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- Attachment 4.16-A: Traffic Analysis
- Attachment 4.16-B: Estimated Truck Trips Required to Deliver Recycled Water for Construction



**4.16 TRANSPORTATION AND TRAFFIC**

Would the Proposed Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			✓	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	✓			
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e) Result in inadequate emergency access?			✓	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			✓	

#### **4.16.0 Introduction**

This section describes the existing transportation and traffic conditions related to the proposed San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as “the Applicants”—Pipeline Safety & Reliability Project (Proposed Project), which involves construction, operation, and maintenance of an approximately 47-mile-long, 36-inch-diameter natural gas transmission pipeline that will carry natural gas from SDG&E’s existing Rainbow Metering Station to the pipeline’s terminus on Marine Corps Air Station (MCAS) Miramar, and evaluates potential Proposed Project-related transportation and traffic impacts. The following subsections summarize the existing roadways, transit and rail services, airports, bicycle, and pedestrian facilities; discuss the policies and regulations related to transportation and traffic; and analyze the transportation and traffic impacts that may result from construction, operation, and maintenance of the Proposed Project. Impacts to transportation and traffic as a result of the Proposed Project are anticipated to be potentially significant.

#### **4.16.1 Methodology**

Transportation and traffic data for the Proposed Project area were obtained primarily through Internet research and reviews of relevant literature, including the following:

- County of San Diego General Plan,
- County of San Diego Code of Regulatory Ordinances,
- City of San Diego General Plan,
- City of San Diego Municipal Code,
- City of San Diego Traffic Impact Study Manual,
- City of San Diego Bicycle Master Plan,
- City of Escondido General Plan,
- City of Escondido Bicycle Master Plan,
- City of Poway General Plan,
- MCAS Miramar Integrated Natural Resources Management Plan (INRMP),
- San Diego Association of Governments (SANDAG) 2050 Regional Transportation Plan (RTP),
- SANDAG average daily trip (ADT) data,
- San Diego Geographic Information Source (SanGIS) geographic information system (GIS) data layers, and
- aerial imagery from Google Earth Pro software

Additionally, Attachment 4.16-A: Traffic Analysis was prepared by Kimley-Horn for the Proposed Project in August and September of 2015. Specific traffic counts and recommendations from the Traffic Analysis have been incorporated into this analysis.

#### **4.16.2 Existing Conditions**

##### **Regulatory Background**

Construction projects that cross public transportation corridors are subject to federal and state regulations, as well as state and local encroachment permitting requirements. The following subsections summarize transportation and traffic regulations that apply to the Proposed Project.

## ***Federal***

### *United States Department of Transportation*

All gas pipelines and facilities are required to be designed, constructed, operated, and maintained in accordance with Title 49, Part 192 of the Code of Federal Regulations (CFR). These regulations include specific requirements for the design, materials, testing, and corrosion protection of gas facilities, as well as for worker training and all other aspects that pertain to gas facility operations and maintenance.

### *United States Marine Corps*

The MCAS Miramar INRMP is designed to integrate the installation's land use needs, in support of the military mission, with the management and conservation of the installation's natural resources. The INRMP requires all vehicles on the base to limit speeds to 35 miles per hour (mph) on developed roads and 15 mph on undeveloped roads and jeep trails.

## ***State***

The use of California state highways for atypical transportation purposes may require written authorization or an encroachment permit from the California Department of Transportation (Caltrans). Caltrans has jurisdiction over the state's highway system and is responsible for protecting the public and infrastructure. Caltrans reviews all requests from utility companies that plan to conduct activities within its rights-of-way (ROWs). An encroachment is defined in Section 660 of the California Streets and Highways Code as "any tower, pole, pole line, pipe, pipeline, fence, billboard, stand or building, or any structure, object of any kind or character not particularly mentioned in the section, or special event, which is in, under, or over any portion of a State highway ROW." Encroachment permits may include conditions or restrictions that limit when construction activities can occur within or above roadways under the jurisdiction of Caltrans. Table 4.16-1: Encroachment Permit Requirements for Jurisdictions in the Proposed Project Area provides further information on the encroachment permit requirements of Caltrans and other agencies with jurisdiction in the Proposed Project area.

**Table 4.16-1: Encroachment Permit Requirements for Jurisdictions in the Proposed Project Area**

<b>Jurisdiction</b>	<b>Encroachment Permit Requirements</b>
Caltrans	Striping Plan, Signal and Lighting Plan, and a Traffic Control Plan (TCP)
County of San Diego	Sign Plan, and lights, barriers, warnings signs, or other measures designed to protect the traveling public, where applicable
City of San Diego	Encroachment Exhibit
City of Escondido	TCP
City of Poway	TCP

Source: Caltrans 2011; County of San Diego 2014; City of San Diego 2014; City of Escondido 2014; City of Poway 2014

### ***Local***

Pursuant to Article XII, Section 8 of the California Constitution, the California Public Utilities Commission (CPUC) has exclusive jurisdiction in relation to local government to regulate the design, siting, installation, operation, maintenance, and repair of natural gas pipeline transmission facilities. Other state agencies have concurrent jurisdiction with the CPUC. Although CPUC jurisdiction supersedes local government authority to regulate such activities, the CPUC encourages, and the Applicants participate in, cooperative discussions with affected local governments to address their concerns where feasible. As part of the environmental review process, the Applicants have considered relevant regional and county policies and issues, and have included this consideration in evaluating the Proposed Project's potential impacts to transportation and traffic.

### ***San Diego Association of Governments***

SANDAG's 2050 RTP was approved in October 2011 and provides guidance for the establishment of a coordinated transportation system for the greater San Diego area. This plan is intended to connect and improve the regional transportation network of freeways, public transit, and roadways. The 2050 RTP also includes provisions to comply with the federal congestion management process required by Title 23, Section 450.320 of the CFR. In order to meet federal congestion management requirements, the 2050 RTP includes the following:

- performance monitoring and measurement of the regional transportation system;
- multimodal alternatives and non-single occupancy vehicle analysis;
- land use impact analysis;
- the provision of congestion management tools; and
- integration with the Regional Transportation Improvement Plan (RTIP).

The RTIP, also prepared by SANDAG, identifies the RTP highway, arterial, transit, and bikeway projects that are planned for implementation over the next five years.

State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas must prepare and regularly update a Congestion Management Plan (CMP). The purpose of the CMP is to monitor the performance of the region's transportation system, develop programs to address short-term and long-term congestion, and better integrate transportation and land use planning. SANDAG provided updates to the state CMP from 1991 until 2008. Beginning in September 2009, the San Diego region has elected to be exempt from the state CMP and, as a result, the San Diego County Board of Supervisors adopted a resolution electing to be exempt from the state CMP. SANDAG continues to abide by Title 23, Section 450.320 of the CFR to ensure the region's compliance with the federal congestion management process.

### ***County of San Diego***

Roads maintained by the county are recorded in an official document known as the Road Register, which is approved by the San Diego County Board of Supervisors. However, many of the roads in the county are not within the system maintained by the county, including private roads maintained by adjacent property owners and many public roads maintained by individual

municipalities. In addition, freeways and state highways within the county are maintained by Caltrans.

The Mobility Element of the County of San Diego General Plan provides guidance to help achieve efficiency and economy in the transportation system, and to facilitate the planning required to maintain and expand the existing transportation network. The Mobility Element of the County of San Diego General Plan aims to maintain a level of service (LOS)<sup>1</sup> standard of LOS D or higher for all Mobility Element roads, except where the criteria included as part of Policy M-2.1 preclude improving roads beyond LOS E/F. Policy M-2.1 Level of Service Criteria requires that:

“Development projects provide associated road improvements necessary to achieve a level of service of “D” or higher on all Mobility Element roads except for those where a failing level of service has been accepted by the County pursuant to the criteria specifically identified in the accompanying text box (Criteria for Accepting a Road Classification with Level of Service E/F). When development is proposed on roads where a failing level of service has been accepted, require feasible mitigation in the form of road improvements or a fair share contribution to a road improvement program, consistent with the Mobility Element road network.”

The four exceptions to Policy M-2.1 of the County San Diego General Plan Policy M-2.1 and when they apply are:

- **Marginal Deficiencies:** Marginal deficiencies are characterized when only a short segment of a road is forecast to operate at LOS E or F, or the forecasted traffic volumes are only slightly higher than the LOS D threshold. Classifying the road with a designation that would add travel lanes for the entire road would be excessive and could adversely impact community character and/or impede bicycle and pedestrian circulation. Also, in some instances, although underutilized alternate routes exist that could accommodate the excess traffic, they were not included in the traffic forecast model.
- **Town Center Impacts:** When the ROW required to add travel lanes would adversely impact established land development patterns and/or impede bicycle and pedestrian circulation. The Community Development Model (see the General Plan’s Guiding Principle #2) concept strives to establish a land development pattern with compact villages and town centers surrounded by areas of low-and very low-density development. The construction of large multi-lane roads could divide an established town center, even though the intent of the road would be to connect areas within the community or improve access to areas within or surrounding the community.
- **Regional Connectivity:** Regional connectivity issues would apply when congestion on state freeways and highways causes regional travelers to use county roads, resulting in congestion on the county road network. Rather than widening county roads to

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<sup>1</sup> LOS is defined by a letter scale of A through F; a road with LOS A has unrestricted, free-flowing traffic, and a road with LOS F experiences significant traffic gridlock during peak hours.

accommodate this traffic, the deficiencies in the regional road network should be addressed.

