DRAFT ENVIRONMENTAL ASSESSMENT

FOR

El Mirage Rd. SR 303 – Jomax Road

PEO-0(231)T
0000 MA PEO T0428 01D

September 2025

Approved by: DocuSigned by: Paul O'Brien C44E3DEFE42B423... Date: 9/19/2025

Paul O'Brien, PE
Administrator
Environmental Planning
Arizona Department of Transportation

This Environmental Assessment has been prepared in accordance with provisions and requirements of Title 23 Code of Federal Regulations Parts 771 and 774, relating to the implementation of the National Environmental Policy Act of 1969 [42 United States Code 4332(2)(c)].

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated June 25, 2024, and executed by FHWA and ADOT.

The Arizona Department of Transportation ensures full compliance with Title VI of the Civil Rights Act of 1964, a federal law that protects individuals and groups from discrimination on the basis of their race, color, and national origin in programs and activities that receive federal financial assistance. For language interpretation services or information about the Department's Title VI Program, please contact the Civil Rights Office, ADOT, 206 S. 17th Avenue, MD 154A, Phoenix, AZ 85007; phone 602.712.7761; fax 602.712.8429.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Abbreviations and Acronyms

ADA	Americans with Disabilities Act
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
ADWR	Arizona Department of Water Resources
AGFD	Arizona Game and Fish Department
AIDTT	Arizona Interagency Desert Tortoise
AJD	approved jurisdictional delineation
APE	area of potential effects
APS	Arizona Public Service
ASLD	Arizona State Land Department
ASM	Arizona State Museum
ASR	alternatives selection report
ASTM	American Society for Testing Materials
AWLW	Arizona Wildlife Linkage Workgroup
AZPDES	Arizona Pollutant Discharge Elimination System
AZTEC	AZTEC Engineering Group, Inc.
BFEs	Base Flood Elevations
CAP	Central Arizona Project
CCAA	Candidate Conservation Agreement
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CWA	Clean Water Act
Corps	US Army Corp of Engineers
dBA	A-weighted decibels
DCR	design concept report
EA	environmental assessment
EPA	US Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FCDMC	Flood Control District of Maricopa County
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
IPaC	Information for Planning and Consultation
JD	jurisdictional determination
L_{eq}	equivalent sound level
LOMR	Letter of Map Revision
LOS	level of service
MAG	Maricopa Association of Governments
MBTA	Migratory Bird Treaty Act
MCAQD	Maricopa County Air Quality Department
MCDOT	Maricopa County Department of Transportation
MSAT	mobile source air toxic
MS4	Municipal Separate Storm Sewer Systems
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act

NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	Ozone
OERT	Online Environmental Review Tool
NO_2	nitrogen dioxide
PISA	Preliminary Initial Site Assessment
PJD	preliminary jurisdictional delineation
PM_{10}	particulate matter
$PM_{2.5}$	fine particulate matter
RGP	Regional General Permit
ROW	right-of-way
RTP	Regional Transportation Plan
SFHAs	Special Flood Hazard Areas
SHPO	State Historic Preservation Office
Sq ft	square feet
SR303L	State Route Loop 303
STIP	State Transportation Improvement Program
SWPPP	Stormwater Pollution Prevention Plan
TCE	temporary construction easements
TI	Traffic Interchange
TIP	Transportation Improvement Program
Title VI	Title VI of the Civil Rights Act of 1964
US	United States
US 60	US Highway 60
USC	United States Code
USFWS	US Fish and Wildlife Service
Waters	waters of the United States

Environmental Commitments and Mitigation Measures

ADOT and the contractor shall follow the federal laws, regulations, guidelines, as well as ADOT standards and specifications listed below to avoid, minimize, and mitigate impacts for all relevant environmental resources:

- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
- Uniform Relocation Act Amendment of 1987
- Title VI of the Civil Rights Act of 1964
- ADOT's *Right of Way Procedure Manual*
- ADOT's *Public Involvement Plan*
- ADOT's *Erosion and Pollution Control Manual*
- ADOT's *Standard Specification for Road and Bridge Construction*

Environmental mitigation measures are intended to avoid, minimize, or mitigate impacts on environmental resources. All of the following mitigation measures apply and would be implemented during design and construction. The mitigation measures listed below are not subject to change without prior written approval from ADOT.

Arizona Department of Transportation Design Responsibilities

- The Arizona Department of Transportation will coordinate the final design affecting the Maricopa Trail with the Maricopa County Parks and Recreation Department.
- During final Design, the Arizona Department of Transportation will complete additional drainage studies and submit a Conditional Letter of Map Revision to the local floodplain administrator.
- During final design, the City of Peoria and Arizona Department of Transportation will update the noise analysis if changes to design elements occur that have the potential to increase impacts on receivers.

Arizona Department of Transportation Roadside Development Responsibilities

- The Arizona Department of Transportation Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Arizona Department of Transportation Roadside Development Section will send the notification at least 60 (sixty) calendar days prior to the start of construction.

Arizona Department of Transportation District Responsibilities

- The Engineer shall contact the ADOT Environmental Planning Historic Preservation Team (660.730.0414) or the Environmental Commitments Coordinator (520.449.1985) at least 14 (fourteen) business days prior to the start of ground-disturbing activities to arrange for qualified personnel to flag avoidance areas as well as monitor and be present during construction. ADOT's Environmental Planning – Historic Preservation Team will provide contact information on the qualified archaeological consultant to the contractor for their records. ADOT's Environmental Planning – Historic Preservation Team will contact the qualified archaeological consultant regarding the project start date and provide Contractor information.
- The Engineer shall coordinate via email or phone with the qualified archaeological consultant and communicate the construction schedule for the duration of ground disturbing work in those areas where monitoring is needed.
- If any active bird nests cannot be avoided by vegetation clearing or construction activities, the Engineer will contact the Environmental Planning Biologist (928.304.0487) to evaluate the situation.
- The Arizona Department of Transportation Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Arizona Department of

Transportation Roadside Development Section will send the notification at least 60 (sixty) calendar days prior to the start of construction.

- If the Engineer in cooperation with the Environmental Planning Biologist determines that burrowing owls cannot be avoided, the contractor shall employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate.

Contractor Responsibilities

- The contractor shall avoid all flagged and/or otherwise designated sensitive cultural resource areas within or adjacent to the project area, unless a qualified archaeological consultant is present..
- Prior to construction activity the contractor's field personnel including the Project Manager, Assistant Project Manager, General Superintendent, and Project Superintendent shall review the attached Arizona Department of Transportation Environmental Planning "Sonoran Desert Tortoise Awareness Program Handout" flier, become familiar with the identification and avoidance of the Sonoran Desert tortoise, and follow the notification request, as applicable.
- If any Sonoran Desert tortoises are encountered during construction, the contractor shall adhere to the attached Arizona Game and Fish Department "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects". If any tortoise is encountered during construction the contractor shall notify the Engineer to report the encounter.
- The contractor shall report encounters with any Sonoran Desert tortoise tortoises (live, injured, or dead) during construction to the Engineer using the attached Arizona Department of Transportation Sonoran Desert Tortoise Observation Form. The final form shall be sent to Arizona Department of Transportation Environmental Planning (email: bioteam@azdot.gov) within 24 hours of the encounter. Photographs should be taken of tortoises encountered and included in the report if possible.
- Prior to construction, all personnel who will be on-site, including, but not limited to, contractors, Contractor's employees, supervisors, inspectors, and subcontractors shall review the attached Arizona Department of Transportation Environmental Planning "Western Burrowing Owl Awareness" flyer.
- If any burrowing owls or active burrows are identified the contractor shall notify the Engineer immediately. No construction activities shall take place within 100 feet of any active burrow.
- If the Engineer in cooperation with the Environmental Planning Biologist determines that burrowing owls cannot be avoided, the contractor shall employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate.
- If vegetation clearing occurs during the migratory bird breeding season (March 1 – August 31), the contractor shall avoid any active bird nests. If the active nests cannot be avoided, the contractor shall notify the Engineer to evaluate the situation. During the non-breeding season (September 1 – February 28), vegetation removal is not subject to this restriction.

1. Introduction

Explanation of an Environmental Assessment

This environmental assessment (EA) for El Mirage Road, State Route 303 (SR303L) to Jomax Road was prepared in accordance with the National Environmental Policy Act (NEPA), as amended (42 United States Code [USC] 4321 et seq). The Arizona Department of Transportation (ADOT) is the lead agency in the planning, preparation, and review of all technical and environmental documents associated with this EA. The environmental review, consultation, and other actions required by applicable federal environmental laws for this project have been carried out by ADOT pursuant to 23 USC Section 327 and a Memorandum of Understanding dated June 25, 2024 and executed by the Federal Highway Administration (FHWA) and ADOT.

The basic function of an EA is to describe the need for a proposed action, alternatives for implementing or constructing a proposed action, and the environmental impacts of the Preferred Alternative and the No Build Alternative. The EA also provides a list of agencies and persons consulted. This document serves as a tool for ADOT to identify potentially significant impacts on social, economic, natural, and cultural resources and measures to avoid, minimize, and mitigate such impacts. The EA also serves as the basis for ADOT to determine whether an environmental impact statement should be prepared for the Preferred Alternative. The Draft EA also summarizes the public, agency, and tribal participation process associated with the Preferred Alternative and lists the agencies and persons consulted.

Should it be determined that the Preferred Alternative would not result in significant adverse impacts on the natural, built, socioeconomic, or cultural environment that could not be avoided, minimized, or otherwise mitigated, a Finding of No Significant Impact would be issued and approved by ADOT—allowing the project to proceed to final design and construction.

Project Location

The project would occur between SR303L and Jomax Road within the City of Peoria, and unincorporated Maricopa County lands, in Maricopa County, Arizona (See Figures 1 and 2). The project would occur within and adjacent to existing Maricopa County and City of Peoria right-of-way (ROW) and easement. New ROW is anticipated for this project for portions occurring through private and Arizona State Trust lands.

Project Background and Overview

The existing El Mirage Road is discontinuous within the study area with no existing road between the SR303L and Happy Valley Road and between Desert Sun Lane and Jomax Road. El Mirage Road is functionally classified as a Maricopa County Department of Transportation (MCDOT) principal arterial south of SR303L, a MCDOT minor collector between Happy Valley Road and Desert Sun Lane, and a City of Peoria arterial north of Jomax Road.

For over 35 years the SR303L freeway and El Mirage Road connection have been included in planning documents and incremental construction projects:

- 1991, ADOT completed location studies and an EA for the entire SR303L corridor from Maricopa County Route 85 to Interstate-17.
- 2000, Maricopa County *Long Range Transportation Plan* identified the El Mirage extension north from the SR303L as a future primary roadway.
- 2001, Maricopa County *Major Streets and Route Plan* identified El Mirage Road as a Future Principal Arterial.
- 2002, MCDOT began construction of an interim SR303L four-lane divided highway. Provisions for the extension of El Mirage Road to the north were included in this project.

- 2004, The interim SR303L opened to traffic from US 60 to Happy Valley Parkway.
- 2005, City of Peoria *Loop 303 Specific Area Plan* included the extension of El Mirage north from SR303L.
- 2011, Maricopa County *Major Streets and Route Plan* identified El Mirage Road as a Future Principal Arterial.
- 2016, ADOT completed the construction of the SR303L/El Mirage Road Traffic Interchange (TI). Provisions for the extension of El Mirage Road to the north were included in this project.
- 2020, Peoria voters approved an update to the Peoria General Plan, referred to as *PlanPeoriaAZ*. The El Mirage Road extension is identified as a Future Arterial Functional Class in the Circulation Plan portion of this general plan.
- 2021, MCDOT *Major Streets and Route* and the *Transportation System Plan 2040* included El Mirage Road extension as a parkway.
- 2022, Maricopa Association of Governments' (MAG) *El Mirage Road: SR303L to Jomax Road Feasibility Study* completed in June 2022 which classified the El Mirage extension as a principal arterial.

General Project Schedule

The construction of T0428 is currently programmed to receive funding through Propositions 400 and 479. Currently there is $25.4 million programmed for T0428 through Proposition 400, with $5.5 million of that total coming from unused funds in the Happy Valley Road Project. An additional $21 million is programmed for T0428 through Proposition 479. An additional $24.5 million in Proposition 479 funding has been requested for this project through a project change request to move funding from two other City of Peoria projects. As of the writing of this report this request has been approved in the Streets Committee and is moving through the MAG approval process. Once finalized, the project changes will be included in the Fiscal Year 2026 Proposition 479 Arterial Life Cycle Program. An additional $3.5 million is anticipated for this project to be obtained from private development. The remaining funding for the project will be the local agency match.

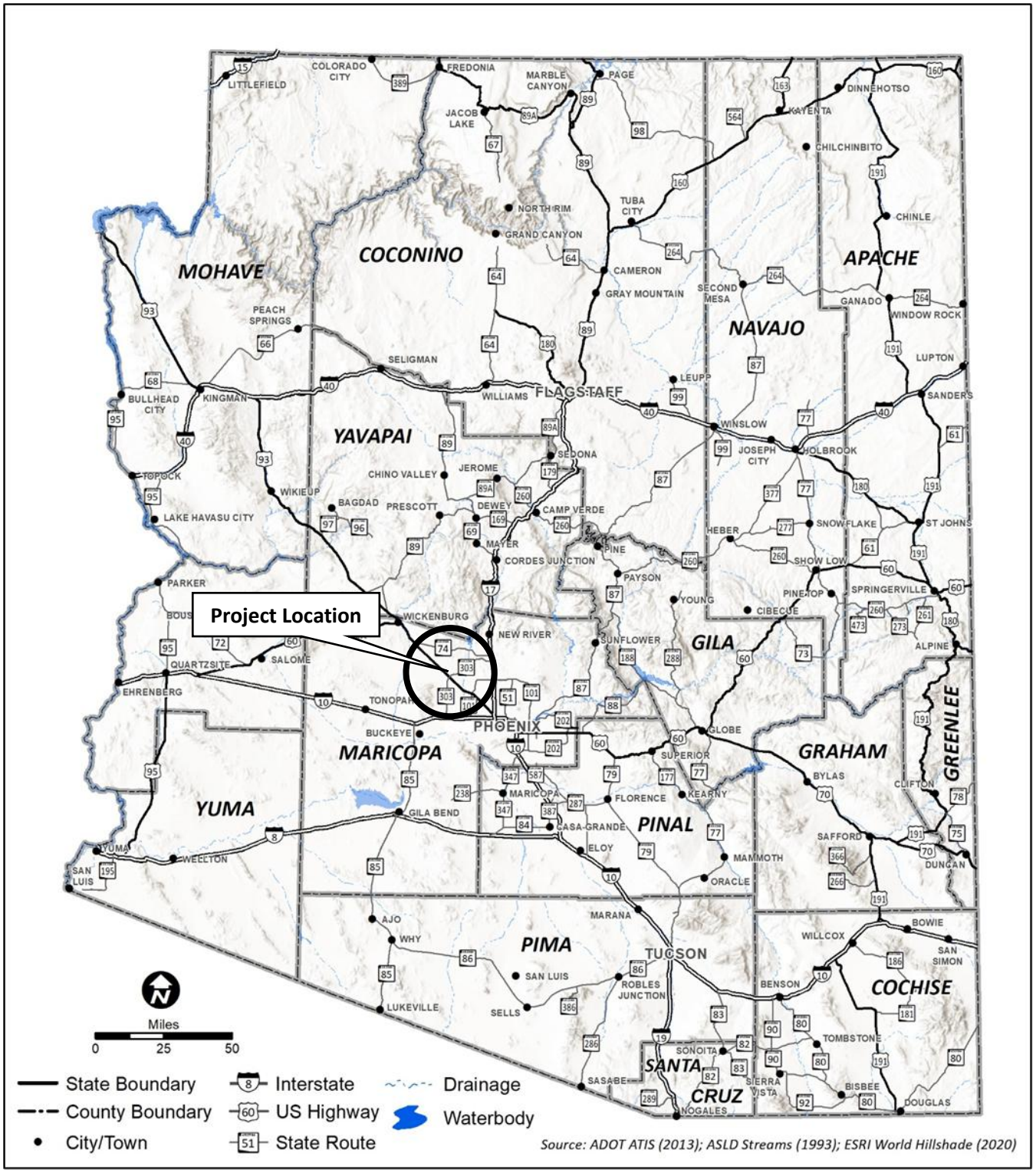

Figure 1 - State Vicinity Map

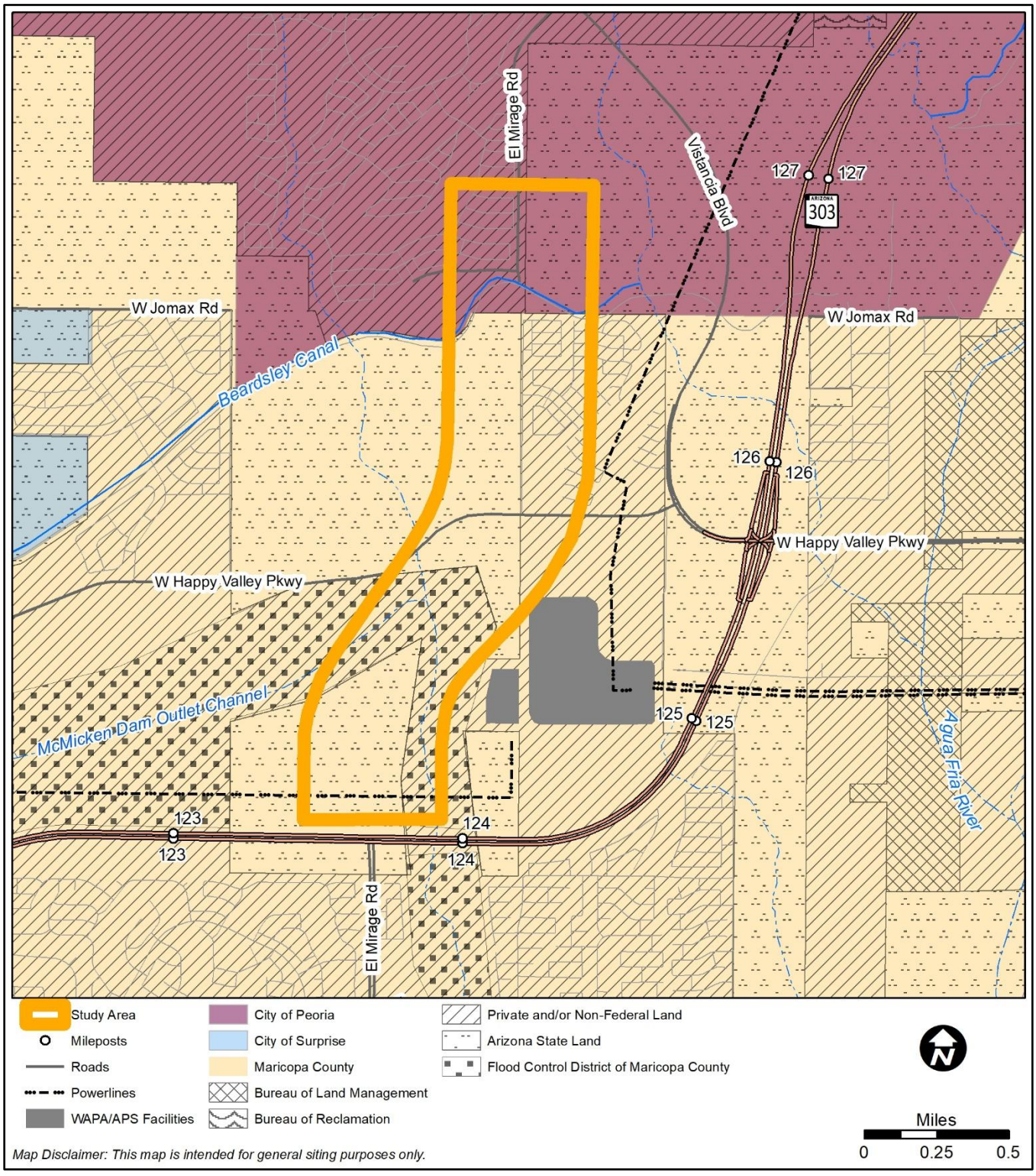

Figure 2 - Study Area Map

2. Project Purpose and Need

Purpose

The primary objectives of this study are to:

1. Improve regional and local transportation connectivity between new and planned developments and the regional transportation system. Currently, large developments have no efficient access to existing freeway facilities.
2. Increase transportation access and capacity for planned growth in the region.
3. Address existing and future congestion on local roadways in the area by facilitating access to the regional freeway system.

