

INTERSTATE 10/JACKSON STREET INTERCHANGE PROJECT

BETWEEN MONROE STREET AND 0.4 MILES WEST OF GOLF CENTER PARKWAY, CITY OF INDIO,
RIVERSIDE COUNTY, CALIFORNIA
DISTRICT 8 – RIV – 10 (PM R54.9/R56.5)
EA 08-0M910
PN 0800020208

Initial Study with [Proposed] Negative Declaration/Environmental Assessment



**Prepared by the
State of California, Department of Transportation**

The environmental review, consultation, and any other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans.

February 2021



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General Information About This Document

What's in this document:

The California Department of Transportation (Department), as assigned by the Federal Highway Administration (FHWA), has prepared this Initial Study/Environmental Assessment (IS/EA) prepared, which examines the potential environmental impacts of the alternatives being considered for the proposed project located within the City of Indio, in Riverside County, California. The Department is the lead agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The document describes why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization and/or mitigation measures.

What you should do:

- Please read this IS/EA.
- Please call (760) 391-4017 to make an appointment to review a copy of this document and the related technical studies at:
City of Indio City Hall
100 Civic Center Mall
Indio, CA 92201
- An electronic copy (PDF file format) of the IS/EA can be obtained from the City of Indio's website as follows: <http://www.indio.org/jacksoninterchange>.
- An electronic copy (PDF file format) of the IS/EA can be obtained from the County of Riverside's website as follows: <https://rcprojects.org/jackson>.
- Attend the virtual public hearing, scheduled for March 10, 2021. Details for the virtual public hearing will be provided on the City of Indio's website (<http://www.indio.org/jacksoninterchange>) prior to the meeting date, and will include a webinar link with instructions, a call-in number, and Spanish translation services.
- We welcome your comments. If you have any concerns regarding the proposed project, please attend the public hearing and/or send your written comments to the Department by the deadline.
- Submit comments via postal mail to:
Renetta Cloud
Senior Environmental Planner
California Department of Transportation
464 W. 4th Street, MS-823
San Bernardino, CA 92401-1400
- Submit comments via email to: Interstate10_Jackson_Int@dot.ca.gov
- Please be sure to submit comments by the deadline: March 26, 2021.

What happens next:

After comments are received from the public and reviewing agencies, the Department, as assigned by FHWA, may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, the Department could design and construct all or part of the project.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Terri Kasinga, Chief, Public and Media Affairs, 464 W. 4th Street, 6th floor, San Bernardino, CA 92401-1400; (909) 383- 4646; or use the California Relay Service 1-800-735-2929 (TTY to Voice), 1-800-735-2922 (Voice to TTY), 1-800- 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech to Speech), or 711.

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SCH # _____
08-RIV-10-PM R54.9/R56.5
EA 08-0M910
PN 0800020208

Interchange modifications at Interstate 10 (I-10) and Jackson Street, between Monroe Street and 0.4 miles west of Golf Center Parkway, located at Post Mile [PM] Revised (R) 54.9 to PM R56.5 on I-10 located in the City of Indio, County of Riverside, California

**Initial Study with [Proposed] Negative Declaration /
Environmental Assessment**

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C), 49 USC 303, and/or 23 USC 138

THE STATE OF CALIFORNIA
Department of Transportation

2/11/2021

Date of Approval



David Bricker
Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation
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PROPOSED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The City of Indio (City), in cooperation with the California Department of Transportation (Department) and the County of Riverside (County), proposes to improve the operational performance of the existing Interstate 10 (I-10)/Jackson Street Interchange within the City limits. The I-10/Jackson Street interchange is located on I-10 between Monroe Street and Golf Center Parkway. The project limits extend from approximately Post Mile (PM) R54.9 to PM R56.5 along I-10 and from Kenner Avenue (South of I-10) to Atlantic Avenue (North of I-10) along Jackson Street.

Determination

This proposed Negative Declaration (ND) is included to give notice to interested agencies and the public that it is the Department's intent to adopt an ND for this proposed project. This does not mean that the Department's decision regarding the project is final. This ND is subject to change based on comments received by interested agencies and the public.

The Department has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the project would not have a significant effect on the environment for the following reasons:

- The project would have no effect on cultural resources, mineral resources, tribal cultural resources, and wildfire.

In addition, the project would have less than significant effects to aesthetics, agriculture and forest resources, air quality, greenhouse gases, biological resources, cultural resources, geology and soils, paleontological resources, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, and utilities and system services.

David Bricker
Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation
CEQA Lead Agency

Date

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Chapter 1 Proposed Project

1.1 NEPA Assignment

California participated in the “Surface Transportation Project Delivery Pilot Program” (Pilot Program) pursuant to 23 USC 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the Department entered into a Memorandum of Understanding pursuant to 23 USC 327 ([NEPA Assignment MOU](#)) with FHWA. The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016, for a term of five years. In summary, the Department continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and the Department assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to the Department under the [23 USC 326 CE Assignment MOU](#), projects excluded by definition, and specific project exclusions.

1.2 Introduction

The California Department of Transportation (Department), as assigned by FHWA, is the lead agency under NEPA; it is also the lead agency under the California Environmental Quality Act (CEQA). The City of Indio (City), in cooperation with the Department and the County of Riverside (County), proposes to improve the operational performance of the existing Interstate 10 (I-10)/Jackson Street Interchange within the City limits. The I-10/Jackson Street interchange is located on I-10 between Monroe Street and Golf Center Parkway. The project limits extend from approximately Post Mile (PM) Revised (R) 54.9 to PM R56.5 along I-10 and from Kenner Avenue (South of I-10) to Atlantic Avenue (North of I-10) along Jackson Street. The project site is centrally located within the City of Indio at the crossroads of I-10 and Jackson Street, and the Coachella Valley Stormwater Channel (CVSC), in Riverside County, California. Refer to Figure 1-1 (Regional Vicinity) and Figure 1-2 (Project Location).

The current I-10/Jackson interchange configuration is a diamond interchange, with signal control at the ramp termini. The project would reconstruct and widen Jackson Street at I-10, including the existing on- and off-ramps. The interchange is a major access point for existing residential and retail sites. The project is included in the Southern California Association of Governments' Final 2016 Regional Transportation Plan/Sustainable Communities Strategy and the Final 2019 Federal Transportation Improvement Program with the Project ID of RIV071252.

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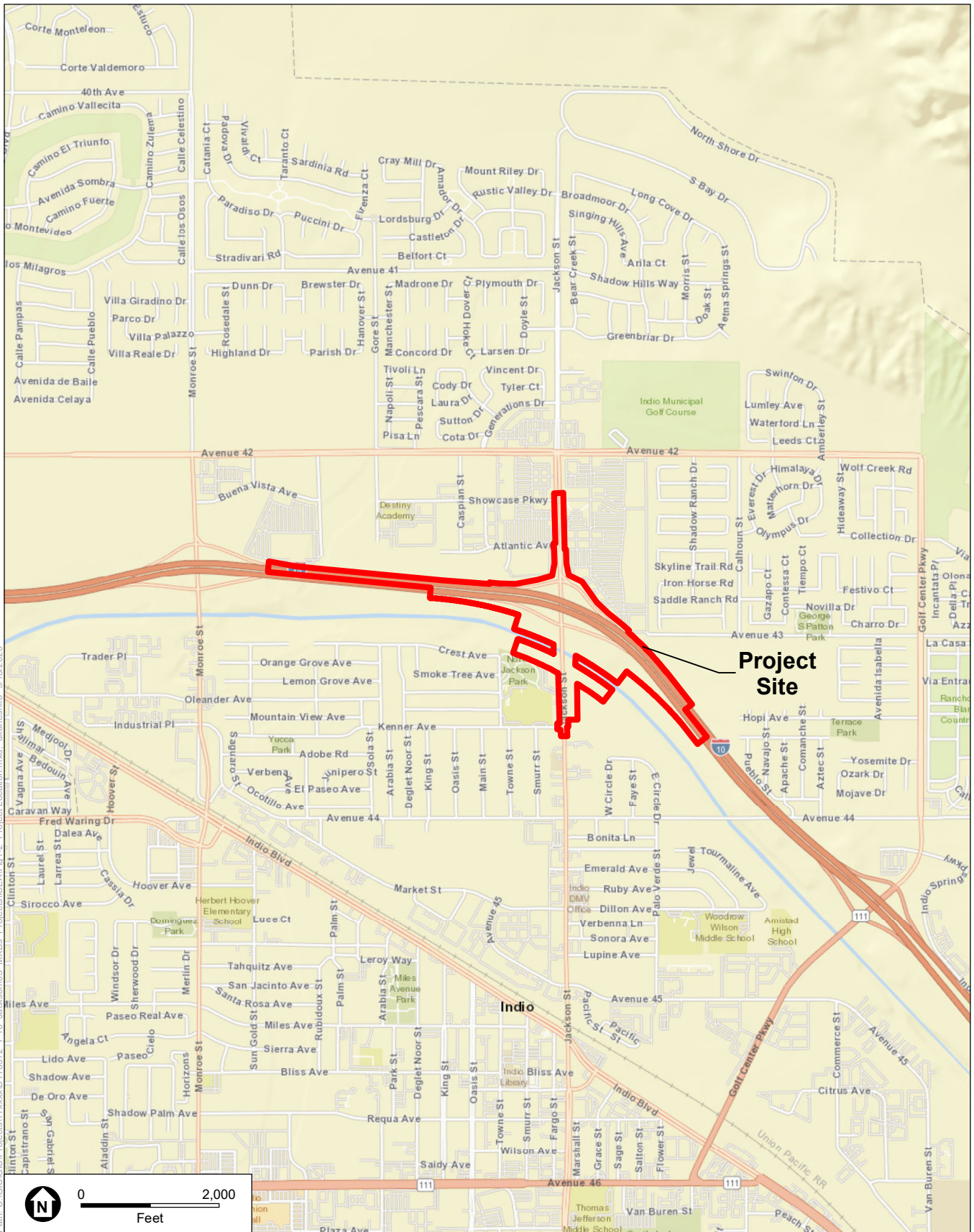


SOURCE: ESRI StreetMap North America.

I-10 / Jackson Street Interchange Project

Figure 1-1
Regional Vicinity

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SOURCE: ESRI StreetMap North America.

I-10 / Jackson Street Interchange Project
DISTRICT 8 – RIV – 10 (PM R54.9/R56.5)

Figure 1-2
Project Location

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1.2.1 Existing Facility

1.2.1.1 Interstate 10

I-10 is a major, east-west transportation route that connects the City of Indio to Los Angeles county, to the west, and the California/Arizona state border, to the east. The route is functionally classified as an “Urbanized Freeway” and is a part of the “State Freeway and Express” (F&E) System. The segment of I-10 from State Route 60 (SR-60) to the California/Arizona State Line is included in the State Interregional Road System (IRRS) which further classifies the route as a “High Emphasis” and “Gateway” route. In addition, the length of I-10 within the County of Riverside is included in the National Highway System (NHS), the Rural and Single Interstate Routing System (RSIRS), and the Strategic Highway Corridor Network (STRAHNET); and is a Surface Transportation Assistance Act (STAA) route for use by oversized trucks. Within the project limits, I-10 is six lanes in total, with three mixed-flow lanes in each direction; a metal-beam center divider, and does not have high-occupancy vehicle (HOV) lanes.

1.2.1.2 Jackson Street

Jackson Street is a north-south arterial in the City of Indio with an existing posted speed limit of 40 miles per hour (mph) south of the interchange, and 45 mph north of the interchange. Within the project area, it is a two-lane roadway with curbs, a striped or raised median, and a sidewalk adjacent to the southbound side of the road. The Jackson Street Overcrossing PM R55.7, Bridge Number 56-0612) is a two-span prestressed concrete box girder bridge constructed in 1972. It is approximately 264 feet long, 47 feet wide, and spans six lanes of traffic over I-10. Immediately south of the interchange, Jackson Street crosses over the Whitewater River via the Whitewater River Bridge (Bridge Number 56C-0084). This bridge is a five-span reinforced concrete box girder bridge. It is approximately 553 feet long, and 47 feet wide.