- Impacts to Environmental and Cultural Resources: This situation would occur when adding travel lanes to a road that would adversely impact environmental and cultural resources, such as significant habitat, wetlands, Multiple Species Conservation Plan preserves, wildlife movement, historic landmarks, stands of mature trees, or archaeological sites. This situation would also occur in areas with steep slopes where widening roads would require massive grading, which would result in adverse environmental impacts and other degradation of the physical environment.

The Mobility Element lists all roadway segments where the marginal deficiency exemption applies in Table M-4 “Road Segments where Adding Travel Lanes is Not Justified.” There are six roadway segments listed in the table that are located partially or wholly within the Proposed Project route. These segments are noted in Table 4.16-2: Impacted Roadways.

Policy M-3.2 Traffic Impact Mitigation also applies to the Proposed Project. Policy M-3.2 states the following:

“Require development to contribute its fair share toward financing transportation facilities, including mitigating the associated direct and cumulative traffic impacts caused by their project on both the local and regional road networks. Transportation facilities include road networks and related transit, pedestrian and bicycle facilities, and equestrian.”

Section 71 of the County of San Diego Code of Regulatory Ordinances governs the placement of any structures on, over, or under county roads. The county requires an encroachment permit for the construction of any tower, pole, pole line, private pipe, private pipeline, non-standard driveway, private road, fence, billboard, stand or building, or any structure or object of any kind or character that is placed in, under, or over any portion of a county roadway.

#### *City of San Diego*

The Mobility Element of the City of San Diego General Plan provides measures for improving the efficiency of the city’s transportation system and facilitates the long-term planning required to improve mobility through the development of a balanced, multi-modal transportation network while minimizing potential environmental and neighborhood impacts. The Mobility Element aims to create a system in which each mode of transportation contributes to an overall goal of providing transportation services that meet varied user needs, while also implementing a strategy to reduce traffic congestion and provide increased transportation choices with consideration for varying land use types. The City of San Diego also utilizes a Traffic Impact Study Manual, which provides acceptable LOS standards for the city and contains guidelines for the preparation of traffic studies.

The City of San Diego Municipal Code addresses the use of or encroachment into public ROWs for private uses. The city requires approval of a public ROW permit for the construction of privately owned structures or facilities within the public ROW.

Table 4.16-2: Impacted Roadways

Road	Approximate Distance of Pipeline Traveled Within Road (feet) <sup>2</sup>	Number of Lanes	Average Weekday Traffic Volume	Pedestrian Facilities Present? (Y/N)	Bicycle Facilities Present? (Y/N)	LOS	Marginal Deficiency Segments Per Policy M-2.1 (County Roadways Only)	Classification	Approximate MP <sup>3</sup>
Old Highway 395	52,600	2	2,440 to 11,820	No	Yes	A to D	5th Street to I-15 Northbound (NB) Ramps (Accepted at LOS E/F); I-15 Southbound (SB) Ramps to Stewart Canyon Drive (Accepted at LOS E/F); and Dulin Road to Pala Road (Accepted at LOS E/F).	2.2E Light Collector, 2.1D Community Collector, 4.2B Boulevard, 4.1B Major Road	0
Rainbow Valley Boulevard West	60	2	1,200 to 2,800	No	No	A	I-15 NB Ramps to Old Highway 395 (Accepted at LOS F).	2.2D Light Collector, 2.2C Light Collector	0.3
Rainbow Glen Road	376	2	1,150	No	No	--	Not Applicable (N/A)	2.2E Light Collector	2.3
Rainbow Hills Road	4,940	2	--	No	No	--	N/A	Local Public Road	2.4
Avo Drive	132	2	-- <sup>4</sup>	No	No	--	N/A	Local Private Road	2.7
Rancho Loma Road	20	2	--	No	No	--	N/A	Local Public Road	2.9
East Mission Road	1,216	2	20,656	No	No	D	Live Oak Park Road to I-15 SB Ramps (Accepted at LOS E).	4.2B Boulevard	3.4
Canonita Drive	60	2	--	No	No	--	N/A	Local Public Road	5.8
Pala Mesa Drive	60	2	--	No	No	--	N/A	2.2F Light Collector, 2.1C Community Collector	7.4
Highway 76/Pala Road	64	4	24,500 to 25,700	Yes	No	C	Old Highway 395 to I-15 SB Ramps (Accepted at LOS E).	4.1A Major Road	8.4
Dulin Road	85	2	--	No	No	--	N/A	Local Public Road	8.8
West Lilac Road	60	2	500	No	No	A	N/A	2.2E Light Collector, 2.2C Light Collector	10.4
Bonsall Reservoir Road	36	2	--	No	No	--	N/A	Local Public Road	10.6
North Old Highway 395	10,437	2	2,440 to 11,820 <sup>4</sup>	No	Yes	A to D	N/A	2.1C Community Collector	11.5
Nelson Way	60	2	--	No	No	--	N/A	Local Public Road	12.3
Gopher Canyon Road	60	4	9,400	Yes	No	A	N/A	4.1B Major Road	14.0
Lawrence Welk Drive	60	2	--	Yes	No	--	N/A	Local Public Road	15.5

<sup>2</sup> Distances were generated from SanGIS street GIS data. The Proposed Project ROW may cross only short distances (generally 60 to 120 feet) of some of these roads or road ROWs, as indicated in this table.

<sup>3</sup> Approximate MP is listed as the MP where the Proposed Project first enters the roadway.

<sup>4</sup> Fields marked with "--" indicate that no data are available on the average weekday traffic volume or LOS. As stated in the City of San Diego Traffic Impact Study Manual, LOS is generally not applied to residential streets as the primary purpose of these streets is to serve the abutting lots, not carry through traffic. LOS normally applies to roads that carry through traffic between major trip generators and attractors.

Road	Approximate Distance of Pipeline Traveled Within Road (feet) <sup>2</sup>	Number of Lanes	Average Weekday Traffic Volume	Pedestrian Facilities Present? (Y/N)	Bicycle Facilities Present? (Y/N)	LOS	Marginal Deficiency Segments Per Policy M-2.1 (County Roadways Only)	Classification	Approximate MP <sup>3</sup>
Champagne Boulevard	22,200	2	6,221 to 11,820	No	Yes	A to B	N/A	4.2B Boulevard, 4.1B Major Road	17.0
Deer Springs Road	60	4	8,000	Yes	No	A	I-15 NB Ramps to North Centre City Parkway (Accepted at LOS F)	4.1B Major Road	18.2
North Centre City Parkway	23,000	2 to 4	4,265 to 31,608	Yes	Yes	A (Unincorporated County), A to D (City of Escondido)	N/A	4.1B Major Road, Major Road, Super Major Road	18.4
Mesa Rock Road	80	2	--	No	No	--	N/A	2.2E Light Collector	20.0
North Nutmeg Street	60	2	4,200	No	No	A	N/A	Local Collector	20.6
Country Club Lane	60	4	12,800	Yes	No	B	N/A	Collector	21.3
South Iris Lane	60	2	5,400	Yes	No	B	N/A	Local Collector	21.9
West El Norte Parkway	142	4	26,000	Yes	Yes	A	N/A	Major Road	22.7
Las Villas Way	141	2	--	Yes	No	--	N/A	Local Public Road	22.8
West Washington Avenue	64	4	18,600 to 19,100	Yes	No	C	N/A	Collector	23.8
Valley Parkway	60	4	18,500 to 20,400	Yes	No	C	N/A	Collector	24.2
South Centre City Parkway	6,280	2 to 4	4,265 to 31,608	Yes	Yes	A to D	N/A	Super Major Road, Major Road	24.2
Grand Avenue	60	4	2,500 to 10,300	Yes	No	A to B	N/A	Collector	24.3
West 2nd Avenue	60	4	20,000	Yes	No	E	N/A	Collector	24.4
West 5th Avenue	120	4	5,000 to 9,000	Yes	No	B	N/A	Collector	24.5
West 9th Avenue	60	4	14,200 to 17,500	Yes	No	B	N/A	Collector	24.8
West 13th Avenue	60	2	2,700 to 4,100	Yes	No	A to B	N/A	Local Collector	25.1
West Felicita Avenue	910	4	23,620	Yes	Yes	C	N/A	Major Road	25.6
South Escondido Boulevard	60	4	12,500	Yes	Yes	B	N/A	Collector	25.8
South Maple Street	60	2	--	Yes	No	--	N/A	Local Public Road	25.9
Tamarme Terrace	30	2	--	Yes	No	--	N/A	Local Public Road	26.0
East Felicita Avenue	680	2	18,752	Yes	No	B	N/A	Major Road	26.1
South Juniper Street	60	2	7,200 to 11,500	Yes	No	A to B	N/A	Collector	26.1

