Initial Study/Mitigated Negative Declaration

Crossover Pipeline Interstate 15 Bypass Project

JANUARY 2023

Prepared for:

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SDCWA Project No.	R0309	SDCWA Project Name	Crossover Pipeline Interstate 15 Bypass Project
SDCWA ENV No.	E2022-03	SDCWA Contract ID/Task No.	061904/21
Associated Permits	2810-2011-001-05; TE03216A-0		

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ANFO	ammonium nitrate/fuel oil
APN	Assessor's Parcel Number
BMP	best management practice
BSRA	biologically significant resource area
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
dBA	A-weighted decibel
DPM	diesel particulate matter
EO	Executive Order
ESA	Endangered Species Act
GHG	greenhouse gas
HMA	Habitat Management Area
I	Interstate
ips	inches per second
IS	Initial Study
L_{eq}	equivalent continuous sound level
L_{eq1hr}	equivalent continuous sound level average over a 1-hour period
L_{eq8hr}	equivalent continuous sound level average over an 8-hour period
L_{max}	maximum sound level during the measurement interval
LT	long-term (noise level measurement location)
MM	Mitigation Measure
MMA	Managed Mitigation Area
MND	Mitigated Negative Declaration
MSCP	Multiple Species Conservation Plan
MT	metric ton
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP Act	Natural Communities Conservation Planning Act
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NSR	noise-sensitive receptor
O_3	ozone

Acronym/Abbreviation	Definition
OPR	Governor's Office of Planning and Research
PM_{10}	coarse particulate matter
$PM_{2.5}$	fine particulate matter
PPV	peak particle velocity
RAQS	Regional Air Quality Strategy
ROW	right-of-way
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_x	sulfur oxides
SPL	sound pressure level
ST	short-term (noise level measurement location)
SWPPP	stormwater pollution prevention plan
TAC	toxic air contaminant
VMT	vehicle miles traveled
VOC	volatile organic compound
Water Authority	San Diego County Water Authority
WPCP	water pollution control plan

1 Introduction

1.1 Project Background and Overview

The San Diego County Water Authority (Water Authority) was established in 1944 as the wholesale water provider for western San Diego County and currently serves 24 member agencies that consist of six cities, 17 special districts, and Marine Corps Base Camp Pendleton. Between 70% and 75% of the total supply for the three million San Diego County (County) residents comes from imported water supplied by the Water Authority. The two main sources of this imported water come from the Sacramento/San Joaquin Rivers in the San Francisco Bay–Delta system to the north (State Water Project water) traveling south via the California Aqueduct, and from the Colorado River coming from the east via the Colorado River Aqueduct. Imported water is conveyed via the First San Diego Aqueduct (First Aqueduct) and Second San Diego Aqueduct (Second Aqueduct), each of which consists of a series of parallel pipelines that traverse the Water Authority's service area southward from its northern service area boundary near the San Diego County border with Riverside County. The First and Second San Diego Aqueducts and the Water Authority's service area are shown on Figure 1.

The existing Crossover Pipeline is a 66-inch pre-stressed concrete cylinder aqueduct pipe that was built in the 1960s to connect the First Aqueduct and Second Aqueduct. The Crossover Pipeline extends approximately 7.5 miles from the Second Aqueduct near the Twin Oaks Valley Water Treatment Plant in the west to the First Aqueduct south of Hubbard Hill in Escondido in the east and allows untreated water from the Second Aqueduct to be transferred to the First Aqueduct, which carries only treated water north of the rejection structure at Hubert Hill. The Crossover Pipeline crosses beneath Interstate 15 (I-15) north of the City of Escondido, near the unincorporated community of Jesmond Dene. The existing Crossover Pipeline alignment is shown on Figure 1.

The Water Authority identified the need for rehabilitation of the Crossover Pipeline because their acoustic fiber-optic monitoring system has detected wire breaks in a segment of the pipe west of I-15 and in the segment of the pipe that runs parallel to I-15, indicating structural concerns for the pipe. The Water Authority is planning to implement the Crossover Pipeline I-15 Bypass Project (proposed project), which would replace and realign an approximately 5,400-foot segment of the existing Crossover Pipeline that runs beneath and parallel to I-15 in unincorporated San Diego County north of the City of Escondido.

1.2 Purpose and Need

The Water Authority needs to repair or replace a segment of the existing Crossover Pipeline to allow continued functioning of its system to meet its member agency water deliveries and extend the service life of its facilities. The following outlines the Water Authority's purpose in implementing the proposed project to meet this need:

- Replace and prevent future deterioration of a segment of the Crossover Pipeline.
- Prevent possible future service disruption to the Crossover Pipeline.
- Reduce shutdown durations and improve maintenance access to the Crossover Pipeline.
- Extend the service life of the Crossover Pipeline.

1.3 California Environmental Quality Act Compliance

The Water Authority's Board of Directors will award a construction contract to build the proposed project, triggering environmental review requirements pursuant to the California Environmental Quality Act (CEQA), with the Water Authority serving as lead agency under CEQA. The Water Authority prepared a CEQA Initial Study (IS) to analyze and consider the environmental impacts of implementing the proposed project, which is presented herein. Based on the results of the IS, the Water Authority has made the determination that a Mitigated Negative Declaration (MND) is the appropriate environmental document for compliance with CEQA (as codified in California Public Resources Code Section 21000 et seq.). As stated in CEQA Section 15070, an MND may be prepared for a project subject to CEQA when an IS has identified no potentially significant effects on the environment when mitigation is identified that can reduce impacts to less-than-significant levels.

This IS/MND has been prepared by the Water Authority as lead agency and is in conformance with Section 15070(a) of the CEQA Guidelines (14 CCR 15000 et seq.). The purpose of the MND and the IS Checklist is to disclose to the public and project decision-makers any potentially significant impacts associated with the proposed project, and to identify mitigation measures that will be incorporated into the project design, as necessary, to reduce or eliminate potentially significant impacts of the proposed project. This IS/MND will be released for public review as described in Section 1.4.

1.4 Public Review Process

The Water Authority is making this IS/MND available for public review and comment pursuant to Section 15073 of the State CEQA Guidelines. A copy of the Draft IS/MND and related documents are available for review on the Water Authority's website (https://www.sdcwa.org/projects-programs/programs/environmental/). The Water Authority has identified a 30-day review and comment period for the draft IS/MND commencing January 12, 2023, and ending February 12, 2023. Comments on the IS/MND may be made in writing before the end of the public review period. In reviewing and commenting on the IS/MND, affected public agencies and interested members of the public should focus on the adequacy of the document in identifying and analyzing the proposed project's possible impacts on the environment. Following the close of the public comment period, the Water Authority will consider this IS/MND and comments thereto in determining whether to approve the proposed project.

Written comments on the IS/MND will be accepted in hard copy or email format, and should be received at the following street address or email address by 5:00 p.m., February 12, 2023:

San Diego County Water Authority
4677 Overland Avenue
San Diego, California 92123
Contact: Sean Paver
Email: spaver@sdcwa.org

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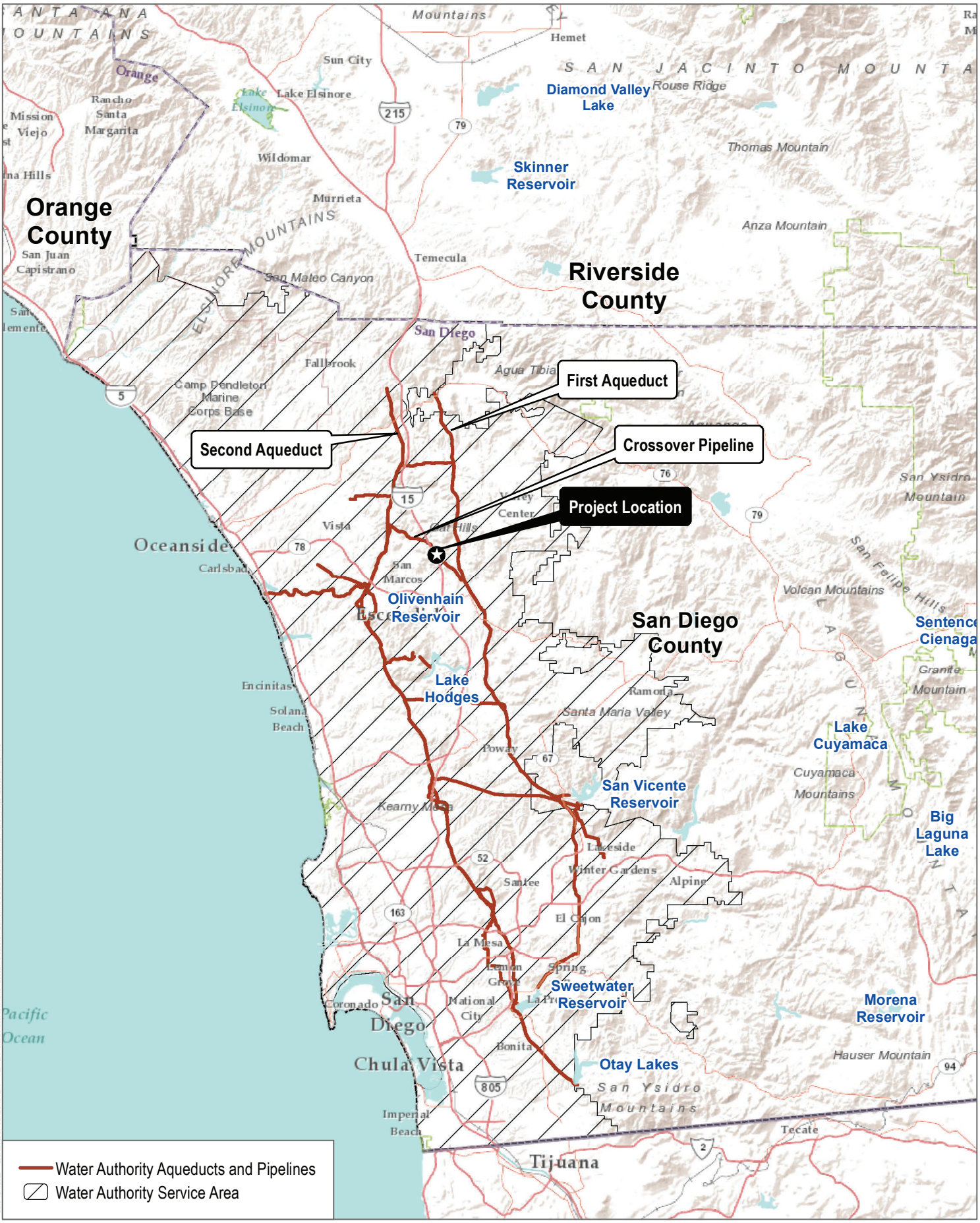

SOURCE: ESRI 2019; SDCWA 2011, 2021

DUDEK

0 5 10 Miles

FIGURE 1

Regional Location Map

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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2 Project Description

2.1 Project Location

The project work areas are primarily located in unincorporated areas of the County, just north the City of Escondido, as shown on Figure 2. Construction activities are anticipated to be located within a mixture of Water Authority right-of-way (ROW), County ROW, and private property; the entire tunneled portion of the proposed pipeline would be located within California Department of Transportation (Caltrans) ROW. One potential construction laydown area is located within the City of Escondido's municipal boundaries. The project alignment spans primarily developed/ disturbed land in a semi-rural area, crosses beneath I-15, and travels along N. Centre City Parkway. The project alignment is surrounded by semi-rural residential development, commercial uses (nurseries and a golf driving range), undeveloped land, and local roadways. Additional details regarding the environmental setting of each work area are discussed in Section 2.2.5, Project Construction Areas, Access, and Staging.

2.2 Project Characteristics

The proposed project would entail replacement and improvement of existing Crossover Pipeline infrastructure. This section describes the characteristics of project construction, proposed permanent and temporary features of the project, and work areas that would experience temporary and permanent impacts related to project implementation. These characteristics form the basis of analyzing the proposed project's potential environmental impacts pursuant to CEQA. Refer to Figure 3 for all project components discussed in this section.

2.2.1 Pipeline Realignment

The proposed realignment of a segment of the Crossover Pipeline is described below, from north to south, as shown on Figure 3. The realigned pipeline would be a 78-inch-diameter welded-steel pipe.

The proposed pipeline realignment would begin with an upstream connection to the existing Crossover Pipeline within the Moon Valley Nursery property (Assessor's Parcel Number [APN] 187-540-28-00) just west of Mesa Rock Road and the I-15 corridor. The proposed pipeline would then head east, traversing the Moon Valley Nursery property via open-cut trench for approximately 180 linear feet. From the east side the Moon Valley Nursery property, the proposed pipeline would cross below Mesa Rock Road, I-15, and N. Centre City Parkway via tunneling for approximately 500 linear feet, terminating within County ROW east of the I-15. The tunneled portion of the proposed pipeline would consist of 78-inch welded-steel pipe within a 90-inch welded-steel pipe casing. Descriptions of the jacking and receiving pit shafts are provided in Section 2.2.5 of this IS/MND.

From the tunneling pit east of I-15, the proposed pipeline would turn south via open-cut trench and run beneath N. Centre City Parkway for approximately 520 linear feet before reaching the existing Crossover Pipeline, an approximately 20-foot segment of which would be removed to allow installation of the replacement pipe. The proposed pipeline would continue to travel south via open-cut trench within N. Centre City Parkway for approximately 4,400 linear feet before turning east. Heading east, the proposed pipeline would continue via open-cut trench through open space within County ROW for approximately 130 linear feet before connecting to the existing Crossover Pipeline at an existing pipe joint. The proposed alignment would total approximately 5,860 linear feet of new pipeline (the new pipeline is longer than the existing 5,400 segment it is replacing).

The Water Authority is requesting new permanent easements along the realigned pipeline for future access and maintenance needs. These easements would be limited to private properties.

2.2.2 New Pipeline Structures

The project entails construction of new aqueduct structures and ancillary components to provide personnel and equipment access to the interior of the pipe and facilitate future maintenance of the pipeline. These structures and facilities include access structures, a pump well, an air vent, corrosion test stations, and fiber-optic pull boxes.

Access Structures and Air Vents

At six locations (shown on Figure 3), the proposed project would involve construction of new permanent pipeline access structures. These structures would provide access into the replacement pipeline for inspection and maintenance personnel and equipment.

The structure proposed near the bend in the pipe east of I-15 would include a pump well for clearing water from the pipe during internal maintenance. The structure would be approximately 18 feet wide by 10 feet long and 10 feet deep, with approximately 3 feet of the structure located aboveground and the majority belowground. Riprap would be installed around the aboveground portion for drainage purposes and to maintain the stormwater flows of the existing culvert on the southern boundary of the work area.

The structure proposed to the immediate southwest of Laydown Area A would be located between N. Centre City Parkway and the existing Water Authority ROW, within County ROW (Figure 3). As proposed, this structure would be situated along an existing slope, and construction would require grading of an approximately 0.2-acre area to establish a suitable maintenance pad around the structure, with excavation up to approximately 30 feet deep from the top of the existing slope. Once constructed, an approximately 4-foot-tall portion of the concrete access structure would be located aboveground, while the remaining approximately 25 feet of the structure would be located below finished grade. As design progresses, the location of this access structure may be moved closer to N. Centre City Parkway; however, the impact area will remain similar, though overall grading may be reduced. This structure would provide two air vents to the proposed pipeline: one air vent would be located at the proposed finished grade and one air release value would be located inside the bottom of the access structure.

All other access structures proposed along the new pipeline would include an air vent. These access structures would be approximately 10 feet wide by 8 feet long and 10 feet deep. Two new access structures (the northernmost one located within the Moon Valley property west of I-15 and the southernmost one located east of N. Centre City Parkway) would be partially above ground, similar to the two new structures described previously. The last two new access structures would be located beneath N. Centre City Parkway with an access hatch level with the finished paved surface. All access structures would include minor piping to a surface air release valve and vent. Where an access structure is located beneath the roadway, access would be constructed at grade and vents would be located outside the roadway.

Corrosion Test System

A corrosion test system would be installed along the proposed pipeline alignment during pipeline construction. The corrosion test system would consist of cathodic protection of the new pipeline and a series of 12 test stations along the proposed pipeline. Generally speaking, cathodic protection consists of the installation of metal rods called “anodes” in proximity to the metal pipeline. These anodes are more susceptible to potentially corrosive soils than

the metal of the pipe and thus protect the pipeline. Each test station would be housed in an aboveground structure. As design progresses, the Water Authority may determine that a water type corrosion test system may be used instead of a cathodic system; a water type corrosion test system would require appurtenances similar to those described for the cathodic protection system.

Fiber Optics

Conduit and pull boxes for future installation of a fiber-optic communication line would be installed during pipeline construction. The conduit (located below ground) and pull boxes (typically 1 to 3 feet wide and deep, located below ground with access at grade) would be located along the proposed pipeline alignment adjacent to N. Centre City Parkway.

2.2.3 Pipeline Connections and Pipeline Abandonment

At the north and south connection points between the existing pipeline and the realigned pipeline, the proposed project would entail excavating pits around the existing pipe to remove sections of pipe and allow construction of the new joints, which would be encased in concrete blocks. An approximately 80-foot-long segment of pipe would be removed within the Moon Valley Nursery property to allow for northern tie-in of new pipe; an approximately 20-foot-long segment of the existing Crossover Pipeline would be removed at the intersection of N. Centre City Parkway and Jesmond Dene Road to allow the realigned pipe's downstream connection to the existing pipeline; and an approximately 90-foot-long segment of pipe would be removed within the Water Authority ROW to allow for the southern tie-in of new pipe. The ends of the existing Crossover Pipeline that would be bypassed by the replacement alignment would be capped. Additionally, three existing, partially subgrade, structures would be removed from the existing pipeline, which would involve demolition of the aboveground portion to just below the existing grade and restoration of the disturbed area. The disturbed area would be limited to the existing Water Authority ROW. All remaining portions of the bypassed existing Crossover Pipeline (approximately 5,210 feet long) would be abandoned in place, which would entail filling the existing pipeline with sand or concrete. Although the existing pipeline would be abandoned and portions would be removed, the Water Authority would maintain its existing easements.

2.2.4 Pipeline Construction Methods

The proposed project's replacement pipeline construction would include one tunnel segment and trench-based installation of the remaining segments. These methods are described in the following subsections. The extents of the proposed tunneling and trenching segments are shown on Figure 3.

Tunneling Construction Methods

Approximately 500 feet of the proposed pipeline would be installed under Mesa Rock Road, I-15, and N. Centre City Parkway using pipe jacking and tunnel boring machines. The tunnel boring machine uses a cutting head that would begin at the jacking pit located in Work Area 1 and tunnel along the alignment to the receiving pit located in Work Area 2. A 90-inch steel casing pipe would be simultaneously jacked into the bore hole as the tunnel boring machine advances, which would provide structural support. Excavated material would be transported via conveyor belt within the tunnel to carts before being loaded into haul trucks for stockpiling and disposal at an appropriate facility. A second pass through the excavated tunnel would install the 78-inch welded-steel pipe within the larger casing pipe. Conduit for future fiber-optic communication line would also be installed in the casing. Following installation of the pipe and conduit the casing would be filled with concrete grout.

Trench Construction Methods

Approximately 5,360 feet of the proposed pipeline would be installed via open-trench construction. Open-trench construction would consist of saw-cutting pavement to prepare for pipe installation. The next sequence of activity would start with trenching and excavation, followed by pipe installation. Backfill would be deposited into the trench and compacted. This process would proceed along the entire length of the pipeline alignment, with excavation, pipe installation, and backfill progressing along the alignment, and would continue until the pipeline is completely installed. Typically, the construction contractor would install up to 40 linear feet of new pipeline in a single day. The road section where activity is occurring would be closed for the duration of the work. Initial paving of the disturbed roads would occur periodically, as needed.

Due to the underlying geology in the project area, construction would require blasting and the use of a rock crusher for materials processing. Blasting is anticipated to be required during pipeline installation along N. Centre City Parkway, as shown on Figures 4C–5E. "Rock blasting" is the controlled use of explosives to excavate, break down, or remove rock that cannot otherwise be conventionally excavated. The result of rock blasting is often known as a "rock cut." Rock cut would be conducted in a focused manner to ensure the integrity and safety of adjacent land uses and structures beyond the immediate work area. Blasting is overseen by a licensed blasting professional who will manage the storage and handling of all explosives work. During each blast, large mats are placed over the areas to control noise, vibration, and air emissions. Prior to the commencement of any blasting activity, the Water Authority will notify surrounding property owners.

After pipe installation is completed, a portion of the paved roads would require finish paving and striping. For areas of trenching outside paved areas (e.g., at the southern tie-in to the existing Crossover Pipeline), the disturbed portion would be returned to existing conditions, which would include seeding and restoration, as required by the Water Authority's Subregional Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP, Water Authority 2010a) (see Section 2.4, Post-Construction Habitat Restoration). The northern and southern tie-in would use similar construction methods to those described in this paragraph for trenching. A description of the northern and southern tie-in methods is provided in Section 2.2.3.

2.2.5 Project Construction Areas, Access, and Staging

An overview of the work areas assumed for project-related construction impacts in this IS/MND are shown on Figures 4A through 4G. These work areas and their respective boundaries were identified by Water Authority project engineers as likely sites needed to implement the proposed project, which include areas for excavation, trenching, staging, and storage. These areas are primarily limited to previously developed and disturbed land. Potential work and laydown areas have been labeled for convenient identification and description in this IS/MND; these numbers are not part of project design, and may be relabeled further along in the design process. Additionally, it is unlikely that all laydown areas described in this IS/MND would be used for construction, but several options under consideration have been identified. For purposes of conservative analysis, this IS/MND assumes that all laydown areas would be used. Table 2-1 includes a brief description of each of the proposed construction areas.

Work Area 1/Northern Tie-In

Work Area 1 is located within the private Moon Valley Nursery property and Water Authority ROW, west of I-15 and Mesa Rock Road (APN 187-540-28-00), as shown on Figure 4A. The active work and staging area would be approximately 1.1 acres and would be located entirely within the Moon Valley Nursery property. Work Area 1 would house an approximately 15-by-32-foot-wide by 15-foot-deep jacking pit for the tunneling portion of the proposed

pipeline alignment. Access to Work Area 1 would occur via Mesa Rock Road. Work Area 1 would be returned to existing conditions upon completion of construction.

Work Area 2

Work Area 2 is located within County ROW, east of I-15 and N. Centre City Parkway, as shown on Figure 4B. The active work area would be approximately 1 acre and would be located entirely within disturbed land. Work Area 2 would house an approximately 20-by-25-foot-wide by 20-foot-deep receiving pit for the tunneling portion of the proposed pipeline alignment. Access to Work Area 2 would occur via N. Centre City Parkway or Tierra Libertia Road. Work Area 2 would be returned to existing conditions upon completion of construction.