1.2.1.3 Coachella Valley Stormwater Channel

The CVSC, also known as Whitewater River, is a 50-mile storm channel that runs from the Whitewater area north of Palm Springs to the Salton Sea channeling waters from surrounding mountain areas. The trapezoidal, earth channel is under the Coachella Valley Water District (CVWD) jurisdiction. Along the southern bank, which is within the limits of the project, the Coachella Valley Association of Governments (CVAG) is currently in the final design phase of a planned 50-mile-long multi-use trail, known as the Coachella Valley Link, or CV Link, that will connect cities within the Coachella Valley for use of Low-Speed Electric Vehicles (LSEV), bicycles, and pedestrian users. CV Link will allow for egress and ingress to Jackson Street.

In addition, full closures of CV Link are not anticipated during construction of the I-10/Jackson Street Interchange Improvement Project. Temporary detours for CV Link users will be provided to maintain mobility. The bridge and CV Link construction activities are integrated, and as a result, CV Link realignment is anticipated to be accomplished over 18 to 24 months.

1.2.2 Purpose and Need

1.2.2.1 Project Purpose

The purpose of this project is to:

- Increase capacity and provide operational improvements at the I-10/Jackson Street interchange directly associated with the forecast travel demand for the 2045 design year within the City of Indio;
- Accommodate multimodal travel that integrates with the City’s General Plan, regional plans, and preserves the values of the area;
- Improve existing interchange geometry.

The above objectives will be evaluated within the project limits while minimizing right-of-way, environmental, and economic impacts.

1.2.2.2 Project Need

The project addresses the following needs:

- Forecasted traffic volumes, in conjunction with the current capacity of the existing interchange, are expected to result in the interchange ramps and associated intersections operating at unacceptable levels of service by the year 2045;
- Gaps in the pedestrian and bicycle infrastructure impede the connection between communities and businesses across the interchange;
- The existing ramp alignments, ramp intersections, and Jackson Street contain existing nonstandard geometric features.

The accelerated growth and development taking place in the City of Indio in the vicinity of the I-10/Jackson Street interchange are expected to generate traffic volumes that will exceed the capacity of the existing interchange in the near future. The I-10/Jackson Street interchange provides a key connection between the city center to the south and the retail centers to the north. The interchange is used for long-distance commutes, regional trips, as well as local trips. At the current rate of growth, the traffic volumes on the I-10 freeway at the Jackson Street interchange are expected to double from existing year (2018) to design year (2045) while traffic volumes are anticipated to increase by almost 50 percent on both Jackson Street and I-10/Jackson Street ramps in that same period. Without the proposed project, the operation of the interchange will continue to deteriorate to unacceptable levels of service, resulting in increased congestion, delays, energy consumption, and air pollution.

Pedestrian and bicycle access across the freeway and the Whitewater River (i.e., CVSC) are currently limited to the existing infrastructure of the Jackson Street overcrossing bridge and the Jackson Street over Whitewater River bridge. Both bridges have an existing nonstandard 5-foot sidewalk width in the southbound direction (west side Jackson Street) and no sidewalk in the northbound direction (east side of Jackson Street). Both bridges have approximately a 2-foot shoulder in both directions. The project will construct standard 6-foot sidewalks and 10-foot shoulder widths in both directions on both bridges to promote and facilitate: (1) connectivity between communities and businesses and (2) pedestrian, bicycle and low-speed electric vehicle (LSEV) use.

Roadway Deficiencies

The Jackson Street at I-10 interchange was constructed in 1972, and several geometric and cross-sectional deficiencies exist within the interchange area. These deficiencies include the following:

- Insufficient shoulder widths on Jackson Street and entrance and exit ramps.
- Insufficient pedestrian sidewalk widths and multi-modal facilities (no bike or low-speed electric vehicle [LSEV], alternative vehicle use facilities).
- Existing bridge structures require seismic retrofit to meet current standards and will be over 50 years old by the project's estimated opening year (2025).
- The existing CVSC bridge foundations are susceptible to scour and require extensive measures to protect the existing foundations.
- Existing bridge structures do not include protective screening over I-10.

Social Demands and Economic Development

According to the U.S. Census, Indio had an estimated population of 88,000 in 2018, and was the 10th fastest growing city in California in between 2010 and 2018. The City is expected to continue to experience significant growth in the future. According to the Southern California Association of Governments (SCAG), Indio is expected to reach a population of approximately 123,000 by 2040, an increase of approximately 39.2 percent (City of Indio, 2018). Overall, the County's population is expected to increase from its current 2.2 million people to approximately 3.2 million in 2040, an increase of almost 50 percent.

The project site is generally surrounded by areas with a General Plan land use designation of "Mixed Use Development Agreement" and "Community Commercial" within the northwestern and northeastern quadrants of the interchange, respectively. Areas to the south of I-10 are designated "Open Space" by the General Plan. Other designations surrounding the southern portion of the project site include Business Park, Commercial office, and Public. According to the City's Zoning Map, I-10 and Jackson Street are roads/rights-of-way. The site is surrounded by areas with a zoning designation of Mixed Use Development Agreement, Community Commercial, Whitewater Storm Channel, Residential-Low, Neighborhood Commercial, and Public. (Figure 2-1 shows the General Plan land use for the project area). Please see Section 2.1.1 (Land Use) for more detailed discussion regarding existing and planned land use in the project area and vicinity. Figure 2-2 and Table 2-1 of Section 2.1.1, Land Use, shows and describes, respectively recently constructed and planned development and infrastructure projects within the project vicinity.

Modal Interrelationships and System Linkages

I-10 provides regional access in the project area as a four-lane freeway facility, traversing the state of California in a west-east orientation. I-10 originates in Santa Monica, California and extends eastward to its terminus in Jacksonville, Florida. As an interstate facility, I-10 serves as a major corridor for goods movement through the project area and areas west and east via the freeway.

The I-10/Jackson Street interchange is a connecting link in the local and regional transportation system. In the immediate vicinity of the interchange, Monroe Street provides access to existing commercial, industrial, and residential areas north and south of the interchange. Regionally, and south of the existing interchange, Monroe Street provides access to the City of La Quinta as well as a direct connection to State Route 111, which provides access to communities east, west, and south of the I-10/Monroe Street interchange.

The project would also include facilities intended to promote connectivity for system linkages related to pedestrian and bicycle movement. The project includes bicycle lanes and sidewalks and would accommodate LSEVs along Monroe Street through the interchange. It also includes a future alignment of the planned Coachella Valley Link (CV Link) project. CV Link is a 50-mile multi-modal transportation pathway proposed by the Coachella Valley Association of Governments (CVAG) that would extend from the City of Palm Springs on the west to the City of Coachella on the east. The route is generally proposed along the levees of the CVSC and on local streets. CV Link is designed to accommodate the widest possible range of users, including pedestrians, bicyclists, LSEVs, and mobility device users (wheelchairs and electric scooters). LSEVs include golf carts and neighborhood electric vehicles. The project would accommodate a segment of the CV Link project along the south levee of the CVSC within the project limits. Access points to the planned future CV Link from Monroe Street would be consistent with the access point locations identified in the CV Link Conceptual Master Plan. The City operates various bus routes through SunLine Transit, with Route 80 operating through the Monroe Street interchange. Route 80 has two stops near the project: Stop 19, on Monroe Street at Oleander Avenue, and Stop 20, on Showcase Parkway at Monroe Street.

The I-10/Jackson Street Interchange Improvement Project is approximately two miles east of the Bermuda Dunes Airport. The privately owned airport is situated in the Coachella Valley and is a major point of general aviation access to the surrounding desert communities of eastern Riverside County. The airport caters to corporate-type, twin engine propeller aircraft and small business jets.

No future plans for rail development are planned in the project vicinity.

Air Quality Improvements

The project includes bicycle lanes and sidewalks and would accommodate LSEVs along Monroe Street through the interchange (refer to Section 1.4 below for detail regarding design features of the Build Alternatives).

Independent Utility and Logical Termini

FHWA regulations (23 Code of Federal Regulations [CFR] 771.111 [f]) require that the action evaluated:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
- Have independent utility or independent significance (be usable and require a reasonable expenditure even if no additional transportation improvements in the area are made).
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Logical termini should encompass an entire project. Cutting a larger project into smaller projects may be considered “improper segmentation.” A project must have independent utility; that is, a project must be able to function on its own, without further improvements.

This Initial Study/Environmental Assessment assesses the project area, which extends from approximately PM R54.9 to PM R56.5 along I-10 and from Kenner Avenue (South of I-10) to Atlantic Avenue (North of I-10) along Jackson Street. The study corridor extends north to south along Jackson Street from Avenue 42 to Avenue 44. Avenue 42 is approximately 0.3 miles north of the I-10/Jackson westbound ramp intersection and Avenue 44 is approximately 0.5 miles south of the I-10/Jackson eastbound ramp intersection. The study area extends west to east from Monroe Street, approximately 1 mile west of the interchange, to I-10/Golf Center Parkway, approximately 1.2 miles to the east. Included in the study area are the I-10 overcrossing and Coachella Valley Stormwater Channel Bridge structures.

The project is of sufficient length, with project termini logically placed, to allow environmental issues to be addressed on a broad scope. The project would save potential interruptions in traffic movement along the I-10 and its facilities within the study area, without any additional transportation improvements being made in the area. As such, the project is considered a project with independent utility.

1.3 Project Description

The City, in cooperation with the Department and the County, proposes to improve the operational performance of the existing I-10/Jackson Street Interchange within the City limits. The I-10/Jackson Street interchange is located on I-10 between Monroe Street and Golf Center Parkway. The project limits extend from approximately PM R54.9 to PM R56.5 along I-10 and from Kenner Avenue (South of I-10) to Atlantic Avenue (North of I-10) along Jackson Street. The project site is centrally located within the city of Indio at the crossroads of I-10 and Jackson Street, in Riverside County, California.

The current I-10/Jackson interchange configuration is a diamond interchange, with signal control at the ramp termini. The project would reconstruct and widen Jackson Street at I-10, including the existing on- and off-ramps. The interchange is a major access point for existing residential and retail sites.

This section describes the proposed action and the project alternatives that were developed to meet the identified purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are Alternative 1, No-Build Alternative; Alternative 2, Compact Diamond Interchange; and Alternative 4, Diverging Diamond Interchange.

1.4 Alternatives

1.4.1 Project Alternatives

Various alternatives were previously evaluated that considered traffic performance, design, environmental impacts, right-of-way, and cost; however, only two viable Build Alternatives and a No-Build Alternative were identified for this project and would be further evaluated during the Project Approval and Environmental Document (PA/ED) phase. Build Alternative 2 is a Compact Diamond (Type L-1) and Build Alternative 4 is a Diverging Diamond Interchange (DDI) also known as Double Crossover Diamond interchange.

- Alternative 1: No-Build (refer to Figure 1-3, No Build Alternative)
- Alternative 2: Compact Diamond Interchange (refer to Figure 1-4, Build Alternative 2)
- Alternative 4: Diverging Diamond Interchange (refer to Figure 1-5, Build Alternative 4)

Additionally, Figure 1-6, Figure 1-7 follow, which are cross-sections of Jackson Street as it relates to the two respective Build Alternatives. Figure 1-6 pertains to Alternative 2, and Figure 1-7 pertains to Alternative 4.

1.5 Comparison of Alternatives

1.5.1 Common Design Features of the Build Alternatives

This project contains a number of standardized project measures which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2.

