ARIZONA DEPARTMENT OF TRANSPORTATION

Draft Environmental Assessment

Interstate 10 and Koli Road Traffic Interchange

Maricopa County, Arizona

ADOT Project No. 010 MA 166 F0701 01L

July 2025

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.

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for

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ADOT Project No. 010 MA 166 F0701 01L

Lead Agency: Arizona Department of Transportation

Cooperating Agency: Gila River Indian Community

July 2025

Comments on this Draft Environmental Assessment are due by August 13, 2025. Provide comments by:

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Approved by: _____ Date: 7/14/2025

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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.

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Acronyms and Abbreviations

ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
BIA	U.S. Bureau of Indian Affairs
CFR	Code of Federal Regulations
CO	carbon monoxide
Community	Gila River Indian Community
CRMP	Cultural Resource Management Program
CWA	Clean Water Act
dBA	A-weighted decibel
EA	environment assessment
EB	eastbound
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GRD	Gila River Development
I-10	Interstate 10
L_{eq}	equivalent sound level
MAG	Maricopa Association of Governments
Master Plan	Wild Horse Pass Master Plan
MSAT	mobile source air toxic
$\mu g/m^3$	micrograms per cubic meter
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
PM_{10}	particulate matter
ppm	parts per million
Project	Interstate 10 and Koli Road Traffic Interchange Project
ROW	right-of-way
RTP	*Regional Transportation Plan*
SR	State Route
TAZ	traffic analysis zone
THPO	Tribal Historic Preservation Office
TI	traffic interchange
TIP	*Transportation Improvement Program*
USC	U.S. Code
WB	westbound
WHPDA	Wild Horse Pass Development Authority

Environmental Commitments and Mitigation Measures

ADOT and the contractor shall follow the federal laws, regulations, and guidelines and the 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 Amendments of 1987
- Title VI of the Civil Rights Act of 1964
- ADOT's *Public Involvement Plan*
- ADOT's *NEPA EA and EIS Guidance*
- ADOT's *Right of Way Procedures Manual*
- ADOT's *Clean Water Act Section 404/401 Guidance Manual*
- ADOT's *Temporary Traffic Control Design Guidelines*
- ADOT's *Erosion and Pollution Control Manual*
- ADOT's *2017 Noise Abatement Requirements*
- ADOT's *Standard Specifications for Road and Bridge Construction*
- SAF-6.01 *Asbestos Management Policy*
- ADOT's *Roadside Vegetation Management Guideline*

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 all phases of construction. The mitigation measures listed below are not subject to change without prior written approval from the Arizona Department of Transportation.

Arizona Department of Transportation Design Responsibilities

- The Arizona Department of Transportation design team would continue to review community access impacts, mobility, and impacts on community services, community cohesion, aesthetics, and community values in all areas affected by the Project to include the traditionally underserved communities that were identified in the Study Area, including short-term impacts (see page 31).

Arizona Department of Transportation Environmental Planning Responsibilities

- Cultural awareness training would be required of contractors (see page 34).

Arizona Department of Transportation Roadside Development Section Responsibilities

- During final design, the Arizona Department of Transportation would coordinate with the Gila River Indian Community regarding the location and scope of aesthetic treatments (see page 48).
- The Arizona Department of Transportation Roadside Development Section would provide special provisions for the control of noxious and invasive plant species during construction that may require treatment and control within the project limits (see page 54).
- Plants protected by the Gila River Indian Community's Native Plant Ordinance would be impacted by this project; therefore, the Arizona Department of Transportation Roadside Development Section would coordinate with the Gila River Indian Community Department of Environmental Quality to ensure compliance with the Native Plant Ordinance (see page 54).

Arizona Department of Transportation Major Projects Responsibilities

- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor would stop work immediately at that location, notify the Engineer, and take all reasonable steps to secure the preservation of those resources. The Engineer would contact the Arizona Department of Transportation Environmental Planning Historic Preservation Team (480-489-9256 or 480-486-0049), which would immediately make arrangements for proper treatment of those resources in coordination with the Gila River Indian Community Tribal Historic Preservation Office, the Gila River Indian Community Cultural Resources Management Program, and the Bureau of Indian Affairs Regional Archaeologist (see page 34).
- During final design, a qualified biologist would complete surveys for nesting birds protected under the Migratory Bird Treaty Act, as necessary, and develop mitigation measures to avoid impacts on nesting birds during construction (see page 54).

Contractor Responsibilities

- The contractor would use the most current Arizona Department of Transportation best management practices to reduce short-term adverse construction impacts related to air quality (from dust and exhaust); noise and vibration; surface and groundwater quality (from runoff); the transport, use, storage, and disposal of hazardous materials and waste; and related pollution control measures and practices during construction (see page 32).
- The contractor would ensure the construction project would be managed in such a manner as to minimize temporary impacts on businesses, community facilities, and the traveling public, such as noise, vibration, dust, exhaust, traffic restrictions, and potential road closures during construction (see page 32).

- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor would stop work immediately at that location, notify the Engineer, and take all reasonable steps to secure the preservation of those resources. The Engineer would contact the Arizona Department of Transportation Environmental Planning Historic Preservation Team (480-489-9256 or 480-486-0049), which would immediately make arrangements for proper treatment of those resources in coordination with the Gila River Indian Community Tribal Historic Preservation Office, the Gila River Indian Community Cultural Resources Management Program, and the Bureau of Indian Affairs Regional Archaeologist (see page 34).
- During final design, a qualified biologist would complete surveys for nesting birds protected under the Migratory Bird Treaty Act, as necessary, and develop mitigation measures to avoid impacts on nesting birds during construction (see page 54).
- Prior to construction, all personnel who would be on-site, including, but not limited to, contractors, Contractors' employees, supervisors, inspectors, and subcontractors, would review the attached Arizona Department of Transportation Environmental Planning "Western Burrowing Owl Awareness" flyer (see page 55).
- If any burrowing owls or active burrows are identified, the contractor would notify the Engineer immediately. No construction activities would take place within 100 feet of any active burrow (see page 55).
- If the Engineer in cooperation with the Arizona Department of Transportation Biologist determines that burrowing owls cannot be avoided, the contractor would employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate (see page 55).
- The contractor would develop a Noxious and Invasive Plant Species Treatment and Control Plan in accordance with the requirements in the contract documents. Plants to be controlled would include those listed in the state and federal noxious weed and the state invasive species lists in accordance with state and federal laws and executive orders. The plan and associated treatments would include all areas within the project right-of-way and easements as shown on the project plans. The treatment and control plan would be submitted to the Engineer for the Arizona Department of Transportation Construction Professional Landscape Architect for review and approval prior to implementation by the contractor (see page 55).
- Prior to the start of ground-disturbing activities and throughout the duration of construction and any landscape establishment period, the contractor would arrange for and perform the control of noxious and invasive species in the project area (see page 55).