Table 2-1. Construction Area Location Summary

Construction Area	Location	Size	Anticipated Construction Activities
Work Area 1/ Northern Tie-In	Moon Valley Nursery, west of I-15 and Mesa Rock Road (APN 187-540-28-00); unincorporated County of San Diego	1.2 acres	Open-cut trenching; Tunneling pit (jacking shaft); Installation of other pipeline access structures; Staging and storage of construction equipment and materials
Work Area 2	County of San Diego right-of-way, east of I-15 and N. Centre City Parkway; unincorporated County of San Diego	1 acre	Tunneling pit (receiving shaft); Open-cut trenching; Installation of other pipeline access structures; Staging and storage of construction equipment and materials
Work Area 3/ Southern Tie-In	County of San Diego right-of-way and Water Authority easement approximately 2,200 feet north of Mesa Rock Road, east of I-15 and N. Centre City Parkway; unincorporated County of San Diego	0.4 acres	Open-cut trenching; Installation of other pipeline access structures;
Work Area 4/Air Valve Vault	County of San Diego right-of-way and Water Authority easement, immediately southwest of Laydown Area A; unincorporated County of San Diego	0.5 acres	Excavation and grading; Installation of subgrade access structure
N. Centre City Parkway Trenching	County of San Diego right-of-way along N. Centre City Parkway from Tierra Libertia Road to approximately 2,200 feet north of Mesa Rock Road, east of I-15; unincorporated County of San Diego	3.8 acres	Open-cut trenching; Installation of other pipeline access structures; Temporary road closure
Laydown Area A	Private property south of Jesmond Dene Road and east of N. Centre City Parkway (APN 187-321-01-00); unincorporated County of San Diego	0.7 acres	Staging and storage of construction equipment and materials

Table 2-1. Construction Area Location Summary

Construction Area	Location	Size	Anticipated Construction Activities
Laydown Area B	Private property southeast of the intersection of Mesa Rock Road/N. Centre City Parkway (APNs 187-170-58-00, 187-170-59-00, and 187-170-60-00); unincorporated County of San Diego	4.4 acres	Staging and storage of construction equipment and materials
Laydown Area C	Private property north of the intersection of N. Centre City Parkway/Ivy Dell Lane (APN 187-170-57-00); unincorporated County of San Diego	6.1 acres	Staging and storage of construction equipment and materials
Laydown Area D	Private property southwest of the intersection of Woodland Heights Glen/Mesa Rock Road (APN 187-091-21-00); City of Escondido	0.7 acres	Staging and storage of construction equipment and materials
Laydown Area E	Thunderbird Driving Range, northeast of the intersection of N. Centre City Parkway/ Jesmond Dene Road (APN 187-630-12-00); unincorporated County of San Diego	0.2 acres	Staging and storage of construction equipment and materials

Work Area 3/Southern Tie-In

Approximately 2,000 feet north of the intersection of N. Centre City Parkway/Mesa Rock Road, the proposed pipeline would turn east through County ROW via 8-foot-wide open-cut trench before connected to the existing Crossover Pipeline within the Water Authority's existing easement, as shown on Figure 4E. Construction of this segment would require vegetation clearing of an approximately 0.4-acre area. Post-construction restoration would occur as required by the Water Authority's NCCP/HCP (see Section 2.4).

Work Area 4/Air Valve Vault

As described in Section 2.2.2, the air valve vault structure proposed to the immediate southwest of Laydown Area A would be located between N. Centre City Parkway and the existing Water Authority ROW, within County ROW (Figure 4C). Construction of this access structure would require grading of an approximately 0.2-acre area and excavation up to approximately 30 feet deep from the top of the existing slope. As noted previously, the final location of this new access structure may shift closer to N. Centre City Parkway, which would involve less grading overall.

N. Centre City Parkway Trenching

The entire proposed pipeline alignment from the eastern tunnel pit to the southern tie-in with the existing Crossover Pipeline would be constructed using an approximately 8-foot-wide open-cut trench within the southbound lane of N. Centre City Parkway within County ROW (Figures 4C–4E). The northbound lane and shoulder of N. Centre City Parkway would remain unchanged and used for construction vehicle access. Figures 4C–4E show the proposed trenching alignment; the entire area, including both lanes of the roadway, to be affected by construction is approximately 3.8 acres, all of which would be within the developed County ROW. During active construction, the affected segment of N. Centre City Parkway would be fully closed and all traffic would be detoured along Mesa Rock Road and Deer Springs Road. The intent of the construction sequence is to construct the proposed pipeline in segments between the local access roads to allow diversion of traffic to the north or south, outside the active work

area. The section of N. Centre City Parkway where work is occurring would remain closed for the duration of work but would allow local traffic to access surrounding private properties. All areas disturbed by construction would be returned to existing conditions.

Laydown Areas A through E

Five laydown areas have been identified for construction of the proposed project and are briefly described in Table 2-1. Project design has not identified definitive laydown areas for the proposed project, but these potential areas have been identified for purposes of environmental impact review. It is unlikely the project would use all five laydown areas discussed in this IS/MND. All laydown areas would be used for the same general purpose of storing equipment and materials for the duration of construction; they may also be used for temporary construction offices. Access to the laydown areas would occur via Mesa Rock Road, N. Centre City Parkway, Jesmond Dene Drive, and Woodland Heights Glen. Laydown Areas B, C, and D would require vegetation clearing and laying of gravel to create a flat and stable surface. Laydown Areas A and E are developed or sufficiently maintained that no vegetation clearing is anticipated to be necessary. All laydown areas would be surrounded by a chain-link fence for security purposes. Specific to Laydown Area C, all work, including staging, storage, stockpiling, and ingress/egress would be limited to the open disturbed areas. Existing structures, foundations, and landscaping would be fenced off and avoided during all phases of construction.

2.3 Project Construction Phasing

The impact analysis presented in this IS/MND assumes the proposed project would be implemented in sequential phases. For the purposes of analysis, Table 2-2 presents the construction phasing and anticipated equipment assumed for project construction. The duration is approximate and may vary due to differing site conditions and/or contractor scheduling. Typical construction work hours would be Monday through Friday, 7:00 a.m. to 7:00 p.m. The proposed project would also require work during 24-hour work periods over 10-to-15-day spans referred to as “shutdowns,” when water is cleared from the pipes to safely allow access and construction activities. These shutdowns are limited in duration to prevent extended water service interruptions for Water Authority member agencies. Nighttime construction work would be limited to Work Area 1/Northern Tie-In and Work Area 3/Southern Tie-In, where crews would connect the new pipe to the existing Crossover Pipeline.

Table 2-2. Anticipated Construction Phasing and Equipment

Phase	Anticipated Equipment	Duration
Pipeline Installation (total for tunneling and trenching)	Excavator Tractors/loaders/backhoes Bore/drill rig Concrete saw Forklift Crane Grout plant Air compressor Welder Generator Pump Blasting equipment Crusher	18 months

Table 2-2. Anticipated Construction Phasing and Equipment

Phase	Anticipated Equipment	Duration
Paving (continual during pipeline installation)	Concrete saw Grader Paver Plate compactor Roller Air compressor	2 months (total for the duration of pipeline installation)
Final Paving	Grader Paver Roller	1 month
Restriping	Air compressor	1 month (concurrent with Final Paving)

2.4 Post-Construction Habitat Restoration

All temporary work areas used for project construction would be restored to pre-project conditions once activity is complete, as required by the Water Authority's NCCP/HCP. Section 6.5.1.4.2 of the NCCP/HCP requires mitigation for all one-time temporary impacts to sensitive vegetation communities by revegetation of the temporary impact area. Section 6.6.1 of the NCCP/HCP states that, under Water Authority supervision, a qualified restoration specialist would prepare and submit to the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) (collectively, the Wildlife Agencies) for their review and concurrence a restoration plan for each restoration site exceeding 0.25 acres. Restoration measures would be developed to restore a site's previous biological resources and minimize establishment of invasive non-native plant species. Habitat restoration activities would occur under the supervision and direction of an environmental surveyor who has experience developing and implementing native restoration plans in Southern California. No off-site mitigation would be required for one-time temporary impacts unless the restoration is deemed unsuccessful. The Water Authority must receive concurrence from the Wildlife Agencies that each restoration effort is successful, as discussed in Section 6.6 of the NCCP/HCP.

For portions of temporary impact areas that are devoid of native habitat, restoration would entail revegetation with an erosion-control seed mix to stabilize the site after construction. Access roads and paved areas would be restored to their pre-project condition.

2.5 Project Operation

The proposed project would not entail changes in routine pipeline operation and would not alter the current or planned quantities of the Water Authority's water deliveries to its member agencies. However, this IS/MND assumes the project would construct new access structure, allowing additional maintenance access to the Crossover Pipeline. The addition of these new access points would lead to a slight change in routine Water Authority patrol for inspection/maintenance but would not add personnel trips on a permanent basis. No additional staff is anticipated to be required for continued operation of the proposed project.

2.6 Permits and Approvals

The Water Authority is lead agency pursuant to CEQA, and issuance of a construction contract by the Water Authority's Board of Directors is the discretionary action that triggers the need for CEQA compliance. Table 2-3 lists permits and approvals by other agencies aside from the Water Authority that would be required to implement the proposed project. The agencies issuing these approvals would be CEQA responsible agencies, relying on this IS/MND to verify that appropriate environmental impact review was performed pursuant to CEQA prior to issuing a decision. The proposed project would entail construction that would encroach into both Caltrans and County ROW; therefore, the Water Authority would be required to obtain an encroachment permit from Caltrans and approval of the traffic control plans from the County. For stormwater pollution protection, the project would be subject to compliance with the State Water Resources Control Board Construction General Permit (2009-0009-DWQ, amended by 2010-0014-DWQ and 2012-0006-DWQ).

Table 2-3. Anticipated Permits and Approvals

Agency/Organization	Permit/Approval
County of San Diego	▪ Traffic Control Permit
California Department of Transportation (Caltrans)	▪ Temporary Construction Encroachment Permit
State Water Resources Control Board	▪ National Pollutant Discharge Elimination System Construction General Permit

2.7 NCCP/HCP Compliance

The Water Authority conducts operations and maintenance work and implements capital improvement program projects pursuant to its NCCP/HCP, which was prepared pursuant to Section 2800 et seq. of the California Fish and Game Code (Natural Communities Conservation Planning Act of 1991 [NCCP Act]) and Section 10(a) of the federal Endangered Species Act (ESA) of 1973, as amended. Adopted by the Water Authority in December 2010, the NCCP/HCP is a comprehensive program designed in conjunction with the Wildlife Agencies to (1) facilitate conservation and management of Covered Species and habitats associated with Water Authority activities and (2) contribute to ongoing regional conservation efforts. A total of 63 Covered Species are listed in the NCCP/HCP, consisting of 26 plant species and 37 wildlife species. The Water Authority's Covered Activities addressed in the NCCP/HCP include the ongoing installation, use, maintenance, and modification of its aqueduct system and associated water treatment, conveyance, and storage systems.

The "Plan Area" addressed in the NCCP/HCP covers 992,000 acres where the Water Authority Covered Activities, including the maintenance and relining of pipelines (NCCP/HCP Section 5.1.13) and replacement/repair of pipeline structures (NCCP/HCP Section 5.2.2.1) described herein, would take place. Approximately 373 acres of Covered Species habitat is expected to be permanently impacted by the Covered Activities identified in the NCCP/HCP over a 55-year period. Adoption of the Water Authority's NCCP/HCP resulted in issuance of an incidental take permit under Section 10 of the federal ESA and incidental take authorization under Section 2835 of the California Fish and Game Code (i.e., the NCCP Act).

As directed in the NCCP/HCP, a verification process ensuring the project's conformance with the NCCP/HCP commitments was completed as a part of the biological resources impact analysis in this document. Temporary and permanent impacts on habitat would be mitigated in accordance with the NCCP/HCP, including on-site restoration

of temporary impact areas (see Section 2.4) and debit of mitigation acreage from one of the Water Authority's Habitat Management Areas (HMAs) or other Wildlife Agency-approved areas for permanent impacts, at ratios stated in the NCCP/HCP. The NCCP/HCP also requires implementation of General Conditions for Coverage (for Covered Species), which are listed in Section 2.1 of Appendix B of the NCCP/HCP, and applicable minimization measures listed in Section 6.4 of the NCCP/HCP. The applicable measures from the NCCP/HCP that will be incorporated into this project as design features are listed in Appendix A of this IS/MND. The Water Authority prepared an Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the NCCP/HCP and certified the document in compliance with CEQA in December 2010. The EIR/EIS concludes that implementation of the avoidance, mitigation, and minimization measures specified in the plan would effectively reduce the biological resources impacts of individual Water Authority Covered Activities and the Water Authority's contributions to regional, cumulative impacts to less-than-significant levels (Water Authority 2010b).

2.8 Water Authority General Conditions/ Project Design Features

The Water Authority requires contractors to follow several standard conditions contained in the construction project specifications that avoid or minimize significant environmental impacts. In addition, design features specific to the proposed project that could minimize or avoid environmental effects would be incorporated into the project, as appropriate. Applicable design features for this action are listed below by issue area. The design features presented herein are not exhaustive, and other specification requirements or design features may be developed during the proposed project that are as effective as those listed.

Aesthetics

1. All areas cleared of vegetation for construction and staging will be revegetated at the completion of the project.
2. Any lighting used during project construction will be of the lowest illumination necessary to ensure safety of all construction personnel and security of the site, and will be shielded and directed away from adjacent habitat areas.

Air Quality

1. All clearing and grading will be carried out with dust control measures adequate to prevent creation of a nuisance to persons or property.
2. Points of public street access to construction work areas will be regularly cleared of dirt or rock material tracked out of the site by construction vehicles.
3. All unpaved access roads, parking areas, and staging areas at construction sites will be watered three times daily or treated with non-toxic soil stabilizers.
4. Dirt stockpiles will be stabilized by soil binders, tarps, fencing, or other erosion-control measures.
5. Soil stabilizers will be applied to inactive construction areas (disturbed areas inactive for 14 days or more).
6. Traffic speeds on unpaved roads will be limited to 20 mph.
7. All trucks hauling soil, sand, and other loose materials will be covered or required to maintain at least 2 feet of freeboard.
8. Blasting activities will be limited to a maximum of 6 tons of explosives used in a single day.

Biological Resources

See Appendix A for a listing of avoidance and minimization measures required by the NCCP/HCP and applicable to this project.

Cultural Resources

1. The Water Authority will develop and implement a cultural resources monitoring plan for project-related ground-disturbing activities associated with surface clearing, trenching, and excavation of tunneling pits and new access structures. The cultural resources monitoring plan will specify the roles of Native American monitors and qualified archaeological monitors and identifies procedures for addressing the potential discovery of artifacts and other tribal cultural resources.
2. In the event of an unexpected discovery of human remains during any phase of construction, project activities in the vicinity of the discovery will be temporarily halted and the San Diego County Coroner contacted, in accordance with Section 7050.5 of the California Health and Safety Code. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, will be contacted to determine proper treatment and disposition of the remains.

Geology and Soils

1. Project construction activities will comply with existing regulatory requirements related to geology and soils, including applicable National Pollutant Discharge Elimination System (NPDES) requirements. The Water Authority will implement a stormwater pollution prevention plan (SWPPP) (including associated sedimentation best management practices [BMPs]) for the construction activities that are specific for project type, location, and characteristics. Typical control measures that may be implemented as part of the project SWPPP include:
    a. Preparation and implementation of a "weather triggered" action plan during the rainy season to provide enhanced erosion or sediment control measures prior to predicted storm events (i.e., 40% or greater chance of rain).
    b. Use of erosion control/stabilizing measures in appropriate areas (including disturbed areas and graded slopes with grades of 3:1 [horizontal to vertical] or steeper), such as geotextiles, mats, fiber rolls, soil binders, or temporary hydroseeding established prior to October 1.
    c. Use of sediment controls to protect the site perimeter and prevent off-site sediment transport, including measures such as filtration devices (e.g., temporary inlet filters), silt fences, fiber rolls, gravel bags, temporary sediment basins, check dams, street sweeping, energy dissipaters, stabilizing construction access points (e.g., with temporary gravel or pavement) and sediment stockpiles (e.g., with silt fences and tarps), and use of properly fitted covers for sediment transport vehicles.
    d. Storage of BMP materials in applicable on-site areas to provide "standby" capacity adequate to provide complete protection of exposed areas and prevent off-site sediment transport.
    e. Provision of training by certified personnel (i.e., either a Qualified SWPPP Developer [QSD] or Qualified SWPPP Practitioner [QSP]) for the personnel responsible for BMP installation and maintenance.
    f. Installation of permanent native vegetation as soon as feasible after grading or construction.
    g. Implementation of appropriate monitoring and maintenance efforts (e.g., prior to and after storm events) to ensure proper BMP function and efficiency.

h. Implementation of sampling/analysis, monitoring/reporting, and post-construction management programs per NPDES requirements.

i. Implementation of additional BMPs as necessary (and required by appropriate regulatory agencies) to ensure adequate erosion and sediment control.

2. Actual BMPs for the proposed project will be determined during the SWPPP development process, with such measures taking priority over the typical industry standard measures listed above.

Hazards and Hazardous Materials/Wildfire

1. Standard BMPs will be implemented to prevent impacts to the public through the transport, use, or disposal of any hazardous materials. Standard industry measures include, but are not limited to:
   a. Hazardous materials used or stored on site will be restricted to areas at least 50 feet from storm drains and water courses.
   b. All hazardous materials will be covered or kept in enclosed facilities.
   c. A written inventory will be kept of all hazardous materials used or stored on site.
   d. To prevent discharge in the event of a spill, berms, ditches, and/or impervious liners (or other applicable methods) will be provided in material storage and vehicle/equipment storage areas to provide a containment volume of 1.5 times the volume of the stored/used materials.
   e. Agency telephone numbers and a summary guide of cleanup procedures will be posted in a conspicuous location at or near the job site trailer.
2. The Water Authority will require their construction contractor to prepare a fire prevention and response plan. All construction crewmembers will be trained in the requirements of the plan. Fire safety information will be disseminated to construction crews during regular project safety meetings. Fire management techniques will be applied during project construction as deemed necessary and depending on the on-site vegetation and the vegetation of surrounding areas.

Hydrology and Water Quality

1. A SWPPP will be implemented to reduce or eliminate pollutants during construction of the proposed project. The SWPPP will identify all pollutant sources, including sources of sediment, that may affect the quality of stormwater discharges associated with construction activity (stormwater discharges from the construction site); identify non-stormwater discharges; identify structural and/or treatment control BMPs that are to be implemented in accordance with a time schedule to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction; and develop a maintenance schedule for permanent or post-construction BMPs that will “to the maximum extent possible” reduce or eliminate pollutants after construction is completed. Detailed BMPs to prevent impacts to water quality will be included in the SWPPP.

Noise and Vibration

1. The Contractor will comply with the noise thresholds the Water Authority has established for this project. Noise levels associated with construction activities are not to exceed an average sound level of 75 A-weighted decibels (dBA) over an 8-hour period, between 7:00 a.m. and 7:00 p.m., and 66 dBA over a 1-hour period between 7:00 p.m. to 7:00 a.m. at or beyond the property lines on any occupied property where the noise is being received.

2. All noise-producing project equipment and vehicles using internal combustion engines will be equipped with mufflers; air-inlet silencers, where appropriate; and any other shrouds, shields, or noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed package equipment (e.g., arc-welders, air compressors) will be equipped with shrouds and noise control features that are readily available for that type of equipment.
3. All mobile or fixed noise-producing equipment used on the project that is regulated for noise output by a federal, state, or local agency will comply with such regulation while in the course of project activity.
4. Electrically powered equipment will be used instead of pneumatic or internal combustion-powered equipment, where feasible.
5. Construction site and access road speed limits will be established and enforced during the construction period; speeds on unpaved roads will not exceed 20 mph.
6. The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only.
7. No project-related public address or music system will be audible at any adjacent noise-sensitive receptor.

Transportation

1. To minimize disruption to communities from construction traffic, the Water Authority will prepare and implement a traffic control plan. The plan will be prepared in accordance with the latest edition of the Federal Highway Administration Manual of Uniform Traffic Control Devices (FHWA 2009), as modified by the most recent California Supplement (Caltrans 2021).
2. The project will not unreasonably restrict access to any private property.

Utilities and Service Systems

1. The Water Authority will notify and coordinate with all other utility providers that own easements, rights-of-way, or facilities within or adjacent to the area affected by the proposed project. Any need to connect with or relocate utilities will be presented to the appropriate utility provider prior to commencement of construction.

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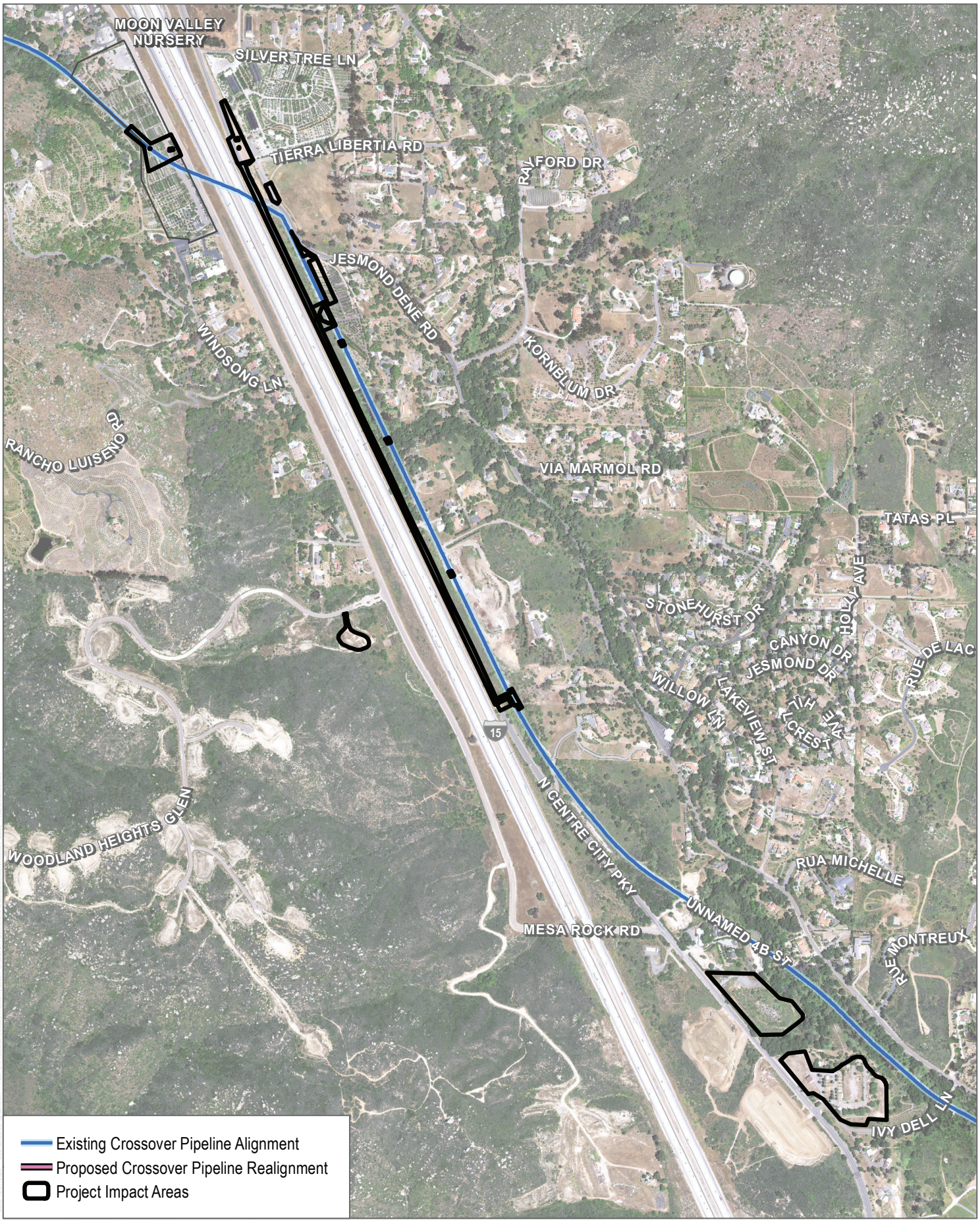