The two build alternatives have the following design elements in common:

- Include construction of the Whitewater River Bridge Structure to accommodate two 12-foot-wide through lanes, 10-foot shoulder and 6-foot-wide sidewalk on each direction.
- Construction of two new access ramps to the CV Link recreational facility
- Widening of existing Jackson Street between Kenner Avenue and Atlantic Avenue to accommodate two 12-foot-wide through lanes in the southbound direction.
- Realignment and widening of the I-10 Eastbound (EB) and I-10 Westbound (WB) on- and off-ramps.
- Construction of 600-foot WB auxiliary lane preceding Jackson Street WB off-ramp.
- Installation of planned ramp meter on the I-10 WB and EB on-ramps.

1.5.2 Design Exceptions

Table 1-1 summarizes the nonstandard design features that would be constructed under the build alternatives.

Table 1-1 Design Exceptions Common to Build Alternatives

Design Standard	Justification for Nonstandard Feature (Exception)
302.1 – Shoulder Width	The inner shoulders along I-10 (six-lane freeway facility) are an existing nonstandard 5 feet in width. The HDM calls for shoulder widths to be 10 feet. The project purpose and need statement excludes improvements to I-10 mainline freeway facility. The existing eastbound I-10 and westbound I-10 inside shoulders do not meet the HDM standard of 10 feet for a freeway with six lanes or more. Widening the shoulders solely within the project limits would create discontinuity and would not meet drivers' expectation for the inside shoulders that are located to the east and west of the project limits. The project purpose and need is intended to provide improvements for a reconstructed interchange.
304.1 – Side Slope Standard	Attaining standard 4:1 fill slope at this location (westbound off-ramp) would require additional right-of way to flatten slope and would impact businesses and future land slated for community development. A concrete barrier is proposed to mitigate the nonstandard fill slope of 2:1 and retains the existing drainage swale within the existing right-of-way.

1.5.3 Unique Features of the Build Alternatives

1.5.3.1 Alternative 1 - No-Build (No-Action)

Under this alternative, no reconstruction or improvements would be made to the existing I-10/Jackson Street interchange other than routine maintenance.

1.5.3.2 Alternative 2 – Compact Diamond Interchange

Under this build alternative, the existing I-10/Jackson Street interchange would maintain the compact diamond configuration and reconstruct Jackson Street, I-10 bridge overcrossing, Whitewater River Bridge, and the I-10 on- and off-ramps. Jackson Street at the I-10 bridge crossing would be reconstructed from one lane to two lanes in each direction, and include two left-turn lanes at each ramp intersection for access to eastbound and westbound I-10 on-ramps. The existing Jackson Street bridge at the Whitewater River Bridge would be widened to increase the number of through lanes from one lane to two lanes in each direction. This alternative would include reconstruction and restriping of Jackson Street to transition the additional travel lanes to the existing lane configurations north and south of the interchange. The I-10 westbound (WB) and eastbound (EB) on-ramps would be widened to two lanes and transition to a single lane merging to I-10. Interchange off-ramps would be widened, realigned and restriped to accommodate additional turn lanes to Jackson Street. Auxiliary lanes would be constructed at the I-10 WB and EB ramps to enhance merging and diverging traffic to I-10.

Table 1-2 describes the nonstandard design features that are unique to Build Alternative 2.

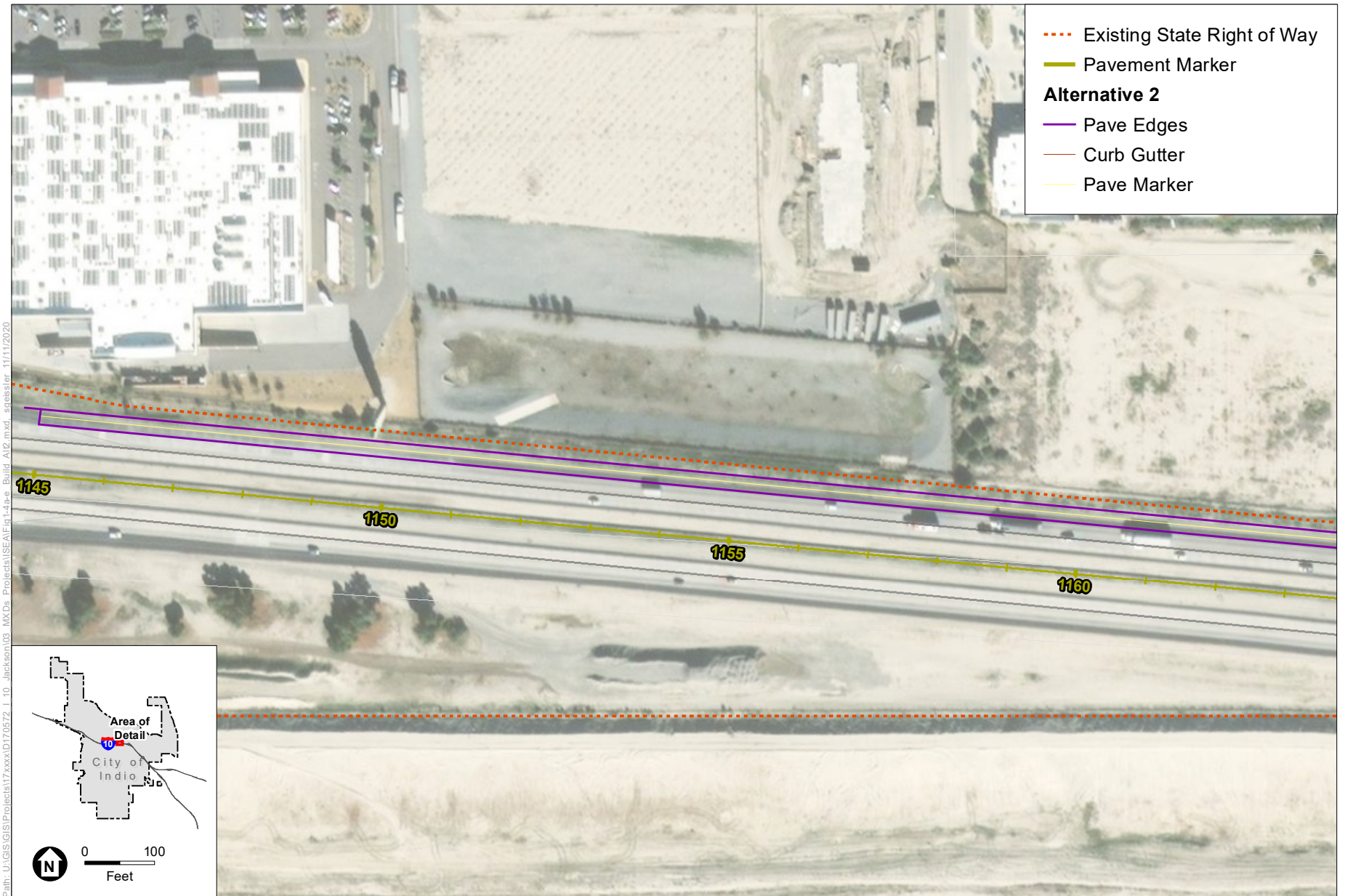


SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project
DISTRICT 8 – RIV – 10 (PM R54.9/R56.5)

Figure 1-3
Alternative 1 (No Build)

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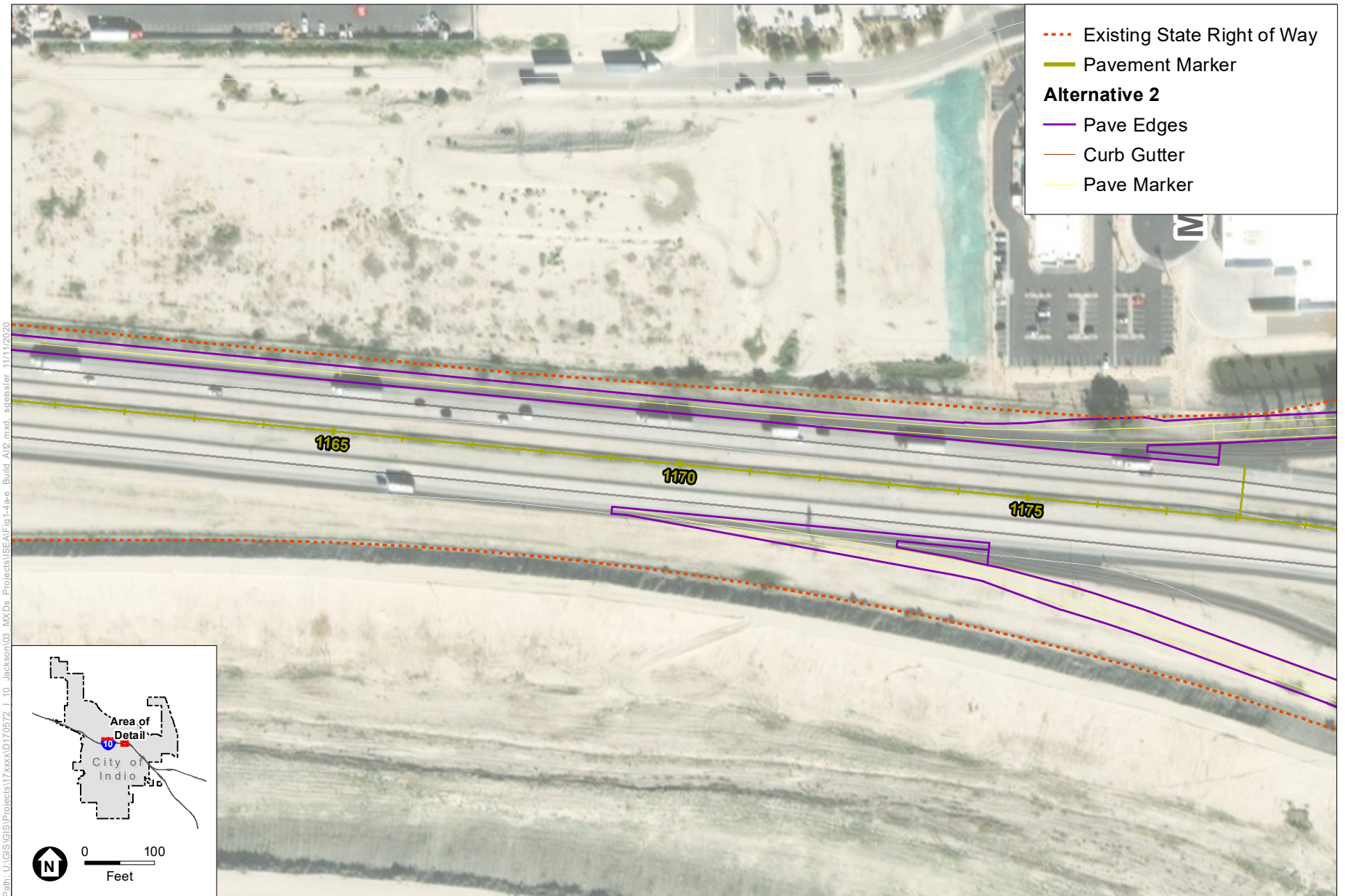


SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project

Figure 1-4a
Build Alternative 2

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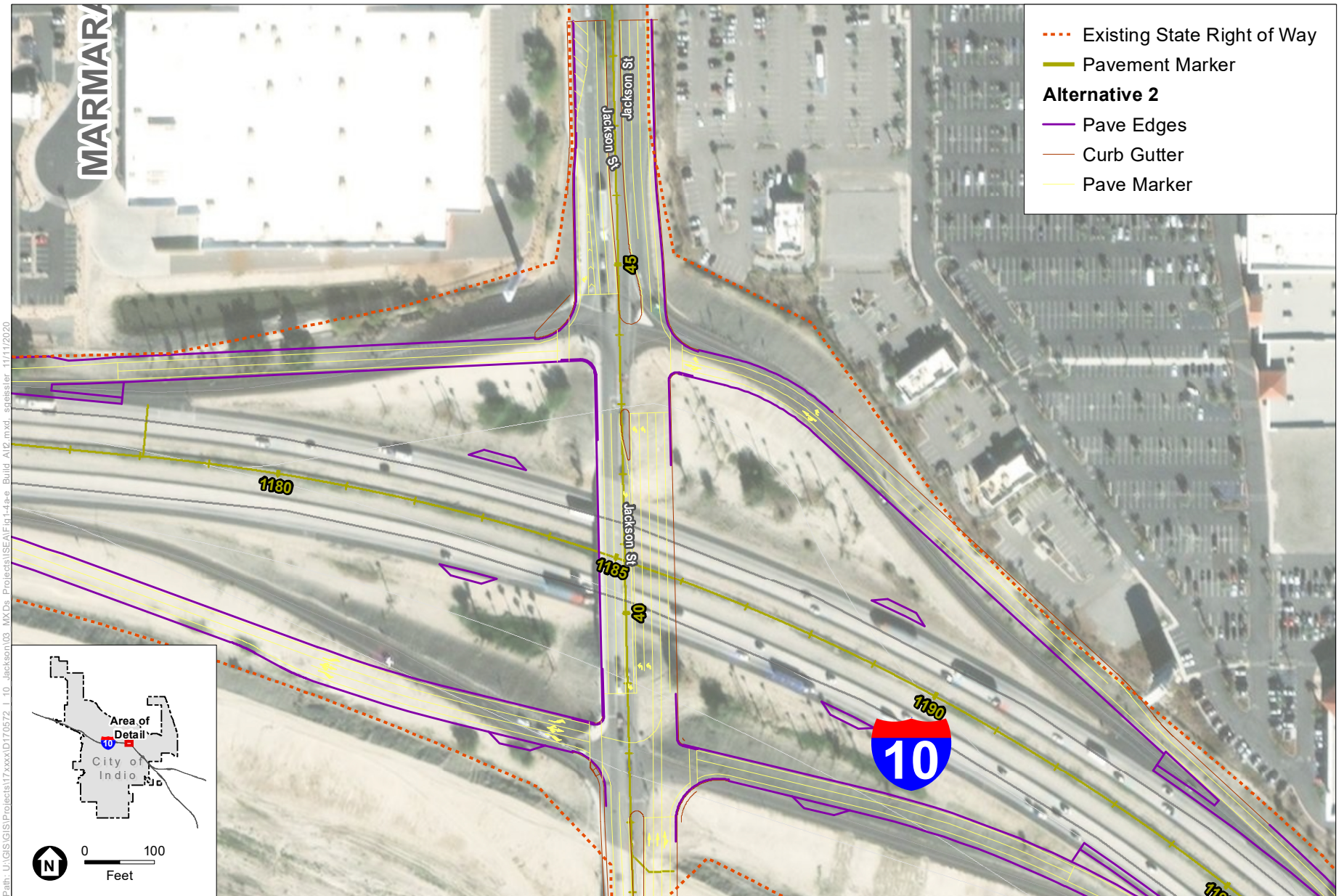


SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project

Figure 1-4b
Build Alternative 2

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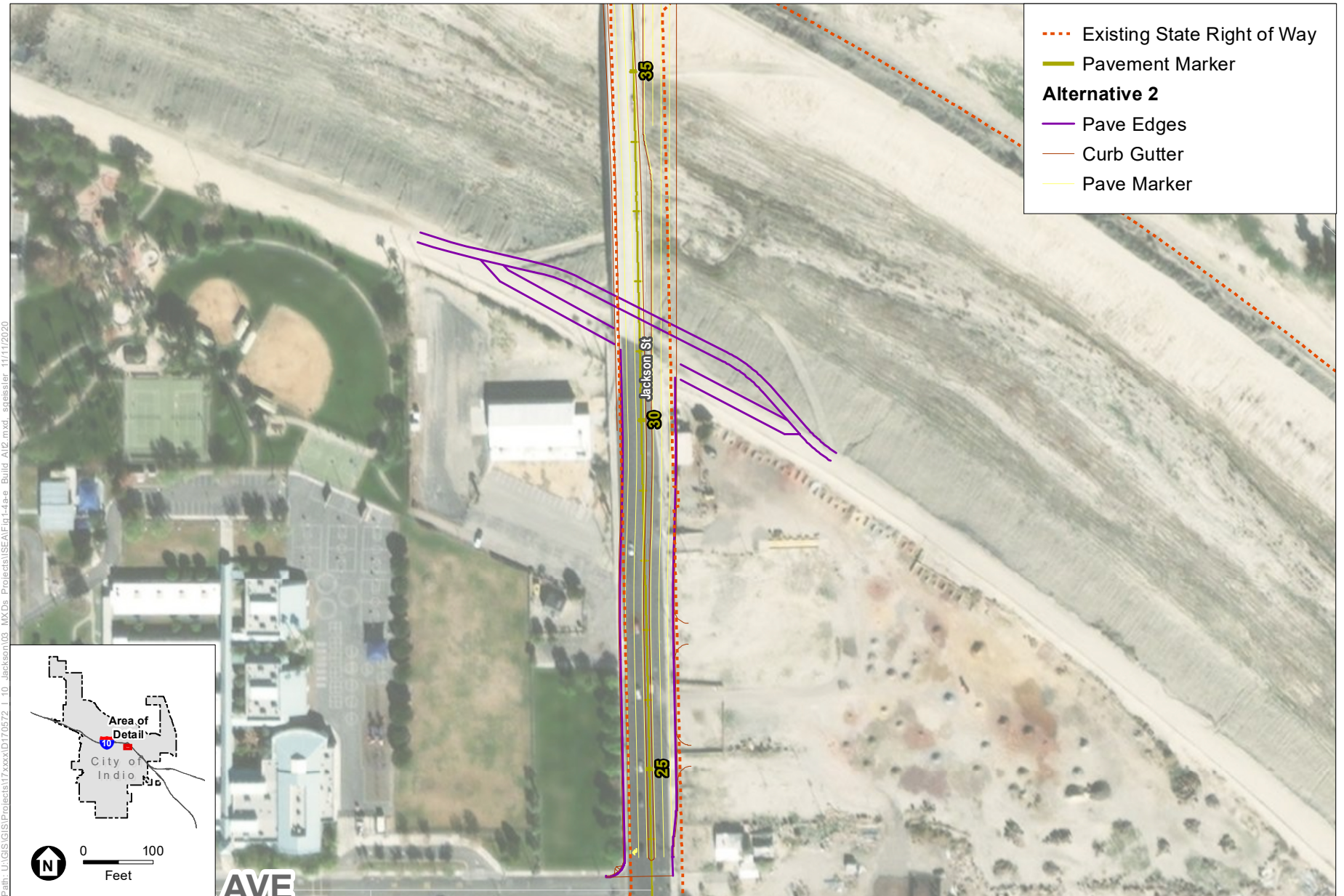


SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project

Figure 1-4c
Build Alternative 2

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SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project

Figure 1-4d
 Build Alternative 2

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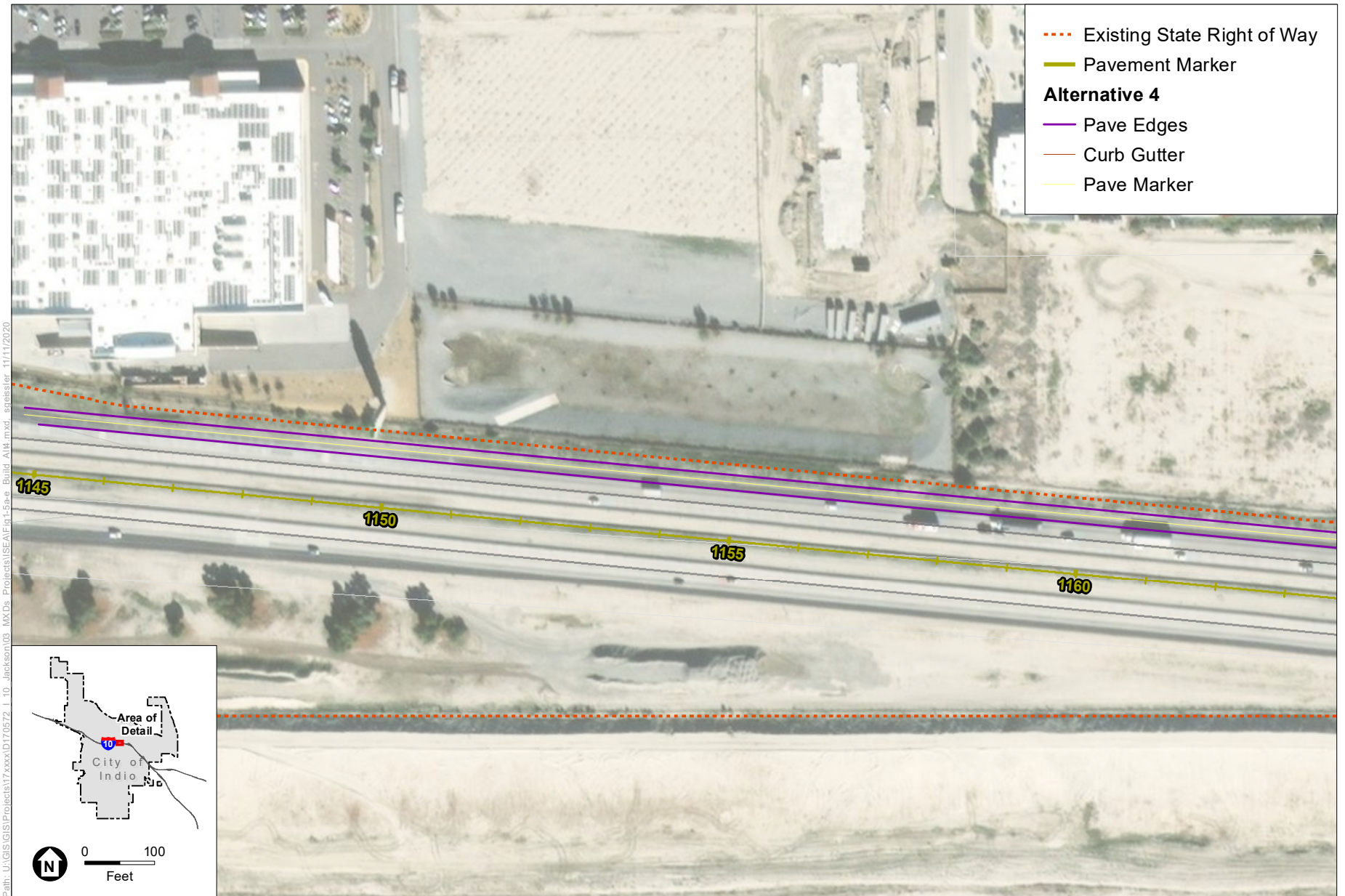


SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project

Figure 1-4e
Build Alternative 2

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SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project