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I. Introduction

A. Explanation of an Environmental Assessment

This environmental assessment (EA) for the Interstate 10 (I-10) and Koli Road traffic interchange (TI) project (Project) was prepared in accordance with the National Environmental Policy Act (NEPA), as amended (42 U.S. Code [USC] Section 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 proposed action is located entirely on Gila River Indian Community (Community) Reservation lands and would require new easement under the jurisdiction of the Community or the U.S. Bureau of Indian Affairs (BIA). Both entities were invited to be cooperating agencies, and the Community has accepted the invitation. The basic function of an EA is to describe the need for a proposed action, alternatives for implementing or constructing the proposed action, and the environmental impacts of the proposed action and alternatives. The EA also provides a list of agencies and persons consulted. This document identifies potential impacts on social, economic, natural, and cultural resources and associated measures to avoid, minimize, and mitigate such impacts.

B. Project Location

ADOT proposes to build the new Koli Road TI in south-central Maricopa County (Figure 1). The proposed TI would be located on I-10 at approximately milepost 163.5, between the existing Wild Horse Pass Boulevard TI and State Route (SR) 347/Queen Creek Road TI. The proposed action is located on Community and allotted lands just south of the cities of Phoenix and Chandler (Figure 2).

C. Project Background and Overview

I-10 is a major transportation route for both freight and passenger traffic in Arizona, connecting Arizona's largest major metropolitan areas of Phoenix and Tucson. I-10 carries both interstate and commuter traffic destined to and from the Phoenix area. The existing I-10 TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road provide access to Community and non-Community commercial enterprises located on Community lands that offer important employment opportunities.

Figure 1. Project location in state

Figure 2. Project vicinity

PATH: H:\PROJECTS\AZ\ADOT\2024ADOT\KOLIRDTI_103608221.7.2_WIP\APRX\KOLIRD_CURRENTASOF_03032025\KOLIRD_CURRENTASOF_03032025_CG.APRX - USER: CGEESEY - DATE: 3/21/2025

The proposed Koli Road TI is included in the planning documents of regional and local agencies. The Maricopa Association of Governments (MAG) *Transportation Improvement Program* (TIP) for fiscal years 2022 to 2025 includes the new Koli Road TI and lists its construction completion date as late 2027. The Community's Gila River Development (GRD), formerly known as the Wild Horse Pass Development Authority (WHPDA), prepared the *Wild Horse Pass Master Plan* in 2019 to establish its long-term strategy for future development west of I-10, and the Master Plan shows the proposed Koli Road TI. Additionally, GRD prepared the *Wild Horse Pass: Koli Road Traffic Interchange Location Study* in 2024, which shows the proposed TI and the Koli Road Extension, which is a Community roadway that would connect with the TI. The Community would be responsible for the design and construction of the Koli Road Extension and ADOT would be responsible for constructing the TI and connecting it to the Community's road extension in, approximately, the summer of 2027. Responsibilities are outlined in an intergovernmental agreement executed by the Community and ADOT. At milepost 163.5, I-10 is classified as an urban freeway, with two general-purpose lanes and one auxiliary lane in each direction. An unpaved median with a cable barrier system separates the eastbound and westbound lanes. The Study Area for the proposed TI extends approximately 0.5 mile east of I-10, 1.2 mile north of milepost 163.5, and 1.5 mile south of milepost 163.5. To the west, the Study Area extends farther out—from 0.5 to 1.7 miles west of I-10—to encompass the existing Maricopa Road.

Gila River Indian Community

The proposed Koli Road TI is located on Community and allotted lands within the Community's Reservation. I-10 in the Community was built on a transportation easement established in 1966 with ADOT, BIA, and the Community. The Community has territorial sovereignty over its tribal land in accordance with federal law. Appendix A, *Coordination and Correspondence*, documents Community and other agency coordination

II. Project Purpose and Need

A. Summary

ADOT, in cooperation with the Community, BIA, and MAG, is proposing a new TI along I-10 south of Phoenix. The proposed action that is under consideration is known as the Koli Road TI (the Project). This section of the EA explains why ADOT and the Community are proposing to construct a new TI (purpose) and the transportation problems to be solved (needs). Refer to Figures 1 and 2 for the Project location and vicinity, respectively.

The purpose and need statement identifies specific measurable transportation problems (needs) that the project would address (purpose). This purpose and need chapter has been prepared based on FHWA NEPA regulations (23 Code of Federal Regulations [CFR] 771) and guidance, including FHWA Technical Advisory T 6640.8A. The purpose and need statement identifies and documents current conditions using the 2024 analysis year and future conditions projected to 2050 in the Study Area.

The purpose and need for the proposed Koli Road TI was also prepared in accordance with:

- 23 USC 327 – Surface Transportation Project Delivery Program
- 23 CFR 450.212 – Transportation Planning Studies and Project Development
- 23 CFR 771 – Environmental Impact and Related Procedures
- ADOT's *NEPA EA and EIS Guidance* (2024a)
- FHWA's *Elements of Purpose and Need* (2018)
- FHWA's Technical Advisory T 6640.8A – *Guidance for Preparing and Processing Environmental and Section 4(f) Documents* (1987)
- American Association of State Highway and Transportation Officials' Practitioners' Handbook 7 – *Defining the Purpose and Need and Determining the Range of Alternatives for Transportation Projects* (2016)

Background

An EA (ADOT 2024b) was recently prepared for improvements along 26 miles of I-10 between SR 202L and SR 387, which includes the Study Area for the Koli Road TI. Traffic conditions at the Wild Horse Pass Boulevard and SR 347/Queen Creek Road TIs—adjacent to the proposed Koli Road TI—were evaluated in detail in that I-10 EA. In addition to these adjacent I-10 TIs, the I-10 improvements include an additional general-purpose lane, high-occupancy vehicle lane, and continuous auxiliary lane in each direction on I-10 in the Koli Road TI Study Area. These lanes will add capacity to I-10 and accommodate the corridor-wide growth occurring in Maricopa, Pinal, and Pima Counties. Implementation of the I-10 improvements represents the existing condition for the proposed Koli Road TI. The I-10 EA received a finding of no significant impact from BIA in February 2024 and from ADOT in March 2024.

On the west side of I-10, the Koli Road TI would connect with an extension of Koli Road from Maricopa Road to I-10. On the east side of I-10, the Koli Road TI would connect with an eventual extension of

Kyrene Road to the south. These local road improvements are identified in GRD's *Wild Horse Pass Master Plan* (Master Plan). The general alignment of the Koli Road Extension was defined in GRD's *Wild Horse Pass: Koli Road Traffic Interchange Location Study* (WHPDA 2024). The Kyrene Road Extension has not yet been defined; however, it is reasonably foreseeable based on information provided by the Community. The construction of these local roadway extensions would be privately funded by the Community (and/or a non-federal source identified by the Community) and they are, therefore, outside the scope of any required ADOT approvals.

B. Purpose

The purpose of the proposed I-10 Koli Road TI is to:

- provide efficient access to the Community to and from I-10 in accordance with the GRD's approved Master Plan
- improve emergency vehicle response times from the Community Fire Station
- improve traffic management on I-10 during incidents
- accommodate growth in population and employment

C. Need

This section identifies the specific and measurable transportation problems that would be alleviated by the proposed Project, considering existing and future conditions along I-10 and in the vicinity (east and west) of I-10 between the Wild Horse Pass Boulevard and SR 347/Queen Creek Road TIs. The issues to be addressed are:

- less than efficient access to Community land
- inadequate emergency vehicle response times during special events
- substantial traffic management issues on I-10 during incidents
- substantial visitor population and employment growth

Need Based on Poor and Inefficient Access to Community Land

Current access to and from I-10 in this growing area of the Community is circuitous, resulting in inefficient travel times, out-of-direction travel, and the increased use of local Community roads. Improved access is needed to support planned growth.