Need

In the last 10 years substantial residential and commercial development has occurred north of the SR303L corridor, resulting in increased travel demand between the communities of Peoria, Surprise and unincorporated Maricopa County and the regional freeway system designed to provide connectivity between these developments and the greater Phoenix metropolitan area. Currently, there is no direct access from the SR303L to developments north, requiring motorists to use indirect access routes that increase travel time, reduce system efficiency and contribute to congestion on adjacent roadways. Providing access is needed to accommodate existing and projected growth, improve mobility and maintain the planned operational performance of the regional freeway system.

<u>Regional and local connectivity</u>

There are limited options for the area north of SR303L between US Highway 60 (US 60) and El Mirage Road to access the SR303L. Currently there is a seven-mile stretch with no northern access to SR 303L between US 60 and Happy Valley Road, only the south access is available for El Mirage Road (Figure 3). In addition, there are discontinuous segments of El Mirage Road between Happy Valley Road and Jomax Road. Based on the limited roadway network, additional access to a regional freeway from areas north of SR303L is needed in the northwest valley.

During public scoping area residents indicated that they utilize health care providers and other services south of the SR303L in Sun City, AZ. The extension of El Mirage Road would provide a more direct route for areas residents using these services. Additionally, new developments are planned along El Mirage Road both within and adjacent to the study area. These developments would be accessed by the El Mirage Road extension for both local residents as well as motorists from the greater region.

<u>Regional Growth</u>

The growth of the area northwest of SR303L in the City of Peoria, City of Surprise, and surrounding lands is outpacing roadway network improvements. Multiple developments are under construction in the cities of Peoria and Surprise and in unincorporated Maricopa County including the West Wing Business Park and North Peoria Gateway. The traffic influence area for this study extends approximately nine miles beyond the study area. The traffic influence area is defined as the geographic area surrounding the study area from which the development is likely to draw a high percentage (80% or more) of the total site traffic. The Maricopa County Association of Governments (MAG) *Momentum 2050 Regional Transportation Plan* estimates the current population within the traffic influence area is 79,000 people. MAG projects that the population of this same area will exceed 250,000 people by year 2050. This study also estimates there are approximately 9,500 jobs in this same area currently, and projects that there will be over 56,000 jobs by year 2050. As the surrounding areas grow, the existing roadway network will need to continue to be expanded to accommodate anticipated traffic demand.

Capacity and Traffic Operations

The cities of Surprise and Peoria have experienced significant growth in recent years, with the development of new residential areas north of SR303L leading to an increase in vehicular traffic volumes. Future 2040 predictions anticipate an average traffic volume of 8,500 to 9,000 vehicles using this extension of El Mirage Road. Currently, vehicles from these areas typically use US 60 TI, via 163rd Avenue and the Happy Valley Road TI via Vistancia Boulevard and Happy Valley Road to access SR303L. The MAG *El Mirage Road: SR303L to Jomax Road Feasibility Study* and the *Loop 303, US 60 to El Mirage Road Traffic Interchange Alternatives Study* indicate that portions of both the US 60/163rd Avenue intersection and the Happy Valley Road/Vistancia Boulevard intersection operate at a level of service (LOS) F in both the morning and evening peak hours. This LOS indicates substantial congestion at these locations and would worsen without this project. The extension of El Mirage Road to the north would allow an additional access point to SR303L to help alleviate some of the congestion at these intersections.

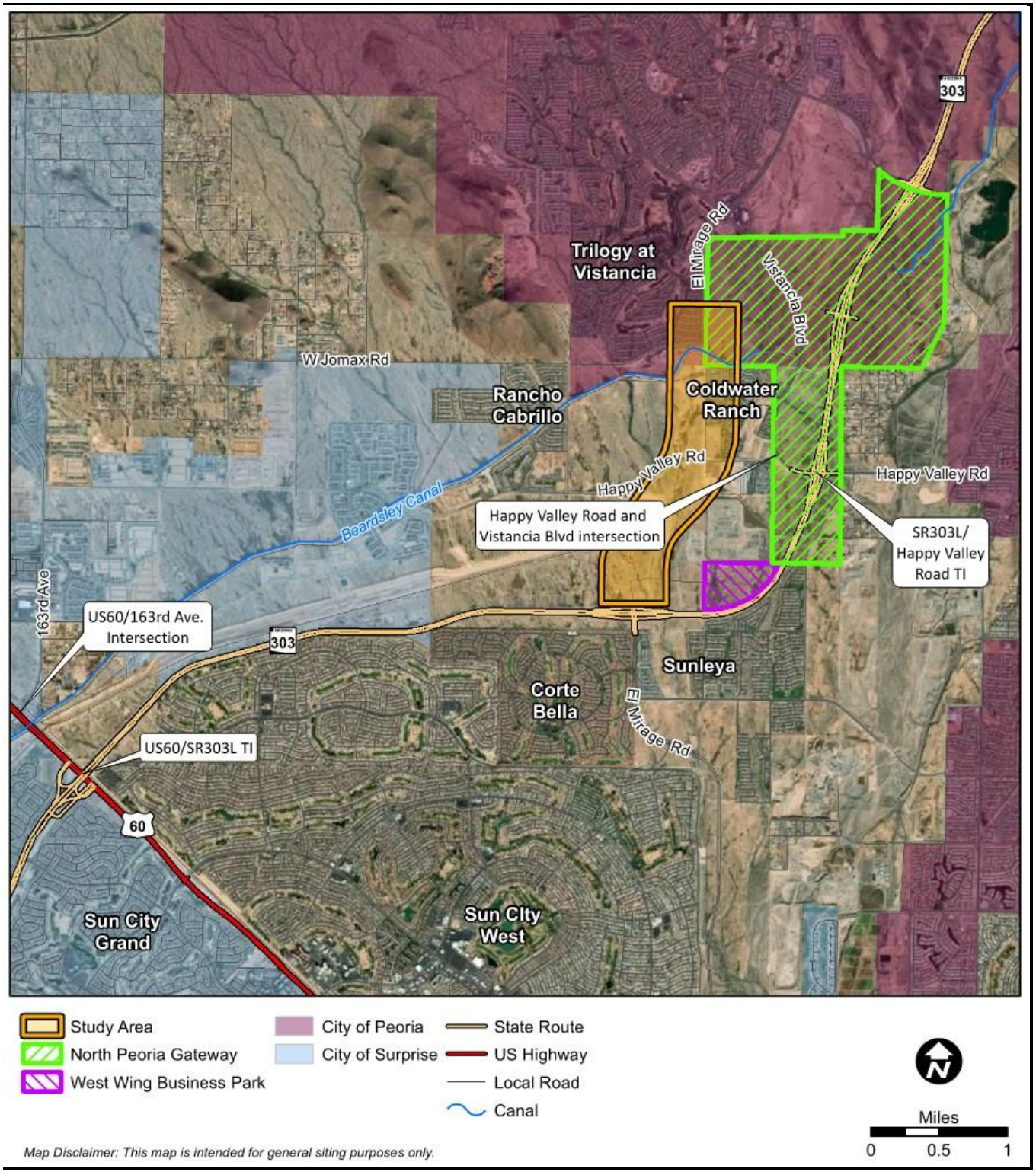

Figure 3 - SR303L Regional Access and Developments

Conformance with Regulations, Land Use Plans, and Other Plans

Local and Regional Planning

The extension of El Mirage Road north from SR303L has been included in numerous local and regional planning efforts. In 2020, Peoria voters approved an update to the Peoria General Plan, referred to as *PlanPeoriaAZ*. This plan has a target horizon year of 2040. The segment of El Mirage Road considered in this study is identified as a Future Arterial Functional Class in the Circulation Plan portion of this general plan.
Maricopa County's most recent transportation plan is the *Transportation System Plan 2040* which includes the El Mirage Road extension as a parkway.

Regional transportation planning is conducted by MAG. The proposed El Mirage Road extension is included in MAG's 2050 regional travel demand model and Regional Transportation Plan (RTP). MAG's transportation improvement program (TIP) for fiscal years 2025 to 2030 includes this project (MAG ID 16301 & 23573) and lists its construction completion date as late 2030. In addition, MAG completed the *El Mirage Road: SR303L to Jomax Road Feasibility Study* in June 2022.

State Planning

All highway and transit projects in the state, funded under Title 23 and the Federal Transit Act, must be included in a federally approved state transportation improvement program (STIP). Projects in the STIP must be consistent with the statewide long-range transportation plan and metropolitan TIPs. The El Mirage Road extension is included in the STIP under items 103196 and 105076.

ADOT and MAG recently completed *Loop 303, US 60 to El Mirage Road Traffic Interchange Alternatives Study* which evaluated the addition of a TI along SR303L between US60 and El Mirage Road. The analysis of alternatives and traffic incorporated the anticipated extension of El Mirage Road from SR303L to Happy Valley Road.

3. Alternatives

NEPA regulations require that any build alternatives and the No-Build Alternative be identified and evaluated in the EA. Consideration of alternatives leads to a solution that satisfies the purpose and need while avoiding, minimizing, or otherwise mitigating adverse impacts on environmental resources in the Study Area. Alternatives were developed and evaluated for their ability to meet the proposed Project's purpose and need while also fulfilling criteria related to engineering, environmental impacts, and cost.

Prior Studies and Alternatives

The MAG June 2022 Study evaluated alternatives for a continuous extension of El Mirage Road from SR303L to Jomax Road. Three alignment alternatives were developed for El Mirage Road from SR303L to Happy Valley Road based on constraints from utilities including existing power lines, floodplains, and section lines (Figure 4). The conclusion of MAG's Study resulted in the selection of Alternative 1, with some modifications for the segment of roadway between Happy Valley Road and Jomax Road.

Alternative 1

Alternative 1 crosses the middle of the McMicken Dam Outfall Wash floodway. Due to the location and the curve radii used in the alignment, the approaches to both future access roads provide improved sight distance and clarity for the driver. Also, the floodway crossing was placed away from the existing Arizona Public Service (APS) transmission lines to allow future development between the roadway and the transmission lines.

Alternative 2

Alternative 2 shifted the roadway alignment across the McMicken Dam Outlet Channel further north than Alternative 1. This alternative followed the APS transmission lines more closely and included larger radius curves that resulted in some smaller strips of remnant parcels. This allowed for a larger area for development between the proposed roadway and existing energy substations. Moving the floodway crossing north conflicted with the existing transmission towers as the road curves to connect with El Mirage Road north of Happy Valley Road.

Alternative 3

Alternative 3 shifted the McMicken Dam Outfall Wash floodway crossing further south than Alternative 1 and crossed the floodway at its narrowest point by using the sharper curves. North of the floodway crossing, the proposed roadway followed the existing parcel lines to increase the amount of land available for development adjacent to the proposed roadway.

Alternatives Considered

This current study began development of alternatives based on the selected alternative (Alternative 1) developed in the MAG study. The selected MAG alternative was developed using MCDOT design standards and roadway typical sections. Because this project will ultimately be operated and maintained by the City of Peoria, Alternative 1 from the MAG study was modified to be compliant with city standards.

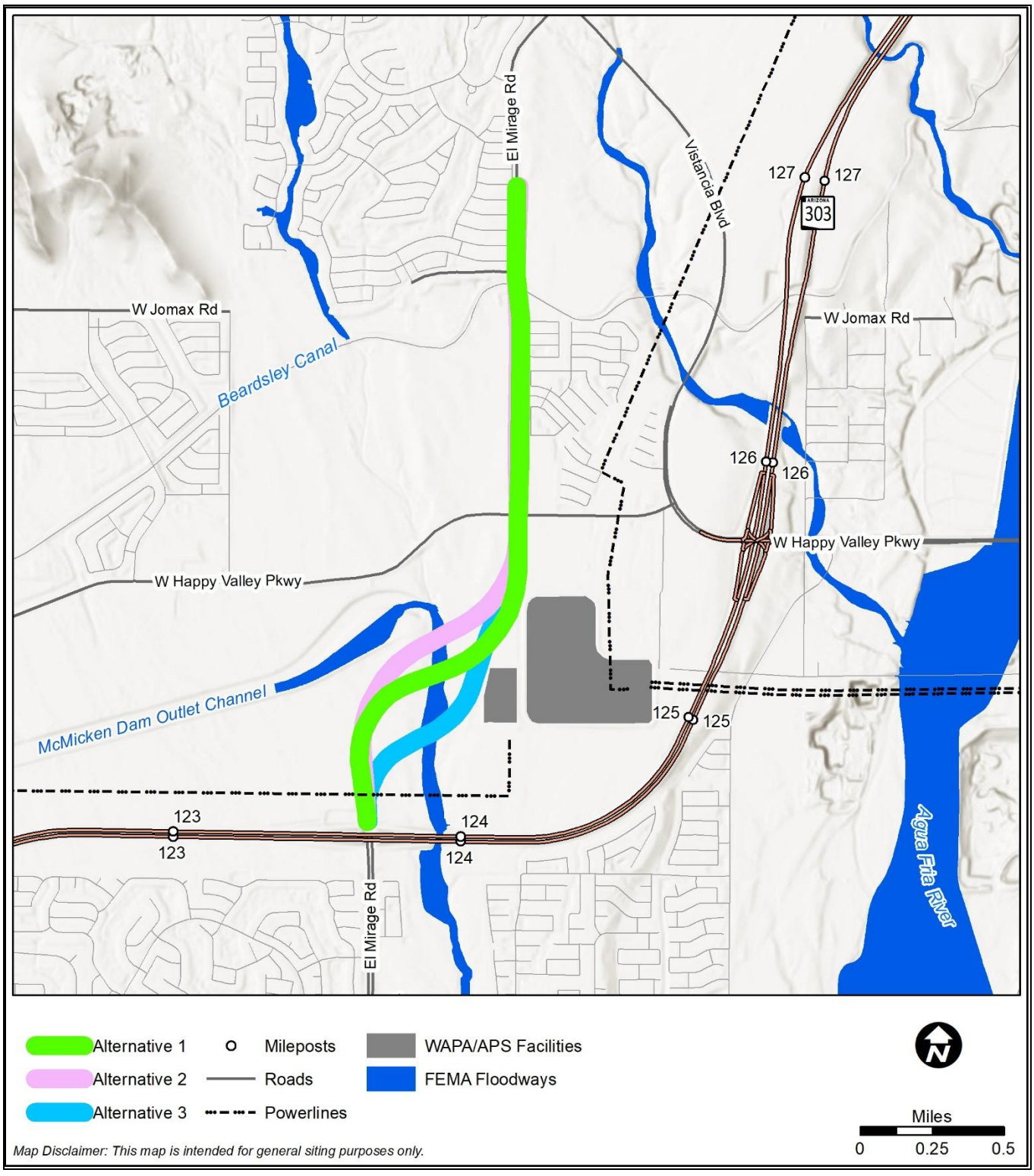

Figure 4 - MAG Feasibility Study Alternatives

Preferred Alternative

The Preferred Alternative consists of an ultimate 6-lane roadway section and was developed through modification of the MAG-study selected alternative (Alternative 1) roadway curves to eliminate superelevation on the roadway and accommodate City of Peoria roadway design standards and typical roadway sections (Figures 5 & 6).