SOURCE: NAIP 2022; SDCWA 2011, 2022

DUDEK

0 250 500 Feet

FIGURE 2

Project Vicinity

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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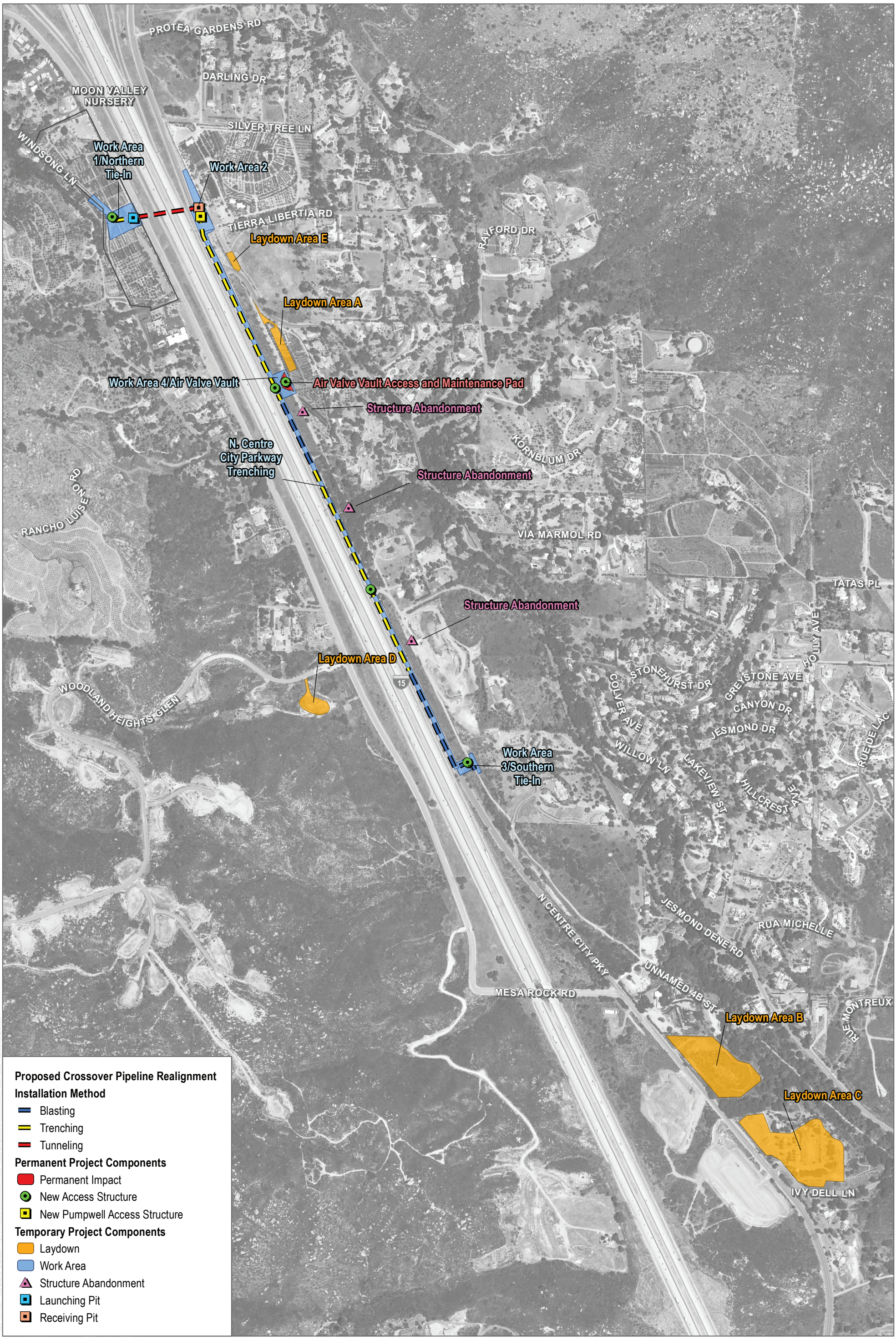

SOURCE: NAIP 2022; SDCWA 2022

DUDEK

0 500 1,000 Feet

FIGURE 3

Project Components

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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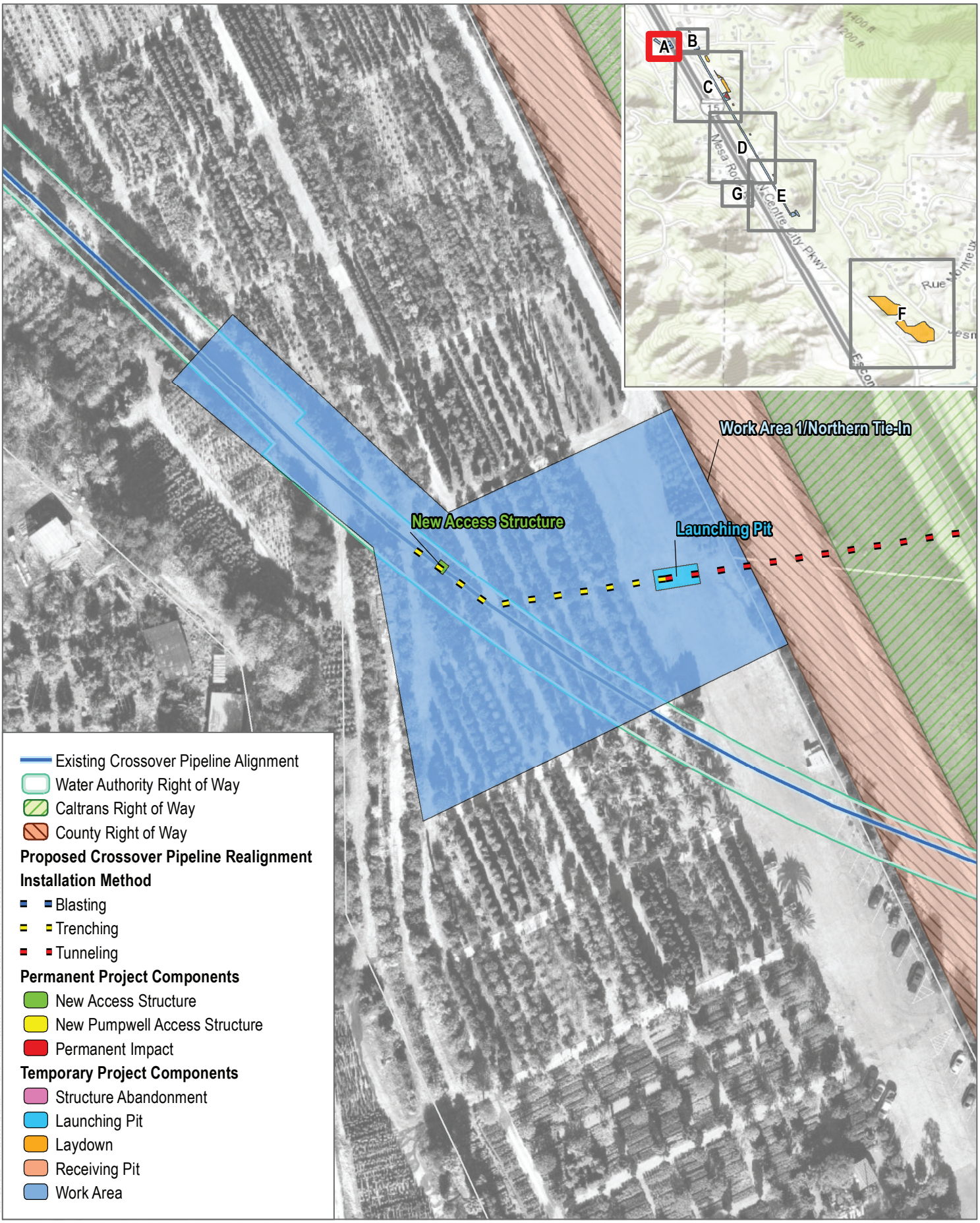

SOURCE: NAIP 2022; SanGIS 2022; SDCWA 2011, 2022

DUDEK

0 80 160 Feet

FIGURE 4A

Work Area Details

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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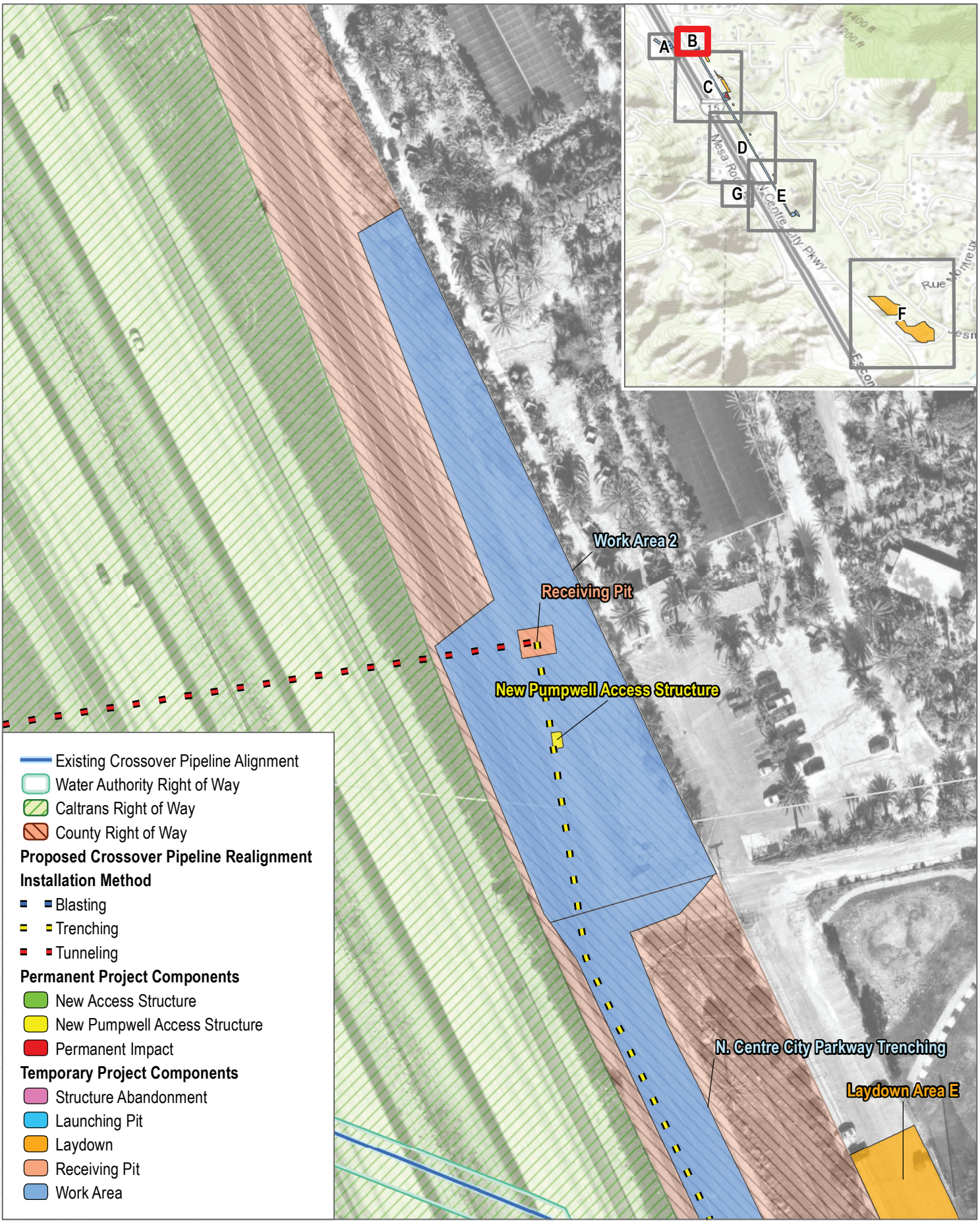

SOURCE: NAIP 2022; SanGIS 2022; SDCWA 2011, 2022

DUDEK

0 80 160 Feet

FIGURE 4B

Work Area Details

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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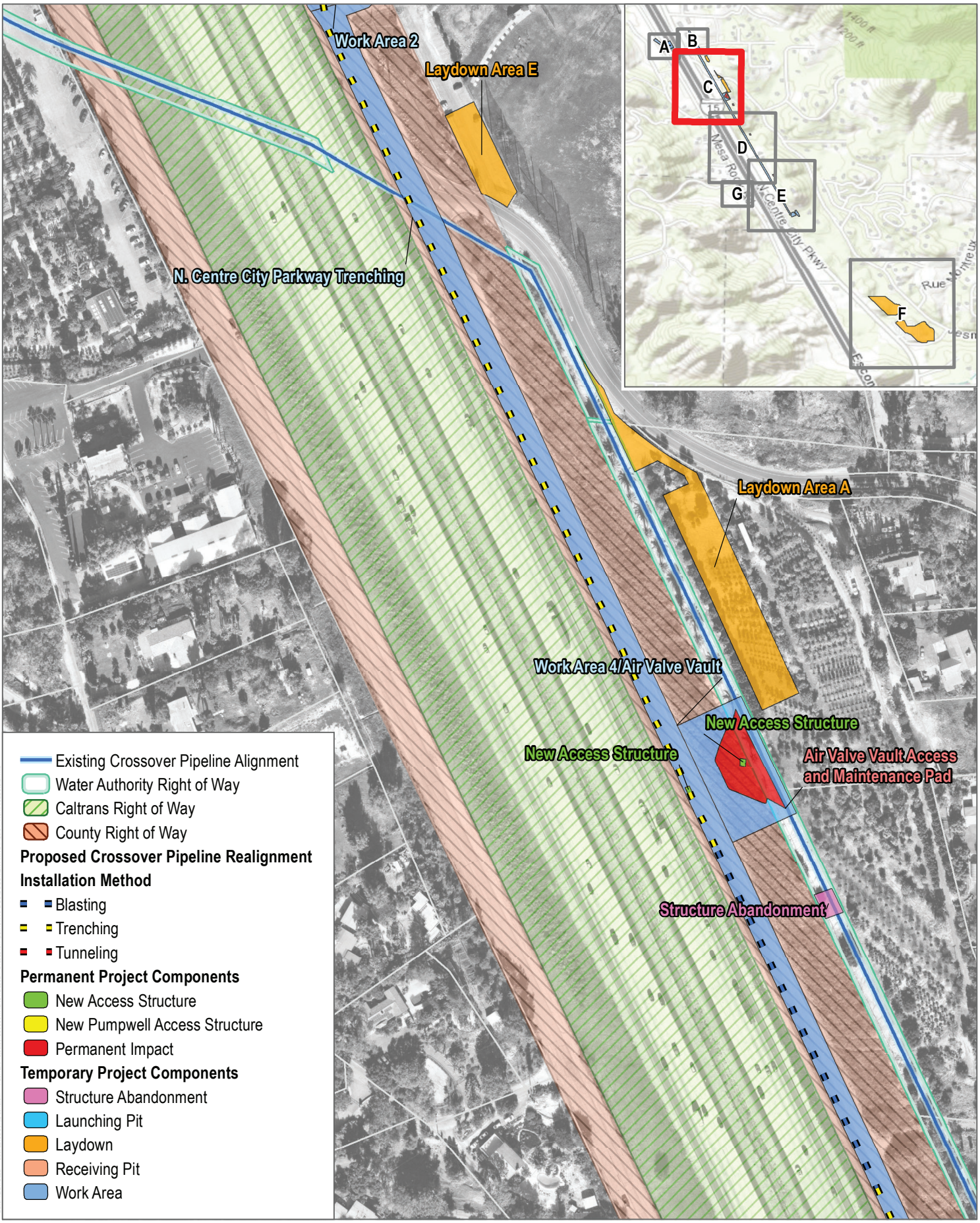

SOURCE: NAIP 2022; SanGIS 2022; SDCWA 2011, 2022

DUDEK

0 187.5 375 Feet

FIGURE 4C

Work Area Details

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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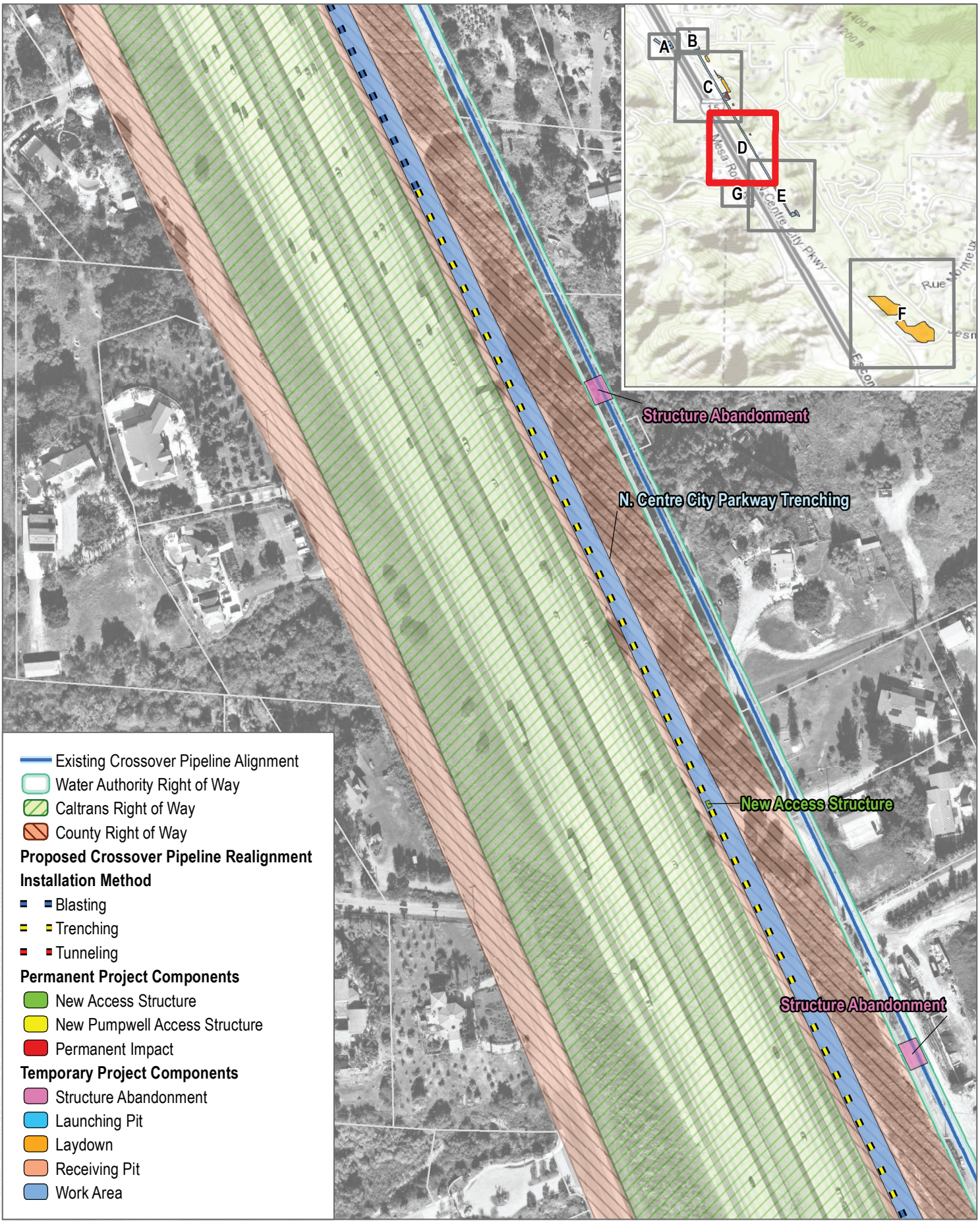

SOURCE: NAIP 2022; SanGIS 2022; SDCWA 2011, 2022

DUDEK

0 187.5 375 Feet

FIGURE 4D

Work Area Details

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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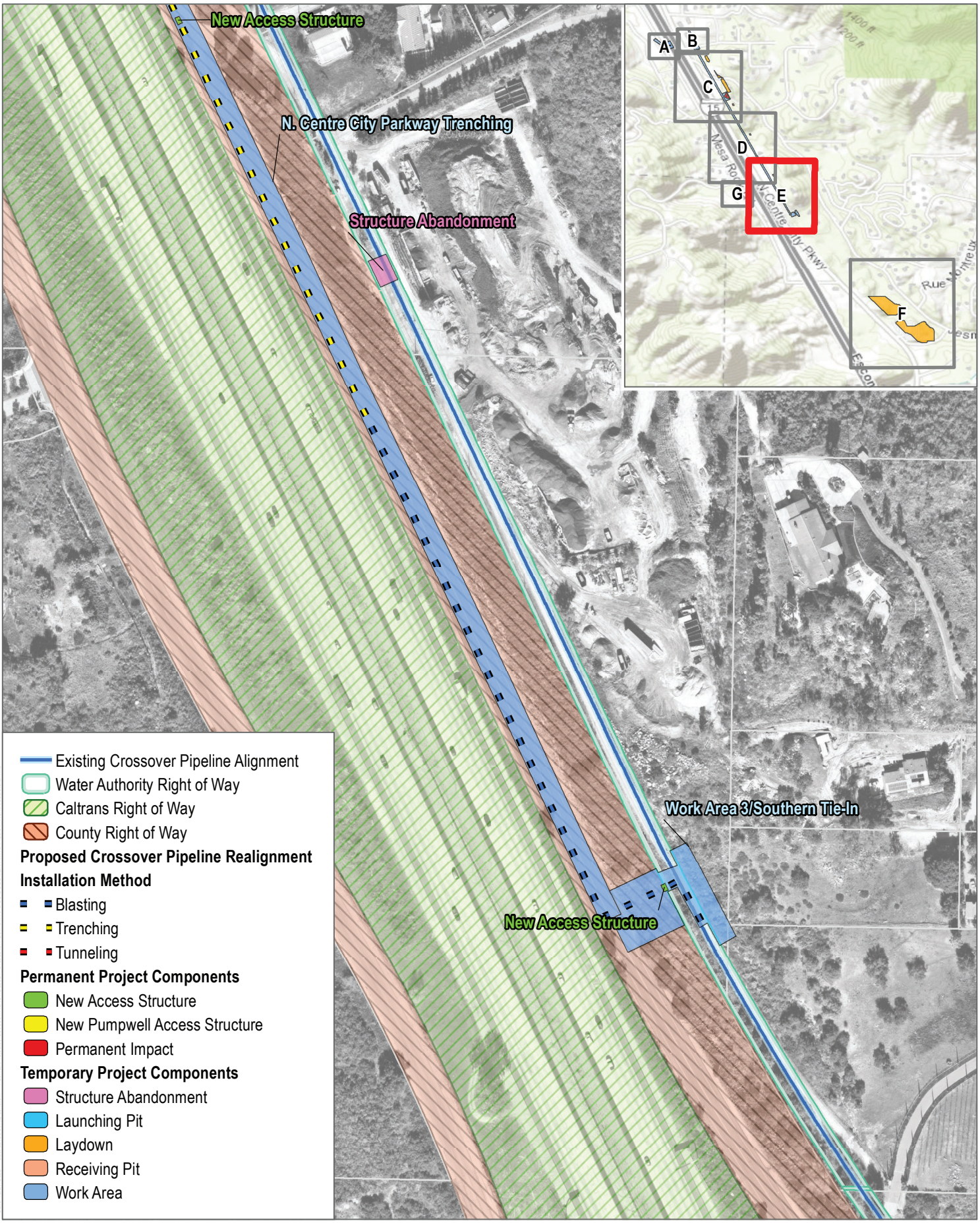

