

4.17 TRAFFIC AND TRANSPORTATION

4.17.1 INTRODUCTION

This section describes the transportation conditions within the vicinity of the project sites, including the existing roadway network, public transit and non-motorized travel, air traffic patterns, and emergency access. This section presents an assessment of the transportation impacts associated with construction and operation of the project, and identifies mitigation measures, as appropriate. This section is based on a traffic analysis prepared for the project by Urban Crossroads (2015). Relevant technical material from the analysis is referenced in this section and included in Appendix G of this DEIR.

4.17.2 ENVIRONMENTAL SETTING

4.17.2.1 Regional and Local Roadways

The proposed project is located in the Coachella Valley in central Riverside County, within the incorporated cities of Desert Hot Springs, Rancho Mirage, Palm Desert, Indio, and La Quinta and in the unincorporated community of Thermal. Regional access in the western Coachella Valley is provided by Interstate 10 (I-10) and State Route 111 (Highway 111). I-10 is a northwest-southeast trending freeway that provides inter-regional access to San Bernardino, Orange and Los Angeles counties to the west, and eastern Riverside County and Arizona to the east. Highway 111 is the major northwest-southeast trending state highway in the Coachella Valley that runs from I-10 at Whitewater to the U.S.-Mexico border crossing in Calexico.

The project sites are served by numerous collector and arterial streets. Collector and arterial streets are generally low-to-medium speed and low-to-medium capacity roadways that provide connections between neighborhood areas, commercial centers, and regional highways. Access to the project sites via local roadways will vary depending on the site location. Table 4.17-1 provides a list of major local roadways, organized by jurisdiction and project site, that are most likely to provide access during construction and operational activities of the project.

TABLE 4.17-1: MAJOR LOCAL ROADWAYS NEAR PROJECT SITES		
Jurisdiction	CVWD Well/Site No.	Major Local Roadways (direction of travel)
Desert Hot Springs	ID8 Treatment Facility site, WBA 3405-1, WBA 3408-1, WBA 3409-2, WBA 3410-1	<ul style="list-style-type: none"> • Dillon Road (EW) • Little Morongo Road (NS) • Palm Drive (NS) (I-10 Access) • Indian Canyon Drive (NS) (I-10/Hwy 111 Access)
Palm Desert	SBA 4610-1, SBA 4720-1, SBA 4721-1, SBA 4722-1, SBA 5632-2, SBA 5657-2, SBA 5664-1, SBA 5676-2, SBA 5677-1, SBA 5678-1, SBA 5679-1, SBA 5720-1	<ul style="list-style-type: none"> • Dinah Shore Drive (EW) • Frank Sinatra Drive (EW) • Gerald Ford Drive (EW) • Country Club Drive (EW) • Monterey Avenue (NS) (I-10/Hwy 111 Access) • Portola Avenue (NS) (Hwy 111 Access) • Cook Street (NS) (I-10/Hwy 111 Access) • Adams Street (NS) (Hwy 111 Access) • Washington Street (NS) (I-10/Hwy 111 Access)
Rancho Mirage	SBA 4510-1	<ul style="list-style-type: none"> • Dinah Shore Drive (EW) • Bob Hope Drive (NS) (I-10/Hwy 111 Access)
La Quinta	SBA 5711-2, SBA 5717-1, SBA 5718-1, SBA 6701-1, SBA 6726-1, SBA 6728-1, SBA 6734-1, WBA 6724-1, WBA 6725-1, WBA 6723-1, La Quinta WBA Treatment Facility	<ul style="list-style-type: none"> • Airport Boulevard (56th Avenue) (EW) • Fred Waring Drive (EW) • Madison Street (NS) (Hwy 111 Access) • Monroe Street (NS) (I-10/Hwy 111 Access)
Indio	SBA 5719-1	<ul style="list-style-type: none"> • Avenue 40 (EW) • Jefferson Street (NS) (I-10/Hwy 111 Access)
Thermal	SBA 6805-1, SBA 6808-1, CRRF and potable water pipeline	<ul style="list-style-type: none"> • Airport Boulevard (EW) • Fillmore Street (NS) (Hwy 111 Access)

4.17.2.2 Transit Service

The SunLine Transit Agency provides public transit service to the project area and throughout the Coachella Valley. SunLine has a service area of approximately 1,120 square miles. Its fifteen transit lines provide public bus service with a fleet of 70 fixed route buses and 33 paratransit vans throughout the Valley, seven days a week (excluding Thanksgiving and Christmas). SunLine Transit Agency buses are wheelchair accessible. They have bicycle racks and can accommodate either two or three bicycles per bus. The following SunLine routes provide transit service in the project area.

- Line 14: Palm Springs to/from Desert Hot Springs (N/S)
- Line 15: Desert Hot Springs to/from Desert Edge (E/W)
- Line 32: Palm Springs to/from Palm Desert (E/W) (SBA 4510-1 within one mile)
- Line 53: Central Palm Desert (SBA 5678-1 within one mile)
- Line 54: Palm Desert to/from Indio (E/W) (SBA 5718-1 within one mile)
- Line 70: Bermuda Dunes to/from La Quinta (N/S) (SBA 6701-1 within one mile)

- Line 80: Indio southbound loop
- Line 81: Indio northbound loop
- Line 90: Indio to/from Coachella (E/W)
- Line 91: Indio to/from Mecca and Oasis (E/W)
- Line 95: North Shore (Mecca and Thermal) to/from Indio (E/W)
- Line 111: Palm Springs to/from Indio (E/W)

4.17.2.3 Bicycle and Pedestrian Network

Local jurisdictions are responsible for planning and maintaining bicycle and pedestrian facilities in the project area. The member cities of the Coachella Valley Association of Governments (CVAG) have also participated in coordinated regional planning efforts. CVAG's Non-Motorized Transportation Plan Update (CVAG 2010) identifies existing and planned bikeways and hiking and equestrian trails throughout the Coachella Valley. A bikeway and trail classification system was devised as part of the Plan's mapping efforts. The definitions of each classification are as follows:

Class I Bikeways: Typically called bike paths, they provide for bicycle travel on paved rights-of-way completely separated from any street or highway.

Class II Bikeways: These are often referred to as bike lanes. They provide a striped, stenciled and signed lane for one-way travel on a street or highway.

Class III Bikeways: Generally referred to as bike routes, they provide for shared use with pedestrian or motor vehicle traffic and are identified by signing, and sometimes stencils.

Paved Multipurpose Paths: Similar to Class I bike paths, but intended for multiple users (bicycles, pedestrians, rollerbladers, other non-motorized users) and do not meet Caltrans bike path standards.

Sidewalk Paths: Wide sidewalks that can be used by joggers, pedestrians, bicyclists and other non-motorized users.

Hiking/Equestrian Trails: Off-road earthen paths intended primarily for equestrians. Hikers, pedestrians, mountain bicyclists and others are permitted, unless signed otherwise.

Golf Cart Paths: Paved off-street paths that permit use by golf carts, bicycles and pedestrians.

Golf Cart Lanes: Striped lanes that permit use by golf carts, bicycles and equestrians.

In addition, the CVAG Plan Update provides guidelines for local jurisdictions to ensure safe, convenient, and friendly environments for pedestrian movement, including improved accessibility, safety lighting, sidewalks, street furniture, and bus shelters. Following is a description of bikeways in the project area.

