

**DRAFT TRIBAL  
ENVIRONMENTAL IMPACT REPORT  
FOR THE PALA CASINO AND SPA  
EXPANSION PROJECT**

**Prepared for:**

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## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
LIST OF ACRONYMS SUMMARY .....	1
S.1 SUMMARY .....	3
S.1 Project Synopsis .....	3
S.2 Purpose and Need .....	3
S.3 Overview of the Environmental Review Process .....	6
S.4 Regulatory Requirements and Approvals .....	6
S.5 Project Alternatives .....	6
1.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING .....	8
1.1 Project Description and Location .....	8
1.2 Project Objectives .....	12
1.3 Intended Uses of the Tribal Environmental Impact Report .....	12
1.4 Environmental Setting .....	12
1.5 Regulatory Requirements and Approvals .....	14
2.0 PROJECT DESCRIPTION .....	15
2.1 Proposed Project .....	15
2.2 Project Alternatives .....	18
3.0 ENVIRONMENTAL ANALYSIS .....	20
3.1 Aesthetics .....	20
3.2 Air Quality .....	29
3.3 Hydrology/Water Quality .....	39
3.4 Noise .....	45
3.5 Public Services .....	52
3.6 Transportation/Traffic .....	55
3.7 Utilities .....	72
4.0 OTHER MANDATORY SECTIONS .....	76
4.1 Cumulative Impacts .....	76
4.2 Issues Determined to be Less Than Significant Through the Initial Study Process and Not Discussed in Detail in the TEIR .....	79
4.3 Significant Effects on the Environment that Cannot be Avoided if the Project is Implemented .....	81
4.4 Irreversible Effect on the Environment if the Project is Implemented .....	81
5.0 MITIGATION MEASURES .....	83

6.0	REFERENCES .....	85
7.0	REPORT PREPARATION, CONSULTATION AND COORDINATION .....	87
7.1	Report Preparation .....	87
7.2	Consultation and Coordination .....	87

## APPENDICES

1. Off-Reservation Environmental Impact Analysis Checklist
2. Traffic Report

## LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Regional Location Map .....	9
2	Project Location Map .....	10
3	Existing Pala Casino and Hotel Site Map .....	11
4	Proposed Site Plan .....	16
5	Existing Facility Viewed from the West of SR-76 .....	21
6	Existing Facility Viewed from the East on SR-76 .....	22
7	Southeast View of Casino, Porte Cochere, and Hotel from the East SR-76 .....	23
8	Southwest View of Porte Cochere from SR-76 .....	24
9	Photo Simulation of Expanded Facility as Viewed from the West on SR-76 .....	26
10	Existing Average Daily Traffic .....	56
11	Existing PM Peak Hour Traffic .....	57
12	Project Average Daily Traffic .....	60
13	Project PM Peak Hour Traffic .....	61
14	Existing Plus Project Average Daily Traffic .....	62
15	Existing Plus Project PM Peak Hour Traffic .....	63
16	Future (2030) Average Daily Traffic .....	66
17	Future (2030) PM Peak Hour Traffic .....	67
18	Future (2030) With Project Average Daily Traffic .....	68
19	Future (2030) With Project PM Peak Hour Traffic .....	69

## LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	National and California Ambient Air Quality Standards .....	30
2	Ambient Air Quality Summary, Escondido-East Valley Parkway Monitoring Station .	32
3	Threshold Limits for Criteria Pollutants .....	33
4	Construction Emissions for the Pala Casino Improvements .....	34

5	Operations Emissions for the Pala Casino Improvements . . . . .	35
6	CO Screening . . . . .	36
7	Intersection Operations (PM Peak Hour) . . . . .	64
8	Intersection Operations (PM Peak Hour), with Mitigation Existing . . . . .	65
9	Existing Wastewater Flows for the Pala Indian Reservation . . . . .	72

## LIST OF ACRONYMS

ADT	Average Daily Trips
AMSL	Above Mean Sea Level
CAA	Clean Air Act
Caltech	California Institute of Technology
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDF	California Department of Forestry
CEQA	California Environmental Quality Act
CFS	Cubic Feet Per Second
CNEL	Community Noise Equivalency Level
CO	Carbon Monoxide
dB	Decibels
dB(A)	Decibels - A weighted
DNL	Day Night Level
EIR	Environmental Impact Report
EMT	Emergency Medical Technician
°F	Degrees Fahrenheit
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
GPD	Gallons Per Day
GPM	Gallons Per Minute
I-15	Interstate 15
ITE	Institute of Traffic Engineers
$L_{dn}$	Noise Level - Day/Night
Leq	Noise Equivalency Level
LOS	Level of Service
MPH	Miles Per Hour
MSCP	Multiple Species Conservation Program
NAAQA	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NB	North Bound
NO <sub>2</sub>	Nitrogen Dioxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	Ozone
Pb	Lead
PM 10	Particulate Matter - Less than 10 Microns
PM 2.5	Particulate Matter - Less than 2.5 Mircons
PPM	Parts Per Million
SANTEC	San Diego Regional Transportation Engineers Council
SB	South Bound
SBR	Sequencing Batch Reactor

SDAPCD	San Diego Air Pollution Control District
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO <sub>2</sub>	Sulphur Dioxide
SR	State Route
TDS	Total Dissolved Solids
TEIR	Tribal Environmental Impact Report
Ug/m <sup>3</sup>	Micrograms per Cubic Meter
VFD	Variable Frequency Drive

## SUMMARY

### S.1 Project Synopsis

This Tribal Environment Impact Report (EIR) has been prepared for the Pala Band of Mission Indians (Tribe) to analyze the potential off-Reservation impacts from the proposed Pala Casino and Spa Expansion Project on the Pala Indian Reservation. This document has been prepared pursuant to the Pala Environmental Review Ordinance which implements Section 10.8 of the Tribal-State Gaming Compact executed by the State of California and the Tribe. The document analyzes the potential off-Reservation effects of a proposal by the Pala Band of Mission Indians to expand its existing casino building and certain other amenities and facilities including the spa, parking area, on-site traffic circulation. The Pala Indian Reservation is located in northern San Diego County, California approximately five miles east of Interstate 15 (I-15), 15 miles north of the City of Escondido, and 50 miles north of the City of San Diego.

### S.2 Summary of Significant Effects and Mitigation Measures that Reduce or Avoid the Significant Effects

Topic	Impacts	Mitigation Measures	Residual Impacts
Aesthetics/Visual Resources	No significant impacts identified.	None necessary.	None.
Air Quality	No significant impacts identified.	None necessary.	None.
Hydrology/Water Quality	No significant impacts identified.	None necessary.	None.
Noise	<p>Potential off-Reservation noise impacts associated with construction traffic on SR-76 between I-15 and the Pala Casino between 10:00 p.m. and 7:00 a.m.</p> <p>Potential off-Reservation noise impacts associated with the testing of diesel generators between 10:00 p.m. and 7:00 a.m.</p>	<p><b>Mitigation Measure N-1:</b> Project construction specifications shall include the requirement that no concentrated heavy trucking, such as for fill import or concrete pouring, shall occur between 10:00 PM and 7:00 AM.</p> <p><b>Mitigation Measure N-2:</b> Project operations procedures shall require that testing of diesel generators shall occur between 7:00 AM and 7:00 PM.</p>	None.

<p>Public Services</p>	<p>The proposed project could result in increased demands for law enforcement, fire, and emergency services from off-Reservation stations.</p>	<p>The Tribe shall negotiate with the County of San Diego the modification of an existing Governmental Agreement for any increased law enforcement, fire, and emergency services needed to serve the Pala Casino Spa Resort.</p>	<p>Less than significant.</p>
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<p>Traffic/ Transportation</p>		<p>No mitigation measures are needed for existing conditions or existing plus project conditions. However, based on the results of the traffic analysis, future No Project conditions or future plus project conditions will require the following mitigation measures:</p> <p><b>Mitigation Measure T-1:</b> Widen SR-76 to six through lanes west of I-15.</p> <p><b>Mitigation Measure T-2:</b> Provide the following lane geometry at the intersection of SR-76 and Old Highway 395:</p> <p style="padding-left: 40px;">Eastbound: 2 left, 2 through, 1 right Westbound: 1 left Northbound: 2 left, 1 through, 1 right Southbound: 2 left, 1 through, 1 right</p> <p><b>Mitigation Measure T-3:</b> Add northbound and southbound loop ramps at the I-15/SR-76 interchange.</p> <p><b>Mitigation Measure T-4:</b> Signalize the SR-76/Cole Grade Road intersection and add a northbound left turn lane.</p> <p><b>Mitigation Measure T-5:</b> Signalize the SR-76/Valley Center Road intersection.</p> <p>It should be noted that these mitigation measures would be recommended with or without project traffic and that project traffic is a relatively small component of overall traffic growth for each of the roadways identified above (Table 8). In order to mitigate the traffic impacts of the project under these scenarios, it is recommended that the project applicant work with Caltrans to determine a fair-share contribution.</p>	
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### S.3 Areas of Controversy

The Tribe has identified the following areas of controversy that must be addressed by the proposed project:

- The need for improvements to SR-76 to handle increased traffic volumes and the source of funding for those improvements.

### S.4 Issues to be Resolved by the Tribe

The Tribe must resolve the following issues:

- Whether the Tribe should provide Caltrans with funds to improve SR-76 between I-15 and the project site;
- The need for an Encroachment Permit from Caltrans for frontage and driveway intersection improvements to be constructed within Caltrans' right-of-way along SR-76 on the Reservation.

### S.5 Project Alternatives

The Tribe has considered the following project alternatives:

**No Project Alternative** - The No Project Alternative consists of the continued operation of the existing Pala Casino, Spa, and Hotel without expansion of any of the existing facilities or uses. This alternative has been rejected by the Tribe because it does not meet the project objective of increasing economic opportunity on the Reservation by meeting a high demand for entertainment and accommodations.

**Southerly Expansion Alternative** - The Southerly Expansion Alternative consists of the expansion of the casino to the south, towards the San Luis Rey River. This alternative has been rejected by the Tribe due to the need to encroach upon the flood plain of the San Luis Rey River and associated sensitive biological resources, including the federally endangered southwestern arroyo toad and least Bell's vireo.

**Second Hotel Tower Alternative** - The Second Hotel Tower Alternative consists of the construction of a second hotel tower to the west of the existing parking structure, within an existing parking lot. This alternative would include the expansion of the parking structure to compensate for the lost surface parking spaces and to accommodate the additional parking demand from the second hotel tower. This alternative was rejected at this time by the Tribe because the location would not be as convenient for guests as the existing hotel. In addition, operations and maintenance costs would be higher for a second standalone hotel tower.

**Second Casino Alternative** - The Second Casino Alternative consists of the construction of a second casino in a parking lot to the west of the existing casino and parking structure. The new

casino would be connected to the existing casino with a retail corridor. This alternative would require the expansion of the existing parking facility in order to compensate for lost surface parking spaces and to accommodate the additional parking demand from the second casino. This alternative was rejected for the same reasons that the Second Hotel Tower Alternative was rejected; guest convenience would suffer and the cost of operation and maintenance would be increased. Ultimately, the Tribe determined that the proposed project, which concentrates all expansion activity at the existing hotel and casino site, would be most efficient and is therefore the Environmentally Superior Project Alternative.

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## **CHAPTER 1.0 - PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING**

### **1.1 Project Description and Location**

The existing Pala Casino and Hotel facility consists of a 181,692 square foot casino and a 10-story, 507-room hotel on a 24-acre site located on the Pala Indian Reservation on the south side of State Route 76 (SR-76) (Figures 1 and 2). The facility's design is patterned as a California contemporary lodge. The entry or main floor of the facility contains the casino, several restaurants, and various entertainment facilities. A lower level includes administration, surveillance, an employee cafeteria, other support services, the Tribal Gaming Authority, and a storage area.

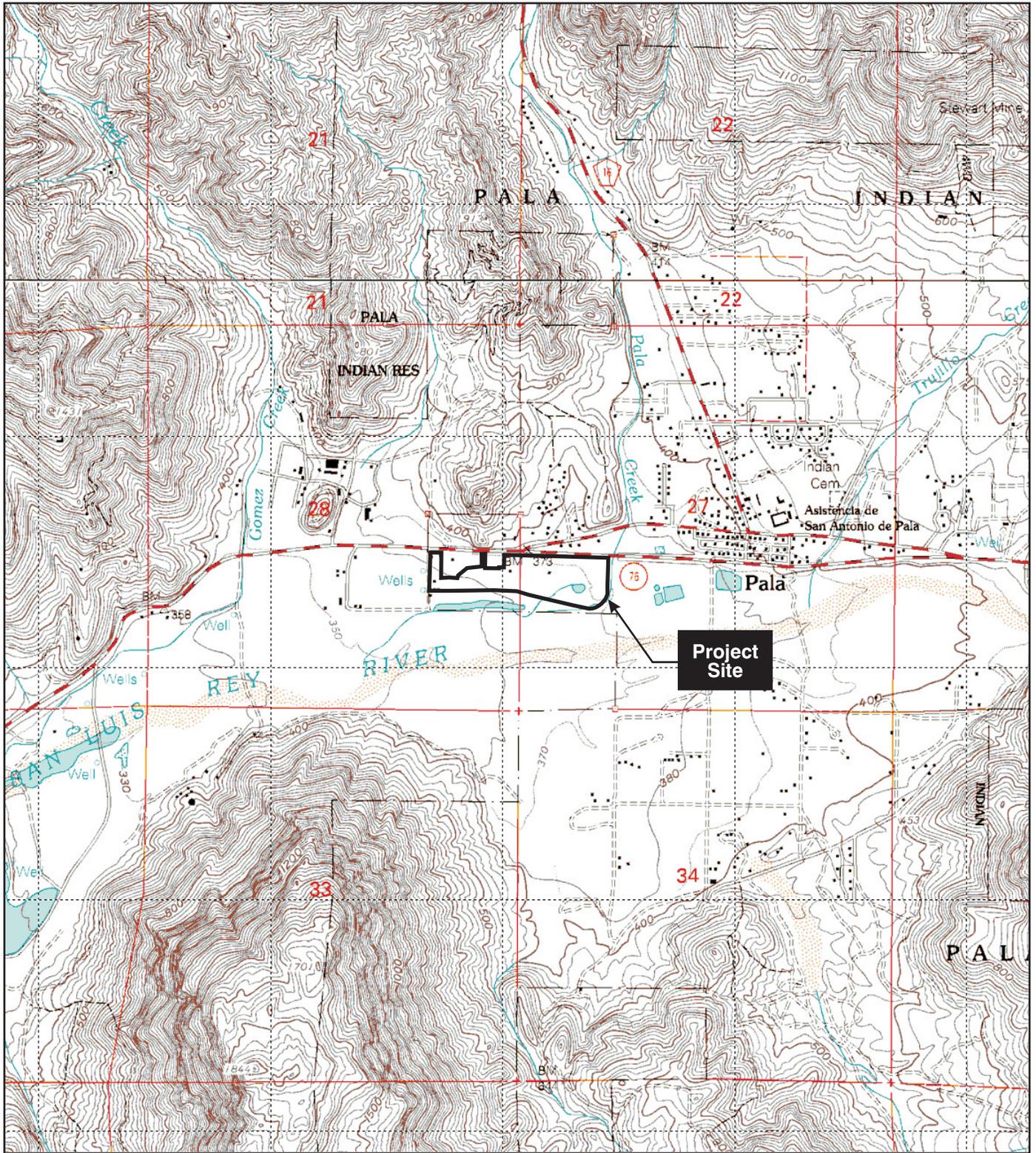
The generally rectangular 24-acre site is bounded by SR-76 on the north, Pala Creek on the east, the former Pala Lake on the south, and the western boundary of the Reservation on the west. The casino, completed in 2001, is located in the central portion of the site, with parking garages and parking lots to the west. The hotel and hotel parking lots, as well as the spa and pool, were completed in 2003 and are located on the eastern portion of the site. Also located on the 24-acre site are a porte cochere in front of the casino, a gas station and mini-mart on SR-76, a private residence in the northwestern portion of the site, and three two-way driveways that provide access with SR-76. The locations of the major existing facilities are illustrated in Figure 3. Water for the casino and hotel is provided by a system of wells, pipelines, and reservoirs located elsewhere on the Reservation, and wastewater is also treated off-site, but on the Reservation, by a wastewater treatment facility completed in 2001. The Tribe is currently planning the construction of a new wastewater treatment facility, adjacent to the existing wastewater treatment facility, to handle projected increased wastewater flows from the Reservation and to improve treated water quality to Title 22 standards for beneficial reuse on the Reservation. The proposed wastewater treatment plant will be a sequencing batch reactor (SBR) facility. The new wastewater treatment facility would be constructed by the Tribe to address future Reservation wastewater treatment needs independently of the proposed casino and spa expansion. Therefore, environmental review of the new wastewater treatment facility is being undertaken by the Tribe separately from this proposed action.



Figure 1  
Regional Location Map



TIERRA  
ENVIRONMENTAL SERVICES



SOURCE: USGS 7.5' Quad Maps - Pala and Pechanga

Figure 2  
Project Location Map



TIERRA  
ENVIRONMENTAL SERVICES



Figure 3  
Existing Pala Casino and Hotel Site Map



## **1.2 Project Objectives**

The Pala Band of Mission Indians proposes to expand its existing casino and spa on land that is currently landscaped or developed with surface parking. The objective of the proposed project is to provide additional gaming space, additional room for restaurant facilities, and an expanded spa for patrons of the Pala Casino and other visitors to the Pala Reservation and northern San Diego County.

Ultimately, the purpose of the proposed project is to improve the long-term socioeconomic condition of the Tribe through the provision of increased revenue and the generation of employment opportunities for Tribal members. The proposed facility would also provide additional employment opportunities for non-Tribal members and the opportunity for employment and purchase of goods and services within northern San Diego County.

Pala Tribal members maintain a great desire to continue to improve their quality of life through independent means. The proposed project would contribute to a raised standard of living for Tribal members. Improvement in the economic and social well-being of community members would result through the creation of additional employment opportunities, vocational training, and other visitor services. The proposed casino and spa expansion would also further reduce dependence upon federal assistance, increase the use of community resources in a culturally and environmentally acceptable manner, and contribute to the maintenance and enhancement of the sovereignty of the Tribe as a government entity.

## **1.3 Intended Uses of the Tribal Environmental Impact Report**

The Tribe will use this Tribal Environmental Impact Report (TEIR) to determine if the proposed project would result in off-Reservation impacts to the environment. The scope of the TEIR is focused on those issues, identified in the Off-Reservation Environmental Impact Analysis Checklist (Appendix A), that could be significantly impacted as a result of implementation of the proposed project. In accordance with Section 10.8 of the Tribal-State Gaming Compact and the Tribe's Environmental Policy Ordinance for Gaming Facility Development (Executive Committee Resolution 00-15), the TEIR must be circulated for public review with copies provided to the State Clearinghouse and the San Diego County Board of Supervisors. The Tribe will use the TEIR to determine if the proposed project will result in off-Reservation effects to the environment.

## **1.4 Environmental Setting**

The project site is located on the Pala Reservation in northeastern San Diego County, approximately 25 miles east of the Pacific Ocean and more than 20 miles beyond the Coastal Zone boundaries. The Reservation is bisected by the San Luis Rey River and the Pala Mission and Village have long been established within this river valley. SR-76 which follows the path of the San Luis Rey River from the Pacific Ocean to the headwaters above Lake Henshaw, provides the primary access to the project site. I-15 is located approximately 5 miles to the west of the project site and intersects SR-76. Other access routes to the project site include County Highway S-16 (S-16), also known as Pala-Temecula Road, which leads north to the city of Temecula in Riverside County, and Lilac Road, which leads south to the community of Valley Center.

The Pala Reservation encompasses 18 square miles. Property adjacent to the Reservation boundaries is unincorporated and within the jurisdiction of the County of San Diego. The Reservation is at the western edge of the Agua Tibia Mountain Range and a substantial portion of the Reservation area is steeply sloping mountainous terrain. Most of the hills are rocky and the soil is shallow. The San Luis Rey River passes through the center of the Reservation in an east to west direction. The river enters and leaves the Reservation in a somewhat restricted channel between steep mountain slopes, but opens out into a small valley within the Reservation where the Pala Mission and Pala townsite are located. The elevation of the townsite is approximately 400 feet above mean sea level (AMSL), while surrounding mountain peaks within the Reservation rise to about 2,100 feet AMSL. To the northeast of the Pala townsite, alluvial fans slope southerly from the mountains to the river channel. The topography of the project site, however, is relatively flat. Elevation of the subject property ranges from 375 feet AMSL at the eastern boundary to approximately 360 feet AMSL at the western boundary. The dry lakebed of Pala Lake, visible from the outdoor patio along the south side of the casino, was formed in this area as a result of previous mining operations.

The project site is located in the Peninsular Range Geomorphic Province of southern California. Artificial fill and recent Holocene alluvium underlie the entire site. Mid-Cretaceous age plutonic rocks of the Southern California Batholith underlie the surrounding area, but are not exposed at the site itself. The project site is located in a seismically active region of southern California. No on-site landslides, faults, or shear zones were observed during the field study for development of the casino and no previously mapped on-site landslides or faults were found by a literature search. The site is not located within the limits of an Alquist-Priolo Special Study Zone. The nearest fault zones include the Elsinore Fault Zone, located approximately 4.0 miles northeast of the property, the San Jacinto Fault Zone, located approximately 26 miles northeast, and the San Andreas Fault Zone, located approximately 55 miles northeast.

The site is located in a Liquefaction Hazard Area as designated by the County of San Diego Geologic Hazard Maps, shown on the Seismic-Geologic Map for the Murrieta-Rancho California Area, Sheet No. 147, revised in November 1987. The site is within the boundary of an area in which the groundwater is shallower than 10 feet and thick alluvium and soft sediments are present. The potential for liquefaction of the site is considered to be moderate-to-high due to on-site soil and water table characteristics (Soil Tech, Inc. 1995). In order to mitigate the potential for liquefaction, the existing hotel and casino were built on pilings bored into bedrock.