The Preferred Alternative consists of:

- Constructing a new segment of El Mirage Road between SR303L and Jomax Road. The roadway configuration includes three vehicular lanes in each direction with a center median, bicycle lanes in each direction, and sidewalk in each direction. The project may be developed as a four-lane roadway as an interim configuration. This interim configuration would construct the outside two travel lanes, with the inside lanes to be constructed as a future stage.
- Constructing two proposed structural crossings, one over McMicken Outlet Channel Wash and one over the Beardsley Canal south of Jomax Road.
- Constructing curb and gutter, on site drainage improvements, and off-site drainage improvements.
- Installing traffic signals at Happy Valley Road
- Relocating utilities as needed
- Installing signage and lighting
- Installing irrigation and landscaping

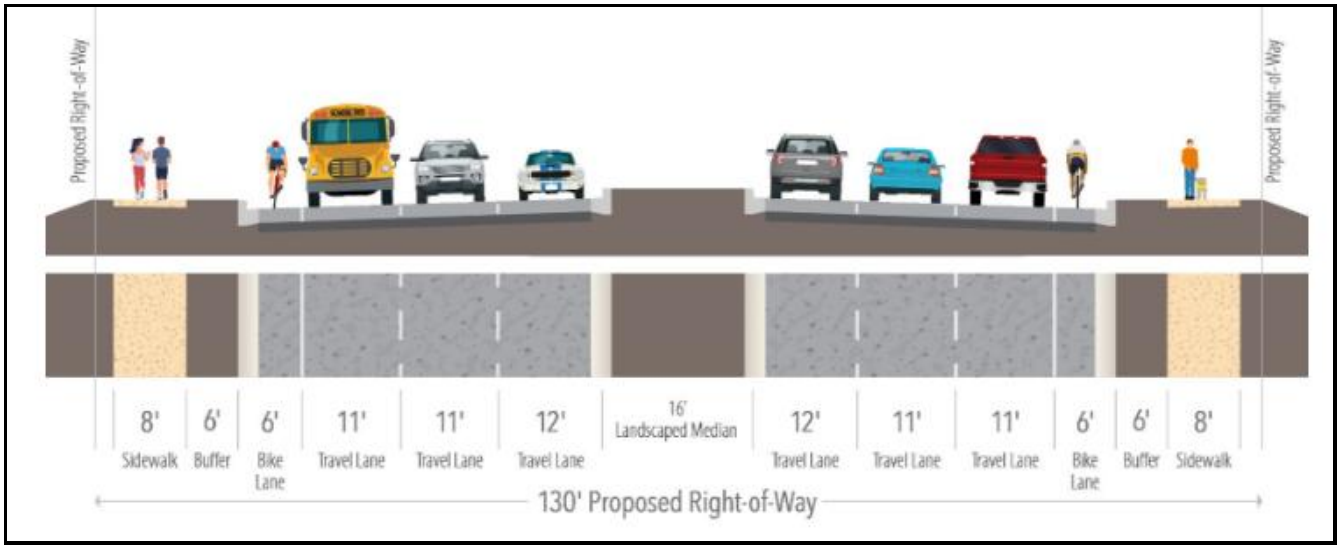

Figure 5 - Preferred Alternative Roadway Typical Section

The total estimated cost for the Preferred Alternative is $87,302,214.00, including $65,900,114.00 for construction, $15,518,500.00 for ROW acquisitions, and $2,706,000.00 for utility relocations. Most of the new ROW and temporary construction easements (TCE) would be acquired from Arizona State Land Department (ASLD) and Flood Control District of Maricopa County (FCDMC). Table 1 below identifies the approximate ROW and TCE areas in acres (ac).

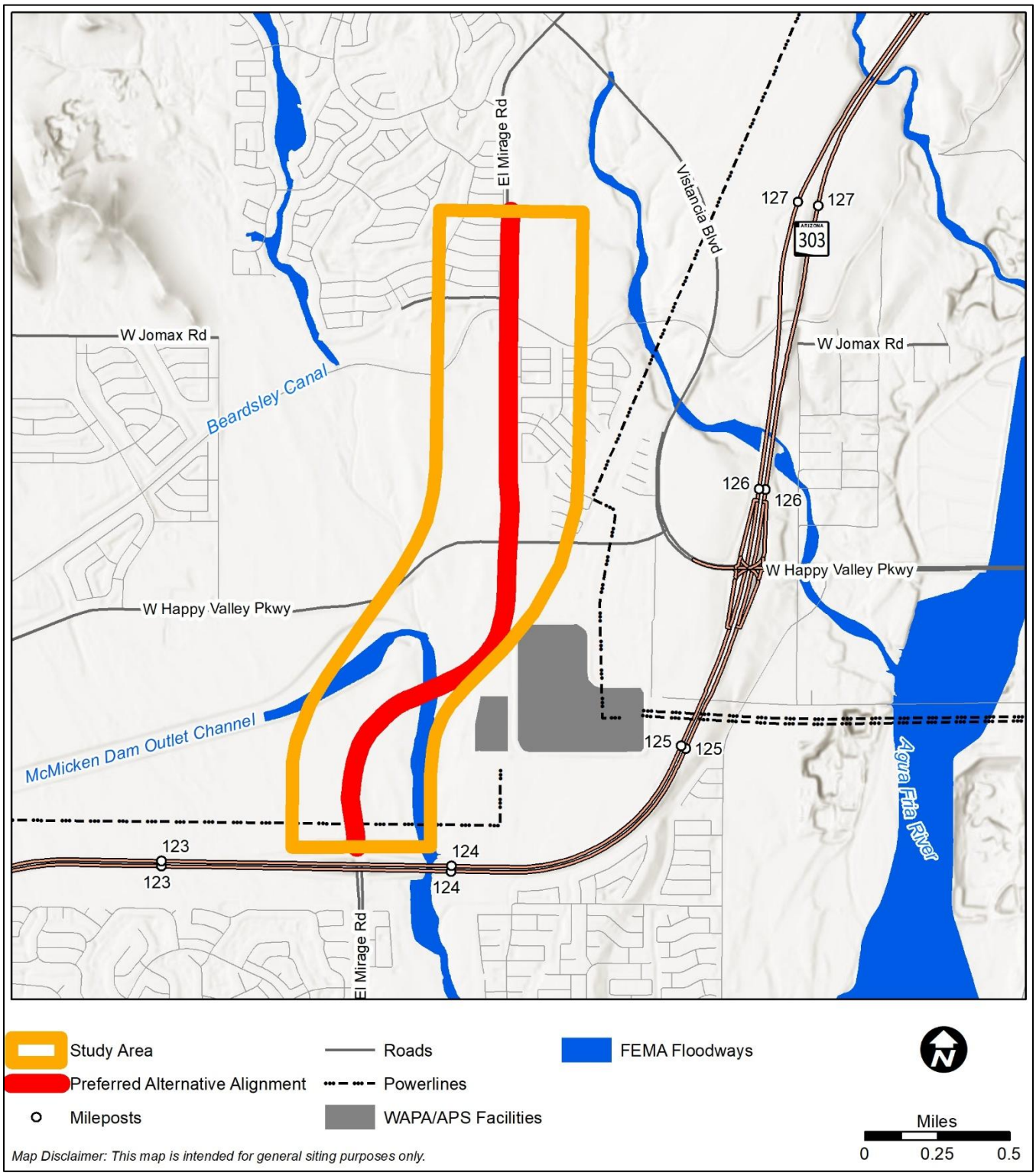

Figure 6 - Preferred Alternative Alignment

Table 1 – Anticipated ROW and TCEs

Landowner	New ROW Area (ac)	TCE (ac)
ASLD	19.97	6.04
FCDMC	4.96	3.34
Private	4.16	1.63

The corridor improvements are estimated to exceed available funding. Consequently, the improvements may be constructed in two phases. The initial phase would accommodate four travel lanes, two in each direction, bicycle lanes, and buffered sidewalk. The initial phase would construct the outside curb in its ultimate location to accommodate future widening to the inside (Figure 7). No changes to the ultimate project footprint or ROW requirements would occur in the interim phase.

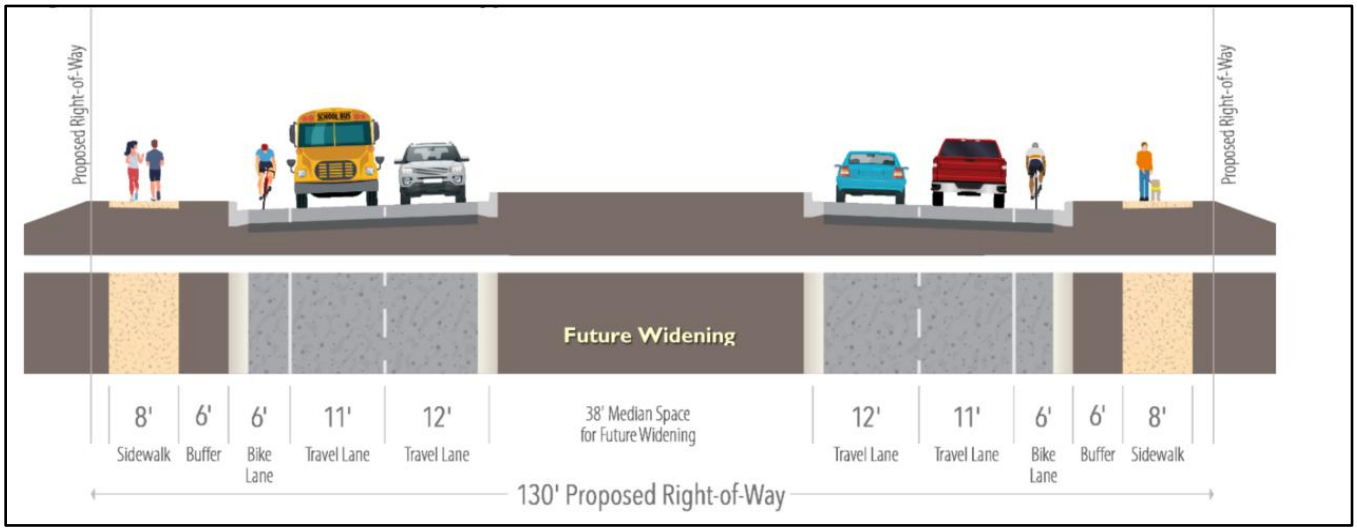

Figure 7 - Potential Interim Phase of the Preferred Alternative

No-Build Alternative

The No-Build Alternative establishes a baseline condition for comparison of impacts. The No-Build Alternative would maintain the El Mirage Road in its existing condition. The connection between SR303L and Happy Valley Road would not be implemented, preventing any travel connection between El Mirage Road north of the TI and SR303L. The connection between Happy Valley Road and Jomax Road would not be implemented. The alternative would not implement the structures crossing McMicken Wash and Beardsley Canal. The Peoria *PlanPeoriaAZ* identifies this connection of El Mirage Road in future development for this area. As discussed in the *Future Land Use* section, two master development areas are within the study area: WestWing Business Park and North Peoria Gateway. Additional unnamed master planned areas are identified within the study area for the City of Peoria to annexation from ALSD land. These master plans include residential, commercial, and industrial development, which will cause additional traffic on the surface streets. The No-Build Alternative would not include the transportation improvements, but adjacent proposed development and transportation network improvements identified in *PlanPeoriaAZ* would continue resulting in increased regional delays. Roadway projects included in the No-Build Alternative include a new TI along SR303L at the Dysart Road alignment, the extension of Jomax Road from Tiera Del Rio Boulevard to El Mirage Road, and the extension of Lone Mountain Road to 163rd Avenue. The No-Build Alternative would not address the anticipated traffic demand of future developments and would not meet the purpose and need of the project.

4. Affected Environment, Environmental Consequences, and Mitigation

Resources Eliminated from Further Evaluation

Based on existing sources of data and the best available information, it was reasonable to make the following determinations:

There are no known sole source aquifers, wetlands, wilderness areas, designated critical habitats, prime or unique farmlands, Section 6(f) properties, national natural landmarks, or wild and scenic rivers affected by the proposed project. Therefore, there would be no impacts to these resources as a result of the proposed project. This negative declaration of impacts to the above-referenced resources will not be restated in this document.

Land Ownership and Right-of-Way

This section describes land ownership, jurisdiction, and land uses in the study area. "Land ownership" identifies public and private ownership; "jurisdiction" implies the authority that regulates land uses; and "land use" describes the existing occupation or physical use of the land. The study area is the area where existing information and field data were collected to identify all known resources in the affected environment.

Existing Conditions

Land Ownership/Jurisdiction

Landowners within the study area include the ASLD, FCDMC, Maricopa Water District (i.e. Beardsley Canal), and private parcels (Figure 2). Roadway rights-of-way along existing streets are managed by Maricopa County and the City of Peoria.

The northern portion of the study area (north of the Township 4N/5N boundary) is within the City of Peoria. The southern portion of the study is within the jurisdiction of Maricopa County.

Existing ROW widths along El Mirage Road between Happy Valley Road and Desert Sun Lane extend 65-feet east from the section line. Existing ROW widths along Happy Valley Road at El Mirage Road are 130-feet minimum. Existing ROW widths along Jomax Road at El Mirage Road are 135-feet. Existing ROW widths at El Mirage Road directly north of the SR303L TI are 230-feet minimum.

Existing Land Use

Existing land within the study area includes vacant properties, open space utilized for flood control, commercial properties, residential, and utilities including the Beardsley Canal and overhead APS powerlines (Figure 8).

Future Land Use

The study area is within the planning area covered by the City of Peoria's update to the Peoria General Plan, referred to as *PlanPeoriaAZ*. This plan has a target horizon year of 2040. Land uses designated in this plan include business parks, industrial, neighborhood commercial, open space, public, and residential (Figure 9).

There are two major planned developments occurring within or adjacent to the study area: the WestWing Business Park and the North Peoria Gateway. The WestWing Business Park proposed development is located north of SR303L and east of El Mirage Road. A roadway is currently under construction from SR303L TI along El Mirage Road for approximately 1000 feet then turning east for approximately 2800 feet to access the property. The project is anticipated to generate traffic in the area. The project is being developed in two phases. Phase one is complete, and phase two is anticipated to be completed by 2029.

The proposed North Peoria Gateway development is approximately 1,600 acres located along SR303L between El Mirage Road and 109th Street. The property is planned to be developed as a mix of employment and commercial uses. The North Peoria Gateway development will require coordination with the ASLD and subdividing parcels. The future land use surrounding and within the study area is anticipated to be developed as primarily residential and commercial.

Environmental Impacts—Preferred Alternative

Existing Land Use

Land acquisition for ROW (29.1 acres) would be required under the Preferred Alternative. Additionally, 11 acres of temporary construction easements would be required under this Preferred Alternative. There are no total acquisitions of any parcel under this alternative and no relocations of any residents or businesses would be required. The majority of land acquisitions (87.5%) would consist of undeveloped parcels owned by ASLD and FCDMC. The FCDMC are completing a project to revise the McMicken Dam Outlet Channel. Coordination with the FCDMC has occurred throughout this study and the Preferred Alternative has been developed to be compatible with the revised operation of flood control features in the study area.

The Preferred Alternative is consistent with planning objectives identified in Peoria's General Plan. No plan amendments would be required for the implementation of this alternative. The Preferred Alternative has been developed to be compatible with both the WestWing Business Park and North Peoria Gateway developments.

Property acquisition would result in a direct conversion of landownership and land use. No zoning change is anticipated due to the project having been planned alongside ongoing or future development. The Preferred Alternative complements or support the region's growth and provide improved traffic operations. These factors typically encourage community growth, and the study area has capacity in terms of undeveloped lands and infrastructure in place. Local jurisdiction planning and zoning requirements include elements for development to consider environmental resources and mitigation as needed. Cumulative impacts on land ownership, jurisdiction, and land use would continue to be neutral to positive.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, routine maintenance and improvements would be expected to continue on the segments of El Mirage Road that currently exist. Land adjacent to the segments of the proposed El Mirage Road may be less desirable for development due to lack of access.

Mitigation Measures

ADOT and the City of Peoria will follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, the Uniform Relocation Act Amendments of 1987, the ADOT Right of Way Procedures Manual, Title VI of the Civil Rights Act of 1964, and the ADOT Public Involvement Plan. No mitigation measures are required.

Conclusion

The Preferred Alternative would permanently acquire approximately 29.09 acres of property for transportation use. The majority of the acquired land is undeveloped or minor partial takes from larger parcels that are not expected to alter existing or future land use. Future land use plans would not be negatively affected by the acquisitions.

The proposed project is consistent with transportation planning by ADOT and MAG and is supported by local jurisdictions Maricopa County and the City of Peoria. The Preferred Alternative would improve travel in the study area and region, and benefit future growth and development.

The No-Build Alternative would not result in changes to existing or future land use patterns or the acquisition of residences or businesses in the study area because no ROW would be required. With the No-Build Alternative, it could be expected that development would slow in locations where future traffic volumes would approach and/or exceed the maximum capacity of the roadway network or in areas where access is limited.

