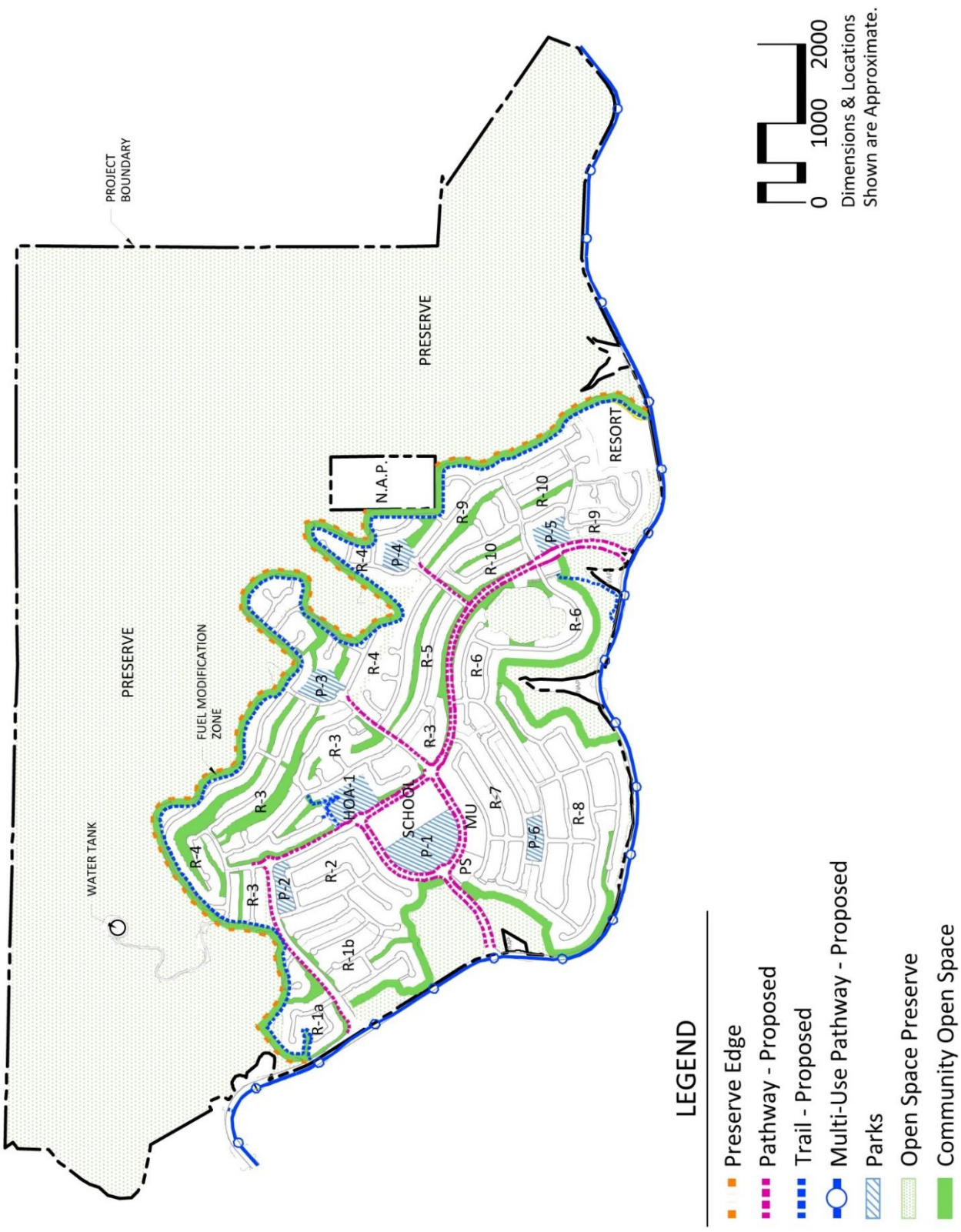


Exhibit O - Otay Ranch Resort Village Preserve, Parks, Recreation, Open Space, and Trails Plan

Additionally, the PLDO includes an in-lieu fee which calculates the cost of park land acquisition and improvements in each park planning area on a per home basis. In the Otay Local Park Planning Area, the in-lieu fee is $6,161 per home. If the project paid this fee for all 1,938 homes, the total amount collected would be $11,940,018. However, it is anticipated the Project will meet PLDO requirements through dedication of developed parkland by providing 25.1-acres of improved park land and a 6.1-acre Homeowners Association recreation facility. The estimated cost for improvements to the proposed parks is roughly $20,000,000. This amount does not include the value of the land. The provision of park improvements by the Project meets the requirements of the County PLDO.

Demand for 187.8-acres of open space is met through provision of 76.4-acres of internal open space, 69.3-acres of Conserved Open Space plus designation of 1,107-acres of Preserve within the Project.

12.7 Inventory and Cost Estimate of Future Facilities

Conceptual park features for each park facility in the Resort Village Alternative H are provided below. However, further refinement of the programming for each park could result in other amenities being planned for each park.

12.8 Threshold Compliance

The parks and recreation facilities identified above (P-1 through P-6) satisfy the PLDO requirement for local parks. The combination of 76.4-acres of internal open space, 69.3-acres of Conserved Open Space, and 1,107-acres of Preserve will provide adequate open space to satisfy the open space requirement.

Table 42: Inventory of Park Facilities

Park	Conceptual Features	Acres (Gross)	Acres (net)	PLDO Credit	Total Credit	Maint. Entity
P-1	One Little League/Softball field, two U-12 soccer field, two full basketball courts, a perimeter jogging path, an outdoor fitness area, a parkour zone, a bicycle fitness park, a skateboard park, a big kid play structure, a toddler play structure, a toddler climbing rock area, a swing set, three passive open turf areas, an informal outdoor amphitheater, restrooms/comfort station, 31 space parking lot, nine covered picnic pavilions, four open picnic areas, 12 seating areas/benches, and six drinking fountains	10.5	9.7	100%	9.7	CFD
P-2	Two U-8 soccer field, perimeter jogging path, four fitness stations, two ½-court basketball, two big kid play structures, a toddler play structure, a toddler climbing rock, two swing sets, a passive open turf area, two covered picnic pavilions, two open picnic areas, six seating area/benches, and two drinking fountains	2.7	2.2	50%	1.1	HOA
P-3	A U-10 soccer field, a perimeter jogging path, two fitness stations, a skateboard park, a big kid play structure, a toddler play structure, a toddler climbing rock area, two swing sets, four covered picnic pavilions, two open picnic areas, six seating areas/benches, and two drinking fountains	3.7	2.1	50%	1.0	HOA
P-4	Three U-6 soccer fields, three fitness stations, a full basketball court, a big kid play structure, a toddler play structure, a toddler climbing rock area, two swing sets, three covered picnic pavilions, two open picnic areas, six seating areas/benches, and one drinking fountain	2.7	1.4	50%	0.7	HOA
P-5	Four U-6 soccer fields, a perimeter jogging path, two drop-shot basketball courts, a basketball full court, a big kid play structure, a toddler play structure, a toddler climbing rock area, two swing sets, a playground game area, two covered picnic pavilions, two open picnic areas, six seating areas/benches, and two drinking fountains	3.1	2.1	100%	2.1	CFD
P-6	Two U-12 soccer fields, a perimeter jogging path, two fitness stations, two basketball half-courts, a big kid play structure, a toddler play structure, a toddler climbing rock area, two swing sets, a passive open turf area, one covered picnic pavilions, one open picnic area, six seating area/benches, and two drinking fountains	2.4	2.4	50%	1.2	HOA
HOA	Three tennis courts, community building, swimming pool, interactive water play area, multipurpose field, parking, open picnic area, covered picnic area, and trail access	6.1	3.4	50%	1.7	HOA
TOTAL		**31.2**	**23.3**		**17.5**	
Demand based on PLDO					**16.63**	
DIFFERENCE (acres over requirement)					**0.87**	

12.9 Parks and Recreation Facilities Improvements Phasing

Table 43 describes the parks and recreation facilities improvements phasing for the Resort Village Alternative H.

Table 43: Local Park Improvements Phasing

Phase	Pocket Parks Improvements
PH1	Begin construction of P-2 subject to Park Agreement
PH2	Begin construction of P-2 subject to Park Agreement.
PH3	Begin construction of P-2 subject to Park Agreement.
PH4	Begin construction of P-3 subject to Park Agreement.
PH5	Begin construction of P-1 and P-6 subject to Park Agreement.
PH6	Begin construction of P-6 subject to Park Agreement.
PH7	Begin construction of P-6 subject to Park Agreement.
PH8	Begin construction of P-4 subject to Park Agreement.
PH9	Begin construction of P-5 subject to Park Agreement.
All Phases	Subject to Park Agreement.

12.10 Financing Park Facilities

Local park sites and improvements will be satisfied through compliance with the County's Park Land Dedication Ordinance (PLDO) whereby the developers shall receive credit against PLDO Fees for the dedication and construction of eligible park improvements.

13.0 School Facilities

13.1 Otay SRP Threshold

Additional facilities to serve children generated by new development shall be provided concurrent with need and shall be of the quality and quantity sufficient to meet, at a minimum, State Department of Education standards.

13.2 Service Analysis

School facilities and services in Chula Vista are provided by two school districts. The Chula Vista Elementary School District (CVESD) administers education for kindergarten through sixth grades. The Sweetwater Union High School District (SUHSD) administers education for the Junior/Middle and Senior High Schools of a large district, which includes the City of Chula Vista. The purpose of the Threshold Standard is to ensure that the districts have the necessary school sites and funds to meet the needs of students in newly developing areas in a timely manner, and to prevent the negative impacts of overcrowding on the existing schools. Through the provision of development forecasts, school district personnel can plan and implement school facility construction and program allocation in line with development.

On November 3, 1998, California voters approved Proposition 1A, the Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998. Prior to the passage of Proposition 1A, school districts relied on statutory school fees established by Assembly Bill 2926 ("School Fee Legislation") which was adopted in 1986, as well as judicial authority (i.e., Mira-Hart-Murrieta court decisions) to mitigate the impacts of new residential development. In a post Proposition 1A environment, the statutory fees provided for in the School Fee Legislation remains in effect and any mitigation requirements or conditions of approval not memorialized in a mitigation agreement, after January 1, 2000, will be replaced by Alternative Fees (sometimes referred to as Level II and Level III Fees). The statutory fee for residential development is referred to in these circumstances as the Level I Fee (i.e., currently at $3.79 per square-foot for new residential construction and $0.61 per square-foot for new commercial and industrial construction).

CVESD utilizes their current *Fee Justification Report, June 2012, by SDFA*, to quantify the impacts of new residential development on the district's school facilities, and to calculate the permissible Alternative Fees to be collected from such new residential development. To ensure the timely construction of school facilities to house students from residential development, alternative fees or implementation of a Mello-Roos Community Facilities District (CFD) will be necessary.

Both CVESD and SUHSD are justified per Gov't Code to collect the maximum fee of $3.20 per square-foot for new residential construction. CVESD has an agreement with SUHSD specifying the amount of the development fee that each district collects from new residential development. Based on the agreement, CVESD collects $1.41 per square-foot and SUHSD collects $1.79 per square-foot for residential construction.

Sweetwater Union High School District utilizes their current "Sweetwater Union High School District Long Range Comprehensive Master Plan." Implementation of the SUHSD Plan is ongoing and has resulted in the upgrading of older schools and accommodating continuing growth. In November 2000, Proposition BB was approved by the voters. The district leveraged $187 million from Proposition BB into a $327 million effort utilizing state funding to modernize and upgrade twenty-two campuses.

In November 2006, the community supported Proposition O, a $644 million bond measure. This bond measure addresses the critical and urgent safety needs of the 32 campuses within the SUHSD. The types of repairs and improvements that Proposition O is addressing includes: improving handicap accessibility, removing asbestos and lead paint, and upgrading fire and life safety systems.

13.3 Project Processing Requirements

Specific Plan/Public Facilities Finance Plans

1. Identify student generation by phase of development.
2. Site proposed school facilities in conformance with the CVESD's Standards and Criteria and the SUHSD Long Range Comprehensive Plan.
3. Reserve school sites, if necessary, or coordinate with the district(s) for additional school classrooms.
4. Identify facilities consistent with proposed phasing.
5. Demonstrate the ability to provide adequate facilities to access public schools in conjunction with the construction of water and sewer facilities.
6. Enter into a School Mitigation Agreement

13.4 Existing Conditions

13.4.1 Chula Vista Elementary School District

The CVESD, established in 1892, is the largest kindergarten through sixth grade (grades K– 6) school district in California, and serves nearly 29,000 students in 45 elementary schools (including Charter Schools) with approximately 2,500 employees (both certified and classified) district-wide. Table 44 lists existing schools together with the capacity and enrollment of each. Capacity using existing facilities is approximately 31,000. Enrollment is currently approximately 28,890. Ten of the 45 schools are over capacity and three schools are near capacity (see Table 44). A new K-6 school opened in Otay Ranch Village 11 in July 2013. With the addition of this school, the CVESD expects to have adequate capacity to house all projected students for the next 18 months. However, additional facilities may be necessary within the next five years.

An additional elementary school in Otay Ranch Village 2 was opened in late 2017 and enrollment has not stabilized as of this date. Currently, several schools in eastern Chula Vista are over capacity, including Arroyo Vista, Hedenkamp, Veterans, McMillin, Wolf Canyon, and Salt Creek. The Learning Community and Mueller Elementary in western Chula Vista are also over capacity and are projected to be nearly 150 over capacity within five years.