Land uses in the area are primarily characterized by low-density residential development, dairying and a variety of crop and orchard agriculture operations, sand mining, and undeveloped open space. The main part of the Pala townsite is located on the north side of SR-76 and is centered about one-half mile east of the project site where the Pala-Temecula Road (S-16) heads north to Temecula. The townsite includes the Tribal offices and the historic Mission San Antonio de Pala, founded in 1816. The townsite also has the Pala Fire Station, Pala Store and Post Office, Cupa Cultural Center, Boys and Girls Club, and Mission School. Numerous residences are concentrated in the townsite area and others extend out west, east, and south. Truck crops are grown on the San Luis Rey River valley floor south of SR-76.

The existing Pala Casino, Spa, and Hotel are located on the south side of SR-76, between the highway and the San Luis Rey River. It is within the footprint of the existing buildings, parking structures, parking lots, and landscaped areas that the expansion project is proposed. A residence is located to the west of the project site on an irregularly shaped, four-acre parcel of allotted land. To the south, the former Pala Lake was created as a result of sand extraction activities that lasted until casino construction began in 2000. Pala Lake was drained naturally when the San Luis Rey River channel shifted during winter storms several years ago and subsequently refilled with sand, and now exists as a dry lakebed. To the east, Caltrans's right-of-way containing Pala Creek enables that agency to keep the creek clear of sediment and debris where it flows under SR-76 and downstream towards its confluence with the San Luis Rey River. A few scattered Tribal residences are located on the north side of SR-76, and the intersection of Pala Mission Road with SR-76 is located immediately opposite from the project site.

Land west of the proposed site and surrounding the Pala Reservation is located within the Pala/Pauma Subregion Area of the County of San Diego General Plan. The area is rural, consisting of scattered undeveloped open space; scattered single family residences; citrus and avocado orchards, field crops, pastures, dairies, horse ranches, and other agricultural operations. The Gregory Canyon Landfill and Recycling Collection Center is proposed for construction and operation in Gregory Canyon, located approximately two miles southwest of the project site on the south side of the San Luis Rey River and on the west side of Gregory Mountain.

Wetlands and riparian habitat along the San Luis Rey River, south and west of the project site, are sensitive lands and are within a designated Resource Conservation Area in the Pala-Pauma Community Plan of the County of San Diego. The Land Use Element of the County General Plan designates lands surrounding the Pala Reservation as Multiple Rural Use, Intensive Agriculture, Agricultural Preserve, Public/Semi-Public, and Impact Sensitive.

## **1.5 Regulatory Requirements and Approvals**

The Tribe has sole land use authority over the Pala Reservation. However, in conformance with the Tribal-State Gaming Compact signed between the Tribe and the Governor of California, the Tribe is committed to working with the County of San Diego to identify and mitigate off-Reservation impacts associated with on-Reservation projects relating to the Pala Casino, Spa, and Hotel. Specifically, Section 10.8.1 of the Compact requires that “Before the commencement of the Project as defined in Section 10.8.7 herein, the Tribe shall cause to be prepared a tribal environmental impact report, which is hereinafter referred to as a TEIR, analyzing the potentially significant off-reservation environmental impacts of the Project pursuant to the process set forth in this Section 10.8.”

The expansion of the Pala Casino and Spa is proposed for construction and operation on Tribal trust land on the Pala Reservation. Because the project site is located on Federal trust land, no San Diego County or State of California land use regulations or permit requirements would be applicable to project development. The only applicable land use regulations on the Reservation are those that are Tribal.

## **2.0 PROJECT DESCRIPTION**

### **2.1 Proposed Project**

The Pala Band of Mission Indians proposes to expand its existing 181,692 square foot casino, spa, and parking facilities. All construction impacts would occur on existing paved parking areas or landscaped areas adjacent to the existing hotel and casino on an approximately 24-acre site near the western edge of the 18-square-mile Pala Reservation. The existing casino site is bounded on the north by SR-76, on the west by the Reservation's western boundary, on the south by the former Pala Lake and the San Luis Rey River flood plain, and on the east by Pala Creek. The generally rectangular site parallels SR-76 for about 1,550 feet in an east-west direction, and extends south of the SR-76 right-of-way about 600 feet. Pala Hotel was constructed at the far eastern end of the project site.

All proposed project components are located on the Pala Reservation. The closest off-Reservation property is located to the south, opposite from Pala Lake, and generally consists of the San Luis Rey River floodplain, which does not contain any residences or roads. To the west along SR-76, the western boundary of the Reservation is located at a distance of about 2,200 feet from the existing hotel site. Off-Reservation property to the northwest and north is located about one-quarter to one-half mile away, and consists of unoccupied mountainous terrain. The nearest off-Reservation property to the east is along SR-76, about one and one-half mile from the existing hotel site. The casino and spa expansion project will be in keeping with the existing attractive facility, utilizing native stone elements, wooden arches, and glass. The key components proposed under the current expansion project are summarized as follows:

#### **Casino Main Level**

The main level of the casino will be expanded by extending the front of the casino approximately 88 feet north, and by extending the west side of the casino approximately 168 feet west. On the north, the existing porte cochere will therefore be reconstructed closer towards SR-76, and on the west the main level of the casino will occupy an existing landscaped area and will abut the parking garage (Figure 4). The expansion will increase the interior square footage of the main level from 181,692 square feet to approximately 250,000 square feet. The expansion will increase the amount of space allocated to gaming from its current size of approximately 72,497 square feet to approximately 123,000 square feet. The expansion of the gaming area will accommodate the relocation of some gaming machines from portions of the casino to the new gaming space, resulting in less congested floor space during periods of high patronage. The Tribe also anticipates increasing the casino's number of slot machines from 2,274 to 2,524, and placing the 250 new slots in the expanded area.

Approximately 8,800 square feet of new lounge, restroom, and service space will be added as well. In addition to the expanded gaming area, the expansion of the main level will accommodate the rearrangement of dining, entertainment, and retail facilities. Many of Pala's existing restaurants including the buffet, Noodles, the Deli, Pala Café, and the Oak Room will be expanded. The Coffee

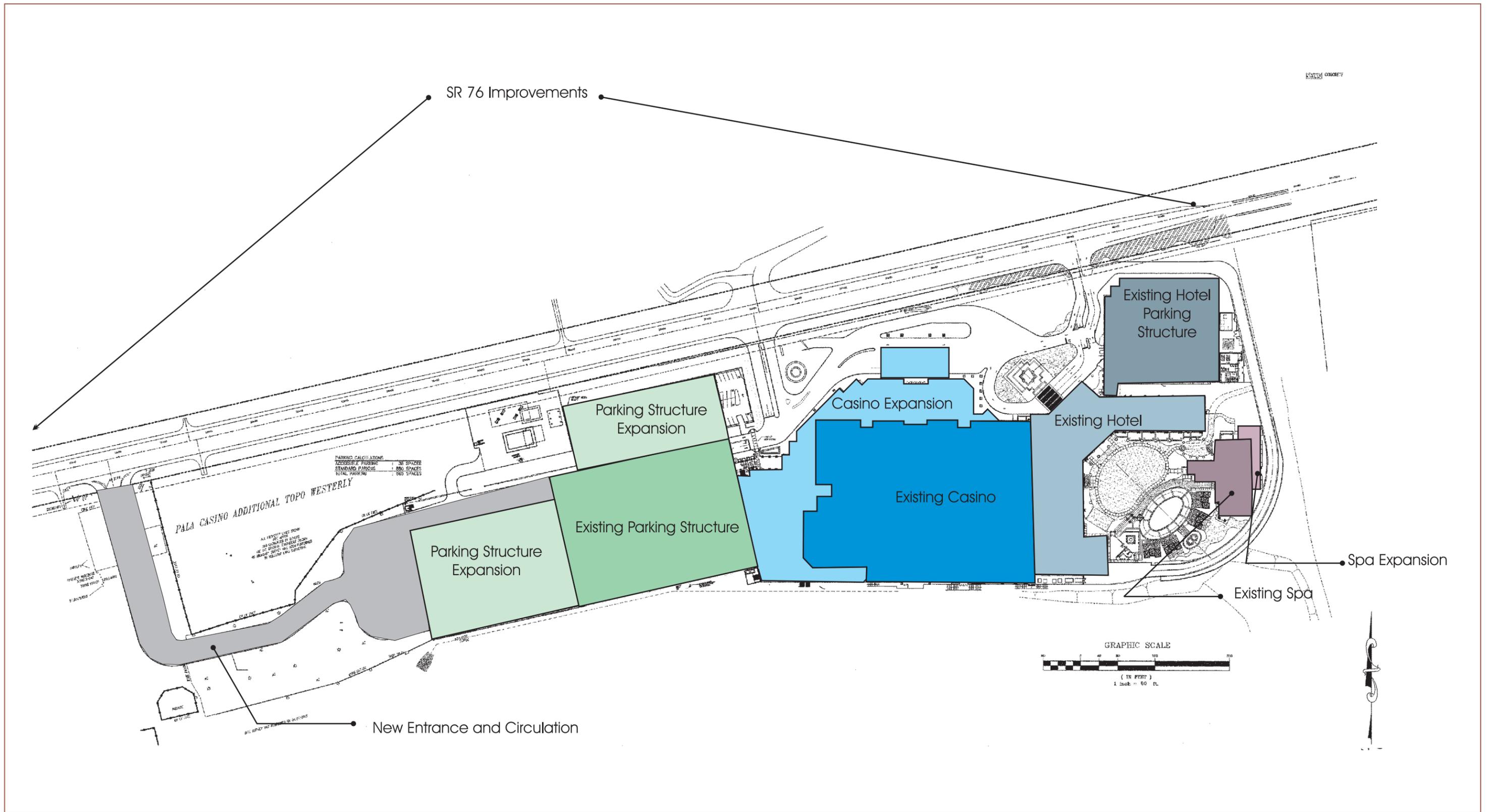


Figure 4  
Proposed Site Plan



outlet will be relocated to a location near the entrance to the hotel lobby, and a new Mexican restaurant will be added. An additional retail outlet will be added near the current gift shop.

## **Hotel and Spa**

The casino expansion will add administrative offices to the south end of the hotel tower. Several existing rooms on the top floor of the hotel will be combined and remodeled into larger rooms and suites. The hotel will also be reconfigured by dividing some of the existing larger rooms into smaller rooms and then combining some smaller rooms into larger “suites” in an effort to provide more of a variety of rooms to patrons. There will not be a substantial net increase or decrease in rooms and possibly no change in room count at all. The spa will also be expanded. There will be 6-7 new treatment rooms added to the spa along with increased locker room spaces, increased lounge spaces and a private outdoor pool area.

## **Parking**

A total of 2,683 parking spaces currently exist at the casino hotel parking structures and the surface valet, staff, and west lots. The proposed expansion project will include the construction of approximately 1,930 additional parking spaces. Most of the new spaces will result from new parking structures which will extend north and west of the existing structure. There will actually be a net increase of approximately 1,372 parking structure spaces. This is due to the fact that much of the new parking structure will be constructed on existing surface lots, resulting in a net loss of 558 surface spaces. A new sub-grade valet parking lot will have 227 spaces. No changes to the existing 545-space hotel parking structure will occur.

## **Administrative Space**

The existing administrative offices are located sub-grade below the main level of the casino, and the existing receiving dock is located at grade level at the southeast corner of the casino. Approximately 30,000 square feet of additional administrative space will be added sub-grade to the east and west ends of the existing administrative area. Approximately 20,000 square feet of additional administration/storage space will be added west of the existing administrative space and approximately another 10,000 square feet of administration/storage space will be added on two levels to the east of the current administrative space.

## **SR-76 Road Improvements**

Under the Proposed Project, the Tribe is considering road improvements to SR-76 at the western end of the project site. Specifically, the construction of a new signalized intersection is proposed at the location of an existing unimproved intersection on the south side of SR-76 located between the western boundary of the Reservation and the private residence of a tribal member. A signalized intersection at this location will require the widening of the SR-76 roadway to include dedicated turn and acceleration lanes. Although the proposed expansion project will function adequately with the site’s existing access with SR-76, a signalized intersection at the western end of the project site will further facilitate access to the expanded parking structure. The signalized intersection will improve traffic safety entering and leaving the project site and will facilitate access to the expanded parking

structure. Improvements within the SR-76 right-of-way will require an Encroachment Permit from Caltrans. Environmental review under the California Environmental Quality Act (CEQA) will be required by Caltrans prior to issuing an Encroachment Permit. The Tribe will be cooperating with Caltrans to develop appropriate improvement plans that will not result in significant environmental impacts.

## 2.2 Project Alternatives

The goal of the proposed project is to expand the existing gaming facility in a manner that provides improved accommodations for patrons, that improves the long-term socioeconomic condition of the Tribe through the provision of increased revenue and the generation of employment opportunities for Tribal members, and provides additional employment opportunities for non-Tribal members and the purchase of goods and services within northern San Diego County. Therefore, in the decision-making process by the Tribe for the proposed casino and spa expansion project, no effort was made to consider alternative economic endeavors or the development of alternative site locations.

In its decision-making process, which began in early 2005, the Tribe was also determined to minimize the environmental impacts of the expansion project, both on and off the Reservation. For example, although the expansion would have been facilitated by extending certain facilities to the south in the direction of former Pala Lake, the Tribe decided that use of the area south of the existing facility would not be in the best interest of the existing environmental setting.

Given that the proposed project is to expand gaming and gaming-related activities and to minimize environmental impacts, the project alternatives are essentially limited to onsite options. Over a nearly two-year decision making period, these options have included adding a second hotel tower, adding a detached second casino building with a corridor of retail space attaching the two separate casinos, adding a second swimming pool and spa area, and several parking configurations. These options were rejected for various reasons related to maximizing onsite land use and minimizing environmental impacts. The Proposed Project as described above represents the most appropriate level of expansion for the Pala Casino Spa Resort.

As discussed above, the Tribe has considered the following project alternatives:

**No Project Alternative** - The No Project Alternative consists of the continued operation of the existing Pala Casino, Spa, and Hotel without expansion of any of the existing facilities or uses. This alternative has been rejected by the Tribe because it does not meet the project objective of increasing economic opportunity on the Reservation by meeting a high demand for entertainment and accommodations.

**Southerly Expansion Alternative** - The Southerly Expansion Alternative consists of the expansion of the casino and spa to the south, towards the San Luis Rey River. This alternative has been rejected by the Tribe due to the need to encroach upon the flood plain of the San Luis Rey River and associated sensitive biological resources, including the federally endangered southwestern arroyo toad and least Bell's vireo.

**Second Hotel Tower Alternative** - The Second Hotel Tower Alternative consists of the construction of a second hotel tower to the west of the existing parking structure, within an existing parking lot. This alternative would include the expansion of the parking structure to compensate for the lost surface parking spaces and to accommodate the additional parking demand from the second hotel tower. This alternative was rejected by the Tribe because the location would not be as convenient for guests as the existing hotel. In addition, operations and maintenance costs would be higher for a second standalone hotel tower.

**Second Casino Alternative** - The Second Casino Alternative consists of the construction of a second casino in a parking lot to the west of the existing casino and parking structure. The new casino would be connected to the existing casino with a retail corridor. This alternative would require the expansion of the existing parking facility in order to compensate for lost surface parking spaces and to accommodate the additional parking demand from the second casino. This alternative was rejected for the same reasons that the Second Hotel Tower Alternative was rejected; guest convenience would suffer and the cost of operation and maintenance would be increased. Ultimately, the Tribe determined that the proposed project, which concentrates all expansion activity at the existing hotel and casino site, would be most efficient and is therefore the Environmentally Superior Project Alternative.

## 3.0 ENVIRONMENTAL ANALYSIS

### 3.1 Aesthetics

#### Existing Conditions

The project site consists of a developed gaming casino and entertainment facility and associated parking and other improvements located on a relatively flat terrace situated between the San Luis Rey River and SR-76. The project site is located at an elevation of about ten feet below the elevation of the road.

Generally, the SR-76 view eastward from I-15 to the site shows a mixture of agricultural (crops and former dairy operations), sand mining, and residential views, intermixed with undeveloped open spaces with native vegetation. The site is situated at the western outskirts of the Pala townsite, the center of which is about one mile to the east. East of the Pala townsite for several miles is a mixture of crop agriculture, sand and gravel operations, and considerable undeveloped open space located primarily on hillsides. A gas station, which is operated by the Tribe, is located on the south side of the road northwest corner of the casino. On the north side of the road, two residences are visible west of the intersection with Pala Mission Road, and a few mobile homes are partly visible east of the intersection with Pala Mission Road.

Off-Reservation approaches toward the project site, from both the west and the east on SR-76, do not readily reveal the existing casino development on the south side of the road. Traveling from the west, off-Reservation views of the casino and hotel facility are not apparent until approaching the Reservation's western boundary and the project site. At the Reservation boundary some surface parking to the south is visible. However, views of the casino and parking structure from the western Reservation boundary are faint due to intervening vegetation, distance, a single-family residence, a gas station and mini-mart, and several signs. It is only after passing the single family residence that eastbound travelers on SR-76 have a good view of the existing casino, hotel, and parking structure (Figure 5).

Traveling from the east, upper portions of the hotel are visible for about two miles within the Reservation, and no views exist of the casino. Approaching the facility from the east, little of the facility except the hotel is visible due to stands of mature trees on the south side of SR-76 (Figure 6). Overall, the existence of dense vegetation along much of the east side of the project site, in combination with the site's relatively flat terrain and lower elevation in comparison with the road, results in limited views of the project site to westbound travelers along SR-76.

The facility's attractive construction is most apparent when traveling immediately in front of the casino and hotel (Figures 7 and 8), although glimpses of the facility are increasingly limited due to the maturing of numerous trees planted along the south side of SR-76 and elsewhere on the project site. The Tribe regularly receives compliments on the attractiveness of its casino and hotel complex from casino patrons and others.



Figure 5  
Existing Facility Viewed from the West on SR-76



Figure 6  
Existing Facility Viewed from the East on SR-76



Figure 7  
Southeast View of Casino, Porte Cochere, and Hotel from the East SR-76



Figure 8  
Southwest View of Porte Cochere from SR-76

Towards the south, and specifically, immediately south of the former Pala Lake, is land outside the Reservation boundaries. The property is undeveloped, there are no roads or usable open space in the area and little or no pedestrian use of this area. Although the casino and hotel are highly visible from this perspective, there are no receptors that are affected. There are no significant off-Reservation views of the project site that would be impacted by the proposed project.

North of the casino and hotel, portions of the facility are visible from a few tribal residences. Due to distance, rugged terrain, and the lack of off-Reservation receptors to the north, significant off-Reservation views of the facility are not apparent.

### **Significance Thresholds**

The proposed project would result in a significant impact to aesthetics/visual resources if it would:

- Have a substantial adverse effect on an off-Reservation scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rocks, outcroppings, and historic buildings within a state scenic highway;
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

### **Impacts**

*Would the proposed project have a substantial adverse effect on an off-Reservation scenic vista?*

In the effort to evaluate off-Reservation aesthetic impacts of the proposed expansion project, photographic simulations of the project site from off-Reservation locations along SR-76 were attempted. However, since off-Reservation views of the existing facility are highly limited, initial photographic simulations indicated that the proposed construction will essentially not be discernible from off-Reservation locations.

In order to demonstrate views of the proposed expansion project, photographic simulations were made from nearby on-Reservation locations. For eastbound travelers on SR-76, the simulated view of the expanded facility is illustrated in Figure 9. This photographic simulation largely shows the new parking structure as it will be expanded to the west and north. The casino is not visible at all, and the view of the hotel disappears briefly. Much of the background mountainous terrain is also not visible from this location, but for eastbound travelers on SR-76 the lack of this view would only last for seconds.

For westbound travelers on SR-76, there will be minimal change in visual conditions. This is because little of the facility is visible due to intervening vegetation. On the Reservation, the only views of the expanded facility to westbound travelers will occur when actually passing the facility, and those views will be limited due to intervening vegetation. Views from off-Reservation areas will not be possible.

There are no significant off-Reservation views of the project site that will be impacted by the proposed expansion project. The project would therefore not have an adverse effect on a scenic vista.



a. Existing Facility



b. Proposed Expansion

Figure 9  
Photo Simulation of the Expanded Facility as Viewed from the West on SR-76

*Would the proposed project substantially damage off-Reservation scenic resources, including, but not limited to, trees, rocks, outcroppings, and historic buildings within a state scenic highway?*

SR-76 is not a state-designated scenic highway, but is designated as a third priority scenic highway east of I-15 in the Scenic Highway Element of the County General Plan. Construction of the existing hotel has changed the character of the local SR-76 roadside area by adding a high-rise element. The proposed additions to the casino, spa, and parking facilities would not be adverse because the existing roadside uses are now mixed, and views of the expanded facility would not be substantially different than views of the existing facility. While aesthetics are highly subjective, the appearance of the existing Pala Casino receives many positive comments from guests. In addition, the County's designation of SR-76 as a third priority scenic highway east of I-15 does not apply to the Pala Indian Reservation, since tribal trust land is not under the County's jurisdiction. In any case, expansion of the existing facility would not degrade the overall visual quality of SR-76 as a scenic highway, especially in off-Reservation areas where the proposed expansion would not be readily visible. The proposed project would not result in the removal of rocks, rock outcrops, or historic buildings. All trees to be removed were planted on the Reservation by the Tribe as landscaping for the existing casino and would be

*Would the proposed project create a new source of substantial light or glare which would adversely affect day or nighttime off-Reservation views in the area?*

Astronomical dark skies is an important issue in San Diego County due to the presence of the Mount Palomar Observatory, located on Mt. Palomar, approximately 12 miles east of the project site. The observatory is operated by the California Institute of Technology (Caltech), and supports the scientific research programs of Caltech's faculty and students as well as those of astronomers from other institutions. The principal instrument for this research is the 200-inch Hale telescope, which is currently one of the most productive telescopes in the world. "Background light" is considered a form of contamination as it is not related to the object being studied and as it takes a great deal of effort to separate it from the desired light. The specialty of the 200-inch Hale telescope is looking at very faint objects very deep into space. Therefore, it is extremely sensitive to background light. One source of background light is controllable and has been increasing over the years. This is the light from man-made outdoor lights that shine, or reflect, into the sky, illuminating the dust and water vapor in the atmosphere, reflecting light back toward the ground.