Figure 1-5a
Build Alternative 4

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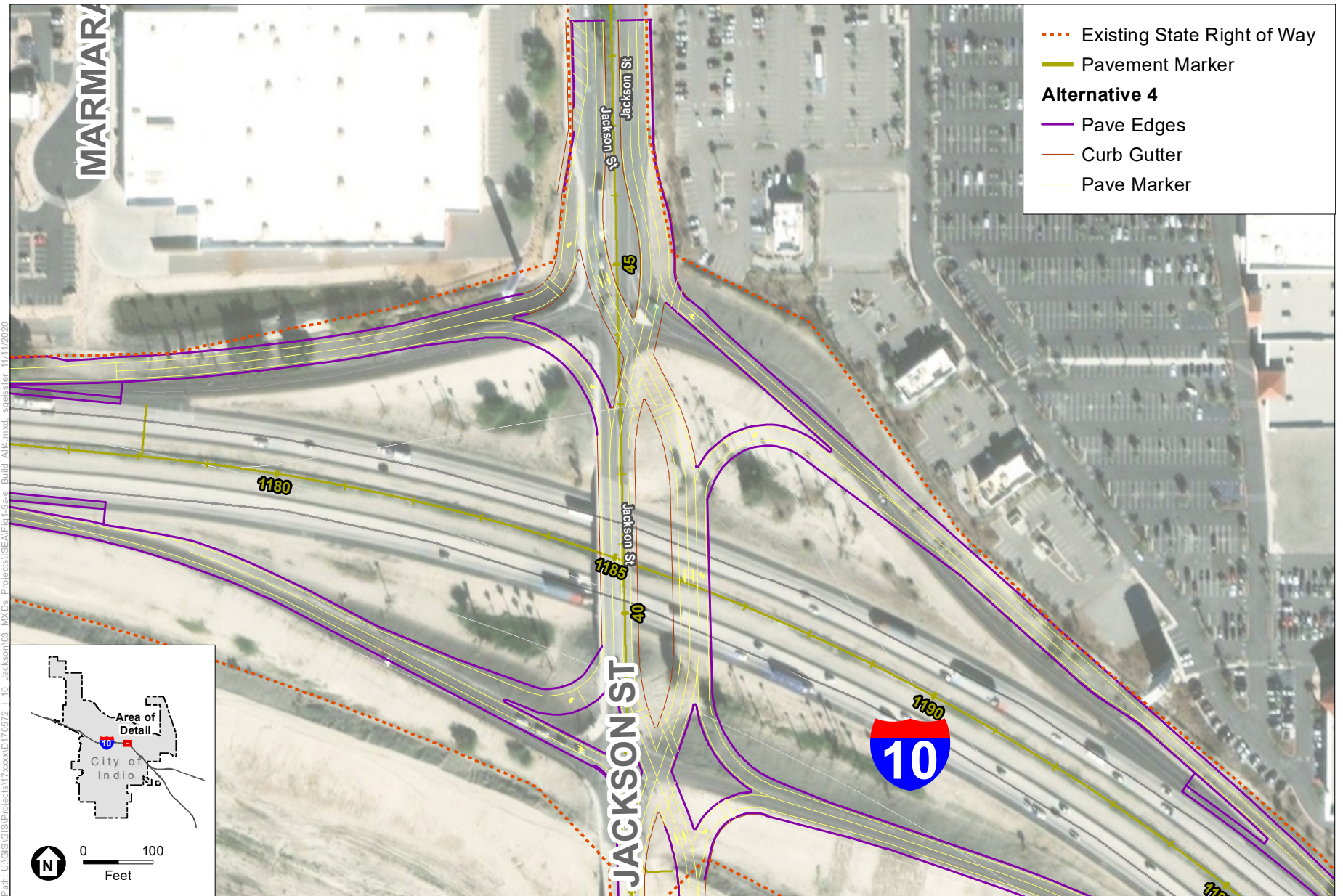


SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project

Figure 1-5b
Build Alternative 4

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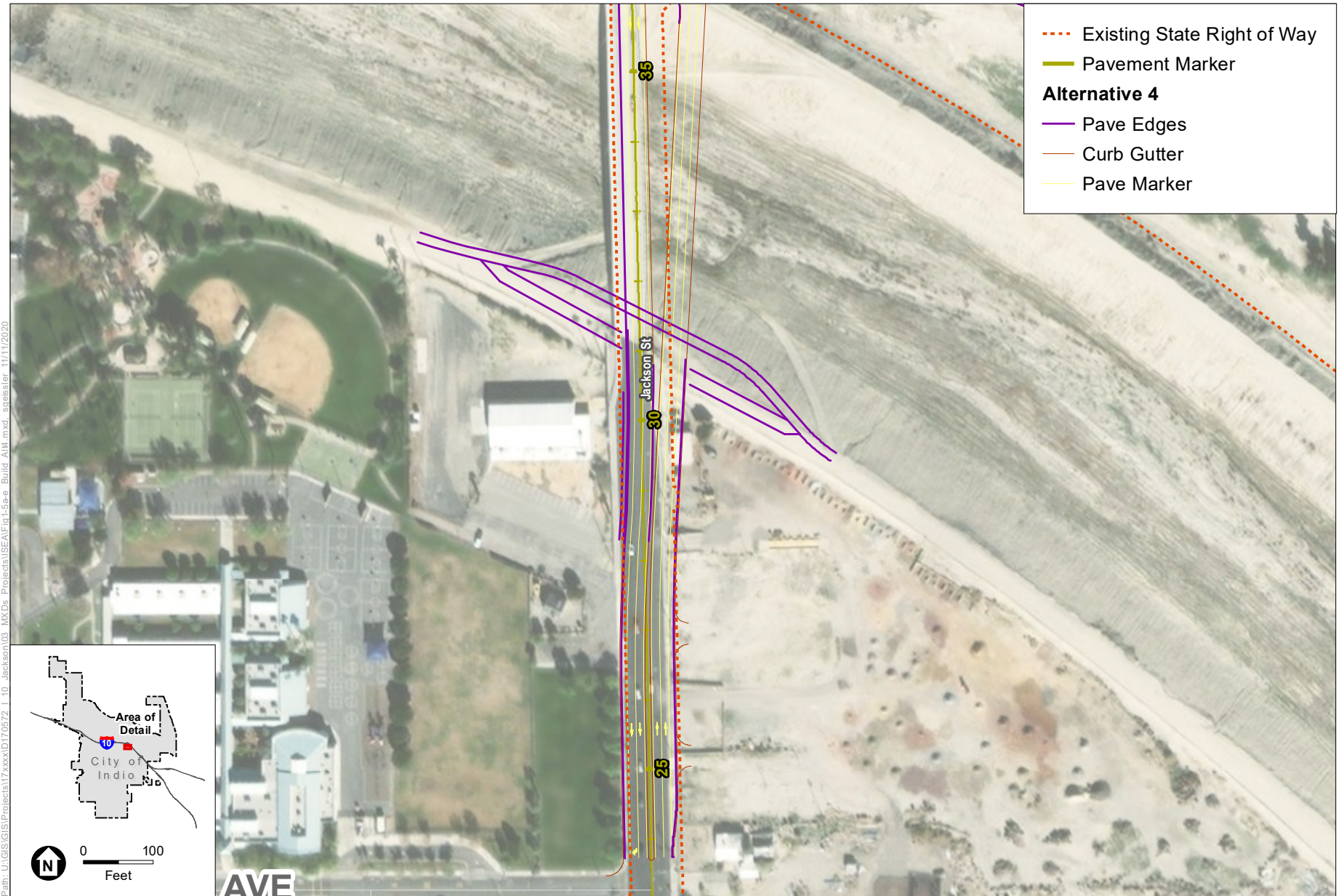


SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project

Figure 1-5c
Build Alternative 4

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SOURCE: Riverside County GIS

I-10 / Jackson Street Interchange Project

Figure 1-5d
Build Alternative 4

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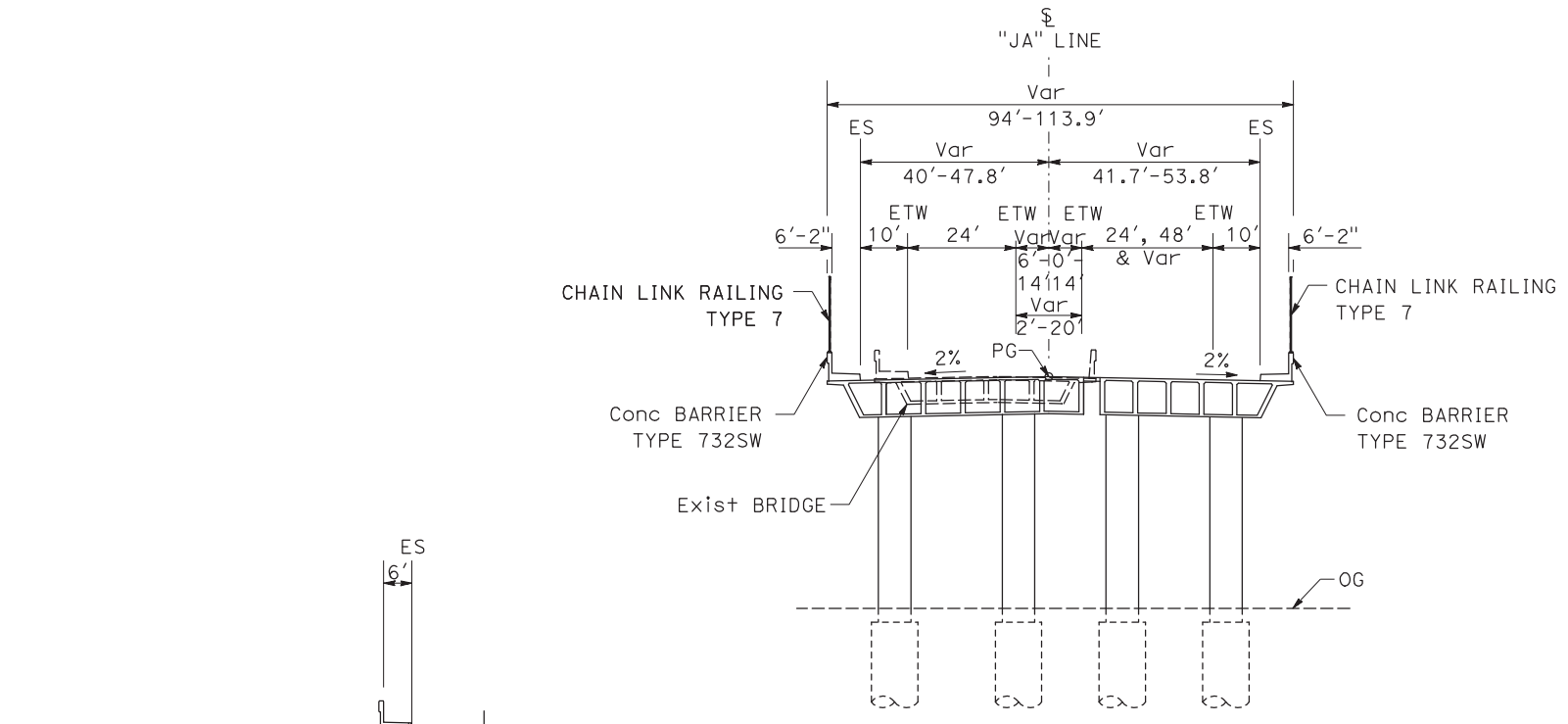
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I-10 / Jackson Street Interchange Project