Considerable growth is expected in the Study Area. GRD prepared the Master Plan in November 2019 to stimulate further economic growth within the Community, and in the vicinity of Wild Horse Pass (WHPDA 2019), providing an important future revenue source to support Community needs and services for its tribal members. The Wild Horse Pass area currently features several popular destinations, including the Gila River Resorts & Casinos – Wild Horse Pass, the Sheraton Grand at Wild Horse Pass resort, the Phoenix Premium Outlets shopping center, the Rawhide Western Town event venue, and the Wild Horse Pass Motorsports Park. The Master Plan documents an economic and market analysis of the larger Phoenix metropolitan area and recommends future development to best capitalize on market opportunities

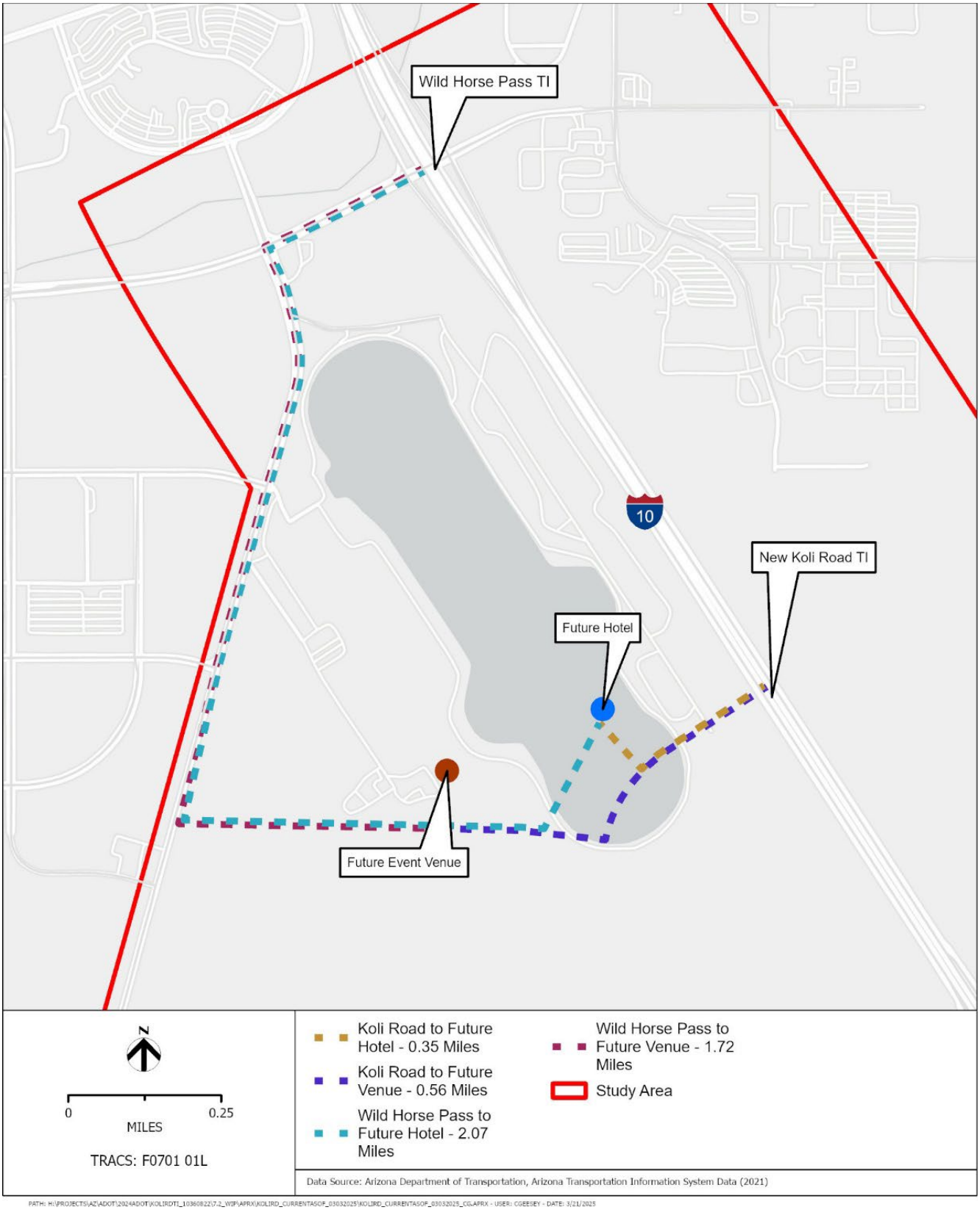
at Wild Horse Pass, which may include apartments, hotels, a casino, office and retail space, restaurants, medical facilities, a museum, a stadium, sports facilities, a water park, outdoor festival venues, and a convention center. By the buildout year of 2060, the hotels are expected to have over 2,500 rooms, the retail space would encompass over 1 million square feet, and the stadium and other event venues would have over 50,000 seats.

The Master Plan included a traffic study that examined how the future development would affect traffic patterns in the Wild Horse Pass area. The area is expected to see about 60,000 daily trips by 2030, 163,000 daily trips by 2040, and 237,000 daily trips by 2060. The traffic study assumed that the Wild Horse Pass area would be served by a new TI on I-10—the proposed Koli Road TI—to accommodate traffic generated by the future development and general population increases.

Current access to this planned area is limited. To support the development, improved access is needed. I-10 provides access to the Community at the northern and southern limits of the Study Area by way of the TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road. However, these TIs are not well-positioned to support future growth. The Community is planning an extensive expansion of the local roadway network that includes the extension of Koli Road to connect with the proposed Koli Road TI. Such a future roadway network would improve access to existing destinations within the Community and would accommodate future development. The plan indicates that Koli Road would be extended approximately ¾ mile east from Maricopa Road to I-10. Kyrene Road would be extended south approximately 1 mile to connect with Koli Road and the proposed Koli Road TI, at some time in the future.

Without improved access to I-10, however, patrons and employees destined for these planned facilities would experience out-of-direction travel, with associated increased travel times and congestion when using the existing TIs. The out-of-direction/additional travel could be up to 1.7 miles (calculated based on a trip from the Wild Horse Pass Boulevard TI, then west and south to the potential location of a new hotel on the existing motorsports facility). Another trip to a potential new event venue on the motorsports park facility would be 1.1 mile longer using the Wild Horse Pass Boulevard TI instead of the proposed Koli Road TI. Figure 3 illustrates the future trip lengths.