City of Desert Hot Springs

The City of Desert Hot Springs currently has two Class II bikeways and three Class III bikeways totaling 8.1 miles. Twenty-eight bikeway projects, totaling 42.4 miles, are proposed in the City in the CVAG Non-Motorized Transportation Plan. The 28 proposed bikeway projects are comprised of seven Class I

bikeways, 12 Class II bikeways, and nine Class III bikeways. There are no existing or proposed bikeways located within the immediate vicinity of project sites in this jurisdiction.

City of Indio

The City of Indio currently has one Class I bikeway and 19 Class II bikeways totaling 18.9 miles. Forty-nine bikeway projects, totaling 68.1 miles, are proposed in Indio in the CVAG Non-Motorized Transportation Plan. The 49 proposed bikeway projects are comprised of one Class I bikeway, 32 Class II bikeways, and 16 Class III bikeways. SBA well 5719-1 is the only project site located immediately adjacent to a proposed Class II bikeway located on Avenue 40, immediately east of Jefferson Street. This bikeway has not been constructed.

City of La Quinta

The City of La Quinta currently has one Class I bikeway and 19 Class II bikeways totaling 34 miles. Eighteen bikeway projects, totaling 21.2 miles, are proposed in La Quinta in the CVAG Non-Motorized Transportation Plan. The 18 proposed bikeway projects are comprised of one Class I bikeway, 14 Class II bikeways, and three Class III bikeways. Ten project sites in La Quinta are located along existing or proposed bikeways, including:

- La Quinta WBA Water Treatment Facility: Existing Class II bikeways along Airport Boulevard, Madison Street (north and south of Airport Boulevard), and Monroe Street (north of Airport Boulevard).
- WBA 6723-1: Existing Class II bikeways along Madison Street and Avenue 54.
- WBA 6724-1: Existing Class II bikeway along Madison Street and Airport Boulevard.
- WBA 6725-1: Existing Class II bikeway along Madison Street and Airport Boulevard.
- SBA 6726-1: Existing Class II bikeway along Airport Boulevard.
- SBA 6728-1: Existing Class II bikeway 310 meters north of site, along Avenue 60.
- SBA 6701-1: Existing Class II bikeway along Washington Street.
- SBA 5718-1: Proposed Class II bikeway along Fred Waring Drive, existing Class II bikeway along Jefferson Street.
- SBA 5717-1: Existing Class II bikeways along Miles Street and Jefferson Street.
- SBA 5711-2: Existing Class II bikeways along Avenue 48 and Adams Street.

City of Palm Desert

The City of Palm Desert currently has one Class I bikeway, 29 Class II bikeways, and 13 Class III bikeways, totaling 54.8 miles. Five bikeway projects, totaling 10.2 miles, are proposed within in the CVAG Non-Motorized Transportation Plan. The five proposed bikeway projects are comprised of two Class I bikeways, two Class II bikeways, and one combination of a Class II and III bikeway. Five project sites in Palm Desert are located along existing or proposed bikeways, including:

- SBA 5632-2: Existing Class II bikeway along Tamarisk Row Road.
- SBA 5676-2: Existing Class II bikeways along Portola Avenue and Frank Sinatra Drive.
- SBA 5678-1: Existing Class II bikeway along Frank Sinatra Drive.
- SBA 5664-1: Existing Class II bikeway along Tamarisk Row Road.
- SBA 5679-1: Existing Class II bikeway along Tamarisk Row Road.

City of Rancho Mirage

The City of Rancho Mirage currently has one Class I bikeway and 11 Class II bikeways totaling 16.6 miles. Nine bikeway projects, totaling 11.3 miles, are proposed within in the CVAG Non-Motorized Transportation Plan. The nine proposed bikeway projects are comprised of two Class I bikeways, six Class II bikeways, and one Class III bikeway. SBA well 4510-1 is the only project site in Rancho Mirage, and it is located adjacent to a proposed and existing bikeway. These include an existing Class II bikeway along Bob Hope Drive, and a proposed Class II bikeway along Dinah Shore Drive.

Unincorporated Riverside County (Including Thermal)

Unincorporated Riverside County currently has one Class II bikeway totaling three miles. Eighty-five bikeway projects, totaling 602.7 miles, are proposed within in the CVAG Non-Motorized Transportation Plan. The 85 proposed bikeway projects are comprised of 46 Class I bikeways, 34 Class II bikeways, and five Class III bikeways. The CRRF is the only site in unincorporated Riverside County, including Thermal, located in proximity to proposed Class I or II bikeways (along Fillmore Street).

4.17.2.4 Airports

The nearest public airports to the project sites are the Bermuda Dunes Executive Airport and the Jacqueline Cochran Regional Airport. Table 4.17-2 identifies the project sites that are located within two miles of these airports. These airports are described below.

TABLE 4.17-2: CHROMIUM-6 PROJECT SITES WITHIN TWO MILES OF AN AIRPORT	
Well	Distance (miles)
Bermuda Dunes Executive Airport	
Palm Desert	
SBA 4720-1	1.4
SBA 4721-1	1.8
SBA 4722-1	2.0
SBA 5657-2	1.4
La Quinta	
SBA 5717-1	1.4
SBA 5718-1	0.7
Indio	
SBA 5719-1	0.7
Jacqueline Cochran Regional Airport	
Thermal	
SBA 6805-1	0.5
SBA 6808-1	0.7

Bermuda Dunes Executive Airport

Bermuda Dunes Executive Airport is located at 79880 Avenue 42 in the unincorporated community of Bermuda Dunes. Bermuda Dunes is a public use airport, and is owned by the Bermuda Dunes Airport Corporation. The airport has two runways and covers an area of approximately 87 acres. The Bermuda Dunes airport vicinity is surrounded by the cities of Indian Wells, Palm Desert, La Quinta and Indio.

Jacqueline Cochran Regional Airport

Jacqueline Cochran Regional Airport is located at 56-850 Higgins Drive in the unincorporated community of Thermal. Jacqueline Cochran is a public airport, owned and operated by Riverside County. The airport has two runways and covers an area of approximately 1,850 acres. The Jacqueline Cochran Regional Airport is surrounded by the unincorporated communities of Thermal, Coachella, Valerie, and Vista Santa Rosa.

4.17.2.5 Railroad Facilities

The Coachella Valley is served by the Union Pacific Railroad (UPRR), which enters the Valley from the west through the San Geronio Pass, generally parallels I-10 through the Valley center, and then parallels Highway 111 from Indio to the east shore of the Salton Sea, where it then continues southeast towards Yuma. The UPRR is a major transcontinental railway carrying extensive freight operations as well as Amtrak passenger trains. This facility carries an average of between 40 and 50 trains per day. Most rail activity is freight traffic operated by UPRR, although Amtrak provides passenger service along the same tracks to Palm Springs and Indio. In recent years, UPRR added a full second track, parallel to the initial lines and is anticipating a 50% to 75% long-term increase in regional rail traffic. Although some of the project sites are adjacent to rail lines, neither project construction nor operations are anticipated to be affected by nor affect the operation of these facilities.