Table 44: Chula Vista Elementary School District Enrollments

Schools	Estimated Enrollment	Approximate Capacity	Remaining Capacity
Allen/Ann Daly	438	393	45
Arroyo Vista Charter	850	1,002	-152
Camarena	1,000	1,014	-14
Casillas	577	505	72
Castle Park	489	381	108
Chula Vista Hills	588	555	33
Chula Vista LCC	888	495	393
Clear View Charter	586	322	264
Cook 449	513	1,530	-1,017
Discovery Charter	938	311	627
Eastlake	702	648	54
Feaster/Ed Charter	1,113	1,235	-122
Finney	586	363	223
Halecrest	577	503	74
Harborside	864	700	164
Hedenkamp	1,150	1,074	76
Heritage	900	829	71
Hilltop Drive	564	563	1
Juarez-Lincoln	727	552	175
Kellogg	427	328	99
Lauderbach	1,052	800	252
Liberty	752	739	13
Loma Verde	650	477	173
Los Altos	489	356	133
Marshall	686	674	12
McMillin	813	845	-32
Montgomery	513	344	169
Mueller Charter	900	1,364	-464
Olympic View	825	807	18
Otay	713	552	161
Palomar	436	363	73
Parkview	536	376	160
Rice	739	650	89
Rogers	639	450	189
Rohr	489	321	168
Rosebank	727	568	159
Salt Creek	975	968	7
Silver Wing	488	438	50
Sunnyside	489	456	33

Schools	Estimated Enrollment	Approximate Capacity	Remaining Capacity
Tiffany	586	520	663
Valle Lindo	677	474	203
Valley Vista	634	622	12
Veterans	901	892	9
Vista Square	689	648	41
Wolf Canyon	927	917	10
Totals	**31,802**	**28,924**	**2,878**

13.4.2 Sweetwater Union High School District

The District serves approximately 40,000 students in 11 middle (7-8) and 14 high school (grades 9–12) and more than 32,000 adult learners at 32 campuses. Several middle and high schools are planned or have been recently opened in the area. Otay Ranch High School is the nearest High School; however, the project area is outside the designated attendance area. Unless the attendance boundary is changed High School, Students will attend Olympian High School, which was opened in 2006 within Otay Ranch Village 7, and has a planned capacity of 2,600 students. A new 7–12 school is planned within Otay Ranch Village 11. However, there is no construction schedule available.

The SUHSD has indicated that the unstable economy, high foreclosure rate, and expansion of charter schools into the 7-12 arena make the 5-year projections for eastern Chula Vista very tentative. If charter schools continue to siphon students, it is likely that the District will have capacity for five years of residential growth. However, if there is a significant increase in development and reoccupation of foreclosed homes, construction of Middle School No. 12 and High School No. 14 in Village 11 and construction is anticipated to occur within 2-3 years.

Table 45: Sweetwater Union Middle School Enrollments

School Site	Program Capacity 100%	Estimated Enrollment	Capacity vs. Projected
Bonita Vista	1,610	1,137	473
Castle Park	1,324	877	447
Chula Vista	1,456	837	619
Eastlake	1,995	1,625	370
Granger	1,350	958	392
Hilltop	1,596	977	619
Mar Vista Mid.	1,530	861	669
Montgomery Mid.	1,434	839	595
National City Mid.	1,038	807	231
Rancho del Rey	1,796	1,778	18
Southwest	1,034	631	403
Subtotal	**16,163**	**11,327**	**4,836**

Table 46: Sweetwater Union High School Enrollments

School Site	Program Capacity 100%	Estimated Enrollment	Capacity vs. Projected
Bonita Vista	2,603	2,623	277
Castle Park	2,099	1,607	492
Chula Vista	2,758	2,586	172
Eastlake	2,964	3,063	-99
East Hills Academy*	212	78	134
Hilltop	2,760	2,143	617
Mar Vista	2,023	1,673	350
Montgomery	2,392	1,712	680
Olympian	2,537	2,610	-73
Otay Ranch	2,737	2,413	324
San Ysidro	2,676	2,447	229
Southwest	2,519	1,910	609
Sweetwater	2,875	2,675	200
Palomar	564	281	283
Subtotal	**31,719**	**27,524**	**4,195**

13.5 Project Demand and Proposed Facilities

13.5.1 Student Generation Factors:

For long-range facilities planning purposes, the referenced school districts have recommended the following student generation projection factors:

Table 47: Student Generation Factors

School Type	Grades	Students per SF Unit	Students per DU
Elementary	K-6	0.4114	0.3481
Middle School	7-8	0.1216	0.0516
High School	9-12	0.2291	0.1057

By land use and school category, Resort Village Alternative H is expected to generate students as determined in Table 48.

Table 48: Student Generation by Development Land Use

Phase	Dwelling Units	Elementary School	Middle School	High School
Single Family	1,881	774	229	431
Multi Family	57	20	3	6
TOTAL	1,938	794	232	437

14.5.2 School Size Standards

School size standards adopted by the respective districts are as shown on the following Table. These sizes are "core" facilities only, and do not reflect modular, temporary structures which are routinely placed on campus to facilitate temporary expansion of classrooms, as necessary.

Table 49: School Size Standards

School Type	Grades	School Size
Elementary	K-6	750-1,000
Middle School	7-8	1,500
High School	9-12	2,400

13.5.3 School Siting Criteria

As established in the Otay SRP and Facility Implementation Plan, school facilities should be sited according to the following criteria. The ideal site should be:

1. At least 10 usable acres for an elementary school site, 25 net usable acres for a middle/junior high school, and at least 50 net usable acres for a senior high school, adequately accommodate the loading and unloading of students, and allow future expansion of facilities and offer design flexibility.

2. Centrally located to residential development to reduce bussing requirements, reduce walking distances for young children, encourage after-hours use of facilities by the public, and discourage vandalism.

3. Adjacent to a street or road that can safely accommodate bike, foot, and vehicular traffic. Middle school and high school sites should have no less than two sides with street frontage. Urban high schools are best located adjacent to collectors that can handle the increased traffic volume of student drivers and the entrance to the school should be signalized.

4. Topographically and environmentally safe and suitable to reduce site preparation costs and permit maximum use of the site for physical activities.

5. Surrounded by land uses that produce a minimum of noise and traffic often associated with commercial and heavy industrial areas.

6. Located adjacent to parks to enable joint field and recreation facility uses.

7. Vacant and undeveloped with utilities stubbed to the site in order to reduce financial and costs of site acquisition.

8. Located such that utilities and services (e.g. cable television, fire protection, and emergency medical services) are or will be readily available, to reduce site development costs.

9. Near imminent development of adjacent properties to insure road and other necessary off-site improvements are available in a timely manner.

10. School siting should be in a location acceptable to the State Division of Aeronautics with regard to distance from Brown Field.

11. A safe distance, i.e., as required by law, from contaminants or toxins in the soil or groundwater from landfills, fuel tanks, agricultural areas, power lines, utility easements, etc.

12. Outside of floodplains; on stable soils; away from fault lines.

13. Integrated into the system of alternative transportation corridors, i.e., bike lanes, riding and hiking trails, and mass transit, where appropriate.

Additionally, Sweetwater Union High School District policy dictates that while it is acceptable and desirable to locate junior high/middle schools in close proximity to a high school, it is not desirable that either be located near an elementary school site. The Chula Vista Elementary School District has also stated a preference for this separation to avoid the mixing of older students with younger students.

13.5.4 Elementary School Demand

There are seven CVESD elementary schools serving Otay Ranch students. These include Heritage Elementary, McMillin Elementary, Hedencamp Elementary, Veterans Elementary, Wolf Canyon Elementary, and Camerena Elementary. The newest K–6 school in Otay Ranch Village 11 (Enrique S. Camarena Elementary School) opened in July 2013. These schools are currently operating at or over capacity. An additional elementary school was planned to commence construction in 2011 within Village 2. An additional elementary school in Otay Ranch Village 2 was opened in late 2017 and enrollment has not stabilized as of this date.

The Otay SRP land plan identifies one 10-acre elementary school site within Village 15, located south of Lower Otay Reservoir. However, Village 15 has been acquired by conservation agencies for open space purposes and development of a school will no longer occur within this area. Therefore, to ensure that students from the Resort Village Alternative H will be accommodated concurrent with demand, the Project reserves a centrally located 10-acre elementary school site within the residential area and adjacent to the 10.5-acre neighborhood park. This school site is identified as school in the Site Utilization Plan for this PFFP.

Utilizing the student generation factors identified by the school districts, it is projected that approximately 794 elementary school students will result from development of the Project. This figure is within the recommended capacity of a single elementary (K-6) school (750-1000 students). The Resort Village Alternative H school site would be reserved for acquisition by the school district or dedication to the school district, pursuant to an agreement between the developer and CVESD. It is anticipated a graded school site will be delivered to the CVESD, including utilities provided to the site and an all-weather road acceptable to the Fire Department and District. The Otay SRP School Facilities Implementation Plan is based on the premise that schools will be constructed when no greater than half of the school's projected students reside in the community; however, facility phasing is solely determined by the District based on available school capacity in the vicinity of the Project site.

In the event that schools are overcapacity, the school district uses relocatable classrooms to temporarily house additional students until a new facility opens. In recognition of the impact on school facilities created by new development, the District and developers may enter into various mitigation agreements to ensure the timely construction of school facilities to house students from new residential development ("Mitigation Agreement"). Historically, developers and school districts have entered into a School Mitigation Agreement and school districts have utilized a community facilities district ("CFD") pursuant to the Mello-Roos Community Facilities District Act of 1982 (CVESD) to finance school facilities. However, per SB2926, in absence of a mitigation agreement, the developer shall pay the statutory school fees under state law in effect at the time of building permit issuance.

13.5.5 Middle School Demand

Secondary schools serving Otay Ranch include Otay Ranch High School, Olympian High School, Rancho del Rey Middle School, and Eastlake Middle School. Enrollment and capacity in these schools are shown in Table 50. Based on the student generation factors identified by the SUHSD, it is projected that 232 middle school students will result from development of the Project. Throughout the district additional middle school capacity is available. Students generated by the Project would be expected to attend an existing middle school. Sweetwater Union High School District officials have indicated that students generated by the Project may attend Eastlake Middle School. In addition, a new middle school site has been identified within Otay Ranch. This middle school is located in Village 7/8 and has a project capacity of 1,500 students. Once constructed (3 to 5 years), this facility may be used by middle school students generated by the Project.

13.5.6 High School Demand

It is anticipated that 437 high school students would be generated by development of the Project. Throughout the district additional high school capacity is available. Students generated by the Resort Village Alternative H residents would be expected to attend an existing high school. Sweetwater Union High School District officials have indicated students generated by the Project may attend Eastlake High School. In addition, a new high school site has been identified within Otay Ranch. This high school is located in Village 11 and has a project capacity of 2,000 students. Once constructed (date to be determined), this facility may be used by high school students generated by the Project.

13.6 Adequacy Analysis

Resort Village Alternative H student generation projections will necessitate construction of an elementary school. A school site within the Project has been reserved in the Site Utilization Plan. To the degree that it can be determined at this time, this site is in compliance with the school siting criteria adopted by the Chula Vista School District.

To mitigate its impact on school facilities, the Project is required to pay school mitigation fees pursuant to Gov. Code Section 65995. Alternatively, the applicants may enter a "School Mitigation Agreement" with the school district(s).

13.7 Inventory of Future Required Facilities

A 10.1-acre site has been identified and reserved as a possible elementary school location.

13.8 Threshold Compliance

A. Reservation of the school site shall be a requirement of development of Resort Village Alternative H.

B. Prior to the issuance of each building permit for any residential dwelling units, the applicant(s) shall provide evidence or certification by the CVESD and SUHSD that any fee charge, dedication or other requirement levied by the school districts under state law has been complied with or that the districts have determined the fee, charge, dedication or other requirements do not apply to the construction or that the applicant has entered into a school mitigation agreement. School Facility Mitigation Fees shall be in accordance with the fees in effect at the time of building permit issuance.

C. The applicant shall provide evidence from the CVESD that the school site has been determined by the district to be acceptable for school use.

13.9 Financing School Facilities

California Government Code section 65995 et. seq. and Education Code Section 17620 et. seq. authorizes school districts to impose facility mitigation exactions on new development as a way to address increasing enrollment caused by that development.

Although the collection of school fees is one method available to defray the cost of new development, it is not an acceptable solution since the maximum amount that could be collected by law represents less than one-fourth the cost to construct schools.

In recognition of this funding deficiency, it is the desire of each district to fully mitigate the facility impacts caused by a master planned community via the creation of a Mello-Roos CFD). The following Mello-Roos Districts have been created by each district:

SUHSD
CFD No. 1 Eastlake
CFD No. 2 Bonita Long Canyon
CFD No. 3 Rancho del Rey
CFD No. 4 Sunbow
CFD No. 5 Annexable
CFD No. 6 Otay Ranch
CFD No. 7 Rolling Hills Estate
CFD No. 8 Coral Gate (Otay Mesa)
CFD No. 9 Ocean View Hills
CFD No. 10 Remington Hills/Annexable
CFD No. 11 Lomas Verdes
CFD No. 12 Otay Ranch (Village 1 West)
CFD No. 13 San Miguel Ranch
CFD No. 14 Otay Ranch Village 11
CFD No. 15 Otay Ranch Village 6 (ORC)

CVESD
CFD No. 1 Eastlake
CFD No. 2 Bonita Long Canyon
CFD No. 3 Rancho del Rey
CFD No. 4 Sunbow
CFD No. 5 Annexable
CFD No. 6 Otay Ranch
CFD No. 10 Annexable for future annexations
CFD No. 11 Otay Ranch (Lomas Verde)
CFD No. 12 Otay Ranch (Village 1, West)
CFD No. 13 San Miguel Ranch
CFD No. 14 Otay Ranch Village 11 (Brookfield/Shea)
CFD No. 15 Otay Ranch Village 6 (ORC)

Based on historical data available from each district an estimate of costs for the construction of school facilities on a per student basis is provided. Both districts follow state standards for determining the costs and size for school construction. The cost for a high school, including land acquisition, is approximately $116,200 per student (2018 dollars). Excluding land, the cost for a high school is approximately $87,400 per student. The cost for a middle school, including land acquisition, is approximately $94,100 per student (2018 dollars). Excluding land, the cost for a middle school is $72,900 per student. The cost for an elementary school, including land acquisition, is approximately $58,800 per student (2018 dollars). Excluding the land, the cost for an elementary school is approximately $46,300 per student. Land acquisition cost is calculated at approximately $1,000,000/net usable acre (10-acre elementary school site) and approximately $1,200,000 per acre (25.5-acre middle school site and 55.3-acre high school site). Using the aforementioned costs per student together with the school size, the following costs per facility can be anticipated.