Road	Approximate Distance of Pipeline Traveled Within Road (feet) <sup>2</sup>	Number of Lanes	Average Weekday Traffic Volume	Pedestrian Facilities Present? (Y/N)	Bicycle Facilities Present? (Y/N)	LOS	Marginal Deficiency Segments Per Policy M-2.1 (County Roadways Only)	Classification	Approximate MP <sup>3</sup>
East 17th Avenue	2,055	2	12,417	Yes	No	--	N/A	Collector	26.1
Encino Drive	3,800	2	1,097 to 1,490	Yes	No	A	N/A	Local Collector	26.5
Encino Court	60	2	--	No	No	--	N/A	Local Public Road	26.6
El Dorado Drive	60	2	--	Yes	No	--	N/A	Local Public Road	26.7
Bear Valley Parkway South	9,103	2 to 6	22,550 to 38,512	Yes	Yes	C to D	N/A	Major Road/Super Major Road	27.2
Rancho Verde Drive	60	2	--	No	No	--	N/A	Local Public Road	27.2
Sunset Drive/Ranchito Drive	60	2	--	Yes	No	--	N/A	Local Collector	27.5
Old Spanish Trail	60	2	--	Yes	No	--	N/A	Local Public Road	27.8
Royal Crest Drive	60	2	--	No	No	--	N/A	Local Public Road	27.9
Las Palmas Avenue	60	2	--	Yes	No	--	N/A	Local Public Road	28.0
Peet Lane	10	2	--	No	No	--	N/A	Local Public Road	28.0
Canyon Road	9	2	--	Yes	No	--	N/A	Local Public Road	28.2
Cody Lane	60	2	--	No	No	--	N/A	Local Public Road	28.3
Alamo Lane	60	2	--	No	No	--	N/A	Local Public Road	28.5
Mary Lane	60	2	--	Yes	No	--	N/A	Collector	28.6
San Pasqual Road	106	4	9,900	Yes	Yes	A	N/A	Major Road	28.9
Park Drive	60	2	--	No	No	--	N/A	Local Public Road	29.0
Beethoven Drive	60	2	--	Yes	Yes	--	N/A	Collector	29.2
Highland Valley Road	532	2	1,943	No	No	A	N/A	Collector	30.4
Pomerado Road	42,780	2 to 6	12,035 to 24,496	Yes	Yes	A to C	I-15 NB Ramps to Willow Creek Drive (Accepted at LOS F).	Major Arterial	30.5
Fieldstone Drive	60	2	--	Yes	No	--	N/A	Local Public Road	30.7
Cloudesly Drive	60	2	--	Yes	No	--	N/A	Local Public Road	30.8
Escala Drive	87	2	--	Yes	No	--	N/A	Local Public Road	31.1
Mirasol Drive	60	2	--	Yes	No	--	N/A	Local Public Road	31.2
Bernardo Trails Drive	60	2	--	Yes	No	--	N/A	Local Public Road	31.4
Paseo del Verano Norte	100	2	9,900	Yes	No	C	N/A	Collector	30.6
Oaks North Drive	92	2	--	Yes	No	--	N/A	Local Public Road	32.0
Paseo del Verano	60	4	4,400	Yes	No	B	N/A	Collector	32.3

Road	Approximate Distance of Pipeline Traveled Within Road (feet) <sup>2</sup>	Number of Lanes	Average Weekday Traffic Volume	Pedestrian Facilities Present? (Y/N)	Bicycle Facilities Present? (Y/N)	LOS	Marginal Deficiency Segments Per Policy M-2.1 (County Roadways Only)	Classification	Approximate MP <sup>3</sup>
Grandee Place	60	2	--	Yes	No	--	N/A	Local Public Road	32.4
Pomerado Place	60	2	--	Yes	No	--	N/A	Local Public Road	32.5
Pomerado Court	60	2	--	Yes	No	--	N/A	Local Public Road	32.7
Caminito de la Gallarda	120	2	--	Yes	No	--	N/A	Local Public Road	32.8
Rancho Bernardo Road	80	4	16,100 to 21,200	Yes	No	B to C	N/A	Major Arterial	33.0
Rios Road	60	2	--	Yes	No	--	N/A	Local Public Road	33.2
Caminito Vecinos	120	2	--	Yes	No	--	N/A	Local Public Road	33.3
Avenida la Valencia	60	2	--	Yes	No	--	N/A	Local Public Road	33.5
Stone Canyon Road	60	2	--	Yes	Yes	--	N/A	Local Public Road	34.1
Bernardo Heights Parkway	32	4	11,600	Yes	Yes	A	N/A	Major Arterial	34.3
Gateway Park Road	60	2	--	Yes	No	--	N/A	Local Public Road	34.4
Monte Vista Road	60	2	--	Yes	No	--	N/A	Local Public Road	34.7
Via Monte Claro	60	2	--	Yes	No	--	N/A	Local Public Road	34.8
Casa Avenida	6	2	--	Yes	No	--	N/A	Local Public Road	34.9
Heath Drive	60	2	--	Yes	No	--	N/A	Local Public Road	35.4
Twin Peaks Road	105	4 to 6	30,800	Yes	Yes	C	N/A	Major Arterial	35.6
Adobe Ridge Drive	60	2	--	Yes	No	--	N/A	Local Public Road	35.6
Kozy Crest Lane	60	2	--	No	No	--	N/A	Local Public Road	35.7
Colony Drive	60	2	--	Yes	No	--	N/A	Local Public Road	35.7
Icarus Lane	60	2	--	No	No	--	N/A	Local Public Road	35.8
Ted Williams Parkway	118	4 to 6	14,400 to 28,000	Yes	Yes	A to B	N/A	Prime Arterial	35.9
Glenoak Road	60	2	--	Yes	No	--	N/A	Local Public Road	36.2
Holland Road	60	2	--	No	No	--	N/A	Local Public Road	36.5
Meadowbrook Lane	60	2	--	Yes	No	--	N/A	Local Public Road	37.0
9th Street	60	2	--	Yes	No	--	N/A	Local Public Road	37.3
Leona Lane	60	2	--	No	No	--	N/A	Local Public Road	37.4
Rimbach Road	60	2	--	No	No	--	N/A	Local Public Road	37.5
Poway Road	107	4	35,900 to 37,100	Yes	Yes	D	N/A	Major Arterial	37.8

Road	Approximate Distance of Pipeline Traveled Within Road (feet) <sup>2</sup>	Number of Lanes	Average Weekday Traffic Volume	Pedestrian Facilities Present? (Y/N)	Bicycle Facilities Present? (Y/N)	LOS	Marginal Deficiency Segments Per Policy M-2.1 (County Roadways Only)	Classification	Approximate MP <sup>3</sup>
Oak Knoll Road	60	2	7,300	Yes	No	D	N/A	Local Collector	37.9
Boulder View Drive	68	2	--	No	No	--	N/A	Local Public Road	38.1
Sunwood Trail	65	2	--	No	No	--	N/A	Unpaved Road	38.2
Old Pomerado Road	61	2	--	No	No	--	N/A	Local Public Road	38.3
Valencia Way	60	2	--	Yes	No	--	N/A	Local Public Road	38.6
Scripps Poway Parkway	120	6	41,400	Yes	Yes	C	N/A	Prime Arterial	39.0
Treadwell Drive	60	2	--	Yes	No	--	N/A	Local Public Road	39.1
Stonemill Drive	60	2	--	Yes	No	--	N/A	Local Public Road	39.3
Legacy Road	60	2	--	Yes	No	--	N/A	Local Public Road	39.7
Spring Canyon Road	101	4	3,700	Yes	Yes	A	N/A	Collector	40.2
Mesa Vista Place	60	2	--	Yes	No	--	N/A	Local Public Road	40.2
Vista Elevada	60	2	--	Yes	No	--	N/A	Local Public Road	40.3
Semillon Boulevard	61	2	3,800 to 13,300	Yes	No	A to F	N/A	Collector	40.8
Fairbrook Road	60	2	3,900	Yes	No	A	N/A	Collector	41.5
Avenida Magnifica	60	2	5,600	Yes	Yes	C	N/A	Collector	42.0
Chabad Center Driveway	60	2	--	No	No	--	N/A	Local Private Road	42.3
Scripps Ranch Row	60	2	--	Yes	No	--	N/A	Local Public Road	42.9
Avenue of Nations	60	2	--	Yes	Yes	--	N/A	Collector	43.2

Sources: SanGIS 2014; OpenStreetMap 2014; SANDAG 2010a; Google 2014; City of San Diego 1998; County of San Diego 2011; Kimley Horn 2015



*City of Escondido*

The Mobility and Infrastructure Element of the City of Escondido General Plan states:

“Circulation Element streets and intersections shall be planned and developed to achieve a minimum level of service ‘C’ defined by the Highway Capacity Manual as amended or updated, or such other national standard deemed appropriate by the city. Level of service ‘C’ may not be feasible in all areas at all times and level of service ‘D’ shall be considered the threshold for determining significant impacts and appropriate mitigation.”

The City of Escondido’s Bicycle Master Plan identifies existing circulation patterns for bicyclists, problem areas, and safety concerns, and develops a master system to further the implementation of bikeways throughout Escondido. The Bicycle Master Plan includes Caltrans bikeway standards, conceptual designs for bicycle paths and trails, maps of existing and proposed bicycle facilities, a phasing plan for improvements, funding sources, and an implementation plan. The plan identifies a bicycle facility network, both on-road (Class II and III) and off-road (Class I). Additional details on bicycle facility classifications are provided in the Bicycle Facilities section that follows. Upon full implementation, the Bicycle Master Plan will create a comprehensive network of bicycle lanes, routes, and paths.

The City of Escondido Municipal Code establishes street and sidewalk standards for areas within the City of Escondido. The Municipal Code chapter defines standards for the public dedication of ROWs, arrangement for relocation of public utility facilities within sidewalks or streets, and issuance of building permits for construction in setback areas and ROWs. Additionally, the Municipal Code chapter identifies standards for locating pumps, tanks, and fire hydrants within sidewalks, streets, or other transportation-related ROWs. The City of Escondido also requires the approval of an encroachment permit for the placement of privately owned facilities within public ROWs.

*City of Poway*

The Transportation Element of the City of Poway General Plan does not contain any policies that apply to the Proposed Project.

The City of Poway requires that all Caltrans rules and regulations are followed for vehicles and traffic within the city limits. If any traffic control devices are necessary, the Director of Public Services will determine the hours and days when the traffic control devices will be in operation or in effect, except in those cases when such hours or days are specified in the Poway Municipal Code or are established by a Poway City Council resolution.

The Mobility Element of the City of Poway General Plan also contains the Bicycle Element, which identifies a bicycle route network, both on-road (Class II and III) and off-road (Class I) in the City of Poway.