4.17.2.6 Existing Traffic Conditions***Level of Service***

The Riverside County Transportation Commission (RCTC) is the designated Congestion Management Agency (CMA) responsible for the development and implementation of the Congestion Management Program (CMP) in the project area. Section 65089(b)(2) of the California Government Code states that the CMP must contain a performance element that includes performance measures to evaluate current and future multimodal system performance for the movement of people and goods. The RCTC's adopted minimum Level of Service (LOS) threshold is LOS E. The LOS is a qualitative measurement that describes operational conditions within a traffic stream and considers speed, travel time, driving comfort, safety and traffic interruptions. Levels of Service are described as a range of alphabetical connotations, A through F, which are used to characterize roadway operating conditions. LOS A represents the best, free flow conditions, and LOS F indicates the worst conditions and severe constraint on the system (see Table 4.17-3). According to the current (year 2011) CMP, all regional roadways within the project area are operating at acceptable levels of service (LOS D or better).

Level of Service	Traffic Conditions
A	Free flow, little or no congestion
B	Stable flow, small amount of traffic congestion
C	Stable flow, average traffic congestion
D	High-density but stable flow
E	Low speeds, very high traffic congestion
F	Forced or breakdown flow, stop-and-go conditions

Existing peak daily traffic volumes on the arterial roadway system in the vicinity of the project well and treatment sites vary widely (see Exhibit C in Appendix G of this EIR). The majority of WBA and SBA wells and the CRRF are located on sites that are accessed by roadways with very low to moderate traffic volumes. Several well sites are also accessed from private streets within gated communities. Similarly, construction activities at the WBA treatment facilities and the CRRF are expected to occur entirely within the boundaries of these sites; while construction vehicles will access these sites from adjacent roadways, construction staging on adjacent roadways is not anticipated. However, construction of the water pipelines associated with the WBA treatment facilities will occur within relatively busy roadways (i.e., Dillon Road in Desert Hot Springs and Madison Street/Airport Boulevard in La Quinta); therefore, more detailed information on the existing traffic conditions along these roadways is described below. Similarly, the pipeline within Tamarisk Row Drive will entail construction activities that will impact roadway capacity and more detailed information on daily traffic volumes is also provided. Daily traffic volumes were obtained from the CVAG 2015 Traffic Census Report.

- **Dillon Road west of Palm Drive (Desert Hot Springs):** This roadway segment was selected for evaluation because it would be affected by construction of the treated water pipeline from the ID8 WBA Water Treatment Facility to the CVWD water reservoir on Langlois Road. Daily traffic volumes on Dillon Road, a two-lane roadway, range between approximately 8,000 vehicles per day (VPD) west of Palm Drive to approximately 11,200 VPD east of Long Canyon Road. Daily traffic volumes on Palm Drive (the highest volume cross-street that the pipeline will cross) range from approximately 29,800 VPD south of Dillon Road to approximately 34,000 VPD north of Dillon Road.
- **Tamarisk Row Drive east of Eldorado Drive (Palm Desert):** This roadway segment was selected for evaluation because it would be affected by construction of the storm drain pipeline from well SBA 5632 to a nearby detention basin. Daily traffic volumes on Tamarisk Row Drive between Eldorado Drive and Regency Way, which is a four-lane divided roadway, are approximately 6,800 vehicles per day (VPD).
- **Madison Street at Airport Boulevard (La Quinta):** This roadway segment was selected because it would be affected by construction of the raw water pipeline from the WBA wells on Madison Street to the La Quinta WBA Water Treatment Facility on Airport Boulevard. Traffic volumes on Madison Street in the vicinity of the La Quinta WBA Water Treatment Facility range from approximately 7,100 VPD south of Airport Boulevard to 10,300 VPD north of Airport Boulevard. The daily traffic volume on Airport Boulevard east of Madison Street is 2,565 VPD.

Volume to Capacity Ratio

In addition to the above roadway segments, representative intersections within these roadway segments were selected for evaluation. The Intersection Capacity Utilization (ICU) technique was used to characterize the two representative intersections: Dillon Road at Palm Drive, and Airport Boulevard at Madison Street. No intersection along Tamarisk Row Drive will be impacted by pipeline construction activities. The ICU is calculated by comparing the volume of intersection traffic with the capacity of the intersection. The ICU is usually expressed as a critical volume to capacity (V/C) ratio. The V/C represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The same LOS thresholds in terms of roadway segment V/C ratio and intersection ICU apply to both types of analysis. The V/C ratio / ICU and corresponding LOS are shown in Table 4.17-4.

Level of Service	Critical Volume-to-Capacity Ratio/ ICU
A	0.00-0.60
B	0.61-0.70
C	0.71-0.80
D	0.81-0.90
E	0.91-1.00
F	> 1.00

For the project traffic study, a saturation flow rate of 1,700 vehicles per hour of green (vphg) per lane (for all types of lanes) were utilized to evaluate the ICU for each study intersection under Existing Lanes conditions. The term vehicles per hour of green per lane refers to the number of vehicles in a single travel lane that could pass a single point (either on a roadway or through an intersection) within a period of 1 hour. At an intersection, the green time is allocated to the various conflicting traffic movements using the intersection. This value is a relatively low default capacity (traffic flows in excess of 2,000 vphg have been measured and are documented in the Highway Capacity Manual), and reflects a conservative worst case starting point for analysis purposes.

Tables 4.17-5 and 4.17-6 provide existing traffic volumes, roadway capacities, volume to capacity (V/C) ratios, roadway level of service, and intersection level of service for the studied roadways and representative intersections. Based on the LOS and ICU analyses, all studied intersections are currently operating at LOS A.

Local Roadway Segment	Existing Traffic Volumes		Roadway Capacity	Volume to Capacity (V/C) Ratio		Roadway Level of Service (LOS)	
	AM Peak	PM Peak		AM Peak	PM Peak	AM Peak	PM Peak
Dillon Road , west of Palm Avenue (eastbound, one lane)	84	106	1,700	0.05	0.06	A	A
Dillon Road , west of Palm Avenue (westbound, one lane)	73	89	1,700	0.04	0.05	A	A
Tamarisk Row Drive , west of Regency Way (eastbound, two lanes)	161	377	3,400	0.05	0.11	A	A
Tamarisk Row Drive , west of Regency Way (westbound, two lanes)	413	226	3,400	0.12	0.07	A	A
Madison Street , north of Airport Boulevard (northbound, two lanes)	418	356	3,400	0.12	0.10	A	A
Madison Street , north of Airport Boulevard (southbound, two lanes)	457	412	3,400	0.13	0.12	A	A

Intersection	Traffic Control*	Intersection Approach Lanes								ICU (V/C)		ICU LOS							
		North-Bound			South-Bound			East-Bound		West-Bound		AM	PM	AM	PM				
		L	T	R	L	T	R	L	T	R	L					T	R		
Palm Drive (NS) at Dillon Road (EW)	TS	1	2	1	1	2	1	1	1	1	1	1	1	1	1	0.506	0.301	A	A
Madison Street (NS) at Airport Boulevard (EW)	TS	1	2	1	1	2	0	0	0	0	0	0	1	0	1	0.280	0.224	A	A

The ICU analysis was performed using the Traffix software.
*TS = Traffic Signal

2018 Roadway and Intersection Conditions without Project

Construction of the project is anticipated to occur over a three-year period, from summer 2016 through summer 2019. The peak period of construction, which is when traffic impacts are expected to be at their greatest, is anticipated to be during 2018. All pipeline construction activities are anticipated to be completed by the end of 2018. Pipeline construction is the aspect of the proposed project with the greatest potential to cause a significant impact. Therefore, for the purposes of the traffic analysis, future roadway and intersection conditions for the year 2018 are characterized to identify future conditions without the project. Tables 4.17-7 and 4.17-8 provide traffic volumes, roadway capacities, V/C ratios, roadway level of service, and intersection level of service in 2018 under future conditions without the project.