Table 50: Estimated School Costs

Elementary School Cost	
(800 students) ($46,300/student w/o land cost)	$37,040,000
(800 students) ($58,800/student w/land cost)	$47,040,000
Middle School Cost	
(1,500 students) ($72,900/student w/o land cost)	$109,350,000
(1,500 students) ($94,100/student w/ land cost)	$141,150,000
High School Cost	
(2,400 students) ($87,400/student w/o land cost)	$209,760,000
(2,400 students) ($116,200/student w/ land cost)	$278,880,000

14.0 Animal Services Facilities

14.1 Otay SRP Threshold

Participate in programs to provide Animal Services facilities sufficient to provide adequate square feet of shelter space per Otay Ranch dwelling unit.

14.2 Service Analysis

Animal Services facilities and services for Resort Village Alternative H are provided by the County of San Diego. County Animal Services facilities protect the health and welfare of both residents and domestic animals. Build-out of the Project may generate the need for additional or expanded animal control facilities.

14.3 Project Processing Requirements

Demonstrate conformance with the *Otay Ranch Facility Implementation Plan*.

14.4 Existing Conditions

The County of San Diego and the City of Chula Vista provide Animal Service for the Otay Ranch planning area. The County provides the service for the unincorporated area including the Resort Village Alternative H site. The Humane Society provides animal shelter and related services and adoption, humane disposal and investigation for San Diego County.

The County provides services in all unincorporated portions of the County. Animal Services staff is on premises 24-hours a day, seven days per week, and private veterinarians provide emergency services on a contract basis. The department provides the following services:

- Emergency care for injured animals
- Surveillance for rabies, rabies vaccination clinics and quarantine of biting animals
- Investigation/prosecution of anti-cruelty laws
- Control of vicious or stray animals
- Licensing of dogs
- Adoption and lost pet services
- Spay/neuter referral and information
- Public education and information

- Inspection and licensing of private kennels
- Humane disposal of injured and unwanted animals
- Shelter domestic animals, reptiles and livestock
- Senior adoption and foster care programs
- Animal rescue – provides animal rescue to all cities in case of disasters

The South Shelter is located at 5821 Sweetwater Road in Bonita and currently provides animal control services to the area in the vicinity of the Project site.

14.5 Project Demand and Proposed Facilities

Build-out development of Resort Village Alternative H will result in a total of 1,938 homes. This increase in population, in conjunction with the proportional regional growth of the area, will result in the need for additional or expanded animal control facilities. The Facility Implementation Plan indicates that a ratio objective of 0.13 square-feet of animal control facilities per home should be utilized in assessing project demand. As a result, the Project will result in the need for 252 square-feet of animal Services facilities.

14.6 Adequacy Analysis

The Otay Ranch Facility Implementation Plan provides that Animal Services facility requirements be addressed through off-site expansion of County of San Diego and City of Chula Vista facilities, as appropriate, based on jurisdiction. No specific Animal Services facilities will be required of Resort Village Alternative H. The County will continue to monitor development rates in the area to determine continued compliance with the law Animal Services threshold.

14.7 Inventory of Future Required Facilities

No specific facilities will be required of Resort Village Alternative H.

14.8 Threshold Compliance

Based upon the analysis contained in this PFFP, it is projected that the Animal Services threshold will be maintained throughout the development of Resort Village Alternative H.

14.9 Financing Animal Services Facilities

Animal Services facilities serving the unincorporated area have been funded from the General Fund and service fees. The fiscal analysis concluded that Resort Village Alternative H will result in a net fiscal annual surplus at build-out of $3,305,127. Additionally, the Otay SRP obligates the Project to contribute its proportionate fair share to any regional impact fee program, if one were to be established. Thus, the Project is projected to result in sufficient tax revenues to accommodate the demand for Animal Services Facilities.

15.0 Regional Facilities Plans

15.1 Otay SRP Requirement

The Otay SRP requires the preparation of Regional Facilities Plans concurrent with the Specific Plan for the following regional facilities:

- Arts and Cultural Facilities
- Cemetery Facilities
- Health and Medical Facilities
- Community Purpose Facilities
- Childcare Facilities
- Social and Senior Service Facilities
- Correctional Facilities
- Justice Facilities
- Integrated Solid Waste Management

15.2 Service Analysis

The following shall constitute the Regional Facilities Plans for each facility as required by the Otay SRP.

Arts and Cultural

The Otay SRP anticipates a multi-use cultural complex in the Eastern Urban Center. In addition, public art and artistic public improvements will be visible in the design of the Resort Village Alternative H. Elements such as landscaping, gateways, signage, street lights, paving materials, fencing, street and park furniture and other key focal points could be utilized. These design issues are addressed in the Resort Village Alternative H Design Plan.

Additionally, the large neighborhood park (P-1) includes an amphitheater which can be used as a stage for artistic performances.

Cemetery Facilities

The Otay SRP requires that each Specific Plan confirm the Otay SRP conclusion that existing cemetery capacity is adequate to serve Otay Ranch residents. The Otay Ranch Resort Village Alternative H residents' demand for cemetery space can be met by the nine cemeteries, memorial parks or mausoleums within the South County area, including Cypress View, Glen Abbey, Greenwood, Holy Cross, La Vista, Mount Hope, Mount Olivet, and San Ysidro.

Health and Medical

The Otay SRP requires opportunities be provided to health care providers to consolidate health care services as part of the Specific Plan review process. Based on existing and projected services provided in the South County, no additional acute hospital facility will be needed to serve The Otay Ranch Resort Village Alternative H community. Both Scripps Memorial Hospital and Sharp Chula Vista Medical Center have the capacity to meet the medical needs of the Resort Village Alternative H residents. The area will also be served by Paradise Valley Hospital and private facilities

In the area of mental health, recent service trends indicate an increase in day treatment and out-patient services as an alternative to traditional therapy in a hospital setting. This change in service delivery will compensate for increased service demand resulting from The Otay Ranch Resort Village Alternative H population.

Build out of The Otay Ranch Resort Village Alternative H will generate an incremental demand for additional nursing home beds. It is anticipated this demand can be met in existing nursing facilities within the South County. Build-out will also generate the need for medical practitioners (doctors, dentists, chiropractors, and allied health professionals). Space for purchase or lease, which is accessible to the public and suitable for siting medical practitioner services, will be available within the Mixed-Use District of the Resort Village Alternative H, the Eastern Urban Center, and other retail areas in the City of Chula Vista.

Social and Senior Service Facilities

The Otay SRP establishes goals for ensuring Otay Ranch residents have adequate access to sources of governmental and private social and senior services programs. Social service programs are mandated by State and Federal statutes and regulations and are largely funded from State and Federal sources. The public sector provides many basic support services to needy segments of the population. At the regional level, the County of San Diego has the primary responsibility to provide social services to County residents. The Department of Social Services serves one out of every eleven County residents, or over 100,000 persons each month.

There are numerous non-profit health and social service organizations located in the South County area. The County Area Agency on Aging provides social and nutritional programs, legal services, ombudsman programs and services to prevent or postpone institutionalization.

Correctional and Justice Facilities

The Otay SRP Correctional and Justice Facilities plans do not apply to the Resort Village Alternative H.

Childcare Facilities

This section implements the Otay SRP requirement to prepare a Childcare Plan. The Resort Village Alternative H Land Plan provides opportunities to locate facilities to meet the needs of the community. Childcare facilities may be located within private homes or commercial/mixed use centers.

Family Care Homes

Home-based child care includes small family day care homes (SFDCH) which serve 6 children and large family day care homes (LFDCH) which serve 7-12 children. Consistent with The Otay Ranch Resort Village Alternative H Development Regulations, SFDCH's could potentially be located within residential zones in the Specific Plan area.

Child Care Center

Facility–based childcare may be non-profit or commercial facilities located in non- residential land use areas of The Otay Ranch Resort Village Alternative H. The mixed use and Resort planning areas could include childcare facilities. The State has adopted regulations related to licensing, application procedures, administrative actions, enforcement provisions, continuing requirements and the physical environment for child day care and day care centers. All child care facilities within the Project and Resort area will need to comply with state, as well as local regulations.

Community Purpose Facilities

Community Purpose Facilities (CPF) are not required in the County of San Diego and, therefore, does not apply to Resort Village Alternative H.

Integrated Solid Waste Management

The Resort Village Alternative H will comply with the Otay SRP requirements for a waste management system, including:

- Curbside recycling
- Green waste recycling
- Material recover facility
- A household hazardous waste collection facility
- Landfill capacity

Curbside pickup and recycling will be accomplished through a contract with a local service provider. Recyclables will be sorted at curb-side and waste disposed at the Otay Landfill.

It is that anticipated green waste collection will be offered every other week. Trash and recycling service will occur weekly. To promote recycling, it is anticipated that a waste service provider will offer different monthly trash service rates depending on the size of each residences trash container.

16.0 Public Facility Financing

16.1 Overview

Public facilities are generally provided or financed in one of the following ways:

Subdivision Exaction – Dedications and/or developer-constructed improvements, reservations of land, and supplemental improvements (reimbursement agreements) are financed as a condition of project entitlements. Exactions must substantially further a legitimate governmental interest, a nexus between the impact and the exaction must exist, and the exaction cannot deny a property owner economically viable use of its land.

Development Impact Fee – Funded through the collection of a fee or other consideration as a condition to approval of a final subdivision map. Such fee assists to defray the cost of constructing planned regional public improvements for which a project contributes an impact. Impact fees must be fairly apportioned either on the basis of benefits conferred or on the need created by the subdivision.

Debt Financing – Financing through a defined district of landowners in order to fund the up-front provision of a public facility.

County General Fund – Payment of general taxes to the San Diego County General Fund serve to pay for many public services throughout the County. Those facilities and services identified as being funded by General Fund sources represent those that will benefit not only the residents of the Project, but also residents within the County in general.

16.2 Subdivision Exactions

In return for receiving a permit to allow development of land, and in response to the projected development's demand for public services, the County may impose exactions such as a dedication of land or money in order that public facility improvements can be made in a timely manner. Resort Village Alternative H, neighborhood-level public improvements will be developed simultaneously with related residential subdivisions and other resort developments. The use of subdivision conditions and exactions, where appropriate, will ensure that the construction of necessary facilities (supply) is timed in concert with actual development (demand). Such exactions must articulate the specific project for which the exaction is being conditioned.

16.3 Development Impact Fee Programs

The County may impose development impact fees or charges for the construction of public improvements. This may occur for public facilities and utilities for which an account has been established and funds appropriated for the project(s). These fees will contribute to the financing of capital facilities improvements within the County. Such fees are adopted in accordance with an established formula as set by State Law.

16.4 Debt Financing Programs

The County has utilized assessment mechanisms to finance a number of public street improvements, as well as regional sewer and drainage facilities. School Districts within the County have also implemented CFD to finance school facilities.

Such districts may be imposed for the purpose of acquiring land, constructing improvements and even maintaining certain facilities for the benefit of the public. The general administration of the district is the responsibility of the public agency.

Such debt financing (special districts) may be appropriate when the value or benefit of the public facility can be assigned to each specific property within an adopted district, and assessments levied in accordance with this benefit distribution. Assessments are levied in specific amounts against each individual property on the basis of this relative benefit.

16.5 County General Fund Impact

16.5.1 Introduction

As outlined in the Fiscal Impact Analysis, prepared by Development Planning and Financing Group (DPFG), July 2018, two basic methodologies were utilized in estimating County revenues and expenditures; the case study and per capita/unit multiplier methods. The case study method was used to estimate secured property tax, sales tax, transient occupancy tax ("TOT") and real property transfer tax. The case study method is based on specific characteristics of the project from which revenues can be estimated. Appropriate County officials were contacted to identify actual tax rates, fees, and costs. The per capita/unit multiplier method, which represents a more general approach were utilized to estimate licenses, permits and franchise fees, fines, forfeitures, other revenues and fees and all expenditures. The County of San Diego FY 2017/18 and FY 2018/19 Budget (the "Budget") were utilized to estimate per capita/unit multipliers.

16.5.2 Project Demographics and Land Uses

In developing per unit/acre multipliers, the PFFP analysis utilized demographic and land use information related to the County as a whole and, more specifically, Resort Village Alternative H. Included in table below are population, housing, and land-use characteristics.

Table 51: General Assumptions in Fiscal Analysis

County of San Diego	Population	Sources
Population	3,337,456	California Department of Finance E-5, City/County Population and Housing Estimates Report, 1/1/2018
Employment	1,804,000	Employment Development Department, State of California, March 2018
Persons per household	3.59	SANDAG Estimate – 91914 zip code
Otay Ranch – Resort Village		
Estimated Population	5,678	California Department of Finance E-5, City/County Population and Housing Estimates Report, 1/1/2018
Estimated Employees	382	DPFG
Housing Units	1,938	Applicant
Commercial - Hotel	16.6	Applicant
Commercial – Retail Mixed-Use Acres	6.6	Applicant

16.5.3 Revenues

Annual revenues at build-out for the County resulting from the development of Resort Village Alternative H are estimated in this section. The major revenue sources which are expected to be generated from the Project and detailed in this section include secured property tax, sales and use tax, transient occupancy tax, real property transfer tax, taxes in-lieu of motor vehicle license fee, license revenues, permit fees, franchise fees, revenues from fines, forfeitures and penalties, revenue from use of money and property, charges for various current services and other miscellaneous revenues. The following section details each of the revenue sources and the methodology employed to estimate revenues from the subject development. All dollar figures are presented at build-out and in 2018 dollars (no inflation rates were used).