The proposed architecture matches that of the existing casino. There would not be extensive use of glass, mirrors, or other reflective surfaces that could affect daytime views.

The existing casino and spa are well lit to improve parking lot, traffic circulation, security, and pedestrian safety. A minimal increase in exterior lighting would be necessary for the proposed project. All outdoor lighting for the proposed project would completely comply with the Dark Skies Ordinance for the Palomar Observatory. The intensity of the lights, as well as the number would be kept to a minimum, and yet be adequate for public safety and security and no adverse effects to dark skies is anticipated. The potential for light and glare to affect daytime or nighttime off-Reservation views would not be significant.

### **Mitigation Measures**

The proposed project would not result in significant visual impacts. Therefore, no mitigation measures are necessary for visual impacts.

### **Conclusions**

The proposed casino and spa expansion would not result in a substantial visual change from the current Pala Casino Spa Resort. Views from off-Reservation locations would not be adversely affected. No mitigation measures would be required.

## 3.2 Air Quality

### Existing Conditions

#### Climate and Meteorology

The project is located in the San Diego Air Basin. The boundaries of the air basin are coincident with those of the county. The climate of San Diego County is profoundly influenced by the Pacific Ocean and its semi-permanent high pressure systems that result in dry, warm summers and mild, occasionally wet winters. One of the main determinants of the climatology is a semipermanent high-pressure area (the Pacific High) in the eastern Pacific Ocean. In the summer, this pressure center is located well to the north, causing storm tracks to be directed north of California. This high-pressure cell maintains clear skies for much of the year. When the Pacific High moves southward during the winter, this pattern changes, and low-pressure storms are brought into the region, causing widespread precipitation. In San Diego County, the months of heaviest precipitation are November through April, averaging about 9-14 inches annually. The mean temperature is 62.2 degrees Fahrenheit (°F), and the mean maximum and minimum temperatures are 75.7 °F and 48.5 °F, respectively.

Two climatic phenomena contribute to air pollution problems in San Diego County. Subsidence inversions occur in the summer and the base of the inversion, at elevations between 1,000 and 3,000 feet, forms a "lid" to trap pollutants, which have been generated in the coastal plain and blown inland by the onshore winds. Thus, the highest pollution levels are often found in the western mountain slope communities, such as Alpine, Ramona and Descanso. The project site is located west of the mountain slope communities, and does not experience the higher pollution levels associated with inversion conditions.

The normal wind pattern is moderate to strong onshore winds during the day and weak offshore winds at night. The Santa Ana wind condition is a reversal of the normal winds, and offshore winds blow pollutants out to the ocean. A strong Santa Ana will produce clear days. However, a weak Santa Ana, and conditions at the start and end of a Santa Ana wind period, will transport air pollutants from Los Angeles and Orange Counties out to sea and southward, then back to shore in San Diego County. This phenomena will produce higher pollutant concentrations in the coastal communities.

#### Regulatory Standards

The Federal Clean Air Act (42 U.S.C. §7401) requires the adoption of National Ambient Air Quality Standards (NAAQS) to protect the public health, safety, and welfare from known or anticipated effects of air pollution. The NAAQS have been updated occasionally. Current standards are set for sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter equal to or less than 10 microns in size (PM<sub>10</sub>), fine particulate matter equal to or less than 2.5 microns in size (PM<sub>2.5</sub>), and lead (Pb). These pollutants are called criteria pollutants. The State of California Air Resources Board (CARB) has established additional standards, which are generally more restrictive than the NAAQS. Federal and state standards are shown in Table 1.

**Table 1. National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	NAAQS <sup>1</sup>		CAAQS <sup>2</sup>
		Primary <sup>3</sup>	Secondary <sup>4</sup>	Concentration <sup>5</sup>
Ozone (O <sub>3</sub> ) <sup>6</sup>	1 Hour	0.12 ppm (235 µg/m <sup>3</sup> )	Same as Primary Standard	0.09 ppm (180 µg/m <sup>3</sup> )
	8 Hour	0.08 ppm		-
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 µg/m <sup>3</sup> )	None	9.0 ppm (10 µg/m <sup>3</sup> )
	1 Hour	35 ppm (40 µg/m <sup>3</sup> )		20 ppm (23 µg/m <sup>3</sup> )
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Average	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	-
	1 Hour	-		0.25 ppm (470 µg/m <sup>3</sup> )
Sulfur Dioxide (SO <sub>2</sub> )	Annual Average	80 µg/m <sup>3</sup> (0.03 ppm)	-	-
	24 Hour	365 µg/m <sup>3</sup> (0.14 ppm)	-	0.04 ppm (105 µg/m <sup>3</sup> )
	3 Hour	-	1300 µg/m <sup>3</sup> (0.5 ppm)	-
	1 Hour	-	Same as Primary Standard	0.25 ppm (655 µg/m <sup>3</sup> )
Annual Geometric Mean	-	30 µg/m <sup>3</sup>		
Suspended Particulate Matter (PM <sub>10</sub> )	24 Hour	150 µg/m <sup>3</sup>	-	50 µg/m <sup>3</sup>
	Annual Arithmetic Mean	50 µg/m <sup>3</sup>		-
	24 Hour	65 µg/m <sup>3</sup>		-
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>6</sup>	Annual Arithmetic Mean	15 µg/m <sup>3</sup>	Same as Primary Standard	-
	24 Hour	65 µg/m <sup>3</sup>		-
Lead (Pb)	30 Day Average	-	-	1.5 µg/m <sup>3</sup>
	Calendar Quarter	1.5 µg/m <sup>3</sup>	Same as Primary Standard	-
Hydrogen Sulfide (HS)	1 Hour	No Federal Standards		0.03 ppm (42 µg/m <sup>3</sup> )
Sulfates (SO <sub>4</sub> )	24 Hour			25 µg/m <sup>3</sup>
Visibility Reducing Particles	8 Hour (10 am-6 pm, Pacific Standard Time)			In sufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70 percent.

µg/m<sup>3</sup> - micrograms per cubic meter; ppm - parts per million

Source: ARB 1999

1. National Ambient Air Quality Standards (other than O<sub>3</sub>, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The Ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the U.S. Environmental Protection Agency (EPA) for further clarification and current federal policies.

2. California Ambient Air Quality Standards for O<sub>3</sub>, CO (except Lake Tahoe), SO<sub>2</sub> (1 and 24 hours), NO<sub>2</sub>, PM<sub>10</sub>, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded.

3. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

4. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

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

6. New federal 8-hour ozone and fine particulate matter standards were promulgated by EPA on July 18, 1997. The federal 1-hour O<sub>3</sub> standard continues to apply in areas that violated the standard. Contact EPA for further clarification and current federal policies.

## Existing Air Quality

Specific geographic areas are classified as either “attainment” or “nonattainment” areas for each pollutant based on the comparison of measured data with federal and state standards. If an area is redesignated from nonattainment to attainment, the Clean Air Act (CAA) requires a revision to the State Implementation Plan (SIP), called a maintenance plan, to demonstrate how the air quality standard will be maintained for at least 10 years.

The SDAB currently meets the federal standards for all criteria pollutants except O<sub>3</sub> and meets state standards for all criteria pollutants except O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. On April 15, 2004, the USEPA issued the initial designations for the 8-hour O<sub>3</sub> standard, and the SDAB was classified as “basic” nonattainment. Basic is the least severe of the six degrees of O<sub>3</sub> nonattainment. The SDAPCD must submit an air quality plan to the USEPA in 2007; the plan must demonstrate how the 8-hour O<sub>3</sub> standard will be obtained by 2009 (SDAPCD 2004). The SDAB is currently classified as a state “serious” O<sub>3</sub> nonattainment area and a state nonattainment area for PM<sub>2.5</sub> and PM<sub>10</sub>. The SDAB currently falls under a federal “maintenance plan” for CO, following a 1998 redesignation as a CO attainment area.

Ambient air pollutant concentrations in the SDAB are measured at 10 air quality monitoring stations operated by the SDAPCD. The closest SDAPCD air quality monitoring station in the SDAB is the Escondido - East Valley Parkway monitoring station, located at 600 East Valley Parkway, Escondido, approximately 18 miles south of the Pala casino. The station monitors O<sub>3</sub>, CO, PM<sub>10</sub>, PM<sub>2.5</sub>, and NO<sub>2</sub>. No other monitoring stations are located near enough to the project area to be used to characterize other criteria pollutants. Table 3 summarizes the excesses of standards and the highest pollutant levels recorded at this station for the years 2001 through 2005.

## Local Sources of Pollutants

Local pollutant sources include particulates from vehicle travel on unpaved roads and the exhaust from vehicles traveling along SR-76 and local roads. Minor pollutant sources include exhaust from maintenance vehicles, such as gasoline engines that are used for mowing grass and other maintenance activities.

## Significance Thresholds

The proposed casino, spa, and associated improvements would result in significant impacts to air quality if they would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality

**Table 2. Ambient Air Quality Summary, Escondido-East Valley Parkway Monitoring Station**

Pollutant	Averaging Time	California Air Quality Standards	Federal Primary Standards	Maximum Concentrations <sup>(1)</sup>					Number of Days Exceeding Federal Standard <sup>(2)</sup>					Number of Days Exceeding State Standard <sup>(2)</sup>				
				2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Ozone	1 hour	0.09 ppm	0.12 ppm <sup>(3)</sup>	0.141	0.100	0.105	0.099	0.095	1	0	0	0	0	4	2	3	2	1
	8 hour	0.070 ppm <sup>(4)</sup>	0.08 ppm	0.093	0.081	0.083	0.086	0.079	1	0	0	2	0	NA	NA	NA	NA	NA
Carbon Monoxide	1 hour	20 ppm	35 ppm	8.5	8.5	12.7 <sup>(5)</sup>	5.3	5.9	0	0	0	0	0	0	0	0	0	0
	8 hours	9 ppm	9 ppm	5.11	3.85	10.6 <sup>(5)</sup>	3.61	3.10	0	0	1	0	0	0	0	1	0	0
Nitrogen Dioxide	1 hour	0.25 ppm	None	0.088	0.084	0.135	0.080	0.076	NA	NA	NA	NA	NA	0	0	0	0	0
	Annual	none	0.053 ppm	0.020	0.021	0.020	0.018	0.017	0	0	0	0	0	NA	NA	NA	NA	NA
PM <sub>10</sub> <sup>(7)</sup>	24 hours	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	74	51	179 <sup>(6)</sup>	57	42	0	0	3.3	0	0	12.6	0	30.7	6.1	0
	Annual	none	50 µg/m <sup>3</sup>	31.2	27.1	31.6	27.5	23.9	0	0	0	0	0	NA	NA	NA	NA	NA
	Annual	30 µg/m <sup>3</sup>	None	29.1	25.1	32.7	27.3	23.9	NA	NA	NA	NA	NA	1	1	1	1	1
PM <sub>2.5</sub>	24 hours	none	65 µg/m <sup>3</sup>	60.0	53.6	69.2 <sup>(8)</sup>	67.3	43.1	0	0	1	1	0	NA	NA	NA	NA	NA
	Annual	12 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>	17.5	16.0	14.2	14.1	-	1	1	1	1	-	-	-	1	1	-

“-” = data not available

“NA” = not applicable.

<sup>(1)</sup> Concentration units for O<sub>3</sub>, CO, and NO<sub>2</sub> are in parts per million (ppm). Concentration units for PM<sub>10</sub> are in micrograms per cubic meter (µg/m<sup>3</sup>).

<sup>(2)</sup> For annual standards, a value of 1 indicates that the standard has been exceeded.

<sup>(3)</sup> The federal 1-hour O<sub>3</sub> standard was revoked for most areas of the United States, including all of California on June 15, 2005.

<sup>(4)</sup> Effective May 17, 2006

<sup>(5)</sup> Due to wildfires throughout San Diego County, CO levels in 2003 were abnormally high. Maximum CO 1-hour and 8-hour concentrations without the wildfire days included were 8.9 ppm and 3.9 ppm, respectively.

<sup>(6)</sup> Due to wildfires throughout San Diego County, PM<sub>10</sub> levels in 2003 were abnormally high. The maximum PM<sub>10</sub> concentration without the wildfire included was 58 µg/m<sup>3</sup>.

<sup>(7)</sup> PM<sub>10</sub> data are recorded separately for federal and state purposes because the USEPA and California methods are slightly different. PM<sub>10</sub> is measured every 6 days; the number of days exceeding standards is projected to a 365-day base from the measurements..

<sup>(8)</sup> Due to wildfires throughout San Diego County, PM<sub>2.5</sub> levels in 2003 were abnormally high. The maximum PM<sub>2.5</sub> concentration without the wildfire included was 38 µg/m<sup>3</sup>.

Source: CARB 2006; SDAPCD 2006.

standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Create objectionable odors affecting a substantial number of people.

The impact assessment relies, in part, on specific numerical thresholds for individual air pollutant emissions. The SDAPCD has no quantitative emissions significance criteria for development projects. Therefore, the thresholds used for assessment of conformity of federal projects to the state air quality plans are used for guidance, and are shown in Table 3.

**Table 3. Threshold Limits for Criteria Pollutants**

<b>Pollutant</b>	<b>Emissions (tons/year)</b>
CO	100
NO <sub>x</sub>	100
VOC	100
PM <sub>10</sub>	100
PM <sub>2.5</sub>	100

Source: EPA 2006

This analysis does not evaluate PM<sub>2.5</sub> because uniform methods of emissions calculations have been established. This evaluation does not address SO<sub>2</sub>, Pb, HS, or vinyl chloride. Although these pollutants are regulated by the federal or state government, little to no emissions of these substances would be generated during construction or subsequent operations.

### **Impact Analysis**

*Would the proposed project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Air quality impacts associated with the proposed project are related to emissions from short-term construction and long-term operations; the latter would primarily be traffic generated by the additional casino patrons and staff.

Construction may affect air quality as a result of (1) construction equipment emissions; (2) fugitive dust from grading and earthmoving; and (3) emissions from vehicles driven to/from the sites by construction workers. Operations emissions would result primarily from vehicle emissions, with lesser emissions from gas used for space and water heating, cooking, and from small engines used for landscape maintenance. The emissions generated by the proposed project would be well within state and federal air quality standards. This impact would be less than significant.

*Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?*

The SDAPCD must implement a SIP to maintain air quality standards within the SDAB. The SIP anticipates a certain amount of construction and increase in traffic each year within the basin. The SIP also anticipates reduced vehicular emissions as new, cleaner burning vehicles, replace older polluting models. The emissions generated by the expansion of the casino and spa would be well within the anticipated emissions within the basin. Therefore, and as is shown below, the proposed project would not conflict with or obstruct the SIP for the SDAB.

*Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

### **Construction**

Construction emissions have been evaluated by use of the URBEMIS 2002 software package version 8.7. The emission factors and calculation methodologies contained in the URBEMIS 2002 program have been approved for use by the California ARB. URBEMIS is a calculation tool designed to estimate air emissions from land use development projects based on development type and size. The model contains data that is specific for each California air basin.

Data relative to the specific project elements is based on the conceptual design described in Chapter 1 of this TEIR. For purposes of emissions analysis, it was conservatively assumed that construction would begin in July 2007 and be completed in 12 months. Changes in plan layouts or other factors are anticipated to be within the accuracy of the estimating methodology. The estimated construction emissions for the proposed project are shown in Table 4. URBEMIS data sheets for the emissions calculations are included in Appendix Z to this document. The anticipated construction emissions would be less than 7 percent of the guidance thresholds, and the impact would be less than significant.

**Table 4. Construction Emissions for the Pala Casino Improvements**

	Pollutant (tons/year)			
	VOC	NO <sub>x</sub>	CO	PM <sub>10</sub>
Grading — 1.3 months	0.11	0.70	0.83	0.08
Facilities Construction — 10.7 months	2.49	5.23	5.97	0.22
Total Construction Emissions	2.60	5.93	6.80	0.30
<b>Guidance Thresholds</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Exceed Threshold?	No	No	No	No

Totals may not add due to rounding.

### **Operations**

Operations emissions principally are generated by mobile sources, that is, vehicle operations associated with the expanded casino and spa. Operations emissions also come from area sources, including natural gas for space and water heating, gasoline powered landscaping and maintenance

equipment, and consumer products such as household cleaners. Operations emissions were estimated using URBEMIS 2002. Operations would begin in 2008, following the completion of construction. For a conservative analysis, 2008 emission factors were used for the whole year, even though the second half of the first year of operations would occur in 2009, when emissions factors will be less. It is estimated that 1,113 new daily vehicle trips would occur; the generation of vehicle trips is discussed in the Section 4.1. The estimated annual operations emissions for the first year of the proposed project are shown in Table 5. Emissions in subsequent years would be less because of the continuing improvement in overall vehicle emissions and the removal of older vehicles from use. The operations emissions for the first year of operations would be less than 25 percent of the guidance thresholds, and the impact would be less than significant.

**Table 5. Operations Emissions for the Pala Casino Improvements**

	Pollutant (tons/year)			
	VOC	NO <sub>x</sub>	CO	PM <sub>10</sub>
Area Sources	0.21	0.24	0.33	0.0
Mobile Sources	1.81	2.59	21.91	2.33
Total Operations Emissions	2.02	2.83	22.24	2.34
<b>Guidance Thresholds</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Exceed Threshold?	No	No	No	No

Totals may not add due to rounding.

### ***Local Emissions***

In addition to the regional impact of vehicle emissions, it is necessary to consider the potential for local CO “hot spots” at locations where traffic is congested. Procedures and guidelines, for use by agencies that sponsor transportation projects, to evaluate the potential local level CO impacts of a project are contained in *Transportation Project-Level Carbon Monoxide Protocol* (the Protocol) (UCDITS 1997). The Protocol provides a methodology for determining the level of analysis, if any, required on a project. The guidelines comply with the Clean Air Act, federal and state conformity rules, NEPA, and CEQA. Although the Proposed Action is not a transportation project, it would result in an increase in vehicle trips on local roadways and intersections. Therefore, the use of this protocol is useful for determining potential local level CO impacts.

The SDAB was redesignated as a CO attainment area subsequent to the passage of the 1990 Clean Air Act amendments. Continued attainment has been verified with the SDAPCD. Therefore, in accordance with the Protocol, only projects that are likely to worsen air quality necessitate further analysis. According to the Protocol, projects may worsen air quality if they significantly increase the percentage of vehicles in cold start modes (i.e., the starting of a vehicle after at least 1 hour of nonoperation), defined as an increase in the number of vehicles operating in a cold start mode of 2 percent or more; those that significantly increase traffic volumes, defined as an increase of 5 percent over existing volumes; and those that worsen traffic flow, defined for intersections, as increasing average delay at signalized intersections operating at LOS E or F.

The proposed casino and spa expansion would increase traffic at the nearest signalized intersection, SR-76/I-15 NB ramps, by 1.8 percent. Increases at the other signalized intersections would be less. Therefore the project would not exceed either the traffic volume or cold start thresholds of the protocol. The project traffic analysis, discussed in Section 3.6 of this TEIR, indicates that project traffic would increase average delay at some signalized intersections operating at LOS F. Therefore, further analysis is required.

To simplify analysis and avoid or minimize dispersion modeling, various air quality agencies in California have developed conservative screening methods for project analysis. For this TEIR analysis of casino and spa local CO impacts, the methods of the Sacramento Metropolitan Air Quality Management District are used (SMAQMD 2004).<sup>1</sup>

For the future (year 2030) analysis, the traffic from the proposed project would increase the delay at three signalized intersections: SR-76/I-15 NB ramps, SR-76/I-15 SB ramps, and SR-76/Old Highway 395. In 2030, all three intersection would operate at LOS F without the project traffic. A screening analysis for potential CO impacts is shown in Table 6. The screening is independent of the intersection and is based on the background concentration of CO and a conservative estimate of project-related CO as a function of peak hour trip generation. As shown in the table, the anticipated 1-hour and 8-hour CO concentrations would be less than the national and state standards, and the impact would be less than significant.

**Table 6. CO Screening for 2030**

	<b>2030</b>
Background 1-hour concentration, ppm <sup>1</sup>	5
Project-related 1-hour concentration, ppm <sup>2</sup>	0.4
Anticipated total 1-hour concentration, ppm	5.4
National Ambient Air Quality Standard, ppm	35
California Ambient Air Quality Standard, ppm	20
Exceed standard?	No
Anticipated total 8-hour concentration, ppm <sup>3</sup>	3.8
National and California Ambient Air Quality Standards, ppm	9.0
Exceed standard?	No

<sup>1</sup> Based on review of area data for 2004-2005. CO background in 2030 is anticipated to be considerably less than in 2005; conservatively, this reduction was not taken.

<sup>2</sup> For 2030, peak hour trip generation = 68 ADT (VRPA 2006); for projects with ≤ 100 ADT, CO contribution = 0.4 ppm (SMAQMD 2004).

<sup>3</sup> Eight-hour concentration assumed to be 0.7 times 1-hour concentration.

*Would the proposed project expose sensitive receptors to substantial pollutant concentrations?*

<sup>1</sup> The APCD has not developed CO screening criteria.

The proposed casino and spa expansion would not be a source of TACs. Additional quantities of operating supplies would be required, but most of these would be included in the existing delivery operations. The casino and spa would not be sensitive receptors for TACs because of the transient nature of their use. There would be no impact from TACs.

*Would the proposed project create objectionable odors affecting a substantial number of people?*

The proposed facilities improvements would not create new sources of odors. With additional casino and spa space, existing sources, such as kitchen exhaust vents, may operate for longer durations. There are no off-site receptors near enough to be potential odor receptors. There would be no impact.

### **Summary of Impacts**

The forecast construction and operations General Conformity emissions for the proposed casino and spa would be less than the impact guidance thresholds. Further, there is no potential for a local CO “hotspot” impact. Air quality impacts would be less than significant.