Local Roadway Segment	2018 Traffic Volumes		Roadway Capacity	Volume to Capacity (V/C) Ratio		Roadway Level of Service (LOS)	
	AM Peak	PM Peak		AM Peak	PM Peak	AM Peak	PM Peak
	Dillon Road , west of Palm Avenue (eastbound, one lane)	92		115	1,700	0.05	0.07
Dillon Road , west of Palm Avenue (westbound, one lane)	79	96	1,700	0.05	0.06	A	A
Tamarisk Row Drive , west of Regency Way (eastbound, two lanes)	170	397	3,400	0.05	0.12	A	A
Tamarisk Row Drive , west of Regency Way (westbound, two lanes)	435	238	3,400	0.13	0.07	A	A
Madison Street , north of Airport Boulevard (northbound, two lanes)	434	370	3,400	0.13	0.11	A	A
Madison Street , north of Airport Boulevard (southbound, two lanes)	474	428	3,400	0.14	0.13	A	A

TABLE 4.17-8: 2018 INTERSECTION CONDITIONS WITHOUT PROJECT																			
Intersection	Traffic Control	Intersection Approach Lanes*								ICU (V/C)		ICU LOS							
		North-Bound			South-Bound			East-Bound		West-Bound		AM	PM	AM	PM				
		L	T	R	L	T	R	L	T	R	L					T	R		
Palm Drive (NS) at Dillon Road (EW)	TS	1	2	1	1	2	1	1	1	1	1	1	1	1	1	0.543	0.306	A	A
Madison Street (NS) at Airport Boulevard (EW)	TS	1	2	1	1	2	0	0	0	0	1	0	1	0.289	0.231	A	A		

The ICU analysis has been performed using the Traffix software.
* L=left turn, T=through lane, R=right turn

4.17.3 REGULATORY FRAMEWORK

4.17.3.1 Federal

There are no federal regulations that address transportation impacts associated with the proposed project.

4.17.3.2 State

The California Department of Transportation (Caltrans) is the responsible agency for implementing State level policies and standards for highway facilities under State jurisdiction. Although the project is not a transportation project, any work that requires movement of oversized or excessive load vehicles on highway facilities requires a transportation permit by Caltrans.

4.17.3.3 Regional and Local

The Riverside County Transportation Commission (RCTC) is the designated Congestion Management Agency (CMA) responsible for the development and implementation of the Congestion Management Program (CMP) in the project area.

The Coachella Valley Association of Governments (CVAG) is the responsible local agency for traffic count data collection in the Coachella Valley. CVAG currently has a Traffic Monitoring Program in place that addresses CMP Systems Monitoring requirements in the Coachella Valley.

Local jurisdictions are responsible for implementing driving and transportation standards on local roadways, including speed limits, bicycle and pedestrian networks, and hauling permits for oversized or excessive load vehicles on city streets. Local jurisdictions set forth future transportation goals, policies, and programs in their General Plans and other planning documents.

4.17.4 IMPACTS AND MITIGATION MEASURES

4.17.4.1 Significance Criteria

According to Appendix G of the State CEQA Guidelines, a project would have a significant impact on traffic or transportation if it were to:

- 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.

4.17.4.2 Approach to Analysis

Impacts to traffic and transportation were assessed using the significance criteria listed above and the LOS and ICU methods presented in Section 4.17.2 above. Potential impacts were evaluated for both construction and operation of the project. Construction impacts related to pipeline construction within the two roadway segments identified above were evaluated quantitatively; construction-related impacts to the remainder of the project sites are evaluated qualitatively. Because operation of the project would generate very few staff vehicle or truck delivery trips at any individual location (well site or treatment facility), operational traffic impacts are also evaluated qualitatively.

Areas of No Project Impact

The project would not result in impacts related to some of the significance criteria listed above. These significance criteria are not discussed further in the impact analysis for the following reasons:

- 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.

The LOS standards established by the CMP are intended to regulate long-term impacts due to future operation of projects and were not developed for temporary construction projects. Therefore, this significance criterion is not applicable to project construction. Operational impacts are evaluated in Section 4.17.4.4 below. Significance criterion “a” is used for the evaluation of construction-related traffic impacts in Section 4.17.4.3 below.

- 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.

There are two airports within the project area, the Jacqueline Cochran Regional Airport (Thermal) and the Bermuda Dunes Airport (Bermuda Dunes). The project will have no impact on the facilities or operations of regional airports, and will not result in a change in air traffic patterns or an increase in traffic levels. The project proposes only ground-based travel; therefore, no project construction or operation would have impacts with respect to air traffic levels. This impact is not discussed further.

- d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Proposed project facility site plans do not include sharp curves or unsafe designs. The project does not include new road designs or alterations of existing features that could substantially increase hazards. A new gravel-paved, dedicated access road will extend south from Dillon Road and east of Nancy Drive to the proposed ID8 WBA Water Treatment Facility site, ensuring safe ingress and egress from the site. Regarding the CRRF, although not required as mitigation, the project design will result in Fillmore Street being widened to add turn and acceleration/deceleration lanes for safe access to the CRRF. These roadway and access improvements will provide for safe roadway conditions in these locations during the construction and operational phases of the CRRF. Therefore, no impact associated with design features are expected for any project site and this impact is not discussed further.

- e. Result in inadequate emergency access.

Emergency access to all of the project sites will be from existing roadways, except for the ID8 WBA treatment facility, which will be from a new gravel access drive that will extend south of Dillon Road east of Nancy Drive. Roadway closures during construction would maintain access for emergency vehicles at all times, and no roadway closures are proposed for operation of the project. Therefore, no impact would occur to emergency access for all project sites and this impact is not discussed further.

- 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.

A review of the relevant SunLine bus routes was conducted to determine whether and to what extent project construction or operations and maintenance could adversely affect access to transit services. The focus of the analysis was on bus stops that are in proximity to a project site, which takes access from the adjoining public road shared by SunLine buses. Nonetheless, all project sites were evaluated for their potential to impact bus service or access.

In the area of the ID8 Site facilities, including the associated three WBA wells and the ID8 WBA Water Treatment Facility and pipelines, SunLine Lines 14 and 15 serve this area but only Line 14 passes through the vicinity, where it travels north-south along Palm Drive. SunLine provides bus stops approximately 200 feet north and south of Dillon Road, neither of which will be impacted by the proposed project.

In the vicinity of SBA wells 4510-1 and 4610-1, SunLine Line 32 passes through this area, but in the case of SBA 4510-1, well site access is internal to the Mission Hills Resort development and construction or operational activities at this site will not affect the adjoining bus stop. Well 4610-1 is not located in proximity to SunLine Line 32. No bus stops or service will be affected by these components of the proposed project.