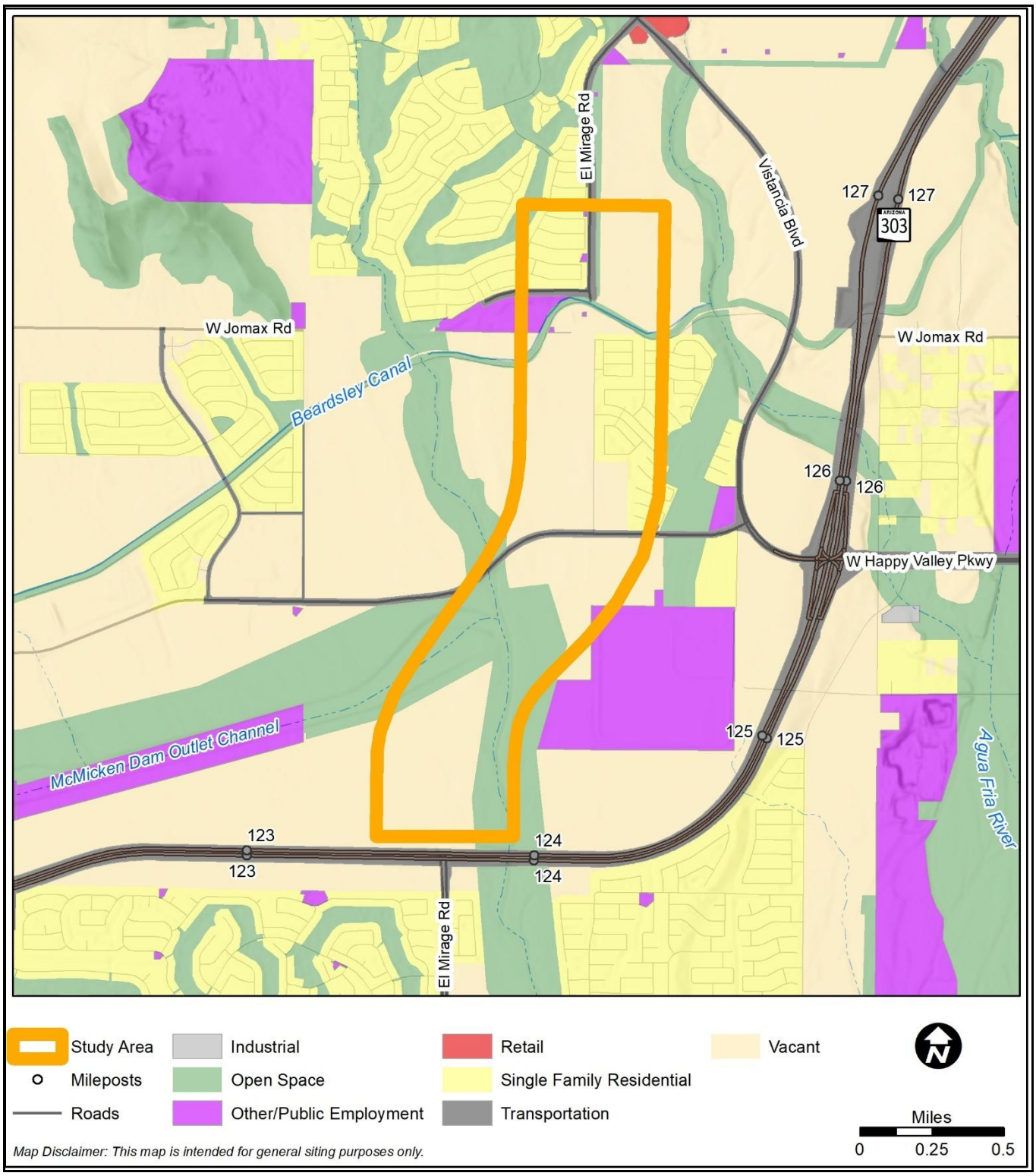

Figure 8 - Existing Land Use (MAG)

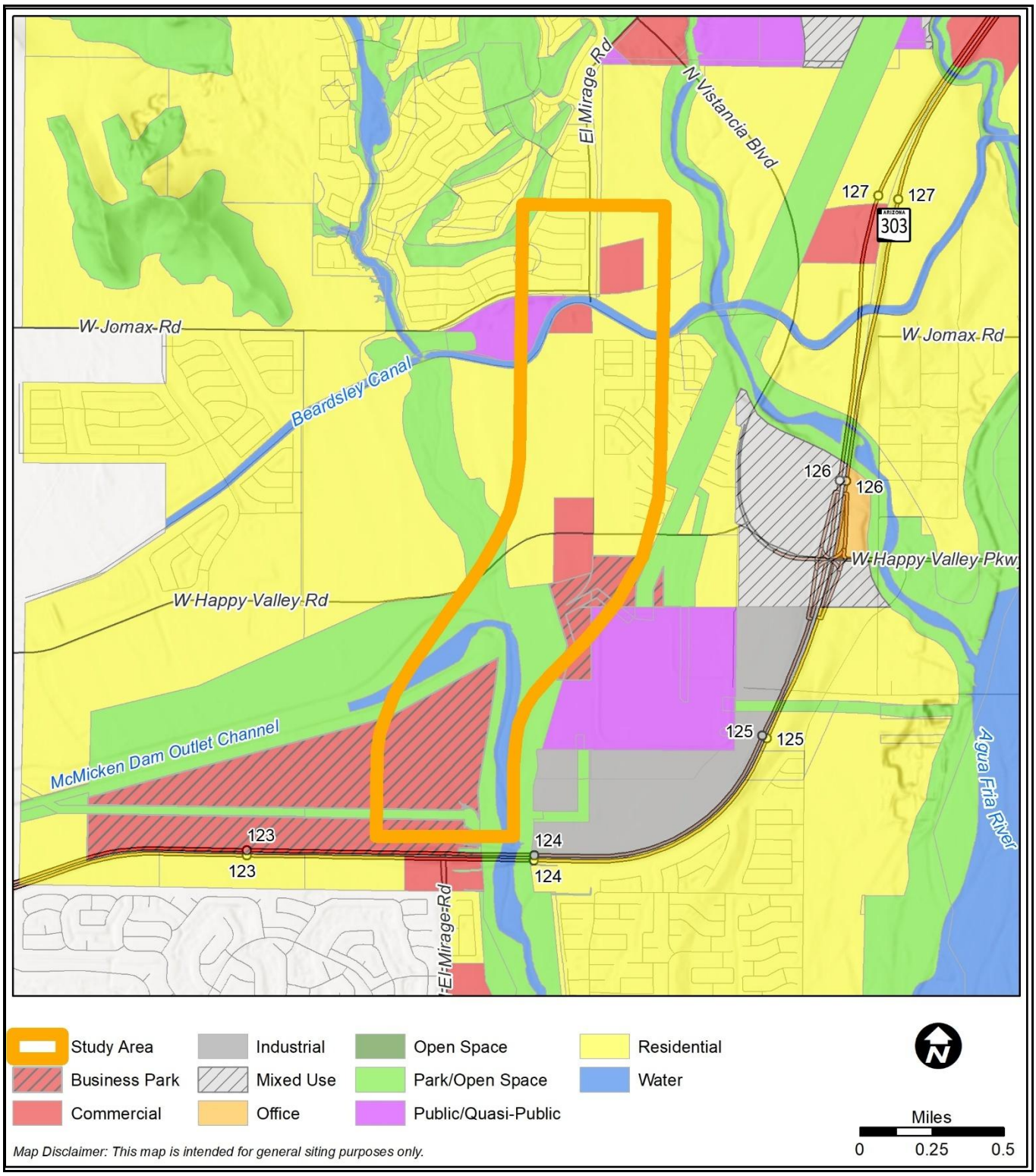

Figure 9 - Peoria Planned Land Use

Socioeconomics

Socioeconomics is a term that describes the economic and social characteristics of a specific population, such as income, education, demographics and occupation. The analysis considers both quantitative and qualitative factors. By considering these elements, socioeconomic analysis helps assess the broader impacts of a project on different population groups and the area's overall social and economic character, and support more informed and balanced strategies when making decisions about a project's effects.

Existing Conditions

Demographics

Jurisdiction in the study area is mainly divided by the City of Peoria, unincorporated sections of Maricopa County, and ASLD. Based on the US Census Bureau's 2023 American Community Survey 5-year survey, the total population within all of Maricopa County was recorded as 4,585,871, while the City of Peoria was estimated at a population of approximately 194,338. The study area is mainly contained to Census Tract 405.33, Block Group 1 and Census Tract 405.34, Block Group 2. A general overview of the demographic makeup of the study area can be found in Tables 2 through Tables 4. These breakdowns are guiding estimates retrieved from the Environmental Protection Agency and US Census Bureau but allows for a generalized representation of the community makeup in the study area.

Table 2 – Demographic Summary of the Study Area

Socioeconomic Indicators	CT 405.33, BG 1	CT 405.34, BG 2	Maricopa County
Total Population	2,862	2,128	4,585,871
% Low Income	7%	9%	11%
% in Limited English-speaking Households	0%	0%	3%
% Unemployed	3%	3%	5%
% with Less than High School Education	3%	2%	18%
% under Age 5	9%	0%	6%
% over Age 64	10%	80%	17%

** Data retrieved from US Census Bureau and the Environmental Protection Agency at the Block Group level.*
% rounded to the next whole number

Table 3 – Racial Composition of the Study Area

Race or Ethnicity[(a)]	CT 405.33, BG 1	CT 405.34, BG 2	Maricopa County
Total Population	2,862	2,128	4,585,871

% White Alone	74%	93%	63%
% Black or African American Alone	6%	2%	6%
% American Indian and Alaska Native alone	1%	0%	2%
% Asian alone	3%	2%	4%
% Native Hawaiian Pacific Islander alone	0%	0%	>1%
% Some other race alone	4%	0%	8%
% Two or more races	12%	4%	16%
% Hispanic or Latin [(a)]	14%	1%	31%

** Data retrieved from US Census Bureau at the Block Group level, Table B03002.*
% rounded to the next whole number.
(a) "Hispanic or Latin" refers to ethnicity, not race. People within different racial categories may have the same ethnicity and vice versa. Therefore, it is calculated differently from the other columns in this table.

Table 4 – Breakdown of Languages Spoken at Home for those Five Years and Older

Languages	CT 405.33	CT 405.34	Maricopa County
Total Population	2,862	3,516	4,234,272
% Speak English only	87.7%	96.6%	74.2%
Languages of those who Speak English less than Very Well			
% Spanish	2.3%	0.0%	6.2%
% French, Haitian, or Cajun	0.0%	0.0%	0.1%
% Germanic	0.0%	0.0%	0%
% Russian, Polish or Slavic	0.0%	0.3%	0.1%
% Other Indo-European	0.0%	0.4%	0.3%
% Korean	0.0%	0.0%	0.1%
% Chinese	0.0%	0.0%	0.3%
% Vietnamese	0.0%	0.0%	0.2%
% Tagalog	0.0%	0.0%	0.1%
% Other Asian and Pacific	0.0%	0.0%	0.3%
% Arabic	0.0%	0.0%	0.2%
% Other unspecified	0.0%	0.0%	0.2%

** Data retrieved from US Census Bureau at the Census Tract level, Table C16001.*
% rounded to the first percentage point.

Surrounding Neighborhoods

Though the current state of the study area is mostly undeveloped, it is within a region of the County earmarked for high community growth, particularly single family lots with densities between 3-5 dwelling units per acre and is in close proximity to emerging technology hubs which are estimated to bring about rapid future urban development. The existing SR303L lines the southern edge of the study area, effectively creating a

transportation corridor separation between those communities to the north. To the north of SR303L, there are two neighborhood subdivisions within the study area, with another approximately 1-mile to the west.

Coldwater Ranch overlaps the study area from Happy Valley Road to just south of the Beardsley Canal. It is a master-planned community built between 2007 and 2019 and primarily consists of single-family homes. The subdivision was designed with several small neighborhood parks with playground equipment, baseball field, soccer field, and disc golf course.

Within the northern limits of the study area starting at Jomax Road is the Vistancia neighborhood. The neighborhood houses over 55,000 residents and is one of the largest master planned communities in Arizona. Vistancia was carefully developed with sub-communities which cater to a variety of lifestyles, including multi-generational family friendly communities, active adult lifestyles, and age 55 and older communities. The development offers a 3.5 mile multi-use trail connecting the entire community and provides an alternate non-vehicular path to schools and outdoor amenities. Residents also have access to two golf courses and a recreation center which provide swimming pools, an indoor gymnasium, tennis courts, and fitness studios.

The Rancho Cabrillo neighborhood is situated near Happy Valley Road and Dysart Road, approximately 1-mile west of the study area. The neighborhood is a medium in size and relatively new, with home construction starting in 2012 and continuing to today. Rancho Cabrillo is characterized as family-friendly with parks, walking paths, and trails for biking and hiking.

Social and Emergency Services

The study area is in the Peoria Unified School District, but no schools are within its boundaries. The closest school was identified to be Big Dreams Preschool and Kindergarten, a private school approximately 1 mile north at the intersection of El Mirage and Vistancia Boulevard. The closest public school is Vistancia Elementary School, approximately 2 miles north at Sunset Point just off Vistancia Boulevard. Several schools were identified east of the study area within the City of Peoria, the closest being Zuni Hills Elementary over 2.5 miles away; however, those schools are separated by SR303L.

No parks were identified within the study area. The closest public park is the City of Peoria's Alta Vista Park, approximately 2.5 miles southeast of the project. As mentioned earlier, several private parks and recreational spaces were included in many of the surrounding master planned communities, the closest being approximately 700 feet east of the project, a baseball field within the Coldwater Ranch neighborhood. Segment 11 of the Maricopa Trail does intersect the proposed roadway alignment, approximately 0.25 miles south of Happy Valley Road. The Maricopa Trail is a 315—mile non-motorized recreational trail loop established to connect the county's regional parks. The trail serves as a vital resource for outdoor recreation and community engagement.

Emergency services, such as police, fire and ambulance facilities, are not within the study area. The closest fire station is approximately 0.5 miles to the east of the project at 119th Avenue just south of Happy Valley Road. The closest police station is approximately 4 miles east within the City of Peoria at approximately Pinnacle Peak Road and Lake Pleasant Parkway. The closest hospital with ambulatory services is approximately 3.5 miles southwest within Sun City West.

<u>Environmental Impacts—Preferred Alternative</u>

The Preferred Alternative would require acquisition of new ROW from the Coldwater Ranch Community Association. The new acquisition would allow for improvements such as widening the sidewalks, reconstructing curb ramps to current federal standards, and potentially constructing underground utilities. The through traffic

would stay the same distance away from houses as it is today. Mature vegetation between El Mirage Road and the privacy wall may need to be removed and, in some locations, may not be possible to replant due to the narrower space between the roadway and houses. No residential relocation would be warranted as a result of the project's ROW acquisition.

New ROW would also be required from Westwing 2 Land Borrower LLC and Sun Belt Land Investment General Partnership, at the southeast corner of EL Mirage Road and Happy Valley Road. Full parcel acquisition is not expected from either business, but rather a maximum of 90 feet from their existing property line. The new ROW would encroach into areas that are mainly being utilized for parking storage and would not result in the take of structures with immobile foundations. As such, the project would result in minor effects to these businesses.

Segment 11 of the Maricopa Trail does cross the Preferred Alternative. In this location, the Maricopa Trail is generally an unpaved pathway which connects the McMicken Dam Outlet to 119th Avenue, and then turns north to the Happy Valley Road/Vistancia Boulevard intersection. The Preferred Alternative would effectively bisect the trail at the El Mirage Road alignment, preventing trail goers from continuing on to 119th Avenue. As such, the design team, in collaboration with Maricopa County, identified a recommended plan to realign and partially integrate the trail into the Preferred Alternative in order to maintain its continuity.

Access to schools, parks, and community services would not be adversely affected by the Preferred Alternative and would likely be improved by enhancing the transportation connectivity in the study area.

Construction-related activities could have a minor short-term impact on travel due to lane closures. Traffic delays should be expected. Access to residences, neighborhoods, businesses, schools, parks, emergency services etc. would be maintained throughout construction, and coordination with these stakeholders would occur prior to construction activities. Residents would also be temporarily exposed to higher levels of noise and dust, which would be mitigated by best management practices. Once construction is complete, traffic circulation would be improved from its current state and less congestion would be experienced by those residents and businesses in the area.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, the connection of El Mirage Road from SR303L north to Jomax Road to ultimately complete the current El Mirage Road alignment would not be constructed. No new ROW would be acquired and construction related activities would not take place.

Future growth in the study area could be negatively affected due to the lack of adequate transportation. This project would have provided a direct route along El Mirage Road as opposed to the current circuitous routes residents and travelers must take, which would ultimately create high traffic volume burdens on the surrounding roadway network as population expands in the area.

Mitigation Measures

ADOT and the City of Peoria will follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, the Uniform Relocation Act Amendments of 1987, the ADOT Right of Way Procedures Manual, Title VI of the Civil Rights Act of 1964, and the ADOT Public Involvement Plan. No mitigation measures are required.

Conclusion

Social and economic impacts under the Preferred Alternative would be minor. No residential displacements would occur; however, small sections of the new roadway would be in closer proximity to residences. ROW would be needed from one of the few active industrial parcels, but those property acquisitions would be relatively minor and would not impede any of the constructed features of those parcels. The Maricopa Trail would be impacted; however, considerations have been made in the alternative to keep the trails' continuity. There would be no negative impacts to schools, parks, neighborhoods, or other social services.

Cultural Resources

Cultural resources are properties that reflect the heritage of local communities, states, and nations. Properties judged to be significant and to retain sufficient integrity to convey that significance are termed "historic properties" and are afforded certain protection in accordance with state and federal legislation. Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 USC 300101 et seq.) and NEPA require federal agencies to take into account the effects of their undertakings on historic properties and afford the Arizona State Historic Preservation Office (SHPO) and other interested parties an opportunity to comment on such undertakings. To comply with these laws, an assessment of cultural resources was completed for this EA. Regulations for Protection of Historic Properties (36 CFR 800) implement Section 106 of the NHPA. These regulations define a process for federal agencies to follow as federal projects are planned and implemented. Historic properties include prehistoric and historic districts, sites, buildings, structures, or objects included in or eligible for inclusion in the National Register of Historic Places (NRHP). Historic properties may be eligible for nomination to the NRHP if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet at least one of the following criteria:

- Criterion A—be associated with events that have made a significant contribution to the broad patterns of our history
- Criterion B—be associated with the lives of persons significant in our past
- Criterion C—embody the distinctive characteristics of a type, period, or method of construction; or represent the work of a master; or possess high artistic values; or represent a significant and distinguish able entity whose components may lack individual distinction
- Criterion D—have yielded, or may be likely to yield, information important in prehistory or history. Properties may be of local, state, or national importance. Typically, historic properties are at least 50 years old, but younger properties may be considered for listing if they are of exceptional importance (Criterion G). Once historic properties are evaluated, the federal agencies can determine whether historic properties are affected. The NRHP defines historic property as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP.

<u>Existing Conditions</u>

Archival research and record searches were conducted at the Arizona SHPO, the Arizona State Museum (ASM), the Arizona State University Archaeological Research Institute, and the AZSITE cultural resource database. Historical maps and survey plats were also reviewed, particularly General Land Office plats maintained by the Bureau of Land Management, and the ADOT Historic Preservation Portal. The results of the inventory are covered in this report: *A Class III Cultural Resource Survey of 105.41 Acres along El Mirage Road, Between State Route Loop 303 and North of Jomax Road, In and Around Peoria, Maricopa County, Arizona* (Russell and Murray 2025). The archival research and records searches identified 25 prior archaeological projects and nearly 5 previously recorded cultural resource intersecting the area of potential effect (APE). These consist of two archaeological sites, two historical, in-use structures, and one isolated occurrence.

Cultural resources eligibility determinations for listing in the NRHP are made by agencies with SHPO concurrence. Some resources remain unassessed and require archaeological testing for sites or research for other resource types to determine their NRHP eligibility. Properties may be of local, state, or national importance. Typically, historic properties are at least 50 years old, but younger properties may be considered for listing if they are of exceptional importance (Criteria Consideration G). Once historic properties are evaluated, the federal agencies can determine whether historic properties are affected. The NRHP defines historic property as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP. Three of the cultural resources (one archaeological site and two historic resource) are listed in the NRHP.

Table 5 provides a summary of the NRHP eligibility status of the cultural resources located within the project limits.