**Existing Roadway Network**

The Proposed Project is located within San Diego County; the cities of San Diego, Escondido, and Poway; and MCAS Miramar. Figure 3-1: Project Overview Map in Chapter 3 – Project Description depicts the location of the Proposed Project area and the existing roadway network.

The major roadways that will be directly impacted during construction are listed in Table 4.16-2: Impacted Roadways and Table 4.16-3: Freeways, Highways, and Major Roads Crossed by the Proposed Project. This list was prepared using GIS street network layers and includes the classification, number of lanes, average weekday traffic volume, distance the Proposed Project travels in the road, and LOS information for each roadway along the Proposed Project route. Roadways in the table have been listed by the designated classification provided in each jurisdiction's general plan. The roadways listed in the table are also included in Attachment 3-A: Detailed Route Map.

**Table 4.16-3: Freeways, Highways, and Major Roads Crossed by the Proposed Project**

Major Road Crossings	Approximate MP	Anticipated Crossing Method		
		Horizontal Directional Drill (HDD)	Horizontal Bore	Open Trench
State Route (SR-) 76	8.4		•	
I-15	11.4	•		
West El Norte Parkway	22.8			•
SR-78	23.4		•	
West Mission Avenue	23.6			•
West Felicita Avenue	25.6			•
Rancho Bernardo Road	33.0			•
Bernardo Heights Parkway	34.3			•
Twin Peaks Road	35.6			•
Ted Williams Parkway	35.9			•
Poway Road	37.8			•
Scripps Poway Parkway	39.0			•

Sources: SANDAG 2010a; Google 2014

Note: The anticipated crossing methods listed in this table are based on preliminary design data for the Proposed Project and are subject to change.

## Railway

The Proposed Project does not cross any active or inactive railway lines. The nearest railway line in the vicinity of the Proposed Project is the Sprinter, a passenger light rail service that operates on the Escondido Branch of the San Diego Northern Railroad which is operated by the North County Transit District (NCTD). As of 2012, approximately 451 trains per week traveled along the approximately 22-mile line and an average of 7,800 riders were served per day at 15 stations. The closest station to the Proposed Project is the Escondido Transit Center, which is also the eastern terminus of the Sprinter, is located at 796 West Valley Parkway in Escondido, approximately 0.32 mile from MP 24.0 of the Proposed Project route.

## **Bus**

The Proposed Project crosses or parallels numerous bus routes operated by the North County Transit District (NCTD), the Metropolitan Transit District (MTS), and the Riverside Transit Agency (RTA). All bus routes that cross or parallel the Proposed Project route are listed in Table 4.16-4: Bus Routes in the Proposed Project Area.

There are two transit stations in the vicinity of the Proposed Project. The Escondido Transit Center, which is located at 796 West Valley Parkway in the City of Escondido, is approximately 0.32 mile from Milepost (MP) 24.0. The Escondido Transit Center offers service on NCTD, MTS, and RTA bus routes, as well as the NCTD Sprinter light rail line and privately operated Greyhound Lines. The Del Lago Transit Station, located at 3310 Del Lago Boulevard in the City of Escondido, is approximately 0.64 mile from the Proposed Project route at MP 29.1 and provides service to NCTD and MTS buses.

## **Air**

The Proposed Project is not located within three miles of any public airports or airstrips. The Proposed Project is located approximately 1.63 miles east of approximate MP 45.0 at MCAS Miramar's Runway 24R. The United States Marine Corps' 3rd Marine Aircraft Wing is based at MCAS Miramar and has exclusive use of runways and supporting facilities at this facility; runways are not open for public use with the exception of emergency landings.

The Proposed Project is also located approximately 0.13 mile from the Pomerado Hospital Heliport at MP 34.7. This heliport is privately owned and operated by the Palomar Pomerado Health System and is not open for public use.

## **Bicycle Facilities**

The California Highway Design Manual defines three types of "bikeways" as follows:

- Class I Bikeway: Provides a completely separated ROW for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized
- Class II Bikeway: Provides a striped lane for one-way bike travel on a street or highway
- Class III Bikeway: Provides for shared use with pedestrian or motor vehicle traffic

These bikeway classifications are used to define bicycle facilities and routes within the County and City of San Diego, as well as in the cities of Escondido and Poway. Bikeways in the Proposed Project area are described further in the following subsections. Table 4.16-2: Impacted Roadways notes each roadway that is equipped with bicycle facilities along the Proposed Project route.

### ***County of San Diego***

As described in the San Diego Regional Bicycle Plan, Old Highway 395 and Champagne Boulevard are classified as Class II bikeways within the Interstate (I-)15 Bikeway Regional Bicycle Corridor.

**Table 4.16-4: Bus Routes in the Proposed Project Area**

<b>Operating Agency</b>	<b>Bus Route Number</b>	<b>Bus Route</b>	<b>Approximate Proposed Project Crossings</b>
NCTD	389	Escondido to Pala via I-15	The route travels on Centre City Parkway from MP 21.1 to MP 23.8.
NCTD	350	Escondido-Del Lago Transit Station	The route crosses the Proposed Project at MP 25.8 and then parallels the Proposed Project on Bear Valley Parkway from MP 27.5 to MP 29.3.
NCTD	355/357	El Norte Parkway and Valley Parkway	The route crosses the Proposed Project at the intersection of Washington Avenue and Centre City Parkway at MP 23.8, and the intersection of 2nd Avenue and Centre City Parkway at MP 24.3.
NCTD	358/359	North Broadway-Country Club-El Norte Parkway	The route crosses the Proposed Project at the intersection of Washington Avenue and Centre City Parkway at MP 23.8, and the intersection of Valley Parkway and Centre City Parkway at MP 24.2.
NCTD	371 FLEX	Flex Ramona Commuter	The route crosses the Proposed Project at the intersection of Valley Parkway and Centre City Parkway at MP 24.2.
NCTD	388	Escondido to Pala via Valley Center Road	The route crosses the Proposed Project at the intersection of Valley Parkway and Centre City Parkway at MP 24.2.
NCTD	351/352	Escondido Circulator	The route crosses the Proposed Project at the intersection of Washington Avenue and Centre City Parkway at MP 23.8, and the intersection of Grand Avenue and Centre City Parkway at MP 24.3.
NCTD	354	Orange Glen High School via Mission, Lincoln, and Citrus Avenues	The route crosses the Proposed Project at the intersection of Washington Avenue and Centre City Parkway at MP 23.8, and the intersection of Valley Parkway and Centre City Parkway at MP 24.2.
NCTD	356	Morning View Drive, El Norte Parkway, and Escondido Boulevard	The route crosses the Proposed Project at the intersection of El Norte Parkway and Centre City Parkway at MP 22.8, and the intersection of Valley Parkway and Centre City Parkway at MP 24.2.
NCTD	353	Palomar Medical Center to Nordahl Marketplace via Citracado Parkway	The route crosses the Proposed Project at the intersection of Grand Avenue and Centre City Parkway at MP 24.3, and the intersection of 2nd Avenue and Centre City Parkway at MP 24.3.

<b>Operating Agency</b>	<b>Bus Route Number</b>	<b>Bus Route</b>	<b>Approximate Proposed Project Crossings</b>
MTS	964	Camino Ruiz and Capricorn Way to Alliant International University	The route crosses the Proposed Project at MP 43.2 at the intersection of Willow Creek Road/Avenue of Nations and Pomerado Road.
MTS	945	Rancho Bernardo-Poway	The route utilizes Pomerado Road between MP 33.0 and MP 37.8.
MTS	944	Poway-Sabre Springs	The route crosses the Proposed Project at the intersection of Poway Road and Pomerado Road at MP 37.8.
RTA	202	Murrieta-Temecula-Oceanside Transit Center	The northbound leg of the route travels on Old Highway 395 from SR-76 to the community of Rainbow from MP 4.1 to MP 8.4.

Sources: NCTD 2014; MTS 2014; RTA 2014

### ***City of San Diego***

The entire length of Pomerado Road within the City of San Diego is classified as either a Class II or Class III bikeway. The Proposed Project also intersects or parallels Class II bikeways on Avenue of Nations, Bernardo Heights Parkway, Rancho Bernardo Road, Spring Canyon Road, and Stonebridge Parkway. The Proposed Project intersects a Class III bikeway at Avenida Magnifica and Pomerado Road.

### ***City of Escondido***

The full length of Centre City Parkway within Escondido's city limits is designated as a Class II bikeway. Additionally, the entire section of the Proposed Project within Bear Valley Parkway is classified a Class II bikeway. The Proposed Project will also intersect Class II bikeways where Centre City Parkway intersects Felicita Avenue, El Norte Parkway, and Mission Avenue, and where Bear Valley Parkway intersects San Pasqual Road.

### ***City of Poway***

The full length of Pomerado Road within Poway's city limits is designated as a Class II bikeway in the City of Poway General Plan. Additionally, the City of Poway General Plan designates Twin Peaks Road, Ted Williams Parkway, Poway Road, and Scripps Poway Parkway as Class II bikeways where they intersect the Proposed Project at Pomerado Road.