16.5.3.1 Secured Property Tax

Secured property tax revenues generated from Resort Village Alternative H were calculated on the basis of a one-percent ad valorem tax rate on the estimated current market value of the residential and commercial development. The subject property is in the tax rate area 63075. According to the County of San Diego Property Tax Services Department, the County share of the one-percent ad valorem tax within the subject property tax rate area is approximately 22.56%.

Market values (assessed values) for the residential units were estimated by the developer based on current market conditions, market research and projected future demand per neighborhood as shown in Table 3 of Appendix A. Market values (assessed values) for commercial - retail mixed uses were estimated per Dollars & Cents of Shopping Centers by Urban Land Institute, dated 2008. Market values (assessed values) for the commercial - hotel uses were calculated based on an estimated $300 Average Daily Rate ("ADR") per hotel room.

These identified market values also represent the assessed values. Although assessed values increase two percent per year and readjust after the property resells, this analysis assumes no inflation and all values remain in 2018 dollars. Included in the attached Table 3 of Appendix B is the assessed value at the build-out of Resort Village Alternative H. Total assessed value for the Project at build-out is estimated at $1,609,799,944.

At Project build-out, the County's General Fund share of the annual property tax (post ERAF) is estimated at $3,631,365 (refer to Table 5 of Appendix B). Of this amount, $191,902 goes to a flood control fund, $515,405 goes to the County Library, #305,686 goes to fire and EMS service, and the remaining $2,618,373 goes to the County General Fund.

16.5.3.2 Sales Tax

Under the California Sales and Use Tax Law, the sale of tangible personal property is subject to sales or use tax unless exempt or otherwise excluded. When the sales tax applies, the use tax does not apply and the opposite is also true. The sales tax is imposed on all retailers for the privilege of selling tangible personal property in the State and is measured by the retailer's gross receipts.

Sales taxes provide a major revenue source in the State of California (the "State"). All cities and counties in the State levy a basic one percent sales tax and have the option to levy additional sales taxes under certain circumstances. In general, sales taxes are imposed on the retail sale or the use of tangible personal property in the State.

Non-Residential Sales Tax

Commercial (retail-mixed use) taxable sales are projected at $5,990,175 at Project build-out as shown below and calculated in Table 7 of Appendix B:

Table 52: Estimated Non-Residential Sales Tax Revenues

Probable Tenant	Type Bldg. SF Estimate	Sales per SF (a)	Estimated % Taxable	Estimated Taxable Sales (per SF)	Total Estimated Taxable Sales
Mixed-Use District					
Small Retail and Restaurants	12,000	$308	75%	$231	$2,772,000
Retail Shops	5,000	$250	75%	$188	$937,500
Office	3,000	N/A	0%	-	-
Subtotal	*20,000*	-			*$3,709,500*
Resort					
Meeting Rooms	1,000	N/A	0%	$ -	$ -
Conference Center	5,000	N/A	0%	-	-
Office	3,000	N/A	0%	-	-
Retail Shops	6,000	$250	75%	$188	$1,125,000
Restaurant	5,000	$308	75%	$231	$1,155,675
Subtotal	*20,000*	-			*$2,280,675*
Total	**40,000**				**$5,990,175**
Annual Sales Tax to County		**1.00%**			**$59,902**

Footnotes:
(a) Per Dollars & Cents of Shopping Centers (2008) by Urban Land Institute.

One percent of the taxable sales in the amount of $59,902 is generated by the sales tax.

Off-site Sales Tax

Retail taxable sales generated from total residential purchasing power are projected at $74,822,651 based on the assumption that residents will generate total retail purchases at 32.6% of household income. Household income is estimated at 35% percent of annual housing costs, which are estimated at $42,463 based on a 20% down payment, 5.5% interest rate, and 30-year loan term on an average sales price of $779,025. Total taxable spending is estimated at $74,822,651. Taxable off-site sales captured in the County from new residents of the Project are estimated at a 10% percent capture rate of the taxable sales and total $7,482,265.

The County has a sales tax rate of one percent. The Project's indirect sales tax to the County is estimated to be $74,823 as shown in Table 8 of Appendix B.

Table 53: Estimated Off-site Sales Tax Revenue

Spending by Residents	Factor	
Aggregate Incomes (from Appendix A, Table 8)	$161K per Unit	$312,018,000
Consumer Expenditures (a)	73.7%	$229,815,325
Taxable Spending (a)	32.6%	$74,822,651
Less: On-site Capture (b)	8.0%	$(5,990,175)
Less: Incorporated City Capture (b)	82.0%	$(61,3550,211)
Net Taxable Spending in County		$7,482,265
Annual Sales Taxes to County	**1.0%**	**$74,823**

Footnotes:

(a) Per Bureau of Labor Statistics Consumer Expenditure Survey, 2012.

(b) Capture percentage represents DPFG's estimate based on location relative to other retail establishments in the market area.

16.5.3.3 Transient Occupancy Tax

Transient occupancy tax (TOT) is a tax added to the price charged for the use of a hotel or a motel room. The majority of the tax is associated with new hotel developments. This FIA anticipates the development of a resort-type hotel, which will consist of approximately 200 rooms and will be built on 16.6-acres. The TOT is projected based on the following assumptions:

- 75 percent occupancy rate 200 rooms
- $300 average room rate
- 8% transient occupancy tax rate

The information used in the determination of the TOT was compiled from various sources. The estimated occupancy rate of 75% is based on surveys for the San Diego area performed by various hotel research firms. The size of the hotel and the average room rate has been provided by the developer. The 8% occupancy tax rate has been obtained from Chapter 2, San Diego County Uniform Transient Occupancy Tax Ordinance (Sec.22.212).

Table 54: Estimated TOT Revenues

Resort Hotel		
No. of Rooms		200
Average Daily Rate (ADR)		$300.00 (a)
Occupancy Rate (%)		75.0% (a)
Total Annual Room Revenues		$16,425,000
Annual County Transient Occupancy Tax	**8.00% (b)**	**$1,314,000**

Footnotes:

(a) Source: HR&A, PKF Consulting, and DPFG.

(b) Transient occupancy tax rate per County of San Diego Transient Occupancy Tax Ordinance effective 10/1/1964, amended 10/26/2007.

Using these assumptions, the County General Fund will receive a total annual TOT of approximately $1,314,000at the project's build-out (refer to Table 10 of Appendix B).

16.5.3.4 Real Property Transfer Tax

Sales of real property in San Diego County are taxed at a rate of $1.10 per $1,000 of the sales price. Assuming that the average turnover rate for residential property is once every ten years and the average turnover rate for nonresidential property is once every 20-years. The following formulas, which take both the transfer tax formula and the average turnover rate into account, were utilized to yield average annual per unit real property transfer tax.

- Single/Multi Family Residential $1.10/$1,000 x 1/10 = 0.00011
- Commercial $1.10/$1,000 x 1/20 = 0.000055

Using these formulas, an estimated annual average real property transfer tax can be calculated. Resort Village Alternative H would generate $171,575 (refer to Table 6 of Appendix B) in average annual real property transfer tax at build-out.

16.5.3.5 Taxes In-Lieu of Motor Vehicle License Fee (VLF)

In May 2004, Governor Schwarzenegger proposed a swap of city and county VLF revenue for additional property tax share as part of a budget agreement between the State and local governments. The swap was included in the 2004 budget package. Under this legislation, property tax in-lieu of VLF is allocated to Cities and Counties, pursuant to a complex formula involving each agency relative share of assessed value. The property tax in-lieu of VLF revenue that will be generated by the Project can be estimated by determining the (i) percentage growth in the total assessed value of the unincorporated area of the County attributable to the Project and multiplying by (ii the property tax in- lieu of VLF revenue of $306.6M expected to be received by the County in FY 2017-18 per the County Budget.

Based on these calculations, Resort Village Alternative H is anticipated to generate $1,208,163 annually in property tax in-lieu of VLF revenue, as shown in the table below (reference Appendix B, Table 9).

Table 55: Estimate In-Lieu VLF Revenues

FY 2013/14 In Lieu VLF Allocation to County	$396,804,243 (a)
FY 2013/14 Unincorporated County AV	$512,372,677,545 (b)
Total Project Assessed Value from Table 3	$1,609,799,944
Less: Existing Assessed Value	$(49,762,387)
Net (New) Assessed Value	$1,560,037,557
AV Growth from Project	0.304%
Annual County Property Taxes In Lieu of VLF	**$1,208,163**

Footnotes:

(a) Per County of San Diego Adopted Operation Plan for Fiscal Years 2017-18 and 2018-19, Adopted Budget (pg. 103).

(b) Per County of San Diego Assessor's Office.

16.5.3.6 Other Revenues

The County receives various other revenues analyzed under the FIA. These include (i) franchise, license, and permit revenues, (ii) fees, fines, and forfeitures, (iii) penalties & cost delinquency taxes, and (iv) miscellaneous revenues. These revenues have been estimated using a Per Capita & 50% Employee Multiplier against the County budgeted revenues for each respective revenue category. Based on the total annual "other" revenues are anticipated to be $36,957 at build-out, as seen in Appendix B, Table 11.

Licenses, Permits and Franchises

The FIA groups numerous revenues into the category of license and permit fees. These revenues include: animal licenses, kennel license, business licenses, marriage licenses, miscellaneous licenses and permits, food handling licenses, construction permits, bio-hazardous waste permits, recreation fees and other miscellaneous permits and fees. For these revenues, except for the business licenses, miscellaneous licenses and permits, and the food handling licenses, per capita multipliers were developed by dividing the Budget's respective revenue items by the County's total population. Similar methodology was used to determine the per capita and per employee multipliers for the business licenses, miscellaneous licenses and permits, and the food handling licenses, except that the per capita and per employee multipliers were developed by dividing the Budget's respective revenue by the County's total population and employment (refer to Table 11 of Appendix B). Franchise fees are charged to various entities in exchange for the exclusive right to operate franchises within the County's jurisdiction. Franchise, license, and permit fees for the project are estimated at $1.61 per capita and per employee based on these budgeted revenues. Based on the per capita and per employee amount calculated from the County budget, Resort Village Alternative H would generate **$9,305** in total licenses, permits and franchises at project's build-out (refer to Table 11 of Appendix B).

Fines, Forfeitures and Penalties

The County Budget for fines, fees, and forfeitures totals $1,554,325 for FY 2017/18. This revenue is projected at $0.37 per capita based on this budgeted revenue. Based on the per capita amount calculated from the County budget, Resort Village Alternative H will generate $2,152 in total fines, forfeitures and penalties at build-out (refer to Table 11 of Appendix B).

Penalties and Cost Delinquency Taxes

The County Budget for revenue from penalties and cost delinquency taxes total $15,920,048 for FY 2017/18. This revenue is projected at $3.76 per capita based on this budgeted revenue. Based on the per capita amount calculated from the County budget, Resort Village Alternative H would generate $22,039 in total revenues from the use of money and property at build-out (refer to Table 11 of Appendix B).

Interfund Charges/Miscellaneous Revenues

The County Budget for revenue from interfund charges and miscellaneous revenues total $2,500,000 for FY 2017/18. This revenue is projected at $0.59 per capita based on this budgeted revenue. Based on the per capita amount calculated from the County budget, Resort Village Alternative H would generate $3,461 (refer to Table 11 of Appendix B) in total charges for current revenues at build-out.

16.5.4 Costs

Annual costs at build-out resulting from development of Resort Village Alternative H are outlined in this section. The annual cost categories to be impacted by the subject development include the general function (legislative/administrative services, finance services, counsel services, personnel services, elections services, property management services, plant acquisition services, promotion services and other general services), public protection function (judicial services, police protection services, detention and correction services, protective inspection services, other protection services and family support services), health and sanitation function (health services and sanitation services), education function (library services, agriculture education services), recreation and cultural function (recreation facilities) and contingency function. A summary of the County FY 2017-18 Budget is presented in the attached Table 12 of Appendix B. These annual costs are utilized in estimating the per capita expenditure or a percentage of the direct cost expenditures for the project. The methodologies used to estimate project expenses are discussed in more detail in the following sections.

16.5.4.1Public Safety

Public Safety costs include expenses related to the District Attorney, Sheriff, Fire, Probation Department, trial courts, child support services, and other services, many of which are provided on a County-wide basis to all County residents. However, certain services such as Fire and Sheriff are only provided to unincorporated areas, except for certain contractual arrangements. For example, the Sheriff's Department provides contract law enforcement services for the cities of Del Mar, Encinitas, Imperial Beach, Lemon Grove, Poway, San

Marcos, Santee, Solana Beach, and Vista. Also, the San Diego County Fire Authority has contracts in place with various other agencies. Due to the abbreviated scope of this analysis and the unavailability of detailed breakdowns of certain County Budget data, this analysis does not dissect and stratify the County Public Safety budget and attempt to allocate specific costs to the Project based on each expense subcategory and associated service area or population. Based on this multiplier, total annual public safety costs are estimated at $2,434,576 at build-out, as seen in Appendix B, Table 12.

16.5.4.2 Health and Human Services

The Health and Human services cost category includes regional operations, aging and independence services, behavioral health services, and child welfare services. Using a Per Capita & 50% Employee Multiplier of $17.37, total annual health and human services costs are anticipated to be $80,236 at build-out, as seen in Appendix B, Table 12.