Table 5 – NRHP Eligibility Status of Cultural Resources within Study Area

Site Designation	Owner	Description	Eligibility Status/Criterion	Concurrence	Recommended Treatment
AZ T:7:187(ASM)	Private	Hohokam prehistoric artifact scatter, which consisted of 150–200 plain ware pottery sherds. In 2002, surface artifacts were collected, and test excavations failed to encounter any subsurface deposits. AZTEC was unable to relocate the site and is of the opinion that whatever remained after the previous surface collection effort has been obliterated during subsequent development.	Ineligible (SHPO-2000-2057, November 13, 2002).	Ineligible	None
AZ T:7:244(ASM)	ASLD	A Hohokam prehistoric artifact scatter, which consisted of 100–150 plain ware pottery sherds, 1 mano fragment, and two basalt cores or preforms. At the time of its original recording, a small drainage went through or past the site, and recorders observed subsurface artifacts in its exposed profile. AZTEC was unable to relocate the site or drainage. While the site's surface assemblage appears to have been removed or destroyed, there is a distinct possibility that subsurface deposits remain intact.	Eligible (D) (SHPO-2020-1181, September 2, 2020).	Eligible (D)	Flag; avoid or monitor
The Beardsley Canal	ASLD, private	An historical, in-use structure that extends south and west from Hank Raymond Lake for approximately 33 miles. Construction of the canal began in 1892 with sporadic progress and regular expansion. An examination of archival maps and aerial images suggests the canal reached the current APE at some time between 1924 and 1949.	Eligible (A) (SHPO-2009-0560, June 23, 2009).	Eligible (A)	Avoid by design
The Wickenburg-Dysart 69-kV Transmission Line		Known also as the APS M-115 Line, is an historical, in-use structure that delivers power between the towns of Wickenburg and El Mirage. Built in 1948 by Central Arizona Light and Power—a precursor to today's APS—the structure passes well west of the current APE. However, the West Wing Spur (APS M-115-5 Spur) was added in 1974, extending through the APE.	Eligible (A) (SHPO-2009-0442, November 5, 2015)	Eligible (A)	Avoid by design

[a] *Eligibility to be listed in the NRHP. Parenthetical letters correspond to criteria at 36 CFR §§ 60.4(a)–(d).*

Environmental Impacts—Preferred Alternative

Two previously recorded archaeological sites (AZ T:7:244[ASM] and AZ T:7:187[ASM]) and two previously recorded historical, in-use structures (the Beardsley Canal and the Wickenburg–Dysart 69-kV Transmission Line) have been identified within the APE for this project. AZ T:7:244(ASM), the Beardsley Canal, and the Wickenburg–Dysart 69-kV Transmission Line were all previously determined eligible for listing in the NRHP. AZ T:7:187(ASM) was previously determined ineligible, and AZTEC Engineering Group Inc. (AZTEC) suggests that IO-1 is likewise ineligible. AZTEC makes the following recommendations:

The proposed addition to El Mirage Road would cross the Beardsley Canal. The manner of crossing, however, has yet to be determined. For the purpose of Section 106 consultation, ADOT is operating under the assumption that the crossing would to some degree compromise the structure's historical integrity of design, materials, and/or workmanship. That said, any impacts to the canal would be limited to 0.25 percent or less of the overall structure. ADOT has determined that such a scenario, should it be necessary, would not adversely affect the property's ability to convey its significance.

While the surface assemblage at AZ T:7:244(ASM) seems to have been removed or destroyed, the site's original recorders did observe evidence of subsurface archaeological deposits. Should such exist within the APE, there exists the potential for inadvertent impacts. To avoid adversely affecting the register-eligible site, ADOT has determined that all ground disturbance within the site and 75 feet therefrom would be monitored by a qualified archaeologist, in accordance with an approved treatment plan. Prior to construction, the buffered site boundary would be flagged for general avoidance, discussed with construction personnel, and added to project plans. Under such conditions, ADOT has determined that adverse effects would be avoided.

Because this project would employ federal funds, it is considered an undertaking subject to review under Section 106 of the NHPA. The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 USC 327 and a Memorandum of Understating dated June 25, 2024, and executed by FHWA and ADOT.

Consulting parties for this project are ADOT, the Ak-Chin Indian Community, APS, the SHPO, ASM, ASLD, Central Arizona Project (CAP), City of Peoria, FCDMC, Fort McDowell Yavapai Nation, Fort Mojave Indian Tribe, Gila River Indian Community, Hopi Tribe, Mescalero Apache Tribe, Maricopa Water District, Pascua Yaqui Tribe, Pueblo of Zuni, Salt River Pima-Maricopa Indian Community (Four Southern Tribes lead), Tohono O'odham Nation, U.S. Army Corp of Engineers (Corps), White Mountain Apache Tribe, and Yavapai-Apache Nation. Consultation occurred on May 14, 2025.

Minor cumulative impacts on cultural resources would be expected due to the project and past, ongoing, and reasonably foreseeable future actions. The study area and vicinity is lacking in cultural resource sites that have not already been evaluated or documented. Local jurisdictions' development guidelines include consideration of archaeological and historic properties.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, no construction would occur. The No-Build Alternative would not have any direct or indirect effects on cultural resources.

Mitigation Measures

Potential impacts to cultural resources may occur as a result of the Preferred Alternative. The following mitigation measures will be implemented to avoid those impacts:

Arizona Department of Transportation District Responsibilities

- The Engineer shall contact the ADOT Environmental Planning Historic Preservation Team (660.730.0414) or the Environmental Commitments Coordinator (520.449.1985) at least 14 (fourteen) business days prior to the start of ground-disturbing activities to arrange for qualified personnel to flag avoidance areas as well as monitor and be present during construction. ADOT's Environmental Planning – Historic Preservation Team will provide contact information on the qualified archaeological consultant to the contractor for their records. ADOT's Environmental Planning – Historic Preservation Team will contact the qualified archaeological consultant regarding the project start date and provide Contractor information.
- The Engineer shall coordinate via email or phone with the qualified archaeological consultant and communicate the construction schedule for the duration of ground disturbing work in those areas where monitoring is needed.

Contractor Responsibility

- The contractor shall avoid all flagged and/or otherwise designated sensitive cultural resource areas within or adjacent to the project area, unless a qualified archaeological consultant is present.

Conclusion

Based on the evaluation of potential impacts to cultural resources, ADOT has determined that a finding of "no adverse effect" is appropriate for this project.

Section 4(f) Resources

Section 4(f) of the US Department of Transportation Act of 1966, as amended, states that the Department of Transportation "may approve a transportation program or project … requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if (1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use" (49 USC 303[c]). On April 16, 2019, ADOT assumed the responsibility for various environmental regulations, including Section 4(f), from the FHWA through a Memorandum of Understanding in accordance with 23 USC 327.

A "use" of a Section 4(f) resource, as defined in 23 CFR 774, occurs: (1) when land is permanently incorporated into a transportation facility; (2) when there is a temporary occupancy of land that is adverse in terms of the statute's preservationist purposes; or (3) when there is a constructive use of the Section 4(f) resource. A constructive use of a Section 4(f) resource occurs when the transportation project does not incorporate land from a Section 4(f) resource, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. For example, a constructive use can occur when:

- The projected noise level increase, attributable to the project, substantially interferes with the use and enjoyment of a noise-sensitive facility of a resource protected by Section 4(f)
- The proximity of the proposed project substantially impairs aesthetic features or attributes of a resource protected by Section 4(f), where such features or attributes are considered important contributing elements to the value of the resource (an example of such an effect would be the location of a proposed transportation facility in such proximity that it obstructs or eliminates the primary views of an architecturally significant historical building or substantially detracts from the setting of a park or historic site that derives its value in substantial part due to its setting)
- The project results in a restriction of access that substantially diminishes the utility of a significant publicly owned park, recreation area, or historic site

<u>Existing Conditions</u>

There are two Section 4(f) resources within the study area which include the Maricopa Trail (a recreational trail) and the Beardsley Canal (a historic property).

Maricopa Trail

The Maricopa Trail is a 315+ mile trail established to promote open space corridors while providing off-street, non-motorized recreation opportunities for bicyclists, pedestrians, and equestrians to utilize. In addition, the trail system links all of Maricopa County's regional parks by traversing 15 separate municipalities. Within the study area, Segment 11 (Trilby – 119th Ave) of the Maricopa Trail crosses the study area 1275 feet south of Happy Valley Road on perpetual easement from lands managed by the ASLD. The trail currently exists as an unpaved single-track trail and is used primarily by hikers and cyclists. The trail is open to the public for use without the requirement for recreation permits from ASLD due to agreements between Maricopa County Parks Department and ASLD.

Beardsley Canal

The Beardsley Canal within the study area was originally constructed sometime between 1924 and 1949. Though the open-air canal has undergone historic and modern improvements, it was previously determined eligible for

listing in the NRHP pursuant to 36 CFR § 60.4(a) under Criterion A, owing to its significance in the context of Arizona's irrigation history (SHPO-2009-0560, June 23, 2009).

Environmental Impacts—Preferred Alternative

Because the Maricopa Trail crosses the corridor perpendicularly, there is no opportunity to avoid this resource. The project team developed several alternatives to preserve the connection along the Maricopa Trail where it intersects the new roadway. Through coordination with the Maricopa County Parks and Recreation Department it was determined that the best option was to route trail users to the El Mirage Road / Happy Valley Road intersection approximately 1,250 feet north where a safe crossing at a signalized intersection could be completed (Figure 10). Because connectivity of trail segments bisected by the roadway would be maintained following construction, the recreational attribute of the trail would not affect the characteristics that warrant protection under Section 4(f). ADOT has coordinated with the official with jurisdiction over the property regarding ADOT's preliminary determination that the project will not adversely affect the property and are seeking to make a *de minimis* determination following the public review period of the EA.

Currently, the new El Mirage Roadway would span the Beardsley Canal utilizing a new bridge structure and no direct impacts to the canal are anticipated. Because the project is still in the scoping phase, ADOT is assuming that the crossing would to some degree compromise the structure's historical integrity of design, materials, and/or workmanship. Any impact on the canal would be limited to 0.25 percent or less of the overall structure. ADOT has determined that such a scenario, should it be necessary, would not adversely affect the property's ability to convey its significance. Consultation under Section 106 of the NHPA has taken place. SHPO concurred on July 14, 2025 that the project would have "no adverse effect" on the Beardsley Canal. Based on the scope of the undertaking; the fact that the undertaking does not adversely affect the function/qualities of the Section 4(f) property on a permanent or temporary basis; and with agreement from the official with jurisdiction (SHPO/THPO), the proposed action constitutes a *de minimis* impact.

Environmental Impacts—No-Build Alternative

No impacts to Section 4(f) resources are anticipated under the No-Build Alternative.

Mitigation Measures

The following mitigation measure will be implemented to minimize harm to Section 4(f) properties:

Arizona Department of Transportation Design Responsibility

- The Arizona Department of Transportation will coordinate the final design affecting the Maricopa Trail with the Maricopa County Parks and Recreation Department.

Conclusion

The construction of the proposed project, which would result in the incorporation of a minor amount of the Maricopa Trail for the construction El Mirage Road, would not adversely affect the activities, features, or attributes that qualify the Maricopa Trail for protection under Section 4(f) and meets the requirements of a use with a *de minimis* impact under 23 CFR 774.17.

The ROW acquisition from the Maricopa Water District over the Beardsley Canal would not impact the historic features of this property and was determined to have no adverse effect under Section 106. The use of a minor amount of land from the property would not compromise the property's eligibility as historic and under Section 4(f) meets the requirements of a use with a *de minimis* impact.

Comments obtained during the public comment period of the Draft EA will be compiled and provided to the officials with jurisdiction over the Section 4(f) resources for their consideration. No decisions will be made until the officials with jurisdiction have had the chance to review the public comments. As design advances, ADOT would coordinate with Section 4(f) resource owners, as needed. Reference the Section 4(f) forms to be included in an appendix in the Final EA.

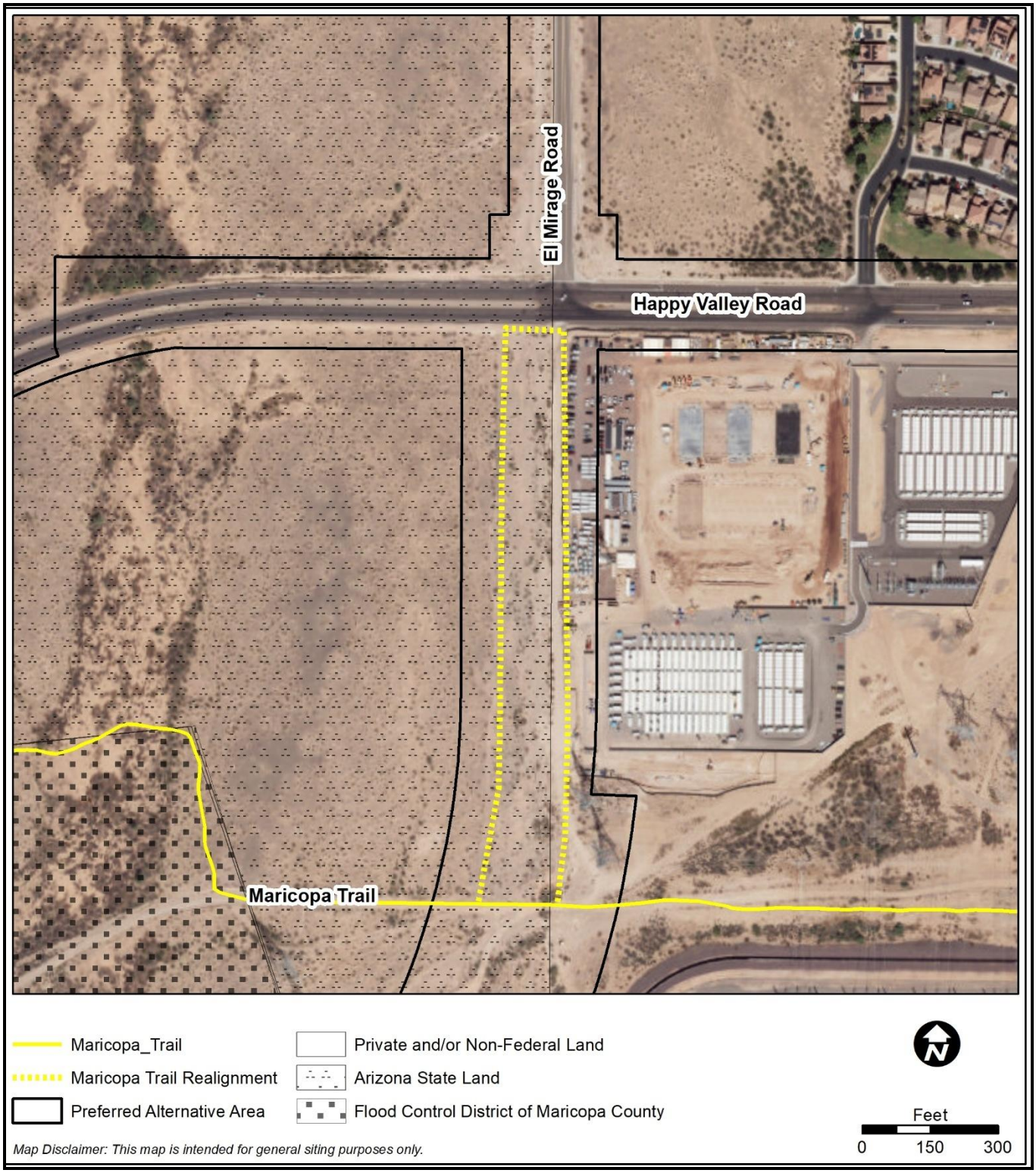

Figure 10 - Proposed Maricopa Trail Realignment

Section 404 and 401 of the Clean Water Act and the National Pollutant Discharge Elimination System

The Clean Water Act (CWA) is the primary federal statute governing discharge of pollutants into jurisdictional waters of the United States (Waters), which, in Arizona, include perennial and intermittent watercourses, their tributaries and adjacent wetlands. The principal goal of the CWA is to establish water quality standards to restore and maintain the chemical, physical, and biological integrity of the nation's Waters by preventing point (concentrated output) and nonpoint (widely scattered output) pollution sources.

Section 404 of the CWA regulates the discharge of earthen fill, concrete, and other construction materials into Waters, and authorizes the Corps to issue permits regulating the discharge of dredge or fill material into Waters. The limits of Waters are defined through a preliminary or approved jurisdictional delineation (JD) accepted by the Corps. A preliminary JD (PJD) assumes all drainages in each area are subject to the jurisdiction of the Corps. An approved JD (AJD) requires that all tributaries and impoundments (33 CFR 328.3) have relatively permanent, standing or continuous flow regime within the same stream order. Tributaries and impoundments need to flow directly or indirectly into a downstream traditional navigable water, which for this project is the Colorado River. Regional General Permit (RGP) 96 applies to Waters that occur within the existing ADOT or LPA ROW or easements throughout non-tribal land in Arizona. The RGP 96 allows for up to 1 acre of permanent impact for each Water for routine linear transportation projects. Other common types of Section 404 permits for transportation projects are: (1) Nationwide Permit 14, Linear Transportation Projects, which authorizes projects with less than 0.50 acre of permanent loss of Waters with no impacts to special aquatic areas such as wetlands, and (2) individual permits, which are required for projects that affect more than 0.50 acre of Waters or cause impacts to jurisdictional wetlands. An individual permit requires mitigation to minimize or offset the impacts to Waters with no net loss of the functions and values of the water resource.

Section 401 of the CWA requires any applicant requesting a federal permit or license for activities that may result in discharge into Waters to first obtain a CWA Section 401 certification from the state in which the discharge originates. The CWA Section 401 certification verifies that the prospective permits comply with the state's applicable effluent limitations and water quality standards. Federal permits or licenses are not issued until the CWA Section 401 certification is obtained. The Arizona Department of Environmental Quality (ADEQ) is responsible for the CWA Section 401 certification. If a project meets the terms and conditions of the RGP 96 or the Nationwide Permit and the criteria for conditional CWA Section 401 certification, notification to ADEQ is not required. However, if a project does not meet the criteria for conditional certification, such as projects occurring within a unique or impaired waters, an individual CWA Section 401 certification application to ADEQ is required.

Section 402 of the CWA formed the National Pollutant Discharge Elimination System (NPDES), which regulates pollutant discharges, including stormwater, into Waters. An NPDES permit sets specific discharge limits for point-source pollutants into Waters and outlines special conditions and requirements for a particular project to reduce impacts to water quality. In 2002, US Environmental Protection Agency (EPA) authorized ADEQ to administer the NPDES program at the state level, called the Arizona Pollutant Discharge Elimination System (AZPDES).