None of the three project wells located within the Palm Desert-Desert Willow golf course and served by SunLine Line 53 will impact local transit service or stops. SBA 5677-1 is accessed from an internal street system while SBA 5676-2 and SBA 5678-1 take access from public roads, but are not located adjacent to or near SunLine bus stops. There is no transit service along Tamarisk Row, where SBA wells 5679-1, 5632-2 and 5664-1 are located and no impacts to service or access will occur in association with these wells.

SBA 5718-1 is located on the south side of Fred Waring Drive and west of Jefferson Street. There is a SunLine bus stop associated with Line 54 located on the north side of Fred Waring Drive, which is separated from the well site by a raised median island. Proposed work on at SBA 5718-1 will not impact bus service or access.

Access to SBA 5717-1 is from an interior private street and there are no bus stops located in proximity to this site either on Miles Avenue or Jefferson Street. The same circumstances exist for SBA 5711-2, which is located on Avenue 48, within and taking access from a gated community.

Access to SBA 6701-1 located on Washington Street is from the western terminus of Avenida Ultimo, which provides no bus service or access. SBA 6734-1 is also located within, and takes access from a gated community at the southwest corner of Avenue 52 and Monroe Street. Neither bus service nor access thereto is provided along Monroe Street where work on WBA wells 6723-1, 6724-1 and 6725-1 is planned.

There is also no bus service or access along Avenue 56 (Airport Boulevard) and, therefore, proposed work on SBA 6726-1 and the La Quinta WBA Water Treatment Facility site, both located east of Monroe Street on Avenue 56, will not impact bus service or access. Neither is there bus service in the vicinity of SBA wells 6805-1 or 6808-1 located farther east on Airport Boulevard. There is also no bus service in the vicinity of SBA 6728-1, located on Monroe Street and south of Avenue 60.

The construction and operation of the proposed CRRF and associated water supply line, both to be located between Avenue 64 and 62, will not impact bus service or access, none being available at this location or in the vicinity.

There is no bus service to the SunCity area north of US I-10 and east of Washington Street. Therefore, work on SBA wells 4720-1, 5719-1, 5720-1, 4721-1, and 4722-1 will have no impact on bus service or access.

In summary, construction, operation and maintenance of the proposed project facilities will not have an adverse impact on mass transit.

There will be no conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Sunline Transit Agency currently provides transit services in the project area; however, as discussed above, no SunLine bus stops will be impacted by construction or operation of

the proposed project. The proposed project will not increase demand for such services, as all project operation and maintenance activities will be provided by CVWD-owned or operated vehicles. Neither will the project significantly impact bicycle or pedestrian facilities. All project operations will be contained on-site with the exception of vehicle traffic, which will be contained on existing roadways in the project area. Existing bike lanes on Madison Street (particularly the southbound facility on the west side of Madison Street), will be affected by pipeline construction activities. However, traffic control plans typically allow for continued bicyclist access even during construction. Therefore, no impact is expected.

4.17.4.3 Construction Impacts and Mitigation Measures

Impact TRA-1: Project construction would conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. (Less than Significant with Mitigation).

During construction of the proposed project, there would be a temporary increase in truck trips and construction worker vehicles in the vicinity of each project site. Construction-related traffic would utilize the existing regional and local roadway network. The traffic related to construction will consist primarily of passenger cars (or light duty pickup trucks), with occasional movement of heavy equipment to and from the project sites. Estimates of the number of workers and quantities of equipment used during construction were developed based on the project description and input from the project construction management contractor. The quantitative analysis of construction impacts to the three roadway segments affected by pipeline construction is presented first, followed by qualitative analysis of construction traffic at the other project sites.

Construction Traffic Impacts of Pipeline Construction

The pipeline construction analysis applies the anticipated construction traffic trips to the existing roadway conditions to determine the effect of construction traffic on roadway operations. Construction workers would arrive prior to pipeline construction activities, and would depart after completing construction activities for the day. For this reason, potential impacts related to construction worker traffic are distinct and independent from potential impacts related to the pipeline construction itself. Table 4.17-9 presents the anticipated trip generation related to all construction activities, including for pipeline installation. It is assumed that the highest number of simultaneous workers that could potentially be onsite during construction activities will be a total of 10 workers. As noted in Table 4.17-9 below, the project construction traffic related peak hour trip generation is 10 trips, with daily traffic generation of 25 trips per day. The daily trip generation assumes 25% of ancillary trips related to equipment deliveries, visits by inspectors, food service, etc.

Based on the amount of construction equipment, number of construction workers, and anticipated hours of arrival and departure, the construction traffic related to the pipeline construction aspect of the project is not anticipated to result in significant impacts to adjoining streets or intersections. This conclusion is based on the limited pipeline construction-related traffic and the threshold of significance set forth in the Riverside County Traffic Impact Study Guidelines, which indicate that analysis is only required at any intersection where a project contributes 50 or more peak hour trips. Traffic from each individual pipeline construction site is not expected to overlap. The project will have no measurable effect on peak hour or daily traffic

volumes due to the low daily traffic volumes generated during construction and ongoing operations.

TABLE 4.17-9: PROJECT CONSTRUCTION TRAFFIC TRIP GENERATION ESTIMATE								
Construction Activity	TYPE OF TRAFFIC	AM PEAK ¹			PM PEAK ¹			DAILY
		IN	OUT	TOTAL	IN	OUT	TOTAL	
All Pipeline Construction	Construction Workers	10	0	10	0	10	10	20
	Miscellaneous Activities ²	0	0	0	0	0	0	5
	Total	10	0	10	0	10	10	25
SBA Well Sites	Construction Workers	8	0	8	0	8	8	16
	Miscellaneous Activities ²	0	0	0	0	0	0	4
	Total	8	0	8	0	8	8	20
WBA Well Sites	Construction Workers	5	0	5	0	5	5	10
	Miscellaneous Activities ²	0	0	0	0	0	0	3
	Total	5	0	5	0	5	5	13
WBA Treatment Sites	Construction Workers	15	0	15	0	15	15	30
	Miscellaneous Activities ²	0	0	0	0	0	0	8
	Total	15	0	15	0	15	15	38
CRRF Site	Construction Workers	30	0	30	0	30	30	60
	Miscellaneous Activities ²	0	0	0	0	0	0	15
	Total	30	0	30	0	30	30	75

¹ Construction workers (including supervisors) assumed to arrive and depart during the same 1 hour period in the morning and afternoon. Carpooling has also not been assumed to occur.

² Daily Traffic from "Miscellaneous Activities" reflects an additional 25% to account for traffic associated with miscellaneous activities such as inspectors, supply / equipment deliveries, food service, etc.

Existing Plus Project Conditions (2015)

As mentioned previously, pipeline construction activities have the potential for an impact that is distinct and independent of the potential impact due to construction worker traffic. This potential impact from the pipeline construction activities results from a combination of reduced available travel lanes and/or the reduction in roadway capacity through construction work zones. To account for reduced roadway capacities related to pipeline construction activity, a saturation flow rate of 1,400 vphg has been used to evaluate each roadway segment V/C ratio and intersection's ICU during construction. The reduced flow rate of 1,400 vphg represents an approximately 20% reduction (from 1,700 vphg under existing conditions) and is a result of lower vehicle speeds within a construction zone area. The reduced capacity is applied to each roadway lane / intersection approach lane where the lane configuration is affected by construction activities. The estimated construction traffic trips are applied to the reduced capacity to evaluate the potential construction impacts to roadway segments. As shown in

Tables 4.17-10 and 4.17-11, all studied roadway segments and intersections would operate at an acceptable LOS under existing plus project construction conditions.