### **Mitigation/Emission Reduction Measures**

No significant air quality impacts were identified, and no mitigation is necessary.

Although no significant impacts were identified the following emission reduction measures will be implemented:

**Mitigation Measure AQ-1:** Project construction specifications shall include the requirement that commercial electric power would be provided to the site at the start of construction and be used during construction to the maximum extent feasible. Accordingly, the use of diesel or gasoline engine portable generators would be minimized or avoided.

**Mitigation Measure AQ-2:** Project construction specifications shall require common dust control practices, such as watering all active grading areas and storage piles, cessation of grading in high winds, the limiting of vehicle speeds on unpaved roads to 15 miles per hour, and preventing the track out of dirt from unpaved areas to paved roadways.

**Mitigation Measure AQ-3:** During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth-moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site.

**Mitigation Measure AQ-4:** If visible soil material is carried over to adjacent streets and roads, the streets and roads shall be swept at least once per day, preferably at the end of the day.

## **Conclusions**

Air quality impacts would be less than significant. However, the Tribe would implement emissions reduction measures to further reduce potential air quality impacts.

### 3.3 Hydrology/Water Quality

#### Existing Conditions

Surface water resources on the Reservation include approximately 33 miles of intermittent rivers and streams, including the San Luis Rey River, Pala Creek, Trujillo Creek, Magee Creek, Marion Canyon, Agua Tibia Creek, and Frey Creek. Surface flow generally occurs during and shortly after major precipitation events. The San Luis Rey River is the largest of the rivers and streams on the Reservation and once flowed uninterrupted from the mountains to the east to the Pacific Ocean to the west. Today surface flow is intermittent due to diversions into the Escondido Canal and the regulation of the upstream release of water from the Lake Henshaw Dam by the Vista Irrigation District. The San Luis Rey River flows through the Pala Reservation for approximately 3.3 miles. Lake Henshaw has a storage capacity of 53,400 acre feet.

The Pala Tribe has implemented a water quality management program through Section 106 of the federal Clean Water Act since 1997. Assessment reports regarding water quality on the Reservation have been prepared under Section 305(b) of the Act. Based on limited surface water data, the beneficial uses of the San Luis Rey River on the Reservation are supporting but threatened. These uses include Municipal, Agricultural, Industrial Supply, Water Contact Recreation, and Wildlife Habitat. The causes for non-attainment of water quality objectives include total dissolved solids (TDS), ammonia, selenium, fecal coliform, and flow alteration. Sources of water quality degradation include agricultural land uses, resource extraction, modification of hydrology, and potential unknown sources.

The Reservation is located within the San Luis Rey River Basin, which measures approximately 56 miles by 10 miles and covers approximately 560 square miles. The Lower San Luis Rey River (below the Lake Henshaw Dam) has been divided into four groundwater basins, with the Reservation within the Pala Basin. The Pala Basin measures approximately 5 miles by 0.5-2.0 miles and is upstream of the Bonsall Basin and downstream of the Pauma Basin. The Regional Water Quality Control Board has further divided the San Luis Rey River Basin into hydrologic areas. The Reservation is located within the Monserate Hydrologic Area.

Groundwater resources on the Reservation are tapped and monitored using wells and springs. The quality of the groundwater is monitored and evaluated in comparison with its ability to support its beneficial uses. Groundwater production within the Pala Basin is from the unconfined alluvial aquifer that lies beneath the Reservation. Groundwater recharge occurs mainly from the infiltration of the San Luis Rey River and its tributaries. Other sources of recharge include infiltration of imported water, subsurface flow, and direct infiltration of precipitation. The net natural recharge to the Pala Basin has been calculated to be 1,900 acre-feet per year (Stetson 1977).

The watershed in the vicinity of the project includes a mixture of land uses including rural residential, agriculture, and open space. Tributary drainages and creeks are either ephemeral or have minor base flows associated with agricultural or landscape irrigation runoff. There has been significant grading associated with the former sand mining operation along the southern boundary of the site, which created a Pala Lake. Pala Lake was subsequently drained when the San Luis Rey

River channel shifted during winter storms. Drainage improvements in the immediate vicinity of the subject project include a bridge crossing over Pala Creek and several small diameter culverts under SR-76. These culverts convey local off-site runoff originating from north of SR-76 to the site. This runoff combines with onsite runoff and is conveyed to Pala Creek as shallow and sheet flow. The combined runoff ultimately discharges to the San Luis Rey River southwest of the site (Lochsa Engineering 1999).

In accordance with the requirements of the National Flood Insurance Program, Flood Insurance Rate Map (FIRM) #060284 0502 C, dated June 15, 1984, has been published for use in the unincorporated portions of San Diego County. Although the technical reports and information within the FIRM studies encompass and include the subject site and adjoining areas of the Pala Indian Reservation, the jurisdiction of the FIRM panel mapping excludes the Pala Indian Reservation. In addition to the FIRM mapping, the County of San Diego has published a Floodplain Map of the Upper San Luis Rey River, including a portion of the River adjacent to the proposed project.

Benchmarks and flood elevations have been correlated between the overlapping portions of the FIRM and County Floodplain maps, and the resulting floodplain limits, floodway limits, and 100-year floodwater elevations have been computed and transcribed onto the project site plan. According to this work, San Luis Rey River floodwater elevations associated with the 100-year return event range from 360.1 at the western edge of the site to 373.0 at the eastern edge. The expected 100-year peak runoff in the San Luis Rey River adjacent to the site is reported to be 30,000 cubic feet per second (cfs) based on the County of San Diego Flood Insurance Study. The hydrologic analysis of the Pala Creek was performed using peak flow computations based on Soil Conservation Service methods and data outlined in the County of San Diego Hydrology Manual and Design and Procedure Manual. The expected 100-year (6-hour) peak runoff in Pala Creek adjacent to the site was calculated to be 7,982 cfs (Lochsa Engineering 1999).

Storm water runoff and its potential effects on water quality is an environmental issue that has received increasing attention from regulatory agencies in recent years. The National Pollution Discharge Elimination System (NPDES), established pursuant to the provisions of the Clean Water Act, is a national program for regulating and administering permits for all discharges to receiving waters. The EPA is ultimately charged with regulating discharges to surface waters. In California, the EPA has delegated permitting authority to the State Water Quality Control Board, but continues to regulate discharges originating on Indian lands into receiving waters.

Commercial projects, including gaming facilities, do not require the EPA's NPDES General Storm Water Permit in order to operate; however, the permit is required for construction projects encompassing five acres or more, commencing after October 1, 1992, on Indian lands in California must be covered by the EPA's NPDES General Storm Water Permit for Construction Activities. To achieve project authorization under the EPA's General Storm Water Discharge Permit, a Notice of Intent (NOI) must be submitted to the EPA at least two days prior to the commencement of construction. The Notice of Intent must include a Pollution Protection Plan.

## Water

The water system serving the Pala Indian Reservation has developed on an incremental basis over a 70-80 year period. System design and planning has been provided by the Indian Health Services, with operation and maintenance by members of the Pala Tribe of Mission Indians. Domestic water supply on the Reservation is divided into two systems; one for areas south of the San Luis Rey River and one for areas north of the San Luis Rey River. The project site is north of the river. The North Section Pala Public Water System consists of four permanent active wells, one new but inactive well, and one permanent inactive well. Water is distributed via three gravity storage tanks with a total capacity of 1,415,000 gallons to the casino and all other development on the north side of the river. The North Section storage is provided in three above-ground storage tanks of 800,000, 455,000, and 160,000 gallon capacity. HDR recently completed a Draft Water Master Plan and Capital Improvement Identification Report that evaluates the Tribe's water infrastructure and future water needs and makes recommendations for capital improvement projects that will current water needs and anticipated growth requirements over the next 20 years (HDR 2006). Well water is used at the casino with excess water production being stored in the 455,000 gallon casino reservoir. The reservoir provides operating storage capacity, fire flow, and a one day maximum storage. The casino water distribution system consists of an 8-inch diameter pipe from the well connected to a 16-inch diameter pipeline connected to the reservoir and casino.

## Significance Thresholds

The proposed project would result in a significant impact to hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be net deficit in off-Reservation aquifer volume or a lowering of the local off-Reservation groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in off-Reservation flooding;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in off-Reservation flooding;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade off-Reservation water quality;

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Inundation by seiche, tsunami, or mudflow.

### **Impact Analysis**

*Would the proposed project violate any water quality standards or waste discharge requirements?*

All wastewater generated by the proposed project would be treated on the Reservation at the Tribe's new SBR wastewater treatment facility. The wastewater treatment plant is being designed to meet the anticipated wastewater treatment needs on the reservation and must meet EPA water quality and waste discharge standards. Wastewater would be treated to Title 22 standards for beneficial reuse on the Reservation. All wastewater would be treated and disposed of on the Reservation. Therefore, the proposed project would not result in off-Reservation violations of water quality standards.

*Would the proposed project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be net deficit in off-Reservation aquifer volume or a lowering of the local off-Reservation groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

The existing average and maximum water consumption was estimated in order to determine the future water demand (CGvL Engineers, 2002). The current year (2006) average water usage is estimated to be 270,000 gallons per day (gpd). With completion of the proposed expansion project, water usage is projected to increase to 323,000 gpd (HDR 2006). The projected increased water demands to serve the proposed casino and spa expansion will require an additional well as back up for the existing well and to provide a higher capacity to accommodate future demand. A new well with a capacity of 90 gpm will be placed in the immediate vicinity of an existing well, north of SR-76 and within the Reservation boundaries. The existing water reservoir volume will be adequate for fire flow and one maximum day storage requirements, and there is no need to upgrade the water storage system. Likewise, the water distribution system is adequate to serve the casino, spa, hotel and Reservation with the anticipated increased demand.

*Would the proposed project substantially alter the drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in off-Reservation flooding?*

There would not be a substantial alternation of the existing drainage pattern of the project site, which is entirely on the Reservation. There would not be any impact to off-Reservation drainage patterns or contributions to off-Reservation flooding. This impact would be less than significant.

*Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in off-Reservation flooding?*

There would not be a substantial alternation of the existing drainage pattern of the project site, which is entirely on the Reservation. There would also not be a substantial increase in the rate or amount of surface runoff as most of the proposed expansion would take place on paved surfaces currently used for parking. The displaced parking would be replaced in the expanded parking structure. There would therefore not be any impact to off-Reservation drainage patterns or contributions to off-Reservation flooding. This impact would be less than significant.

*Would the proposed project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

The proposed project would not result in a substantial increase in non permeable surfaces on the Reservation because most construction would be on currently paved parking areas. The displaced parking would be compensated for through the expansion of the existing parking structure. Existing stormwater drainage systems would be sufficient to handle the runoff from the proposed expansion. Stormwater runoff ultimately flows into the San Luis Rey River. The increase in runoff would be negligible and would not be measurable at off-Reservation locations.

*Would the proposed project otherwise substantially degrade off-Reservation water quality?*

As noted above, wastewater would be treated on the Reservation and would meet all EPA requirements. Stormwater would be handled by existing storm drains and would ultimately be discharged to the San Luis Rey River. The amount and quality of the storm water would not be substantially different from today as the proposed expansion project would primarily occur on paved surfaces. Therefore, this impact would be less than significant.

*Would the proposed project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

The proposed project does not include the construction of housing. No expansion activities would occur south of the existing southern Pala Casino Spa Resort boundary, which is located above the flood plain of the San Luis Rey River. There would not be an increased flood hazard over the existing conditions. There would be no effect to off-Reservation property. This impact would not be significant.

*Would the proposed project place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

No expansion activities would occur south of the existing southern Pala Casino Spa Resort boundary, which is located above the flood plain of the San Luis Rey River. There would not be an increased flood hazard over the existing conditions. There would be no effect to off-Reservation property. This impact would not be significant.

*Would the proposed project expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

All improvements would be made on the Reservation. No expansion activities would occur south of the existing southern Pala Casino Spa Resort boundary, which is located above the flood plain of the San Luis Rey River. There would not be an increased flood hazard over the existing conditions. There would be no effect to off-Reservation property. This impact would not be significant.

*Would the proposed project expose people or structures to significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?*

The proposed project site is located approximately 25 miles inland from the Pacific Ocean, at an elevation of 400 feet. A seiche or tsunami would not travel this distance up the San Luis Rey River Valley. The mountains surrounding the project site are granite and the alluvium in the river valley is predominantly sand and gravel derived from granite. This substrate does not lend itself to mudflows. This impact would be less than significant.

### **Mitigation Measures**

No significant hydrology/water quality impacts have been identified. No mitigation measures are necessary.

### **Conclusions**

The proposed project would be an expansion of an existing use within the footprint of an existing hotel, spa, and casino resort. Increased water and wastewater treatment demands would be handled by the Tribe on site. There would be little or no increase in runoff as the development would for the most part be above existing paved areas. There would not be any expansion of facilities towards or into the floodplain of the San Luis Rey River. There would not be any adverse affects to off-Reservation hydrology or water resources.

### 3.4 Noise

Noise is defined as unwanted or objectionable sound that is typically associated with human activity and that interferes with or disrupts normal activities. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment. The response of individuals to similar noise events is diverse and influenced by the type of noise, the perceived importance of the noise and its appropriateness in the setting, the time of day and the type of activity during which the noise occurs, and the sensitivity of the individual. The standard unit employed for noise measurements is the decibel (dB). Decibels are measured on a logarithmic scale, which quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling traffic volume, would increase the noise level of 3 dB; a halving of the energy would result in a 3 dB decrease. The human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, the "A-weighted" noise scale, which weights the frequencies to which humans are sensitive, is used for measurements. Noise levels using A-weighted measurements are sometimes written dB(A) or dBA.

Average noise levels over a period of minutes or hours are usually expressed as dB Leq, or the equivalent noise level for that period of time. The period of time average may be specified; Leq<sub>(3)</sub> would be a three hour average. When no period is specified, a one-hour average is assumed. A noise level averaged over a period of 24 hours is normally used to evaluate noise-land use compatibility; the values for the period from 10 p.m. to 7 a.m. are weighted to account for greater human sensitivity to noise in the evening and nighttime hours. The 24-hour noise average is called the Community Noise Equivalent Level (CNEL) and the Day-Night level (DNL or Ldn). Title 24 of the California Code of Regulations requires the use of the CNEL for planning purposes. For the purpose of this analysis, CNEL and Ldn are considered equivalent.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two noise sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease; that a change of 5 dBA is readily perceptible, and that an increase (decrease) of 10 dBA sounds twice (half) as loud<sup>2</sup> (Caltrans 1998).

#### Sensitive Receptors

Human noise-sensitive receptors are generally considered to be persons who occupy areas where noise is an important attribute of the environment. These areas typically include residential housing, mobile homes, hotels, hospitals, nursing homes, education facilities, and libraries. These sensitive receptors can include outdoor areas (e.g., residential side and backyards, parkland) and/or interior activity areas that can be adversely affected by significant noise levels. Specific wildlife species can also be affected by noise and are considered to be sensitive receptors.

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<sup>2</sup> The "trained" as opposed to "average" ear can detect changes of 2 dBA in normal environmental noise.

There are no off-Reservation sensitive receptors near the project site. Therefore, the County noise ordinance limits are not relevant in this TEIR. The nearest off-reservation sensitive receptors are one home approximately 1,200 feet west of the existing parking garage. There are scattered homes adjacent to SR-76, between the reservation and Couser Canyon Road; these homes are 75 to 100 feet from the roadway. Some of these homes are below or above grade and/or behind heavy foliage.

## **Existing Conditions**

### **Noise Sources and Noise Levels**

The principal off-Reservation noise source is vehicle traffic on SR-76. Existing peak hour traffic volume west of Pala Casino is approximately 700 vehicles, which increases to approximately 1000 vehicles east of I-15. Average speeds between the casino and Couser Canyon Road vary from 45 to 20 miles per hour, depending on the road characteristics. The noisiest hour noise levels in this segment, at a distance of 75 to 100 feet from the roadway, are estimated to vary from 58 to 66 dBA Leq.

### **Existing Noise Levels**

Vehicular traffic on SR-76 is the dominant noise in the area of the proposed project. The traffic noise level for the measurement period was calculated, using the FHWA Highway Traffic Noise Model, the counted traffic data and the estimated speed. The calculation indicates a traffic noise level at the measurement point of 62 dBA Leq. The higher measured noise level indicates that the actual speed may have been higher than estimated, or that the individual noise emission levels of the vehicles was greater than the model value because the vehicles are accelerating out of curves at the measurement point.

Peak hour traffic volumes are estimated to be approximately twice the volumes observed between 8:00 and 9:00 p.m.<sup>3</sup> Therefore, peak hour traffic noise is estimated at 3 dBA greater than the measured noise, or approximately 68 dBA Leq at a distance of 45 feet from the road in those sections where speeds are in the 45 mph range. Most of the homes west of the project site lie between 50 and 100 feet of SR-76 and some homes are in sections where speeds will be 25-30 mph because of the curves. It may be generally stated that existing peak hour noise levels at the homes approach or exceed the 66 dBA Leq FHWA standard.

In addition to the short-term noise measurements, 24-hour traffic noise levels along SR-76 were calculated for an existing average daily traffic volume of 13,700 ADT, the existing value for Pala Road between the project site and Couser Canyon Road. It was assumed that the average speed is 40 miles per hour, and the traffic consists of a mix of 95.6 percent automobiles, 1.4 percent medium trucks and 3 percent heavy trucks. The auto-truck mix data was provided by Caltrans (1994, 1995). With these conditions, average noise levels at a distance of 50 feet from the centerline of the road

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<sup>3</sup> This estimate is based on a review of relative hourly volumes counted by Caltrans in January and February 2002. The counts were made in the segment of SR-76 between Couser Canyon Road and I-15, and do not provide actual volumes in the segment east of Couser Canyon where the residences are located.

would be 65 dBA CNEL. At a distance of 100 feet from the road, noise levels would be about 61 dBA CNEL if the terrain was earth and plantings, i.e., acoustically "soft." If the ground between the road and the receptor (home) was paved, the 24-hour average noise level at a distance of 100 feet would be about 62 dBA CNEL. Most of the homes west of the project site lie between 50 and 100 feet of SR-76, and 24-hour average noise levels of 60-63 dBA CNEL would be anticipated. Therefore, existing traffic noise levels at the residences likely equal or exceed the County new development standard of 60 dBA CNEL.

## **Significance Thresholds**

### Applicable Off-Reservation Standards, Plans, Policies, and Regulations

Noise standards are set by various agencies and typically relate to noise/land use compatibility. For example, the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans) consider a traffic noise impact to occur if the loudest hourly average noise level, Leq, is equal to or greater than 66 dBA at a residential receptor or 72 dBA Leq at a commercial receptor. FHWA and Caltrans also define a traffic noise impact when a transportation project would increase noise levels by 12 dBA or more.

Federal highway noise evaluation and abatement policies are contained in the U.S. Code of Federal Regulations, 23 CFR Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise*. As defined in 23 CFR 772, Section 772.5(g), traffic noise impacts occur when the predicted traffic noise levels approach or exceed the noise abatement criteria (NAC), or when predicted traffic noise levels substantially exceed the existing noise levels. The interpretations of "approach or exceed" and "substantially exceed" vary among federal and state agencies. For California, a traffic noise impact will occur, "when predicted noise levels with project approach within 1 dBA, or exceed" the NAC (Caltrans 1998.) A noise increase is substantial, "when the predicted noise levels with the project exceed existing noise levels by 12 dBA, Leq(h)" (Caltrans 1998).

The County of San Diego requires noise abatement measures for new residential projects if the projected noise level would exceed 60 dBA CNEL. The County of San Diego Noise Ordinance prohibits construction between the hours of 7:00 PM and 7:00 AM, and on Sundays and holidays. The County of San Diego Noise Ordinance also prohibits construction noise levels at residential properties exceeding 75 dBA when averaged over 8 hours.

The principal category of noise-sensitive land use considered in this analysis is residential; the NAC for Category B is Leq = 67 dBA. Therefore, a noise impact would occur when traffic noise levels are greater than or equal to 66 dBA Leq. The County of San Diego, in the Noise Element of the General Plan, has a standard of 60 dBA CNEL as a maximum exterior noise level for the development of new sensitive receptors. The County of San Diego Noise Ordinance contains limits for noise generated from a project site to nearby sensitive receptors for construction and post-construction situations.

The proposed project would result in significant noise impacts if it would expose off-Reservation receptors to:

- Noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundbourne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

### **Impact Analysis**

*Would the proposed project result in noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The Tribe does not have noise standards for noise levels on the Reservation. Noise levels at off-Reservation sensitive receptors is regulated by the County of San Diego through the Noise Element of the County's General Plan and the Noise Ordinance. The nearest off-Reservation homes to the project site are 900 and 1,200 feet to the west. Minimum daytime noise levels are approximately 40 dBA; nighttime minimum noise levels are estimated to be as low as 30 dBA. At a distance of 900 feet, the maximum noise level from construction at the site would be 65 dBA if there was an unobstructed line of sight. Typically, however, there is not. The average noise level during demolition could be 61 dBA, reducing to 55 dBA after demolition. At 1,200 feet, noise levels would be approximately 3 dBA less than at 900 feet. Therefore, the construction noise is likely to be audible at these nearest residences, but would not be anticipated to interfere with routine daytime activities and would not be in excess of standards established by the County of San Diego.

*Would the proposed project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

### **Construction**

Construction of the casino, spa, and parking expansion project may occur during both daytime and nighttime hours, and would result in increased noise levels in the vicinity of the project site. Construction equipment noise levels vary widely as a function of the equipment used and the activity level, or duty cycle. In a typical construction project, the loudest short-term noise levels – for a few minutes during each cycle – are those of earth-moving equipment under full load, which are on the order of 90 dBA at a distance of 50 feet from the source. Construction equipment noise is usually considered a point source, with attenuation within short distances at a rate of 6 dBA per doubling of distance, that is, a noise level of 90 dBA at 50 feet will be 84 dBA at 100 feet, 78 dBA at 200 feet, etc. The nature of construction projects, with equipment moving from one point to

another, work breaks, and idle time, is such that long-term noise averages are less than short-term noise levels. For project similar to the proposed project, a maximum 1-hour average noise level of 80 dBA  $L_{eq}$  at a distance of 15 meters (50 feet) from the construction area may be assumed for the site preparation phase.