AZPDES permits require that the project be designed to protect Waters and during construction that the contractor follow all plans and requirements of the permit. AZPDES permits require that the project be designed to protect Waters, erosion control best management practices be implemented, and a Stormwater Pollution Prevention Plan (SWPPP) be prepared for construction activities with one acre or more of ground disturbance. Municipal Separate Storm Sewer Systems (MS4s), convey stormwater runoff through drains, streets, and open channels, directly discharging untreated stormwater into retention basins, washes, rivers, or lakes. Municipalities operating MS4s within local urbanized areas designated by the EPA or the ADEQ are required to

obtain discharge permits under NPDES or AZPDES authority. ADOT, City of Peoria and Maricopa County are MS4s and implement permits in the study area.

Existing Conditions

The Arizona List of Unique Waters (Arizona Administrative Code R-18-11-112[E]) and the Arizona 2018 Section 303(d) List of Impaired and Not Attaining Waters along with the ADEQ eMaps site (http://gisweb.azdeq.gov/arcgis/emaps/) were reviewed to determine whether any unique or impaired are present. No Unique, Outstanding, Impaired, or Not Attaining Waters are within the project vicinity. An unnamed wash that flows from the north, connects with the McMicken Dam Outlet Channel at the McMicken Dam north of SR303L. It then crosses under SR303L and eventually drains into the Agua Fria River. In addition, the Beardsley Canal, which runs north and south in this location, crosses through the study area at the north end of the Preferred Alternative area.

The Waters present within the study area include 1.216 acres of one ephemeral surface water and 0.308 acre of the Beardsley Canal. The unnamed surface water crosses under Happy Vally Road via a concrete box culvert. South of Happy Valley Road the surface water connects with the McMicken Dam Outlet Channel and connects to the Agua Fria River south of Deer Valley Road. Based on a Corps Regulatory approved jurisdictional delineation (AJD), SPL-2002-00827 dated March 18, 2024, this surface water feature is the same stream order as the delineated feature in this AJD. This AJD covers an area approximately 8 miles north of the Preferred Alternative area. Since the surface water was not jurisdictional in the AJD, it is not jurisdictional in the study area per the revised definition of waters that incorporated the US Supreme Court decision in the case *Sackett v. Environmental Protection Agency* that was effective September 8, 2023. The Beardsley Canal is a constructed canal system that draws water primarily from Lake Pleasant and receives water from the CAP interconnect. It is owned and operated by the Maricopa Water District and provides irrigation water to agriculture fields as far south as Buckeye, Arizona. While it receives water from a jurisdictional water, it does not drain into a jurisdictional water downstream. Thus, it would not meet the definition of a tributary under 33 CFR 328.3(a)(3).

Environmental Impacts—Preferred Alternative

The Preferred Alternative would not require a section 404 permit from the Corps as waters in the study area are not jurisdictional. Construction activities such as clearing, grading, trenching, and excavating would disturb soils and sediment. If not managed properly, disturbed soils and sediments could be washed into nearby drainages and impact water quality. To prevent construction-related pollutant discharges into Waters, ADOT would prepare and implement a SWPPP, details, and specifications in accordance with the requirements of the AZPDES Construction General Permit and ADOT's Erosion and Pollution Control Manual.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, construction would not occur. The No-Build Alternative would not have any direct or indirect effects on these surface water features or their floodplains. No construction would occur so the requirements of the AZPDES Construction General Permit would not apply.

Environmental Commitment

ADOT and the Contractor will follow ADOT's Erosion and Pollution Control Manual ADOT's Standard Specifications for Road and Bridge Construction. No mitigation measures are required.

Conclusion

Construction of the Preferred Alternative would be subject to the requirements of the AZPDES Construction General Permit. After construction, the project would be managed under Peoria's MS4 permit to prevent pollutant discharges in runoff. No impact to surface waters would occur due to the No-Build Alternative.

Drainage and Floodplain Considerations

This section identifies and assesses applicable drainage patterns, such as surface water and groundwater, and floodplains. Surface water includes water present above the soil surface such as rivers, streams, lakes, pools, and stormwater runoff. Groundwater is water that flows below the soil surface that can be collected by underground wells or other facilities constructed for collecting water or for monitoring.

Executive Order 11988, Floodplain Management, requires that impacts on floodplains be evaluated for all federal actions, and directs agencies to reduce impacts on floodplains, minimize flood risks on human safety and well-being, and restore and preserve floodplain values. Floodplains are delineated and managed by the Federal Emergency Management Agency (FEMA). A floodplain is generally level land subject to periodic flooding from an adjacent body of water.

A 100-year flood is a storm having a 1 percent chance of being exceeded in magnitude in any given year. The 100-year floodplain includes areas adjoining a water body that are inundated by water during a 100-year flood. The floodway is the area within the floodplain where the water is likely to be the deepest and fastest; this area should be kept free of obstructions to allow 100-year floodwaters to move downstream without increasing the water surface elevation more than 1 foot. FEMA Flood Insurance Rate Maps depict the delineated 100-year floodplain. The 100-year floodplain is divided into flood zones, including:

- Zone A: areas subject to inundation by 100-year floods that have been identified through qualitative methodologies; no base flood elevations have been determined
- Zone AE: areas subject to inundation by 100-year floods that have been identified through quantitative methodologies; base flood elevations have been determined
- Zone AH: areas subject to inundation by 100-year shallow floods where ponding occurs, and flood depths are between 1 and 3 feet deep; base flood elevations have been determined
- Zone AO: areas subject to inundation by 100-year shallow floods typified by sheet flow on sloping terrain with flood depths between 1 and 3 feet; base flood elevations have been determined

<u>Existing Conditions</u>

FEMA Special Flood Hazard Areas (SFHAs) exist within the study area. Effective SFHAs in the project vicinity are shown on FEMA Flood Insurance Rate Map (FIRM) 04013C1230L, dated October 16, 2013. (Figure 11) This FIRM panel includes SFHAs for the communities of Maricopa County (040037), City of Peoria (040050), and City of Surprise (040053). The area includes one Letter of Map Revision (LOMR). LOMR Case No. 13-09-2729P incorporates updates to profiles, floodway data, and discharges in the McMicken Dam Outlet Wash, from approximately 565 ft upstream of the confluence of Agua Fria River to approximately 8,600 ft upstream of Happy Valley Parkway and became Effective June 27, 2014.

The McMicken Dam Outlet Wash is designated as a Zone AE floodplain, defined as a SFHA subject to inundation by the flood event having a 1-percent chance of being equaled or exceeded in any given year, and has Base Flood Elevations (BFEs) determined. Further, the Outlet Wash includes a Zone AE Floodway. FEMA defined a regulatory floodway as the portion of a wash that is reserved from encroachment in order to discharge the base flood without increasing the water-surface elevation by more than a designated height. The McMicken Dam Outlet Channel, upstream of the study area as well as Wash 16 East, located upstream of the dam outfall, are classified as Zone A floodplains, a SFHA subject to inundation by the 1-percent chance flood but with no BFEs determined.

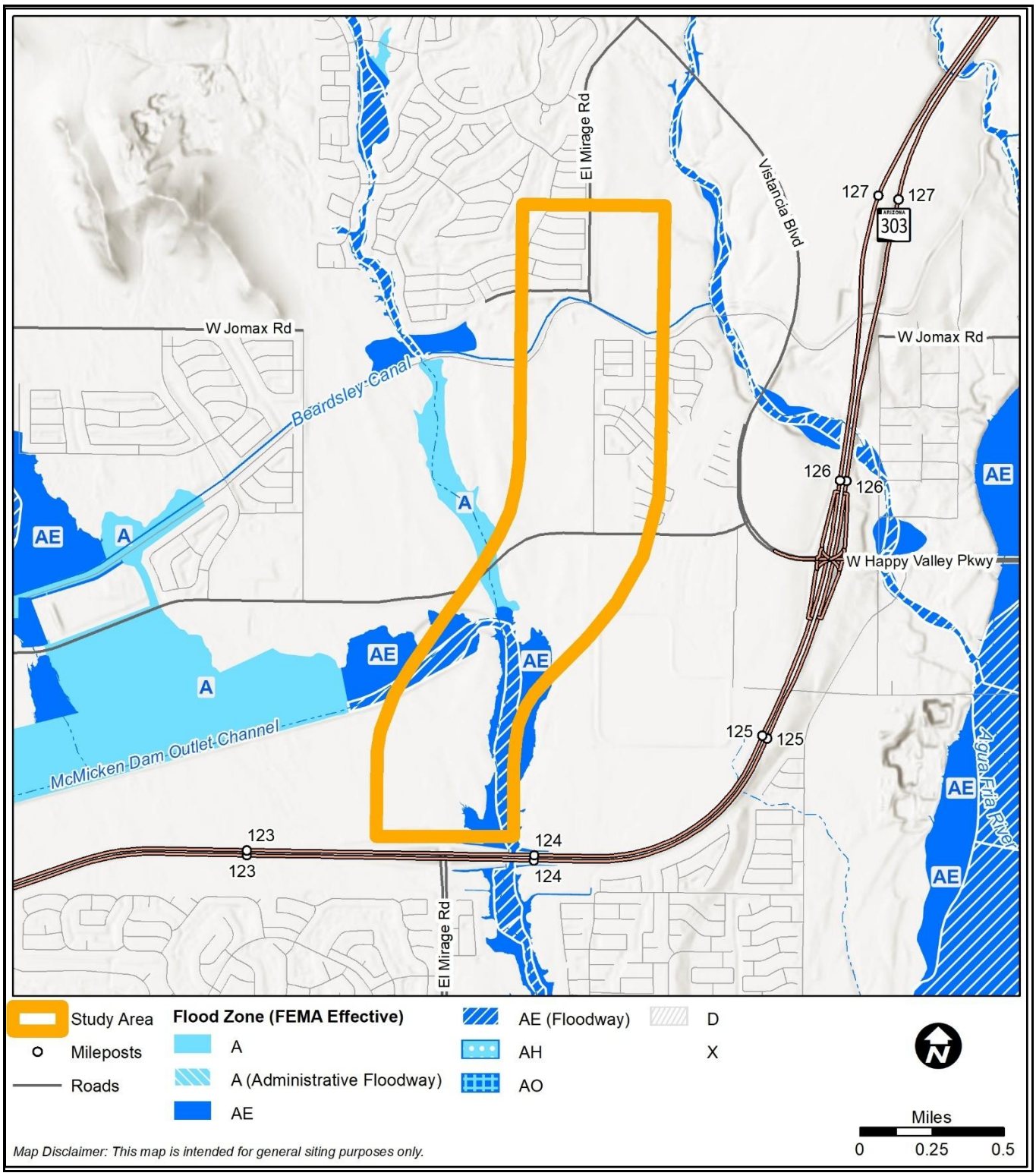

Figure 11 - FEMA Floodplains

The FCDMC recently developed and began construction on improvements to the McMicken Dam Outlet Channel, in the vicinity of the proposed El Mirage Road extension. Construction of the channel improvements was complete as of January 16, 2025.

Environmental Impacts - Preferred Alternative

The drainage systems associated with the project have been designed to collect, route, and store onsite stormwater runoff within the project limits and to convey offsite stormwater runoff through the project corridor. Onsite runoff is directed to one of several surface retention basins located adjacent to the project corridor.

The crossing of the McMicken Dam Outlet Channel has been evaluated using the Corps HEC-RAS program, version 6.5. The Preferred Alternative includes a 10-barrel 12'x12' Reinforced Box Culvert. Preliminary impacts to the hydraulic properties of the wash, under proposed conditions, upstream of the El Mirage Road crossing include a Water Surface Elevation increase of approximately 8.2" and velocity increase of approximately 1.06 ft/s. Impacts to the hydraulic properties of the wash, under proposed conditions, downstream of the El Mirage Road crossing include a Water Surface Elevation decrease of approximately 1.4" and Velocity increase of approximately 1.02 ft/s. It is anticipated that final design will require the completion of a Conditional Letter of Map Revision to document these increases to flood elevations as a result of the project.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, construction would not occur. The No-Build Alternative would not have any direct or indirect effects surface water features or their floodplains.

Mitigation Measures

Arizona Department of Transportation Design Responsibility

- During Final Design the Arizona Department of Transportation will complete additional drainage studies and submit a Conditional Letter of Map Revision to the local floodplain administrator.

Conclusion

Construction of the Preferred Alternative is anticipated to raise flood elevations. Additional drainage evaluations will be completed during final design. No impact to floodplains would occur due to the No-Build Alternative.

Biological Resources

Existing Conditions

This section describes the Natural (Biological) Resources that may be affected by implementation of the proposed project. It discusses vegetation, wildlife, threatened and endangered species, other special-status species, protected native plants, and invasive species. Biological characterization of the project site and surrounding area is based on a site visit conducted on November 7, 2024, by AZTEC Biologists Anthony Motta and Sara Scofield. A draft Biological Evaluation was prepared for the project and is available on the study website at https://www.elmirageroadextension.com/resources. The information contained in this section is incorporated from the Biological Evaluation, as applicable.

The project is situated between two existing stretches of El Mirage Road in the City of Peoria and in unincorporated Maricopa County lands. The study area is flat and lacking topography with elevations ranging from 1,300 feet to 1,360 feet above mean sea level. The McMicken Dam Outlet Channel, a manmade drainage lined with landscaped boulders, cuts through the southern portion of the project. South of Happy Valley Road, surrounding lands are undeveloped, except for an electrical substation located east of the McMicken Dam Outlet Channel. The area north of Happy Valley Road is characterized by scatted development including master-planned residential communities along El Mirage Road both north and south of the Beardsley Canal.

Geologic formations in the study area consist of the late and middle Pleistocene surficial deposits unit. The late and middle Pleistocene surficial deposits unit consists of unconsolidated to weakly consolidated alluvial fan, terrace, and basin-floor deposits with moderate to strong soil development. Fan and terrace deposits are primarily poorly sorted, moderately bedded gravel and sand, and basin-floor deposits are primarily sand, silt, and clay (Ludington et al. 2005). Soils in the study area are Hyperthermic Arid soils of the Mohall-Vecont- Pimant association, which consists of well-drained soils formed in mixed old alluvium on broad valley plains (Hendricks 1985).

The project is located within the Lower Colorado River Subdivision-Sonoran Desertscrub biotic community (Turner & Brown 1994). Vegetation within and adjacent to the study area is typical of the Lower Colorado River Subdivision-Sonoran Desertscrub biotic community and is characterized by scattered individual tree species including ironwood (*Olneya tesota*), velvet mesquite (*Prosopis velutina*), and foothill palo verde (*Parkinsonia microphylla*). Shrubs and cacti scattered throughout the study area include creosote (*Larrea tridentata*), triangle leaf bursage (*Ambrosia deltoidea*), lotebush (*Ziziphus obtusifolia*), desert broom (*Baccharis sarothroides*), saguaro (*Carnegiea gigantea*), teddy bear cholla (*Cylindropuntia bigelovii*), buckhorn cholla (*Cylindropuntia acanthocarpa*), and barrel cactus (*Ferocactus* spp.) Ground cover is characterized by grasses and forbs such as mediterranean grass (*Schismus arabicus*), and scorpion weed (*Phacelia distans*) interspersed with bare ground surfaces. During the site visit, noxious and/or invasive plant species were observed and include Sahara mustard (*Brassica tournefortii*), stinknet (*Oncosiphon piluliferum*), and Russian thistle (*Kali tragus*).

Wildlife observed during the site visit include the red-tailed hawk (*Buteo jamaicensis*), Gambel's quail (*Callipepla gambelii*), house finch (*Haemorhous mexicanus*), and great blue heron (*Ardea herodias*). No caves, mines, bridges, or drainage structures that could provide suitable roosting habitat for use by bats are present in the study area.

Two drainages intersect the study area. The Beardsley Canal, a perennial drainage, bisects the study area approximately 220 feet south of Jomax Road. The canal is a concrete lined channel with surface waters flowing east to west. The McMicken Dam Outlet Channel, an ephemeral drainage, intersects the southern portion of the

study area approximately 2,500 feet south of Happy Valley Road. Vegetation is not present along the McMicken Dam Outlet Channel within the study area.

Threatened and Endangered Species

The US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system (Project Code: 2023-0094347) and the Arizona Game and Fish Department (AGFD) Online Review Tool (OERT) (Project ID: HGIS-19485) were accessed on June 30, 2025. The Endangered Species Act (ESA) species list from the IPaC receipt was reviewed by a qualified biologist (Anthony Motta, AZTEC). The database queries indicated the following species with the potential to occur within the study area:

- Sonoran Desert Tortoise (*Gopherus morafkai*)
- Cactus Ferruginous Pygmy-owl ((*Glaucidium brasilianum cactorum*)
- California Least Tern (*Sternula antillarum browni*)
- Yellow-Billed Cuckoo (*Coccyzus americanus*)
- Gila Topminnow (*Poeciliopsis occidentalis*)
- Monarch butterfly (*Danaus plexippus*)

Of these species, only the Sonoran Desert tortoise and the Monarch butterfly were determined to potentially occur in the study area, based on potentially suitable habitat, preferred elevation of the species, and current distribution range of the species. Therefore, these species are evaluated further. Neither the IPaC search nor the AGFD OERT identified critical habitat within the search area for the project.

Sonoran Desert Tortoise

The Sonoran Desert tortoise receives no protection under the ESA. However, this species is protected by the State of Arizona. ADOT is a signatory to the *Candidate Conservation Agreement for the Sonoran Desert Tortoises (Gopherus morafkai) in Arizona* (USFWS and AIDTT 2015) and makes accommodations for protection of tortoises on construction projects where tortoises may be present.

Sonoran Desert tortoises typically inhabit the bajadas and rocky, steep slopes of Mojave Desertscrub and both subdivisions of Sonoran Desert scrub but can be found in other habitat within western and central Arizona between 900- and 4,200-feet elevation east and south of the Colorado River. Desert tortoises most often occur in a paloverde-cacti mix with boulders, rocky outcrops, and natural ground cavities nearby. They require loose soils to excavate shelters below rocks, boulders, and vegetation on semi-open slopes, but will also shelter in caliche caves of washes, or otherwise in rocky crevices. These shelter sites are one of the more important components of desert tortoise habitat since they shelter for long spans of time to avoid temperature extremes and drought conditions. The Sonoran Desert tortoise also utilizes inter-mountain valleys for dispersal at all life stages and these areas are considered part of their home range. Home ranges vary in size based on rainfall levels, with small home ranges in wet years and larger home ranges in dry years. Typically, these tortoises will occupy from 0.01- 1.0 square mile with high fidelity to their home ranges except when dispersing to new areas. Tortoise dispersal into new areas is typically related to physiological needs such as food and shelter availability and suitability.