SOURCE: NAIP 2022; SanGIS 2022; SDCWA 2011, 2022

DUDEK

0 187.5 375 Feet

FIGURE 4E

Work Area Details

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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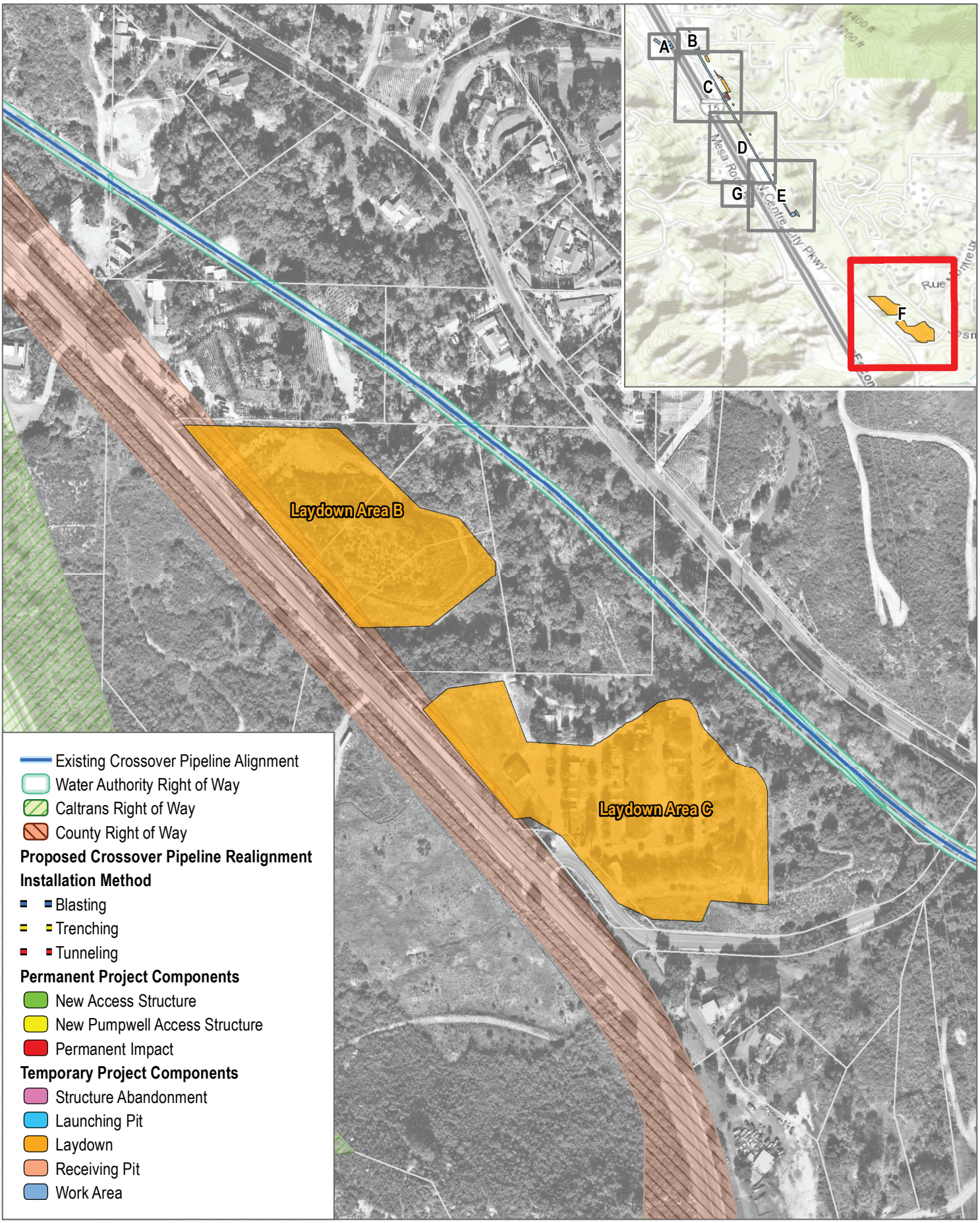

SOURCE: NAIP 2022; SanGIS 2022; SDCWA 2011, 2022

DUDEK

0 287.5 575 Feet

FIGURE 4F

Work Area Details

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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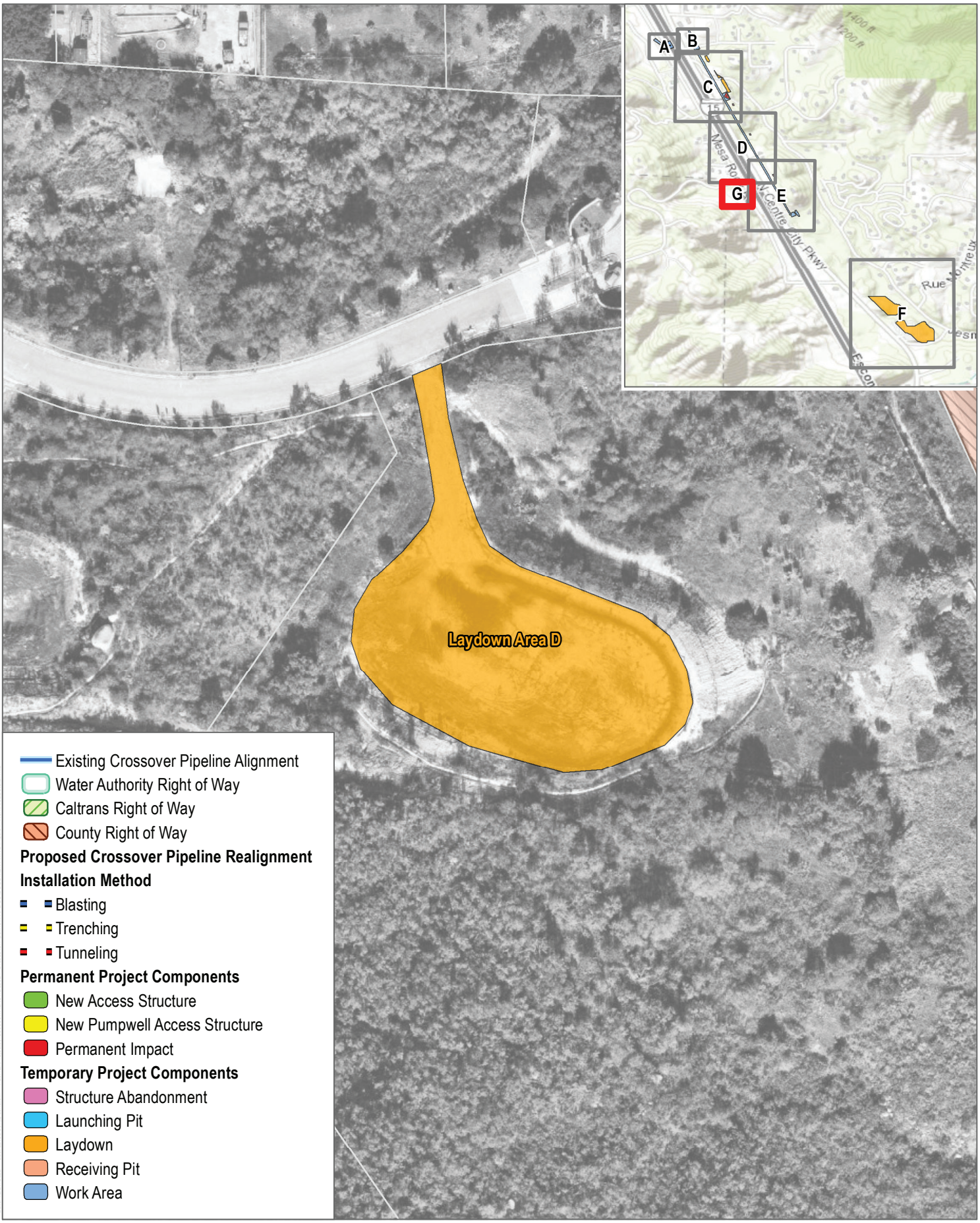

SOURCE: NAIP 2022; SanGIS 2022; SDCWA 2011, 2022

DUDEK

0 80 160 Feet

FIGURE 4G

Work Area Details

Crossover Pipeline I-15 Bypass Project Mitigated Negative Declaration

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3 Initial Study Checklist

1. **Project title:**

   Crossover Pipeline Interstate 15 Bypass Project

2. **Lead agency name and address:**

   San Diego County Water Authority, 4677 Overland Avenue, San Diego, California 92123

3. **Contact person and phone number:**

   Sean Paver, Senior Water Resources Specialist, 858.522.6753

4. **Project location:**

   Refer to Section 2.1, Project Location.

5. **Project sponsor's name and address:**

   Same as lead agency.

6. **General plan designation:**

   County of San Diego: Semi-Rural Residential (SR-1 and SR-4)

   City of Escondido (Laydown Area D): Specific Plan Area (SPA)

7. **Zoning:**

   County of San Diego: Limited Agricultural (A70) and Rural Residential (RR)

   City of Escondido (Laydown Area D): Specific Plan (S-P)

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):**

   Refer to Section 2, Project Description.

9. **Surrounding land uses and setting (Briefly describe the project's surroundings):**

   Refer to Section 2.1, Project Location.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

    Refer to Section 2.6, Permits and Approvals.

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Refer to Sections 3.5, Cultural Resources, and 3.18, Tribal Cultural Resources.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Kelley Gage, Director of Water Resources — January 5, 2023

Signature — Date

3.1 Aesthetics

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Would the project have a substantial adverse effect on a scenic vista?

Less-Than-Significant Impact. Scenic vistas generally refer to views of expansive open space areas or other natural features, such as mountains, undeveloped hillsides, large natural water bodies, or coastlines. Certain urban settings or features, such as a striking or renowned skyline, may also represent a scenic vista. In addition, scenic vistas include views that are accessible from public vantage points, such as public roadways and parks. The County's General Plan Conservation and Open Space Element does not specifically list or identify any designated scenic vistas but does identify I-15 from the Escondido city limits to the Riverside county line as a local County scenic highway (County of San Diego 2011). Therefore, project construction would be temporarily visible within a County-designated scenic corridor. Although it is unlikely due to the intervening topography of the surrounding private properties, project construction may be temporarily visible at distance from public trails and roadways in the hillsides and mountain peaks in the greater vicinity.

During construction, heavy equipment, material storage, and active work would be visible to passing motorists traveling on I-15. Night lighting would be required during construction activities that occur after dark, including for the 24-hour work periods during pipeline shutdowns that would occur in Work Areas 1 and 3 for a 10-to-15-day period. Motorists traveling on I-15 would be afforded brief views of project construction due to the speed of travel; assuming a 65 mph travel speed, motorists would travel through the project work areas over the course of approximately 1 minute. Although located in a County scenic corridor, the area surrounding the portion of I-15 where construction would occur is developed with roadway

infrastructure and commercial and residential uses. Upon completion of construction, the project components would be primarily underground. The project would include new access structures featuring partially aboveground concrete boxes as well as small appurtenances such as air valves, corrosion test system housing, and fiber-optic pull boxes. These aboveground structures would be small in size, located along the new pipeline alignment, and similar to other existing accessory features of infrastructure along freeways and roadways, including the existing development along this corridor. These aboveground project components would be only briefly visible from the immediate vicinity and would not have the potential to adversely affect or block a scenic vista. Therefore, implementation of the project would not result in a substantial adverse effect on a scenic vista; impacts would be less than significant.

b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. According to the California State Scenic Highway Mapping System, there are no officially designated state scenic highways in the project area (Caltrans 2021). The nearest eligible state scenic highway is State Route 76, located approximately 2.3 miles north of the project alignment. The project locations would not be visible from the highway due to distance and the intervening topography and development. Therefore, the project would not substantially damage resources within a state scenic highway and no impact would occur.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less-Than-Significant Impact. California Public Resources Code Section 21071 provides the definition of "urbanized area." The project location does not meet the definition of an "urbanized area" located within an unincorporated area, per California Public Resources Code Section 21071(b). Thus, the project would be considered to be in a non-urbanized area; an analysis regarding the project's effect on visual character is provided below.

As discussed in Section 3.1(a), the project work areas would be visible from I-15, a County-designated scenic highway. Visibility of the construction work and laydown areas, new access structures, and new accessory improvements would be limited to motorists/cyclists traveling on the surrounding roadway network and private property owners. Temporary visible elements associated with the project would include construction equipment, staging activities, and fencing associated with tunneling, trenching, and excavation for new access structures. Visual impacts resulting from construction activities would be temporary, ceasing upon completion of construction. The new permanent access structures and accessory improvements would not be prominently visible from any public areas, including I-15. These aboveground features would be similar to other existing infrastructure commonly located along roadways. Thus, the project would result in no permanent aesthetic change and minimal temporary aesthetic change viewed from public areas and would not substantially degrade the existing visual character of the surrounding project area. Therefore, impacts would be less than significant.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less-Than-Significant Impact. Night lighting would be required during construction activities that occur after dark, including for the 24-hour work periods during pipeline shutdowns. Temporary lighting would be used to appropriately illuminate the immediate project work area and for safety and security purposes during project construction. Pursuant to standard Water Authority construction specifications, nighttime lighting would be of the lowest illumination necessary to ensure safety of all construction personnel and security of the project area and would be shielded and directed away from adjacent habitat areas and residential areas. The impacts caused by this temporary lighting would be less than significant due to its short duration and the limited number of potential affected viewers.

Under existing conditions, there is no exterior or interior lighting associated with the pipeline. Similar to existing conditions, the proposed project would not include permanent exterior lighting. As such, the project would not introduce a new source of light to the project area. New and replacement structures would be made of concrete, which would not serve as a new source of glare. Therefore, any impact related to light or glare would be less than significant.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less-Than-Significant Impact. According to the California Department of Conservation's Important Farmland Finder, the project is located within areas designated as Unique Farmland, Other Land, and Urban/Built-Up Land (DOC 2022a). The areas designated as Unique Farmland coincide with Work Area 1/Northern Tie-In and Work Area 2 and are associated with the active Moon Valley Nursery properties.

Despite Work Area 2 being designated as Unique Farmland, the area of disturbance would be limited to the disturbed cleared land within the County ROW adjacent to the active Moon Valley Nursery operations and the Moon Valley Nursery property. Work Area 2 does not contain active agricultural uses and has existed in its cleared disturbed state for more than a decade (NETR 2022). With the exception of the new access vault structure, Work Area 2 would be returned to similar to pre-project conditions. Given the current state and use of the land, Work Area 2 would not convert Unique Farmland to non-agricultural use.

Work Area 1/Northern Tie-In is located within the active Moon Valley Nursery property, which is used for the storage and sale of potted trees and plants. None of the plants within Work Area 1/Northern Tie-In are planted in the soil. Construction of the proposed project within Work Area 1/Northern Tie-In would result in the temporary disturbance of the active Moon Valley Nursery. The property owner would be responsible for the temporary relocation of nursery assets during the construction period. Upon completion of construction, the disturbed area would be returned to pre-project conditions, with the exception of a new access vault structure that would be located within Water Authority ROW. Therefore, the project would not result in a long-term permanent conversion of Unique Farmland used as an active nursery. Impacts would be less than significant.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less-Than-Significant Impact. The project traverses land zoned by the County as Agriculture (A70) and contains no Williamson Act contracts. Work Areas 1 through 4, Laydown Areas A and E, and areas proposed for demolition of existing pipeline structures would be located within land zoned for agricultural use. As discussed in Section 3.2(a), within Work Area 1 existing potted trees and other plants would be temporarily relocated for project construction, but the land would be returned to the owner or operator for continued nursery use once construction is complete. Laydown Areas A and E consist of an existing parking lot or disturbed land that is not actively used for agriculture. Work Areas 3 and 4 consist of vegetated land within the County ROW, with a smaller portion located within land zoned as A70; this land similarly does not contain any active agricultural use. The existing pipeline structures proposed for demolition are located within Water Authority ROW that traverses land zoned as A70. This portion of the Water Authority ROW consists of disturbed land used for regular maintenance access to the existing partially subgrade concrete access vault structures and does not contain active agricultural uses.

Upon completion of construction, the proposed project would be primarily underground, with the exception of partially aboveground access structures and accessory improvements. These improvements would be located primarily within existing public road ROW and would not conflict with existing zoning. Operation of the project would continue similar to existing conditions. Therefore, the project would not conflict with long-term agricultural uses of adjacent properties consistent with County zoning. As such, implementation of the project would not conflict with existing zoning for agricultural use or land under a Williamson Act contract. Therefore, impacts would be less than significant.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. No forest land, timberland, or Timberland Production lands, as defined in the code sections listed above, occur within the project area. Therefore, the proposed project would not conflict with zoning for forest land or cause rezoning of forest land; no impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. Refer to Section 3.2(c). Because no forest land exists in the project area, no impact would occur.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less-Than-Significant Impact. Refer to Sections 3.2(a) through 3.2(d). Impacts would be less than significant.

3.3 Air Quality

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	**AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:**				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less-Than-Significant Impact. The San Diego Air Pollution Control District (SDAPCD) is responsible for developing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the basin—specifically, the California State Implementation Plan (SIP) and Regional Air Quality Strategy (RAQS).[1] San Diego Association of Governments (SANDAG) is responsible for developing forecasts and data that are used by SDAPCD in preparing the SIP and RAQS. The federal ozone (O_3) maintenance plan, which is part of the SIP, was adopted in 2012 (SDAPCD 2012). The SIP includes a demonstration that current strategies and tactics will maintain acceptable air quality in the basin pursuant to the National Ambient Air Quality Standards (NAAQS). The RAQS, most recently updated in 2016, outlines SDAPCD's plans and control measures designed to attain the California Ambient Air Quality Standards (CAAQS) for O_3. At the time of writing this IS/MND, the 2022 RAQS was in the public review stage. The SIP and RAQS rely on information from the California Air Resources Board (CARB) and SANDAG, including mobile and area source emissions as well as information regarding projected growth in the County as a whole and in the cities in the County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile-source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans.

While SDAPCD does not provide guidance regarding the analysis of impacts associated with air quality plan conformance, the County's Guidelines for Determining Significance and Report and Format and Content

[1] For the purpose of this discussion, the relevant federal air quality plan is the Ozone Maintenance Plan (SDAPCD 2012). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the San Diego Air Basin.

Requirements – Air Quality (Air Quality Report Guidelines) do discuss conformance with the RAQS (County of San Diego 2007). The guidance indicates that if the project, in conjunction with other projects, contributes to growth projections that would not exceed SANDAG's growth projections for the City, the project would not be in conflict with the RAQS (County of San Diego 2007). If a project includes development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project might be in conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality.

The proposed project area traverses multiple general plan land use designations and zoning designations; however, the project would not include changing existing land uses, land use designations, or applicable policies as designated in the general plans of the affected jurisdictions. Additionally, the project would not induce population growth in the area as it is being implemented to maintain existing operations. Per CEQA Guidelines Section 15206(b), the project would not be considered regionally significant because it would not have the potential to substantially affect housing, employment, or population projections within the San Diego region, which form the basis of the RAQS projections. As such, the project would not conflict with or obstruct implementation of the RAQS.

Therefore, implementation of the proposed project would not conflict with the RAQS or SIP and proposed development would be consistent with the growth in the region. Impacts would be less than significant.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less-Than-Significant Impact. Past, present, and future development projects may contribute to adverse air quality impacts in the San Diego Air Basin (SDAB) on a cumulative basis. By its nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the applied significance thresholds, it would have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

Because neither the Water Authority nor SDAPCD has established numeric thresholds for determining project-level significance of criteria air pollutant emissions for CEQA analyses, the thresholds identified in the County's Air Quality Report Guidelines are applied for the construction emissions analysis.

A quantitative analysis was conducted to determine whether the project could result in emissions of criteria air pollutants that may result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the SDAB is designated as nonattainment under the NAAQS or CAAQS (Appendix B contains modeling results). The SDAB has been designated as a federal and state nonattainment area for O_3 , and state particulate matter with an aerodynamic diameter less than or equal to 10 microns (coarse particulate matter, or PM_{10}), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (fine particulate matter, or $PM_{2.5}$). The following discussion quantitatively evaluates potential short-term construction impacts that would result from implementation of the proposed project. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O_3, as well as carbon monoxide (CO), sulfur oxides (SO_x), PM_{10},

and $PM_{2.5}$. The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from construction and operation of the project.[2]

Construction

Construction of the project would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, off-site trucks hauling excavated earth materials, and construction workers traveling to and from the site. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Therefore, an increment of day-to-day variability exists. Pollutant emissions associated with construction activity were quantified using CalEEMod. Default values provided by the program were used where detailed project information was not available.

Implementation of the project would generate construction-related air pollutant emissions from entrained dust, equipment and vehicle exhaust emissions, and striping. Emissions generated during construction of the project are subject to the SDAPCD's rules and regulations. Construction of project components would be subject to SDAPCD Rule 55 – Fugitive Dust Control. Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) that may be generated during grading and construction activities by using methods such as wetting soils that would be disturbed. It was assumed that the active sites would be watered at least twice daily, resulting in an approximately 55% reduction of fugitive dust (CalEEMod default value), to represent compliance with the SDAPCD standard dust control measures in Rule 55. The application of architectural coatings, such as road markings, and the application of asphalt pavement would produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SDAPCD Rule 67.0.1 for Architectural Coatings. Internal-combustion engines used by construction equipment and haul trucks, vendor trucks, and worker vehicles would result in emissions of criteria air pollutants. Full construction modeling assumptions can be found in Appendix B.

In addition to the conventional methods of excavation for tunneling and trenching (described in Section 2.2), project construction would require blasting of rock during trench installation of the realigned pipeline within N. Centre City Parkway. For the purposes of air quality modeling, the following assumptions regarding blasting were made in conjunction with Water Authority engineers:

- The most commonly used explosives today are ammonium nitrate/fuel oil (ANFO)-based blends, due to their lower cost compared to dynamite. The chemistry of ANFO detonation is the reaction of ammonium nitrate with a long-chain alkane to form NO_x, carbon dioxide (CO_2), and water vapor (H_2O). When detonation conditions are optimal, these gases are the only products. In practical use, such conditions are impossible to attain, and blasts produce moderate amounts of other gases. The U.S. Environmental Protection Agency's Compilation of Air Pollutant Emission Factors (AP-42), Section 13.3 – Explosives Detonation (EPA 1980), provided the emissions factors for CO, NO_x, and SO_x used in this assessment. According to AP-42, "Unburned hydrocarbons also result from explosions, but in most instances, methane is the only species that has been reported" (EPA 1980); methane (CH_4) is not a VOC, and no CH_4 emission factor has been determined for ANFO.

[2] CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform to calculate construction and operational emissions from land use development projects. The model was developed for the California Air Pollution Control Officers Association in collaboration with multiple air districts across the state. Numerous lead agencies in the state, including SDAPCD, use CalEEMod to estimate greenhouse gas (GHG) emissions in accordance with CEQA Guidelines Section 15064.4(a)(1).

- Some of the rock created by blasting would be crushed, creating emissions of particulates. These were quantified using emissions factors found in AP-42, Section 11.19.2 (Crushed Stone Processing) (EPA 2004).
- Construction of the project would include multiple blasts, to remove a section of approximately 4,000 cubic yards of earth (approximately 600 feet in length), and to remove another section of approximately 6,000 cubic yards of earth (approximately 1,000 feet in length). The first section would conservatively require 5 tons of ANFO over the course of at least two blasting days. The second section would conservatively require 8 tons of ANFO over the course of at least three blasting days. Each blast would create a depression 16 feet in depth and 19 feet in width. Approximately 1,544 tons of rock created by these blasts would be crushed by a 2015 IROCK TC-20 crusher. The emissions created by blasting and crushing were calculated using a separate modeling spreadsheet using figures provided by project engineers and the AP-42 emission factors, and will be added to the emissions calculated via CalEEMod (Appendix B).

Table 3.3-1 shows the estimated maximum daily construction emissions of the project.

Table 3.3-1. Estimated Maximum Daily Construction Emissions – Unmitigated

Year	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2024	2.42	22.67	26.48	0.06	1.56	1.15
2025	8.44	98.15	67.76	0.22	3.54	2.93
2026	64.88	111.77	142.65	0.27	6.60	5.48
Maximum daily construction	*64.88*	*111.77*	*142.65*	*0.27*	*6.60*	*5.48*
Maximum daily blasting	*0.00*	*45.39*	*178.89*	*5.34*	*0.05*	*0.00*
Maximum daily crushing	*0.00*	*0.00*	*0.00*	*0.00*	*2.30*	*0.31*
Total maximum daily	**64.88**	**157.16**	**321.54**	**5.61**	**8.95**	**5.79**
Pollutant threshold	**137**	**250**	**550**	**250**	**100**	**67**
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: SDAPCD 2016.
Notes: VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
The values shown are the maximum summer or winter daily emissions results from CalEEMod; complete results are provided in Appendix B.

As shown in Table 3.3-1, maximum daily construction emissions would not exceed any thresholds during construction in all construction years. Therefore, impacts would be less than significant.

Operation

The proposed project would not entail changes in routine pipeline operation and would not alter the current or planned quantities of the Water Authority's water deliveries to its member agencies. No additional staff would be necessary for operation of the project. Because the project would not result in substantial changes to routine operational activities, air quality impacts associated with operational air pollutant emissions would be less than significant.

Health Effects of Criteria Air Pollutants

Project construction would not exceed significance thresholds for VOCs, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. VOCs and NO_x are precursors to O_3, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SDAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations also depends on the time of year that the VOC emissions occur, because exceedances of the O_3 CAAQS/NAAQS tend to occur in April through October, when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact.