## **4.16.3 Impacts**

### **Significance Criteria**

According to Appendix G of the California Environmental Quality Act Guidelines, the Proposed Project will have a significant impact if it:

- Results in a conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the circulation system
- Results in a conflict with an applicable congestion management program
- Results in a change in air traffic patterns
- Results in a substantial increase in hazards due to design feature or incompatible uses
- Results in inadequate emergency access
- Conflicts with adopted policies, plans, or programs supporting alternative transportation

### **Question 4.16a – Traffic Plan or Policy Conflicts**

#### ***Construction – Less-than-Significant Impact***

Construction of the Proposed Project will comply with all applicable policies from the general plans for the County of San Diego and the cities of San Diego, Escondido, and Poway, as further discussed in the following paragraphs. No policies or requirements related to the Proposed Project were identified within the SANDAG 2050 RTP. The MCAS Miramar INRMP does not have any specific policies related to the Proposed Project; however, the INRMP states that MCAS Miramar regulations require that all personnel follow a vehicle speed limit of 35 mph on improved roads and 15 mph on all unimproved roads while aboard MCAS Miramar. The

Applicants and their contractors will obey all applicable speed limits during construction, in accordance with the requirements of the INRMP and MCAS Miramar regulations.

The Proposed Project will comply with Policy M-2.1 of the Mobility Element of the County of San Diego General Plan, which requires that development projects provide the associated road improvements necessary to achieve a LOS D or higher on all Mobility Element roads, except where a failing LOS has been accepted pursuant to the specific criteria of Policy M-2.1. The Proposed Project will be constructed within a number of Mobility Element roadways in the County of San Diego. Additionally, six roadway segments that have been accepted in the County of San Diego General Plan as a failing LOS and that are crossed or contiguous with the Proposed Project. These segments are listed in Table 4.16-2: Impacted Roadways. Prior to construction, the Applicants will evaluate potential impacts to LOS on all Mobility Element roadways impacted by construction and strategies to reduce impacts to LOS on those roadways as part of the Traffic Management Plan (TMP) required as part of Applicants-Proposed Measure (APM-) TRA-01. The Applicants will restore all road surfaces impacted by trenching activities following the completion of construction in accordance with the obtained encroachment permit conditions. As impacts to LOS on Mobility Element Roadways resulting from construction of the Proposed Project will be temporary, lasting only as long as it takes to construct the Proposed Project within or adjacent to a roadway, the Proposed Project will not result in a permanent decrease in LOS on Mobility Element roadways. Therefore, the Proposed Project will be consistent with this policy. Further discussion and analysis related to complying with this and other LOS standards are discussed further in the response to Question 4.16b – Level of Service Changes.

The Proposed Project will also comply with Policy M-3.2 of the County of San Diego General Plan's Mobility Element, which requires development projects to contribute their "fair share" toward financing transportation facilities, including mitigating the associated direct and cumulative traffic impacts caused by a project to regional and local roadway networks. During construction, the Applicants will implement strategies to mitigate for direct and cumulative traffic-related impacts as part of the Traffic Management Plan (TMP) required as a part of APM-TRA-01, including restoring all roadways impacted by construction to pre-existing conditions or better. The Proposed Project will not require improved or expanded transportation facilities to support operations and maintenance activities. Therefore, the Proposed Project will be consistent with this policy.

The Proposed Project will also comply with Policy M-6.1 of the County of San Diego General Plan's Mobility Element, which states that heavy truck traffic (generally trucks heavier than 33,000 pounds) should be minimized near schools and within village and residential areas, and requires the careful location of truck-intensive land uses. Heavy trucks and equipment will be required to construct the Proposed Project, for applications such as hauling pipe sections, slurry, and construction equipment to areas of active construction as well as hauling away spoils excavated from the pipeline trench. However, the TMP required by APM-TRA-01 will include requirements that the Applicants and their constructors must minimize truck trips near schools and residential areas to the minimum necessary to construct the Proposed Project and to meet the objectives of Policy M-6.1. Therefore, the Proposed Project will be consistent with this policy.

The Proposed Project will also comply with policies ME-A.5 and ME-C.6 of the Mobility Element of the City of San Diego General Plan. ME-A.5 states that adequate sidewalk widths and clear paths of travel should be provided for pedestrian usage, and obstructions and barriers that inhibit pedestrian circulation should be minimized. ME-C.6 states that, when feasible, utility lines should be placed underground. Though the Proposed Project may have appurtenant structures (including mainline valves [MLVs] and metering stations) constructed aboveground, the majority of the Proposed Project will be constructed below ground level and will not be visible following the completion of construction. Any aboveground structures will be placed so that they do not obstruct pedestrian circulation in the area. Though temporary sidewalk closures may be required as part of the construction of the Proposed Project, alternative pedestrian walking routes around construction areas will be designated in the TMP required by APM-TRA-01.

The Proposed Project will also comply with the Mobility and Infrastructure Element of the City of Escondido General Plan, including Street Network Policy 7.3, which establishes LOS standards for city streets. As part of the TMP required by APM-TRA-01, the Applicants will implement strategies to reduce potential impacts to LOS resulting from construction on streets in the City of Escondido, including using traffic controls, flaggers and signage to reduce impacts to local traffic. Additionally, all potential impacts to LOS will be temporary, lasting only as long as it takes to construct the Proposed Project, as the Proposed Project will not induce any growth that will cause a permanent impact to LOS in the City of Escondido. Further discussion and analysis related to complying with this and other LOS standards are discussed further in the response to Question 4.16b – Level of Service Changes.

Construction of the Proposed Project will not impact policies related to mass transit providers, as no such policies were identified that relate to the Proposed Project. Due to the length and duration of construction, the potential exists for construction of the Proposed Project to conflict with relevant circulation plans, ordinances, and policies establishing measures of effectiveness for the performance of the circulation system, particularly the LOS standards set by individual jurisdictions. During construction, lanes of travel, bikeways, and pedestrian sidewalks along the Proposed Project route will be closed periodically to traffic. APM-TRA-02 will ensure that the Proposed Project is designed to place the pipeline within road shoulders and medians to the extent feasible, which will minimize the required construction-related lane closures. It is anticipated that construction of the Proposed Project will progress at an average rate of 200 to 300 feet per day. The Applicants will obtain all required ministerial encroachment permits and all other similar local permits, including a City of San Diego Public ROW Permit prior to construction. Additionally, the Applicants will obtain a variance for lateral encroachment onto any Caltrans ROWs if one is required to construct the Proposed Project.

In order to comply with the requirements of the encroachment and public ROW permits, as well as the applicable plans and policies discussed previously, the Applicants propose to implement APM-TRA-01, which requires the preparation of a comprehensive TMP for the Proposed Project. The TMP will be prepared to address the requirements of the Caltrans, county, and city encroachment permits outlined in Table 4.16-1: Encroachment Permit Requirements for Jurisdictions in the Proposed Project Area. The TMP will also address the applicable general plan policies discussed previously and all other factors related to potential

construction-induced traffic impacts. These factors include, but are not limited to, the following:

- protection of traffic by use of flaggers, warning signs, lights, and barricades;
- minimum interference with traffic;
- cleanup and restoration of roadways upon completion of work;
- considering horizontal boring at intersections of roads with LOS D or lower to minimize impacts;
- speed limits on all roads, including unpaved access roads within MCAS Miramar;
- timing and duration of work, including the potential for night or weekend work;
- potential impacts to LOS standards;
- potential impacts to emergency vehicle response times;
- potential impacts to public transit, including bus routes;
- potential impacts to non-motorized transit, including bicycle lane closures and detours; and
- potential impacts to pedestrian access, including temporary sidewalk and pedestrian crossing closures and detours.

By implementing the TMP required by APM-TRA-01, the Applicants will comply with all requirements of all applicable general plan policies and goals, as well as all required encroachment and public ROW permits. Therefore, any potential impacts related to applicable policies, plans, and ordinances will be less than significant.

#### ***Operation and Maintenance – Less-than-Significant Impact***

The Proposed Project will be regularly inspected, maintained, and repaired following the completion of construction. To maintain service continuity, routine preventative maintenance will be conducted one to six times per year depending on the location, as will aerial and ground inspections, as shown in Table 3-6: Maintenance Activities in Chapter 3 – Project Description. These types of inspections already occur at the Applicants’ other existing facilities in the area.

In the event that maintenance activities or repair work require the temporary closure of a travel lane, sidewalk, or bicycle facility, the Applicants will coordinate with the jurisdiction where the work is to be conducted. All work will be conducted in compliance with applicable policies and requirements of the jurisdiction and any other applicable traffic control requirements (e.g., TCPs and TMPs). Because these activities will be infrequent and will be conducted in accordance with all applicable traffic plans, ordinances, and policies, impacts will be less than significant.

#### **Question 4.16b – Level of Service Changes**

##### ***Construction – Potentially Significant Impact***

The SANDAG 2050 RTP includes provisions to meet the federal and state requirements for a congestion management program for the San Diego County region, such as a regional transportation system plan, strategies to monitor performance of the regional transportation system, and a variety of congestion management tools. Additionally, the County of San Diego requires that development projects generally cannot create additional traffic that causes roadways to exceed LOS D, except for roadway segments where LOS E/F has been accepted based on the

criteria established by Policy M-2.1 of the County of San Diego General Plan's Mobility Element. The City of San Diego Traffic Impact Study Manual provides acceptable LOS standards for the City of San Diego, which includes LOS D in urban areas and LOS C in undeveloped areas. The City of Escondido considers LOS D to be the threshold for determining significant impacts to LOS standards, and the City of Poway prohibits development that would result in LOS D being exceeded during the two highest peak hours unless no feasible alternatives exist and an overriding public need can be demonstrated.

Existing LOS for roads in the Proposed Project area range widely from LOS A to F (LOS A indicates free-flowing traffic, while LOS F indicates a roadway that experiences significant traffic gridlock during peak hours). Construction crews, as well as materials and equipment, will primarily access the Proposed Project route and associated potential staging yards via I-15 and SR-78, and will utilize the existing network of surface arterials and major roads in the urban section of the route to travel from the freeways to active construction areas. Where the Proposed Project is located outside of urban areas, crews will largely access construction and staging areas via a network of existing unpaved utility access roads on MCAS Miramar. Table 4.16-5: Approximate Vehicle Trip Increases on Public Roadways to be Used contains a list of roadways that will be used by construction crews and Proposed Project-related traffic, as well as the existing ADT data, approximate peak construction period ADT data, and existing and construction LOS.