The project may include a small amount of demolition of concrete in the porte cochere area, the eastern portion of the existing parking structure, and removal of some existing paving. This kind of demolition requires the use of hoe-rams, jackhammers, and similar impact tools. Impact equipment generally produces louder maximum noise levels than diesel engines, and the character of the noise is different. Average noise levels for individual pieces of construction equipment are calculated based the methodology in *Construction noise control program and mitigation strategy as the Central Artery/Tunnel Project* (Thalheimer 2000). A conservative scenario considering one hoe-ram for pavement breaking, and two pieces of earthmoving equipment, such as a bulldozer, grader, or truck would result in hourly average noise levels of 86 dBA at a distance of 50 feet.

The nearest off-Reservation homes to the casino site are 900 and 1,200 feet to the west. Minimum daytime noise levels are approximately 40 dBA; nighttime minimum noise levels are estimated to be as low as 30 dBA. At a distance of 900 feet, the maximum noise level from construction at the site would be 65 dBA if there was an unobstructed line of sight. The average noise level during demolition could be 61 dBA, reducing to 55 dBA after demolition. At 1,200 feet, noise levels would be approximately 3 dBA less than at 900 feet. The construction noise is likely to be audible at these nearest residences, but would not be anticipated to interfere with routine daytime activities.

Noise would be generated off site by construction vehicle traffic, including the delivery of equipment and materials, the removal of demolition spoils, and the commuting of the crew. It is assumed that most truck traffic would travel to and from the site using SR-76 to the west. Using the FHWA traffic noise model and traffic data provided in Section 4.1 of this TEIR, daytime hourly average traffic noise levels at a distance of 100 feet from the road are estimated at 54 to 65 dBA Leq. If construction traffic added 10 heavy truck passes in one hour, the average hourly noise level would increase by 1 to 1.5 dBA in the quieter segments of the roadway and 0.4 to 0.8 dBA in the noisier segments. Concentrated trucking, if it occurs, would be expected for short periods only, such as the removal of demolition spoils, the importing of required fill, and the supply of concrete for continuous pours. The daytime noise increases due to trucking would not be perceptible and would be temporary and intermittent, and would be less than significant.

Frequent heavy trucking at nighttime could increase average hourly noise levels by more than 5 dBA, and the repeated truck passes could disturb sleeping. Therefore, to avoid this impact, the Tribe would incorporate a noise abatement measure that will prohibit concentrated trucking activities between 10:00 PM and 7:00 AM. **(Impact N-1)**

*Would the proposed project result in excessive groundbourne noise levels?*

As is noted above, noise from truck traffic could result in significant off-Reservation noise impacts between the hours of 10:00 PM and 7:00 AM **(Impact N-1)**. This impact would be significant.

*Would the proposed project result in substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

### **Operations**

Upon completion of the casino and spa expansion, noise would be generated off site by the vehicle traffic of the patrons, employees, and vendors. As described in Section 4.1 of this TEIR, the casino would generate 1,113 trips per day, including 34 trips during the peak hours. ADT on SR-76 west of the site would increase by 7.5 percent. For this area, the 24 hour average CNEL traffic noise increase would be less than 0.5 dBA, which is imperceptible. Further to the west, where the traffic volumes are greater, the noise increase due to the proposed project would be less. The increase in the noisiest hour noise level could be greater because the peak traffic generation from the casino and spa improvements may not occur at the traditional peak hour. However, the noisiest hour noise level increase would be less than 1 dBA. The noise increase would be less than significant.

Noise would be generated on site by vehicles coming and leaving; air conditioning, heating, and kitchen equipment; trash collection; landscape maintenance equipment; and other activities typical of a commercial operation. The nearest off-site receptors are at least three miles from the site, and there would be no significant noise impact.

The project would include the addition of one or more diesel generators for the provision of emergency power. These generators would be test operated at least monthly, and perhaps as often as once per week. The noise level at off-site receptors from generator operations would be near or less than ambient, but may be audible under certain nighttime meteorological conditions. To avoid an impact, the Tribe would continue to limit test operation of the diesel generators to daytime hours **(Impact N-2)**.

### **Mitigation Measures**

The Tribe shall implement the following mitigation measures in order to reduce or avoid potential adverse noise impacts:

**Mitigation Measure N-1:** Project construction specifications shall include the requirement that no concentrated heavy trucking, such as for fill import or concrete pouring, shall occur between 10:00 PM and 7:00 AM.

**Mitigation Measure N-2:** Project operations procedures shall require that testing of diesel generators shall occur between 7:00 AM and 7:00 PM.

### **Conclusions**

Construction noise and operational noise would not exceed off-Reservation County of San Diego thresholds. However, truck traffic between the hours of 10:00 PM and 7:00 AM and the testing of diesel generators between 7:00 PM and 7:00 AM could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

These impacts would be significant. Mitigation measures would be adopted to reduce these potential impacts to below a level of significant.

## 3.5 Public Services

### Existing Conditions

#### Fire/Emergency Medical Services

The Pala Tribe maintains its own Fire Department located near the intersection of Pala Mission Road and Pala-Temecula Road, approximately one mile east of the project site. The staff consists of about 30 individuals including three Captains, three Engineers, six fire fighters, and about 18 reserves. A minimum of twelve permanent staff, including two paramedics, are on duty at all times. The station's fire fighting equipment includes one engine with a 750-gallon water tank and a 1,250 gallon per minute (gpm) pump, one reserve engine with a 500-gallon tank and a 1,000 gpm pump, a new water tender with a 2,000-gallon tank, a reserve water tender with a 2,500-gallon tank and a 750 gpm pump, a 110-foot ladder truck with a 300-gallon tank, and a brush engine with a 500-gallon water tank and 500 gpm pump and foaming system with a 30-gallon tank of foam (Assistant Chief David Osuna, Personal Communication). The station also maintains a rescue unit and provides both Basic and Advanced Life Support. All fire fighters have completed Emergency Medical Training (EMT) and are available 24 hours a day. Fire fighters can respond to the project site in approximately two minutes. The North County Fire Protection District provides mutual aid to the Reservation, and has a response time of approximately eight minutes. In addition, a California Department of Forestry (CDF) station is located at Rincon approximately nine miles east on SR-76 and is available to provide emergency backup fire protection. The Tribe also has a mutual aid agreement with the Pechanga Tribe to the north, and is developing a mutual aid agreement with Valley Center to the south.

Operation of the expanded casino and spa would increase the demand for both fire protection and emergency medical services as currently provided by the Pala Fire Department. The existing casino, spa, and hotel have been designed to facilitate fire prevention (e.g., fire alarms, sprinklers, fire retardant roofing materials). The proposed expansion would also incorporate these measures. The casino and hotel facility's security department also has individuals on staff 24 hours a day with certified CPR training as well as first response fire training. Adequate water would continue to be available for fire fighting by providing an on-site water reservoir, pump system, and emergency backup system.

The project site is within the Palomar-Pomerado Hospital District. The Palomar-Pomerado Hospital District extends from the City of San Marcos in the west to the community of Julian in the east, and from the Riverside County line in the north to the San Vicente and El Capitan Reservoirs to the south, a total of 800 square miles. The District maintains two hospitals: Palomar Medical Center in Escondido, with 299 beds; and Pomerado Hospital in Poway, with 109 beds. The Palomar Medical Center is closest to the project site at a distance of approximately 15 miles. Palomar Medical Center is also the base station for all paramedic units operating in the District.

## **Law Enforcement Services**

Law enforcement for the Pala Reservation is provided by the Pala Tribe's own security force and the San Diego County Sheriff's Department. The Pala Tribe contracts with the County Sheriff's Department to provide two Special Purpose Deputies five days per week, eight hours per day. The Special Purpose Deputy has an office in the Pala townsite on the Reservation. The closest Sheriff's substation is the Pauma-Valley Center Substation located in Valley Center at 28205 North Lake Wolford Road, approximately 15 miles from the project site. The response time from the Valley Center Sheriff's Substation to the Reservation is approximately 23 minutes for a priority call and 37 minutes for a routine call (Sergeant Donald Continelli, Personal Communication). These response times were prepared in 1997, prior to the establishment of a County Sheriff's Department Office on the Reservation. The average response time for the hours the local office is staffed would be much less. The Sheriff's Substation has a total sworn staff of 18 including one Sergeant, one Lieutenant, two Detectives, two Community-Oriented Policing Deputies, one Pala Special Purpose Deputy, and twelve Patrol Deputies. The Station provides 24-hour service with a minimum of two officers on duty during the day, three during the evening, and two during the night hours.

The existing casino security force patrols both the interior of the casino and outside of the casino including the parking garage and surface parking lots. There are currently 74 individuals on the security force and 14 full-time Emergency Medical Technicians on staff. Many of the security officers are trained in CPR and there is always, at a minimum, on Emergency Medical Technician on site. It is anticipated that the expansion of the property will prompt an increase in security staff. Due to the presence of this trained security and medical staff, no impacts to off-Reservation law enforcement are likely to occur.

## **Hazardous Materials**

The only hazardous materials, other than household waste associated with the facility, will be chlorine used in operation of the drinking water system. The local Pala Fire Department trains regularly with the San Diego County Hazardous Materials Response Team and will be available for response to any hazardous material spills (Robert Smith, personal communication).

## **Significance Threshold**

The proposed project would result in significant impacts to off-Reservation public services if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant off-Reservation environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any off-Reservation public services, including fire protection, police protection, schools, parks, or other public facilities.

**Impact Analysis**

*Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant off-Reservation environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any off-Reservation public services, including fire protection, police protection, schools, parks, or other public facilities?*

The proposed project may result in an incremental increase in the demand for police and fire services. Because these services are provided by the Tribe on the Reservation, impacts to off-Reservation service providers would be negligible. The project would not have any affect on off-Reservation schools, parks, or other public facilities.

**Mitigation Measures**

None necessary.

**Conclusions**

The Tribe would handle all increased demands for public services on the Reservation. Therefore, there would not be an increase in the demand for off-Reservation public services. Public services impacts would be less than significant and no mitigation measures would be necessary.

### 3.6 Transportation/Traffic

This section of the TEIR is based on the technical report, *Traffic Impact Analysis, Pala Hotel and Casino Expansion, San Diego County, California*, prepared by VRPA Technologies (2006) and attached to this TEIR as Appendix B.

#### Existing Conditions

##### **Existing Street System and Traffic Volumes**

The key roadways located in the vicinity of the project site are Interstate-15 (I-15), SR-76 (also known as Pala Road), Pala-Temecula Road/3rd Street (S-16), and Pala Mission Road. The existing street system and traffic volumes in the vicinity of the project site are shown in Figure 10. These volumes include 13,700 average daily traffic (ADT) along SR-76 between I-15 and Pala Temecula Road and 11,200 ADT along SR-76 east of Pala Temecula Road. Existing land geometry and evening (PM) peak hour traffic volumes are shown in Figure 11. The intersections of SR-76 and the northbound and southbound ramps are currently signalized. Other study area intersections are currently unsignalized. The key characteristics of these roadways may be summarized as follows.

**I-15** is an eight-lane north-south freeway with full diamond interchange at SR-76, located about five miles west of the site. The current 24-hour two-way volume of traffic (ADT) on I-15 is 137,100 north of SR-76 and 132,000 south of SR-76.

**SR-76 (Pala Road)** is a winding road with several sharp curves, generally with one lane in each direction. It is about 24 feet wide, except along the casino frontage where it has been widened to two lanes in either direction. The speed limit is posted at 45 miles per hour (mph). SR-76 is classified as a Major Road on the County Circulation Element east of I-15. According to County standards, Major Roads should be 78 feet wide in 98 feet of right of way, providing four through lanes. The current ADT on SR-76 is about 7,700 at the project site.

**Pala-Temecula Road/3rd Street** is an unclassified road. It currently provides one lane in each direction. The curb-to-curb width is about 21 feet, and the speed limit is posted at 45 mph.

**Pala Mission Road** is an unclassified road that intersects with SR-76 both east and west of Pala Temecula Road. The west intersection, opposite the project site, has been reconfigured. Pala Mission Road currently provides one lane in each direction. The curb-to-curb width is about 27 feet, and the speed limit is posted at 25 mph.

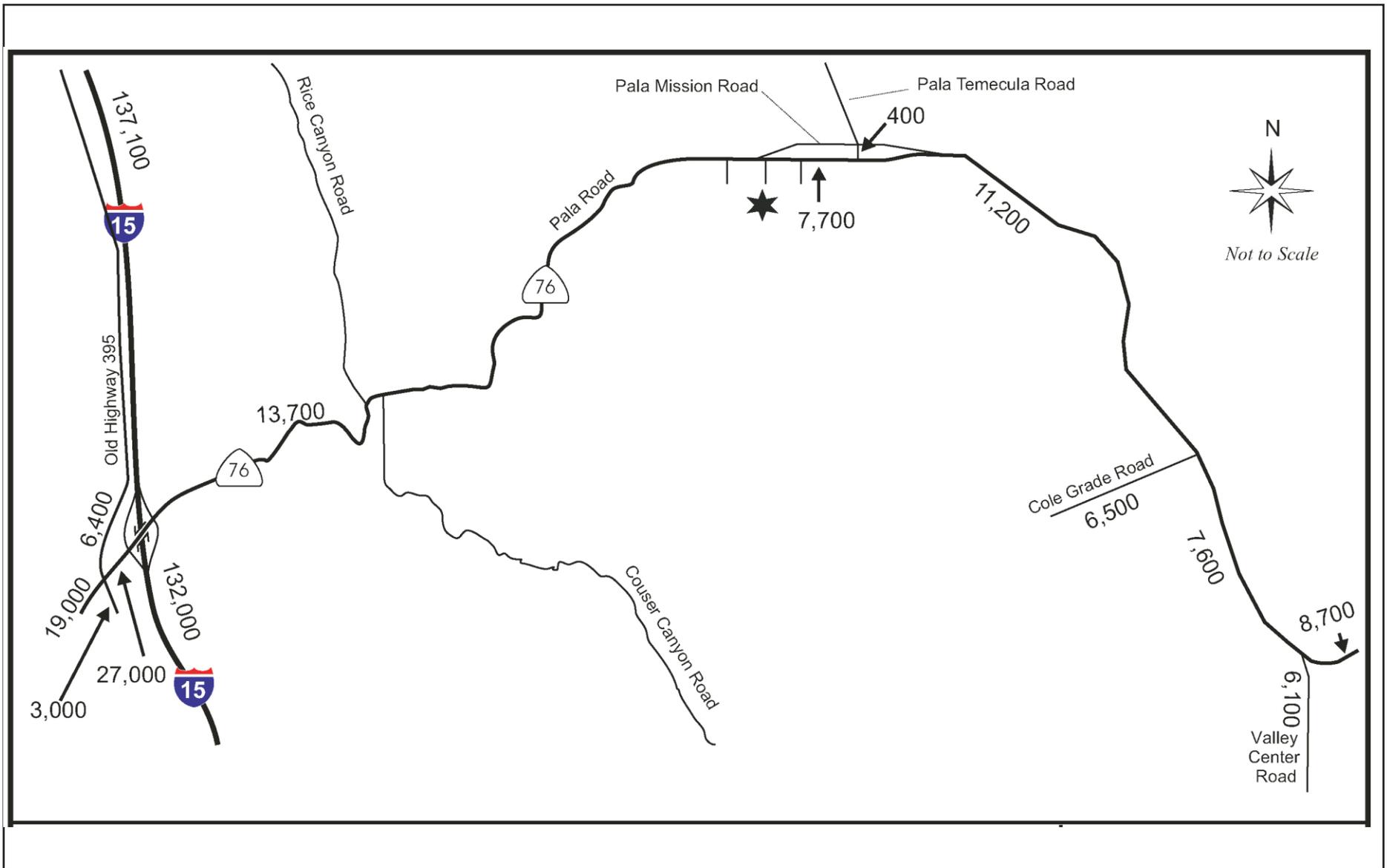


Figure 10  
Existing Average Daily Traffic



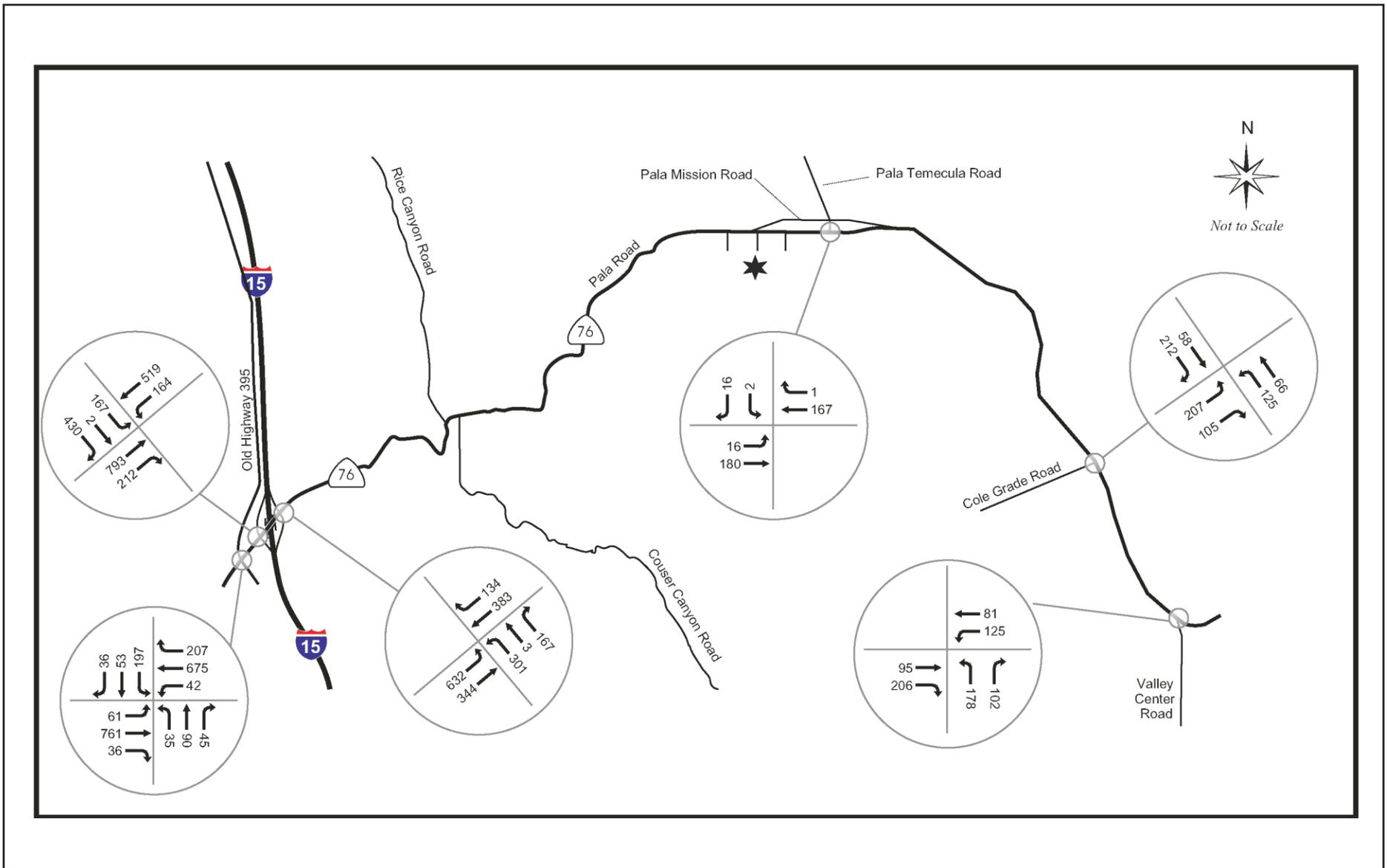


Figure 11  
Existing PM Peak Hour Traffic



The study area for the traffic impact analysis included the following street segments and intersections:

Street Segments:

SR-76, west of Old Highway 395  
SR-76, west of I-15  
SR-76, I-15 to Pala Mission Road  
SR-76, Pala Mission Road to Pala Temecula Road  
SR-76, Pala Temecula Road to Cole Grade Road  
SR-76, Cole Grade Road to Valley Center Road  
SR-76, east of Valley Center Road  
I-15, north of SR-76  
I-15, south of SR-76

Intersections:

SR-76/Old Highway 395  
SR-76/I-15 Southbound Ramps  
SR-76/I-15 Northbound Ramps  
SR-76/Pala Temecula Road  
SR-76/Cole Grade Road  
SR-76/Valley Center Road

## Existing Operations

The functioning of a road segment or an intersection can be expressed as a level of service (LOS). LOS refers to the operational conditions within a traffic stream and motorists' perceptions in terms of delay, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. There are six LOS capacity conditions designated from "A" to "F." LOS A represents a light traffic with minimal delays and LOS F represents significant traffic congestion. In general, the region-wide goal for an acceptable level of service on all freeways, roadway segments, and intersections is LOS D (SANTEC/ITE, 2000). Therefore, roadways in the study area operating at levels of service A through D were considered to be operating adequately with no need for improvement (Figure 11).

Street segment operating conditions were analyzed for SR-76 east and west of I-15 and, for I-15 north and south of SR-76. SR-76 was found to operate at LOS D west of I-15, and at LOS A for each segment west of I-15 to east of Pala Mission Road. Intersection operations were analyzed for the PM peak hour for the northbound (NB) and southbound (SB) I-15/SR-76 on-off ramps, and for the SR-76/Casino East, Middle, and West Driveways. The SR-76/I-15 NB ramps operate at LOS D and the SR-76/I-15 SB ramps operate at LOS C. The intersections of SR-76 and the casino driveways currently operate at LOS A (east driveway) and LOS B (middle and west driveways).