Figure 3. Future trip lengths

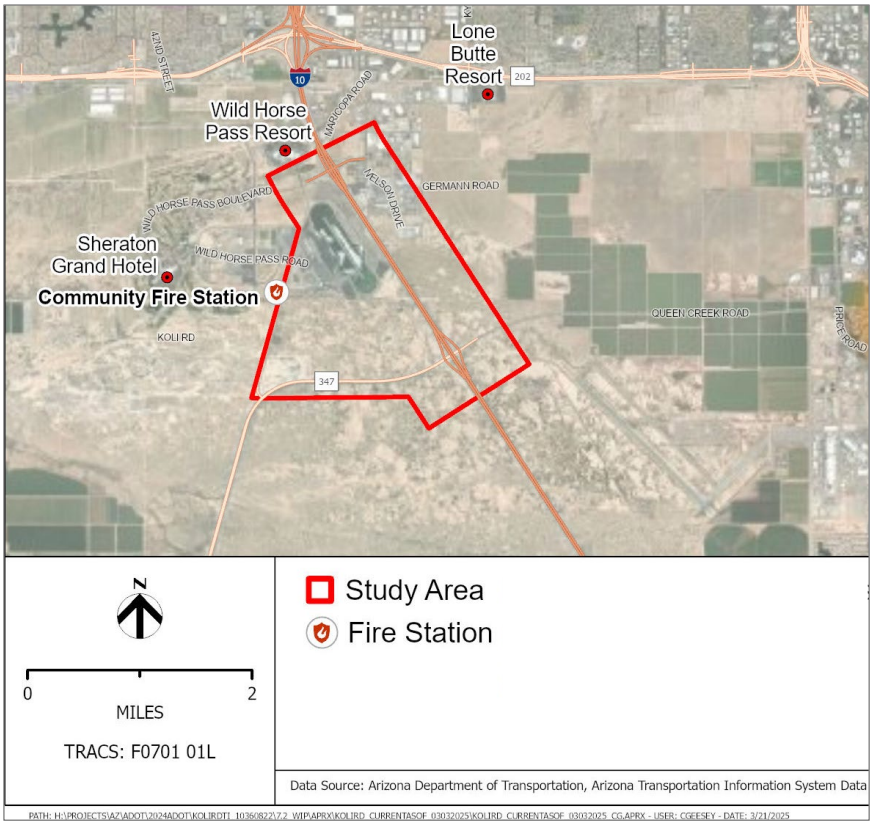


Need Based on Inadequate Emergency Vehicle Response Times

Emergency responders currently face delays related to special event traffic in the Wild Horse Pass area, and this problem is expected to worsen with future development.

A Community Fire Station is located at the intersection of 48th Street and Maricopa Road (Figure 4). The station provides emergency medical services within the Study Area and to surrounding areas. The current estimated response times from the Community Fire Station to area attractions, including the Gila River Resorts & Casinos – Wild Horse Pass, Sheraton Grand at Wild Horse Pass, and Gila River Resorts & Casinos – Lone Butte are 4, 6, and 8 minutes, respectively. These response times are considered reasonable; however, during an agency scoping meeting held for this study on December 12, 2023, the Community Fire Department reported that it has experienced delayed response times during special events, which will increase as the population, development, and number of venues and events in this area increases. A new Koli Road TI would provide an additional alternative route for first responders, allowing more flexibility when a special event in the Wild Horse Pass area causes backed-up traffic at the existing I-10 TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road. It would provide an additional access point to I-10, reducing traffic on local roadways, which would also aid in emergency vehicle access and reduced response times. Additionally, the future development envisioned by GRD for the Wild Horse Pass area will include a stadium venue that could accommodate up to 36,000 attendees and generate over 16,000 peak-hour trips, resulting in additional event-related traffic delays that would pose a challenge for the Community's first responders, given the limited locations to access I-10.

Figure 4. Community Fire Station and nearby destinations



Need Based on Substantial Traffic Management Issues on I-10 during Incidents

Emergency responders currently experience challenges while managing traffic on I-10 during incidents in and near the Study Area.

Crashes, emergencies, or inclement weather are types of incidents that can cause congestion along I-10, affecting safety and travel time reliability. The frequency and duration of highway closures indicate the travel inconveniences associated with incidents. A comparison of closures along I-10 with closures on other statewide corridors was documented in ADOT's *I-10 East Corridor Study, State Route 202L to New Mexico State Line* (2017).[1]

Closure times were evaluated using a green-yellow-red scoring system, as shown in Table 1. In the 4-mile segment of I-10 between SR 202L and SR 347/Queen Creek Road, 12 closures occurred between 2010 and 2015—11 in the eastbound direction and 1 in the westbound direction. These incidents caused 4 miles of roadway to be closed for over 62 hours (3,736 minutes) in the eastbound direction and 3.5 hours (213 minutes) in the westbound direction (ADOT 2017).

Table 1. Closure rating system

Performance Level	Closure Duration (minutes)
Good	< 44.18
Fair	44.18 – 124.86
Poor	> 124.86

Source: From ADOT (2017)

The closure durations for I-10 eastbound within the Koli Road TI Study Area placed it in the red category (poor) compared to other statewide corridors. When incidents on I-10 occur, traffic is diverted to the local roadway network. A new TI at Koli Road would provide an additional point along I-10 where drivers could be routed off the freeway, improving traffic management options. It would also improve response times to and from the highway for emergency responders, including from the Community Fire Station in the Wild Horse Pass area. During an agency scoping meeting held for this study on December 12, 2023, the Community Police Department stated that the new Koli Road TI would provide more options for traffic management during traffic diversions as a result of incidents. It should also be noted that the upcoming I-10 improvements between SR 202L and SR 387 will improve traffic management by providing additional lanes on I-10.

Need Based on Substantial Visitor Population and Employment Growth

Future development will result in substantial growth in the visitor population and in employment in and around the Study Area, resulting in additional travel demand and exacerbating the problems identified in the previously discussed needs.

Population and employment data were obtained from MAG for the Community. These data were provided for areas known as traffic analysis zones (TAZs). The population and employment data for 2023 and 2050

[1] Closures related to construction were not included in the data because ADOT provides this information to the public, allowing travelers to adjust their travel plans.

are presented by TAZ in Table 2 and in Figures 5 and 6, respectively. The Community's Wild Horse Pass attractions attract a substantial number of people who occupy hotel rooms at the Community's hotels and resort. These hotel stays are represented in the existing and future population figures. Therefore, the population is referred to as a "visitor population" and is a strong indicator of future travel demand generated by visitors to the area.

Table 2. Projected population (visitors) and employment growth, 2023 to 2050

Traffic analysis zone	2023 visitor population	2050 visitor population	2050 % population change from 2023	2023 employment	2050 employment	2050 % employment change from 2023
3374	0	5	—	0	0	—
3376	199	3,783	1,801	307	2,699	779
1014	0	956	—	103	702	582
1013	0	0	—	65	123	89
3375	630	876	39	2,194	2,204	1
3377	0	0	—	0	338	—
3191	82	112	37	254	269	6
3411	0	0	—	1,140	1,322	16
1017	0	0	—	509	506	–1
Total	**911**	**5,727**	**529%**	**4,572**	**8,163**	**79%**

Sources: 2023 MAG Socioeconomic Projections for selected TAZs in the Community and MAG regional travel demand model

MAG projects that the visitor population will grow by over 500 percent by 2050. This is largely attributable to planned development west of I-10 and south of Wild Horse Pass Boulevard, in areas near the existing Gila River Resorts & Casinos – Wild Horse Pass, Sheraton Grand at Wild Horse Pass, and Wild Horse Pass Motorsports Park. Similarly, although not as pronounced, employment is forecast to grow by nearly 80 percent by 2050. This substantial growth in the visitor population and employment in the vicinity of the Study Area will place additional travel demand on the local roadway network and I-10 TIs.