16.5.4.3 Land Use and Environmental

The Land Use and Environment Group cost category includes agriculture, weights and measures, environmental health, parks and recreation, planning and land use and public works costs. Using a Per Capita & 50% Employee Multiplier of $42.28, total annual land use and environmental costs are anticipated to be $248,125 at build-out, as seen in Appendix B, Table 12 of the FIA

16.5.4.4 Community Services

The Community Services Group cost category includes animal services, housing, and community development, purchasing and contracting, the County Executive Office, and Registrar of Voters. Using a Per Capita & 50% Employee Multiplier of $22.03, total annual community services costs are anticipated to be $125,038 at build-out, as seen in Appendix B, Table 12 of the FIA.

16.5.4.5 Finance and General Government

The Finance and General Government services cost category includes executive office, assessor/recorder/county clerk, treasurer – tax collector, auditor and controller, county counsel and human resources costs. Using a Per Capita & 50% Employee Multiplier of $48.23, total finance, and general government costs are anticipated to be **$283,163** at build-out, as seen in Appendix B, Table 12.

16.5.4.6 Finance - Other

Other finance costs include community projects, community enhancement, contingency reserve, and countywide general expense costs. Using a Per Capita & 50% Employee Multiplier of $3.5, total other finance costs are anticipated to be $20,520 at build-out, as seen in Appendix B, Table 12.

16.5.5 Net Fiscal Impact

Utilizing the previously mentioned methodologies, estimated net fiscal impact at build- out is presented in Table 1 of the Appendix B. No annual adjustments to revenues or costs were utilized.

Fiscal annual revenues are estimated at $6,496,785 at Resort Village Alternative H build-out and fiscal annual costs are estimated at **$3,191,658**at the Project's build-out, resulting in a net fiscal annual surplus at build-out of $3,305,127.

Table 56: Net Fiscal Impact

Revenues/(Expenditures)	Estimated Revenue	Estimated Expenditures
Recurring Revenues		
Property Tax	$3,631,365	
Sales Tax (on-site)	$59,902	
Sales Tax (off-site)	$74,823	
Transient Occupancy Tax	$1,314,000	
Real Property Transfer Tax	$171,575	
Property Tax in-lieu of VLF	1,208,163	
Other Revenues	$36,957	
Recurring Expenditures		
Public Safety		$2,434,576
Health and Human Services		$80,236
Land Use and Environmental		$248,125
Community Services		$125,038
Finance and General Government		$283,163
Finance Other		$20,520
Total Revenues and Costs	**$6,496,785**	**$3,191,658**
Total Surplus	**$3,305,127**	

16.6 Other Methods Used to Finance Facilities

State and Federal Funding – Historically, federal and state financial and technical assistance programs have been available for County agencies to utilize, particularly for public school districts.

Developer Reimbursement Agreements – Certain facilities that are off-site of the project site but are necessary to serve Resort Village Alternative H may provide regional benefits beyond the Project. Under such circumstances, developer reimbursement agreements for up-front funding of improvements can be executed to provide for a future payback to the developer from other properties benefiting from the improvement. Such benefiting developments are required to reimburse their fair share of costs for the shared facility at the time that their project is issued permits for development.

APPENDIX A

FISCAL IMPACT ANALYSIS

Fiscal Impact Analysis
For
Otay Ranch Resort Village 13
Alternative H

July 2018

DRAFT

Prepared By:

DPFG
DEVELOPMENT PLANNING & FINANCING GROUP, INC.

Table of Contents

Appendices:

1. Purpose of Fiscal Impact Analysis

This Fiscal Impact Analysis ("FIA") has been prepared to determine the estimated fiscal impacts on the County of San Diego ("County") in connection with the proposed development of the Otay Ranch Resort Village 13 – Alternative H ("Project"). The reader should be aware that the FIA contains estimates or projections of the Project's future revenue and cost impacts on the County and actual fiscal results may vary from estimates because events and circumstances may occur in a manner that is different than projected in the FIA. The primary purpose of this FIA is to estimate the Project's net fiscal impact on the County's General Fund upon build-out.

2. Project Description

The Project consists of approximately 1,869 gross acres located east of SR-125 off of Otay Lakes Road, in the unincorporated area east of Chula Vista in the Otay Ranch community. The Project is planned for 1,881 single family homes located on 516.9 acres, 57 mixed-use multi-family units, and an 18-acre commercial village center that will include approximately 20,000 square feet of retail and service establishments and a resort style hotel with 200 rooms and 20,000 square feet of resort-oriented commercial uses catering to the San Diego community. The Project will also include an elementary school site, a site for public safety facilities, open space, and park and recreational facilities.

LAND USE ASSUMPTIONS

Residential				
Lot Size	No. of Units	Avg. Home Size (SF)	Projected Avg. Sales Price (a)	Total Residential Assessed Value
Move-Up 50x85	395	2,700	$ 672,800	$ 265,756,000
Move-Up Plus 50x100	258	3,600	807,600	208,360,800
Move-Up Plus 55x100	494	3,600	807,600	398,954,400
Premium Estate 60x105	530	4,000	807,600	428,028,000
Premium Estate 65x105	204	4,000	919,000	187,476,000
Single Family Subtotal/Avg.	1,881	3,567	791,374	$ 1,488,575,200
Mixed Use (Attached)	57	2,000	371,500	21,175,500
Residential Subtotal/Avg.	**1,938**	**3,521**	**779,025**	**$ 1,509,750,700**

Commercial			
Probable Tenant Type	Bldg. SF (b)	Estimated Assessed Value per SF or Room (c)	Total Commercial Assessed Value
Mixed-Use Areas			
Small Retail and Restaruants	15,500	$ 538	$ 8,339,000
Retail Shops	1,500	538	807,000
Office	3,000	464	1,392,000
Mixed-Use Subtotal	20,000		$ 10,538,000
Resort			
Meeting Rooms	1,000	Incl. in Hotel	$ -
Conference Center	5,000	Incl. in Hotel	-
Office	3,000	464	1,392,000
Retail Shops	6,000	538	3,228,679
Restaurant	5,000	538	2,690,566
Resort Subtotal	20,000		$ 7,311,244
Hotel (Rooms)	200	$ 411,000	82,200,000
Commercial Subtotal/Avg.	**40,000**		**$ 100,049,244**

Total Project Assessed Value	**$ 1,609,799,944**

Footnotes:
(a) Source: Developers, HR&A, DPFG.
(b) Estimated square footages per Developers.
(c) Assessed values per Table 4.

3. FIA Limiting Conditions

The FIA is subject to the following limiting conditions:

- The FIA contains an analysis of recurring revenues and costs to the County from development of the Project. The FIA is based on estimates, assumptions and other information developed from DPFG's research, interviews, telephone discussions with County staff, and information from DPFG's database which were collected through fiscal impact analyses previously prepared by DPFG and others.

- The sources of information and basis of the estimates are stated herein. While we believe the sources of information are reliable, DPFG does not express an opinion or any other form of assurance on the accuracy of such information.

- The analysis of recurring revenues and cost impacts to the County contained in the FIA is not considered to be a "financial forecast" or a "financial projection" as technically defined by the American Institute of Certified Public Accountants. The word "projection" used within this report relates to broad expectations of future events or market conditions.

- Since the analyses contained herein are based on estimates and assumptions which are inherently subject to uncertainty and variation depending on evolving events, DPFG cannot represent that results will definitely be achieved. Some assumptions inevitably will not materialize and unanticipated events and circumstances may occur; therefore, the actual results achieved may vary from the projections.

4. General Sources of Information and Methodology Used in FIA

The FIA was prepared to estimate the allocable revenue and cost impacts to the County's general fund ("General Fund") as a result of the Project's development. The FIA uses a combination of case study methods and multiplier methods to estimate Project impacts.

When projecting fiscal impacts using a multiplier method, the FIA determines per capita/employee impacts by applying the appropriate multiplier to the Project's land use assumptions. The Per Capita-and-Employee-Multiplier Method involves dividing a cost or revenue figure by the number of residents and 50% of all employees working in the County, and then multiplying that number by the number of residents projected for the Project at buildout. This method assumes that recurring costs and revenues will result from the Project at the same rates that currently prevail within the County, with each employee counted as one-half of a resident to reflect the relative significance of employees (i.e. non-residential land uses) in generating County public services costs or County revenues. The multipliers were calculated using data from the County of San Diego Adopted Operational Plan Fiscal Year 2017-18 and 2018-19 ("Budget"). Where appropriate, County Budget data is adjusted to account for expected marginal increases when the nature of the cost or revenue item contains a fixed component that is not anticipated to change based on population growth from the Project. All cost and revenue factors are projected in 2017-2018 dollars, and are not adjusted for inflation, based on the assumption that the relative impacts of inflation in future years will be offsetting.

Information used in preparing the FIA was obtained from the following sources: (1) County of San Diego Adopted Operational Plan Fiscal Year 2017-18 and 2018-19; (2) Baldwin and Sons ("Developer"); (3) CBRE Q1 2018 San Diego Retail MarketView report; (4) San Diego County Auditor-Controller's Office (fiscal year 2017-2018 share of the basic tax information and assessments); (5) CBRE Q1 2018 San Diego Office MarketView; (6) California Department of Finance E-5 City/County Population and Housing Estimates Report; and (7) Employment Development Department for the State of California.

The FIA is organized as follows:

Appendix	Table	Description
B	1	Fiscal Impact Analysis Summary
B	2	Population and Employment Data
B	3	Land Use and Assessed Value Assumptions
B	4	Estimated Property Value Using Income Method
B	5	Property Tax Revenue
B	6	Property Transfer Tax Revenue
B	7	On-Site Sales Tax Revenue
B	8	Off-Site Sales Tax Revenue
B	9	Property Tax In-Lieu of MVLF
B	10	Transient Occupancy Taxes
B	11	Other Recurring Revenues
B	12	Recurring Expenditures
B	13	Recurring Expenditures Detail
B	14	Permanent Employment

The following table shows the key demographic and property tax assumptions used in the FIA:

	Entire County		County Unincorporated		Sheriff Service Area Population		Project	
Population	3,337,456	(a)	513,123	(a)	955,888	(b)	5,678	(a)
Employees	1,804,000	(c)	220,000	(c)	430,700	(c)	382	(d)
Residents + 50% Employees	4,239,456		623,123		1,171,238		5,869	

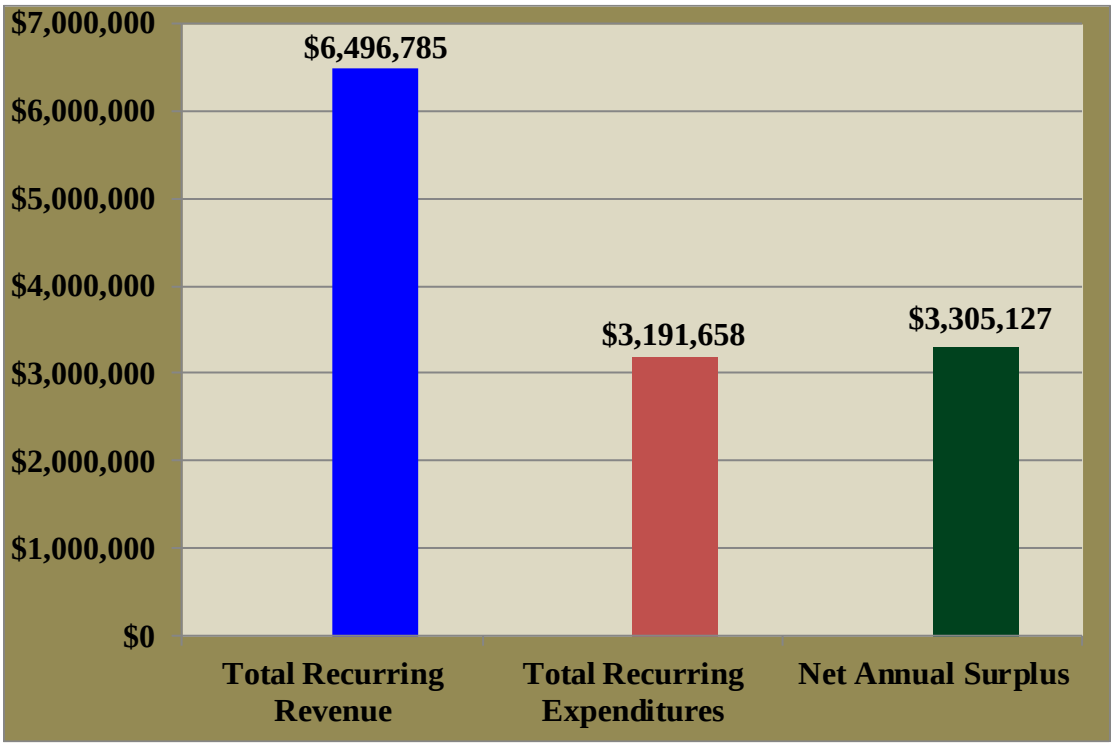
Footnotes:
(a) Per the California Department of Finance E-5 City/County Population and Housing Estimates Reports, 1/1/2018.
(b) Sheriff Service Area Population includes the Unincorporated County along with the Cities of Del Mar, Encinitas, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, and Vista, with whom the County has a service contract with per the E-5 City/County Population and Housing Estimates Report.
(c) Per the Employment Development Department for the State of California. Dated March 2018.
(d) Represents estimated permanent employees per Table 14.

Total Assessed Value from Table 3		$ 1,609,799,944
Base 1% Ad-Valorem Tax	1.00%	16,097,999
County Share of 1% for TRA 63075 (a):		
County General	16.2652%	$ 2,618,373
County Library	3.2017%	515,405
San Diego County Flood Control District	1.1921%	191,902
County Service Area #135 Fire and EMS	1.8989%	305,686
Total Annual Property Taxes to County	**22.5579%**	**$ 3,631,365**

Footnotes:
(a) Per County of San Diego Auditor/Controller.