## Significance Thresholds

The proposed project would result in significant off-Reservation traffic impacts if it would:

- Cause an increase in off-Reservation traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of off-Reservation vehicle trips, the volume to capacity ratio on off-Reservation roads, or congestion at off-Reservation intersections);
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated off-Reservation roads or highways;
- Substantially increase off-Reservation hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);
- Result in inadequate emergency access;
- Result in inadequate parking capacity.

## Impact Analysis

*Would the proposed project cause an increase in off-Reservation traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of off-Reservation vehicle trips, the volume to capacity ratio on off-Reservation roads, or congestion at off-Reservation intersections)?*

Traffic studies conducted for other Tribal casino and hotel projects in the San Diego, including post-construction traffic counts, were used to supplement traffic data for the first five years of operations for the Pala Casino Spa Resort, to determine the proper trip generation rate for evaluation of the proposed expansion project. Each of the 250 additional slot machines was estimated to generate 4.5 trips. Based on this criteria, the project is estimated to generate 1,113 ADT with 68 PM peak hour trips (34 inbound/34 outbound). The AM peak period was not analyzed as the site is projected to generate a very small amount of traffic between 7:00-9:00 AM.

The project traffic was distributed to the street system based on the proximity of I-15 to the site, the population distribution, and the location of other gaming facilities (Viejas, Sycuan, Barona, and Pechanga). Only 2% of the trips are assumed to arrive/depart from areas east of the expanded casino and spa. The assignment of 19% along north I-15 is due to potential patrons in Riverside County. The 30% assignment west of I-15 on SR-76 is due to SR-76 being a direct feeder into Oceanside and to Interstate 5 serving patrons from Orange County and Los Angeles. The remainder 45% assigned to south I-15 is due to the large population base of the San Diego metropolitan area. Figures 12 and 13 show the assignment of project traffic based on the established trip distribution percentages and project PM peak hour traffic. Figures 14 and 15 show the existing plus project traffic volumes and PM peak hour traffic.

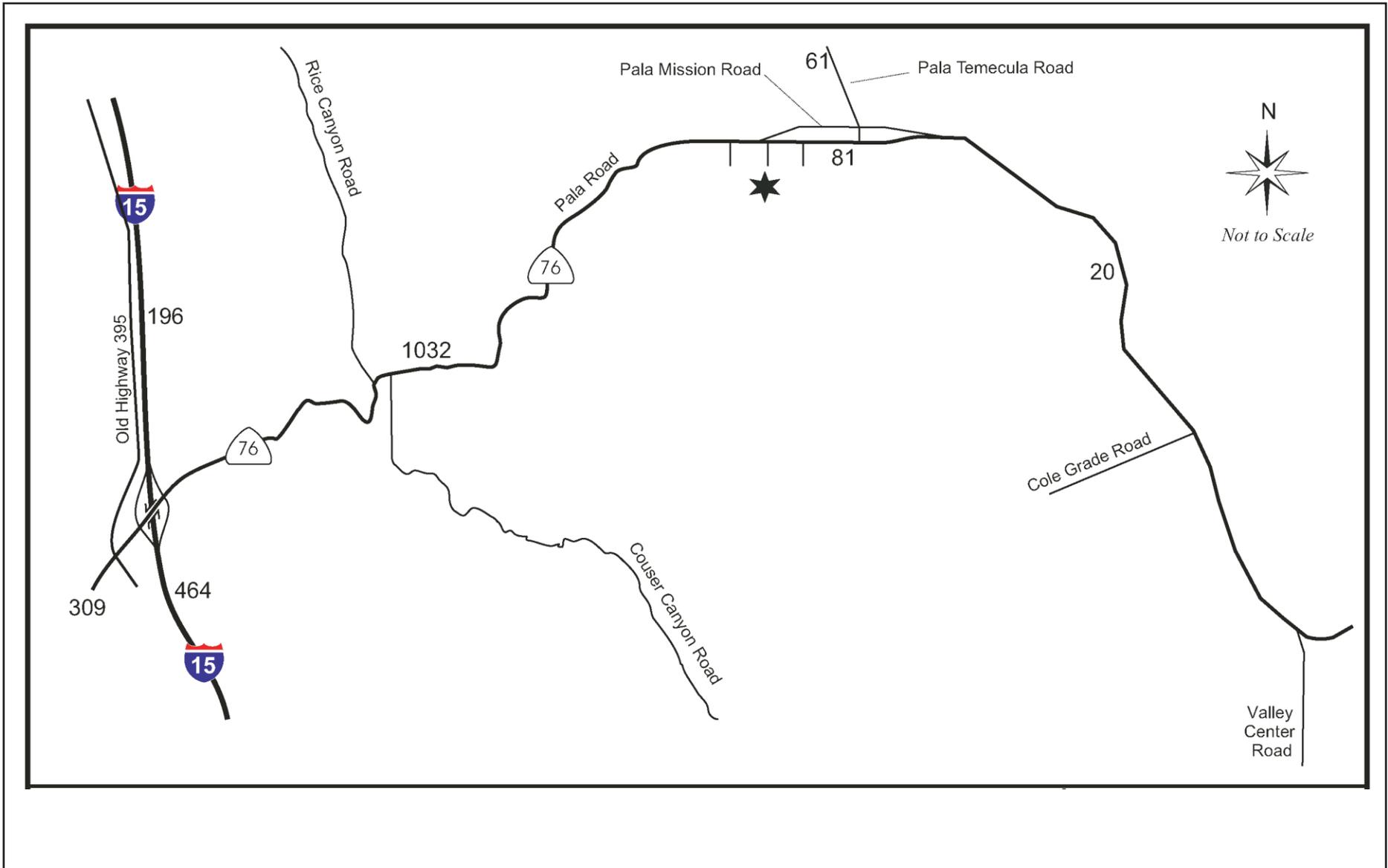


Figure 12  
Project Average Daily Traffic



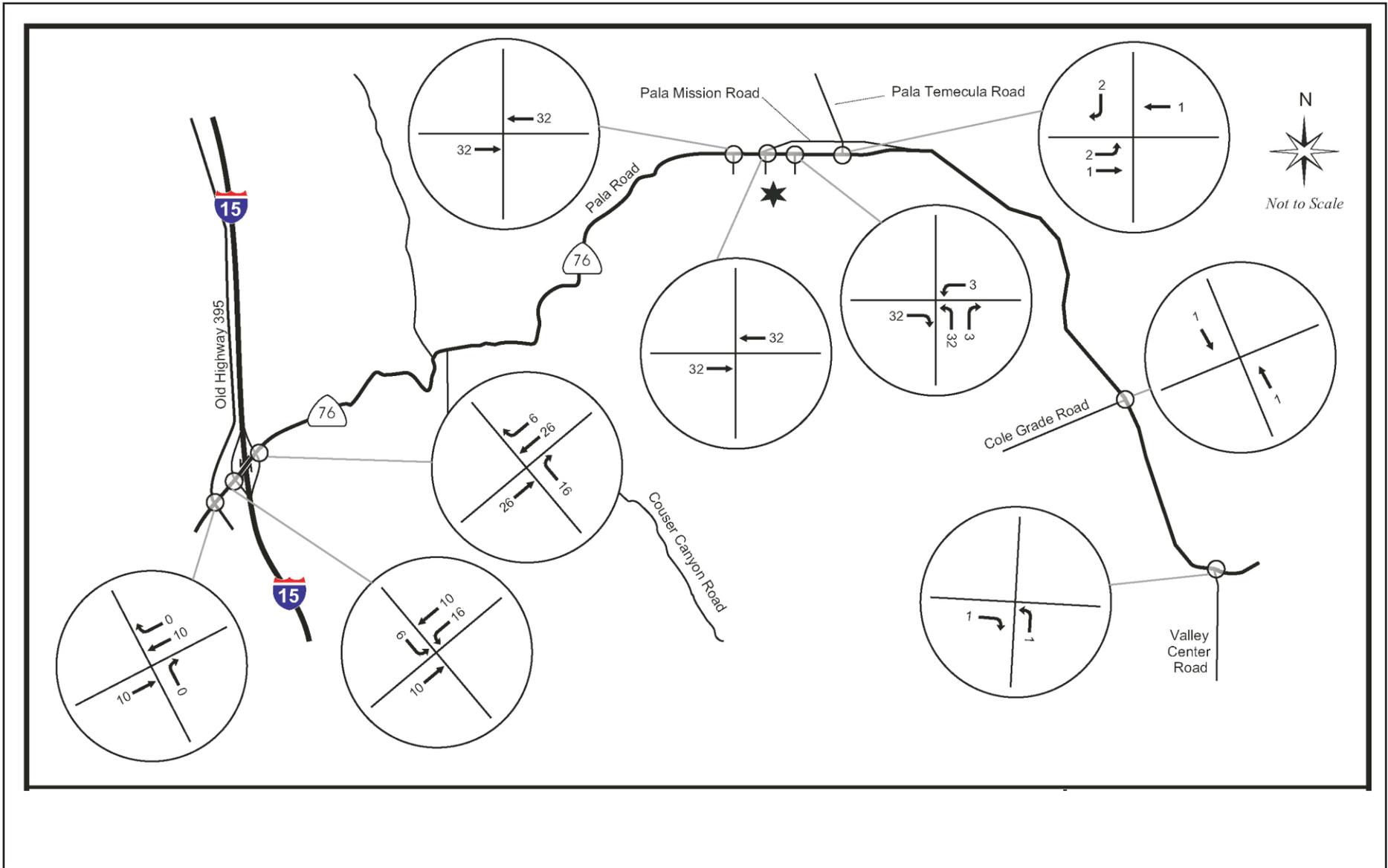


Figure 13  
Project PM Peak Hour Traffic



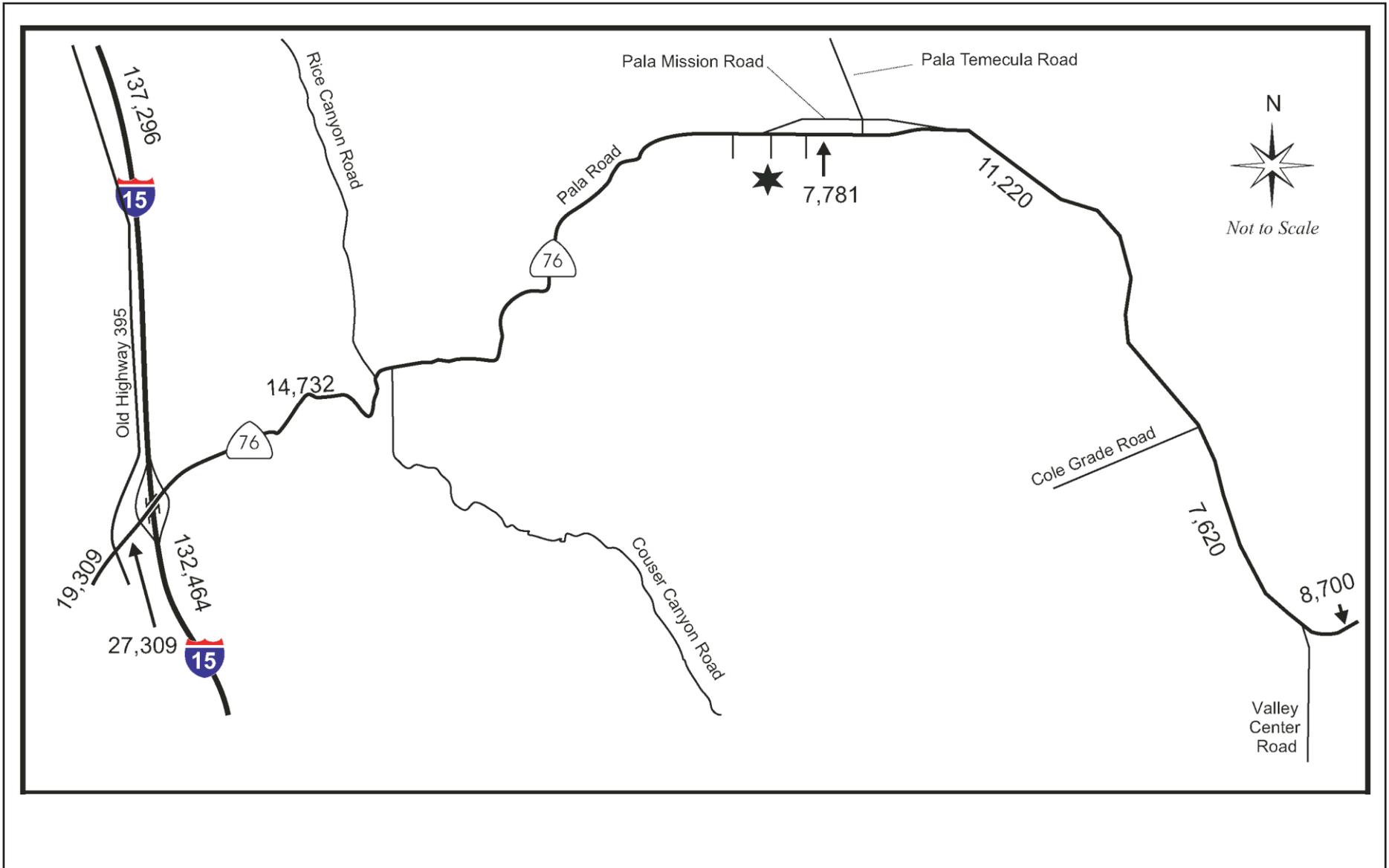


Figure 14  
Existing Plus Project Average Daily Traffic



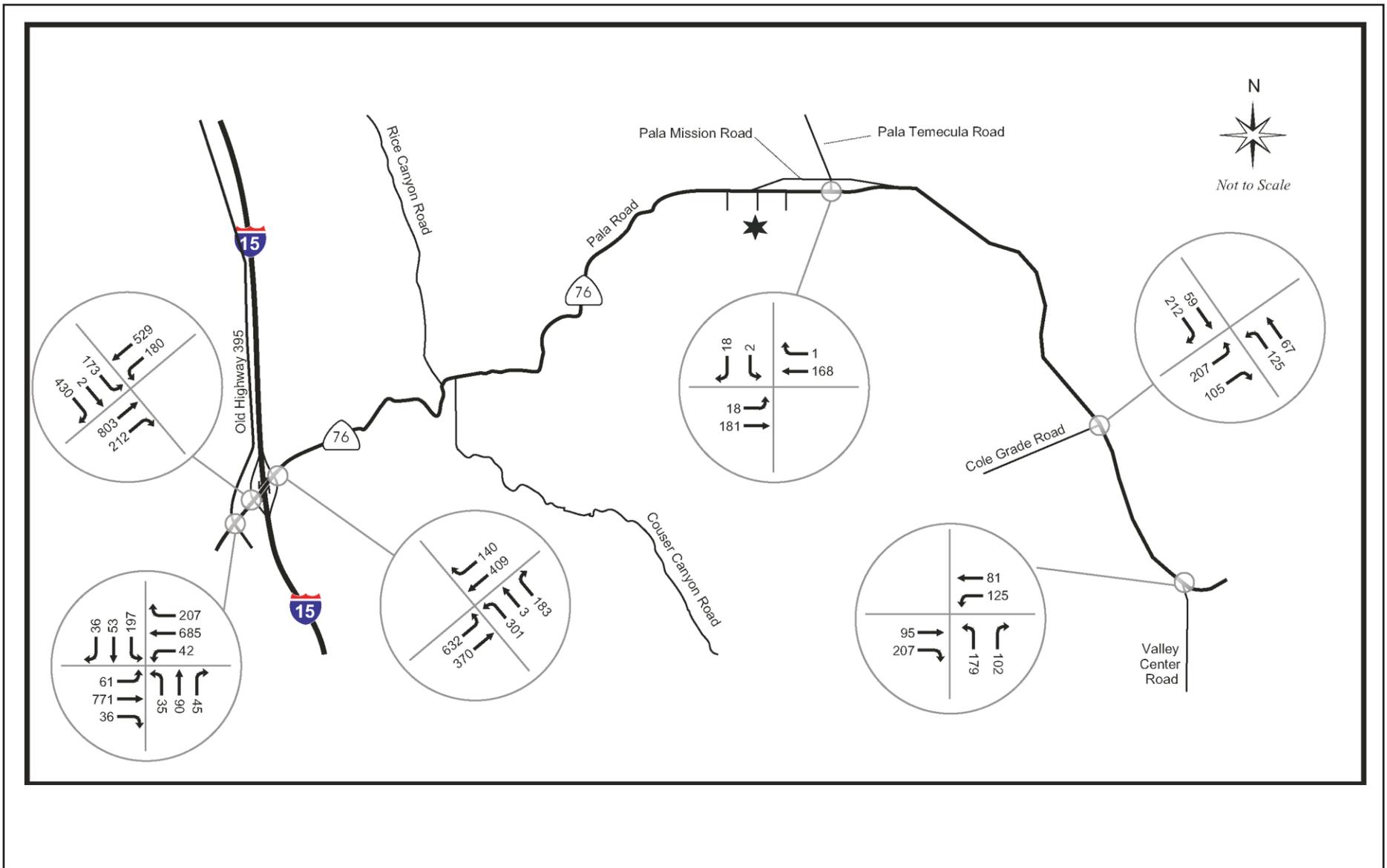


Figure 15  
Existing Plus Project PM Peak Hour Traffic



The proposed project is estimated to result in an 11.2 percent increase traffic to and from the Pala Casino based on the proposed increase in gaming floor space, restaurants, and spa expansion. The proposed project would generate 1,113 Average Daily Trips (ADT). Approximately 6 percent of the increase would be during the PM Peak Hour, which equates to 34 inbound trips and 34 outbound trips. Based on the experience of the Pala Casino and other similar venues within San Diego County, AM Peak Hour trips would be negligible.

The projected 11.2 percent increase in existing traffic volumes generated by the proposed project would not result in a reduction in Level of Service (LOS) for any road segment or intersection within the study area. No mitigation measures would be required for short-term traffic impacts.

**Existing Plus Project.** The addition of project traffic to the I-15 northbound and southbound intersections with SR-76 would result in minimal increase in delays but would not affect the level of service. The SR-76/I-15 NB ramps would continue to operate at LOS D and the SR-76/I-15 SB ramps would continue to operate at LOS C during the PM peak hour (Table 7). Project traffic would change the existing operations at the SR-76/Project East Driveway from LOS A to LOS B. The other two driveway intersections with SR-76 would not be changed. They would continue to operate at LOS A. The addition of project traffic would reduce operations on SR-76 from I-15 to Couser Canyon Road and from Couser Canyon Road to Pala Mission Road from LOS A to LOS B. Operations on SR-76 east of Pala Mission Road would remain at LOS A for this scenario. Operations on SR-76 west of I-15 would decrease from LOS D to LOS E with the addition of project traffic. The project traffic would not change the level of service on I-15 (Table 8).

**Existing Plus Project Plus Cumulative.** The addition of cumulative traffic (from the Gregory Canyon Landfill, Palomar Aggregates Quarry, Lake Rancho Viejo, Sycamore Ranch, Brook Hills, and I-15/SR-76 gas station projects) to the existing plus project traffic would further decrease operations at the I-15/SR-76 intersection ramps and on SR-76 between I-15 and the project site during the PM peak hour. The addition of cumulative traffic to the existing plus project traffic would also result in a decrease from LOS D to LOS F at the SR-76/I-15 northbound ramps and a decrease from LOS C to LOS F at the SR-76/I-15 southbound ramps. Operations during the PM peak hour at all three project driveway intersections with SR-76 would remain at LOS B in this scenario (Table 7).

**Table 7. Intersection Operations (PM Peak Hour)**

Intersection	Existing		Existing + Project		Future Without Project		Future With Project	
	Avg. Delay (Sec)	LOS	Avg. Delay (Sec)	LOS	Avg. Delay (Sec)	LOS	Avg. Delay (Sec)	LOS
SR-76/Old 395 Hwy	44.1	D	44.5	D	>80	F	>80	F
SR-76/I-15 NB Ramps	50.3	D	54.6	D	>80.0	F	>80.0	F
SR-76/I-15 SB Ramps	30.4	C	32	C	>80.0	F	>80.0	F
SR-76/Pala Temecula	(1)	A	(1)	A	(1)	B	(1)	B
SR-76/Cole Grade Rd	(1)	C	(1)	C	(1)	F	(1)	F
SR-76/Valley Center Rd	(1)	C	(1)	C	(1)	F	(1)	F

(1) Unsignalized intersection. Average delay not applicable.

The addition of cumulative traffic to the existing plus project traffic would increase the flow rates along SR-76 between I-15 and the project site but would only minimally change the level of service. The operations along SR-76 between I-15 and Couser Canyon Road would decrease the LOS from B to C. Between Couser Canyon Road and Pala Mission Road, the LOS would remain at B. The LOS along SR-76 east of Pala Mission Road would remain at LOS A. Operations along SR-76 west of I-15 would further decrease to LOS F with cumulative traffic added to existing plus project traffic (Table 8).

**Table 8. Intersection Operations (PM Peak Hour), with Mitigation Existing**

Intersection	Existing		Existing + Project		Future Without Project		Future With Project	
	Avg. Delay (Sec)	LOS	Avg. Delay (Sec)	LOS	Avg. Delay (Sec)	LOS	Avg. Delay (Sec)	LOS
SR-76/Old 395 Hwy	44.1	D	44.5	D	41.7	D	41.8	D
SR-76/I-15 NB Ramps	50.3	D	54.6	D	17.4	B	17.7	B
SR-76/I-15 SB Ramps	30.4	C	32	C	24.4	C	24.5	C
SR-76/Pala Temecula	(1)	A	(1)	A	(1)	B	(1)	B
SR-76/Cole Grade Rd	(1)	C	(1)	C	39.9	D	40.1	D
SR-76/Valley Center Rd	(1)	C	(1)	C	42.1	D	42.2	D

(1) Unsignalized intersection. Average delay not applicable.

**Future Without Project and With Project.** Future traffic conditions in the study area in the Year 2020 were analyzed, both with and without the development of the project. The following assumptions were used to develop the future traffic conditions:

1. A growth rate of 3.0% per year was used for through traffic. This percentage was developed as an average growth rate of roadways in the study area, based on the SANDAG regional travel forecasting model for the Year 2020.
2. Traffic entering and leaving the Pala Casino was increased at a rate of 1.5% per year through the Year 2010. This increase was made in consideration that the casino recently opened and is expected to experience higher patronage as its customer base grows.