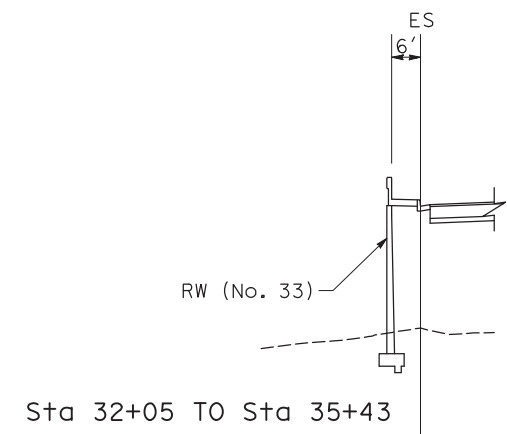
Figure 1-5e
 Build Alternative 4

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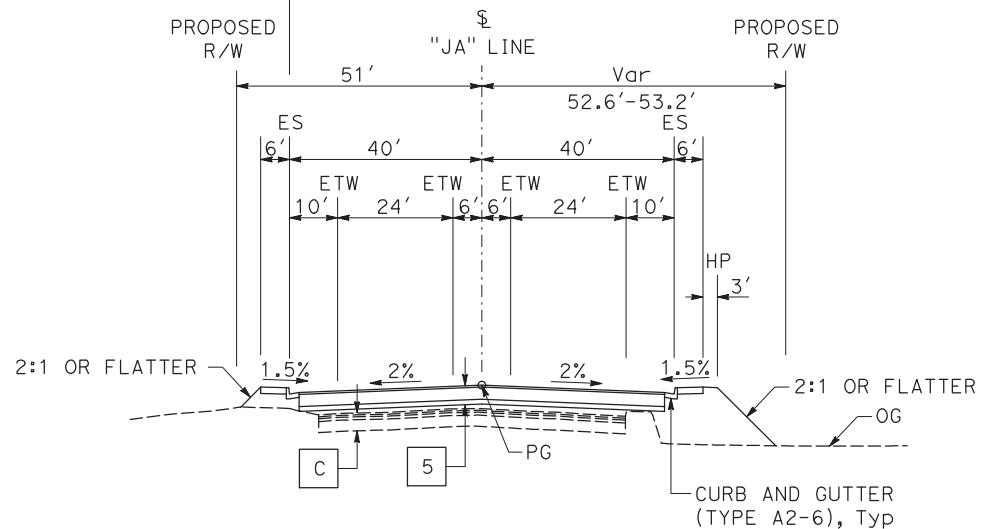
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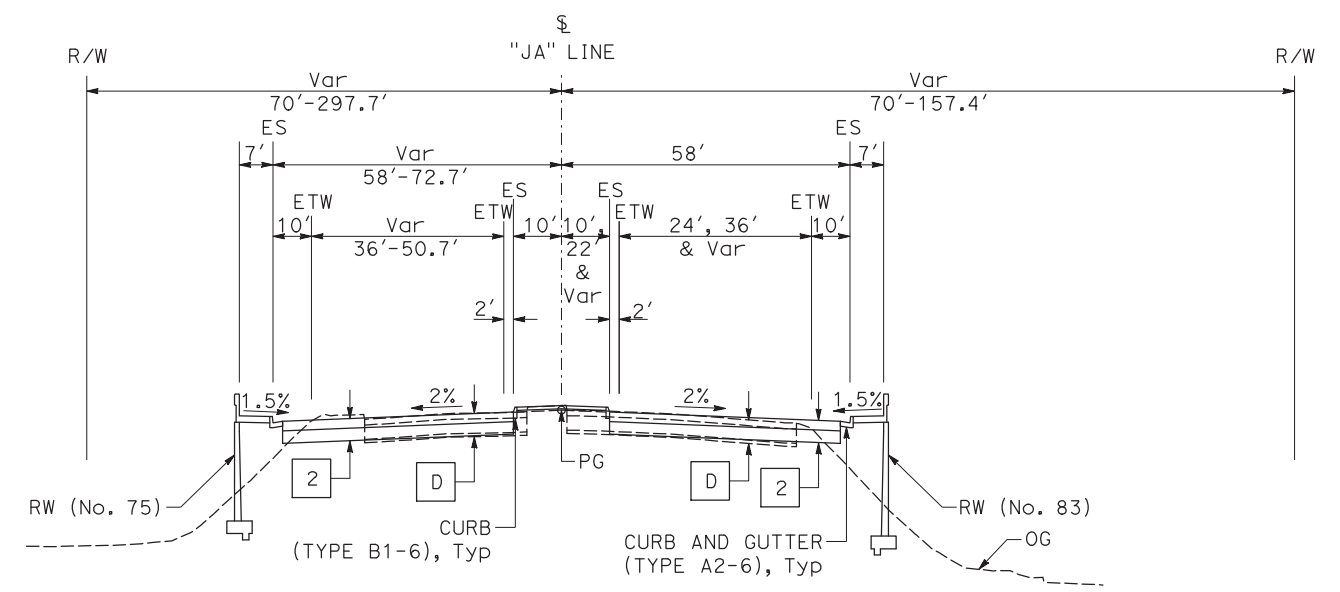
WHITWATER RIVER BRIDGE
Sta 35+43 TO Sta 40+95



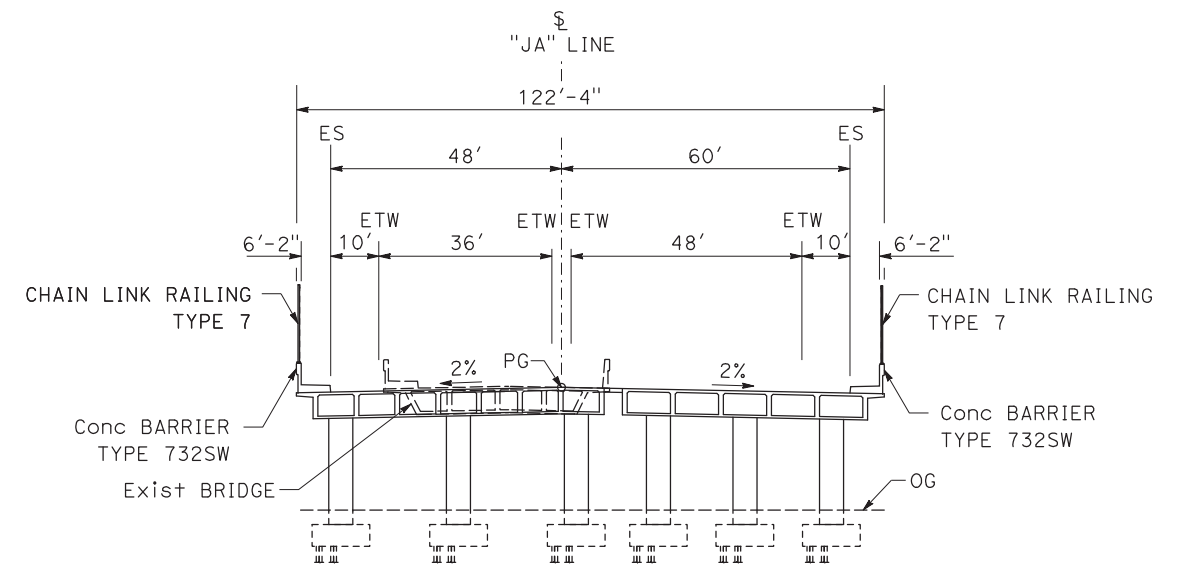
Sta 32+05 TO Sta 35+43



JACKSON St
Sta 28+00 TO Sta 35+43

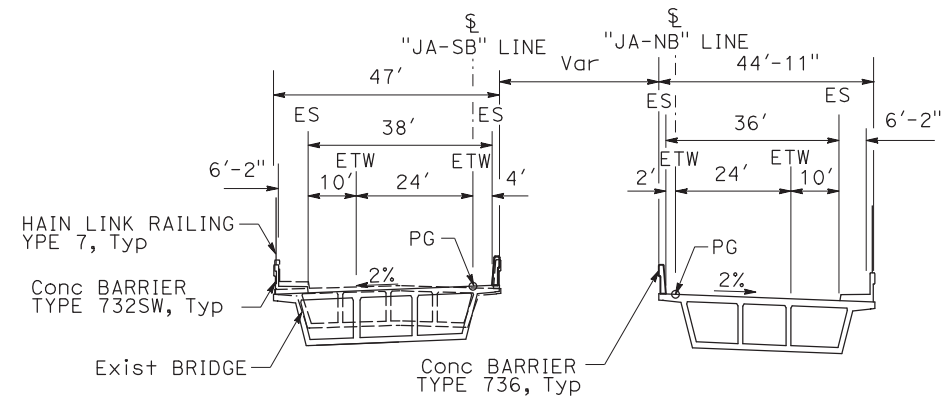


JACKSON St
Sta 48+89 TO Sta 52+79



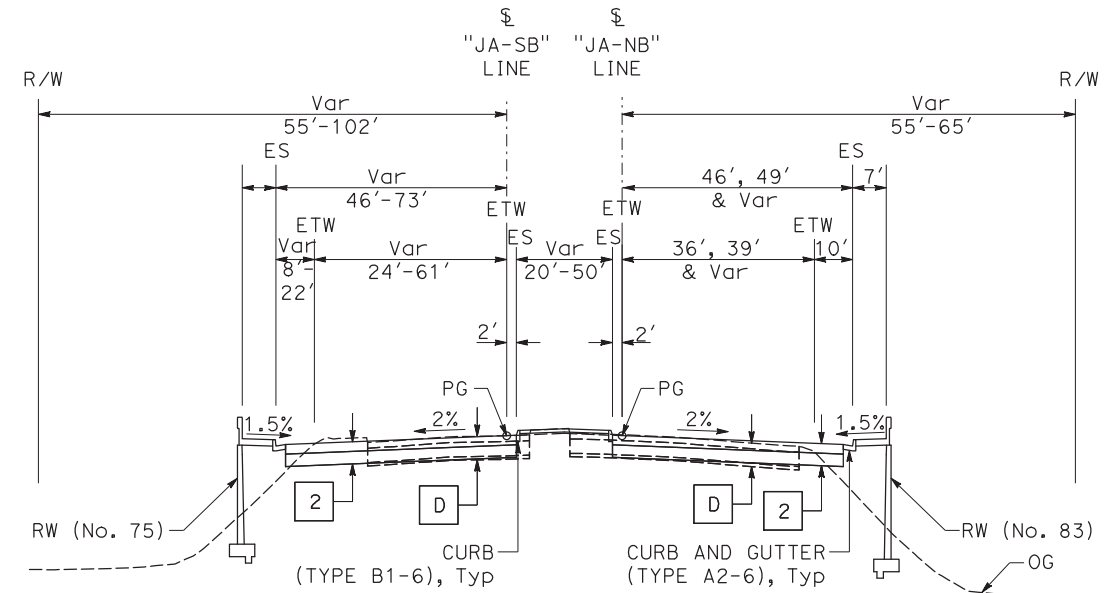
JACKSON St OC
Sta 43+64 TO Sta 46+28

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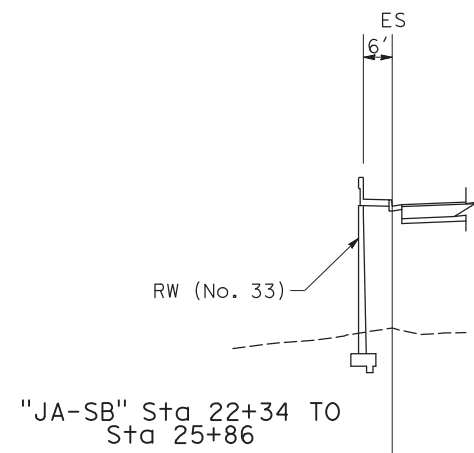
WHITWATER RIVER BRIDGE