Local Roadway Segment	Existing Plus Project Traffic Volumes		Roadway Capacity with Project	Volume to Capacity (V/C) Ratio		Roadway Level of Service (LOS)	
	AM Peak	PM Peak		AM Peak	PM Peak	AM Peak	PM Peak
	Dillon Road , west of Palm Avenue (eastbound, one lane)	84		106	1,400	0.06	0.08
Dillon Road , west of Palm Avenue (westbound, one lane)	73	89	1,400	0.05	0.06	A	A
Tamarisk Row Drive , west of Regency Way (eastbound, one lane)	161	377	1,400	0.12	0.27	A	A
Tamarisk Row Drive , west of Regency Way (westbound, two lanes)	413	226	2,800	0.15	0.08	A	A
Madison Street , north of Airport Boulevard (northbound, one lane)	418	356	1,400	0.30	0.25	A	A
Madison Street , north of Airport Boulevard (southbound, one lane)	457	412	1,400	0.33	0.29	A	A

Intersection	Traffic Control	Intersection Approach Lanes								ICU (V/C)		ICU LOS					
		North-Bound			South-Bound			East-Bound		West-Bound		AM	PM	AM	PM		
		L	T	R	L	T	R	L	T	R	L	T	R				
Palm Drive (NS) at Dillon Road (EW)	TS	1	1	0	1	1	0	1	1	0	1	1	0	0.861	0.779	D	C
Madison Street (NS) at Airport Boulevard (EW)	TS	1	1	0	1	1	0	0	0	0	1	0	1	0.449	0.376	A	A

Future 2018 Plus Project Conditions

Conditions have been evaluated for both No Project Conditions and With Project Conditions during project pipeline construction. Based on the anticipated construction sequencing, all pipeline construction is projected to be completed by the end of 2018. Therefore, this analysis is based on recent growth trends in the vicinity of project pipeline construction activities as the best available indicator of traffic conditions for the roadway segments studied. The project pipeline construction would not be expected to change study area peak hour traffic volumes during construction activities, as workers will arrive before construction starts and depart after construction activities for the day are completed. The potential impact of project pipeline construction is related to the temporary combination of the reduction of travel lanes and the reduced capacities of travel lanes within the construction zone. These impacts will end once construction is completed each day.

The projected intersection lane closures associated with pipeline construction activities will result in acceptable operations for 2018 background growth plus project traffic conditions, as shown in Table 4.17-12, with one exception at the intersection of Dillon Road at Palm Drive, which, during construction of the pipeline in this location, is projected to operate at ICU LOS F during PM peak hours without mitigation (see Table 4.17-13).

Local Roadway Segment	2018 Plus Project Traffic Volumes		Roadway Capacity	Volume to Capacity (V/C) Ratio		Roadway Level of Service (LOS)	
	AM Peak	PM Peak		AM Peak	PM Peak	AM Peak	PM Peak
	Dillon Road , west of Palm Avenue (eastbound, one lane)	92		115	1,400	0.07	0.08
Dillon Road , west of Palm Avenue (westbound, one lane)	79	96	1,400	0.06	0.07	A	A
Tamarisk Row Drive , west of Regency Way (eastbound, one lane)	170	397	1,400	0.12	0.28	A	A
Tamarisk Row Drive , west of Regency Way (westbound, two lanes)	435	238	2,800	0.16	0.09	A	A
Madison Street , north of Airport Boulevard (northbound, one lane)	434	370	1,400	0.31	0.26	A	A
Madison Street , north of Airport Boulevard (southbound, one lane)	474	428	1,400	0.34	0.31	A	A

Intersection	Traffic Control	Intersection Approach Lanes								ICU (V/C)		ICU LOS					
		North-Bound			South-Bound			East-Bound		West-Bound		AM	PM	AM	PM		
		L	T	R	L	T	R	L	T	R	L	T	R				
Palm Drive (NS) at Dillon Road (EW) - Alt. 1 Geometry*	TS	1	1	0	1	1	0	1	1	0	1	1	0	0.79	1.00	C	F
	TS	1	1	1	1	1	0	1	1	0	1	1	0	0.73	0.73		C
Madison Street (NS) at Airport Boulevard (EW)	TS	1	1	0	1	1	0	0	0	0	1	0	1	0.46	0.38	A	A

* Alternative 1 Geometry: northbound approach would provide 1 left turn lane, 1 through lane, and 1 right turn lane.

The initial analysis at this location assumes that only a single left turn lane and a single through lane will be maintained while pipeline construction through the intersection occurs. To achieve acceptable LOS during construction, two options are available: limiting the time of day when

construction activities are allowed, or expanding the available number of lanes. Implementation of Mitigation Measure TRA-1 will reduce this impact to a less than significant level, as shown in Table 4.17-14.

Mitigation Measure TRA-1: Construction Traffic Management Plan for Pipeline Installations

- Conceptual traffic control plans showing the potential lane configuration for representative segments of Dillon Road and Madison Street are included as Appendix E of the Traffic Analysis (Appendix G of this EIR). Dillon Road would be maintained as a two-lane road, with the two lanes shifted to accommodate construction activities. Construction activities on Madison Street would be expected to require narrowing the southbound travel way from two through lanes to a single through lane.
- The contractor shall prepare and implement a Construction Traffic Management Plan that specifies traffic and/or construction controls at the intersection of Dillon Road at Palm Drive, requiring either an alternative temporary roadway configuration during pipe laying or requiring that project construction at the intersection restore all existing travel lanes prior to 4 PM in the afternoon. An alternative configuration wherein the northbound approach provides one left turn lane, one through lane, and one right turn lane would improve the LOS during construction to an acceptable level (LOS C). Implementation of this measure would reduce pipeline-related construction traffic impacts at this intersection to a less than significant level.

TABLE 4.17-14: 2018 PLUS PROJECT CONSTRUCTION IMPACT AFTER MITIGATION																	
Intersection of Palm Drive at Dillon Road	Traffic Control	Intersection Approach Lanes								ICU (V/C)		ICU LOS					
		North-Bound			South-Bound			East-Bound		West-Bound		AM	PM	AM	PM		
		L	T	R	L	T	R	L	T	R	L					T	R
Before Mitigation	TS	1	1	0	1	1	0	1	1	0	1	1	0	0.79	1.00	C	F
After Mitigation	TS	1	1	1	1	1	0	1	1	0	1	1	0	0.79	0.73	C	C
														8	3		
														8	8		

Construction Traffic Impacts at SBA Well Sites

As noted above, trip generation for the various project components was developed based upon an understanding of the construction activities planned at each site. In the case of the SBA well sites, construction activities will largely be limited to equipment retrofits and the installation of new onsite treatment facilities. Construction traffic related to each of the SBA well site facility improvements is estimated at eight (8) vehicles per hour (both AM and PM peak hour conditions), with daily traffic generation of 20 trips per day. There will be no on-street construction staging and all construction will occur within the well sites. Therefore, ingress and egress turning movements associated with construction of the improvements constitute the traffic impacts associated with the SBA well components of the proposed project.