The Master Plan completed by GRD shows development occurring at a faster rate than the MAG region, with corresponding additional growth in population and employment. The Master Plan includes a detailed traffic analysis to assess the travel demand for the forecast growth. The analysis evaluated buildout scenarios for 2030, 2040, and 2060. For the 2060 buildout scenario, the analysis shows over 237,00 total daily trips. The additional traffic will exacerbate the problems cited in the previously discussed needs.

Figure 5. Projected visitor population growth by 2050

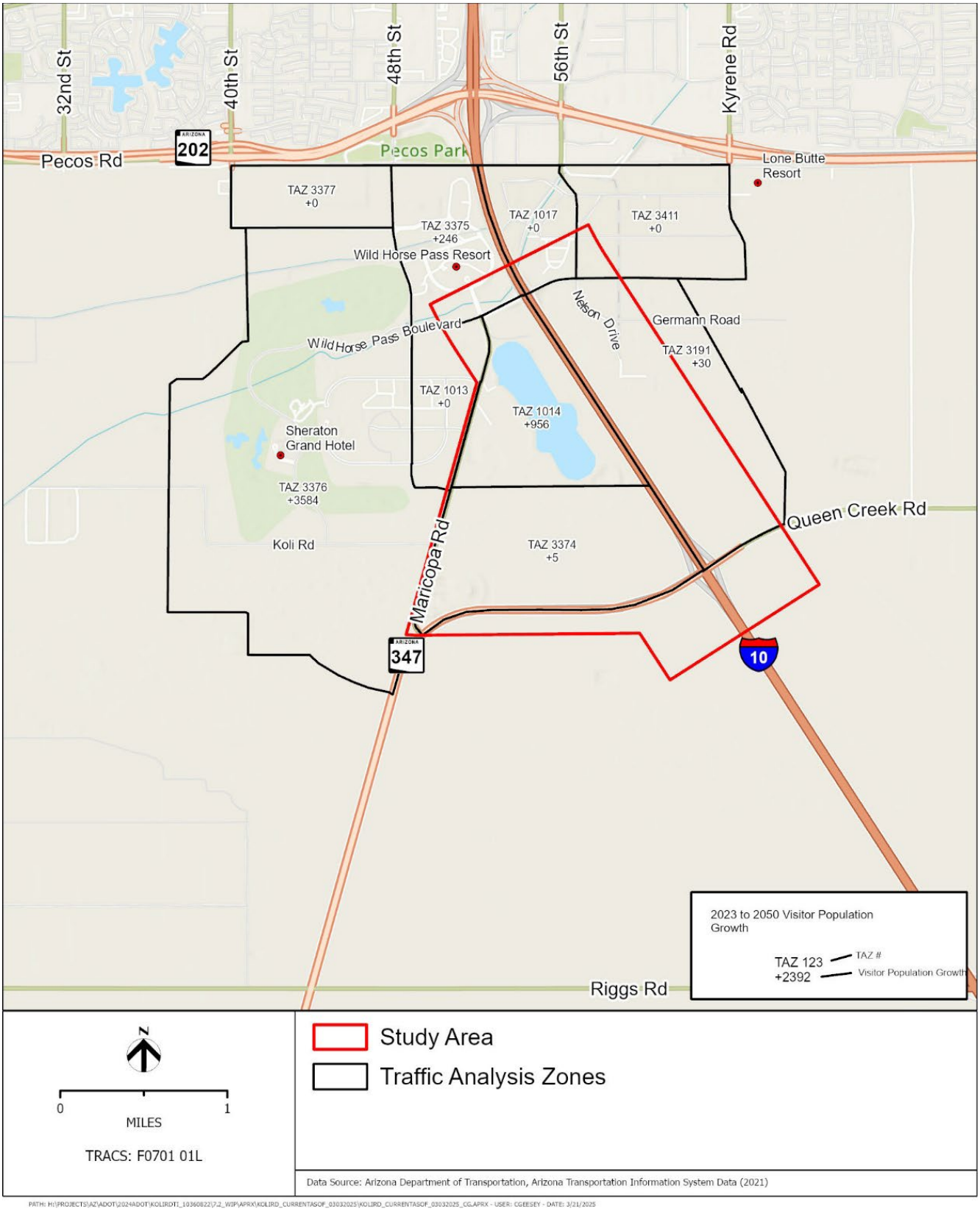
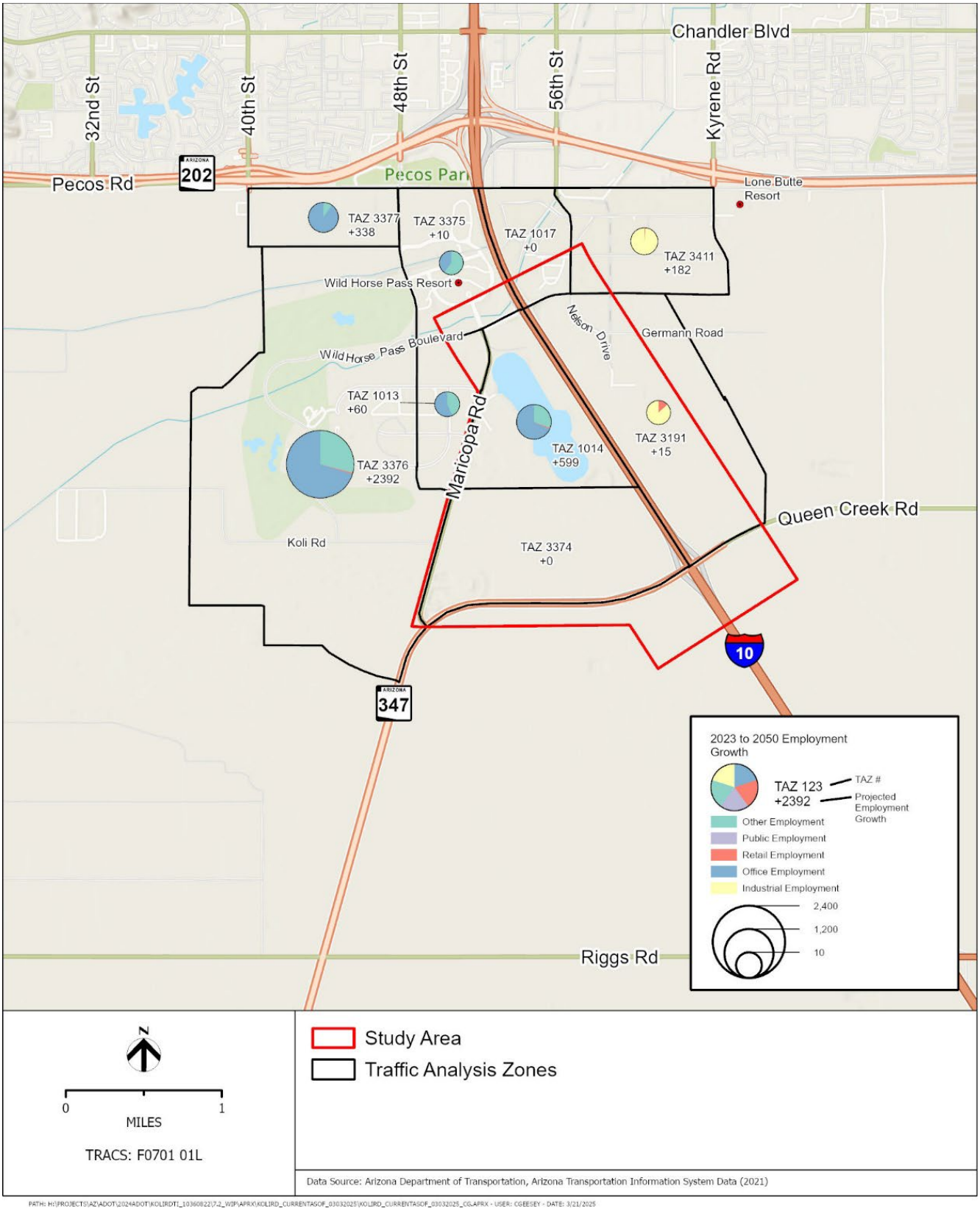