"JA-SB" Sta 25+64 TO Sta 31+13

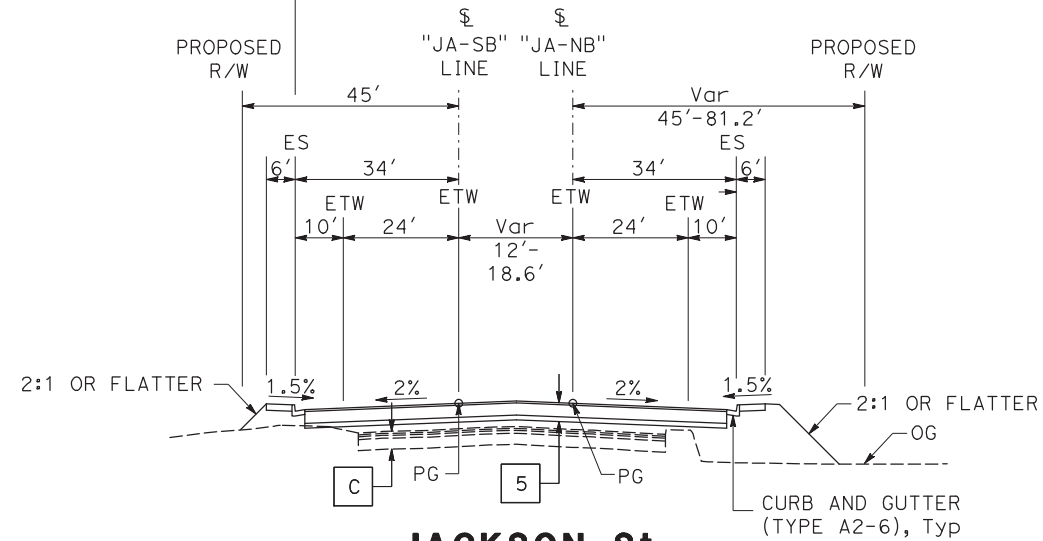


JACKSON St

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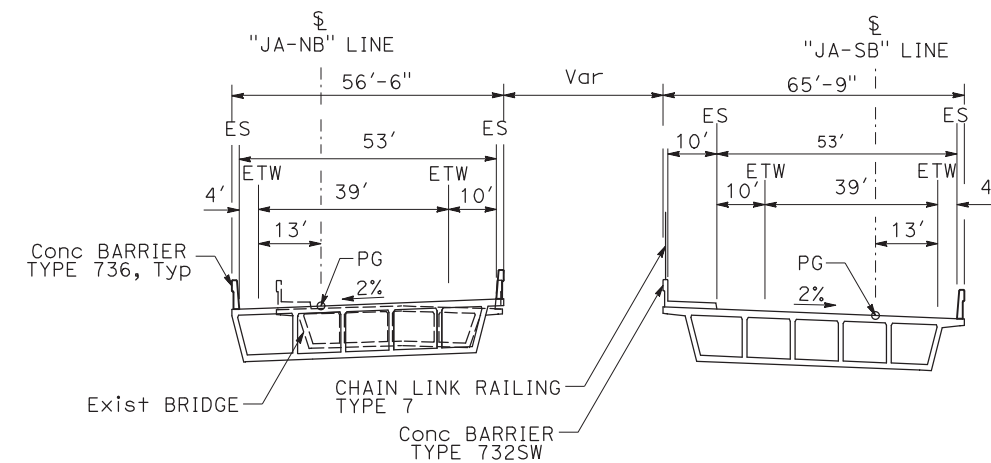


"JA-SB" Sta 22+34 TO Sta 25+86



JACKSON St

"JA-SB" Sta 18+77 TO Sta 25+64



JACKSON St OC

"JA-SB" Sta 33+68 TO Sta 36+30

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Table 1-2 Design Exceptions Unique to Build Alternative 2

Design Standard	Justification for Nonstandard Feature (Exception)
202.2(1) – Standard for Superelevation	To attain standard superelevation rate at the westbound off-ramp, the alignment would need to be revised with a larger curve and a superelevation rate of 2% (the length of the curve is too short to allow full development while keeping the ramp alignment within existing ROW) which could be achieved with a ramp alignment that intersects Jackson Street with a high skew of 60 degrees resulting in nonstandard angle of intersection.
302.2(3) – Shoulder Cross Slope	Nonstandard shoulder cross slope is proposed between reversing curves on the westbound off-ramp in order to improve drainage and avoid placement of drainage facilities along the proposed retaining wall along the right shoulder.
202.5(1) – Superelevation Transition	To provide standard superelevation transition a longer tangent between curves would be required to accommodate both transition and runoff at the westbound off-ramp. This change would shift alignment east into Indio Town Center resulting in new right-of-way acquisition including removal of 24-Hour Fitness, Taco Bell and KFC restaurants.
504.3(3) – Distance Between Ramp Intersection and Local Road Intersection	The proposed intersection spacing between the westbound ramps and Atlantic Avenue would be approximately 432 feet and does not meet the minimum required distance of 500 feet. The proposed Alternative 2 configuration results in nonstandard spacing due to the existing location of Atlantic Avenue in relation to the westbound ramp. Alternative 2 would propose a raised median to also restrict access to Atlantic Avenue.

1.5.3.3 Alternative 4 – Diverging Diamond Interchange

Under this build alternative, the existing I-10/Jackson Street interchange would be reconstructed to a diverging diamond interchange (DDI) configuration utilizing a twin-bridge layout spanning over the I-10 freeway and the Whitewater River. Two new parallel bridge structures over the Whitewater River and Jackson Street overcrossing would be constructed to accommodate two 12-foot-wide through lanes, 10-foot-wide shoulders and 6-foot-wide sidewalks along Jackson Street. The existing bridges along Jackson Street will be evaluated as to whether it could accommodate two travel lanes and may be reconstructed. The crossover intersections would gradually transition traffic from the right side of the road to the left side of the road while providing free right- and left-turn movements to the I-10 on-ramps before crossing over back to the right-side of the road for through traffic. The DDI configuration requires two cross-over intersections with two-phase traffic signal operation within the interchange; inbound and outbound freeway traffic would cross one intersection compared to two intersections for the compact diamond interchange configuration. In addition, Alternative 4 would include reconstruction and restriping of Jackson Street to transition the additional travel lanes to the existing lane configurations north and south of the interchange. The I-10 westbound and eastbound on-ramps would be widened to two lanes and transition to a single lane merging to the I-10 freeway. Interchange off-ramps would be widened, realigned and restriped to accommodate additional turn lanes to Jackson Street. Auxiliary lanes would be constructed at the I-10 WB and EB ramps to enhance merging and diverging traffic to I-10.

Table 1-3 describes the nonstandard design features that are unique to Build Alternative 4.

Table 1-3 Design Exception Unique to Build Alternative 4

Design Standard	Justification for Nonstandard Feature (Exception)
504.3(3) – Distance Between Ramp Intersection and Local Road Intersection	The proposed intersection spacing between the westbound ramps and Atlantic Avenue would be approximately 380 feet and does not meet the minimum required distance of 500 feet. The proposed Alternative 4 configuration results in nonstandard spacing due to the existing location of Atlantic Avenue in relation to the westbound ramp. Alternative 4 would propose a raised median to also restrict access to Atlantic Avenue.

Parcel and Right-of-Way Impacts

Both Build Alternatives would partially acquire 16 parcels, with Build Alternative 2 acquiring 1.69 acres and Alternative 4 acquiring 2.059 acres. Approximately 16.684 acres for Alternative 2 and 16.366 acres for Alternative 4 would be required for temporary construction easements (TCEs) during construction. Neither Alternatives 2 or 4 would require full acquisitions from any parcels. See Table 1-4 for potential right-of-way acquisitions and where TCEs will be required.

Table 1-4 Potential Right-of-Way Acquisition

APN Number	Address	Alternative 2 Partial or Full Take	Alternative 4 Partial or Full Take	Current Property Owner	Current Land Use
610-080-009	Indio, CA 92203	TCE 6.43 acres	TCE of 6.43 acres	CVCWD	Vacant Land; Whitewater River
610-080-042	Indio, CA 92203	Partial Acquisition of 0.05 acre	Partial Acquisition of 0.05 acre	Aljacks Retail Partners	Vacant Land
610-230-002	No Address Associated	Partial Acquisition of 0.014 acre	Partial Acquisition of 0.003 acre	City of Indio	Vacant Land
610-230-004	No Address Associated	Partial Acquisition of 0.20 acre	Partial Acquisition of 0.195 acre	City of Indio	School
692-050-018	42550 Jackson Street, #A, Indio, CA 92203-9792	Partial Acquisition of 0.076 acre	Partial Acquisition of 0.076 acre	McDonalds USA, James Femino	Commercial
692-050-019	42550 Jackson Street, #C, Indio, CA 92203-9793	Partial Acquisition of 0.194 acre	Partial Acquisition of 0.194 acre	Panda Express Inc., Mario Lam Sheung Woo	Commercial
692-050-020	Indio, CA 92203	Partial Acquisition of 0.008 acre	Partial Acquisition of 0.008 acre	Indio Towne Center, James A. Padova	Vacant Land
692-050-021	42750 Jackson Street, Indio, CA 92203-9798	Partial Acquisition of 0.102 acre	Partial Acquisition of 0.102 acre	Tanklage Family Partnership	Commercial
692-050-022	42750 Jackson Street, #B, Indio CA 92203-9796	Partial Acquisition of 0.076 acre	Partial Acquisition of 0.076 acre	Taco Bell Corporation, James Ronald Verneti	Commercial
692-050-024	42900 Jackson Street, Indio, CA 92203-9754	Partial Acquisition of 0.083 acre	Partial Acquisition of 0.083 acre	Indio Towne Center, James A. Padova	Commercial
692-050-027	42700 Jackson Street, Indio, CA 92203-9752	Partial Acquisition of 0.191 acre	Partial Acquisition of 0.191 acre	Indio Towne Center, James A. Padova	Commercial
692-060-001	43320 Jackson Street, Indio, CA 92201-2533	Partial Acquisition of 0.245 acre; TCE 0.413 acre	Partial Acquisition of 0.245 acre; TCE 0.413 acre	James W Clause & Alexa E Clause	Commercial
692-060-002	43400 Jackson Street, Indio, CA 92201-2534	Partial Acquisition of 0.086 acre; TCE 0.565 acre	Partial Acquisition of 0.086 acre; TCE 0.565 acre	James W Clause & Alexa E Clause	Vacant Land
692-060-004	Indio, CA 92203	Partial Acquisition of 0.294 acre; TCE 8.494 acres	Partial Acquisition of 0.68 acre; TCE 8.177 acres	CVCWD	Vacant Land; Whitewater River

APN Number	Address	Alternative 2 Partial or Full Take	Alternative 4 Partial or Full Take	Current Property Owner	Current Land Use
692-500-001	Indio, CA 92201	Partial Acquisition of 0.031 acre; TCE 0.393 acre	Partial Acquisition of 0.031 acre; TCE 0.393 acre	James W Clause & Alexa E Clause	Vacant Land
692-500-002	Indio, CA 92201	Partial Acquisition of 0.030 acre; TCE 0.351 acre	Partial Acquisition of 0.030 acre; TCE 0.351 acre	James W Clause & Alexa E Clause	Vacant Land
692-500-003	43486 Jackson Street, Indio, CA 92201-2534	Partial Acquisition of 0.009 acre; TCE 0.037 acre	Partial Acquisition of 0.009 acre; TCE 0.037 acre	Edwin J Neumeyer	Single Family Residence
Total Acquisitions	NA	1.69 acres	2.059 acres	N/A	N/A
Total TCEs	NA	16.684 aces	16.366 acres	N/A	N/A

Source: HNTB, *RealQuest Professional*, accessed April 10, 2019.

Right-of-Way Data

The right-of-way costs, including utility work are presented in Table 1-5. The Right-of-Way Data Sheet, which provides detailed information and right-of-way costs, was approved on September 16, 2019.

Table 1-5 Right-of-Way Cost

Preliminary Estimate	Build Alternative 2	Build Alternative 4
Right-of-Way Acquisitions	\$2,022,918	\$2,039,128
Utility Work	\$607,950	\$607,950
Total Right-of-Way & Utility	\$2,630,868	\$2,647,078

Project Features

This project contains a number of standardized project measures which are employed on most, if not all, Department projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2.

1.5.4 Transportation System Management and Transportation Demand Management Alternatives

Transportation System Management (TSM) strategies increase the efficiency of existing facilities; they are actions that increase the number of vehicle trips a facility can carry without increasing the number of through lanes. Examples of TSM strategies include ramp metering, auxiliary lanes, turning lanes, reversible lanes, and traffic signal coordination. TSM also encourages automobile, public and private transit, ridesharing programs, and bicycle and pedestrian improvements as elements of a unified urban transportation system. Modal alternatives integrate multiple forms of transportation modes, such as pedestrian, bicycle, automobile, rail, and mass transit.

Although TSM measures alone could not satisfy the purpose and need of the project, the following TSM measures have been incorporated into the Build Alternatives for this project:

- A 6-foot-wide sidewalk 4 that extends on both sides of Jackson Street for the limits of the project.
- Both Build Alternatives include construction of new access ramps to CV Link recreational facility.
- Alternatives 2 and 4 would also feature two-lane ramp meter entrances at I-10 WB and EB off-ramps.