Based on the amount of construction equipment, number of construction workers, and anticipated hours of arrival and departure, the construction traffic related to the SBA well site

aspect of the project is not anticipated to result in significant impacts to adjoining streets or intersections. This conclusion is based on the limited SBA construction-related traffic and the threshold of significance set forth in the Riverside County Traffic Impact Study Guidelines, which indicate that analysis is only required at any intersection where a project contributes 50 or more peak hour trips. Traffic from each individual construction site is not expected to overlap. The project will have no measurable effect on peak hour or daily traffic volumes due to the low daily traffic volumes generated during construction and ongoing operations.

Construction Traffic Impacts at WBA Well Sites

All construction activities at the WBA well sites are anticipated to occur within each site boundary, with site ingress and egress where access is taken from a public street; however, no staging areas are anticipated exterior to the sites on the adjacent roadways. In the case of the WBA well sites, construction activities will largely be limited to equipment retrofits and the installation of new onsite pipelines to convey raw well water to the associated offsite WBA treatment facility. Therefore, ingress and egress turning movements associated with construction of the improvements constitute the traffic impacts associated with WBA well component of the proposed project. The project construction traffic related to WBA well site facility improvements at each well site is five (5) vehicles per hour (both AM and PM peak hour conditions), with daily traffic generation of 13 trips per day. Based on the amount of construction equipment, number of construction workers, and anticipated hours of arrival and departure, the construction traffic related to the WBA well site improvements is not anticipated to result in a significant impact. This conclusion is based on the limited WBA construction-related traffic and the threshold of significance set forth in the Riverside County Traffic Impact Study Guidelines, which indicate that analysis is only required at an intersection where a project contributes 50 or more peak hour trips. Traffic from each individual construction site is not expected to overlap. The project will have no measurable effect on peak hour or daily traffic volumes due to the low daily traffic volumes generated during construction and ongoing operations.

Construction Traffic Impacts at WBA Treatment Facility Sites

An assessment was made of the potential traffic impacts associated with the construction of each of the two WBA treatment facilities planned for construction at the ID8 Site (Desert Hot Springs) and the La Quinta Site. Access to the ID8 WBA Water Treatment Facility will be from a new gravel-paved access road that would extend south of Dillon Road approximately 300-feet east of Nancy Drive. The La Quinta WBA Water Treatment Facility is proposed immediately north of Airport Boulevard, from which construction traffic will access the site. Construction traffic related to WBA treatment facility improvements at each treatment facility site is 15 vehicles per hour (both AM and PM peak hour conditions), with daily traffic generation of 38 trips per day.

Construction traffic associated with development of the La Quinta WBA Water Treatment Facility is expected to take direct access from Airport Boulevard. However, currently the La Quinta Site is in a relatively natural state with both native and ornamental plantings throughout. Therefore, initial site grubbing and grading may require that some early phase construction traffic use a portion of the Airport Boulevard frontage for equipment staging or short-term on-street parking. Construction activities at the La Quinta WBA Water Treatment Site are expected

to be accomplished in a matter of a few days and may temporarily affect pedestrian and bicycle facilities located along the north side of Airport Boulevard.

Based on the amount of construction equipment, number of construction workers, and anticipated hours of arrival and departure, the construction traffic related to the WBA treatment facility aspect of the project is not anticipated to result in a significant impact. This conclusion is based on the limited WBA construction-related traffic and the threshold of significance set forth in the Riverside County Traffic Impact Study Guidelines, which indicate that analysis is only required at any intersection where a project contributes 50 or more peak hour trips. Traffic from construction of the two subject WBA treatment sites is not expected to overlap. The project will have no measurable effect on peak hour or daily traffic volumes due to the low daily traffic volumes generated during construction and ongoing operations.

Construction Traffic Impacts at CRRF

The CRRF site would be located immediately east of Fillmore Street in a predominantly agricultural area of the valley, where vehicle traffic is very limited. Neither the County nor CVAG collect traffic data for this roadway, which currently terminates at Avenue 66. The project construction traffic related to the CRRF facility is 30 vehicles per hour (both AM and PM peak hour conditions), with daily traffic generation of 75 trips per day.

Temporary construction traffic associated with the proposed CRRF would generate approximately 30 trips per AM and PM peak hour and approximately 75 daily trips, and will not exceed the County's threshold for intersection analysis of 50 or more peak hour trips. Potential project impacts are also reduced by the location of the project and likely mid-block site access and away from intersections where the roadway network is generally most constrained. Potential impacts are also affected by the number and type of construction equipment, number of construction workers, and anticipated hours of arrival and departure. Construction equipment staging will take approximately one day and construction worker arrivals and departures will generally be 7 AM and 5 PM, respectively. There may also be ancillary trips during construction at each site for supplemental construction materials and hauling of construction waste but these will be limited to once or twice a day. These variables were considered when analyzing potential impacts to local traffic from the effects of project construction traffic. Project phasing and construction staging for each project component was also considered. CRRF construction traffic is not anticipated to result in a significant impact. Traffic from other proposed project site development is not expected to overlap with that associated with the CRRF due to proximity of the sites and timing of construction. The project will have no measurable effect on peak hour or daily traffic volumes due to the low daily traffic volumes generated during construction and ongoing operations.

Impact TRA-2: Project construction may temporarily affect bikeway and pedestrian paths that are adjacent to some project sites. (Less than Significant)

ID8 WBA Facilities

Construction at the various sites of the ID8 WBA wells, ID8 WBA Water Treatment Facility, and related pipelines has been analyzed for its potential to adversely impact bicycle and pedestrian facilities. In the ID8 Site vicinity, there are no on- or off-street bicycle paths. Sidewalks are very limited and include a sidewalk at the southwest corner of Palm Drive and Dillon Road serving only the adjacent commercial building at this location, and short stretches of sidewalk fronting

some development along Dillon Road farther east. There is no interconnected sidewalk or bicycle network in the ID8 Site vicinity. Therefore, the project will not have a significant impact on pedestrian or bicycle facilities in the ID8 Site planning area.

Other WBA and SBA Well Sites

In addition to the very limited pedestrian and bicycle facilities in the ID8 Site area, all of the other project SBA and WBA wells sites were also evaluated for the potential of site construction to impact bicycle and pedestrian facilities. In all cases, there will be no on-street construction staging or other activities in the public rights of way that could significantly impact pedestrian or bicycle facilities. This is also true for those well sites located within private communities and resorts. As noted above, construction-related ingress and egress will be limited and will have less effect than the numerous existing property access drives along project roadways that serve existing development. Well construction impacts will be temporary and will end once construction is completed. Therefore, well construction-related impacts to bicycle and pedestrian facilities will be less than significant.