No Sonoran Desert tortoise or signs of this species was detected during the site survey. The project is located within the Lower Colorado River Subdivision-Sonoran Desertscrub biotic community. The surrounding topography is relatively flat; however, a mountain complex at the intersection of West Jomax Road and North Dysart Road located one mile west of the northern terminus of the project may provide higher quality habitat for the Sonoran Desert tortoise. Tortoises may use drainages within the study area as a travel corridor between areas of suitable habitat. Tortoise shelter sites such as caliche caves were not observed during the November

2024 site visit; however, boulders lining the McMicken Dam Outlet Channel may provide marginal quality shelter sites. Therefore, suitable habitat for Sonoran Desert tortoise is present within the study area.

Monarch Butterfly

As of December 10, 2024, the monarch butterfly is proposed to be listed as a threatened species for federal protection under the ESA (16 USC 1531-1544). ADOT is enrolled in the Nationwide Candidate Conservation Agreement (CCAA) for Monarch Butterfly on Energy and Transportation Lands and has been issued a Certificate of Inclusion in the CCAA which confers exemption from take prohibitions for certain activities. ADOT has committed to adoption of conservation areas ('adopted acres') and conservation measures under the CCAA which are anticipated to result in a net conservation benefit to the species. This project occurs outside of the ADOT ROW, therefore, coverage under the CCAA is not applicable. Monarch butterflies migrate to Arizona in the spring from overwintering sites in California and Mexico. They follow the blooming of nectar plants to the north and from low to higher elevations and back between spring and fall. While most monarchs return to overwintering sites in the fall, some monarchs remain in sheltered low elevation riparian areas in central and southern Arizona during the winter months. Open fields containing milkweed plants are not present within the action area. Thus, the project would not impact suitable monarch breeding habitat. However, the action area does contain suitable nectar sources that could be utilized by migrating monarchs.

Other Special Status Species

This section refers to species that are not protected by the federal ESA but do receive some limited protection under other wildlife laws and regulations or agency management policies. The biological resources germane to this section include the western burrowing owl and bird species protected under the Migratory Bird Treaty Act (MBTA).

As part of the environmental review process a letter describing the project was sent to the AGFD to inform them of the project and to solicit comments. The letter requested any specific concerns, suggestions, or recommendations the agency may have related to the project. No response from the AGFD has been received. However, as indicated earlier, AGFD online environmental review tool identified two special status species: the Sonoran Desert tortoise and the western burrowing owl, as occurring within two miles of the project.

Western Burrowing Owl

The AGFD OERT identified the western burrowing owl (*Athene cunicularia hypugaea*) as having been documented within 3 miles of the study area. During the November 2024 site visit, no individual burrowing owls or suitably sized burrows were observed.The species is often found in open areas such as vacant lots near human habitation, and therefore, has the potential to be impacted by the project (AGFD 2022a).

Nesting Birds

The study area contains suitable habitat for nesting migratory birds (e.g., scattered trees and patches of shrubs). During the November 2024 site survey, an inactive verdin nest was observed within a tree in the proposed construction footprint. Nesting birds have the potential to be impacted by the project if they are utilizing vegetation for nesting during vegetation removal activities. The project has yet to be scheduled at the time of this document's completion.

Wildlife Connectivity

Linear transportation features such as roads and highways can fragment wildlife habitat and act as physical barriers to wildlife movement. Wildlife movement corridors are generally narrow strips of habitat that may be used by wildlife to move from one area to another. Other corridors include those across or near geological

features that offer good physical relief and/or vegetative cover. Wildlife movement within these corridors is crucial in maintaining healthy wildlife populations. Fragmentation can prevent wildlife from gaining access to required resources and can isolate populations from each other, resulting in reduced genetic diversity that can undermine a population's long-term viability. In Arizona, wildlife movement corridors are often drainages and associated riparian habitat.

Impacts on wildlife and wildlife movement are related to the type of linear feature and amount of use. The roadway type, width, design, and location are key factors that contribute to this barrier effect and to the impact on wildlife movement. Other features associated with roads, such as ROW fencing and line- of-sight clearing, may also contribute to the impacts on wildlife and wildlife movement. Roads acting as barriers can suppress populations of certain wildlife species occurring near them, primarily by direct mortality (road kill) and reduced genetic viability.

ADOT, the AGFD, the FHWA, and representatives from other agencies have completed a Wildlife Linkages Assessment to address important wildlife movement corridors in Arizona. The project is not located within any linkage areas identified in the Arizona Wildlife Linkages Assessment (Arizona Wildlife Linkage Workgroup [AWLW] 2006).

The AGFD OERT identified a wildlife linkage area from the 2012 Maricopa County Wildlife Connectivity Assessment (i.e., the White Tank Flood Retainment Structures movement area) as occurring within the study area. This movement area is utilized for connectivity along flood control lands from McMicken Dam south to the Buckeye FRS1 and the Hassayampa River movement blocks. The assessment listed urbanization as a current threat/barrier to the movement area. The creation of a new road contributes to the urbanization of the area and has the potential to create a barrier to connectivity. However, the study area occurs in a semi-developed, residential environment, outside of the highly developed Phoenix metropolitan area. As such, there would remain ample undeveloped or semi-developed areas for wildlife to utilize for movement. A letter was sent to AGFD on October 04, 2024 to request any concerns or recommendations on the project. No response has been received to date.

Protected Native Plants

Plants protected by the Arizona Native Plant Law include all cacti, yucca, agave, and many leguminous tree species such as paloverde, mesquite, and ironwood that are wild growing (i.e., not plant planted for landscaping). During the survey conducted on November 7, 2024, the following protected native plants were documented within the project footprint and surrounding ROW: velvet mesquite, ironwood, palo verde, teddy bear cholla, buckhorn cholla, saguaro, and barrel cactus.

Noxious and Invasive Plant Species

Under Executive Order 13112, dated February 3, 1999, projects on federal lands or that are federally funded must*: "….subject to the availability of appropriations, and within Administration budgetary limits, use relevant programs and authorities to: (1) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded…"*

The construction footprint and surrounding ROW were inspected for the presence of noxious and invasive plants on November 7, 2024. During the site visit, invasive plant species Sahara mustard, stinknet, and Russian thistle was observed within the construction footprint and surrounding ROW.

Environmental Impacts—Preferred Alternative

The Preferred Alternative would result in minor direct or indirect impacts to biological resources.

Sonoran Desert Tortoise

Vegetation removal and ground disturbance (earthwork) are anticipated for this project and would impact suitable foraging and dispersal habitat present within the Preferred Alternative. If traveling or sheltering desert tortoises are present during vegetation removal or ground disturbing activities, these individuals could be injured or killed by construction vehicles or heavy equipment. Therefore, the project may impact individual Sonoran Desert tortoise, but it is not likely to result in a trend toward federal listing or loss of viability. With the implementation of these avoidance and monitoring measures, it is deemed that the proposed project development may affect, but not likely to adversely affect the Sonoran Desert Tortoise.

Monarch Butterfly

Proposed project development may result in a temporary loss of monarch migrating habitat. However, since there are no suitable nectar sources in the action area, it is deemed that the project is not likely to jeopardize the continued existence of the species.

Western Burrowing Owl

Proposed project development may impact western burrowing owls, if this species incidentally occurs in the action area. However, with the implementation of proposed avoidance and monitoring measures, it is deemed that the project is not likely to adversely impact western burrowing owls.

Nesting Birds

Proposed project development may impact nesting birds, if nesting birds occur in the Preferred Alternative area. However, with the implementation of proposed avoidance and monitoring measures, it is deemed that the project is not likely to adversely impact nesting birds protected under the MBTA. These measures also provide an overarching protection for the western burrowing owl.

Wildlife Connectivity

The proposed project may impact wildlife connectivity. However, due to the urbanization of the surrounding area and potential for future design features to accommodate wildlife movement it is deemed that the project is not likely to adversely impact wildlife movement..

Protected Native Plants

Project development would impact these plants.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, the Recommended Alternative would not be constructed, and existing conditions within the study area would remain unchanged. As a result, there would be no direct effects with construction, operation or maintenance activities, and the need for mitigation measures would be eliminated

Environmental Commitments and Mitigation Measures

Arizona Department of Transportation Environmental Planning Responsibility

- If the Engineer in cooperation with the Environmental Planning Biologist determines that burrowing owls cannot be avoided, the contractor shall employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate.

Arizona Department of Transportation Roadside Development Responsibility

- The Arizona Department of Transportation Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Arizona Department of Transportation Roadside Development Section will send the notification at least 60 (sixty) calendar days prior to the start of construction.

Arizona Department of Transportation District Responsibilities

- If any active bird nests cannot be avoided by vegetation clearing or construction activities, the Engineer will contact the Environmental Planning Biologist (928.304.0487) to evaluate the situation.
- The Arizona Department of Transportation Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Arizona Department of Transportation Roadside Development Section will send the notification at least 60 (sixty) calendar days prior to the start of construction.
- If the Engineer in cooperation with the Environmental Planning Biologist determines that burrowing owls cannot be avoided, the contractor shall employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate.

Contractor Responsibilities

- Prior to construction activity the contractor's field personnel including the Project Manager, Assistant Project Manager, General Superintendent, and Project Superintendent shall review the attached Arizona Department of Transportation Environmental Planning "Sonoran Desert Tortoise Awareness Program Handout" flier, become familiar with the identification and avoidance of the Sonoran Desert tortoise, and follow the notification request, as applicable.
- If any Sonoran Desert tortoises are encountered during construction, the contractor shall adhere to the attached Arizona Game and Fish Department "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects". If any tortoise is encountered during construction the contractor shall notify the Engineer to report the encounter.
- The contractor shall report encounters with any Sonoran Desert tortoise tortoises (live, injured, or dead) during construction to the Engineer using the attached Arizona Department of Transportation Sonoran Desert Tortoise Observation Form. The final form shall be sent to Arizona Department of Transportation Environmental Planning (email: bioteam@azdot.gov) within 24 hours of the encounter. Photographs should be taken of tortoises encountered and included in the report if possible.
- Prior to construction, all personnel who will be on-site, including, but not limited to, contractors, Contractor's employees, supervisors, inspectors, and subcontractors shall review the attached Arizona Department of Transportation Environmental Planning "Western Burrowing Owl Awareness" flyer.
- If any burrowing owls or active burrows are identified the contractor shall notify the Engineer immediately. No construction activities shall take place within 100 feet of any active burrow.
- If the Engineer in cooperation with the Environmental Planning Biologist determines that burrowing owls cannot be avoided, the contractor shall employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate.

- If vegetation clearing occurs during the migratory bird breeding season (March 1 – August 31), the contractor shall avoid any active bird nests. If the active nests cannot be avoided, the contractor shall notify the Engineer to evaluate the situation. During the non-breeding season (September 1 – February 28), vegetation removal is not subject to this restriction.

Conclusion

In general, the expected impacts are minor because no threatened or endangered species, critical habitat, or designated wildlife corridors are present in the study area. Native trees and shrubs would be removed with the Preferred Alternative. At this preliminary stage of design, the numbers of trees and shrubs and the acreages are undetermined. During final design, more detailed information would be developed.

Air Quality

This section describes the potential air quality impacts of the Preferred Alternative, as required under the Clean Air Act.

Existing Conditions

The study area lies in the Phoenix nonattainment area for particulate matter (PM_{10}). There is one monitoring site adjacent to the study area, Zuni Hills, located south of Zuni Hills Elementary School, at the intersection of Zuni Hills and North 109th Avenue. The closest carbon monoxide (CO) monitoring site is West Phoenix, located at 39th Avenue and Earll Drive in Phoenix. The Zuni Hills site collects data on concentrations of PM_{10}. The West Phoenix site collects data on concentrations of nitrogen dioxide (NO_2), PM_{10}, CO, $PM_{2.5}$, and Ozone (O_3). The averaging time is eight hours for CO and O_3, 24 hours for PM_{10} and $PM_{2.5}$, and 1 hour for NO_2. Monitor dating from Maricopa County Air Quality Department's (MCAQD) sites between 2021 and 2023 has recorded exceedances flagged due to exceptional event days, at both Zuni Hills and West Phoenix sites. Table 6 summarizes air monitoring data at the two sites.

Table 6 – Zuni Hills and West Phoenix Site Air Quality Data

Monitoring Site	Pollutant	Averaging Time	2021		2022		2023	
			Concentration	No. of Exceedances	Concentration	No. of Exceedances	Concentration	No. of Exceedances
West Phoenix (WP)	CO	8-hour	3.5 ppm	0	2.7 ppm	0	3.2 ppm	0
	O_3	8-hour	0.081 ppm	11	0.081 ppm*	17	0.087 ppm*	18
	$PM_{2.5}$	24-hour	224 µg/m^3*	3	110.3 µg/m^3*	5	95.2 µg/m^3*	4
	PM_{10}	24-hour	250 µg/m^3*	1	127 µg/m^3	0	182 µg/m^3*	1
	NO_2	1-hour	55 ppb	0	51.0 ppb	0	60 ppb	0
Zuni Hills (ZH)	PM_{10}	24-hour	248 µg/m^3*	1	167 µg/m^3*	1	146 µg/m^3	0

Notes: µg/m^3 – micrograms per cubic meter; ppm – parts per million; ppb – parts per billion
* - dates that have been identified as atypical events by ADOT/Maricopa
Source: MCAQD, 2021 - 2023 Air Monitoring Network Plan Drafts, EPA Air Data for West Phoenix Monitor, Annual Data 2021 – 2023, https://www.epa.gov/outdoor-air-quality-data

Environmental Impacts—Preferred Alternative

The analysis of potential air quality impacts resulting from the proposed El Mirage Road involved an evaluation of PM_{10} and mobile source air toxics (MSATs).

Particulate Matter

On February 24, 2025, ADOT provided a copy of the Project-Level PM_{10} Quantitative Hot-Spot Analysis—Project of Air Quality Concern Questionnaire to the following consultation parties: EPA, FHWA, MAG, ADEQ, Maricopa County Air Quality Department, and City of Peoria. There were no objections to the Project determination and ADOT concluded interagency consultation by notifying interested parties that this Project would proceed as a project that requires a quantitative PM_{10} hot-spot analysis under 40 CFR 93.123(b).

The El Mirage Road and Jomax intersection, El Mirage Road and Happy Valley Road intersection, and El Mirage Road and SR303L ramps intersections were selected for detailed hot-spot modeling to demonstrate project conformity with National Ambient Air Quality Standards (NAAQS) based on the top intersections ranked by volume and by LOS and delay. These three selected intersections have the greatest potential concentrations of

PM_{10} due to congestion and traffic volumes in 2050. The Draft Air Quality Report can be found on the study website at https://www.elmirageroadextension.com/resources.

The modeled concentrations, including background concentrations, were compared to the applicable NAAQS. The receptor with the maximum 6th-highest concentration was located on the northwest or northeast quadrants of the freeway. The result is shown in Table 7 below.

Table 7 – Predicted 24-Hour PM_{10} Concentration (µg/m³)

Location	6th-Highest PM10 Value	Background PM10 Value	Total Concentration	Total Concentration Rounded to nearest 10 µg/m3	PM10 NAAQS
SR303L ramps & El Mirage Road	38.0	107	145.0	150	150
El Mirage Road & Happy Valley Road	24.1	107	131.1	130	150
El Mirage Road & Jomax Road	25.4	107	132.4	130	150
µg/m³ = micrograms per cubic meter					

As shown in Table 6, total PM_{10} concentrations for the project's three selected TIs are below PM_{10} NAAQS. Therefore, the project meets conformity requirements and no project emission reduction mitigation or control measures need to be considered by project sponsors.

Mobile Source Air Toxics

For the Preferred Alternative, the vehicle miles traveled are estimated to be slightly higher than with the No-Build Alternative in the study area. As a result, emissions of total priority MSATs would be slightly higher than with the No-Build Alternative. However, EPA's national control programs are projected to reduce annual MSAT emissions by over 76 percent between 2020 and 2060.

Construction may generate a temporary increase in MSAT emissions. Project-level assessments that render a decision to pursue construction emission mitigation will benefit from a number of technologies and operational practices that should help lower short-term MSATs. In addition, diesel retrofit technologies are designed to lessen the number of MSATs.

The magnitude of the EPA-projected reductions is so great (even after accounting for the increase in vehicle miles traveled) that MSAT emissions in the study area are likely to be substantially lower in the future than they are today, regardless of the selected alternative.

Short-term air quality impacts may be experienced during construction of the project because of the operation of construction equipment and the slow traffic speeds and idling associated with a construction zone. This would be a localized condition that would end with the completion of construction activities.

The planned project and ongoing and future transportation projects are all accounted for in the MAG regional air quality conformity in the TIP.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, the El Mirage Road improvements would not be built. Because traffic volumes are predicted to increase through 2050, traffic congestion would increase. Through improved engine technology and cleaner vehicle options, the No-Build Alternative would result in air quality improvements, although not to the extent of the Preferred Alternative.

Mitigation Measures

Because air quality would not be adversely affected in the long term by the proposed El Mirage Road project, no mitigation measures are required.

Conclusion

Section 176c of the Clean Air Act requires that transportation projects conform to the approved air quality State Implementation Plan for meeting federal air quality standards. This Project is not likely to cause or contribute to the severity or number of violations of the National Ambient Air Quality Standards.

This Project is included in the *MAG Momentum 2050 Regional Transportation Plan* and the *FY 2025-2030 Transportation Improvement Program* as approved by MAG regional Council on January 22, 2025.

Noise

This section presents the analysis conducted to assess the potential noise impacts of the Preferred Alternative. Potential noise impacts were evaluated through ambient (existing) noise monitoring and predictions of existing noise levels and future traffic noise levels for the design year (2050) under both the No-Build and Preferred Alternatives. This assessment began by selecting representative sites in the study area and measuring existing noise levels. These levels were measured in A-weighted decibels (dBA), which corresponds to the human perception of loudness. Future traffic noise levels were then predicted using the noise prediction computer model, Traffic Noise Model Version 2.5. The Noise Report can be found on the study website at https://www.elmirageroadextension.com/resources.