Figure 6. Projected employment growth by 2050



D. Conformance with Regulations, Land Use Plans, and Other Plans

Regional Planning Efforts

Regional transportation planning is conducted by MAG and ADOT. The proposed Koli Road TI is included in MAG's 2050 regional travel demand model and *Regional Transportation Plan* (RTP). MAG's TIP for fiscal years 2022 to 2025 includes the new Koli Road TI and lists its construction completion date as late 2027.

Local Planning Efforts

The proposed Koli Road TI Project conforms, to the extent described below, to local planning efforts enacted by Maricopa County, the Community, and the City of Phoenix.

Maricopa County

The *Maricopa County Vision 2030 Comprehensive Plan* (Maricopa County 2016) does not specifically identify the proposed Project. However, the plan states that any update or amendment "to the Maricopa County Transportation System Plan, municipal transportation plans, Short and Long Range Regional Transportation and Transit Plans, the State Highway Plan, the National Highway System, the Federal Interstate Highway System, or any other transportation system within Maricopa County, will be considered as amendments to the Comprehensive Plan." Because the proposed Project is included in the RTP, it is considered as an amendment to the County's comprehensive plan.

Gila River Indian Community

The *Wild Horse Pass Master Plan* was prepared for the Community by GRD, formerly known as WHPDA. As previously discussed, the plan includes future development of apartments, hotels, a casino, office and retail space, restaurants, medical facilities, cultural attractions, a stadium, sports facilities, a water park, outdoor festival venues, and a convention center. A detailed traffic analysis was completed to determine the future roadway network needs, lane requirements, and intersection traffic control to accommodate the future development. An interchange with I-10 at or near the proposed Koli Road TI is included in the 2030 through 2060 buildout scenarios.

GRD also prepared the *Wild Horse Pass: Koli Road Traffic Interchange Location Study* in 2024, and this study shows the Koli Road TI on I-10 with an extension of Koli Road leading to the new TI.

City of Phoenix

The City of Phoenix *2025 General Plan 2015* (City of Phoenix 2024) does not specifically identify the proposed Koli Road TI. As with Maricopa County, the City of Phoenix is a supporting municipality for the preparation of regional planning studies to improve the I-10 corridor in Arizona, recognizing I-10's value for economic development by connecting Phoenix to major markets across the nation.

III. Alternatives

A. Introduction

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 Project purpose and need while avoiding, minimizing, or otherwise mitigating adverse impacts on environmental resources in the Study Area. Several alternatives were evaluated for their ability to meet the proposed Project's purpose and need while also fulfilling criteria related to engineering, environmental impacts, the need for additional easement, and cost.

ADOT began developing the Koli Road TI alternatives following the NEPA agency scoping meetings held in December 2023. ADOT studied two build alternatives and a no-build alternative. In October 2024, ADOT held a public meeting to present the results of a screening of the alternatives. ADOT gathered feedback at the public meeting and during the associated comment period. This feedback, along with extensive coordination with the Community, shaped the TI alternatives discussed in this chapter.

Screening

The study team analyzed the No-Build Alternative (K1) and two build alternatives (K2 and K3) using engineering, environmental, easement, and cost criteria, as shown in Table 3. This high-level multidisciplinary evaluation—based on preliminary concepts for the TI—identified the key advantages and/or challenges associated with each alternative.

Table 3. Description of Koli Road TI alternative evaluation criteria

Criterion	Areas of evaluation	
Engineering	• roadway design factors • drainage considerations • traffic operations in 2050 • safety • compatibility with adjacent land uses • constructability/traffic during construction	• utility considerations • maintenance/maintainability • incident management • pedestrian and bicyclist access • I-10 main line impacts • future I-10 expansion considerations
Cost	• design and construction cost	• utility cost
Right-of-way/ Easement	*Tribal land:* • new long-term freeway easement (acres) • billboard relocations	*Allotted land:* • new long-term freeway easement (acres) • billboard relocations
Environmental	• floodplain • jurisdictional waters of the U.S. • water resources • noise • air quality • visual resources • hazardous materials • land use (existing and future)	• local businesses (including billboards) • local communities (residential impacts) • socioeconomic factors • biological resources • prime and unique farmlands • archaeological resources • traditional cultural properties • Section 4(f) and Section 6(f) resources

Figure 7 summarizes the alternative evaluation results for the various criteria, using symbols to indicate the relative potential impacts of each alternative, as follows:

- empty circle: most desirable or least impacts
- half-filled circle: average desirability or average impacts
- filled-in circle: least desirable or most impacts

K1 Alternative – No Build Alternative

The K1 Alternative is the No-Build Alternative, representing future conditions without a new TI on I-10. People would continue to reach destinations in the area using the existing TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road. As shown on Figure 7, the K1 Alternative was the least desirable alternative in terms of addressing future traffic conditions in 2050 and compatibility with adjacent land uses. The K1 Alternative would result in more traffic congestion at the adjacent TIs and would not provide a new access point for future development planned in the area. Conversely, the K1 Alternative would have no impacts related to the construction of a large new facility on I-10, would cost nothing, and would not involve future maintenance beyond the continued upkeep of I-10.

K2 Alternative – Diverging Diamond TI

The K2 Alternative would be a new diverging diamond TI on I-10 (Figure 8). This type of TI optimizes the flow of traffic by allowing free-flow left turns at the TI without drivers crossing oncoming traffic. Diverging diamond TIs are relatively new to Arizona but more common elsewhere in the United States. It is desirable from a safety standpoint because it would reduce potential conflict points by 50 percent and would discourage wrong-way driving on I-10. The K2 Alternative also scored high in the categories of future traffic conditions in 2050 and compatibility with adjacent land uses. However, the K2 Alternative scored worse with regard to drainage considerations, constructability/maintenance of traffic during construction, maintenance, incident management, and pedestrian and bicyclist access.[2] The K2 Alternative would have higher costs and land acquisition needs—its design and construction would cost an estimated $69.5 million ($3 million more than the K3 Alternative) and would involve the acquisition of 34.9 acres of easement from allotment land (1.9 acre more than the K3 Alternative).