Construction of the project would not contribute to exceedances of the NAAQS or CAAQS for nitrogen dioxide (NO_2). Health effects that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the project alignment and would not be concentrated in one portion of the site at any one time. In addition, existing NO_2 concentrations in the area are below the NAAQS and CAAQS standards. Because project-generated NO_x emissions would not exceed the significance threshold, the project would not result in potential health effects associated with NO_2 or NO_x.

CO tends to be a localized impact associated with congested intersections. The associated potential impact for CO hotspots was determined to be less than significant and is discussed further in Section 3.3(c). Furthermore, the existing CO concentrations in the area are below the NAAQS and CAAQS standards. Thus, the project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction of the project would not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS or CAAQS for particulate matter or obstruct the SDAB from coming into attainment for these pollutants. The project would also not result in substantial diesel particulate matter (DPM) emissions during construction, and therefore would not result in significant health effects related to DPM exposure. Additionally, the project would implement dust control strategies and would be required to comply with SDAPCD Rule 55, Fugitive Dust Control, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction, the project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.

In summary, because construction of the project would not result in exceedances of the significance thresholds for any criteria air pollutant, the potential health effects would be less than significant. Furthermore, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and there are currently no modeling tools that could provide reliable and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects. Because project-generated construction emissions would be less than the applied mass daily thresholds for all pollutants, health effects associated with project-generated criteria air pollutant emissions would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less-Than-Significant Impact. Localized project impacts associated with construction and operational emissions of criteria pollutants and toxic air contaminants (TACs) are assessed below.

Sensitive Receptors

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, older people, and people with cardiovascular and chronic respiratory diseases. Air quality regulators typically define sensitive receptors as schools (preschool–12th grade), hospitals, resident care facilities, daycare centers, and other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. However, for the purposes of CEQA analysis, the County's definition of a sensitive receptor also includes residents.

The closest sensitive receptors to the project alignment are single-family residences directly bordering the project work areas.

CO Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO "hotspots." CO transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors such as residents, schoolchildren, hospital patients, and older people. Typically, high CO concentrations are associated with severely congested intersections operating at an unacceptable level of service (level of service E or worse). Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots.

Project construction activities would be temporary and would not be a source of daily, long-term mobile-source emissions. Accordingly, project construction activities would not generate traffic that would contribute to potential adverse traffic impacts that may result in the formation of CO hotspots. In addition, because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing. Based on these considerations, the project would result in a less-than-significant impact to air quality with regard to potential CO hotspots.

Health Impacts of Toxic Air Contaminants

In addition to impacts from criteria pollutants, impacts may include emissions of pollutants identified by the state and federal government as TACs or hazardous air pollutants. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and is aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal hazardous air pollutants, and adopts appropriate control measures for sources of these TACs. The greatest potential for TAC emissions during construction

would be DPM emissions from heavy equipment operations and heavy-duty trucks. The following measures are required by state law to reduce DPM emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use Off-Road Diesel Vehicles (13 CCR 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units shall be used whenever possible.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. SDAPCD recommends an incremental cancer risk threshold of 10 in 1 million. "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology. The project would not require the extensive operation of heavy-duty construction equipment, which is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce DPM emissions, nor would it involve extensive use of diesel trucks, which are also subject to a CARB Airborne Toxics Control Measure.

As shown in Table 3.3-1, maximum daily PM_{10} or $PM_{2.5}$ emissions generated by construction equipment operation and haul-truck trips during construction (exhaust particulate matter, or DPM), combined with fugitive dust generated by equipment operation and vehicle travel, would be well below the significance thresholds. Moreover, total construction of the project would last approximately 15 months, after which project-related TAC emissions would cease. Thus, the project would not result in a long-term source of TAC emissions. No residual TAC emissions or corresponding cancer risk are anticipated after construction, and no long-term sources of TAC emissions are anticipated during operation of the project. Therefore, the impact of exposure of project-related TAC emissions to sensitive receptors would be less than significant.

Valley Fever

The average incidence rate of valley fever (coccidioidomycosis) within San Diego County is below the statewide average. Furthermore, construction of the project would comply with SDAPCD Rule 55, Fugitive Dust Control, which limits the amount of fugitive dust generated during construction. SDAPCD Rule 55 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. As explained above, the nearest sensitive-receptor land uses (existing residences) are adjacent to the project alignment. Based on the low incidence rate of coccidioidomycosis in the project vicinity (less than or equal to 4.9 cases per 100,000 people between 2011 and 2020 in zip code 92026) and in San Diego County (12.9 cases per 100,000 people in 2019), with the project's implementation of dust control strategies, and based on the distance from the nearest sensitive receptors, it is not anticipated that earthmoving activities during project construction would result in exposure of nearby sensitive receptors to valley fever (County of San Diego 2019). Therefore, the project would have a less-than-significant impact with respect to valley fever exposure for sensitive receptors.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less-Than-Significant Impact. Odor is a form of air pollution; of all types of pollution, it is possibly the most obvious to the general public. Odors can present significant problems for the source and its surrounding community. Although offensive odors seldom cause physical harm, they can be annoying and cause concern.

Potential sources that may emit odors during construction activities include diesel equipment, gasoline fumes, and asphalt paving material. Odors from these sources would be localized and generally confined to the project work areas. Such odors would disperse rapidly from the work areas and generally occur at magnitudes that would not affect substantial numbers of people. The proposed pipeline would be installed in a sequential fashion; therefore, construction activity would not occur in one location for an extended period. The project would use typical construction techniques in compliance with SDAPCD rules. As such, the project would not cause an odor nuisance, and odor impacts would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

This section summarizes the findings of the Biological Resources Report for the Crossover Pipeline Interstate 15 Bypass Project, prepared by Dudek (biological report). This biological report is included as Appendix C to this IS/MND.

a) ***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Less-Than-Significant Impact. For purposes of CEQA analysis, this section identifies plant and wildlife species as "sensitive species" if they are listed as endangered, threatened, candidate, rare, protected, watch list, or species of special concern according to USFWS and CDFW; California Rare Plant Rank 1A, 1B, 2A, or 2B; or Covered Species of the Water Authority's NCCP/HCP. Field surveys were conducted by qualified biologists in accordance with the requirements of the NCCP/HCP. In assessing potential presence for species that were not observed during surveys, Dudek biologists relied on CDFW's California Natural Diversity Database and USFWS data, field observations of on-site habitat, and professional expertise related to species distribution in the region. Potential presence was ranked as low, moderate, or high/present pursuant to a methodology discussed in Section 3.4 of Appendix C. Observation of a species during biological resources surveys conducted for this project or a determination of moderate or high potential for presence in the project work area triggers implementation of species-specific Conditions of Coverage that are set forth in NCCP/HCP Appendix B. The Conditions of Coverage require specific measures to be incorporated into the project to ensure impacts to species are avoided and minimized. The results of this assessment are summarized below. As required by NCCP/HCP Section 6.4.1.2, the project would be subject to a pre-activity survey prior to beginning construction to verify existing conditions and ensure that applicable NCCP/HCP measures have been incorporated.

Sensitive Plant Species

No special-status plant species were observed during the reconnaissance surveys conducted for the biological report. Dudek's habitat assessment of the project impact areas concluded there is moderate potential for six NCCP/HCP plant Covered Species to occur in project work areas: San Diego thorn-mint (*Acanthomintha ilicifolia*), California adolphia (*Adolphia californica*), San Diego ambrosia (*Ambrosia pumila*), thread-leaved brodiaea (*Brodiaea filifolia*), Orcutt's brodiaea (*Brodiaea orcuttii*), and Parry's tetracoccus (*Tetracoccus dioicus*). Because these species were not observed during reconnaissance surveys and were not determined to have high potential to occur in any project work area based on the

habitat assessment, the project would not have a significant impact on these species pursuant to CEQA. Post-construction habitat restoration as required by the NCCP/HCP would return on-site vegetation to its pre-project conditions and continue to support moderate potential for occurrence these species. The project's impact on sensitive plant species would be less than significant.

Sensitive Wildlife Species

No wildlife NCCP/HCP Covered Species or other wildlife special-status species were observed during the summer 2022 reconnaissance survey.

Although it was not observed during surveys, Dudek concluded that one wildlife Covered Species, the coastal California gnatcatcher (*Polioptila californica californica*), has a high potential to occur in certain project work areas due to the presence of suitable Diegan coastal sage scrub habitat and the proximity to recorded observations of the species. This species is listed as threatened pursuant to the federal ESA and is listed by CDFW as a Species of Special Concern. Project work areas that occur in suitable habitat for this species include the proposed air valve vault and maintenance pad, Work Area 3/Southern Tie-In, and Laydown Area B. Work Area 3 and Laydown Area B are within USFWS-designated critical habitat for coastal California gnatcatcher (see Figure 4 of Appendix C). Laydown Area C also overlaps with mapped Critical Habitat but is devoid of any suitable Diegan coastal sage scrub. For purposes of NCCP/HCP compliance, this species is deemed to occupy the Diegan coastal sage scrub occurring within the project work areas, and project construction at these locations will be subject to the appropriate species-specific NCCP/HCP Conditions of Coverage, as discussed below.

Four wildlife Covered Species were determined to have a moderate potential to occur within the study area: Belding's orange-throated whiptail (*Aspidoscelis hyperythra*), coastal (western) whiptail (*Aspidoscelis tigris stejnegeri*), and northern red diamond rattlesnake (*Crotalus ruber*) and the bird species yellow warbler (*Setophaga petechia*). One additional special-status species that is not covered by the NCCP/HCP, Cooper's hawk (*Accipiter cooperii*; California Watch List Species), was also deemed to have moderate potential to occur due to the presence of suitable nesting and foraging habitat.

The project's impacts on all these species involve direct impacts through habitat removal (both temporary and permanent), as well as temporary indirect impacts due to noise and human presence adjacent to habitat during project construction. The NCCP/HCP anticipates these types of temporary and permanent impacts on wildlife species and establishes avoidance and minimization measures, which the Water Authority is committed to implement to prevent significant impacts on Covered Species. Appendix A lists all NCCP/HCP conditions that are required for the project, including the general Conditions of Coverage and all species-specific measures. With implementation of these conditions of the NCCP/HCP, the project's impacts on sensitive wildlife would be less than significant.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less-Than-Significant Impact. The project's impact areas are predominantly located in developed and disturbed areas associated with roadways and adjacent businesses and residential properties, but the project would involve direct impacts on one sensitive native vegetation community: Diegan coastal sage scrub. Vegetation communities with project-related impacts are discussed in greater detail in the biological

technical report (Appendix C). For Covered Activities such as this project, impacts on native habitat are anticipated by and governed by the Water Authority's NCCP/HCP.

Diegan coastal sage scrub is designated by the NCCP/HCP as a Tier II uplands community. Impacts on this community would occur in three areas, from north to south: the proposed air valve vault east of N. Centre City Parkway, Work Area 3/Southern Tie-In, and Laydown Area B. At Laydown Area B, impacts would be temporary only, but permanent impacts would occur at the other two locations to accommodate proposed pipeline structures and associated maintenance aprons. All other direct impacts would occur in land assigned the non-sensitive land-cover types urban/developed and disturbed. Temporary and permanent impact acreage estimates are presented in Table 3.4-1. The impact areas are shown on Figure 2 of Appendix C.

Table 3.4-1. Estimated Impacts on Vegetation Communities and Land Cover Types

Vegetation Community/Land Cover Type	Water Authority NCCP/HCP Tier	Temporary Impacts (Acres)[a]	Permanent Impacts (Acres)[a]
Coastal sage scrub (Diegan)	II	4.17	0.13
Urban/developed land	IV	10.37	—
Disturbed land	IV	4.38	0.05
	Project Total	**18.61**	**0.18**

Note:
[a] Totals may not sum due to GIS-based rounding.

Permanent and temporary impacts resulting from Covered Activities are subject to requirements of the NCCP/HCP. The project's permanent impact on Tier II vegetation would be less than significant pursuant to CEQA on a project level due to the limited scale of the impact. These project impacts also contribute to regional habitat impacts that are significant pursuant to CEQA, The NCCP/HCP was established in part to address the Water Authority's contribution to these cumulative impacts, and ensure the Water Authority's cumulative impacts are less than significant.

Other sensitive native communities observed in the vicinity of the project alignment include coast live oak woodland, southern coast live oak riparian forest, and southern mixed chaparral. The project would result in indirect impacts on these adjacent habitats that are anticipated by and governed by the NCCP/HCP. Implementation of mandatory measures required by the NCCP/HCP to reduce the potential for degradation of adjacent and off-site habitat would appropriately address indirect impacts on these vegetation communities, and this would not be a significant impact pursuant to CEQA.

The NCCP/HCP requires off-site mitigation for a project's permanent impacts on Tier I, II, and III vegetation communities at ratios that are defined in NCCP/HCP Section 6.5.1. The project's anticipated off-site mitigation obligation is shown in Table 3.4-2. Mitigation would be debited from the Water Authority's available credits at the San Miguel Mitigation Bank. Pursuant to NCCP/HCP procedures, mitigation for these impacts considers that the impacts occur outside a biologically significant resource area (BSRA) and that mitigation would occur inside a BSRA.[3] Off-site mitigation is not required for impacts on non-sensitive Tier IV land cover types. The acreage-based mitigation is not considered mitigation for a significant impact in the context of CEQA, as significant impacts are reduced by implementation of NCCP/HCP requirements.

Table 3.4-2. Mitigation for Impacts to Sensitive Vegetation Communities

Vegetation Community/ Land Cover Type	Water Authority NCCP/HCP Tier	Temporary Impacts (acres)[a]	Permanent Impacts (acres)[b]	On-Site Restoration Required (acres)	Off-Site Mitigation Required (acres)
Coastal sage scrub (Diegan)	II	4.17	0.13	4.17	0.13
Urban/developed land	IV	10.37	—	0 [b]	—
Disturbed habitat	IV	4.38	0.05 [c]	0 [b]	—
	Project Total	**18.61**	**0.18**	**4.17**	**0.13**

Notes:

[a] Some numbers may not sum due to rounding.

[b] Impacts to Tier IV communities do not require on-site restoration or off-site mitigation because these communities are not sensitive. Developed areas that are currently paved would be repaved; all other Tier IV habitats (excluding agricultural areas) would be stabilized with a native seed mix for erosion-control purposes after construction is complete.

Pursuant to Section 6.5.1.4.2 of the NCCP/HCP (Water Authority 2010a), the project would mitigate all one-time temporary impacts on sensitive vegetation communities (Tier II) by on-site restoration and revegetation of the impacted area. Temporary impacts on non-sensitive Tier IV land cover types would not require on-site habitat restoration. Developed areas that are currently paved would be repaved; disturbed areas would be stabilized with a native seed mix for erosion-control purposes after construction is complete. Existing orchards and agricultural sites would be stabilized and made available again for similar uses by the property owner.

Section 6.6.1 of the NCCP/HCP states that, under Water Authority supervision, a qualified restoration specialist would prepare and submit to the Wildlife Agencies for their review and concurrence a restoration plan for each native habitat restoration site exceeding 0.25 acres. For this project, Work Area 3/Southern Tie-In and Laydown Area B feature native habitat and exceed 0.25 acres, so they would be subject to this requirement. All other project work areas are either devoid of native vegetation or are smaller than 0.25 acres.

Restoration measures would be developed to restore a site's previous biological resources and minimize establishment of invasive non-native plant species. Habitat restoration activities would occur under the supervision and direction of an environmental surveyor who has experience developing and implementing

[3] The NCCP/HCP differentiates between impacts that occur in BSRAs, which include lands outside the Water Authority ROW that occur in preserves such as the County Multiple Species Conservation Plan (MSCP) Pre-Approved Mitigation Areas (PAMAs) or Water Authority NCCP/HCP Preserve Area. Permanent impacts within BSRAs are assigned higher mitigation ratios. Work Area 1/Northern Tie-In, Laydown Area B, and Laydown Area E overlap with mapped County PAMA lands. Laydown Area B and Laydown Area E have no permanent impacts, so are unaffected by the BSRA designation as it relates to NCCP/HCP mitigation. A permanent impact is proposed at Work Area 1/Northern Tie-In for construction of a new aqueduct structure, but this occurs in developed land that is not subject to mitigation for permanent impacts pursuant to the NCCP/HCP. Therefore, all mitigation would be applied with the impacts occurring outside BSRAs. The Water Authority's San Miguel Mitigation Bank qualifies as a BSRA because it is in the Water Authority's preserve system, so mitigation ratios would be applied at that applicable rate.

native restoration plans in Southern California. The restoration plan would define success criteria appropriate to each affected habitat type, and the Water Authority would monitor and maintain the sites on a quarterly basis for a 5-year period. If a site meets the designated criteria after that period, mitigation would be deemed successful and the Water Authority may terminate maintenance and monitoring. If a site is not meeting the designated criteria, the Water Authority may elect to continue maintenance and monitoring to improve the conditions at the site, or they may deem the mitigation unsuccessful and consider the site as a permanent impact subject to off-site mitigation obligations of the NCCP/HCP. The Water Authority must receive concurrence from the Wildlife Agencies that each restoration effort is successful, as discussed in Section 6.6 of the NCCP/HCP. Post-construction restoration of temporary habitat impacts is an obligation under the NCCP/HCP to minimize impacts; implementing this requirement would keep the project's temporary impacts on habitat less than significant. Compliance with obligations of the NCCP/HCP ensures the project's impacts on sensitive vegetation communities would be less than significant.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less-Than-Significant Impact. The July 2022 reconnaissance survey included a review of the study area for wetlands and waters features that may be under federal and/or state jurisdiction. As currently designed, the project would not result in direct impacts on any jurisdictional aquatic resource or riparian vegetation community. The N. Centre City Parkway trench alignment passes adjacent to riparian vegetation that was identified as falling under CDFW jurisdiction, associated with a non-wetland waters of the U.S. feature. The project would entail trimming of oak tree branches that hang over the road shoulder in this location, but no tree removal would occur, and the underlying stream feature would be unaffected. Tree trimming will be conducted in compliance with the Water Authority's NCCP/HCP. This would not be a significant impact pursuant to CEQA and would not require a Streambed Alteration Agreement from CDFW. This also would not constitute a direct impact on the riparian vegetation community pursuant to the NCCP/HCP; therefore, it is not counted as a temporary impact and would not require post-construction habitat restoration. The project's impact on jurisdictional features would be less than significant.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less-Than-Significant Impact. Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the immigration and emigration of animals. Wildlife corridors contribute to population viability by (1) ensuring the continual exchange of genes between populations, which helps maintain genetic diversity; (2) providing access to adjacent habitat areas, representing additional territory for foraging and mating; (3) allowing for greater carrying capacity; and (4) providing routes for colonization of habitat lands following local population extinctions or habitat recovery from ecological catastrophes (e.g., fires). The project work areas are situated within and along public roadways and developed properties. There are no major rivers or other contiguous open space that would serve as a migratory corridor. Given the study area setting, it is likely that birds would be the primary wildlife group that could use native habitat in the various project work areas as a steppingstone-type linkage to other territories. The project's temporary impact on small pieces of native habitat would not significantly disrupt this potential migratory use by birds, and post-construction restoration of native habitat would ensure continued use in the future. No wildlife nursery sites were observed or are known to exist within or

immediately adjacent to project work areas. Therefore, the project's impact on migration, wildlife corridors, and wildlife nursery sites would be less than significant.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The project is not subject to any local policies or ordinances protecting biological resources. Therefore, no impact would occur. Discussion of the project's consistency with the Water Authority's NCCP/HCP is provided in Section 3.4(f).

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less-Than-Significant Impact. The Water Authority's NCCP/HCP describes how the Water Authority would implement its long-term agreement with the Wildlife Agencies, wherein the Wildlife Agencies would issue incidental take authorization under the NCCP Act and Section 10 of the federal ESA. Under the NCCP/HCP, take authorization applies to identified Covered Activities and the potential impacts to sensitive resources associated with implementation of such activities. In doing so, the NCCP/HCP implements streamlined project permitting and environmental compliance for Covered Activities, resulting in a long-term NCCP/HCP that takes a comprehensive approach to conservation of Covered Species and their habitat.

The Water Authority's 992,000-acre NCCP/HCP Plan Area (Plan Area) covers the western third of San Diego County and a portion of southwestern Riverside County. The Plan Area comprises the area within which all Water Authority incidental take will occur and will be permitted under the NCCP/HCP. The Plan Area includes habitat in and around Water Authority facilities, undeveloped parts of the Water Authority ROW, and the Preserve Area, which is made up of Habitat Management Areas (HMAs) and Managed Mitigation Areas (MMAs). The 1,920-acre managed Preserve Area is a system composed of six existing and proposed upland and wetland HMAs, from which mitigation credits will be deducted by the Water Authority to compensate for impacts from Covered Activities to sensitive vegetation communities. The 1,147 acres of MMAs represent previously conserved, regionally important habitat lands that have been acquired by the Water Authority to mitigate for impacts associated with other projects. The MMAs would not provide mitigation credits for future projects; however, similar to the HMAs, they represent important habitat linkages and connectivity in areas where little natural habitat remains. The Plan Area comprising the Probable Impact Zone is where the Water Authority's Planned and Future Projects and nearly all Covered Activities will occur over the 55-year term of the NCCP/HCP. The Probable Impact Zone is identified as 1,000 feet on either side of the pipelines or facilities, or approximately 64,600 acres along the existing pipeline ROWs and surrounding other appurtenant water conveyance, storage, and treatment facilities. Covered Activities occurring in the remainder of the Plan Area would require a minor or major NCCP/HCP amendment prior to impacts to Covered Species or their habitats.

The study area is entirely within the NCCP/HCP's Probable Impact Zone and is a Covered Activity under the NCCP/HCP as a capital improvement program project, pursuant to NCCP/HCP Section 5.1.1.1 (construction of new pipelines and ancillary facilities), and as an operations and maintenance activity pursuant to Section 5.2.2 of the NCCP/HCP (replacement of pipelines and minor support facilities/appurtenances).

The NCCP/HCP provides the Water Authority a mechanism for take authority under the federal ESA and consistent with the NCCP Act. Therefore, the NCCP/HCP addresses direct and indirect impacts to listed species discussed in Section 3.4(a). Applicable NCCP/HCP measures to address direct and indirect impacts to sensitive species would be implemented, as described in Section 3.4(a). As discussed in Section 3.4(b), the project would mitigate direct impacts to habitat through off-site mitigation and on-site restoration in accordance with the requirements of the NCCP/HCP. The Wildlife Agencies will review this IS/MND as part of the public review process to verify conformance with the adopted NCCP/HCP.

Based on the foregoing discussion, there is no impact pursuant to CEQA related to conflicts with the Water Authority's NCCP/HCP.

Other Regional Habitat Conservation Plans

The NCCP/HCP is designed to provide strategic contributions to regional conservation efforts and avoid and/or minimize impacts to existing preserve lands to the extent feasible. This approach to preserve planning and conservation efforts enables the NCCP/HCP to provide support to and be compatible with other regional conservation plans with which the Plan Area overlaps (numerous existing and in-process NCCP/HCPs in San Diego County and several NCCP/HCPs in western Riverside County). Areas outside the Water Authority's ROW that are identified as preserves in these NCCP/HCPs are considered BSRAs under the Water Authority's NCCP/HCP.

Work Area 1/Northern Tie-In, Laydown Area B, and Laydown Area E occur within the County Multiple Species Conservation Plan (MSCP) Pre-Approved Mitigation Areas (PAMAs), which meet the definition of a BSRA as stated in Section 6.5.1.4.1 of the Water Authority's NCCP/HCP. The project's permanent impacts in PAMA lands are limited to developed areas lacking native habitat, which do not require mitigation pursuant to the NCCP/HCP. Temporary impacts on native habitat within PAMA lands occur at Laydown Area B, where the project would remove an area of disturbed Diegan coastal sage scrub. These one-time temporary impacts in this BSRA will be mitigated by on-site restoration pursuant to Section 6.5.1.4.2 of the NCCP/HCP. No off-site mitigation is required for these one-time temporary impacts. Implementation of this habitat restoration and other required NCCP/HCP measures listed in Appendix A would ensure the project would not result in a significant conflict with the MSCP. Therefore, impacts would be less than significant.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

This section is based on the Cultural Resources Inventory Report (cultural report) prepared for the project by Dudek in October 2022. The cultural report is included as Appendix D to this IS/MND.