Available parking may be impacted if construction personnel park their personal vehicles at areas of active construction, and particularly in urban areas with potentially limited workspaces and parking. To prevent impacts to parking, the Applicants propose to implement APM-TRA-03, which will require construction personnel to park their personal vehicles at staging yards and utilize contractor-operated buses, vans, and trucks to access construction sites where parking is restricted. At the end of the day, construction personnel will utilize the same vehicles to return to the staging areas. In addition, APM-TRA-04 requires that notification be posted along existing parking areas regarding the potential temporary loss of on-street parking due to planned construction activities.

As described in Chapter 3 – Project Description, the Applicants anticipate that up to 600 construction personnel will be working on the Proposed Project during peak construction; however, outside of the peak construction period, the number of daily trips will be significantly lower as the need for construction personnel will be commensurate with the level of construction activities being conducted. During the initial and later construction phases of the project, demand for construction personnel will be lower, resulting in fewer vehicle trips. At the peak of construction, a maximum of approximately 600 personal vehicle trips per day will occur to and from the Proposed Project areas under construction at any given time and/or the associated staging areas during peak construction times. Additionally, a maximum average of approximately 413 truck trips<sup>5</sup> per day will be required during construction. Existing roadways in the Proposed Project area will also be used for worker commutes.

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<sup>5</sup> Based on the calculations provided in Section 4.3 Air Quality, the maximum number of daily truck trips required to construct the Proposed Project will be 413.

**Table 4.16-5: Approximate Vehicle Trip Increases on Public Roadways to be Used**

Roadway	Approximate Existing ADT	Approximate Maximum ADT at Peak Construction <sup>6</sup>	Approximate ADT Increase During Peak Construction (percent)	Existing LOS	Potential Temporary LOS Change as a Result of Construction-Related Traffic? (Y/N)
Rainbow Valley Boulevard West	2,800	3,054	9.1	A	No
East Mission Road	16,800	17,054	1.5	D	No
Highway 76/Pala Road	25,700	25,954	1.0	C	No
Gopher Canyon Road	9,400	9,654	2.7	A	No
Deer Springs Road	8,000	8,254	3.2	A	No
El Norte Parkway	24,000 to 28,400	24,254 to 28,654	0.9 to 1.1	A to B	No
Valley Parkway/Grand Avenue East Bound (EB)/2nd Street EB	19,800 to 44,000	20,054 to 44,254	0.6 to 1.3	C	No

<sup>6</sup> The peak construction increase in ADT was calculated using the assumption that the pipeline will be constructed by a maximum of 600 personnel, and as stated in the Project Description, the 600 personnel will be divided into four crews of up to 150 personnel each during peak construction periods. It is assumed that each construction worker will drive his or her personal vehicle to and from the Proposed Project each day for a total of 150 daily personal vehicle trips per crew per day, and for an aggregate total of 600 personal vehicle trips per day for the entire Proposed Project. Additionally, based on the Air Quality models in Section 4.3 Air Quality, it is assumed that in total, construction activities will require 413 truck trips per day to construct the Proposed Project and each of the four crews will require approximately the same number of trucks per day. Based on these assumptions, each crew will generate 104 truck trips and 150 personal vehicle trips per day, resulting in a maximum total of 254 vehicle trips per crew, per day. The approximate maximum ADT—as well as the approximate percentage increase in ADT—during peak construction was calculated using the maximum number of vehicle trips generated by one crew per day (254) and assumes only one crew will utilize a specific roadway at any given time to travel from freeways to a staging area or an area of active construction along the Proposed Project route.

<b>Roadway</b>	<b>Approximate Existing ADT</b>	<b>Approximate Maximum ADT at Peak Construction<sup>6</sup></b>	<b>Approximate ADT Increase During Peak Construction (percent)</b>	<b>Existing LOS</b>	<b>Potential Temporary LOS Change as a Result of Construction-Related Traffic? (Y/N)</b>
Citracado Parkway/Felicita Parkway	10,600 to 11,200	10,854 to 11,454	2.3 to 2.4	A to B	Yes, some roadway segments may temporarily change from LOS B to C
Via Rancho Parkway/Bear Valley Parkway	33,000 to 34,000	33,254 to 34,254	0.7 to 0.8	B	No
Pomerado Road	15,100	15,354	1.7	B	No
Rancho Bernardo Road	21,200 to 37,800	21,454 to 38,054	0.7 to 1.2	C to D	No
Bernardo Center Drive/Bernardo Heights Parkway	11,600 to 23,400	11,854 to 23,654	1.1 to 2.2	A to B	No
Camino del Norte/Twin Peaks Road	32,100 to 45,600	32,354 to 45,854	0.6 to 0.8	B to C	No
Ted Williams Parkway	28,000 to 30,100	28,254 to 30,354	0.8 to 0.9	B	No
Poway Road	37,100 to 40,300	37,354 to 40,554	0.6 to 0.7	C to D	No
Scripps Poway Parkway	32,500 to 42,500	32,754 to 42,754	0.6 to 0.8	B to C	No
Kearny Villa Road	22,000	22,254	1.2	C	No

Sources: SANDAG 2014; Google 2014

Construction of the Proposed Project will generally be between the hours of 6:00 a.m. and 7:00 p.m. six days per week, or as dictated by each city or county ordinance and/or encroachment permit requirements. Construction personnel will typically drive to the work site or staging yards before 6:00 a.m. and leave at the end of the day, between approximately 5:00 p.m. and 7:00 p.m., with fewer people traveling to and from the work site throughout the day. Potential impacts to traffic resulting from these personal vehicle trips will be addressed by the respective jurisdiction's encroachment permits at the time of construction. When combined with the 413 anticipated truck trips required to transport materials and equipment to and from the Proposed Project work areas, a maximum of 1,013 total vehicle trips<sup>7</sup> will be required per day during the peak construction period. As described in Chapter 3 – Project Description, the Proposed Project will be constructed by four crews of 125 to 150 workers. Assuming each crew requires roughly the same number of truck trips per day to construct the Proposed Project, this will result in 228 to 254 vehicle trips per day per crew to any one of the four segments along the Proposed Project route during the peak construction period, as each crew is anticipated to construct a different segment of the Proposed Project.

Additionally, as discussed further in Section 4.17 Utilities and Service Systems as part of APM-PUS-01, the Applicants are proposing to use recycled water during construction where it is feasible to do so, and does not result in additional significant impacts to traffic, air quality, and greenhouse gas emissions as a result of the transportation of recycled water from a recycled water source to construction areas. The actual use of recycled water during construction will be dependent on a range of factors, including availability of recycled water at the time of construction, as well as state and local regulations related to use and discharge of recycled water. The estimated number of truck trips required to use recycled water during construction of the Proposed Project is provided in Attachment 4.16-B: Estimated Truck Trips Required to Deliver Recycled Water for Construction. The calculations in the Attachment conservatively assume that recycled water will be used for all construction-related activities for the Proposed Project. Based on the calculations, the use of recycled water for all dust control, saw cutting, and HDD applications would generate an estimated additional 1,449 truck trips during the 12 to 18 month construction phase of the Proposed Project, or an average of approximately four additional truck trips per day. Based on this estimate, if the Proposed Project were to use recycled water for all dust control, saw cutting and HDD applications, the Proposed Project would generate a maximum average of 1,017 vehicle trips per day during peak construction activities. Additionally, an estimated 939 truck trips would be required to transport recycled water for hydrostatic testing of the Proposed Project. Hydrostatic testing will be required for the three pipe segments along the Proposed Project that will be installed using HDD techniques, as well as for the final hydrostatic testing of the completed pipeline. The three HDD segments would require an estimated combined 86 truck trips to transport recycled water from the recycled water source to the test locations, and the final hydrostatic test would require an estimated 853 truck trips to transport water from a recycled water source to the testing location. These truck trips would be

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<sup>7</sup> For the purposes of this chapter, the term “vehicle trips” refers to the total combined number of personal vehicle trips and truck trips required to construct the Proposed Project.

concentrated at the testing locations, and would take place immediately prior to the commencement of hydrostatic testing<sup>8</sup> over a period of several days to several weeks.

Temporary or partial lane closures will likely be required during certain construction activities, such as when the underground portions of the Proposed Project are installed within or adjacent to roadways. Public roadways with the potential to have temporary lane closures are listed in Table 4.16-2: Impacted Roadways. In order to minimize potential impacts on transportation and traffic from these lane closures, traffic controls in the form of signs, cones, and flaggers will be in place during all construction activities requiring temporary lane closures, the potential for night or weekend work will be evaluated, and construction traffic will be required to avoid LOS D through F roadways during peak hours, in accordance with APM-TRA-01. Generally, road closures will only be an option if detour routes are available and property access can be maintained. APM-TRA-02 will ensure that the Proposed Project is designed to place the pipeline within road shoulders and medians to the extent feasible, which will minimize the required construction-related lane closures. Should driveway access to residences or businesses be temporarily blocked or restricted by construction activities, each residence and/or business will be notified by the Applicants at least four weeks prior to the construction activity, in accordance with APM-TRA-04.