K3 Alternative – Diamond TI

The K3 Alternative would be a new diamond TI on I-10 (Figure 9). Diamond TIs are common in Arizona and differ from diverging diamond TIs by stopping traffic at the TI intersections for left turns. The K3 Alternative is more desirable for maintenance and incident management because it would allow traffic to exit I-10 and use the ramps to travel directly through the TI when I-10 is closed at the TI on account of bridge maintenance work or an incident. The K3 Alternative also scored high in the categories of future traffic conditions in 2050 and compatibility with adjacent land uses. It scored better than the K2 Alternative in terms of drainage, constructability, and pedestrian and bicyclist access.[2] It would cost less than the K2 Alternative and involve less land acquisition. The K3 Alternative scored worse than the K2 Alternative for safety because it would have more potential conflict points as drivers turn left across oncoming traffic.

[2] During development of the Design Memo, the criteria for constructability/maintenance of traffic during construction, maintenance, and pedestrian and bicyclist access were further investigated. The investigation is summarized in Section 3.4.1 of the Design Memo.

Figure 7. Koli Road TI alternatives evaluation for engineering, cost, and right-of-way criteria (top) and environmental criteria (bottom)

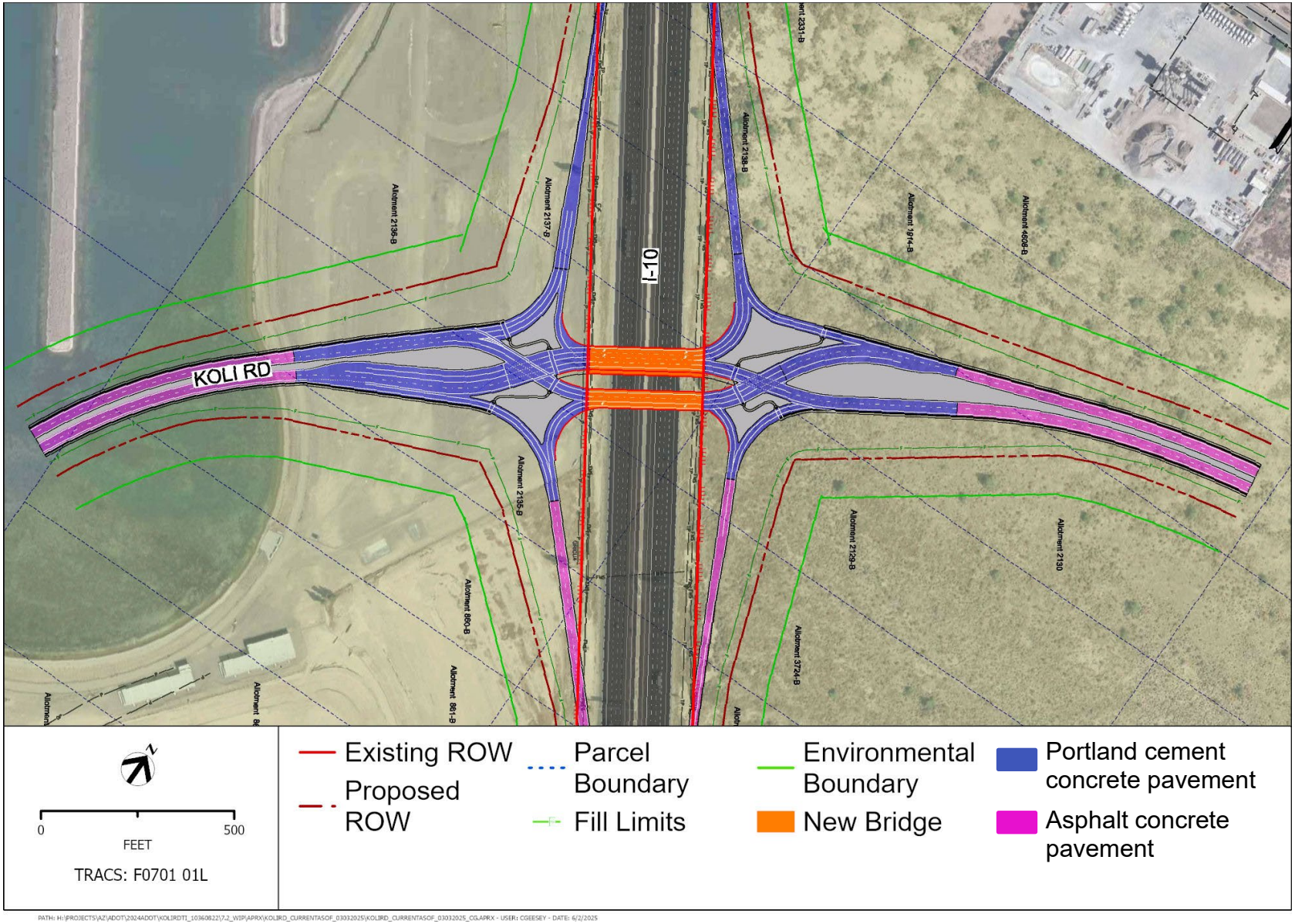
○ = Most desirable or least impacts ◐ = Average desirability or average impacts ● = Least desirable or most impacts

ALTERNATIVES			ENGINEERING IMPACTS											COST		RIGHT OF WAY (TRIBAL LAND)		RIGHT OF WAY (ALLOTMENT LAND)	
			Roadway Design Factors	Drainage Considerations	Traffic Operations in 2050	Safety	Compatibility with adjacent land use	Constructability / Maintenance of Traffic During Construction	Utility Considerations	Maintenance / Maintainability	Incident Management	Pedestrian and Cyclist Access	I-10 Mainline Impacts	Design and Construction Cost ($millions)	Utility Cost ($millions)	New Long-Term Freeway Easement (Acres)	Billboard Relocations	New Long-Term Freeway Easement (Acres)	Billboard Relocations
Koli Rd Interchange Alternatives																			
Interchange Configuration	K1	No Build	N/A	○	●	◐	●	○	○	○	N/A	N/A	N/A	$0.0	$0.0	0.0	0	0.0	0
	K2	Diverging Diamond Interchange (DDI)	○	◐	○	○	○	●	◐	●	●	●	◐	$69.5	$1.4	0.9	0	34.9	3
	K3	Diamond Interchange	○	○	○	◐	○	○	◐	◐	○	○	◐	$66.5	$1.4	0.9	0	33.0	3

ALTERNATIVES			ENVIRONMENTAL IMPACTS																
			Floodplain	Jurisdictional Waters of the U.S.	Water Resources	Noise	Air Quality	Visual	Hazardous Materials	Land Use (Existing and Future)	Local Businesses (including billboards)	Local communities (environmental justice, residential impacts)	Biological Resources	Prime and Unique Farmlands (soils not just active farming)	Archaeological Resources	Traditional Cultural Properties (TCPs)	Section 4(f) and Section 6(f)
Koli Rd Interchange Alternatives																			
Interchange Configuration	K1	No Build	○	○	○	○	◐	○	○	○	○	◐	○	○	○	○	○	○	
	K2	Diverging Diamond Interchange (DDI)	○	○	○	○	○	◐	○	◐	◐	○	○	◐	○	○	○	○	
	K3	Diamond Interchange	○	○	○	○	○	◐	○	◐	◐	○	○	◐	○	○	○	○	