Records Search

Dudek requested a cultural resources records search of the project work areas and a 1-mile radius from the South Coastal Information Center in August 2021. The records search identified 59 studies that have been performed within 1 mile of the project work areas, 12 of which encompass at least a portion of the project area. These studies include several survey reports for I-15 and one report, SD-1962, included evaluations of three archaeological sites that are outside but adjacent to the project area.

SD-1962. This study included an archaeological survey and significance testing of three archaeological sites prior to the development of I-15. In 1971, San Diego State University surveyed the I-15 alignment and identified three sites near the project work areas: CA-SDI-4558, CA-SDI-4562, and CA-SDI-4562A. Segments were resurveyed in 1976 and Caltrans conducted archaeological testing in 1977. The study determined that CA-SDI-4562 consists of a surface scatter with no temporally sensitive artifacts and no subsurface component. CA-SDI-4562A was destroyed by a soil borrowing operation in the 1960s, with no subsurface component. CA-SDI-4558, conversely, was a well-preserved prehistoric habitation site with a high potential for buried deposits.

The records search also identified 32 previously recorded cultural resources within 1 mile of the project area, with one cultural resource recorded within the project work areas: P-37-033557, Old Highway 395. The historic resources identified in the records search include Old Highway 395, four rock features, two structures, a water reservoir, a water flume, a refuse scatter, and two isolates. Prehistoric sites identified in the records search include eight artifact scatters, six milling stations, five habitation/camp sites, and two isolates. P-37-004558 is the nearest prehistoric resource and consists of a rich habitation site located approximately 0.3 miles outside of the project work areas. The results of the records search are provided in Appendix D.

P-37-033557/Old Highway 395. Old Highway 395 was the main north–south thoroughfare for eastern San Diego County. In 2018, California legislators designated the segment constructed prior to 1935 as Historic State Highway Route 395. In 2018, Old Highway 395 was recommended eligible for the National Register of Historic Places under Criterion A and the California Register of Historical Resources under Criterion 1.

The proposed project would involve the installation of pipeline beneath a segment of P-37-033557, which is currently called N. Centre City Parkway. This segment of P-37-033557 was part of the 1947–1950 realignment and has maintained that same alignment since. Installation of the project would require open-cut trenching into P-37-033557.

Native American Heritage Commission Sacred Lands File Search

Dudek requested a Native America Heritage Commission (NAHC) search of their Sacred Lands File on August 13, 2021, for the project area and a 1-mile buffer. NAHC provided results on September 10, 2021. The NAHC results were positive but did not specify whether any resources were identified within the project area of potential effect. NAHC recommended contacting the San Pasqual Band of Mission Indians. The NAHC response also included a list of tribal representatives who should be contacted. Dudek mailed outreach letters to the listed representatives, including the San Pasqual Band of Mission Indians, on September 29, 2021. To date, four tribal representatives have responded to NAHC related outreach (Appendix D).

Assembly Bill 52 Tribal Outreach

In compliance with Assembly Bill (AB) 52, the Water Authority, as lead agency, is responsible for conducting government-to-government consultation with pertinent tribal entities. Refer to Section 3.18 of this IS/MND for a discussion regarding AB 52 and tribal cultural resources.

Surveys

An intensive pedestrian field survey of accessible areas was conducted by Dudek on July 14, 2022, and an additional survey was conducted on August 2, 2022. All survey work was conducted employing standard archaeological procedures and techniques consistent with the Secretary of the Interior's Standards. The project area shows signs of having been almost completely disturbed. The majority of the project work areas have undergone extensive ground alteration and have been leveled, developed, and covered by previous development and landscaping. This is especially true of the I-15 corridor. There is sparse vegetation in some of the laydown areas that has grown after initial ground disturbance.

Dudek archaeologists confirmed the presence of P-37-033557 in the project work areas. The field surveys confirmed that this segment of Old Highway 395 has been maintained and is currently in use. No other artifacts or features were identified during these surveys.

Archival Research

Historic aerial images were reviewed to understand the development of the project area and surrounding properties at historicaerials.com (Appendix D). Historic aerial photographs of the project area were available for 1938, 1946, 1947, 1953, 1964, 1967, 1978, 1980, 1981–1986, 1988–1991, 1993–2000, 2002, 2003, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020. The historic aerial from 1938 shows the project area consists of undeveloped land, agricultural fields, and dirt roads without a prominent north–south throughfare. By 1953, Old Highway 395 was established, but the surrounding land still consisted of undeveloped land and agricultural fields. Between 1978 and 1980, I-15 was constructed and the terrain of the project area completely changed. Massive earthmoving operations had transformed the area and the ground surface had been completely graded. Despite the massive earthmoving operation, Old Highway 395, some of which is now N. Centre City Parkway, appears to have retained its alignment and remained in use during the construction of I-15.

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less-Than-Significant Impact. As discussed in the introductory paragraphs to this section, Old Highway 395 was recommended as eligible for the National Register of Historic Places under Criterion A and the California Register of Historical Resources under Criterion 1 but was not evaluated for significance as part of that recommendation. The proposed project would involve the installation of pipeline beneath a segment of Old Highway 395 that is currently N. Centre City Parkway, a part of the County's circulation system. As part of the County's circulation system, N. Centre City Parkway has been subject to maintenance and repairs, such as repaving, and the road is not maintained as a historic resource. The project would involve trenching and then repaving the affected area to return to similar pre-project conditions consistent with County roadway standards. The project would also result in the permanent installation of at-grade access structures and pull boxes and small aboveground appurtenances such as air vents within and immediately surrounding portions of N. Centre City Parkway. Upon completion of construction, N. Centre City Parkway would resume its current use and its current alignment would remain unchanged. New appurtenances and access structures would be similar to other existing and typical infrastructure located on the shoulders of roadways. Therefore, the project would not result in a substantial adverse change in the significance of Old Highway 395 and impacts would be less than significant.

The survey and archival research indicated that the mobile home development located adjacent to Laydown Area C was built around 1950. All construction-related work, including staging, storage, stockpiling, and ingress/egress would be limited to the open disturbed areas. Existing structures, foundations, and landscaping would be fenced off and avoided during all phases of construction. Upon completion of construction, Laydown Area C would be returned to pre-project conditions. Therefore, the project would not result in a substantial adverse change to built structures within Laydown Area C, and evaluation of this property as a significant historic resource is not necessary.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less-Than-Significant Impact. The cultural resources inventory of the project indicates that there is a moderate sensitivity for encountering previously unknown intact subsurface archaeological deposits during project construction. The South Coastal Information Center records search did not identify any resources within the project work areas (except P-37-033557, discussed in Section 3.5[a]), the review of historic aerial photographs showed extensive earthmoving and terrain reconfiguration, and the pedestrian survey did not identify any resources within the project work areas. However, the records search did identify cultural resources in the immediate surrounding area. NAHC reviewed the Sacred Lands File and stated that the results were positive for Native American resources but did not specify whether any resources were identified within the project work areas. Native American representatives contacted during the outreach process recommended monitoring due to heightened cultural sensitivity relating to the presence of traditional cultural properties and tribal cultural resources near the project alignment. Additionally, due to when N. Centre City Parkway was constructed, it was likely not subject to archaeological or Native American review. Due to the surrounding culturally sensitive area, there is a moderate potential that intact, buried archaeological deposits may be present beneath N. Centre City Parkway. No resources were identified in the already cleared and leveled laydown areas. There is low potential for encountering archaeological deposits under I-15 due to the extensive earthwork conducted for construction of the freeway.

Project construction may encounter buried archaeological deposits during trenching, clearing of the ground surface, or excavation of the tunneling pits/access structures. With implementation of the project-specific cultural resources monitoring plan identified in Section 2.8, Water Authority General Conditions/Project Design Features, which would require full-time archaeological and Native American monitoring of ground disturbance of identified work areas, impacts would be less than significant.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less-Than-Significant Impact. The project work areas and laydown areas are not located within a known cemetery or other areas where human remains have a higher potential to be discovered. In the unlikely event that the project results in inadvertently uncovering human remains interred outside of dedicated cemeteries, the project would be subject to compliance with Section 7050.5 of the California Health and Safety Code, which specifies that if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner shall notify NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, NAHC must immediately notify those persons it believes to be the Most Likely Descendant of the deceased Native American. The Most Likely Descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains. Compliance with these applicable regulations would ensure that impacts to human remains would be less than significant.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less-Than-Significant Impact. The project would result in temporary energy consumption during construction.

Electricity

Temporary electric power for as-necessary lighting and electronic equipment (such as heating, ventilation, and air-conditioning equipment and computers inside temporary construction trailers) would be required for project construction. The amount of electricity used during construction would be minimal; typical demand would stem from the use of electrically powered hand tools and several construction trailers by managerial staff during the hours of construction activities. The majority of the energy used during construction would be from petroleum. The electricity used for construction activities would be temporary and minimal; therefore, impacts would be less than significant.

Natural Gas

Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the subsection "Petroleum." Any minor amounts of natural gas that may be consumed as a result of project construction would be temporary and negligible, and would not have an adverse effect; therefore, impacts would be less than significant.

Petroleum

Petroleum would be consumed throughout construction of the project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and vehicle miles traveled (VMT) associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities and on-site haul trucks involved in relocating dirt around the project work areas would rely on diesel fuel. Construction workers would travel to and from the project location throughout the duration of construction using gasoline-powered vehicles. Heavy-duty construction equipment of various types would be used during construction. Overall, because the proposed project would not be unusual as compared to typical construction practices or overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state, the project construction would not result in wasteful, inefficient, or unnecessary consumption of petroleum. Therefore, impacts would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The proposed project would entail the replacement of existing water infrastructure. Thus, the project is not designed to facilitate or encourage renewable energy project development and would not impede the development of renewable energy projects. Construction of the proposed project would involve energy for use of construction equipment and transportation (e.g., worker vehicles and haul trips). These uses would involve a typical amount of use of energy resources, similar to other construction activities. Overall, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, no impact would occur.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

This section is based in part on the geotechnical investigation prepared for the project by Atlas. The Geotechnical Study presenting the results of this investigation is included as Appendix E to this IS/MND. The paleontological resources information presented in this section is based on a paleontological records search conducted for the project by the San Diego Natural History Museum; the results of this search are included as Appendix F to this IS/MND.

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

and

ii) Strong seismic ground shaking?

Less-Than-Significant Impact. The Alquist-Priolo Earthquake Zoning Act (Alquist-Priolo Act) requires the delineation of fault zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development on or near active fault traces to reduce hazards associated with fault rupture. The Alquist-Priolo Earthquake Fault Zones are the regulatory zones that include surface traces of active faults. The project locations are not located in an Alquist-Priolo Earthquake Fault Zone (DOC 2022b). No known active faults cross the project work areas (Appendix E). The nearest active fault to the project alignment is the Elsinore Fault Zone, which is approximately 12.35 miles to the northeast (Appendix E). As such, the probability of fault rupture along the project alignment is low (Appendix E). Strong seismic activity along nearby faults could result in ground shaking conditions, which are a common hazard in much of Southern California. The proposed project would not include habitable structures or structures that could result in risk of loss, injury, or death in the event of strong seismic ground shaking. The new access structures would be constructed to the standards of the most recent California Building Code, including seismic structural requirements. Compliance with these requirements would reduce the potential risk to both people and structures with respect to strong seismic ground shaking. Project design is subject to engineering design standards that consider the likelihood of seismic conditions. As part of the project design process, continued geotechnical investigations would be performed to inform final design of the project relative to potential geotechnical risks. Therefore, impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less-Than-Significant Impact. Liquefaction occurs when a buildup of pore water pressure occurs in the affected soil layer to a point where a total loss of shear strength may occur during a seismic event, causing the soil to behave as a liquid. Soils prone to liquefaction are not mapped within the project alignment. As determined by the geotechnical investigation, considering the lack of shallow groundwater and underlying soils, liquefaction is not a geologic concern (Appendix E). The project would not increase the risk from seismic-related ground failure impacts, including liquefaction. Therefore, impacts would be less than significant.

iv) Landslides?

Less-Than-Significant Impact. Landslides typically occur on moderate to steep slopes that are affected by such physical factors as slope height, slope steepness, shear strength, and orientation of weak layers in the underlying geologic units that contribute to landslide susceptibility. The project alignment and work areas are not located within or near steep slopes, and evidence of landslide or slope instabilities was not observed as part of the geotechnical investigation (Appendix E). Work Area 4/Air Valve Vault is located at the top of a small slope with an elevation differential of approximately 30 feet from N. Centre City Parkway. As part of the project, the area at the top of the slope would be graded and stabilized around the new

access vault structure to allow for permanent maintenance access. The engineering design of this small slope would appropriately consider on-site conditions to ensure a stable area for Water Authority maintenance access. As noted previously, the final location of this new access structure is still under design consideration and may be moved from the top of the slope to immediately adjacent to N. Centre City Parkway. In either location, appropriate engineering design would consider site conditions for grading required in this area. The project would not entail any other features that would cause or exacerbate landslide risks. Therefore, impacts would be less than significant.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less-Than-Significant Impact. Project-related ground disturbance would be subject to the Water Authority' standard construction BMPs, as stated in Section 2.8, and would comply with existing regulatory requirements and standards related to geology and soils, both of which would serve to limit the potential for erosion and loss of topsoil. This includes preparation and implementation of a SWPPP in compliance with the Construction General Permit (2009-009-DWQ) to minimize the potential of sedimentation and soil erosion. The BMPs and regulatory requirements would minimize and reduce potential for soil erosion and the loss of topsoil from the relatively small areas that would be temporarily disturbed during construction. Post-construction stabilization of all temporary work areas, as is required to close out the project's SWPPP, would return sites to their pre-project conditions and prevent erosion in the long term. Therefore, impacts would be less than significant.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less-Than-Significant Impact. The geotechnical investigation did not identify potential hazards associated with soil or geological stability, including landslide, spreading, subsidence, liquefaction, or settlement. The project design process will entail continued geotechnical investigations to inform final design and construction of the project relative to minimization of potential geotechnical risks, including soil stability, during both construction and operation of the project. With implementation of standard engineering design protocols, impacts would be less than significant.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less-Than-Significant Impact. Expansive soils are clay based and tend to increase in volume due to water absorption and decrease in water volume due to drying. The geotechnical investigation indicated that expansive clay minerals may be encountered along the project alignment. As part of the project design process, continued geotechnical investigations would be performed to inform final design of the project relative to potential geotechnical risks, including expansive soils. Such design considerations may include temporary supports for the jacking and receiving shafts as part of tunnel construction. As such, the project would employ standard engineering protocols to limit the potential effects of soils conditions on project-related infrastructure. Therefore, impacts would be less than significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less-Than-Significant Impact with Mitigation Incorporated. The project area is located within the Peninsular Ranges Geomorphic Province (Appendix E). Published geological mapping indicates that the project area is underlain by middle to late Pleistocene age (774,000 to 11,700 years old) Quaternary alluvium and Cretaceous age (>66 million years old) plutonic igneous bedrock (Appendix E). The Pleistocene age deposits have been assigned a moderate sensitivity for the presence of paleontological resources, whereas the plutonic igneous rocks have no potential for paleontological resources (Appendix F). A field survey of the project area conducted by Dudek paleontologist Jason Collins on July 14, 2022, confirmed the desktop geologic review of the site and surroundings, and no fossils were observed.

According to the records search conducted by the San Diego Natural History Museum, there are no paleontological localities documented within a 1-mile radius buffer of the project alignment (Appendix F). However, fossil localities are known from Pleistocene age sedimentary deposits elsewhere in northern San Diego County. These sediments have produced middle- to late Pleistocene age terrestrial plants, freshwater and terrestrial invertebrates, and terrestrial mammals in sites near Fallbrook, Vista, Carlsbad, and Oceanside, California. Therefore, implementation of the project has the potential to uncover paleontological resources in areas where excavation extends into Pleistocene age sediments. This would occur in three segments of the project's trench excavation and during development of the tunnel jacking shaft and receiving shaft. The depth that these sediments occur is generally limited to the first 10 feet beneath the existing ground surface, and beneath a layer of fill material that is present throughout but that varies in its depth. With the implementation of MM-GEO-1, which would require paleontological monitoring of earthwork in Pleistocene age Quaternary alluvium, potentially significant impacts would be reduced to a level below significance.

Mitigation Measures

MM-GEO-1 Prior to the commencement of construction, a qualified paleontologist shall be retained by the Water Authority. The paleontologist will create a Worker's Environmental Awareness Program (WEAP) pamphlet that will be provided as training to construction personnel to understand regulatory requirements for the protection of paleontological resources. This training shall include examples of paleontological resources to look for and protocols to follow if discoveries are made. The paleontologist shall develop the training and any supplemental materials necessary to execute said training.

The Water Authority will identify in the project's final construction drawings and/or specifications the locations where earthwork will occur in Pleistocene age sediments and will secure the services of a qualified paleontological monitor to be present during these activities. The monitor will meet the 2010 Society for Vertebrate Paleontology standards, and will work under the supervision of a qualified Lead Paleontologist.

In the event that paleontological resources are encountered when a monitor is not on site, all construction shall cease within at least 50 feet of the discovery and the Lead Paleontologist must be notified immediately. The paleontological monitor and the Lead Paleontologist shall have the authority to temporarily divert the construction equipment around the find to allow for formal evaluation.

All significant fossils collected during project construction will be prepared for curation in a properly equipped paleontology laboratory. All fossils collected during project construction shall be donated to a public, non-profit institution with a research interest in the materials within San Diego County or other local repository. Accompanying notes, maps, and photographs shall also be filed at the repository.

A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report will include a summary of the field and laboratory methods, an overview of the geology and paleontology in the project vicinity, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. A copy of the report shall be submitted to the Water Authority and the designated museum repository.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gas (GHG) emissions. There are currently no established thresholds for assessing whether the GHG emissions of a project, such as this project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated at a project level under CEQA.

The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor's

Office of Planning and Research's Technical Advisory "Discussion Draft CEQA and Climate Change Advisory" states the following (OPR 2018a):

> Neither the CEQA statute nor the CEQA Guidelines prescribe thresholds of significance or particular methodologies for performing an impact analysis. This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable.... Even in the absence of clearly defined thresholds for GHG emissions, such emissions must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact.

Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2018a).

Amendments to Section 15064.4 of the CEQA Guidelines were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Section 15064.4 specifies that a lead agency "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project" (14 CCR 15064.4). Section 15064.4 also provides lead agencies with the discretion to determine whether to assess those emissions quantitatively or to rely on a qualitative analysis or performance-based standards. In addition, the CEQA Guidelines specify that "when adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7[c]).

In the absence of a locally adopted numeric threshold by regional experts and agencies (e.g., SDAPCD), the project is being evaluated according to CEQA Guidelines Section 15064.7(c), which recommends considering whether a project's GHG emissions meet the California Air Pollution Control Officers Association (CAPCOA) 900 metric tons (MT) carbon dioxide equivalent (CO_2e) per year screening level threshold. The screening level threshold was developed based on various land use densities and future discretionary project types to determine the size of projects that would likely have a less than cumulatively considerable contribution to climate change.

The CAPCOA threshold was developed to ensure capture of 90% or more of likely future discretionary developments. The objective was to set the emissions threshold low enough to capture a substantial fraction of future development while setting the emission threshold high enough to exclude small development projects that would contribute a relatively small fraction of cumulative statewide GHG emissions. A development capacity threshold was determined to capture approximately 90% of residential units. GHG emissions associated with 50 single-family residential units were estimated and found to be 900 MT CO_2e, establishing the basis for demonstrating that cumulative reductions are being achieved across the state for residential development.

CAPCOA's 900 MT CO_2e per year threshold was developed to meet AB 32's state target of reducing emissions to 1990 levels by the year 2020. Since adoption and evaluation of this threshold, Senate Bill (SB) 32 was passed to set a revised statewide reduction target to reduce emissions to 40% below 1990 levels by the year 2030. Although the CAPCOA threshold does not consider the reduction targets set by SB 32, the CAPCOA threshold was developed with an aggressive project-level GHG emission capture rate of 90%.

The CAPCOA threshold of 900 MT CO_2e represents a more stringent screening level than has been approved by other air districts in compliance with 2030 statewide reduction targets.[4] Due to the aggressive GHG emission capture rate, the CAPCOA threshold would still act as a viable threshold to reduce project GHG emissions proposed after 2020 and meet SB 32 targets. Furthermore, as state legislative requirements such as Building Energy Efficiency Standards and transportation-related efficiency measures become increasingly stringent over time, future project GHG emissions would be reduced, helping to meet state emission reduction targets. Projects that would generate emissions beyond the 900 MT CO_2e per year screening level threshold would be required to implement feasible on-site mitigation measures to reduce their impacts on climate change. Projects that meet or fall below CAPCOA's screening level threshold are expected to result in 900 MT CO_2e per year of GHG emissions or less and would not require additional analysis. Therefore, this assessment uses the 900 MT CO_2e per year screening threshold to evaluate whether the project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less-Than-Significant Impact. Construction of the project would result in GHG emissions that would primarily be associated with the use of off-road construction equipment, haul trucks, on-road vendor trucks, and worker vehicles.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario used in Section 3.3, Air Quality (see also Appendix B). On-site sources of GHG emissions include off-road equipment and off-site sources including vendor trucks and worker vehicles. Table 3.8-1 presents construction emissions for the project in 2024, 2025, and 2026 from on-site and off-site emission sources.

Table 3.8-1. Estimated Annual Construction Greenhouse Gas Emissions – Unmitigated

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2024	235.40	0.04	0.01	238.69
2025	1,099.93	0.17	0.02	1,111.35
2026	176.81	0.04	<0.01	178.39
			Total	**1,528.43**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent; <0.01 = reported value less than 0.01. See Appendix B for complete results.
The values shown are the annual emissions reflecting the CalEEMod outputs.
Totals may not sum precisely due to rounding.

As shown in Table 3.8-1, the estimated total GHG emissions during construction would be approximately 239 MT CO_2e in 2024, 1,111 MT CO_2e in 2025, and 178 MT CO_2e in 2026, for a total of approximately

[4] As a comparison to the CAPCOA threshold, other regional air districts such as the Sacramento Metropolitan Air Quality Management District (SMAQMD) have updated their GHG emission significance thresholds to ensure that future proposed projects help meet the state's 2030 emissions reduction target and do not result in a cumulative impact to climate change. In April 2020 SMAQMD published updated project screening levels and determined that projects estimated to generate less than 1,100 MT CO_2e per year would not result in a significant cumulative impact. This threshold was developed to demonstrate compliance with the statewide reduction targets in 2030, and the screening-level threshold was determined by SMAQMD to capture 98% of total GHG emissions (SMAQMD 2020).

1,528 MT CO_2e over the construction period. Estimated project-generated construction emissions amortized over 30 years would be approximately 51 MT CO_2e per year. As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the project would be short term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Amortized construction emissions would be below the screening GHG threshold of 900 MT CO_2e per year. Therefore, environmental impacts related to the project's GHG emissions would be less than significant.

b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less-Than-Significant Impact. There are regional and statewide plans and goals that have been set forth to reduce GHG emissions at the regional and statewide scale, such as the CARB Scoping Plan and SANDAG's Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS). The project's consistency with these plans and future GHG reduction goals is described below.

Consistency with SANDAG's RTP/SCS

At the regional level, SANDAG's RTP/SCS has been adopted for the purpose of reducing GHG emissions attributable to passenger vehicles in the San Diego region. In October 2015, SANDAG adopted its RTP/SCS, which meets CARB's 2020 and 2035 reduction targets for the region.