5. FIA Summary and Conclusions

The FIA examines the financial impact the Project will have at buildout on the General Fund. The Project will generate additional revenue for the General Fund primarily through increased property taxes, property taxes in-lieu of vehicle license fees, and sales taxes. The additional costs incurred to the General Fund as a result of the Project are less than the additional revenues generated, and consist primarily of police and fire services. The Project's direct impact to the General Fund at buildout is summarized in the following chart.



As seen in the chart above, the Project is anticipated to generate a **$3,305,127** surplus to the County on an annual basis once the Project is fully developed. The FIA does not consider the impact that of potential reduced County expenditures due to privately maintained amenities, parks, or streets.

OVERALL SUMMARY

FISCAL IMPACT			
Recurring Revenues:			
Property Tax	$	3,631,365	Table 5
Property Transfer Tax		171,575	Table 6
On-site Sales Tax		59,902	Table 7
Off-site Sales Tax		74,823	Table 8
Property Tax in-lieu of VLF		1,208,163	Table 9
Transient Occupancy Tax		1,314,000	Table 10
Other Revenues		36,957	Table 11
Total Recurring Revenue	**$**	**6,496,785**	
Recurring Expenditures:			
Public Safety	$	2,434,576	Table 12
Health and Human Services Agency		80,236	Table 12
Land Use and Environment		248,125	Table 12
Community Services		125,038	Table 12
Finance and General Government		283,163	Table 12
Finance Other		20,520	Table 12
Total Recurring Expenditures	**$**	**3,191,658**	
Net Fiscal Surplus (Deficit)	**$**	**3,305,127**	

6. FIA Recurring Revenues

6.1 Property Tax

In addition to other ad valorem charges imposed by various local agencies, land owners in the State of California ("State") are required to pay annual property taxes of 1% on the assessed value of their property pursuant to Proposition 13. Each County in California is divided into tax rate areas ("TRA"). After the basic 1% property tax is collected by the County, the tax is allocated to various local agencies based on each agency's share of the basic tax within the property's applicable TRA. The Project is subject to TRA 063075. Pursuant to a Master Property Tax Transfer Agreement entered into between the County and various cities, the County will receive 21% of the share of the base 1% tax. The breakdown of lots and estimated assessed value by TRA is detailed in Appendix B, Table 5. In total, the Project is anticipated to generate **$3,631,365** per year in property taxes.

6.2 Property Transfer Tax

The County receives property transfer tax revenue as new or existing property is sold and ownership is transferred. In accordance with California Revenue and Taxation Code Section 11911, a County may levy a transfer tax at the rate of $1.10 for each $1,000 of assessed value. The FIA assumes a residential turnover rate of 10.00% of total assessed

value per year (i.e., properties change ownership every 10 years on average) and a commercial turnover rate of 5.00% of the total assessed value per year (i.e. properties change ownership every 20 years on average). Using this assumption, the County is anticipated to receive approximately **$171,575** in annual property tax transfer revenue at buildout, as shown in the table to follow (reference Appendix B, Table 6).

	Residential	Commercial	Total
Total Assessed Value from Table 3	$ 1,509,750,700	$ 100,049,244	$ 1,609,799,944
Turnover Rate (a)	10.00%	5.00%	
Annual Taxable Assessed Value	$ 150,975,070	$ 5,002,462	$ 155,977,532
Property Transfer Tax Rate (b)	0.110000%	0.110000%	0.110000%
Annual Property Transfer Taxes	**$ 166,073**	**$ 5,503**	**$ 171,575**

Footnotes:
(a) Based on assumption that residential property will change ownership once every 10 years and commercial property will change ownership once every 20 years.
(b) Represents property transfer tax rate of $1.10 per $1,000 of sale or resale value per Revenue and Taxation Code Section 11911-11929.

6.3 Sales Tax

Under the California Sales and Use Tax Law, the sale of tangible personal property is subject to sales or use tax unless exempt or otherwise excluded. When the sales tax applies, the use tax does not apply and the opposite is also true. The sales tax is imposed on all retailers for the privilege of selling tangible personal property in the State and is measured by the retailer's gross receipts.

Currently, there is a 7.50% statewide sales and use tax base rate that is collected by the State Board of Equalization. The State government receives 6.50% of the 7.50% and local governments receive the remaining 1.00% which is transferred to the local government's general fund.

The County will receive sales tax revenue from taxable purchases made within the County limits by the Project's residents. The FIA derives an average household income of $161,000 based on 35.0% of income being spent on annual housing costs (i.e., principal, interest, and property taxes). Then, it is assumed that 73.7% of household income is spent on consumer expenditures and 32.6% of such expenditures are taxable, based on data for the San Diego MSA from the U.S. Bureau of Labor Statistics 2016-17 Consumer Expenditure Survey. Next, of the total taxable spending, it is assumed that 90% is captured inside of incorporated cities or On-site leaving an estimated 10% of taxable spending to estimate retail taxable expenditures captured by the County. After calculating total Project retail taxable expenditures captured in the County, the FIA assumes the County receives sales tax revenue of 1% of taxable sales. Applying this methodology, the County is anticipated to receive approximately **$74,823** in annual sales tax (reference Appendix B, Table 8). The County will also receive sales tax from the businesses operating within the commercial development from residents not living within the Project. The FIA estimates

on-site sales tax using an approximate taxable sale per square foot (reference Appendix B, Table 7) resulting in the County receiving **$59,902** in annual sales tax.

Spending by Residents:	Factor	
Aggregate Incomes (from table below)	$161K per Unit	$312,018,000
Consumer Expenditures (a)	73.7%	229,815,325
Taxable Spending (a)	32.6%	74,822,651
Less: On-site Capture (b)	8.0%	(5,990,175)
Less: Incorporated City Capture (b)	82.0%	(61,350,211)
Net Taxable Spending in County		**$ 7,482,265**
Annual Sales Taxes to County	1.0%	**$ 74,823**

Household Income Calculation:		
Avg. Sales Price		$ 779,025
Down Payment	20%	155,805
Loan Amount		623,220
Interest Rate		5.5%
Term (years)		30
Annual Mortgage Payment		$42,463
HOA	$ 200	$ 2,400
Maintenance/Insurance	200	2,400
Property Taxes	1.1373%	8,860
Total Annual Housing Costs		$ 56,123
% Income spent on Housing		35%
Annual Income Required		$ 160,351
Annual Income Required (rounded)		**$ 161,000**

Footnotes:
(a) Per Bureau of Labor Statistics Consumer Expenditure Survey, 2016-17.
(b) Capture percentage represents DPFG's estimate based on location relative to other retail establishments in the market area.

6.4 Property Tax In-Lieu of Vehicle License Fees ("VLF")

In May 2004, Governor Schwarzenegger proposed a swap of County and County VLF revenue for additional property tax share as part of a budget agreement between the State and local governments. The swap was included in the 2004 budget package. Under this legislation, property tax in-lieu of VLF is allocated to Cities and Counties pursuant to a complex formula involving each agencies relative share of assessed value. The property tax in-lieu of VLF revenue that will be generated by the Project can be estimated by determining the (i) percentage growth in the total assessed value of the County attributable

to the Project, and multiplying by (ii) the property tax in-lieu of VLF revenue of $512,372,677,545 expected to be received by the County in fiscal year 2017/18 per the County Budget. Based on these calculations, the Project is anticipated to generate **$1,208,163** annually in property tax in-lieu of VLF revenue, as shown in the table below (reference Appendix B, Table 9).

FY 2018/19 In Lieu MVLF Allocation to County	$	396,804,243	(a)
FY 2017/18 County AV		512,372,677,545	(b)
Total Project Assessed Value from Table 3		1,609,799,944	
Less: Existing Assessed Value		(49,762,387)	
Net (New) Assessed Value	$	1,560,037,557	
AV Growth from Project		0.304%	
Annual County Property Taxes In Lieu of MVLF	**$**	**1,208,163**	

Footnotes:

(a) Per County of San Diego Adopted Operation Plan for Fiscal Years 2017-18 & 2018-19, page 103.

(b) Per County of San Diego Assessor's Office.

6.5 Transient Occupancy Tax (TOT)

The transient occupancy tax (hotel, motel, campground or bed tax) is authorized under State Revenue and Taxation Code section 7280, as an additional source of non-property tax revenues to local government. Per County of San Diego Ordinance, the County levies an occupancy tax at a rate of 8.0% of hotel or other lodging stays less than 30 days. The Project is proposed to include a 200 room luxury hotel. Based on information determined by adjacent hotels of a similar style, an average nightly room rate of $300 has been used with an assumed occupancy rate of 75.0%. The Project is expected to generate **$1,314,000** in annual County Transient Occupancy Tax, as shown in the table below (reference Appendix B, Table 10).

Proposed Resort Hotel			
No. of Rooms		200	
Average Daily Rate (ADR)		$ 300	(a)
Occupancy Rate (%)		75.0%	(a)
Total Annual Room Revenues		16,425,000	
Annual County Transient Occupancy Tax	**8.00%** (b)	**$ 1,314,000**	

Footnotes:

(a) Source: HR&A, PKF Consulting, and DPFG.

(b) Transient occupancy tax rate per County of San Diego Transient Occupancy Tax Ordinance effective 10/1/1964, amended 10/26/2007, amended Ord. No. 10366 effective 2/5/2015.

6.6 Other Revenues

The County receives various other revenues analyzed under the FIA. These include (i) franchise fees, (ii) fines and forfeitures, and (iii) charges for services. These revenues have been estimated using the appropriate multiplier against the County budgeted revenues for each respective revenue category. Accordingly, total annual "other" revenues are anticipated to be **$36,957** at buildout, as seen in Appendix B, Table 11.

7. FIA Recurring Costs

7.1 Public Safety

The County Public Safety Category includes Police and Fire services as well as Child Support services, medial services and all supporting administration. Based on the multiplier method, total annual Public Safety costs to the County's General Fund for the Project are estimated to be **$2,434,576** at buildout, as shown in Appendix B, Table 12.

7.2 Health and Human Services

The Health and Human Services cost includes Self Sufficiency Services, Aging and independence Services, Behavioral health Services, Child Services, Public health Services, Administrative Support, and Housing and Community Development Services. The FIA assumes an estimated 100% marginal increase for all costs except administrative support as they do not have a 1:1 relationship with population growth (i.e., majority of costs are fixed, not variable). Accordingly, using a Per Capita & 50% Employee Multiplier Health and Human Services costs are anticipated to be **$80,236** at buildout, as shown in Appendix B, Table 12.

7.3 Land Use and Environment

The Land Use and Environment cost category includes all of the County's Environmental and Parks and Recreations expenditures, including Agriculture, Public Works, Air Pollution and the University of California Cooperative Extension program. Accordingly, using a Per Capita Multiplier total annual Land Use and Environment costs are anticipated to be **$248,125** at buildout, as shown in Appendix B, Table 12.

7.4 Community Services

The Community Services cost category includes services related to the County Library, Animal Services, and Registrar of Voters. Using a Per Capita & 50% Employee Multiplier, total Animal Control costs are anticipated to be **$125,038** at buildout, as shown in Appendix B, Table 12.

7.5 Finance and General Government

The Finance and General Government cost category includes services related to the County's Auditor and Controller as well the Treasurer, County Technology office, City Counsel, and Grand Jury. Finance and General Government also includes all additional County support staff such as Human Resources and the Chief Administrative Office. Assuming a marginal increase of 25% and using a Per Capita & 50% Employee Multiplier, total Finance and General Government costs are anticipated to be **$283,163** at buildout, as shown in Appendix B, Table 12.

7.6 Finance Other

The Finance Other cost category includes services related to the collection and investment of County funds and programs that are largely Countywide and have no specific staffing associated with them. Using a Per Capita & 50% Employee Multiplier, total Finance Other costs are anticipated to be **$20,520** at buildout, as shown in Appendix B, Table 12.

8. Glossary of Defined Terms and Acronyms

Budget	County of San Diego Adopted Operation Plan for Fiscal Year 2017-18 and 2018-19
County	County of San Diego
Developer	Baldwin and Sons, LLC / Moller Otay Lakes Investments, Inc.
DPFG	Development Planning & Financing Group
FIA	Fiscal Impact Analysis
General Fund	County of San Diego General Fund
Project	Otay Ranch Resort Village 13 – Alternative H
State	State of California
TRA	Tax Rate Area
VLF	Vehicle License Fees

Appendix A

Legend

- SINGLE FAMILY RESIDENTIAL
- MIXED USE (MU)
- PUBLIC SAFETY (PS)
- SCHOOL
- RESORT
- PRESERVE
- OPEN SPACE
- PARK
- NOT A PART

SITE UTILIZATION PLAN

Appendix B

Table 1
Fiscal Impact Analysis Summary
July 2018

FISCAL IMPACT			
Recurring Revenues:			
Property Tax	$	3,631,365	Table 5
Property Transfer Tax		171,575	Table 6
On-site Sales Tax		59,902	Table 7
Off-site Sales Tax		74,823	Table 8
Property Tax in-lieu of VLF		1,208,163	Table 9
Transient Occupancy Tax		1,314,000	Table 10
Other Revenues		36,957	Table 11
Total Recurring Revenue	**$**	**6,496,785**	
Recurring Expenditures:			
Public Safety	$	2,434,576	Table 12
Health and Human Services Agency		80,236	Table 12
Land Use and Environment		248,125	Table 12
Community Services		125,038	Table 12
Finance and General Government		283,163	Table 12
Finance Other		20,520	Table 12
Total Recurring Expenditures	**$**	**3,191,658**	
Net Fiscal Surplus (Deficit)	**$**	**3,305,127**	

Table 2
Population and Employment Data
July 2018

	Entire County		County Unincorporated		Sheriff Service Area Population		Project	
Population	3,337,456	(a)	513,123	(a)	955,888	(b)	5,678	(a)
Employees	1,804,000	(c)	220,000	(c)	430,700	(c)	382	(d)
Residents + 50% Employees	4,239,456		623,123		1,171,238		5,869	

Footnotes:
(a) Per the California Department of Finance E-5 City/County Population and Housing Estimates Reports, 1/1/2018.
(b) Sheriff Service Area Population includes the Unincorporated County along with the Cities of Del Mar, Encinitas, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, and Vista, with whom the County has a service contract with per the E-5 City/County Population and Housing Estimates Report.
(c) Per the Employment Development Department for the State of California. Dated March 2018.
(d) Represents estimated permanent employees per Table 14.