A total of 17 arterials, major roads, and collectors that travel between local freeways to the Proposed Project route and will likely be used by a majority of construction workers and equipment to access the Proposed Project from freeways. As these roadways are likely to carry a majority of the vehicle traffic to the Proposed Project route, a percentage increase in the number of vehicle trips per weekday compared to the most recent available traffic count data has been calculated and can be located in Table 4.16-5: Approximate Vehicle Trip Increases on Public Roadways to be Used. Table 4.16-5: Approximate Vehicle Trip Increases on Public Roadways to be Used lists the most recent available ADT range on roadways between I-15 and the Proposed Project route, the approximate increase in ADT during peak construction periods, the approximate potential percentage increase in ADT during peak construction, and whether if the increased number of vehicle trips will result in a change in LOS during peak construction periods. Additionally, the potential exists for the Proposed Project to impact traffic on roads adjacent to but not crossing the Proposed Project route during construction. Traffic impacts on these roads may include detours required by construction activities; as well as construction equipment and vehicle traffic. These impacts will generally be short-term in nature, lasting only as long as it takes to construct the Proposed Project in any specific area, but the level of impact will be lower on the roadways where the Proposed Project will be constructed. Additionally, all construction-related detours will be established in accordance with the TMP required by APM-TRA-01 and will be kept to the minimum necessary to construct the Proposed Project.

The operation and use of construction equipment and vehicles has the potential to impact LOS along these roadways in the Proposed Project study area due to the increased number of vehicles on the roadway, construction vehicle ingress and egress, and trenching activities. To reduce the impact to LOS standards along these arterials and major roads, the Applicants will implement APM-TRA-01, which involves the development of the TMP and requires construction traffic to

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<sup>8</sup> In the event that recycled water is used for hydrostatic testing, all water required for hydrostatic testing must be in place prior to the test, as testing requires a continuous filling source.

avoid the use of roadways that operate at LOS D through F for travel to and from the Proposed Project during peak hours (generally from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. on weekdays). Additionally, where these roadways intersect the Proposed Project route, the Applicants will consider a variety of methods in their TMP and construction design to minimize construction-related impacts to LOS at these intersections. These methods may include requiring horizontal boring under all road intersections that carry high traffic volumes—which include major arterials, arterials, and major roads that intersect the Proposed Project route—or conducting construction activities at these locations during off-peak hours, including at night and on weekends in order to reduce impacts to LOS standards.

Though the Proposed Project will be constructed within or under at least 114 public roadways, a majority of these roads will only be crossed for a short distance at intersections. As stated previously in the response to Question 4.16a – Traffic Plan or Policy Conflicts, it is anticipated that Proposed Project construction will progress at an average rate of approximately 200 to 300 feet per day. As shown in Table 4.16-2: Impacted Roadways, a majority of intersections along the Proposed Project route vary in width between 60 and 120 feet and, correspondingly, impacts to these intersections will be short-term. By way of illustration, during construction only the following 13 public roads will involve the installation of more than 500 linear feet of pipe:

- the Old Highway 395,
- Rainbow Hills Road,
- East Mission Road,
- Champagne Boulevard,
- North Centre City Parkway,
- South Centre City Parkway,
- East 17th Avenue,
- West Felicita Avenue,
- East Felicita Avenue,
- Encino Drive,
- Bear Valley Parkway,
- Highland Valley Road, and
- Pomerado Road.

The LOS for these roadways range from A to D, with the exception of Rainbow Hills Road and East 17th Avenue, which do not have an established LOS. It is not anticipated that construction activities will result in a permanent change to LOS, as any impacts to LOS as a result of construction will be temporary, as construction will progress at approximately 200 to 300 feet per day. Similarly, for roadways listed in Table 4.16-2: Impacted Roadways other than the 13 roadways listed above, impacts to LOS will be correspondingly short-term, as the distance traveled by the Proposed Project in these roadways ranges from six to 376 feet, and construction will typically progress at the same rate, approximately 200 to 300 feet per day. Additionally, LOS is a long-term standard, and short-term construction impacts are unlikely to have a lasting impact on LOS. However, as required by APM-TRA-01, the Applicants will incorporate

measures into the TMP and applicable encroachment permits that further reduce impacts to LOS on these roadways. These measures may include, but are not limited to, the following:

- scheduling construction activities outside of peak hours,
- determining alternative routes or detours prior to construction,
- utilizing flaggers and signage to direct traffic, and
- limiting the length of open trenches to the length allowed by county and city encroachment permits.

Proposed Project-related traffic may result in an increase in existing daily traffic and road congestion due to lane closures, but it is not anticipated to result in a permanent change to LOS after the approximately 12- to 18-month construction period is complete. In addition, APM-TRA-03 will further reduce impacts to LOS by requiring construction personnel to park their personal vehicles at staging yards and utilize contractor-operated buses, vans, and trucks to access areas of active construction. During construction, Proposed Project-related traffic will be dispersed over the approximately 47-mile-long route, particularly along the approximately 40-mile-long urban section. In addition, construction activity impacts at any one location will generally be short-term in duration, and will last between several days to install pipe and several weeks to conduct HDD activities or horizontal boring under freeways, highways, and major intersections. Despite the incorporation of the TMP required by APM-TRA-01, construction impacts to LOS as a result of Proposed Project construction are anticipated to be potentially significant.

#### ***Operation and Maintenance – Less-than-Significant Impact***

As discussed previously, the Proposed Project will be regularly inspected, maintained, and repaired following completion of its construction. To maintain service continuity, routine preventive maintenance will be conducted. Similar inspections and routine maintenance already occur at the Applicants' other existing facilities in the area. While it is not anticipated, in the event that operation and maintenance of the Proposed Project require lane closures or detours, the Applicants will utilize existing operation and maintenance protocols to ensure that impacts to LOS as a result of these activities are reduced. Operation and maintenance activities associated with the Proposed Project will require a relatively small number of vehicle trips. One to six vehicle trips<sup>9</sup> will be required for any individual aboveground location annually, as well a variable number (up to 250)<sup>10</sup> of vehicle trips to provide location and marking services (e.g., DigAlert) and surveillance of other agencies and entities in the event that excavation above or near the pipeline is required. Due to the intermittent nature of these trips and the need for up to approximately 270 trips per year or an average of less than one vehicle trip per day, operation and maintenance of the Proposed Project will not substantially increase existing traffic levels along identified roadway trips.

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<sup>9</sup> This number was estimated using the information provided in Table 3-6: Maintenance Activities in Chapter 3 – Project Description. Depending on the type of structure or crossing, generally one to six annual visits are required at a given location.

<sup>10</sup> The need for location and marking services, as well as excavation surveillance activities, is highly variable and depends on a range of factors that are outside of the Applicants' control.

All work will be conducted in compliance with applicable policies and requirements of the jurisdiction and any other applicable traffic control requirements (e.g., TCPs and TMPs). Because these activities will be infrequent and will be conducted in accordance with all applicable traffic plans, ordinances, and policies, impacts will be less than significant.

#### **Question 4.16c – Air Traffic Changes**

##### ***Construction – No Impact***

Helicopter use is not anticipated during construction of the Proposed Project, and no changes to air traffic patterns will be required to accommodate construction. As a result, there will be no impact.

##### ***Operation and Maintenance – No Impact***

Operation and maintenance activities will include routine inspections, ongoing maintenance, and repairs necessary to ensure that the integrity of the system is maintained over the long term. Inspections may occur in the form of an annual aerial patrol with a helicopter and/or through ground patrols to inspect the facilities. As is consistent with operation and maintenance activities that currently occur at other facilities operated by the Applicants in the area, if helicopters are used to assist with operation and maintenance activities, the Applicants will notify the Federal Aviation Administration, as appropriate, prior to conducting such activities. Additionally, these aerial patrols are conducted on an annual basis and take only one day. Therefore, no impact will occur.

#### **Question 4.16d – Increase in Hazards**

##### ***Construction – Less-than-Significant Impact***

As discussed previously, potential short-term impacts associated with temporary lane closures during construction will be less than significant, and will be further reduced with the implementation of APM-TRA-01. All Proposed Project facilities that are aboveground—including MLVs, pressure-limiting or metering stations, and the interconnections with existing natural gas transmission lines operated by the Applicants—will be constructed outside the roadway prisms<sup>11</sup> to eliminate potential hazards to traffic. During construction, certain major at-grade intersections will be crossed using horizontal boring techniques, which will further reduce the potential for traffic hazards. Horizontal boring reduces the need for open trenching within roadways, as the technique only requires the excavation of an entry pit and exit pit in which to place boring equipment. These excavations will be located outside of roadway prisms and will be protected with appropriate traffic barriers and signage.

During the approximately 12- to 18-month-long construction period, heavy equipment operating adjacent to or within public road ROWs will have the potential to increase the risk of accidents as construction-related trucks and equipment on Proposed Project area roadways will interact with other vehicles as they travel from staging yards and enter/exit areas of active construction. Potential conflicts could also occur between construction traffic and bicyclists and pedestrians.

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<sup>11</sup> A roadway prism is defined as an area consisting of the road surfaces and any cut slope and road fill.

As discussed previously, the Applicants will obtain all required road encroachment permits and other approvals prior to construction and will comply with all the applicable conditions of approval. Incorporation of the TMP, as required by APM-TRA-01, will govern how Proposed Project construction will comply with roadside safety protocols in order to reduce the potential for increased hazards. As a result, any potential impacts will be less than significant.

***Operation and Maintenance – No Impact***

The Proposed Project facilities will generally be unmanned during operation, with the exception of occasional maintenance and monitoring visits that will occur on an as-needed basis, but generally no more than several times per year at any given location. In general, operation and maintenance visits will be performed using standard pickup trucks or similarly sized vehicles. The Proposed Project facilities will otherwise be monitored remotely. As a result, any potential increase in hazards is not anticipated.