1.5.5 Value Analysis

A Value Analysis (VA) study was conducted for this project June 4-7, 2018. The objectives of the VA study were to: (1) evaluate the three alternatives; (2) evaluate widening potential; and (3) identify alternative tie-in options to CV Link without disrupting adjacent properties. During the course of the VA study, a number of analytical tools and techniques were applied to develop a better understanding of the baseline concept. A major component of this analysis was Value Metrics which seeks to assess the elements of cost, performance, time, and risk as they relate to project value.

It was determined at the VA Study Implementation Meeting, conducted September 6, 2018, at Department District 8 offices, that the VA alternatives related to interchange configuration and the determination for full reconstruction versus widening/retrofit of either/both configuration will require further evaluation before an implementation disposition could be ascertained. However, contained within each of these VA alternatives is the recommendation to build the new bridges in two sections rather than three (building a new structure on the right side [section 1], then shifting traffic from the existing bridge to the right bridge to reconstruct or retrofit the existing bridge [section 2]). The VA team calculated a roughly \$1 million savings related to improved construction efficiencies. This aspect will be implemented in future designs as it reduces cost and construction impacts related to staging.

Several other VA alternatives identified by the VA team were accepted for implementation. One of the two VA alternatives related to adjusting the vertical curve on the south approach was accepted, depending upon whether full reconstruction or widening/retrofit is implemented. In addition, the J&L Landscape building may need to be relocated as construction will likely impact the property regardless of the staging approach selected.

1.5.6 Comparison of Alternatives

Build Alternatives 2 and 4 satisfy the project purpose and need. Design facilities would be fully accessible, as described in the Department's Design Information Bulletin 82-03 "Pedestrian Accessibility Guidelines for Highway Projects" and would allow Americans with Disabilities Act (ADA)-compatible crossings.

Table 1-6 provides a summary comparison between the two Build Alternatives and the No-Build Alternative, which have been studied in conjunction with development of the proposed new interchange project.

Table 1-6 I-10/Jackson Street Interchange – Comparison of Project Alternatives

	Build Alternative 2	Build Alternative 4	Alternative 1 (No-Build)
Environmental Impacts	Similar impacts related to air quality, biological resources, cultural resources, hazardous waste/materials, hydrology and floodplain, noise, paleontology, Section 4(f) resources, and visual/aesthetics.		None
	Regulated Waters of the U.S. and State <ul style="list-style-type: none"> 0.35 acres of permanent impacts and 0.99 acres of temporary impacts on USACE/RWQCB jurisdiction; and 0.78 acres of permanent impacts and 6.41 acres of temporary impact to CDFW jurisdiction. 	Regulated Waters of the U.S. and State: <ul style="list-style-type: none"> 0.43 acres of permanent impacts and 0.95 acres of temporary impacts on USACE/RWQCB jurisdiction; and 0.91 acres of permanent impacts and 6.32 acres of temporary impacts to CDFW jurisdiction. 	None
	Water Quality <ul style="list-style-type: none"> 7.88 acres of new impervious surface. 	Water Quality <ul style="list-style-type: none"> 7.88 acres of new impervious surface. 	None
Engineering	Similar impacts related to LSEV users, utilities, Transportation System Management strategies, pavement strategies, and drainage.		None
	Right-of-Way Acquisition <ul style="list-style-type: none"> 1.69 acres permanent acquisition 16.684 acres TCEs 	Right-of-Way Acquisition <ul style="list-style-type: none"> 2.059 acres permanent acquisition 16.366 acres TCEs 	None
	Structures <ul style="list-style-type: none"> One structure over I-10 approximately 264 feet by 122 feet; and One structure over the CVSC approximately 550 feet by 115 feet 	Structures <ul style="list-style-type: none"> Two structures over I-10 approximately 264 feet by 54 feet; and Two structures over the CVSC approximately 550 feet by 47 feet 	None
	Multi-Modal Users <ul style="list-style-type: none"> 4 pedestrian / bike / LSEV crossing points 	Multi-Modal Users <ul style="list-style-type: none"> 8 pedestrian / bike / LSEV crossing points Free-turn vehicle movements encourage higher speeds and increase the severity of conflicts with bike, LSEV, and pedestrian users 	N/A
Traffic Operations	Similar operational improvements related to peak hour level of service (LOS) for both the mainline and intersection analysis.		None
	Similar freeway operations for both alternatives. Compared to No-Build (Alternative 1): <ul style="list-style-type: none"> 1.85% improvement in AM average vehicle delay 9% improvement in PM average vehicle delay 	Compared to No-Build (Alternative 1): <ul style="list-style-type: none"> 3.7% improvement in AM average vehicle delay 8% improvement in PM average vehicle delay 	None
Project Cost	\$82,800,000	\$82,900,000	None

1.5.6.1 Cost Estimates

A breakdown of the current estimated costs are summarized in Table 1-7.

Table 1-7 Project Costs

	Build Alternative 2	Build Alternative 4
Construction Cost		
Roadway	\$31,255,200	\$34,093,100
Structures	\$29,121,851	\$26,334,743
Right-of-Way	\$2,630,868	\$2,647,078
Support Cost		
PA/ED	\$1,878,000	\$1,878,000
PS&E	\$9,060,000	\$9,060,000
Right-of-Way	\$371,250	\$371,250
Construction Management	\$8,450,000	\$8,480,000
Total Project Cost	\$82,800,000	\$82,900,000

1.5.7 Final Decision-Making Process

After the public circulation period, all comments received will be considered, and the Project PDT team will identify a preferred alternative and make the final determination of the project's effect on the environment. Under CEQA, if no unmitigable significant adverse impacts are identified, the Department will prepare a Negative Declaration (ND) or Mitigated ND. Similarly, if the Department determines the action does not significantly impact the environment, the Department, as assigned by the FHWA, will issue a Finding of No Significant Impact (FONSI) in accordance with NEPA.

In accordance with Senate Bill (SB) 743 CEQA regulatory changes, the Department is a part of the Project Development Team (PDT) determined a Vehicle Miles Traveled (VMT) based significance determination is not warranted for the project. Under the Department's "VMT CEQA Significance Determination for State Highway System Projects Implementation Timeline Memorandum", dated April 13, 2020, a VMT-based significance determination may be required for projects that initiated on or after December 28, 2018 and which have reached or will reach the Departments' Milestone 020 ("Begin Environmental") before September 15, 2020. The project initiated the environmental phase (Milestone 020) on March 18, 2018, which is outside and prior to the start of the VMT implementation timeline established under the above noted memorandum. Therefore, a VMT-based significance determination is not warranted for this project.

1.5.8 Locally Preferred Alternative

In July 2019, the Indio City council reviewed the benefits and impacts associated with each of the build alternatives under consideration and designated Alternative 2 as the Locally Preferred Alternative (LPA). The identification of the project's Preferred Alternative (PA) is planned to occur after the circulation of this IS/EA and the public hearing.

1.5.9 Alternatives Considered but Eliminated from Further Discussion

1.5.9.1 Alternative 3: Single Point Interchange (SPUI) (from PSR-PDS)

Alternative 3 proposes to reconstruct and widen the existing interchange to a Type L-13 SPUI configuration. The SPUI intersection type controls all at grade traffic movements through one signalized intersection. The existing Jackson Street overcrossing would be reconstructed to accommodate two through lanes and two left-turn pockets for each direction of travel. The existing Whitewater River Bridge would be reconstructed to accommodate two lanes of traffic in each direction. This alternative would provide the following benefits:

- Improved operational efficiency and safety
- Single traffic signal, ideal for balanced traffic volumes
- Wider turn radii eases movement for large vehicles

Alternative 3 is consistent with the requirements stated in the Traffic Operations Policy Directive (TOPD) 13-02: Intersection Control Evaluation (ICE).

On June 28, 2018, the PDT eliminated this alternative from further consideration. The decision resulted from City input, the Draft Preliminary VA Study Report, and an Alternative Screening Analysis. The Alternative Screening Analysis assessed the project alternatives on four qualitative and quantitative categories, which included Traffic Operations and Performance, Multi-Modal Safety, Corridor Impacts, and Community Expectations. The alternative ranked lowest in the screening analysis, which were documented in the June 2018 PDT meeting minutes.

Diamond Interchange with Roundabout Intersection Control

This alternative proposes to reconstruct and widen the existing interchange to a Type L-1 Diamond interchange configuration. Roundabouts are proposed to provide traffic right-of-way controls at the ramp intersections.

As part of the ICE process, this alternative was evaluated in the Traffic Operations Analysis Report. The analysis indicates that two-lane roundabouts would not provide sufficient capacity nor meet the purpose and need of the project, while three-lane roundabouts would have significant right-of-way impacts and costs associated with additional infrastructure and bridge/roadway widening.

Partial Cloverleaf Interchange and Roundabouts

Department District Traffic Operations Policy Directive 13-02: Intersection Control Evaluation (ICE) requires the consideration of various strategies, treatments, and configurations at state highway intersections to balance the needs of all modes and users with system performance goals and the highway facility context. To address the ICE requirements, the team assessed the viability of three other potential intersection configurations in addition to Alternatives 2 and 3; a partial cloverleaf (Parclo) and two types of roundabouts. Roundabouts were evaluated at the I-10 eastbound and westbound ramp intersections at Jackson Street. A memorandum has been drafted and appended to the Draft Project Report completed for this project (Caltrans 2020), with a recommendation that the Parclo and roundabouts alternatives should be removed from further consideration due to some or all of the following factors:

- Significant right-of-way acquisition
- ROW acquisition would potentially generate project controversy
- Negligible operational benefit
- Significant congestion through construction staging

- Deficient LOS (specific to roundabouts)
- City’s preference to defer additional alternatives based on initial screening
- Inconsistent with the project purpose and need

Reversible Lanes

Assembly Bill 2542 amended California Streets and Highways code to require, effective January 1, 2017, that the Department or a regional transportation planning agency demonstrate that reversible lanes were considered when submitting a capacity-increasing project or a major street or highway lane realignment project to the California Transportation Commission for approval (California Streets and Highways Code, Section 100.015). However, reversible lanes were not considered for the I-10/Jackson Street Interchange Improvement Project because it is 100 percent locally funded and was programmed prior to January 1, 2017.

1.6 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications (PLACs) listed in Table 1-8 would be required for project construction. The City of Indio will submit the permit applications and is the responsible permittee for compliance of the permit conditions.

Table 1-8 Required Permits, Reviews, and Approvals

Agency	Permit/Approval	Status
State Water Resources Control Board (SWRCB)	National Pollutant Discharge Elimination System (NPDES) Permit	NPDES General Construction Permit (2009-0009-DWQ) would be applied for 30 days prior to soil-disturbing activities.
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement	Application for permit will be submitted to CDFW after approval of the final Environmental Document. Permit will be acquired prior to completion of final design.
Colorado River Regional Water Quality Control Board (RWQCB)	Porter-Cologne Act and CWA Section 401 Water Quality Certification	Application for permit will be submitted to RWQCB after approval of the final Environmental Document. Permit will be acquired prior to completion of final design.
U.S. Army Corps of Engineers (USACE)	Clean Water Act (CWA) Section 404 Nationwide Permit	Application for permit will be submitted to USACE after approval of the final Environmental Document. An Approved Jurisdictional Determination will be included in the permit application. Permit will be acquired prior to completion of final design.
USACE	Section 408 Permit	Application for permit will be submitted to USACE after approval of the final Environmental Document. Permit will be acquired prior to completion of final design.
City of Indio, California Department of Transportation (Caltrans)	Freeway Agreement	Superseding Freeway Agreement will be prepared and executed after completion and approval of the final Environmental Document and Project Report.
Federal Highway Administration (FHWA)	Air Quality Conformity Determination	FHWA’s air quality conformity analysis determination letter will be obtained prior to approval of the final Environmental Document for the project.
Coachella Valley Water District (CVWD)	Encroachment Permit	Permit will be acquired prior to completion of final design.