Table 3
Land Use and Assessed Value Assumptions
July 2018

Residential				
Lot Size	**No. of Units**	**Avg. Home Size (SF)**	**Projected Avg. Sales Price (a)**	**Total Residential Assessed Value**
Move-Up 50x85	395	2,700	$ 672,800	$ 265,756,000
Move-Up Plus 50x100	258	3,600	807,600	208,360,800
Move-Up Plus 55x100	494	3,600	807,600	398,954,400
Premium Estate 60x105	530	4,000	807,600	428,028,000
Premium Estate 65x105	204	4,000	919,000	187,476,000
Single Family Subtotal/Avg.	1,881	3,567	791,374	$ 1,488,575,200
Mixed Use (Attached)	57	2,000	371,500	21,175,500
Residential Subtotal/Avg.	**1,938**	**3,521**	**779,025**	**$ 1,509,750,700**

Commercial			
Probable Tenant Type	**Bldg. SF (b)**	**Estimated Assessed Value per SF or Room (c)**	**Total Commercial Assessed Value**
Mixed-Use Areas			
Small Retail and Restaruants	15,500	$ 538	$ 8,339,000
Retail Shops	1,500	538	807,000
Office	3,000	464	1,392,000
Mixed-Use Subtotal	20,000		$ 10,538,000
Resort			
Meeting Rooms	1,000	Incl. in Hotel	$ -
Conference Center	5,000	Incl. in Hotel	-
Office	3,000	464	1,392,000
Retail Shops	6,000	538	3,228,679
Restaurant	5,000	538	2,690,566
Resort Subtotal	20,000		$ 7,311,244
Hotel (Rooms)	200	$ 411,000	82,200,000
Commercial Subtotal/Avg.	**40,000**		**$ 100,049,244**

Total Project Assessed Value	**$ 1,609,799,944**

Footnotes:
(a) Source: Developers, HR&A, DPFG.
(b) Estimated square footages per Developers.
(c) Assessed values per Table 4.

Table 4
Estimated Property Value using Income Method
July 2018

		Retail/Shops		Office		Total
Gross Square Feet		28,000		6,000		34,000
Less: Non-leasable Space @ 10%		(2,800)		(600)		
Leasable Square Feet		25,200		5,400		30,600
REVENUE						
Average Monthly NNN Rental Rate per s.f.		$ 2.26	(a)	$ 2.92	(b)	
Total Scheduled Annual NNN Rents		$ 683,424		$ 189,216		$ 872,640
EXPENSES						
Vacancy (%)		4.60%	(a)	11.20%	(b)	
Vacancy ($)		$ 31,438		$ 21,192		
Unreimbursed Expenses (vacant space)	(c)	11,632		7,841		
Total Expenses		$ 43,069		$ 29,033		$ 72,103
NET OPERATING INCOME		$ 640,355		$ 160,183		$ 800,537
CAP RATE	(d)	4.25%		5.75%		
TOTAL VALUE		**$ 15,067,168**		**$ 2,785,786**		**$ 17,852,954**
VALUE PER GROSS SQUARE FOOT		**538.11**		**464.30**		**525.09**
VALUE PER GROSS SQUARE FOOT (ROUNDED)		**538.00**		**464.00**		**525.00**

	Hotel
No. of Rooms	200
Average Daily Rate	$ 300
Occupancy	75%
Annual Room Revenue	$ 16,425,000
Other Revenues (30% of Room Rev.)	4,927,500
Total Revenue	$ 21,352,500
Operating Expenses as % of Revenue	75%
Total Operating Expenses	16,014,375
Net Operating Income	$ 5,338,125
Cap Rate	6.50%
TOTAL VALUE	**$ 82,125,000**
VALUE PER ROOM	**410,625**
VALUE PER ROOM (ROUNDED)	**411,000**

Footnotes:
(a) Based on CBRE Q1 2018 San Diego Retail MarketView report.
(b) Based on CBRE Q1 2018 San Diego Office MarketView report.
(c) Assumes operating expenses at 37% of rental revenue; based on operating cost data per Dollars and Cents of Shopping Centers (2008) published by ULI.
(d) Based on CBRE Second Half 2017 Cap Rate Survey for Retail Neighborhood/Community Center (Grocery Anchored) and Suburban Office. Report indicates a range of 4.25% to 5.00% for Class A Retail in San Diego market in "stabilized" condition, 5.50% to 6.00% for Class A Office in San Diego market in "stabilized" condition and 5.50% to 7.50% for a stabilized Luxury Hotel.

Table 5
Property Tax Revenue
July 2018

Total Assessed Value from Table 3		$ 1,609,799,944
Base 1% Ad-Valorem Tax	1.00%	16,097,999
County Share of 1% for TRA 63075 (a):		
County General	16.2652%	$ 2,618,373
County Library	3.2017%	515,405
San Diego County Flood Control District	1.1921%	191,902
County Service Area #135 Fire and EMS	1.8989%	305,686
Total Annual Property Taxes to County	**22.5579%**	**$ 3,631,365**

Footnotes:
(a) Per County of San Diego Auditor/Controller.

Table 6
Property Transfer Tax Revenue
July 2018

	Residential	Commercial	Total
Total Assessed Value from Table 3	$ 1,509,750,700	$ 100,049,244	$ 1,609,799,944
Turnover Rate (a)	10.00%	5.00%	
Annual Taxable Assessed Value	$ 150,975,070	$ 5,002,462	$ 155,977,532
Property Transfer Tax Rate (b)	0.110000%	0.110000%	0.110000%
Annual Property Transfer Taxes	**$ 166,073**	**$ 5,503**	**$ 171,575**

Footnotes:
(a) Based on assumption that residential property will change ownership once every 10 years and commercial property will change ownership once every 20 years.
(b) Represents property transfer tax rate of $1.10 per $1,000 of sale or resale value per Revenue and Taxation Code Section 11911-11929.

Table 7
On-Site Sales Tax Revenue
July 2018

Probable Tenant Type	Bldg. SF	Estimated Sales per SF (a)	Estimated % Taxable	Estimated Taxable Sales per SF	Total Estimated Taxable Sales
Mixed-Use Areas					
Small Retail and Restaruants	12,000	$ 308	75%	$ 231	$ 2,772,000
Retail Shops	5,000	250	75%	188	937,500
Office	3,000	N/A	0%	-	-
Subtotal	20,000	-			$ 3,709,500
Resort					
Meeting Rooms	1,000	N/A	0%	$ -	$ -
Conference Center	5,000	N/A	0%	-	-
Office	3,000	N/A	0%	-	-
Retail Shops	6,000	250	75%	188	1,125,000
Restaurant	5,000	308	75%	231	1,155,675
Subtotal	20,000			-	$ 2,280,675
Total	**40,000**				**$ 5,990,175**
Annual Sales Tax to County				**1.00%**	**$ 59,902**

Footnotes:
(a) Per Dollars & Cents of Shopping Centers (2008) by Urban Land Institute.

Table 8
Off-Site Sales Tax Revenue
July 2018

Spending by Residents:	Factor	
Aggregate Incomes (from table below)	$161K per Unit	$ 312,018,000
Consumer Expenditures (a)	73.7%	229,815,325
Taxable Spending (a)	32.6%	74,822,651
Less: On-site Capture (b)	8.0%	(5,990,175)
Less: Incorporated City Capture (b)	82.0%	(61,350,211)
Net Taxable Spending in County		**$ 7,482,265**
Annual Sales Taxes to County	1.0%	**$ 74,823**

Household Income Calculation:		
Avg. Sales Price		$ 779,025
Down Payment	20%	155,805
Loan Amount		623,220
Interest Rate		5.5%
Term (years)		30
Annual Mortgage Payment		$42,463
HOA	$ 200	$ 2,400
Maintenance/Insurance	200	2,400
Property Taxes	1.1373%	8,860
Total Annual Housing Costs		$ 56,123
% Income spent on Housing		35%
Annual Income Required		$ 160,351
Annual Income Required (rounded)		**$ 161,000**

Footnotes:
(a) Per Bureau of Labor Statistics Consumer Expenditure Survey, 2016-17.
(b) Capture percentage represents DPFG's estimate based on location relative to other retail establishments in the market area.

Table 9
Property Taxes In Lieu of MVLF
July 2018

FY 2018/19 In Lieu MVLF Allocation to County	$	396,804,243	(a)
FY 2017/18 County AV		512,372,677,545	(b)
Total Project Assessed Value from Table 3		1,609,799,944	
Less: Existing Assessed Value		(49,762,387)	
Net (New) Assessed Value	$	1,560,037,557	
AV Growth from Project		0.304%	
Annual County Property Taxes In Lieu of MVLF	**$**	**1,208,163**	

Footnotes:
(a) Per County of San Diego Adopted Operation Plan for Fiscal Years 2017-18 & 2018-19, page 103.
(b) Per County of San Diego Assessor's Office.

Table 10
Transient Occupancy Taxes
July 2018

Proposed Resort Hotel			
No. of Rooms		200	
Average Daily Rate (ADR)		$ 300	(a)
Occupancy Rate (%)		75.0%	(a)
Total Annual Room Revenues		16,425,000	
Annual County Transient Occupancy Tax	**8.00%** (b)	**$ 1,314,000**	

Footnotes:

(a) Source: HR&A, PKF Consulting, and DPFG.

(b) Transient occupancy tax rate per County of San Diego Transient Occupancy Tax Ordinance effective 10/1/1964, amended 10/26/2007, amended Ord. No. 10366 effective 2/5/2015.

Table 11
Other Recurring Revenues
July 2018

Revenue Category	FY 17-18 Adopted Budget (a)	Adjustment	Adjusted Budget	Multiplier	Factor	Project Equivalent Persons	Project Revenues
Property Taxes	$ 655,892,809	100%	$ 655,892,809	Case Study	-	-	$ -
Total Teeter Revenue	13,318,946	100%	13,318,946	N/A	-	-	-
Total Sales & Use Tax/In Lieu of Sales Tax	28,944,685	100%	28,944,685	Case Study	-	-	-
Total Intergovernmental Revenue	50,914,115	100%	50,914,115	N/A	-	-	-
Total Other Revenues including RPTT	64,532,562	100%	64,532,562	Case Study	-	-	-
Property Taxes Prior Secured	400,000	100%	400,000	Case Study	-	-	-
Property Taxes Prior Secured Supplemental	5,858,218	100%	5,858,218	Case Study	-	-	-
Property Taxes Prior Unsecured	150,000	100%	150,000	Case Study	-	-	-
Property Taxes Prior Unsecured Supplemental	400,000	100%	400,000	Case Study	-	-	-
Other Tax Aircraft Unsecured	2,756,225	100%	2,756,225	Case Study	-	-	-
Transient Occupancy Tax	4,435,038	100%	4,435,038	Case Study	-	-	-
Real Property Transfer Taxes (RPTT)	20,889,353	100%	20,889,353	Case Study	-	-	-
Franchises, Licenses, Permits	5,469,355	100%	5,469,355	Per Capita	1.64	5,678	9,305
Fees, Fines, & Forfeitures	1,554,325	100%	1,554,325	Per Capita & 50% Employee	0.37	5,869	2,152
Penalties & Cost Delinquency Taxes	15,920,048	100%	15,920,048	Per Capita & 50% Employee	3.76	5,869	22,039
Interest on Deposits & Investments	4,200,000	100%	4,200,000	N/A	-	-	-
Interfund Charges/Miscellaneous Revenue	2,500,000	100%	2,500,000	Per Capita & 50% Employee	0.59	5,869	3,461
Total	**$ 813,603,117**						**$ 36,957**

Footnotes:
(a) Per County of San Diego Adopted Operation Plan for Fiscal Years 2017-18 & 2018-19, page 103.