**Question 4.16e – Emergency Access Effects**

***Construction – Less-than-Significant Impact***

As discussed in Section 4.14 Public Services, the Proposed Project will have the potential to impact emergency services due to increased vehicle traffic and temporary lane closures that may be necessary to construct and install the pipeline. Additionally, there are six fire stations, one police fire and headquarters, and one hospital located directly adjacent to the Proposed Project route, and construction activities have the potential to temporarily restrict access to these locations. To reduce the potential for these impacts to occur, the Applicants will implement APM-TRA-05, which includes strategies and procedures to avoid impacts to emergency vehicle access and response times. APM-TRA-05 requires the Applicants to coordinate with all applicable emergency service providers no less than 60 days prior to beginning construction of the Proposed Project, and to notify and coordinate with emergency service providers no less than 48 hours prior to implementing any lane or road closures or restricting access. As previously discussed, road closures will typically only be an option if detour routes are available and property access can be maintained. APM-TRA-02 will ensure that the Proposed Project is designed to place the pipeline within road shoulders and medians to the extent feasible, which will minimize the required construction-related lane closures. Further, as part of the comprehensive TMP required by APM-TRA-01 and the required applicable encroachment permits, the Applicants will include measures to reduce impacts to emergency services and response times to a less-than-significant level. With the implementation of APM-TRA-01, APM-TRA-02, and APM-TRA-05, potential impacts are anticipated to be less than significant.

***Operation and Maintenance – Less-than-Significant Impact***

As previously described, Proposed Project facilities will be unmanned during operation, with only occasional maintenance and monitoring visits needed. No road or lane closures will be required during normal operation of the Proposed Project. If maintenance or an emergency repair of the Proposed Project will span a road or occur where a lane closure is required, activities will be coordinated with the applicable local jurisdiction (as they are currently) to avoid closing any emergency access routes or to designate temporary emergency vehicle detour routes. Therefore, emergency access will only be obstructed in limited circumstances for short periods of time, and impacts will be less than significant.

### **Question 4.16f – Alternative Transportation Conflicts**

#### ***Construction –Less-than-Significant Impact***

The Proposed Project will be constructed in roadways that are also utilized by public bus routes, bicycle routes, and pedestrian sidewalks. The Proposed Project will cross or parallel 14 public bus routes operated by the NCTD, MTS, and RTA. The Proposed Project will also cross numerous Class II and III bikeways and will be constructed within roadways designated as Class II bikeways, including the full length of the Proposed Project within Old Highway 395, Champagne Boulevard, North Centre City Parkway, South Centre City Parkway, Bear Valley Parkway, and the full length of Pomerado Road. Lastly, the Proposed Project will require the temporary closure of sidewalks—particularly in the cities of San Diego, Escondido, and Poway—during construction activities located in the vicinity of these features.

In order to reduce the potential impacts to alternative transportation facilities, the Applicants will include requirements in the TMP, as required by APM-TRA-01, which will reduce these impacts to less than significant. The Applicants will also coordinate with the appropriate jurisdictions regarding the design of temporary detours for bicycle routes and pedestrian access ways away from areas of active construction, while maintaining appropriate levels of circulation in accordance with all applicable plans and ordinances. To reduce impacts to bus routes, the Applicants will coordinate with the NCTD, MTS, and RTA prior to construction and will determine the timing and duration of disruptions to individual bus stops and routes caused by Proposed Project construction activities. If determined to be necessary, the Applicants—in coordination with NCTD, MTS, and RTA—will temporarily reroute bus routes away from areas of active construction or areas with active lane closures. With the incorporation of APM-TRA-01, any potential impacts to alternative transportation will be less than significant.

#### ***Operation and Maintenance – Less-than-Significant Impact***

The operation and maintenance practices for the Proposed Project will be the same as those conducted for other existing facilities operated by the Applicants and located in the vicinity. Rail, bus, bicycle, and pedestrian traffic are not affected by current operation and maintenance activities for existing facilities in the vicinity. While unlikely, operation and maintenance activities may require temporary closures of roadways utilized bus, bicycle and pedestrian traffic. However, any closures will be short term in nature and would only involve closing short distances of the roadway. Any closures will be coordinated with the appropriate local jurisdiction (as they are currently), and any impacts to alternative transportation will be minimized to the extent possible to conduct the required maintenance. Therefore, operation and maintenance activities associated with the Proposed Project are not anticipated to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Thus, impacts to alternative transportation as a result of operations and maintenance of the Proposed Project will be less than significant.

#### **4.16.4 Applicants-Proposed Measures**

In addition to the TMP required by Caltrans, the County of San Diego, and the cities of San Diego, Escondido, and Poway, the following APMs will be implemented to reduce potential

impacts to traffic flows, emergency services, public and alternative transportation, and driveway access for essential services:

- **APM-TRA-01:** Prior to construction, the Applicants will prepare a comprehensive Traffic Management Plan (TMP) for the Proposed Project. The TMP will be prepared in accordance with all applicable requirements of the state, county, and city encroachment permits and applicable county and city plans, ordinances, and policies. The TMP will also address all other factors related to reducing potential construction-induced traffic impacts, which include, but are not limited to, the following:
  - coordinating with the jurisdictions prior to construction to determine specific traffic handling layouts;
  - protecting traffic by using flaggers, warning signs, lights, and barricades;
  - minimizing interference with traffic;
  - restoring roadway capacity to the extent feasible during hours when construction activities are not occurring, which could include the use of road plates or temporary paving;
  - cleaning and restoring roadways upon completion of work;
  - scheduling the timing and duration of work, including the potential for night or weekend work;
  - minimizing the potential impacts to level of service standards, where possible;
  - minimizing the potential impacts to emergency vehicle response times and emergency evacuation routes;
  - minimizing potential impacts to public transit, including coordinating with public transit agencies to modify bus routes during construction, as well as determining construction notification procedures for public transit users;
  - minimizing potential impacts to non-motorized transit, including bicycle lane closures and detours;
  - minimizing potential impacts to pedestrian access, including temporary sidewalks and pedestrian crossing closures and detours;
  - determining the locations where full road closures may be required to ensure there are comparable detour routes available and which driveways in the area of the closures will have continual access during the closures;
  - determining, prior to construction, any alternative routes or detours that use similar street types to roadways with temporary closures;

- limiting the length of open trenches to the length allowed by county and city encroachment permits;
  - implementing strategies to mitigate for direct and cumulative traffic-related impacts;
  - implementing strategies for construction phasing and traffic management that minimize the duration of Proposed Project construction;
  - implementing construction schedules and techniques that minimize roadway closures, including the number of cross streets and side streets that may be blocked or otherwise impacted by construction activities;
  - implementing construction phasing or techniques to maintain access through intersections where no alternative routes are available;
  - minimizing heavy truck traffic near schools and residential areas to the minimum necessary to construct the Proposed Project;
  - considering horizontal boring at intersections of roads that are regionally significant and carry high traffic volumes, including roads designated in applicable general plans as primary arterials, arterials, and major roads; and,
  - enforcing speed limits of construction vehicles on all roads, including unpaved access roads within Marine Corps Air Station Miramar.
- **APM-TRA-02:** The Proposed Project will be designed so that the pipeline alignment utilizes existing road shoulders and medians to the maximum extent feasible in order to minimize reductions in roadway capacity as a result of construction-related lane closures.
  - **APM-TRA-03:** In order to limit impacts to parking capacity in rural and urban areas of the Proposed Project route, the Applicants will require most construction personnel to utilize contractor-operated vehicles to travel from Proposed Project staging yards to areas of active construction. Construction workers will drive to staging yards located along the Proposed Project route, park their personal vehicles, and utilize contractor-operated private buses, vans, and pickups to be transported to active work areas. At the end of the day, construction personnel will utilize the same vehicles to return to the staging areas. Personnel (e.g., foremen, inspectors, supervisory staff, vehicle operators, welders, monitors, security, and safety personnel) who require a vehicle as part of their specific role will be exempt from this requirement.
  - **APM-TRA-04:** At least four weeks prior to construction, the Applicants will notify residents and businesses along the Proposed Project route where driveway access could be temporarily blocked or restricted as a result of construction activities. For each residence or business, the Applicants will provide information regarding when these construction activities are scheduled to occur, the anticipated duration and times of the restricted access, and a contact telephone number. Additionally, a minimum of two weeks prior to construction in any specific section of the Proposed Project, the Applicants

will post signage along existing parking areas regarding the potential temporary loss of on-street parking as a result of Proposed Project construction.

- **APM-TRA-05:** No less than 60 days prior to construction, the Applicants will coordinate with applicable emergency service providers that have driveways within 0.5 mile of the Proposed Project route. Prior to construction, the Applicants will solicit input from the affected emergency service providers on how to best construct the Proposed Project while maintaining emergency vehicle access at all times. Options may include the following:
  - trenching only a portion of a driveway at a time to allow vehicle access via the other side of the driveway;
  - having trench plates readily available in order to quickly place a temporary bridge for vehicles over the open trench;
  - designating temporary emergency vehicle detour routes; and
  - in locations with multiple driveways, only conducting construction activities in front of one driveway at a time to maintain emergency vehicle access.

At least one week prior to scheduled construction activities that may impact emergency vehicle access, the Applicants will provide the emergency service providers with information regarding when these construction activities are scheduled to occur, the anticipated duration and times of the restricted access, and a contact telephone number. The Applicants and their contractors will be responsible for ensuring access at all times for emergency service vehicles at the locations where Proposed Project construction is occurring.

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**ATTACHMENT 4.16-A: TRAFFIC ANALYSIS**



**ATTACHMENT 4.16-B: ESTIMATED TRUCK TRIPS REQUIRED TO DELIVER RECYCLED  
WATER FOR CONSTRUCTION**