Intersection and street segment operations in the study area would be the same in the future with or without the project (Figures 16 through 19).

The traffic impact analysis determined that all but one roadway segment in the project study area are currently operating at an acceptable level of service. SR-76, east of I-15, operates at LOS E. All intersections in the project study area operate at LOS D or better.

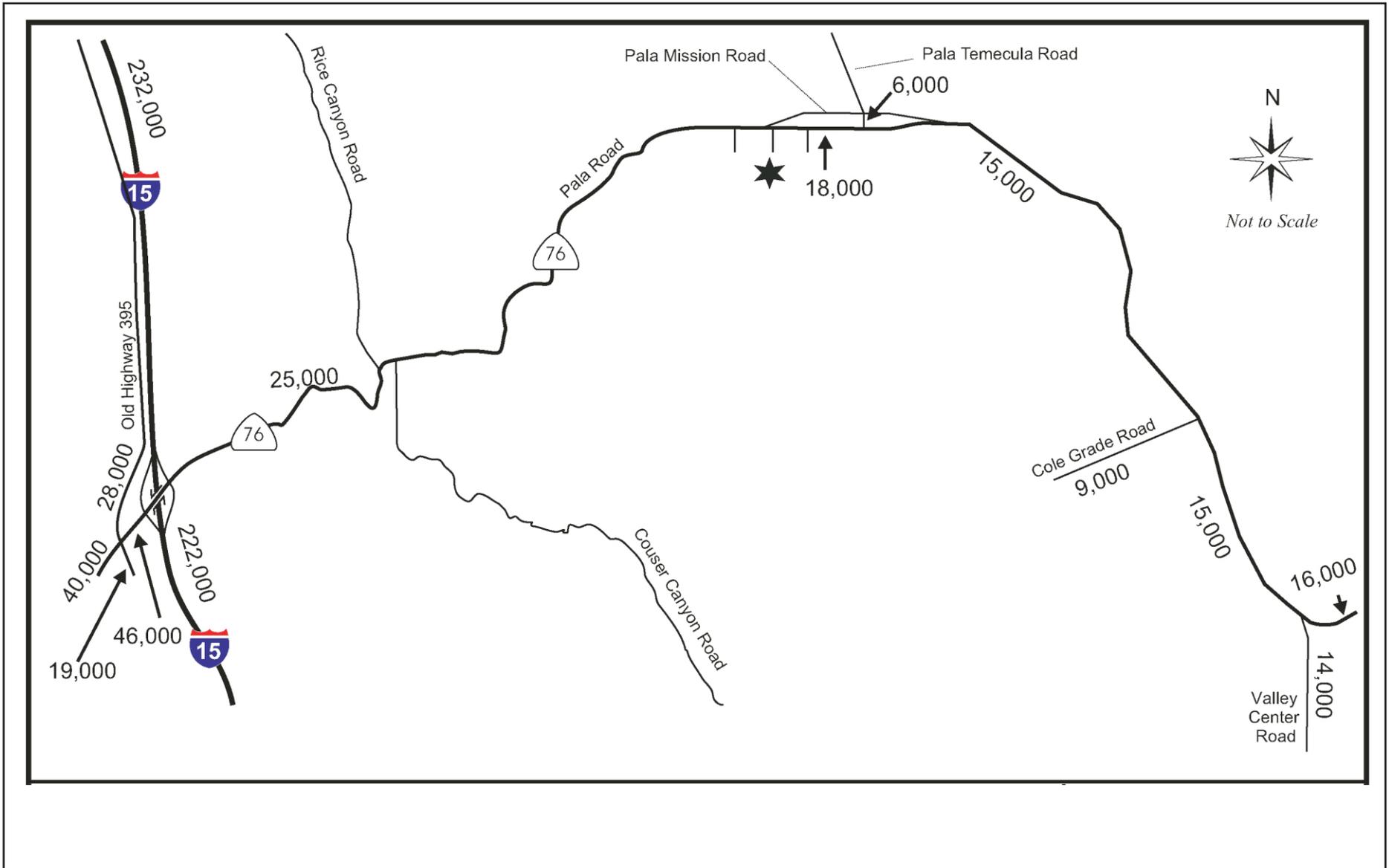


Figure 16  
 Future (2030) Average Daily Traffic



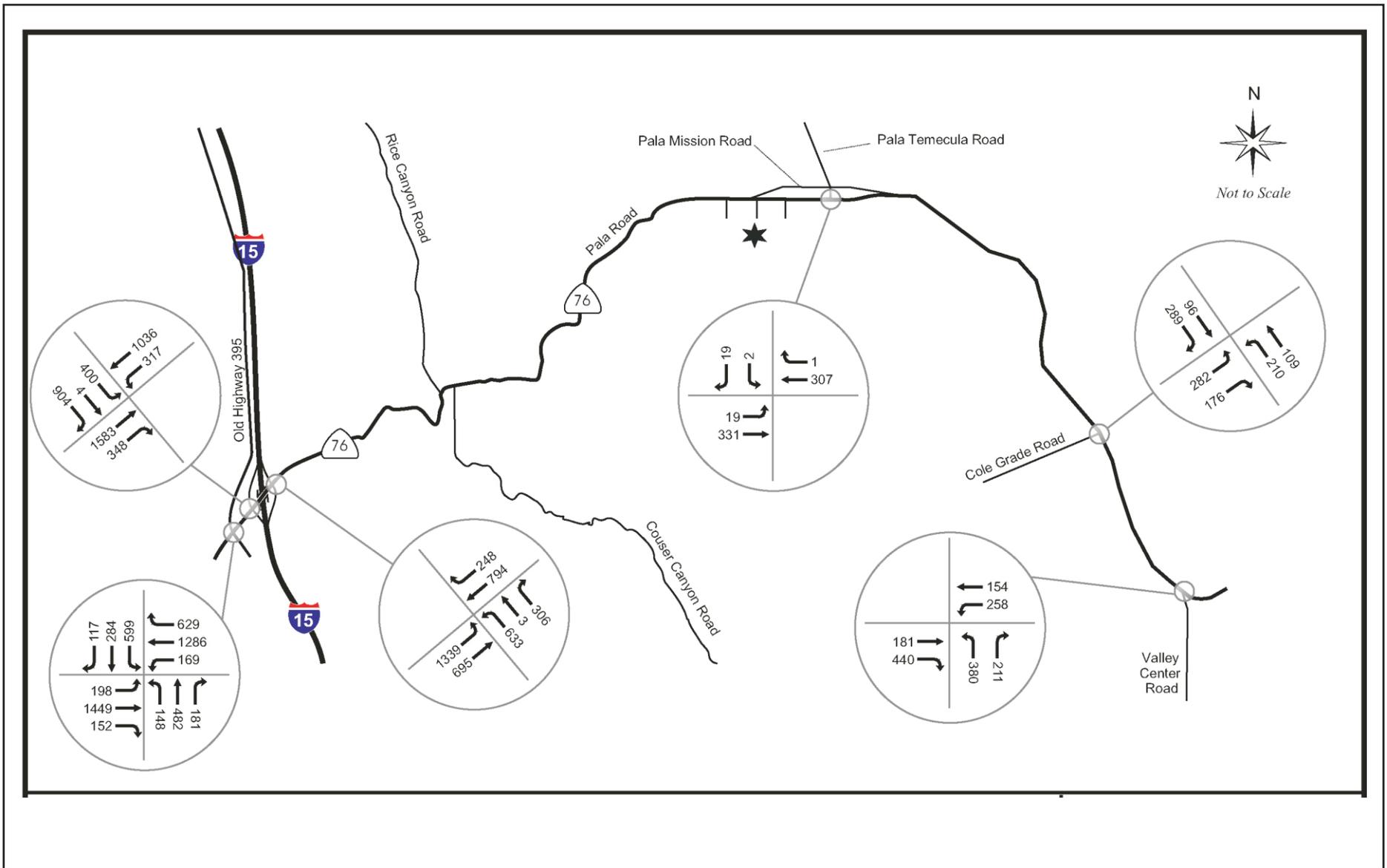


Figure 17  
 Future (2030) PM Peak Hour Traffic



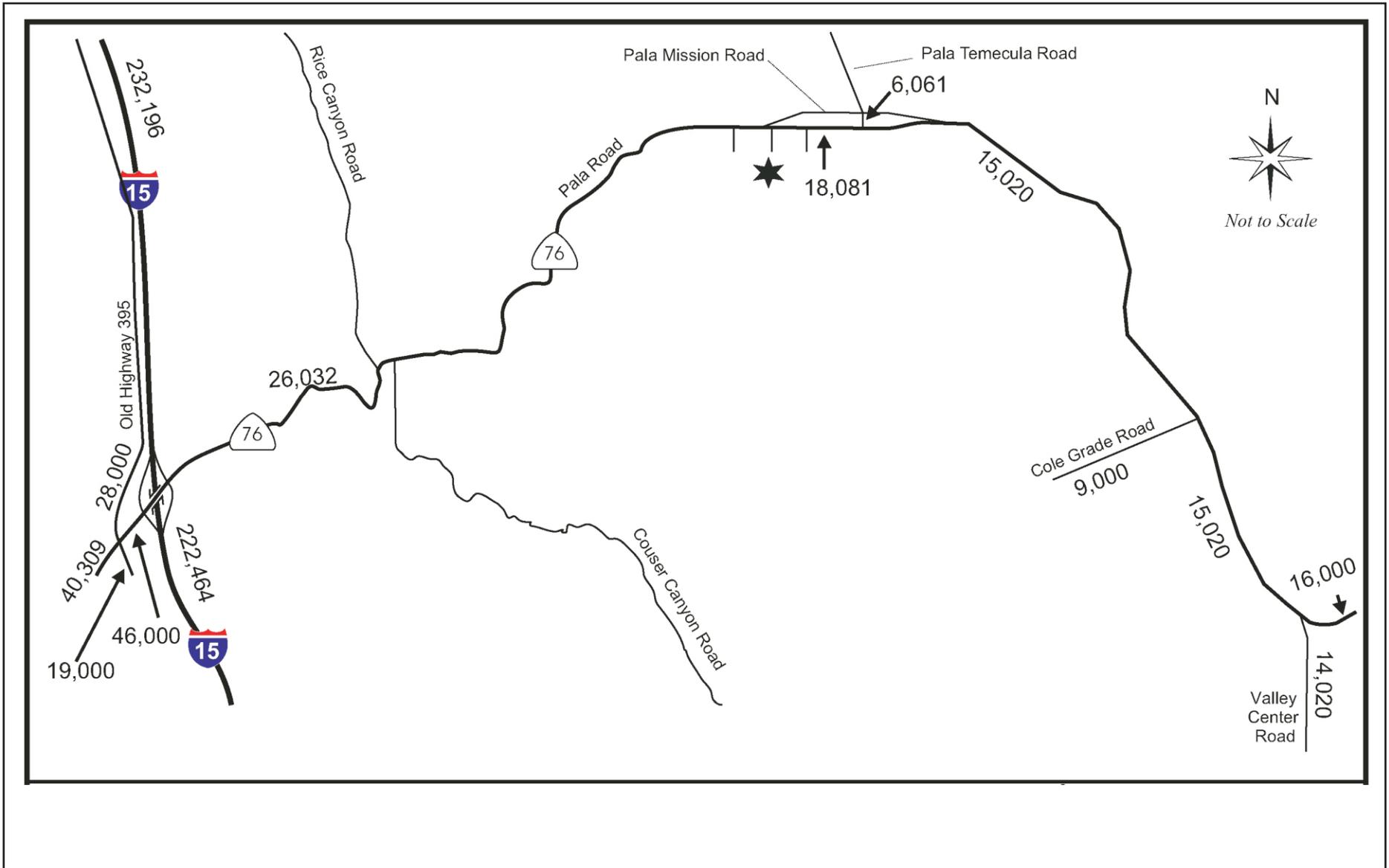


Figure 18  
 Future (2030) With Project Average Daily Traffic



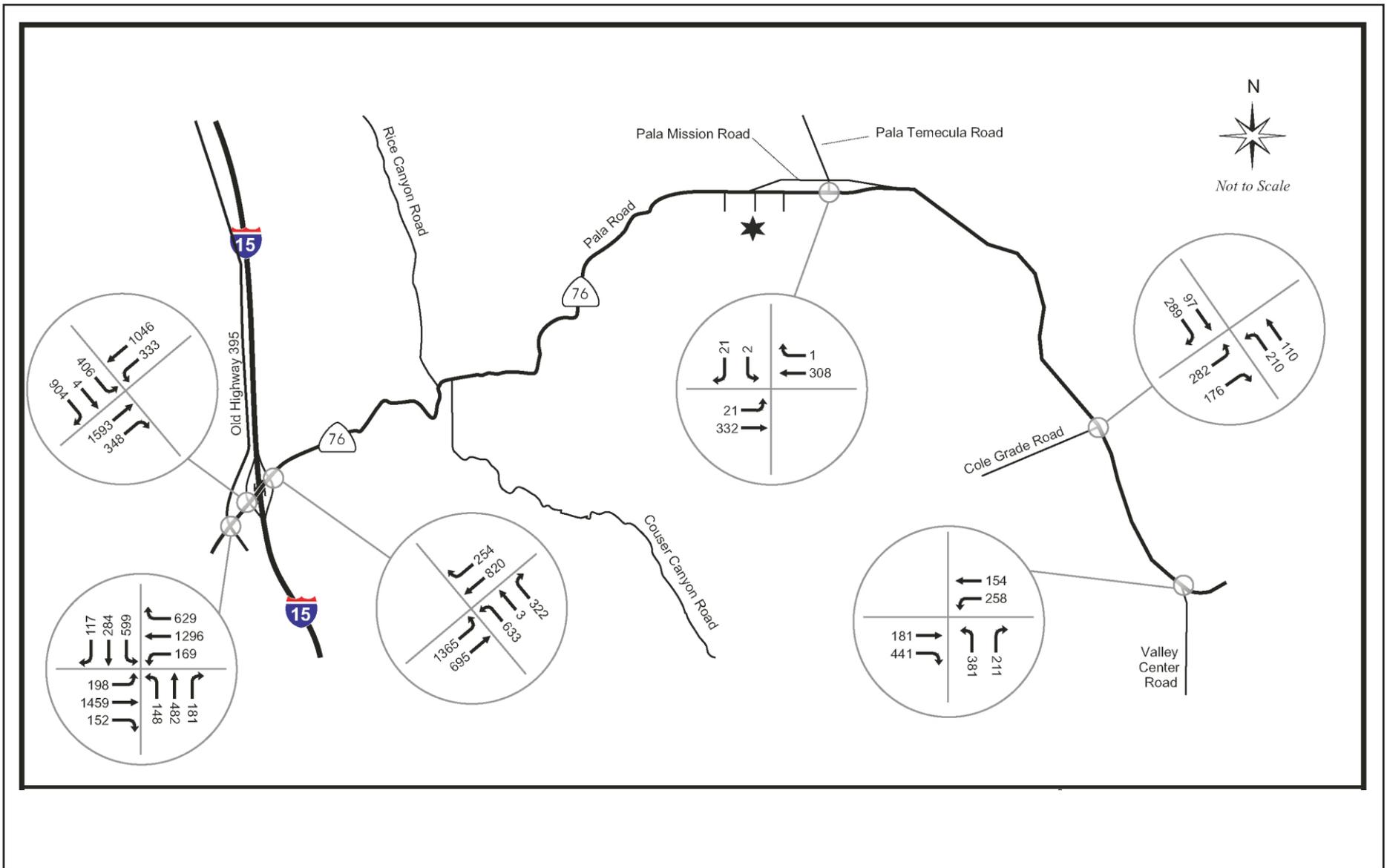


Figure 19  
Future (2030) With Project PM Peak Hour Traffic



The projected increase in traffic volumes related to the proposed project is 11.2 percent. This increase is considered to be substantial in relation to the existing traffic capacity and load of the street system. This is due to the projected future traffic volumes on SR-76 and the documented need for improvements between I-15 and the Reservation (**Impact T-1**). Improvements will be needed at the SR-76/I-15 Interchange, the SR-76/Old Highway 395 intersection, the SR-76/Cole Grade Road intersection, and the SR-76/Valley Center Road intersection in order to achieve LOS D operating conditions for the Future without Project and Future with Project scenarios (**Impacts T-2 through T-5**).

*Would the proposed project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated off-Reservation roads or highways?*

Short-term traffic impacts would not be significant. As is noted above, the Future without Project and Future with Project scenarios would result in the County's LOS standard of D to be exceeded at four intersections. This impact would be significant.

*Would the proposed project substantially increase off-Reservation hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?*

SR-76 currently features sharp curves and potentially dangerous intersections. Mitigation measures recommended for the proposed project would assist Caltrans to address these issues through the widening and realignment of SR-76 between I-15 and the Reservation. The proposed project would not substantially increase any off-Reservation traffic hazards. This impact would be less than significant.

*Would the proposed project result in inadequate emergency access?*

The proposed project would not impede emergency access. All additions to the existing casino, spa, and parking structures would meet UBC standards for emergency access, including fire suppression. This impact would be less than significant.

*Would the proposed project result in inadequate parking capacity?*

The proposed project includes the addition of approximately 1,372 parking spaces for a total of 4,055 spaces. This is a 44 percent increase over the existing parking capacity. Based on the Tribe's projection of an increase of 11.2 percent visitation in response to the proposed expansion project, parking capacity would be more than adequate. This impact would not be significant.

### **Mitigation Measures**

No mitigation measures are needed for existing conditions or existing plus project conditions. However, future No Project conditions or future plus project conditions will require the following mitigation measures:

**Mitigation Measure T-1:** Widen SR-76 to six through lanes west of I-15.

**Mitigation Measure T-2:** Provide the following lane geometry at the intersection of SR-76 and Old Highway 395:

Eastbound: 2 left, 2 through, 1 right  
Westbound: 1 left  
Northbound: 2 left, 1 through, 1 right  
Southbound: 2 left, 1 through, 1 right

**Mitigation Measure T-3:** Add northbound and southbound loop ramps at the I-15/SR-76 interchange.

**Mitigation Measure T-4:** Signalize the SR-76/Cole Grade Road intersection and add a northbound left turn lane.

**Mitigation Measure T-5:** Signalize the SR-76/Valley Center Road intersection.

It should be noted that these mitigation measures would be recommended with or without project traffic and that project traffic is a relatively small component of overall traffic growth for each of the roadways identified above (Table 8). In order to mitigate the traffic impacts of the project under these scenarios, it is recommended that the project applicant work with Caltrans to determine a traffic impact fee that would represent the project's fair share of the cost of the recommended improvements, if and when these improvements are undertaken. The payment of this traffic impact fee would render the project's traffic impacts to be insignificant.

## Conclusions

Traffic impacts would be less than significant. However, cumulative traffic impacts on SR-76 between I-15 and the project site would be significant by 2030 regardless of whether or not the project is constructed. Because the proposed project would contribute to the future significant traffic impact, the Tribe would like to provide a fair-share contribution to the necessary improvements.

### 3.7 Utilities

#### Existing Conditions

#### Wastewater Treatment

Prior to development of the Pala Casino Spa Resort, the Reservation was served by a gravity collection system that conveyed wastewater generated by approximately 60 percent of the residences located north of San Luis Rey River to two wastewater treatment and disposal facilities characterized by lagoon and percolation beds. The wastewater generated by other residences on the north side of the San Luis Rey River, and by all residences on the south side of the river, was disposed to individual septic tanks.

Due to water contamination believed to be caused by the previous wastewater treatment plant discharges and the condition of the ponds, the Tribe abandoned the previous wastewater treatment facilities and constructed a new wastewater treatment and disposal facility in association with construction of the existing casino and entertainment facility. The existing wastewater treatment facility is located north of SR-76 and east of the Pala townsite on the Reservation. The facility consists of a casino lift station, Reservation lift station, and treatment plant. The two lift stations are utilizing variable frequency drives (VFD) to maintain steady flow to the treatment plans consistent with the flows generated. Existing flow rates are provided in Table 9.

**Table 9. Existing Wastewater Flows for the Pala Indian Reservation**

Facility	gallons per day	
	Average Daily Flow	Maximum Daily Flow
Casino Lift Station (LS-1)	61,000	110,000
Reservation Lift Station (LS-2)	56,000	97,000
Wastewater Treatment Plant	117,000	207,000

The current (year 2006) average wastewater flow generated by the Casino is 220,000 gpd. Upon completion of the proposed expansion, wastewater generation is projected to increase to 250,000 gpd (year 2008). The proposed new Tribal wastewater treatment facility will be completed by 2008 and will have a capacity of 600,000 gpd, with a max day flow of 1,200,000 gpd and a peak hour flow of 1,800,000 gpd. The Tribe is proceeding with the construction of the new wastewater treatment facility independently of the proposed casino and spa expansion project in order to accommodate projected Reservation-wide wastewater treatment needs.

#### Significance Thresholds

The proposed project would result in significant impacts to off-Reservation utilities and service systems if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant off-Reservation environmental effects;
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects;
- Insufficient water supplies to serve the project from existing entitlements and resources;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has insufficient capacity to serve the project's projected demands in addition to its existing service commitments;
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste needs; or
- Would fail to comply with federal, state, and local statutes and regulations related to solid waste.

### **Impact Analysis**

*Would the proposed project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

As a sovereign nation, the Reservation is not subject to the treatment requirements of the Regional Water Quality Control Board, but is subject to federal clean water regulations as enforced by the EPA. The proposed SBR wastewater treatment plant will be a fill-and-draw activated sludge system. In this system, wastewater is added to a single "batch" reactor, treated to remove undesirable components, and then discharged. Equalization, aeration, and clarification can all be achieved using a single batch reactor. To optimize the performance of the system, however, two or more batch reactors can be used in a predetermined sequence of operations.