While the RTP/SCS does not regulate land use or supersede the exercise of land use authority by SANDAG's member jurisdictions, the RTP/SCS is a relevant regional reference document for purposes of evaluating the intersection of land use and transportation patterns and the corresponding GHG emissions. The RTP/SCS is not directly applicable to the project because the underlying purpose of the RTP/SCS is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout San Diego County, as stipulated under SB 375. CARB has recognized that the approved RTP/SCS is consistent with SB 375 (CARB 2015). The RTP/SCS is not directly applicable to the project because the underlying purpose of the RTP/SCS is to provide direction and guidance by making the best transportation and land use choices for future development; still, the project would not conflict with the goals and policies of the RTP/SCS. Additionally, the project would not impact local transportation and land use during the duration of construction.

Project Consistency with CARB's Scoping Plan

The Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs (CARB 2017). The Scoping Plan is not directly applicable to specific projects, and it is not intended to be used for project-level evaluations.[5] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-global-warming-

[5] The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

potential GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others. To the extent that these regulations are applicable to the project, the project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

Project Consistency with Senate Bill 32 and Executive Order S-3-05

The proposed project would not impede the attainment of the most recent state GHG reduction goals identified in SB 32 and Executive Order (EO) S-3-05. SB 32 establishes a statewide goal of reducing GHG emissions to 40% below 1990 levels by 2030, while EO S-3-05 establishes a statewide goal of reducing GHG emissions to 80% below 1990 levels by 2050. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory for meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan (First Update) that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014, p. ES2). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update states the following (CARB 2014, p. 34):

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050.[6] Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32 and EO S-3-05. This is confirmed in the 2017 Scoping Plan, which states the following (CARB 2017, p. 7):

> The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically [feasible,] and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

As discussed previously, the project is consistent with CARB's 2017 Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions. In September 2018, EO B-55-18 was signed, which commits the state to total carbon neutrality by 2045. However, because the specific path to

[6] **Footnote 63 from First Update (CARB 2014):** Greenblatt, J. 2013. Estimating Policy-Driven Greenhouse Gas Emissions Trajectories in California: The California Greenhouse Gas Inventory Spreadsheet (GHGIS) Model. Lawrence Berkeley National Laboratory. http://eetd.lbl.gov/publications/estimating-policy-driven-greenhouse-g.

compliance for the state in regard to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional reduction measures for the project would be speculative and cannot be identified at this time.

With respect to future GHG targets under SB 32 and EO S-3-05, CARB has also made clear that its legal interpretation is that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet SB 32's 40% reduction target by 2030 and EO S-3-05's 80% reduction target by 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to allow the state to continue on its trajectory toward meeting these future GHG targets. Therefore, impacts would be less than significant.

Project Consistency with San Diego County Water Authority Climate Action Plan

The San Diego County Water Authority adopted its 2019 Climate Action Plan (CAP) in June 2020. The document identifies GHG emission reduction strategies to be incorporated as part of project development and long-term Water Authority program planning. The Water Authority does not currently have adopted or recommended thresholds of significance for analyzing GHG emissions generated from project development for CEQA impact evaluation. The CAP includes an inventory of current and projected future GHG emissions and their sources, reduction targets and anticipated milestones, reduction measures to achieve identified GHG emission targets, and a monitoring and reporting program to ensure strategy implementation. Reduction measures identified in the CAP include support operations and pump upgrades; vehicle fleet conversion and VMT reduction; solar PV installation where feasible; and in-line hydropower generation where feasible. The project would entail replacement and improvement of existing pipeline infrastructure, and as such, the site would be utilized for a similar purpose as that under existing conditions and would not introduce a new land use or facility that would generate substantially greater GHG emissions. As such, the project would not impede implementation of the CAP, nor would it conflict with the overall reduction measures currently pursued by the Water Authority. Therefore, the impact associated with the potential for the project to conflict with the Water Authority's CAP would be less than significant.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less-Than-Significant Impact. All project-related transportation, use, and disposal of hazardous materials would be limited to common substances used to maintain and operate construction equipment. Storage, handling, and transport of all potentially hazardous materials used during construction would occur in compliance with applicable federal, state, and local regulations implemented to minimize risk of hazardous materials release. Hazardous materials used during construction would be stored in the proposed laydown areas, away from environmentally sensitive areas, in quantities that would not pose significant hazard to the public in the event of a release. Implementation of a SWPPP in compliance with the Construction General Permit (2009-009-DWQ) and standard construction best management practices (BMPs) would prevent the use of these materials from causing a significant hazard to the public or environment. Operation of the proposed project would not substantially change from the existing maintenance activities performed by Water Authority staff. With the implementation of a SWPPP and standard construction BMPs, any impacts related to the transport, use, or disposal of hazardous materials would not have a substantial adverse effect on the environment. Therefore, impacts would be less than significant.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less-Than-Significant Impact. As stated in Section 3.9(a), implementation of a SWPPP and standard construction BMPs would minimize the potential for accidental release of hazardous materials into the environment. Operation of the proposed project would involve routine maintenance, which would require the use of potentially hazardous materials. During both construction and operation, the project would proceed in compliance with applicable federal, state, and local regulations implemented for the minimization of hazardous materials risk. Therefore, impacts related to the accidental release of hazardous materials would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The nearest school to the project area is North Broadway High School (2301 North Broadway, Escondido, California 92026), located approximately 0.8 miles southeast of Laydown Area C. Therefore, the project alignment is not located within 0.25 miles of a school; no impact would occur.

d) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Hazardous Waste and Substances Sites (Cortese List) is a planning document providing information about the location of hazardous materials release sites. California Government Code Section 6596.2 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List (CalEPA 2022).

According to the Department of Toxic Substances Control's EnviroStor database, the nearest identified cleanup site is Chatham Brothers Barrel Yard (ID# 37490029), located approximately 6.5 miles southeast of the project area (DTSC 2022). This hazardous materials site is located at an adequate distance such that it would not present a worker hazard for construction crews. Therefore, no impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less-Than-Significant Impact. The closest airport to the project is the Ramona Airport, located approximately 9.5 miles southwest of the project area. A portion of the project work area is located within the airport's Airport Influence Area Review Area 2 (ALUC 2011). The project work area is not located in any identified safety zones or within the range of excessive noise. Review Area 2 consists of locations within airspace protection (land use limitation in areas of high terrain) and overflight notification areas. Project construction would be temporary and would occur in a lower topographical area compared to the immediate surrounding higher-elevation hillsides. Furthermore, the project would not introduce any new residential uses or employment centers that could expose people to a safety hazard from excessive aircraft noise. Impacts would be less than significant.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less-Than-Significant Impact. Construction of the project would temporarily disrupt a portion of N. Centre City Parkway and reroute traffic via surrounding public roadways. As identified in Section 2.8, Water Authority General Conditions/Project Design Features, to minimize disruption to communities from construction traffic the Water Authority would prepare and implement a traffic control plan to the approval of the County for the affected portion of N. Centre City Parkway. This would include adequate signage, flaggers, and detouring. First responders would be able to travel through the active work areas along N. Centre City Parkway to access surrounding properties in the event of an emergency. Upon completion of construction, the affected roadways would return to existing conditions. Therefore, implementation of the project would not impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less-Than-Significant Impact. The project area is located within a very high fire hazard severity zone (VHFHSZ) (CAL FIRE 2022). Thus, wildland fires have the potential to occur should the project cause a wildland fire risk, increase wildland fire risk, increase wildland fire risk in the area, exacerbate the severity of a wildland fire, and/or exacerbate the severity of damage or hazards during a fire.

Project construction would be conducted in accordance with local and state regulations governing fire prevention and safety. As discussed in Section 2.8, a fire prevention and response plan would be prepared by the project contractor, as required by the Water Authority. Additionally, all construction crewmembers would be trained in the requirements of the plan. Implementation and compliance to the fire prevention and response plan would reduce the potential for wildfire ignition.

Upon completion of construction, the project would return to similar to pre-construction conditions. Operation and maintenance of the project would not substantially differ from existing practices and protocol. Therefore, the project would not increase exposure to a significant risk of loss, injury, or death involving wildland fires. Therefore, impacts would be less than significant.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on or off site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less-Than-Significant Impact. Construction of the project would include earthwork activities that, without proper controls, could result in erosion and sedimentation affecting downstream receiving waters and could violate water quality standards. Substances such as oils, fuels, paints, and solvents may be inadvertently spilled within the project area where construction occurs and subsequently conveyed via stormwater to nearby drainages, watersheds, and groundwater. The project area is larger than 1 acre and is therefore subject to the requirements of the NPDES Construction General Permit issued by the San Diego Regional Water Quality Control Board. The permit requires the implementation of stormwater controls and development of a SWPPP to minimize the amount of sediment and other pollutants from being discharged in stormwater runoff during construction and implementation of various temporary BMPs designed to prevent erosion and siltation and the off-site conveyance of various on-site constituents. Similar to surface water quality, groundwater quality

would be protected during project construction through BMPs required by the NPDES permit. BMPs would include spill prevention and cleanup guidelines, dewatering operations guidelines, and stormwater runoff prevention. These BMPs would protect groundwater from contamination by construction activities. Upon completion of construction, the project work areas and laydown areas would return to conditions similar to existing conditions. Therefore, impacts associated with surface water or groundwater quality would be less than significant.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less-Than-Significant Impact. None of the project work areas are located within a designated groundwater basin; as such, there are no adopted groundwater plans related to the project area (DWR 2022). The project would not entail the use of groundwater and thus would not deplete groundwater within the project vicinity. Upon completion of construction, the project work areas and laydown areas would return to similar to pre-project conditions, with the exception of new access structures and other appurtenances. These areas would be small in footprint and would not substantially alter overall permeability of the affected area. As such, various areas of the project area would remain pervious and allow for groundwater recharge. Impacts would be less than significant.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in substantial erosion or siltation on or off site;

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) impede or redirect flood flows?

Less-Than-Significant Impact. The project would not entail permanent changes to drainage patterns in any of the project work areas. An existing stormwater drainage facility, consisting of an existing headwall and culvert underneath Tierra Libertia Road, is located in Work Area 2. During construction, stormwater flows within Work Area 2 (flowing toward the north) would be temporarily routed around the tunneling receiving shaft. Upon completion of construction, a new partially above-grade concrete access vault structure would be located in Work Area 2. Riprap would be installed around the new access vault structure for drainage purposes. However, the existing drainage pattern of this area would remain similar to existing conditions and not be substantially altered such that the project would result in substantial erosion, an increase in runoff, or impedance of flood flows.

As previously discussed, the Water Authority would prepare and implement a SWPPP, which would include construction BMPs to control erosion and sediment during construction activities. With adherence to the SWPPP conditions and standard permitting conditions, construction-related impacts related to soil erosion, siltation, surface water runoff, and redirected flows would remain below a level of significance. Upon

completion of construction, all temporarily disturbed surfaces would be stabilized and restored to initial conditions, including recontouring the site to maintain pre-existing drainage patterns. Therefore, impacts from implementation of the proposed project would be less than significant.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. According to Federal Emergency Management Agency flood maps, the project area is not located within a designated high risk or special flood hazard area (FEMA 2022). Seiches are large waves generated in enclosed bodies of water in response to ground shaking. There are no bodies of water in the vicinity of the project that could pose a hazard due to seiche. The project area is located approximately 13 miles east of the Pacific Ocean, and approximately 1,000 feet above sea level. As such, tsunamis do not pose a hazard to the project. Further, the project would implement BMPs during construction to ensure that flows from the project work areas and laydown areas during construction would not release pollutants into downstream receiving waters. Because the project is not located withing a flood hazard, tsunami, or seiche zone, no impact would occur.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less-Than-Significant Impact. The project is located in the San Diego Basin, which is governed by the Water Quality Control Plan for the San Diego Basin (Basin Plan; RWQCB 1994). The Basin Plan acknowledges the importance of compliance with the Construction General Permit in controlling polluted runoff and sedimentation from construction projects. None of the project work areas are located within a designated groundwater basin; as such, there are no adopted groundwater plans related to the project (DWR 2022). The project would comply with regional and local regulations requiring preparation of a SWPPP and would not obstruct existing water quality control plans. Additionally, the Water Authority will require preparation of and compliance with a SWPPP that specifies BMPs and other control measures to maintain compliance with these regulations. The project does not propose any point-source pollutant discharge that would conflict with the Basin Plan. The project would adhere to construction stormwater regulations and requirements and would not conflict with a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

a) Would the project physically divide an established community?

No Impact. The physical division of an established community typically refers to the construction of a linear feature (such as a major highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and an outlying area. The objective of the proposed project is to replace existing underground water infrastructure, which would not result in the division of an established community. During construction, N. Centre City Parkway and surrounding roadways would be temporary affected by project construction traffic and work. However, access to surrounding properties would be maintained and use of the roads would resume upon completion of construction Operation and maintenance of the project would not substantially differ from existing practices and protocol. The proposed access structures and accessory improvements would operate passively and would not impede movement along access roads. Following construction, operation of the project would be similar to existing conditions. Therefore, no impacts would occur.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed project would entail replacing and improving existing infrastructure. New permanent easements on private property which would be created as part of the project. These easements would be placed over or adjacent to new pipeline infrastructure, similar to the existing Water Authority ROW. The purpose of these easements is to allow continued maintenance access to Water Authority infrastructure that traverses private property. These new easements would not result in a change to land use. The proposed easements on a given parcel would not affect its continued use. Therefore, the proposed project would not be in conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☒	☐

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

and

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Less-Than-Significant-Impact. According to the County's General Plan, the project area is located within Mineral Resource Zone 3 (MRZ-3) (see Figure C-4 of the County of San Diego General Plan). Areas classified as MRZ-3 potentially contain significant mineral resources (County of San Diego 2011). Despite this designation, the project area consists of developed and disturbed land and is not designated as a mineral resource recovery site in the County's General Plan. Additionally, no mineral extraction activities occur in or adjacent to these areas. The project alignment has long been developed as a freeway and as roadway infrastructure. Operation of mineral extraction uses (i.e., heavy machinery and rock-processing equipment) would be incompatible with the underlying land use designations of the site and surrounding existing residences. Therefore, the project would not result in any further loss of availability of the identified resources, and impacts would be less than significant.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

This section is based on the Construction Noise and Vibration Assessment prepared by Dudek, which is included as Appendix G to this IS/MND. A full discussion of regulatory context and methodology can be found in Appendix G. Because the project would not result in substantial changes in operation of Water Authority facilities associated with the project, the technical analysis incorporated into this section addresses potential impacts resulting from construction noise.

Existing Noise Setting

Dudek conducted sound pressure level (SPL) measurements at representative positions near the project alignment on August 11, 2022, to quantify and characterize the existing outdoor ambient sound environment and establish a quantified baseline for a noise assessment. Table 3.13-1 provides the location, date, and time at which these noise level measurements were performed.

Three short-term (ST) noise level measurement locations were selected along the Water Authority's ROW (or otherwise publicly accessible land) to represent outdoor ambient sound environmental conditions considered comparable to those of existing off-site noise-sensitive receivers in the project vicinity. These surveyed locations, referred to as ST1, ST2, and ST3, are displayed in figures provided in Appendix G and described in Table 3.13-1. The measured noise levels, expressed as both equivalent continuous sound level (L_{eq}) and maximum sound level during the measurement interval (L_{max}), are presented in Table 3.13-1. The primary noise source measured and perceived at the sites was I-15 freeway traffic. As shown in Table 3.13-1, the measured SPL at the three sampled locations ranged from approximately 67 A-weighted decibels (dBA) L_{eq} at ST1 to 70.3 dBA L_{eq} at ST2. Table 3.13-1 also presents summarized long-term (LT) SPL measurements recorded over a 28-hour period at a position on Silver Tree Lane referred to as LT1. The intent of this LT SPL measurement was to quantify representative outdoor ambient noise over a full diurnal cycle. The results are consistent with expected changes in I-15 traffic volumes: higher during typical commuter hours, and lower during nighttime hours. Detailed noise measurement data are included in Appendix G.

Table 3.13-1. Measured Baseline Outdoor Ambient Noise Levels

Site	Location/Address	Date and Time (24-hour clock)	L_{eq} (dBA)	L_{max} (dBA)
ST1	Approximately 180 feet east of N. Centre City Parkway roadway centerline on the north side of Silver Tree Lane	2022-08-11, 09:00 to 09:15	67.2	71.9
ST2	Approximately 40 feet east of N. Centre City Parkway roadway centerline on the south side of McKveshal Road	2022-08-11, 09:30 to 09:45	70.3	76.9
ST3	Approximately 20 feet west of Mesa Rock Road roadway centerline at the entrance to 26334 Mesa Rock Road	2022-08-11, 10:15 to 10:30	67.9	80.5
LT1	Approximately 100 feet east of N. Centre City Parkway roadway centerline on the north side of Silver Tree Lane	2022-08-11, 09:00, to 2022-08-12, 13:00	66.4	83.0

Source: Appendix G.
Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; L_{max} = maximum sound level during the measurement interval.

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less-Than-Significant Impact with Mitigation Incorporated. The project would generate construction noise that would be received by residences and businesses in the vicinity of the project work areas and laydown areas. Most construction activity would occur during the day, but the project is also anticipated to generate noise during 10- to 15-day shutdown periods where construction may occur 24 hours per day at

Work Areas 1 and 3. Dudek modeled daytime and nighttime construction noise levels as received at surrounding residences to determine whether the project would result in significant impacts. The results are presented in Appendix G and summarized below.

The project alignment is on unincorporated County land, with the exception of Laydown Area D, which is located within the City of Escondido's municipal boundaries. All nighttime construction activity would occur on unincorporated County land. The Water Authority, as its own legal entity, is not governed by the County's Noise Ordinance (Noise Ordinance; San Diego County Ordinance 9962, which amends Title 3, Division 6, Chapter 4 of the San Diego County Code of Regulatory Ordinances) or the City of Escondido's Noise Ordinance (Section 17-234 of the City's Municipal Code); however, for CEQA purposes, the Water Authority elected to analyze daytime construction noise against the standards established by these jurisdictions.

County of San Diego. Section 36.409 of the County's Noise Ordinance specifies that noise due to construction may not exceed a 75 dBA average over an 8-hour period (L_{eq8hr}). This 75 dBA L_{eq8hr} threshold applies from Monday through Saturday between the allowable hours of construction per Section 36.408 (i.e., 7:00 a.m. and 7:00 p.m.). The Noise Ordinance does not allow operation of construction equipment on Sundays or holidays.

City of Escondido. Section 17-234 of the City's Municipal Code states that noise due to construction may not exceed a 75 dBA L_{eq1hr} at any time. Construction equipment is permitted to operate Monday through Friday (between the hours of 7:00 a.m. and 6:00 p.m.) and on Saturdays (between the hours of 9:00 a.m. and 5:00 p.m.). Unlike the County noise ordinance of noise energy, which is averaged over an 8-hour period, the City's noise ordinance uses a 1-hour average.

Neither the County nor the City have an established construction noise limit for nighttime work and work on Sunday. For nighttime work and work on Sundays, which would occur during the limited 10-to-15-day shutdown periods located in the County, the Water Authority applied a threshold of 66 dBA, which considers the existing freeway noise received by the residences in the vicinity of the project work areas. This threshold represents a 10-dB increase over the quietest noise levels recorded during the long-term measurements, which would be considered a substantial temporary increase pursuant to CEQA.

Although construction noise levels vary from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor, noise exposure levels from the aggregate of concurrently operating construction equipment can be accurately predicted with standardized sound modeling techniques. The following subsections evaluate conventional construction equipment noise emission along the project alignment, noise from staging areas, and noise from expected blasting activities. For the purposes of this noise analysis, "conventional construction" is defined as all construction-related work outside of anticipated blasting activities.

Conventional Construction Noise

Analysis of daytime construction assumed simultaneous operation of excavators, loaders, pavers, heavy trucks, wheeled cranes, generators, concrete saws, tunneling equipment, and other construction equipment. As presented in Table 3.13-2, the estimated hourly construction noise levels are predicted to not exceed 70 dBA L_{eq} at the nearest studied occupied properties, which include residences and businesses. Under these conditions, predicted operation of daytime construction equipment and processes would not exceed the County-based threshold of 75 dBA L_{eq8hr}. Additionally, as shown in Table 3.13-1, construction would be

occurring in an existing noisy environment due to proximity to I-15. Therefore, daytime conventional construction noise would be less than significant. Receptor locations and additional modeling methodology are provided in Appendix G.

Table 3.13-2. Predicted Daytime Conventional Construction Sound Levels at Modeled Receptor Locations

Modeled NSR Locations	Modeled NSR Location Description	Predicted Highest Hourly L_{eq} (dBA)
NSR1	Residence east of North Centre City Parkway on Silver Tree Lane	59
NSR2	Residence west of the I-15 on Windsong Lane, near the proposed underground pipeline crossing	64
NSR3	Residences west of the Bell Marie Winery	60
NSR4	Belle Marie Winery	61
NSR5	Residence on Windsong Lane and east of proposed pipeline Station 23	64
NSR6	Residence at 26064 Mesa Rock Road, or a nearby residence at the intersection of Mesa Ranch and Mesa Rock Road	63
NSR7	Residence at 25990 Mesa Rock Road	61
NSR8	Residence at 25984 Mesa Rock Road	63
NSR9	Residences accessed via 25812 Jesmond Dene Road	63
NSR10	Residence at 25880 Jesmond Dene Road	61
NSR11	Residence near baseline measurement position ST3, east of the intersection of McKveshal Road and N. Centre City Parkway	70
NSR12	Residences accessed via private road that intersects N. Centre City Parkway	70
NSR13	Residence at 26322 Jesmond Dene Road	66

Source: Appendix G.
Notes: NSR = Noise-Sensitive Receptor; L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels.

Construction occurring at night and on Sundays would be limited to the pipeline connection locations at Work Area 1/Northern Tie-In and Work Area 3/Southern Tie-In. Table 3.13-3 shows that modeled locations may exceed the 66-dBA hourly threshold at the receptor nearest to the northern tie-in, referred to as Noise-Sensitive Receptor (NSR) 2. Modeled noise received in the vicinity of the southern tie-in would not exceed the selected threshold.

Table 3.13-3. Predicted Nighttime Conventional Construction Sound Levels at Modeled Receptor Locations

Modeled NSR Locations	Modeled NSR Location Description	Predicted Highest Hourly L_{eq} (dBA)
NSR1	Residence east of North Centre City Parkway on Silver Tree Lane	53
NSR2	**Residence west of the I-15 on Windsong Lane, near the proposed underground pipeline crossing**	**71**
NSR3	Residences west of the Bell Marie Winery	57
NSR4	Belle Marie Winery	55

Table 3.13-3. Predicted Nighttime Conventional Construction Sound Levels at Modeled Receptor Locations

Modeled NSR Locations	Modeled NSR Location Description	Predicted Highest Hourly L_{eq} (dBA)
NSR5	Residence on Windsong Lane and east of proposed pipeline Station 23	50
NSR6	Residence at 26064 Mesa Rock Road, or a nearby residence at the intersection of Mesa Ranch and Mesa Rock Road	45
NSR7	Residence at 25990 Mesa Rock Road	48
NSR8	Residence at 25984 Mesa Rock Road	50
NSR9	Residences accessed via 25812 Jesmond Dene Road	66
NSR10	Residence at 25880 Jesmond Dene Road	60
NSR11	Residence near baseline measurement position ST3, east of the intersection of McKveshal Road and N. Centre City Parkway	51
NSR12	Residences accessed via private road that intersects N. Centre City Parkway	45
NSR13	Residence at 26322 Jesmond Dene Road	49

Source: Appendix G.
Notes: NSR = Noise-Sensitive Receptor; L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels. Bold text indicates modeling exceeds applied threshold.

Exceeding the 66 dBA threshold is considered a significant impact warranting mitigation. MM-NOI-1, detailed below, identifies use of a temporary construction noise barrier at this location to reduce noise levels below the 66 dBA threshold.

This IS/MND assumes the project would construct new access structures, allowing additional maintenance access to the Crossover Pipeline. The addition of these new access points would lead to a slight change in routine Water Authority patrols for inspection/maintenance but would not add personnel trips on a permanent basis. No additional staff is anticipated to be required for continued operation of the proposed project. This slight change in operational routine would not generate substantial noise compared to existing conditions. Therefore, impacts during project operation would be less than significant.