La Quinta WBA Treatment Facility

Construction traffic associated with development of the La Quinta WBA Water Treatment Facility is expected to take direct access from Airport Boulevard (Avenue 56). However, currently the La Quinta Site is in a relatively natural state with both native and ornamental plantings throughout. Therefore, initial site grubbing and grading may require that some early phase construction traffic use a portion of the Airport Boulevard frontage for equipment staging or short-term on-street parking. This could affect and potentially temporarily close down sidewalk and bike path use in this immediate area. Both pedestrian and bicycle facilities are also located on the south side of this roadway providing users with an immediate alternative. Therefore, based on the limited time of potential conflicts between construction traffic and sidewalk and bike path users, and the availability of these same facilities on the south side of the street, impacts to sidewalk and bicycle facilities in proximity to the La Quinta WBA Water Treatment Facility will be less than significant.

4.17.4.4 Operation Impacts and Mitigation Measures

Impact TRA-3: Operation and maintenance of the proposed project will not 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. (Less than Significant)

Operation of the proposed project will not conflict with an applicable congestion management program. Operations and maintenance (O&M) traffic varies with the type of facility. Each of these is briefly describe below.

SBA Well Sites O&M Traffic Impacts

The SBA well sites currently operate in automated mode, with no onsite manual operation required. The subject treatment process at each well site will also be automated and will not require onsite manual operation. A number of routine tasks and procedures are required as a normal part of operation and will require regular CVWD staff visits to each SBA well site. CVWD operations staff currently visit each well site approximately one to two times per week. With the

addition of resin treatment equipment at each site, these visits are expected to add four to eight times per year at each SBA well site. In the aggregate, the 0.5 new average daily O&M trips associated with all of the SBA well sites will have a negligible and less than significant impact on adjacent roadways and traffic operations.

CRRF O&M Traffic Impacts

The CRRF will be the one component of the project that will have full time staffing. Approximately seven full-time and six part-time CVWD staff will work at this facility. This staffing level will yield approximately 38 O&M staff trips per day, which will primarily occur during the AM and PM peak hours. Ancillary trips will also be generated by various deliveries to the facility, which has been calculated to be approximately 20 trips per day. Therefore, the CRRF facility has the potential to generate approximately 58 in and out trips per day.

As noted above, access to the CRRF will be from Fillmore Street, where current traffic volumes are very low and are largely limited to agricultural activities in the area. Therefore, peak hour traffic will be approximately 20 trips in the AM and PM, with ancillary trips occurring throughout the day. Based upon the low level of O&M traffic associated with the CRRF and the equally limited traffic volumes on Fillmore Street, O&M traffic associated with the operations and maintenance of the CRRF will have a negligible and less than significant impact on adjacent roadways and traffic operations.

WBA Well Sites O&M Traffic Impacts

As described in Section 3 of this DEIR, improvements to the WBA well sites will be limited to pump and other equipment upgrades, and the installation of additional pipelines that will convey raw well water directly to the associated WBA treatment facilities. There will be no new demand for O&M services and related traffic is expected to be the same as it is for the current condition. Therefore, there will be no impact to local roadways or applicable congestion management programs associated with WBA well site O&M.

WBA Treatment Facilities

The two WBA treatment facilities will be designed to operate remotely by automation, with all functions controlled by programmable logic controllers (PLCs). However, a number of routine operational tasks and procedures are required as normal part of operation and will require CVWD staff visits to the facility on a weekly basis; thus there will be a total of 52 site visits per year or one per week to each of the WBA treatment facilities. These trips account for general O&M, resin exchange, and deliveries of carbon dioxide, anti-scalant, sodium hydroxide, and calcium hypochlorite. This volume of O&M traffic is substantially less than that associated with the construction of these facilities, is negligible and the O&M traffic impacts for the WBA treatment facilities will be less than significant.

In summary, operations and maintenance traffic associated with the proposed chromium-6 project facilities and operations will have a less than significant impact on the level of service standards and travel demand measures established by the Riverside County Congestion Management Program.

4.17.5 SIGNIFICANCE AFTER MITIGATION

The proposed project will have a very limited impact on roadway and intersection operations, and other components of the regional and local transportation system both during construction and operation. Potential impacts can be mitigated to less than significant levels with the implementation of standard traffic control programs and adherence to the mitigation measures set forth above.

4.17.6 CUMULATIVE IMPACTS

The project will make a considerable contribution to cumulative traffic-related impacts if the proposed project and area-specific and regional development were to adversely affect the same transportation infrastructure, or if circulation plans were affected by the project or would cause impacts on other infrastructure or circulation plans in the project vicinity. The geographic scope of the analysis was the roadway system surrounding each facility. The cumulative analysis performed for this impact was the growth projection analysis pursuant to State CEQA Guidelines Section 15130(b)(1)(B). Potentially impacted facilities include regional freeways, highways, and local roadway systems, as well as multi-modal facilities such as bus stops and bike lanes.

Total project construction and O&M traffic associated with the project would be very low and less than significant. Project traffic would also be widely disbursed so project impacts would be limited in the extent of their geographic effect. Therefore, the geographic extent of potential cumulative traffic related impacts on roads and intersections in proximity to project sites and the Coachella Valley region is low and not cumulatively considerable. Project development, including pipeline construction, would be temporary, would take place over a short time frame and will affect a limited length of roadway at a time. Growth in background traffic on potentially affected roadways has been projected for each roadway based on annual growth trends, which range from 1.19% per year on Madison Street to 2.86% on Dillon Road. As noted above, current traffic volumes were assessed based on jurisdictional traffic counts and those collected for this analysis. The volume of traffic on Madison Street and Dillon Road during construction was calculated based on existing traffic volumes, which were adjusted using the average annual growth rate.

The assessment of potential cumulative impacts was based upon long-term roadway conditions as characterized in relevant community and County General Plans, including future network geometries and project General Plan buildout traffic volumes. Therefore, cumulative impacts of concern are those associated with the on-going operation and maintenance of the project facilities, including wells and treatment sites.

Each SBA well site will generate approximately four to eight new O&M trips per year. This translates to 184 new trips for all of the SBA well sites, which yields 0.5 average daily trips. The effects of SBA well traffic on adjacent and other roadways will be negligible (one-half trip per day) and cumulative impacts will be less than considerable. These trips will originate from and end at the CRRF, thereby generating up to 216 new trip-ends at the CRRF per year or on average less than one trip per day to all SBA well sites. Operation of the CRRF supporting the SBA wells site treatment facilities will generate approximately 11 new staff trips per day. The CRRF will also generate vehicle trips associated with the delivery of chemicals and other materials needed for the resin regeneration process and the disposal of brine residue, and are expected to total approximately 12 additional trips per year. In the aggregate and on-

average, the operation of the SBA well sites and the supporting CRRF will conservatively generate an average of approximately 59 trips per day.

The WBA well operations will not generate new vehicle trips; current weekly visits are sufficient to ensure proper operation of the proposed WBA wells. The two WBA treatment sites, to be located in the Desert Hot Springs and La Quinta areas, will operate autonomously and will generate approximately two vehicle trips per month.

In summary, the operation and maintenance of the SBA and WBA wells sites, the CRRF and the two WBA treatment sites will conservatively generate approximately 60 new vehicle average daily trips, with almost all of these daily trips being associated with the operation and maintenance of the CRRF. As noted above, vehicle trips to and from the various well sites and the WBA treatment sites will be very limited and essentially negligible. Therefore, the cumulative impacts of the operation and maintenance of the various project facilities on local and regional traffic will not be cumulatively considerable.

4.17.6 REFERENCES

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