Table 12
Recurring Expenditures
July 2018

Expenditure Category	FY 17-18 Adopted Budget	Adjustment	Adjusted Budget	Multiplier	Factor	Project Equivalent Persons	Project Cost
Public Safety							
Executive Office	$ 81,687,161	50%	$ 40,843,581	Per Capita & 50% Employee	$ 9.63	5,869	$ 56,543
District Attorney	112,088,696	50%	56,044,348	Per Capita & 50% Employee	13.22	5,869	77,586
Sheriff	369,881,842	100%	369,881,842	Per Capita and 50% Employee Public Safety Service Area	315.80	5,869	1,853,455
Child Support Services	-	100%	-	Per Capita & 50% Employee	-	5,869	-
Citizens' Law Enforcement Review Board	717,451	50%	358,726	Per Capita & 50% Employee	0.08	5,869	497
Office of Emergency Services	2,504,660	50%	1,252,330	Per Capita & 50% Employee	0.30	5,869	1,734
Medical Examiner	10,206,880	100%	10,206,880	Per Capita & 50% Employee	2.41	5,869	14,130
Probation	84,243,969	50%	42,121,985	Per Capita & 50% Employee	9.94	5,869	58,313
Public Defender	84,029,729	50%	42,014,865	Per Capita & 50% Employee	9.91	5,869	58,164
San Diego County Fire Authority	33,354,341	100%	33,354,341	Per Capita & 50% Employee Unincorporated	53.53	5,869	314,154
Public Safety	$ 778,714,729		$ 596,078,896				$ 2,434,576
Health and Human Services Agency							
Self Sufficiency Services	$ 34,043,762	50%	$ 17,021,881	Per Capita & 50% Employee	$ 4.02	5,869	$ 23,565
Aging and Independence Services	11,777,034	50%	5,888,517	Per Capita & 50% Employee	1.39	5,869	8,152
Behavioral Health Services	7,498,142	50%	3,749,071	Per Capita & 50% Employee	0.88	5,869	5,190
Child Welfare Services	2,697,510	50%	1,348,755	Per Capita & 50% Employee	0.32	5,869	1,867
Public Health Services	14,380,491	50%	7,190,246	Per Capita & 50% Employee	1.70	5,869	9,954
Administrative Support	45,172,658	50%	22,586,329	Per Capita & 50% Employee	5.33	5,869	31,268
Housing and Community Development Services	173,747	100%	173,747	Per Capita & 50% Employee	0.04	5,869	241
Health and Human Services	$ 115,743,344		$ 57,958,546				$ 80,236
Land Use and Environment							
Executive Office	$ 4,975,605	50%	$ 2,487,803	Per Capita & 50% Employee	$ 0.59	5,869	$ 3,444
Agriculture, Weights and Measures	8,080,808	100%	8,080,808	Per Capita & 50% Employee	1.91	5,869	11,187
Air Pollution Control District	1,609,836	100%	1,609,836	Per Capita & 50% Employee	0.38	5,869	2,229
Environmental Health	542,536	100%	542,536	Per Capita & 50% Employee	0.13	5,869	751
University of California Cooperative Extension	1,139,291	50%	569,646	Per Capita & 50% Employee	0.13	5,869	789
Parks and Recreation	32,616,773	100%	32,616,773	Per Capita & 50% Employee	7.69	5,869	45,154
Planning and Development Services	24,119,100	100%	24,119,100	Per Capita & 50% Employee	5.69	5,869	33,390
Public Works	109,205,915	100%	109,205,915	Per Capita & 50% Employee	25.76	5,869	151,182
Land Use and Environment	$ 182,289,864		$ 179,232,416				$ 248,125

Expenditure Category	FY 17-18 Adopted Budget	Adjustment	Adjusted Budget	Multiplier	Factor	Project Equivalent Persons	Project Cost
Community Services							
Executive Office	$ 3,592,041	50%	$ 1,796,021	Per Capita	$ 0.54	5,678	$ 3,056
Animal Services	3,654,908	100%	3,654,908	Per Capita	1.10	5,678	6,218
County Library	38,521,218	100%	38,521,218	Per Capita	11.54	5,678	65,536
General Services	25,406,771	50%	12,703,386	Per Capita	3.81	5,678	21,612
Purchasing and Contracting	5,745,724	100%	5,745,724	Per Capita	1.72	5,678	9,775
County Successor Agency	2,245,898	100%	2,245,898	Per Capita	0.67	5,678	3,821
Registrar of Voters	17,657,027	50%	8,828,514	Per Capita	2.65	5,678	15,020
Community Services	$ 96,823,587		$ 73,495,668				$ 125,038
Finance and General Government							
Executive Office	$ 25,066,789	50%	$ 12,533,395	Per Capita & 50% Employee	$ 2.96	5,869	$ 17,351
Board of Supervisors	9,249,947	50%	4,624,974	Per Capita & 50% Employee	1.09	5,869	6,403
Assessor, Recorder, County Clerk	69,669,615	50%	34,834,808	Per Capita & 50% Employee	8.22	5,869	48,224
Treasurer - Tax Collector	22,992,232	50%	11,496,116	Per Capita & 50% Employee	2.71	5,869	15,915
Chief Administrative Office	5,193,816	50%	2,596,908	Per Capita & 50% Employee	0.61	5,869	3,595
Auditor and Controller	36,276,913	50%	18,138,457	Per Capita & 50% Employee	4.28	5,869	25,110
County Technology Office	176,875,569	50%	88,437,785	Per Capita & 50% Employee	20.86	5,869	122,431
Civil Service Commission	531,768	50%	265,884	Per Capita & 50% Employee	0.06	5,869	368
Clerk and Board of Supervisors	3,933,716	50%	1,966,858	Per Capita & 50% Employee	0.46	5,869	2,723
City Counsel	27,253,889	50%	13,626,945	Per Capita & 50% Employee	3.21	5,869	18,865
Grand Jury	781,387	50%	390,694	Per Capita & 50% Employee	0.09	5,869	541
Human Resources	26,649,865	50%	13,324,933	Per Capita & 50% Employee	3.14	5,869	18,447
County Communications Office	4,608,494	50%	2,304,247	Per Capita & 50% Employee	0.54	5,869	3,190
Finance and General Government	$ 409,084,000		$ 204,542,000				$ 283,163
Finance Other							
General Fund	$ 14,822,532	100%	$ 14,822,532	Per Capita & 50% Employee	$ 3.50	5,869	$ 20,520
Total Finance Other	$ 14,822,532		$ 14,822,532				$ 20,520
Total	**$ 1,597,478,056**		**$ 1,126,130,057**				**$ 3,191,658**

Footnotes:

(a) Per County of San Diego Adopted Operation Plan for Fiscal Years 2017-18 & 2018-19.

Table 13
Recurring Expenditures - Detail
July 2018

Description	2017-18 Budget Page Ref.	2017-18 Recommended Total	2017-18 Licenses Permits and Franchises	2017-18 Fine, Forfeitures and Penalties	2017-18 Revenue From Use of Money and Property	2017-18 Intergovernmental	2017-18 Charges for Current Services	2017-18 Miscellaneous Revenues	2017-18 Other Financing Sources	2017-2018 Net General Fund Expenditures
Public Safety										
Executive Office	140	$ 387,932,181	$ -	$ 12,857,729	$ 250,000	$ 278,883,732	$ 12,521,133	$ 123,000	$ 1,609,426	$ 81,687,161
District Attorney	146	193,633,301	-	-	-	20,855,927	1,160,000	2,041,000	57,487,678	112,088,696
Sheriff	155	842,852,567	500,500	5,498,430	3,115,606	75,776,012	149,004,213	18,456,591	220,619,373	369,881,842
Child Support Services	162	51,804,642	-	-	-	50,146,537	1,658,105	-	-	-
Citizens' Law Enforcement Review Board	166	717,451	-	-	-	-	-	-	-	717,451
Office of Emergency Services	171	7,811,529	-	-	-	4,972,309	334,560	-		2,504,660
Medical Examiner	177	10,975,423	-	-	-	-	682,083	86,460	-	10,206,880
Probation	185	213,581,376	-	68,500	-	98,221,471	7,488,790	102,132	23,456,514	84,243,969
Public Defender	193	87,591,568	-	-	-	1,511,839	1,050,000	1,000,000	-	84,029,729
San Diego County Fire Authority	201	39,155,221	-	-	5	243,330	4,399,956	650,117	507,472	33,354,341
Total Public Safety		$ 1,836,055,259	$ 500,500	$ 18,424,659	$ 3,365,611	$ 530,611,157	$ 178,298,840	$ 22,459,300	$ 303,680,463	$ 778,714,729
Health and Human Services Agency										
Self Sufficiency Services	220	$ 524,147,156	$ -	$ 3,800,000	$ 248,605	$ 482,215,969	$ 1,620,000	$ 1,218,820	$ 1,000,000	$ 34,043,762
Aging and Independence Services	229	137,696,011	51,000	172,489	52,000	122,595,022	893,838	2,054,628	100,000	11,777,034
Behavioral Health Services	237	529,098,092	-	-	-	472,554,608	42,895,718	1,749,624	4,400,000	7,498,142
Child Welfare Services	245	364,705,045	654,000	-	681,211	357,211,334	1,464,490	1,996,500	-	2,697,510
Public Health Services	255	143,994,039	220,000	3,133,231	69,503	115,628,577	9,137,793	924,444	500,000	14,380,491
Administrative Support	265	186,052,773		39,162	1,900,000	110,885,503	28,055,450	-	-	45,172,658
Housing and Community Development Services	273	28,704,848	-	-	-	27,663,656	3,000	864,445	-	173,747
Total Health and Human Services		$ 1,914,397,964	$ 925,000	$ 7,144,882	$ 2,951,319	$ 1,688,754,669	$ 84,070,289	$ 8,808,461	$ 6,000,000	$ 115,743,344
Land Use and Environment										
Executive Office	285	$ 6,032,276	$ -	$ -	$ -	$ 1,056,671	$ -	$ -	$ -	$ 4,975,605
Agriculture, Weights and Measures	295	22,076,450	3,816,300	116,000	-	9,445,842	605,500	12,000	-	8,080,808
Air Pollution Control District	304	46,376,350	8,737,788	980,000	196,000	24,008,832	540,708	-	10,303,186	1,609,836
Environmental Health	314	45,095,456	23,215,003	239,315	-	3,623,143	17,475,459	-	-	542,536
University of California Cooperative Extension	320	1,139,291	-	-	-	-	-	-	-	1,139,291
Parks and Recreation	330	44,042,448	50,450	-	1,208,856	687,000	7,020,412	407,100	2,051,857	32,616,773
Planning and Development Services	340	44,860,121	4,435,346	205,703	1,000	662,040	15,436,932	-	-	24,119,100
Public Works	352	302,169,247	5,001,000	-	21,266,994	82,632,565	51,342,619	2,098,600	30,621,554	109,205,915
Total Land Use and Environment		$ 511,791,639	$ 45,255,887	$ 1,541,018	$ 22,672,850	$ 122,116,093	$ 92,421,630	$ 2,517,700	$ 42,976,597	$ 182,289,864

Description	2017-18 Budget Page Ref.	2017-18 Recommended Total	2017-18 Licenses Permits and Franchises	2017-18 Fine, Forfeitures and Penalties	2017-18 Revenue From Use of Money and Property	2017-18 Intergovernmental	2017-18 Charges for Current Services	2017-18 Miscellaneous Revenues	2017-18 Other Financing Sources	2017-2018 Net General Fund Expenditures
Community Services										
Executive Office	362	$ 4,792,638	$ -	$ -	$ -	$ 1,200,597	$ -	$ -	$ -	$ 3,592,041
Animal Services	367	18,728,128	1,980,000	1,300	-	-	13,054,620	37,300	-	3,654,908
County Library	373	43,366,672	-	-	105,000	3,048,521	1,138,112	553,821	-	38,521,218
General Services	381	215,628,350	-	-	1,331,946	3,612,301	173,246,961	1,137,716	10,892,655	25,406,771
Purchasing and Contracting	386	14,801,253	-	-	60,000	-	8,058,529	937,000	-	5,745,724
County Successor Agency	389	7,347,420	-	-	4,393	-	-	-	5,097,129	2,245,898
Registrar of Voters	397	23,940,444	-	-	-	377,160	5,841,257	65,000	-	17,657,027
Total Community Services		$ 328,604,905	$ 1,980,000	$ 1,300	$ 1,501,339	$ 8,238,579	$ 201,339,479	$ 2,730,837	$ 15,989,784	$ 96,823,587
Finance and General Government										
Executive Office	408	$ 25,066,789	$ -	$ -	$ 200,000	$ 2,293,173	$ -	$ 1,103,797	$ -	$ 21,469,819
Board of Supervisors	413	9,249,947	-	-	-	-	-	-	-	9,249,947
Assessor, Recorder, County Clerk	421	69,669,615	1,000,000	-	10,000	-	38,186,585	-	-	30,473,030
Treasurer - Tax Collector	428	22,992,232	-	920,150	-	-	14,791,216	701,748	-	6,579,118
Chief Administrative Office	432	5,193,816	-	-	-	-	176,052	-	-	5,017,764
Auditor and Controller	438	36,276,913	-	-	-	4,000	6,435,078	220,000	-	29,617,835
County Technology Office	444	176,875,569	-	-	-	-	158,565,345	100,000	5,793,798	12,416,426
Civil Service Commission	448	531,768	-	-	-	-	43,412	-	-	488,356
Clerk and Board of Supervisors	452	3,933,716	-	-	-	-	870,350	14,200	-	3,049,166
City Counsel	459	27,253,889	-	-	-	-	12,742,181	1,000	-	14,510,708
Grand Jury	463	781,387	-	-	-	-	-	-	-	781,387
Human Resources	469	26,649,865	-	-	-	5,247	1,769,126	8,482,727	-	16,392,765
County Communications Office	474	4,608,494	1,526,500	-	-	-	-	-	-	3,081,994
Total Finance and General Government		$ 409,084,000	$ 2,526,500	$ 920,150	$ 210,000	$ 2,302,420	$ 233,579,345	$ 10,623,472	$ 5,793,798	$ 153,128,315
Finance Other										
General Fund	537	$ 14,822,532	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 14,822,532
Total Finance Other		$ 14,822,532	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 14,822,532

Footnotes:

(a) Per County of San Diego Adopted Operation Plan for Fiscal Years 2017-18 & 2018-19.

Table 14
Permanent Employment
July 2018

Tenant Type	Bldg. SF	Estimated SF per Employee (a)	Estimated Employees
Mixed-Use Areas			
Small Retail and Restaruan	15,500	450	34
Retail Shops	1,500	510	3
Office	3,000	280	11
Subtotal	20,000		48
Resort			
Meeting Rooms	1,000	-	-
Conference Center	5,000	-	-
Office	3,000	280	11
Retail Shops	6,000	510	12
Restaurant	5,000	450	11
Subtotal	20,000		34
Hotel - 200 Rooms (b)			300
Total	**40,000**		**382**

Footnotes:

(a) Service and Retail categories per Planner's Estimating Guide - Projecting Land-Use and Facility Needs by Arthur C. Nelson, FAICP (2004).

(b) Hotel employment is a preliminary estimate by DPFG based on 1.5 employees per room for luxury hotel.