Existing Conditions

Existing land uses in the study area consist of residential, industrial, open space, and vacant. Activity Category B includes residential at Coldwater Ranch subdivision and Desert Bloom at Trilogy at Vistancia Subdivision. Activity Category F includes industrial facilities. Activity Category G includes undeveloped land.

In total, 134 noise receivers were evaluated in the noise model for different land use categories. Five monitoring sites were selected to document existing traffic noise levels, with noise levels ranging from 46 to 65 dBA equivalent sound level (L_{eq}). The lowest noise level was recorded along the sidewalk inside the Desert Bloom at Trilogy at Vistancia Subdivision, while the highest noise level was recorded at the cul-del-sac in the Sunleya subdivision south of the Study Area.

Environmental Impacts—Preferred Alternative

Construction noise is anticipated for roadway improvement projects and lasts for the duration of the construction. Construction activities are generally of a short-term nature. Depending on the nature of construction operations, the duration of the noise could last from seconds (for example, a truck passing a customer) to months (for example, constructing a bridge). Construction noise is also intermittent and depends on the type of operation, location, and function of the equipment and the equipment usage cycle.

Predicted future peak-hour noise levels along the Preferred Alternative would range from 50 to 72 dBA L_{eq} for the 134 noise receivers. Future noise levels in Preferred Alternative show a substantial increase of 15 dBA over the existing noise levels in the Coldwater Ranch Subdivision, therefore, noise impacts would occur.

Noise barriers should be designed to reduce projected unmitigated noise levels for benefited receptors closest to the transportation facility. To be considered reasonable, at least half of the benefited receptors in the first row would need to achieve this level of noise reduction. The maximum reasonable cost of abatement is $49,000 per benefited receptor (cost per-benefited-receptor) with barrier costs calculated at $35 per square foot, or $85 per square foot if constructed on a structure such as a bridge. The cost of removing any previously built walls, drainage, and other similar construction work is included in the cost assessment whenever the cost of the alterations are attributed solely to the construction of a noise barrier. Noise barriers were evaluated for the Preferred Alternative but not recommended because the cost-per-benefited receptor for the evaluated noise barriers is greater than the ADOT NAR threshold due to construction costs associated solely with utility relocations and existing wall removals that would otherwise not be encumbered by the project. Barrier determination will be reevaluated in final design when more detailed plans are available.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, the El Mirage Road improvements would not be built and noise would be caused by traffic on El Mirage Road in its existing configuration only on existing segments of the roadway. As such, the No-Build Alternative would result in lower noise levels at the evaluated receivers as what would occur with the Preferred Alternative. Predicted future peak hour noise levels for the No-Build Alternative would range from 41 to 66 dBA L_{eq}.

Mitigation Measures

Noise barriers are not currently recommended; however, design will continue to be monitored. The following mitigation measure would be followed:

Arizona Department of Transportation Design Responsibility

- During final design the City of Peoria and Arizona Department of Transportation will update the noise analysis if changes to design elements occur that have the potential to increase impacts on receivers.

Conclusion

Future noise levels under the Preferred Alternative show a substantial increase of 15 dBA over the existing noise levels in the Coldwater Ranch Subdivision, therefore, noise impacts would occur. Noise barriers are currently not recommended because the anticipated cost exceeds the maximum reasonable cost-per-benefited-receptor. Final noise barrier recommendations will be made during final design when additional project details are available.

Hazardous Materials

Hazardous materials and hazardous waste sites can pose a threat to infrastructure projects, ranging from ownership liability to construction-related safety risks. The EPA's 2002 Brownfields Act established "all appropriate inquiry" as the process for evaluating potentially contaminated properties. American Society for testing Materials (ASTM) International's E1527-21 standard, implemented in 2021, provides the procedures for conducting a Phase I Environmental Site Assessment and defines the qualifications of the environmental professionals who perform them (ASTM International 2021).

The FHWA has adopted a phased approach to hazardous materials site analysis that aligns with the ASTM series of standards. These assessments evaluate current and historical property uses to determine whether those uses may have adversely impacted soil, groundwater, or both—potentially threatening human health or the environment.

ADOT employs a Preliminary Initial Site Assessment (PISA) as a screening tool early in project development, especially for comparing multiple alternatives. A PISA includes a regulatory records review, limited field observations, and historical land use evaluation. While not fully ASTM-compliant, the PISA integrates core ASTM elements sufficient to identify potential hazardous materials concerns or fatal flaws.

Existing Conditions

A PISA was conducted to evaluate the potential for hazardous materials or incidents within or adjacent to a new segment of El Mirage Road between SR303L and Jomax Road in Sun City West, Maricopa County, Arizona. An environmental database report was obtained from Environmental Risk Information Services on December 5, 2024, and a site reconnaissance was performed by AZTEC on December 20, 2024. Historical aerial photographs and topographic maps were also reviewed. The PISA was approved by ADOT on March 12, 2025.

The study area is characterized by natural desert landscape and roadway improvements associated with SR303L. Surrounding land uses include vacant land to the south, residential housing to the north and east, and a substation to the east. The topography is generally flat.

Site reconnaissance did not reveal evidence of environmental concern, such as uncontrolled debris, staining, odors, chemical containers, monitoring wells, or signs of improper waste disposal. Only incidental windblown debris and roadside litter were observed.

Historical aerial imagery from 1930 to 2024 indicates that the study area remained largely undeveloped until the early 2000s. Residential development and associated roadway infrastructure began in the early 21st century. A groundwater well appears to have been constructed south of the Beardsley Canal during this time, and minor wildcat dumping was observed north of the canal in aerial imagery. However, no dumping was visible during the 2024 field visit.

One known well—Production Well, owned by the City of Peoria—is located within the Project Area. While it is not listed in the Arizona Department of Water Resources (ADWR) well registry, it appears on a City of Peoria production well map. Additional nearby wells include City of Peoria production wells and Shea Homes piezometers (drilled and abandoned). Based on ADWR records, depth to groundwater in this area exceeds 300 feet below ground surface.

A records review identified one environmental incident of concern on the study area: a 2021 dump truck fire that resulted in the release of approximately 30 gallons of diesel fuel and the potential use of Aqueous Film

Forming Foam, a known per- and polyfluoroalkyl substances-containing substance. This incident occurred on El Mirage Road, where the area is paved and curbed, reducing the likelihood of contaminant migration into the surrounding environment.

AZTEC also performed a HAZMAT Survey, consistent with ADOT's typical approach. No asbestos-containing materials or lead-based paint were detected in structures potentially affected by the proposed improvements.

Environmental Impacts—Preferred Alternative

A review of available environmental records, aerial imagery, a site visit, and HAZMAT Survey identified no known hazardous materials concerns within the Preferred Alternative. As such, it is unlikely that project activities will involve the disturbance of known contaminated sites or materials. Should any wells be encountered during construction, they shall be abandoned in accordance with ADWR standards.

Construction-related hazardous materials, such as fuels and lubricants, will be managed in accordance with applicable federal and state regulations and ADOT Standard Specifications for Road and Bridge Construction.

With adherence to standard construction best management practices, no adverse impacts related to hazardous materials are anticipated, and no further investigation or mitigation is required.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, no construction activities would occur. As a result, there would be no disturbance of existing site conditions and no potential or encountering hazardous materials.

No impacts related to hazardous materials are anticipated under the No-Build Alternative.

Mitigation Measures

No concerns related to hazardous materials were identified within the Preferred Alternative. ADOT and the contractor would follow ADOT's Standard Specifications for Road and Bridge Construction. No mitigation measures are required.

Conclusion

Based on the findings of the PISA and HAZMAT Survey, no hazardous materials concerns were identified within the study area. The potential for encountering contamination during construction is low. With adherence to standard construction practices, the Preferred Alternative is not expected to result in adverse impacts related to hazardous materials, and no further assessment or mitigation is warranted.

Visual Resources

This section describes the characteristics of the viewshed in the study area and potential impacts on visual resources. For roadway improvement projects, visual resources are considered from two perspectives: (1) the view from the roadway to motorists and (2) the view of the roadway to the surrounding community. Visual resources and effects to these resources are defined by identifying key views and considering community goals and preferences, when applicable.

Existing Conditions

No designated scenic roads/byways are in the study area, and land management agency visual analysis requirements do not apply. The study area is characterized by a variety of land uses including undeveloped desert areas, areas modified by flood control facilities, large utility structures, transportation facilities, and single-family residential neighborhoods.

Distant views are of the Hieroglyphic and Bradshaw Mountains to the north, New River Mountains to the northeast, and White Tank Mountains to the southwest. Nearby local landforms in the midrange include Twin Buttes, Saddleback Mountain, East Wing and West Wing mountains. Vegetation in the undeveloped areas is sparse, with low shrubs and trees.

Environmental Impacts—Preferred Alternative

The Preferred Alternative introduces new built features in portions of the study area including new roadway pavement and structures. The new roadway will be similar to other arterial roadways within the City of Peoria and consistent with future development in the area as indicated in the general plan. The final design process will evaluate landscaping and architectural treatments of structural elements.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, no impact to visual quality would occur.

Environmental Commitments

ADOT and the contractor would follow ADOT's Standard Specifications for Road and Bridge Construction. No mitigation measures are required.

Conclusion

There are no lands in the study area with visual quality objectives. Implementation of the Preferred Alternative would introduce built features into the viewshed; however, these features are consistent with anticipated future conditions as development occurs. Distant views of surrounding mountain ranges would be minimally altered by the Preferred Alternative from some vantage points.

Material Pits and Water Sources

Roadway construction projects typically require additional fill material ("borrow") or generate excavated earth or pavement/structures that require disposal ("waste").

Existing Conditions

The topography in the area is relatively flat with soils consisting of unconsolidated to weakly consolidated alluvial fan, terrace, and basin-floor deposits with moderate to strong soil development. There are several approved material sources within the project vicinity within the Agua Fria River. Water providers within the study area include the City of Peoria and private water companies.

Environmental Impacts—Preferred Alternative

Initial roadway modeling for the Preferred Alternative identified the need for borrow to construct the roadway. The Preferred Alternative would require about 120,000 cubic yards of borrow. The construction contractors would seek either existing commercial sources or would develop nearby sources, if required. It would be the responsibility of the contractor to identify any needed material sources or waste disposal sites and to provide environmental documentation regarding the potential use of these sites, as specified in the ADOT Standard Specifications for Road and Bridge Construction (2021).

Environmental Impacts—No-Build Alternative

The No-Build Alternative would not borrow material or generate waste material. Therefore, the No Build Alternative would have no impact related to the use of materials sources or waste sites.

Mitigation Measures

No additional mitigation measures are required.

Conclusion

It would be the responsibility of the contractor to identify any needed material sources or waste disposal sites and to provide the environmental documentation regarding the potential use of these sites, as specified in the ADOT Standard Specifications for Road and Bridge Construction (ADOT 2021).

Utilities

Existing Conditions

A preliminary utility investigation was completed identifying 17 utility owners with facilities in the study area. The investigation included contacting utility owners for Bluestake facility record requests.

Environmental Impacts—Preferred Alternative

Based on preliminary design, there would be impacts to utilities with the Preferred Alternative. The project would impact utilities requiring relocations or modifications at multiple locations. During final design, the extent of impact would be determined and coordinated with the affected utilities. This coordination will include determination of prior rights with each utility. Design plans are made available to the utilities early in the process to allow for proper planning and scheduling of service relocations or modifications. Service outages are expected to be of short duration and the public would be notified of any planned outages.

Environmental Impacts—No-Build Alternative

Under the No-Build Alternative, no impact to utilities would occur.

Environmental Commitments

ADOT and the contractor would follow ADOT's Standard Specifications for Road and Bridge Construction. No additional mitigation measures are required.

Conclusion

There is not sufficient engineering detail to determine the full extent of utilities in conflict with the proposed roadway improvements. Coordination with all affected utilities would continue throughout final design and construction to minimize costs to utilities or ADOT, and service outages to customers.

5. Public Involvement and Coordination

ADOT typically conducts early coordination with federal and state agencies for EA projects and local governments and holds a public scoping meeting or other scoping opportunity in accordance with 23 CFR 771.111, which requires public involvement in the NEPA process. Early agency coordination led to refining the study area, project purpose and need, and alternatives. It also provided an opportunity to gather information on environmental resources and receive input from resource agencies regarding study expectations and potential mitigation requirements. Public and agency outreach activities were conducted in accordance with a project specific Public Involvement Plan (July 2024) available at https://www.elmirageroadextension.com/resources. This plan complies with federal nondiscrimination requirements for Title VI of the Civil Rights Act, the Americans with Disabilities Act, and Limited English Proficiency, which has been approved by FHWA, and complies with all Title VI, ADA, NEPA, and Limited English Proficiency requirements.

Agency Scoping

Letters were mailed to 17 entities representing city and county agencies, jurisdictions, emergency services, schools, and interest groups in October 2024. The letters sought specific input from these entities on their interests, concerns, or potential opportunities to be considered during the alternatives development and design. One response from the FCDMC suggested coordination with the McMicken Dam Outlet Channel Improvement project which has been ongoing through the Design Concept Report (DCR). Additionally, various departments of the City of Peoria, Maricopa County, and ASLD have attended monthly progress meetings and have provided input throughout the study.

Public Scoping

A 30-day public scoping phase began on September 30, 2024. Members of the public were invited to provide input by mail and email. The project team received 60 comments from the public. Most comments (88%) focused on traffic and the need for the project to reduce congestion. Similarly, most commenters (88%) supported the proposed project. Four commenters expressed opposition to the project, citing concerns about increased traffic and/or unsafe driving near their homes; traffic noise; airborne pollutants; and potential use of the roadway by industrial and commercial vehicles. The remaining comments were neutral and/or addressed an issue outside the scope of this EA.

Public Information Meetings

A public information meeting was held on February 26, 2025, at the Lake Pleasant Elementary School (31501 N. Westland Road, Peoria, AZ 85383) and 93 people attended. The purpose of the public information meeting was to review the design concepts for the initial and ultimate configurations, ask questions of and share input with the project team and local governmental representatives, and complete a survey seeking input about the potential project. Eighty percent of survey respondents indicated that they would utilize the El Mirage Road extension to access SR303L with most anticipating use daily (57.5%). Of comments received as part of the survey, 53% of responses were in favor of the project while 5% were opposed. Meeting materials and the Public Meeting Summary, which includes comments received both in-person and from the survey, can be found at https://www.elmirageroadextension.com/resources.

Draft EA Comment Period and Public Hearing

Agencies and members of the public are invited to review and comment on the Draft EA and Initial DCR. The 30-calendar-day comment period begins on September 24, 2025 (the anticipated date of publication) and ends on October 24, 2025. The Draft EA and Initial DCR can be reviewed on the study website at https://www.elmirageroadextension.com/resources or in person at Sunrise Mountain Library, 21109 N 98th Ave., Peoria, AZ, 85382.

A virtual public hearing will be held during the Draft EA review period on October 9, 2025. There will be several ways in which the public can participate and provide comments. Agency, tribal, and public comments received by ADOT during the public comment period will be incorporated and considered in the Final EA and, if applicable, the Finding of No Significant Impact, along with ADOT responses to each comment.

6. Literature Cited

Arizona Game and Fish Department (AGFD). 2022. *Western Burrowing Owl (Athene cunicularia hypugaea).* Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. 7 pp.

Arizona Interagency Desert Tortoise Team (AIDTT). 2015. *Candidate conservation agreement for the Sonoran Desert tortoise (Gopherus morafkai) in Arizona*. May 27, 2015. 138 pp.

Arizona Wildlife Linkage Workgroup (AWLW). 2006. *Arizona Wildlife Linkages Assessment*. Section VI, Figure 6.1, Arizona's Wildlife Linkages Map

City of Peoria. 2005. *Loop 303 Specific Area Plan: Project Report*. City of Peoria, AZ. Retrieved from https://gis.peoriaaz.gov/webdocs/Departments/Community_Development/Planning_and_Zoning/Publications/FinalLoop303_Report.pdf

City of Peoria. 2020. *PlanPeoriaAZ 2040 General Plan*. City of Peoria, AZ. Retrieved from https://www.peoriaaz.gov/home/showpublisheddocument/23952/638792694964530000

Hendricks, D.M. 1985. Arizona Soils. A Centennial Publication of the College of Agriculture, University of Arizona, Tucson.

Ludington, Steve, Moring, Barry C., Miller, Robert J., Flynn, Kathryn S., Hopkins, Melanie J., and Haxel, Gordon A., 2005. *Preliminary integrated databases for the United States – Western States: California, Nevada, Arizona, and Washington*: US Geological Survey Open-File Report 2005-1305, US Geological Survey, Reston Virginia, USA.

Maricopa Association of Governments (MAG). 2021. *Momentum 2050 Regional Transportation Plan.* [Regional transportation plan]. Retrieved from https://azmag.gov/Programs/Transportation/Regional-Transportation-Plan-RTP

_____. 2022. *El Mirage Rd: SR303L to Jomax Rd Feasibility Study*. [Feasibility Study] Maricopa Association of Governments. Retrieved from https://azmag.gov/Portals/0/Documents/MagContent/El-Mirage-SR303L-to-Jomax-Rd-Feasibility-Report-2022-June.pdf?ver=4vvNBQthJmdtMRtuWGK4BA%3d%3d

_____. 2025. *FY 2025-2030 Transportation Improvement Program.* [Transportation program]. Maricopa Association of Governments. Retrieved from https://azmag.gov/Programs/Transportation/Transportation-Improvement-Program-TIP

Public Environmental Data Partners. 2025. *EJScreen*. [Environmental justice screening report]. Retrieved June 9, 2025, from https://pedp-ejscreen.azurewebsites.net/

US Census Bureau. n.d.-a. *Limited English Speaking Households.* American Community Survey, 5-Year Estimates Detailed Tables, Table S1602. US Department of Commerce.

_____. n.d.-b. *Poverty Status in the Past 12 Months*. American Community Survey, 5-Year Estimates Detailed Tables, Table S1701. US Department of Commerce.

_____. n.d.-c. *Race.* American Community Survey, 5-Year Estimates Detailed Tables, Table B02001. US Department of Commerce.

_____. n.d.-d. *Total Population*. American Community Survey, 5-Year Estimates Detailed Tables, Table B01003. US Department of Commerce.