Laydown Area Noise

Noise generated at each laydown area is anticipated to be much lower than the active work areas, resulting primarily from heavy truck trips, short periods of heavy truck idling, and transfer of materials and equipment. As detailed in Appendix G, all predicted staging area noise levels would be less than 50 dBA L_{eq}, well below both the County and City daytime threshold and below the established nighttime threshold. Therefore, noise impacts at the laydown areas would be less than significant.

Blasting and Rock Crushing Noise

Construction of the project requires blasting within N. Centre City Parkway, which would support the fracturing and removal of approximately 4,000 cubic yards of earth (two blasting events) and then another 6,000 cubic yards of earth (three blasting events); approximately 1,544 tons of rock created by these blasts would then be processed with rock crushing machinery at a location assumed to be near each of the blasting areas. Only one blast per day would occur. Table 3.13-4 presents predicted values for the blasting

scenarios, as well as the predicted A-weighted L_{max} for each detonated charge. Each weighing approximately 5 pounds, the installed charges would be detonated in rapid succession; thus, the blasts would be separated by a slight "charge delay." Therefore, each detonation would produce a distinct vibration and noise-producing event, with corresponding magnitudes predicted and presented as "single charge" values in Table 3.13-4. The predicted 1-hour L_{eq} and 12-hour L_{eq} values account for all detonations occurring within a single blast. This assessment assumes that only one blast event would occur in any 12-hour period. Details of the prediction results, based on Dyno Nobel estimation techniques (Dyno Nobel 2010), are included in Appendix G.

Table 3.13-4. Predicted Blast Event Noise and Vibration Levels

Blast Area No. and Horizontal Distance (feet) to nearest NSR	Cubic Yards of Rock Cut per Blast	Single Charge Detonation Airborne Sound Pressure Level (SPL, dBA L_{max}) at the Receiving Structure	Single Charge Detonation Peak Particle Velocity (inches per second)	1-hour L_{eq} for the Blast Event (SPL, dBA)	8-hour L_{eq} for the Blast Event (SPL, dBA)
1 – NSR12 (500 feet)	2,000	85	0.12	79.5	70
2 – NSR10 (500 feet)	2,000	85	0.12	79.7	71

Notes: NSR = noise-sensitive receiver; SPL = sound pressure level; dBA = A-weighted decibels; L_{max} = maximum sound level during the measurement interval; L_{eq} = equivalent continuous sound level (time-averaged sound level).

Predicted 8-hour L_{eq} airborne noise levels for the entirety of each blast event are compliant with the County's daytime construction noise standard. Other project construction noise up to a magnitude of 65 dBA 8-hour L_{eq} could occur during the same day as the blasting event and result in a cumulative project-attributed construction noise level that complies with the County's 75 dBA 8-hour L_{eq} threshold. Therefore, noise impacts from blasting would be less than significant.

A rock-crushing/processing facility would be used on site during construction activities for the processing of blasted rock. The rock-crushing operation would begin with a front-end loader picking up material and dumping the material into a primary crusher. The material would then be crushed, screened, and stacked in product piles. The material would be stockpiled adjacent to the rock-crushing equipment. Electric power would most likely be provided by a diesel engine generator. The primary crusher would generate impulsive noise events, in addition to relatively steady-state or continuous-type noise emission from motors, conveyors, etc. Maximum noise levels associated with the primary crusher would be expected to reach approximately 87 dBA at 45 feet (Appendix G). At this reference noise level and distance, the operating rock crusher could be located no closer than 180 feet to an NSR. At this time, the exact location of the rock crusher is not yet known, and existing residences are located within that distance (180 feet) from the N. Centre City Parkway Work Area. Therefore, noise impacts due to rock crushing would be potentially significant and mitigation is required. With implementation of MM-NOI-2, which requires a minimum distance for placement of the rock crusher from nearby residences, impacts would be reduced to a level below significance.

Mitigation Measures

MM-NOI-1 Temporary Construction Noise Barriers. Prior to the start of nighttime (7:00 p.m. to 7:00 a.m.) or Sunday construction activity at Work Area 1/Northern Tie-In , the Water Authority's contractor shall erect noise barriers between the active work areas and the nearby residence. The noise barriers may be portable barriers, but if portable barriers are used they shall be left in place during all construction activity occurring at night and on Sundays. The barrier shall be composed of materials with a sound transmission class value of 25. The noise barrier design requirement shall be included on the construction specifications.

MM-NOI-2 Rock Crusher Siting. The Water Authority shall require the contractor to site the rock crushing facility at least 180 feet from the nearest residence. This requirement shall be included on the construction plans.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less-Than-Significant Impact. Under certain conditions, construction activities may expose people or structures to excessive groundborne vibration or groundborne noise. For construction vibration impacts, guidance from Caltrans indicates that a vibration velocity level of 0.2 inches per second (ips) peak particle velocity (PPV) received at a structure would be considered annoying by occupants. As for the receiving structure itself, Caltrans guidance recommends that a vibration level of 0.3 ips PPV would represent the threshold for potential risk of building damage, which would be considered excessive vibration.

Dudek's construction noise assessment (Appendix G) also includes consideration of vibration impacts, including vibration impacts due to blasting, and concluded that the project work areas are distant enough from structures and inhabited areas that these thresholds would not be exceeded. Table 3.13-4 indicates that the predicted groundborne vibration level from a single detonation is only 0.12 ips PPV, which would be well below the risk thresholds for building occupant annoyance (0.2 ips PPV) and residential structure damage (0.3 ips PPV). Therefore, the project's vibration impacts would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project is not located within the vicinity of a private airstrip. A portion of the project work areas is located within the McClellan–Palomar Airport Influence Area Review Area 2 (ALUC 2011). The project work areas are not located within any identified boundaries of excessive noise. Review Area 2 consists of locations within airspace protection (land use limitation in areas of high terrain) and overflight notification areas. The project would not introduce any new residential uses or employment centers that could expose people to excessive aircraft noise. No impact would occur.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) ***Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

No Impact. The proposed project would consist of replacement of the existing pipeline. No additional water supply or capacity would result through project implementation. The project would not include or encourage the construction of new homes or businesses. Therefore, no impacts would occur.

b) ***Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

No Impact. The project is located within a mixture of Water Authority ROW, County ROW, and private property with no existing housing or people. Implementation of the project would not affect any existing housing or necessitate construction of replacement housing in the area. Therefore, no impacts would occur.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

No Impact. The proposed project would replace an existing water pipeline. As discussed in Section 3.14, Population and Housing, the project would not induce population growth and therefore would not result in a permanent or temporary increase in demand on fire protection services. The project would not introduce new structures that might require fire protection. Therefore, no impacts would occur.

Police protection?

No Impact. The construction and operation of the project would not have an impact on or result in a need for new or altered police protection services. The project would not induce population growth or result in the addition of housing, schools, or other community facilities that might require police protection. Therefore, no impacts would occur.

Schools, parks, or other public facilities?

No Impact. The project would not induce population growth requiring the expansion or construction of public services such as schools, parks, and other public facilities. Therefore, no impacts would occur

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. As discussed in Section 3.14, Population and Housing, the proposed project would not induce any population growth that would result in increasing the use of existing parks and recreational facilities. Therefore, no impacts to recreational facilities would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project would not include development of recreational facilities. In addition, the project would not induce population growth such that the expansion of existing recreational facilities is required. Therefore, no impacts associated with the construction or expansion of recreational facilities would occur.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Pursuant to SB 743, the CEQA guidelines have been updated and the focus of transportation analysis changed from level of service or vehicle delay to vehicle miles traveled (VMT). The Governor's Office of Planning and Research (OPR) approved the addition of new Section 15064.3, "Determining the Significance of Transportation Impacts," to the state's CEQA Guidelines, compliance with which is required beginning July 1, 2020. To aid in this transition, OPR released a Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018b) (Technical Advisory). The updated CEQA Guidelines state that "generally, vehicle miles traveled is the most appropriate measure of transportation impacts" and define VMT as "the amount and distance of automobile travel attributable to a project" (14 CCR 15064.3[a]). It should be noted that "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. OPR has clarified in the Technical Advisory and in informational presentations that heavy-duty truck VMT is not required to be included in the estimation of a project's VMT. Other relevant considerations may include the effects of the project on transit and non-motorized travel.

Based on OPR's Technical Advisory, the County adopted region-specific transportation criteria and thresholds for the unincorporated areas, including VMT Efficient Area Map Viewer. Because the project area is in unincorporated San Diego County, the VMT analysis requirements per CEQA Guidelines Section 15064.3(b) for the proposed project were conducted based on guidance provided in OPR's Technical Advisory.

The project would generate temporary trips associated with construction workers and vendors during the entire construction phase, as assumed in Section 3.3, Air Quality, and detailed in Appendix B. Each worker vehicle and truck is assumed to generate two daily trips, one inbound and one outbound. The construction work shift would occur between 7:00 a.m. and 7:00 p.m. The majority of the workers would arrive and depart outside the AM peak hour (which generally occurs between 7:00 a.m. and 9:00 a.m.) and the PM peak hour (which generally occurs between 4:00 p.m. and 6:00 p.m.) of the adjacent street network. Vendor truck traffic and haul trips are anticipated to be evenly distributed throughout the 12-hour workday. Operation of the project would lead to a slight change in routine Water Authority patrols for inspection/maintenance, but would not add personnel trips on a permanent basis. No additional staff is anticipated to be required for continued operation of the project. Therefore, the project would not result in a permanent increase in vehicle/worker trips.

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less-Than-Significant Impact. The project would generate temporary construction traffic that would cease upon completion of construction. Construction would temporarily affect circulation on N. Centre City Parkway, which contains a separate bicycle lane in the north- and southbound directions. As identified in Section 2.8, Water Authority General Conditions/Project Design Features, to minimize disruption to communities from construction traffic the Water Authority would prepare and implement a traffic control plan to the approval of the County. The traffic control plan would incorporate measures focused on maintaining safe access for both motor vehicles and bicycles. Upon completion of construction, N. Centre City Parkway would be returned to its existing condition. The proposed access structures and accessory improvements would be located on private property, Water Authority ROW, or adjacent to the roadway. These improvements would not be located in areas that would interfere with the surrounding circulation system. The project area is in a semi-rural area that does not feature transit and pedestrian facilities. As such, the project would not impede access, plans, programs, or policies related to transit, roadway, bicycle, or pedestrian facilities. Operation of the project would not require additional permanent employees; thus, the project would not result in an increase in permanent traffic. Therefore, impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less-Than-Significant Impact. Section 15064.3(b) uses VMT as the basis for evaluating transportation impacts of the proposed project under CEQA. The guidelines and thresholds of this section apply to land use and transportation projects that are subject to CEQA analysis. The updated CEQA Guidelines do not establish a significance threshold; however, they do recommend a threshold of significance for land use development (residential, office, and other land uses) and transportation projects. It should be noted that there is no significance threshold for construction or maintenance projects.

The proposed project would involve construction that would generate temporary construction-related traffic over the course of 20 months and nominal operations traffic; thus, it would be categorized under Section 15064.3(b)(3), qualitative analysis. Section 15064.3(b)(3) recognizes that lead agencies may not be able to quantitatively estimate VMT for every project type. For many projects, a qualitative analysis of construction traffic may be appropriate. This is because construction-related trips are temporary and would not generate permanent trips. Per OPR, heavy vehicle traffic is not required to be included in the estimation of a project's VMT. Although worker and vendor trips would generate VMT, once construction is completed the construction-related traffic would cease and would return to pre-construction conditions. Measures to reduce the VMT generated by workers and trucks are limited, and there are no thresholds or significance criteria for temporary, construction-related VMT. Therefore, impacts from construction-related VMT would be temporary and short term.

The proposed project's construction would be generally consistent with construction activities in terms of the temporary nature of activities, trip generation characteristics, and the types of vehicles and equipment required. Managing worker and vendor trip lengths for the construction projects is not feasible because of the location and duration of individual activities. Alternative modes of transportation are also not available for workers. The increase in VMT associated with project construction is expected to be temporary and would therefore not cause a significant impact. Once completed, the operation of the project can be considered a "small project" per the OPR Technical Advisory, given that it would not generate greater than 110 daily trips and would therefore be presumed to have a less-than-significant impact.

Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Sections 15064.3(b)(1) and 15064.3(b)(3), and impacts would be less than significant.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less-Than-Significant Impact. Workers and trucks would access various project work areas via existing roadways, primarily through I-15, N. Centre City Parkway, and Mesa Rock Road. Additional construction workers would access areas through private property using private access roads. During construction of the project, all truck drivers would adhere to California Vehicle Code regulations pertaining to licensing, size, weight, and load of vehicles operated on highways and local roads; safe operation of vehicles; and transport of any hazardous materials. Traffic on public roadways due to project construction would be of the same vehicle types (passenger cars and trucks) that occur and are allowed under existing conditions. Therefore, project-related construction traffic would not increase hazards due to geometric design features or incompatible uses.

The proposed project would require repaving of N. Centre City Parkway upon completion of construction to return it to existing conditions. This would be completed to County standards such that it would not increase hazards for users of the roadway. The project would not otherwise result in a change to roadway or circulation system geometry. Average daily operational trips associated with the project would be same as those required for existing maintenance activities, with the majority being passenger cars or light-duty trucks. The amount of operational daily trips would not increase hazards due to a geometric design feature or incompatible use. Impacts would be less than significant.

d) Would the project result in inadequate emergency access?

Less-Than-Significant Impact. The project would generate temporary construction traffic, which would cease upon completion of construction. Project construction would obey all traffic laws and maintain access to private property. Operation of the project would not require additional permanent employees; thus, the project would not result in an increase in permanent traffic. As identified in Section 2.8, to minimize disruption to communities from construction traffic the Water Authority would prepare and implement a traffic control plan to the approval of the County for the affected portion of N. Centre City Parkway. This would include adequate signage, flaggers, and detouring. First responders would be able to travel through the active work areas along N. Centre City Parkway to access surrounding properties in the event of an emergency. Upon completion of construction, affected roadways would resume use similar to existing conditions. Thus, implementation of the project would not result in inadequate emergency access and impacts would be less than significant.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

The proposed project would be subject to compliance with AB 52 (California Public Resources Code Section 21074), which requires consideration of impacts to tribal cultural resources as part of the CEQA process. AB 52 requires the Water Authority, as the lead agency responsible for CEQA compliance for the project, to notify any groups (who have requested notification) of the project who are traditionally or culturally affiliated with the geographic area of the project. Because AB 52 is a government-to-government process, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the Water Authority.

In accordance with AB 52, on June 15, 2022, the Water Authority sent notification letters to the tribal representatives traditionally or culturally affiliated with the geographic area of the project. The following tribal groups responded to the notification letter requesting formal consultation:

- Rincon Band of Luiseño Indians responded on July 15, 2022.
- San Luis Rey Band of Mission Indians responded on July 13, 2022.
- Pechanga Band of Indians responded on July 18, 2022
- San Pasqual Band of Mission Indians responded on August 22, 2022.

The Water Authority has responded to the tribes that have requested formal consultation. Consultation is ongoing. No other tribal representatives responded to the Water Authority's notification.

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

and

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less-Than-Significant Impact. Consultation conducted in accordance with AB 52 on this project indicated that the project alignment is in an area of tribal cultural significance and sensitivity. However, no specific resources were identified. See Section 3.5 for a discussion of the project's potential archaeological impacts, which were determined to be less than significant. The project would include implementation of a cultural resources monitoring plan during project-related ground-disturbing activities, which would ensure that any unanticipated tribal cultural resource that is uncovered during excavation is appropriately handled. Impacts to tribal cultural resources as a result of project implementation would therefore be less than significant.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less-Than-Significant Impact. The proposed project would consist of the replacement of existing water infrastructure. Improvements to water infrastructure are included within the project design as analyzed herein. As such, any potential environmental impacts related to these components of the proposed project are already accounted for in this IS/MND as part of the impact assessment conducted for the entirety of the project.

An existing stormwater drainage facility, consisting of an existing headwall and culvert underneath Tierra Libertia Road, is located in Work Area 2. During construction, stormwater flows in Work Area 2 (flowing toward the north) would be temporarily routed around the tunneling receiving shaft. Upon completion of construction, a new partially above-grade concrete access vault structure would be located in Work Area 2.

Riprap would be installed around the new access vault structure for drainage purposes. However, the project would not require or result in the permanent relocation or alteration of this existing culvert and would not require new drainage facilities. Therefore, impacts would be less than significant.

The project would not result in development that would substantially increase the demand for water or wastewater services, such as new commercial or residential land uses. During construction, water usage for watering the site and other needs would be temporary and minimal. During operation, the project would not employ additional personnel other than the existing maintenance personnel serving the area. Operation of the project would be similar to existing operation and maintenance of the pipeline; no new or altered wastewater treatment, electric power, natural gas, or telecommunication facilities would be required. Therefore, impacts associated with the relocation or construction of new water, wastewater treatment, electric power, natural gas, or telecommunication facilities would be less than significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less-Than-Significant Impact. During construction, water usage for watering the site and other needs would be temporary and minimal. During operation of the project, the project would have no effect on water supplies beyond its purpose, which is to protect existing water delivery infrastructure. Therefore, impacts would be less than significant.

c) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The proposed project would not result in an increased demand on wastewater services. Therefore, no impacts would occur.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less-Than-Significant Impact. Implementation of the proposed project would generate solid waste in the form of construction and demolition debris that would need to be hauled off site and recycled or disposed of in a landfill. The closest active landfill to the project area is Republic Services Sycamore Landfill (Sycamore Landfill; 8514 Mast Boulevard, Santee, California 92071), located approximately 20 miles south of the project alignment. Sycamore Landfill has a maximum permitted throughput of 5,000 tons per day and a remaining capacity of 113,972,637 cubic yards. It is anticipated that Sycamore Landfill will cease operation in 2042 (CalRecycle 2022). Diversion of construction and demolition debris via recycling at a local recycling facility would reduce the amount of waste sent to the landfill. Additionally, waste generated from construction would be temporary and would be nominal compared to the daily capacity accepted at Sycamore Landfill.

The project would not result in the need for new solid waste disposal systems and would not require substantial alterations to existing solid waste disposal systems or landfill capacity. Upon completion of construction, the pipeline would resume normal operation. The project would not create additional solid waste that would need to be serviced by a landfill. Therefore, impacts would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. Demolition debris would be disposed of and/or recycled at an appropriate facility. Any solid material removed during construction would be disposed of in compliance with applicable federal, state, and local statutes and regulations related to solid waste. Under AB 939, the Integrated Waste Management Act of 1989, local jurisdictions are required to develop source reduction, reuse, recycling, and composting programs to reduce the amount of solid waste entering landfills. Local jurisdictions are mandated to divert at least 50% of their solid waste generation into recycling. Operation of the project would not generate waste. Therefore, impacts would not occur.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

The entire project area is located within a state responsibility area and/or lands classified as very high fire hazard severity zones (VHFHSZs) (CAL FIRE 2022).

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less-Than-Significant Impact. During construction of the project, temporary construction and staging areas would be located within a mixture of Water Authority ROW, County ROW, and private property, with

the tunneled portion located within Caltrans ROW. All project work areas would also remain fully accessible for emergency vehicles and would not interfere with emergency response or evacuation plans. Additionally, access to neighboring private properties would be maintained at all times during construction. Upon completion of construction the project work areas and laydown areas would return to similar to pre-construction conditions, with the exception of proposed new access structures and accessory improvements, which would be located outside of roadways and access routes. Therefore, implementation of the project would not impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less-Than-Significant Impact. Construction of the project would not substantially alter on-site slopes or influence prevailing winds or other factors that could exacerbate wildfire risk. However, project construction would introduce potential ignition sources to the project area, including the use of vehicles and heavy machinery, accidental human-caused ignitions, and the potential for sparks during welding activities or other hot work. Because the project would entail construction work in the vicinity of dry brush, construction activities could result in an increase in the potential for accidental wildfires. Project construction would be conducted in accordance with state and local regulations governing fire prevention and safety. The County Code of Regulatory Ordinances has adopted the 2019 California Fire Code with local amendments (County of San Diego 2022). In addition, as identified in Section 3.9, Hazards and Hazardous Materials, the Water Authority would require the project contractor to prepare a fire prevention and response plan specific to the project, and all construction crewmembers would be trained in the requirements of the plan. Implementation of and adherence to the plan would reduce this potential for wildfire ignition during construction.

Upon completion of construction, the project and affected area would return to similar to pre-construction conditions, with the addition of proposed new accessways. Operation and maintenance of the project would not substantially differ from existing practices and protocol. Therefore, the project would not increase or exacerbate wildfire risks and impacts would be less than significant.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less-Than-Significant Impact. Construction and operation of the project would not directly require new or expanded infrastructure other than that which is planned as part of the project. As discussed in Section 3.19, Utilities and Service Systems, no new utility connections, water/wastewater facilities, or other service utilities would be required for the project. All potential temporary or ongoing environmental impacts related to planned components of the project have been accounted for and analyzed as part of the impact assessment conducted for the entirety of the project. Additionally, the project would be required to comply with all regulatory requirements and mitigation measures outlined within this IS/MND for the purposes of mitigating impacts associated with trenching, grading, site work, and the use of heavy machinery. Therefore, with implementation standard measures to reduce fire risk and compliance with regulatory requirements, the installation and maintenance of associated infrastructure would not exacerbate wildfire risk or result in impacts to the environment beyond those already disclosed throughout this document, and impacts would be less than significant.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less-Than-Significant Impact. Construction activities could result in changes to drainage patterns and slope stabilization. Soils would be stabilized during project construction with adherence to the project SWPPP and associated construction BMPs related to erosion and sediment control. Upon completion of construction, all disturbed surfaces would be stabilized and restored to initial conditions. Furthermore, the project alignment is not located in a designated high risk or special flood hazard area. As discussed in Section 3.7, Geology and Soils, the project area is not located in a landslide zone. Therefore, the project would not expose people or structures to substantial risks related to post-fire instability and impacts would be less than significant.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less-Than-Significant Impact. Potential impacts related to sensitive and special-status habitat, wildlife species, and plant species are discussed in Section 3.4, Biological Resources. As discussed in Section 3.4, potential impacts to biological resources would be less than significant with the implementation of NCCP/HCP requirements. The proposed project would not substantially degrade the quality of the environment or impact fish or wildlife species or plant communities. As discussed in Section 3.5, Cultural Resources, and Section 3.18, Tribal Cultural Resources, potential impacts to cultural resources and tribal cultural resources would be less than significant with the implementation of a cultural resources monitoring plan (refer to Section 2.8). The proposed project would not eliminate important examples of the major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less-Than-Significant Impact with Mitigation Incorporated. Given the nature of the proposed project, potential cumulative impacts could occur during the temporary construction work if other cumulative projects occur in the same time frame. Additionally, the project, as with potential cumulative projects such as the North County Environmental Resources Recycling Center and the I-15 pavement replacement project, would incorporate mitigation measures to reduce impacts, including those from construction noise. The project and potential cumulative projects would each implement traffic control for construction trips such that circulation and access are not significantly impacted. Upon completion of construction, the project would have no potential to contribute to a cumulative impact. Impacts would be less than significant with incorporation of mitigation measures.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less-Than-Significant Impact with Mitigation Incorporated. The potential for adverse direct or indirect impacts to human beings was considered throughout Chapter 3 of this IS/MND, including impacts related to air quality (Section 3.3), hazards and hazardous materials (Section 3.9), and noise (Section 3.13). Based on this evaluation, there is no substantial evidence that construction or operation of the proposed project with the proposed mitigation measures for construction noise impacts incorporated would result in a substantial adverse effect on human beings. Impacts would be less than significant with incorporation of mitigation measures.

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Appendix A

NCCP/HCP Conditions for Coverage and Minimization Measures

Appendix B

Air Quality and Greenhouse Gas Emissions Modeling

Appendix C

Biological Resources Technical Report

Appendix D
Cultural Resources Report

Appendix E
Geotechnical Study

Appendix F

Paleontological Records Search Results

Appendix G

Construction Noise and Vibration Assessment