The SBR facility will generate sludge that will be hauled from the facility for disposal in an approved landfill. The amount of sludge generated will be approximately double that which is produced today. The sludge will be hauled by a single 20-cubic yard truck approximately twice a week to either the Santee or Otay landfills, which are the only two landfills in San Diego County approved for the disposal of sludge.

*Would the proposed project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?*

The Tribe has prepared a Water System Master Plan and Capital Improvement Program to evaluate the existing water supply system, identify current system deficiencies, and provide recommendations for system improvements to serve anticipated growth on the Reservation, including the proposed casino and spa expansion (HDR 2006). Recommended capital improvements are being constructed independently from the proposed project, as the water system improvements are to serve the future water needs of the entire Reservation. The environmental effects of the capital improvements are also being addressed separately from the proposed project. Because the Reservation covers approximately 12,000 acres and includes the San Luis Rey River Valley, the availability of groundwater is not a major concern. Much of the Reservation is within the Pala Groundwater Basin. The Tribe has undertaken major groundwater studies beginning in the 1970s. Based on these studies, the steady-state water budget for the Pala Basin is estimated to be 12,630 acre-feet/year (Springer & Anderson 1999). The Tribe currently has a water storage capacity of 1,615,000 gallons, which exceeds the recommended total of 1,007,000 gallons by 608,000 gallons (HDR 2006).

*Would the proposed project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant off-Reservation environmental effects?*

The proposed project would be constructed within the developed footprint of the existing Pala Casino Spa Resort, much of which is currently paved for parking. The existing casino, hotel, parking structure, and parking lots feature existing storm water drainage facilities that ultimately discharge to the San Luis Rey River. On-Reservation modifications to the storm drains would be made to accommodate the proposed development. However, there would not be a substantial increase in the size or location of these facilities. There would be little change in the area of impervious surfaces on the Reservation. Therefore, no off-Reservation impacts would occur. This impact would not be significant.

*Would there be insufficient water supplies to serve the project from existing entitlements and resources?*

Because the Reservation covers approximately 12,000 acres and includes the San Luis Rey River Valley, the availability of groundwater is not a major concern. Much of the Reservation is within the Pala Groundwater Basin. The Tribe has undertaken major groundwater studies beginning in the 1970s. Based on these studies, the steady-state water budget for the Pala Basin is estimated to be 12,630 acre-feet/year (Springer & Anderson 1999). The Tribe currently has a water storage capacity of 1,615,000 gallons, which exceeds the recommended total of 1,007,000 gallons by 608,000 gallons (HDR 2006).

*Would the proposed project result in a determination by the wastewater treatment provider which serves or may serve the project that it has insufficient capacity to serve the project's projected demands in addition to its existing service commitments?*

The Tribe owns and operates its own wastewater treatment facilities. The existing wastewater treatment facility was completed in 2001 and replaced an older, less efficient system that relied on a series of treatment ponds. The Tribe is in the process of building a new SBR wastewater treatment facility adjacent to the existing facility. The new SBR facility will be completed prior to the completion of the proposed casino and spa expansion project and has been designed to meet the projected future needs of the entire Reservation. Therefore, the proposed project would not result in a determination by the Tribe that there would be insufficient capacity to serve the project's projected demands in addition to its existing service commitments on the rest of the Reservation. This impact would be less than significant.

*Would the proposed project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste needs?*

The following landfills accommodate San Diego County's waste disposal needs: Ramona Landfill, Borrego Springs Landfill, Otay Landfill, West Miramar Sanitary Landfill, Sycamore Sanitary Landfill, San Onofre Landfill, and Las Pulgas Landfill (CIWMB 2006). The total amount landfilled per year is 4,046,078 tons (County of San Diego 2005). The Reservation is served by Waste Management Corporation for solid waste disposal. Waste is hauled to either the Sycamore, Otay, or the Ramona Landfill. The Sycamore Landfill has a projected closure date of 2019. The Otay Landfill has a projected closure date of 2025. The Ramona Landfill has a permitted capacity of 1,100,000 tons and a remaining capacity of 294,550 tons. The expected closure of the Ramona Landfill is 2009-2011. A landfill has been proposed adjacent to the Reservation within Gregory Canyon. The Tribe has actively opposed this landfill. If and when it will open is not known.

*Would the proposed project fail to comply with federal, state, and local statutes and regulations related to solid waste?*

The proposed project is the expansion of an existing use. There will be no change in the method of disposal of solid waste. The Tribe would continue to contract with an independent waste hauler. Waste haulers in San Diego County must comply with a plethora of solid waste regulations. Therefore, although the volume of solid waste generated would increase, this increase would not violate any federal, state, or local statutes or regulations related to solid waste. This impact would be less than significant.

### **Mitigation Measures**

No significant impacts to utilities have been identified. No mitigation measures are necessary.

### **Conclusions**

The Tribe has been undertaking major capital improvement projects to improve water and wastewater storage, transmission, and treatment facilities on the Reservation. These projects are independent of the proposed casino and spa expansion. The Pala Basin contains more than enough water to serve the proposed project, the rest of the Reservation, and off-Reservation land uses. Therefore, impacts to utilities would be less than significant and no mitigation measures are required.

## 4.0 OTHER MANDATORY SECTIONS

### 4.1 Cumulative Impacts

Cumulative effects are effects on the environment which result from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

The Reservation is anticipating modest residential growth over the next 20 years, including construction of 166 new single-family home units and up to 300 condominiums. Some commercial development is also likely. There are no specific plans for any of this development as the projects are in the conceptual planning stage and have not been approved by the Tribal Council.

Although it is anticipated that some additional economic development by the Pala Tribe or by other non-tribal land owners in the project vicinity will occur in the future as a result of gaming and associated development, only one private project has been proposed to date, Warner Ranch. As discussed below, the Warner Ranch project is in the preliminary planning phases and no environmental analysis has been completed to date.

The Tribe has not adopted a land use plan for their lands; therefore, additional growth on the Reservation will occur as individual projects are approved by the Tribal Council. Growth adjacent to the Reservation is subject to review by the County of San Diego for conformance to the General Plan, habitat conservation plans, and other land use policies and regulations. Future growth within the vicinity of the Pala Reservation would result in a change in the character of the Pala Community from rural development and agriculture to land uses that are more intensive and suburban in character. While this anticipated change in character may be substantial over the next 20 years, it is not considered significant because of the adopted land use controls.

Tierra Environmental Services reviewed the Discretionary Projects Map for the Pala-Pauma Community Planning Area dated January 2006 on October 2, 2006. This map indicated that several projects have been proposed or have been completed along the SR-76 corridor between I-15 and the Pauma Indian Reservation. Several of the larger proposed projects consist of the Palomar Aggregates Quarry, Gregory Canyon Landfill, Warner Ranch Specific Plan, and improvements to SR-76 between I-15 and the Pala Reservation. These projects have been the subject of extensive environmental review and litigation for over 20 years and the timing of project impacts, if the projects are ever constructed, is not known. Additional projects reviewed by the County include a series of reclamation plans have been approved for the San Luis Rey River approximately two miles downstream of the project site. These reclamation projects are all labeled as complete. The remaining projects consist of Tentative Parcel Maps, Tentative Maps, and Minor Use Permits. These projects are concentrated Pala Del Norte Road, north of SR-76 and approximately 2 miles west of the project site.

The Warner Ranch project is the closest project to the Pala Reservation and the project site. An application to initiate a General Plan Amendment was submitted to the County July 13, 2005 and has

been approved. This approval allows the applicant to proceed with an application for a General Plan Amendment, but in no way indicates approval of the project as proposed. A pre-scoping meeting was held between the applicant and the County August 2, 2006. A scoping letter had not been issued as of October 2, 2006 and no environmental documents had been prepared. The following information was contained in the project file.

The 513.61-acre Warner Ranch project proposes the construction of approximately 900 dwelling units on 806 lots. Dwellings would range from multi-family condominium projects to estate-lot single-family homes. The project is also proposed to include a 5.41-acre commercial area and a fire station on the north side of SR-76, opposite the Pala Casino Spa Resort. The stables and riding facilities associated with the existing Warner Ranch property would be preserved as a community equestrian center. Site preparation would require 4,100,000 cubic yards of cut that would be balanced on site with 4,100,00 cubic yards of fill. The project includes 273 acres of open space that would become part of the County's Multiple Species Conservation Program (MSCP) North County Subarea. Water and wastewater service would be provided through an annexation to the San Luis Rey Municipal Water District.

The proposed casino and spa expansion project would not result in significant impacts to agricultural resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, land use, mineral resources, population and housing, and recreation, as described in the Off-Reservation Environmental Impact Analysis Checklist (Appendix A). The project's contribution to potentially significant cumulative impacts for other issue areas (e.g., noise, air quality, visual aesthetics, public services/safety, and water resources) is likewise not significant, as described in Section 4.0. Potentially adverse cumulative impacts have been identified for traffic circulation only. Mitigation measures have been incorporated into the project so that its contribution to the cumulative effect has been reduced.

Future cumulative effects were derived from six potential projects in the area. These include the Gregory Canyon Landfill, which would be south of SR-76 and east of Couser Canyon Road; the Palomar Aggregates Quarry, which would be north of SR-76 about one mile east of I-15; the Lake Rancho Viejo residential project, east of I-15 and south of SR-76; the Sycamore Ranch residential and golf course project located west of I-15; the Brook Hills residential project located west of I-15; and a gas station proposed for the southwest quadrant of the I-15/SR-76 interchange. The Warner Ranch project was not included due to its preliminary nature and lack of project details and environmental documents.

### **Traffic/Circulation**

The six cumulative projects, taken together, are estimated to generate about 14,200 ADT to the area near the I-15/SR-76 interchange. The total number of trips that would be generated by the four projects along SR-76 between I-15 and Couser Canyon Road would be 2,400 ADT. The portion of these trips that would occur on SR-76 east of Couser Canyon Road would be 200 ADT.

The addition of cumulative traffic to the existing plus project traffic would further decrease operations at the I-15/SR-76 intersection ramps and on SR-76 between I-15 and the project site

during the PM peak hour. The LOS at the southbound I-15 ramps/SR-76 intersection would decrease from LOS C to LOS F. The addition of cumulative traffic to the existing plus project traffic would also result in a decrease from LOS D to LOS F at the northbound I-15 ramps/SR-76 intersection. Mitigation measures that would reduce these project plus existing plus cumulative traffic impacts to less than significant have been incorporated into the project design and are described in Sections 4.0 and 6.0 of this TEIR.

The addition of cumulative traffic to the existing plus project traffic would increase the flow rates along SR-76 between I-15 and the project site during the PM peak hour, but not enough to decrease the LOS below C. The operations along SR-76 west of I-15 would decrease from LOS E for the existing plus project scenario to LOS F for the existing plus project plus cumulative scenario. Widening of SR-76 to four lanes through the intersection would mitigate these impacts. It is recommended that the proposed project provide fair-share costs toward this improvement, if and when this improvement is undertaken.

### **Noise**

Future traffic volumes along SR-76 could result in cumulatively significant noise impacts to existing residences in the area. Mitigation measures have been identified as conditions of approval for individual projects that would generate significant noise impacts. Noise impacts resulting from improvements to SR-76 would be considered by Caltrans during project design. The proposed Pala Casino project would not generate significant levels of noise and no mitigation measures have been recommended.

### **Air Quality**

Although the proposed project would not result in significant impacts to air quality, build-out of the region, including the projects listed above, may contribute to the degradation of regional air quality. Implementation of the tactics presented in the Regional Air Quality Strategy, as adopted by the San Diego Air Pollution Control District, are directed at mitigating regionally significant air quality impacts. The effectiveness of such measures are dependent upon sound land planning, emission reductions through more efficient automobiles, trip reducing techniques and other factors that are outside the control of individual projects.

### **Visual Aesthetics**

Implementation of the proposed project, when considered with the development of other projects in the vicinity, would contribute to a change in the visual character of the area from undeveloped ridges and valleys, rural developments and agriculture to land uses more suburban in character, including a large landfill operation, commercial development proximate to the freeway and residential subdivisions. These cumulative changes in the visual environment would be significant over a long period of time. There are no measures available to mitigate the area's visual change in character resulting from the development intensity anticipated in the County's General Plan for land adjacent to the Reservation. The adopted land use plans, policies and ordinances are intended to guide development on county land and to ensure that it occurs in a manner which does not create

significantly adverse aesthetic impacts. Review and approval of development on Indian trust land by the Pala Tribal Council would likewise ensure that changes in the visual aesthetics of the area are not significantly adverse.

### **Water Resources**

The project area and vicinity is located within the watershed of the San Luis Rey River. As development occurs in the watershed, sedimentation and urban runoff can degrade the water quality of the river. The proposed project includes measures directed at controlling surface runoff and reducing potential water quality impacts. The San Diego County Grading Ordinance and NPDES require that mitigation measures would be included in all projects in the area to reduce impacts similarly. Cumulative impacts associated with hydrology and water quality are expected to be adequately mitigated through implementation of individual project measures.

Increased water demands in the project vicinity would be addressed on a project basis. The proposed project includes provisions for a new well, piping and disinfection facilities. Cumulative impacts related to water supply are not anticipated. Cumulative impacts related to wastewater would be addressed in a similar manner with each project responsible to meet its demands. The proposed casino and spa expansion includes improvements to the wastewater flow system and future organic loadings.

The Reservation currently generates approximately 65,000 gpd of wastewater on average. This will likely increase in the future with additional residential development. The extent of future residential development is unknown at this time, however, future upgrades may be necessary to handle the Reservation growth. No off-Reservation impacts would result.

## **4.2 Issues Determined to be Less Than Significant Through the Initial Study Process and Not Discussed in Detail in the TEIR**

### **Agricultural Resources**

The proposed project will be constructed entirely on the Pala Reservation, within the footprint of the existing Pala Casino Spa Resort. The closest off-Reservation agricultural lands are located along SR-76, west of the project site. The proposed project will not have any direct or indirect impact on these agricultural lands.

### **Biological Resources**

The proposed project will be constructed entirely on the Pala Reservation, within the footprint of the existing Pala Casino Spa Resort. No off-Reservation biological resources will be affected by the proposed project. The San Luis Rey River, which flows through the Pala Reservation and past the project site, contains the most-sensitive biological resources in the project area. The proposed project will not result in any impacts to lands beyond an existing solid masonry wall that separates the Pala Casino Spa Resort from the riparian areas.

**Cultural Resources**

The proposed project will be constructed entirely on the Pala Reservation, within the footprint of the existing Pala Casino Spa Resort. No off-Reservation cultural resources will be affected by the proposed project.

**Geology and Soils**

The proposed project will be constructed entirely on the Pala Reservation, within the footprint of the existing Pala Casino Spa Resort. No off-Reservation geology and soils will be affected by the proposed project. The county has required the implementation of a series of reclamation plans for sand mining areas within the San Luis Rey river downstream of the project site. The proposed project will not result in any impacts to lands beyond an existing solid masonry wall that separates the Pala Casino Spa Resort from the riparian areas. Therefore, the proposed project will not have any adverse impacts to geology, soils, or reclamation efforts for off-Reservation mining efforts within the San Luis Rey River.

**Hazards and Hazardous Materials**

The proposed project will be constructed entirely on the Pala Reservation, within the footprint of the existing Pala Casino Spa Resort. No off-Reservation hazards and hazardous materials will be affected by the proposed project. The proposed project is an expansion of the existing Pala Casino Spa Resort. The existing project does not result in off-Reservation hazards and hazardous materials impacts and neither will the proposed project.

**Land Use**

The proposed project will be constructed entirely on the Pala Reservation, within the footprint of the existing Pala Casino Spa Resort. No off-Reservation land uses will be affected by the proposed project. The County of San Diego has jurisdiction over all land use matters on off-Reservation lands.

**Mineral Resources**

The proposed project will be constructed entirely on the Pala Reservation, within the footprint of the existing Pala Casino Spa Resort. No off-Reservation mineral resources will be affected by the proposed project. There were once a number of sand and gravel mining facilities on the San Luis Rey River, downstream from the project site. The county has required the implementation of a series of reclamation plans for these areas. The proposed project will not result in any impacts to lands beyond an existing solid masonry wall that separates the Pala Casino Spa Resort from the riparian areas. Therefore, the proposed project will not have any adverse impacts to the reclamation efforts for the former off-Reservation mining efforts within the San Luis Rey River.

## **Recreation**

The proposed project is the expansion of an entertainment and recreation facility that includes a gym, spa, and swimming pool. The increased use of this facility is not likely to increase the use of off-Reservation park and recreation facilities.

### **4.3 Significant Effects on the Environment that Cannot be Avoided if the Project is Implemented**

The proposed project will be constructed entirely within the existing Pala Casino, Spa, and Hotel development footprint on the Pala Reservation. Off-Reservation impacts will be limited to traffic, visual resources, noise, and air quality. Mitigation measures have been proposed to reduce or avoid each of the identified impacts. There are no significant effects on the off-Reservation environment that cannot be avoided if the project is implemented.

### **4.4 Irreversible Effect on the Environment if the Project is Implemented**

The proposed project will require the use of energy for construction, operations, and maintenance. Much of the energy that will be used will be from non-renewable sources, primarily fossil fuels. As noted above, impacts to off-Reservation visual resources, traffic, noise, and air quality will occur. The Tribe believes that the visual impacts of the project will be positive through the use of architecturally interesting and attractive colors, textures, and landscaping. Traffic, noise, and air quality impacts will depend upon improvements to SR-76 and improvements to motor vehicles. For example, increased use of electric, hydrogen fuel cell, and hybrid gas/electric and diesel/electric vehicles in the future would reduce noise and air quality impacts associated with project-generated trips. Therefore, the projects off-Reservation impacts are not considered to be irreversible.

## **Growth Inducement**

A project is considered to be growth inducing if it will directly or indirectly foster economic or population growth or the need for additional housing. Examples of growth inducing impacts are the extension of water, sewer, or other utilities to an area currently un-served or under served by the utility. A project could be considered to be growth inducing if it burdens existing community services or facilities to such an extent that new services or facilities will be necessary. A project that will encourage or facilitate additional development that causes significant environmental effects may be considered to be cumulatively growth inducing. Growth could occur in the form of commercial development, and land residential development, and/or increased numbers of concentrations of housing.

Cumulative impacts are likely to occur, both as a result of a regional growth and as a result of future growth of the Tribe and development of the Reservation. Off-Reservation growth is regulated by the County of San Diego and its subject to all relevant local and state land use regulations and requirements. The potential environmental impacts of growth have been addressed by the County of San Diego in the Environmental Impact Report prepared for the General Plan and on a project-by-project basis as development has been proposed within the Pala-Pauma Community Planning Area.

The Pala-Pauma Community Planning Area covers approximately 115 square miles in northeastern San Diego County. The existing population is 6,177. The projected population in the 2020 General Plan is 12,670, which is approximately double the existing population. It is the County's goal to provide for orderly, planned growth as needs arise and essential services such as water, sewer, fire protection, and schools are made available. It is also the goal of the County to preserve existing agricultural land uses and provide for adequate amounts of commercially designated land without effecting the scenic, rural character of the community.

The proposed project would not extend water, sewer, or any other utility or service to an off-Reservation location, and would therefore not directly result in the growth of off-Reservation lands. The proposed project, however, would contribute to much needed improvements along SR-76 and would provide additional employment opportunities for off-Reservation residents. The developer of Warner Ranch, adjacent to the Reservation, has cited the Pala Casino, Spa, and Hotel as generating a need for additional housing in the area. Approval of this development, or any other development of off-Reservation lands within the Pala-Pauma Community Planning area is the responsibility of the County of San Diego. The proposed project would not result in significant off-Reservation growth.

## 5.0 MITIGATION MEASURES

With incorporation of the following mitigation measures, no significant environmental effects would result from approval and implementation of the proposed action.

### Traffic Circulation

**Mitigation Measure T-1:** Widen SR-76 to six through lanes west of I-15.

**Mitigation Measure T-2:** Provide the following lane geometry at the intersection of SR-76 and Old Highway 395:

Eastbound: 2 left, 2 through, 1 right

Westbound: 1 left

Northbound: 2 left, 1 through, 1 right

Southbound: 2 left, 1 through, 1 right

**Mitigation Measure T-3:** Add northbound and southbound loop ramps at the I-15/SR-76 interchange.

**Mitigation Measure T-4:** Signalize the SR-76/Cole Grade Road intersection and add a northbound left turn lane.

**Mitigation Measure T-5:** Signalize the SR-76/Valley Center Road intersection

### Noise

**Mitigation Measure N-1:** Project construction specifications shall include the requirement that no concentrated heavy trucking, such as for fill import or concrete pouring, shall occur between 10:00 PM and 7:00 AM.

**Mitigation Measure N-2:** Project operations procedures shall require that testing of diesel generators shall occur between 7:00 AM and 7:00 PM.

### Air Quality

**Mitigation Measure AQ-1:** Project construction specifications shall include the requirement that commercial electric power would be provided to the site at the start of construction and be used during construction to the maximum extent feasible. Accordingly, the use of diesel or gasoline engine portable generators would be minimized or avoided.

**Mitigation Measure AQ-2:** Project construction specifications shall require common dust control practices, such as watering all active grading areas and storage piles, cessation of grading in high winds, the limiting of vehicle speeds on unpaved roads to 15 miles per hour, and preventing the track out of dirt from unpaved areas to paved roadways.

**Mitigation Measure AQ-3:** During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth-moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site.

**Mitigation Measure AQ-4:** If visible soil material is carried over to adjacent streets and roads, the streets and roads shall be swept at least once per day, preferably at the end of the day.

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## **7.0 REPORT PREPARATION, CONSULTATION AND COORDINATION**

### **7.1 Report Preparation**

The following individuals contributed to the preparation of this Environmental Evaluation:

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Project Development

**Pala Casino**

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### **7.2 Consultation and Coordination**

The following individuals and groups were consulted during preparation of this EA:

Pala Band of Mission Indians

Robert H. Smith, Tribal Chairman

Assistant Chief David Osuna, Pala Fire Department

Lieutenant Sean Gerrity, San Diego County Sheriff