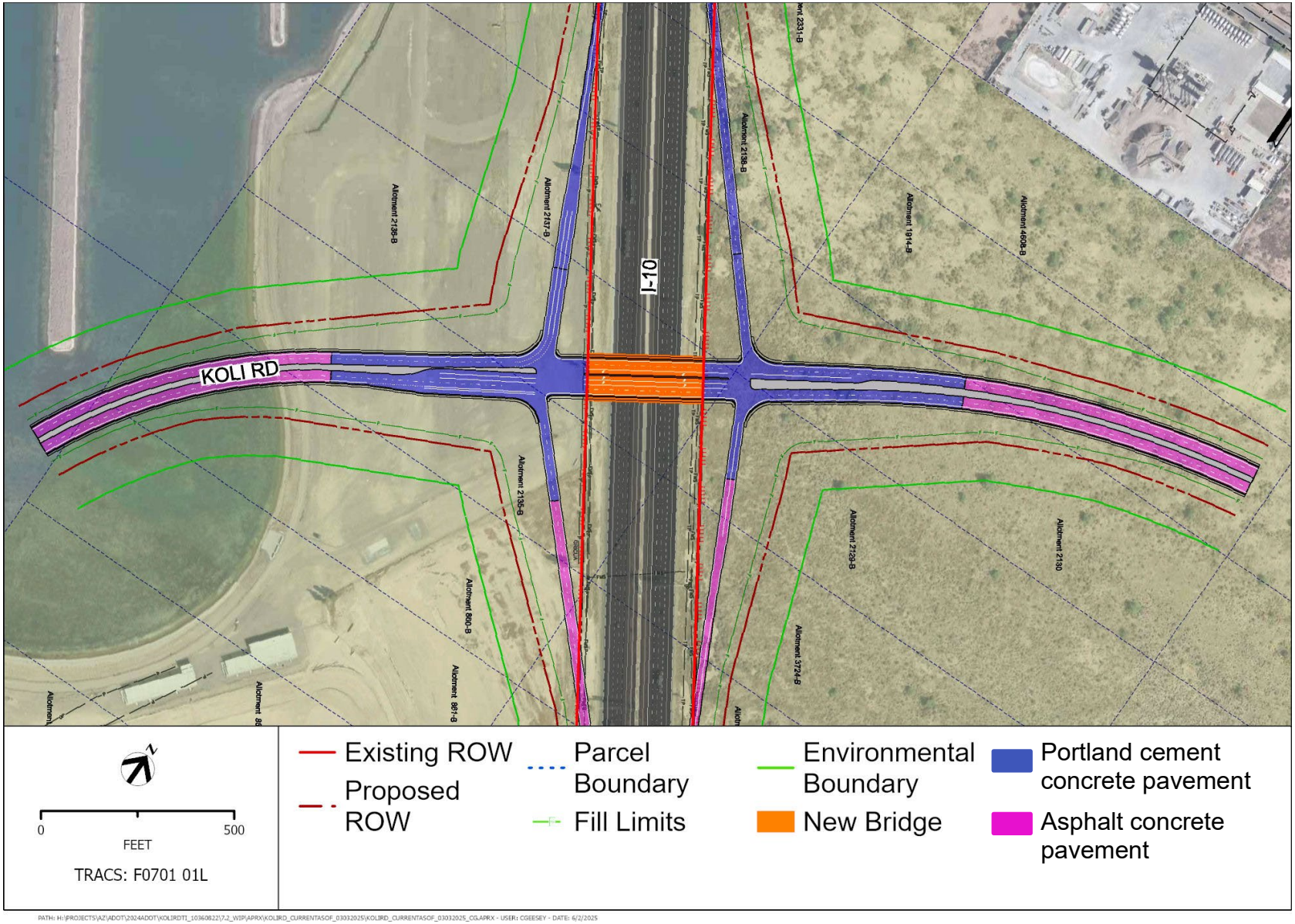
Note: The preliminary environmental impact analysis was conducted prior to the rescinding of Executive Order 12898 on environmental justice.

Figure 8. Koli Road TI – K2 Alternative (diverging diamond TI)



Note: This figure was developed in early 2024 during the alternatives screening process to facilitate a comparison of the diamond and diverging diamond TI configurations. The configuration under consideration would ultimately connect with roadway extensions to the east and west.

Figure 9. Koli Road TI – K3 Alternative (diamond TI)



Note: This figure was developed in early 2024 during the alternatives screening process to facilitate a comparison of the diamond and diverging diamond TI configurations. The configuration under consideration would ultimately connect with roadway extensions to the east and west.

B. Alternatives Considered But Eliminated from Further Study

Both build alternatives (K2 and K3 Alternatives) scored better than the No-Build Alternative (K1 Alternative) in terms of future (2050) traffic operations and compatibility with future land uses, considering GRD's future development plans for the area and the additional traffic such development is expected to generate. Compared with each other, the build alternatives were similar in terms of roadway design, utility relocations, and traffic on the I-10 main line. Their environmental impacts would also be similar. The main differences between the two build alternatives related to several engineering criteria, cost, and land acquisition.

The engineering evaluation concluded that the K3 Alternative (diamond TI) achieved the highest rating; however, the Community identified the K2 Alternative (diverging diamond TI) as its preferred choice. As a cooperating agency and key stakeholder for this study, and with the Project being located on Community Reservation lands, the Community's input carried substantial weight. Public comments received during the October 2024 public meeting and associated comment period did not indicate a clear consensus regarding the alternatives. The K2 Alternative (diverging diamond TI) configuration is considered to be safer and it offers potential advantages—such as reduced traffic control measures during special events—because it allows free-flowing left turns. Should traffic volumes increase as a result of future development, the diverging diamond TI design could provide enhanced traffic flow on Koli Road. For these reasons, the K3 Alternative (diamond TI) was eliminated from further study.

Further discussion of the alternatives evaluation is provided in Appendix B, *Alternatives Memorandum*.

C. Alternatives Under Consideration

No-Build Alternative

With the No-Build Alternative, a new TI would not be provided on I-10 in the Study Area. Maintenance of I-10 and the nearby TIs (at Wild Horse Pass Boulevard and SR 347/Queen Creek Road) would continue. With the No-Build Alternative, issues related to poor and inefficient access to Community land, inadequate emergency response times during special events, traffic management challenges during events and incidents, and inadequate infrastructure to handle substantial visitor population and employment growth would continue and worsen over time as the GRD Master Plan is implemented.

While the No-Build Alternative would not meet the Project's purpose and need, it serves as a baseline for comparing and evaluating the impacts of the proposed action against the impacts of not undertaking the proposed action.

Build Alternative

The K2 Alternative would be built as a new diverging diamond TI on I-10, approximately halfway between the existing TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road. It would carry traffic on Koli Road over I-10 on two bridge structures (Figure 10). Westbound Koli Road on the TI would have two to three through lanes, with ramp lanes adjacent, while eastbound Koli Road would have two to four through lanes, with ramp lanes adjacent (Figure 11).

Figure 10. Koli Road TI configuration

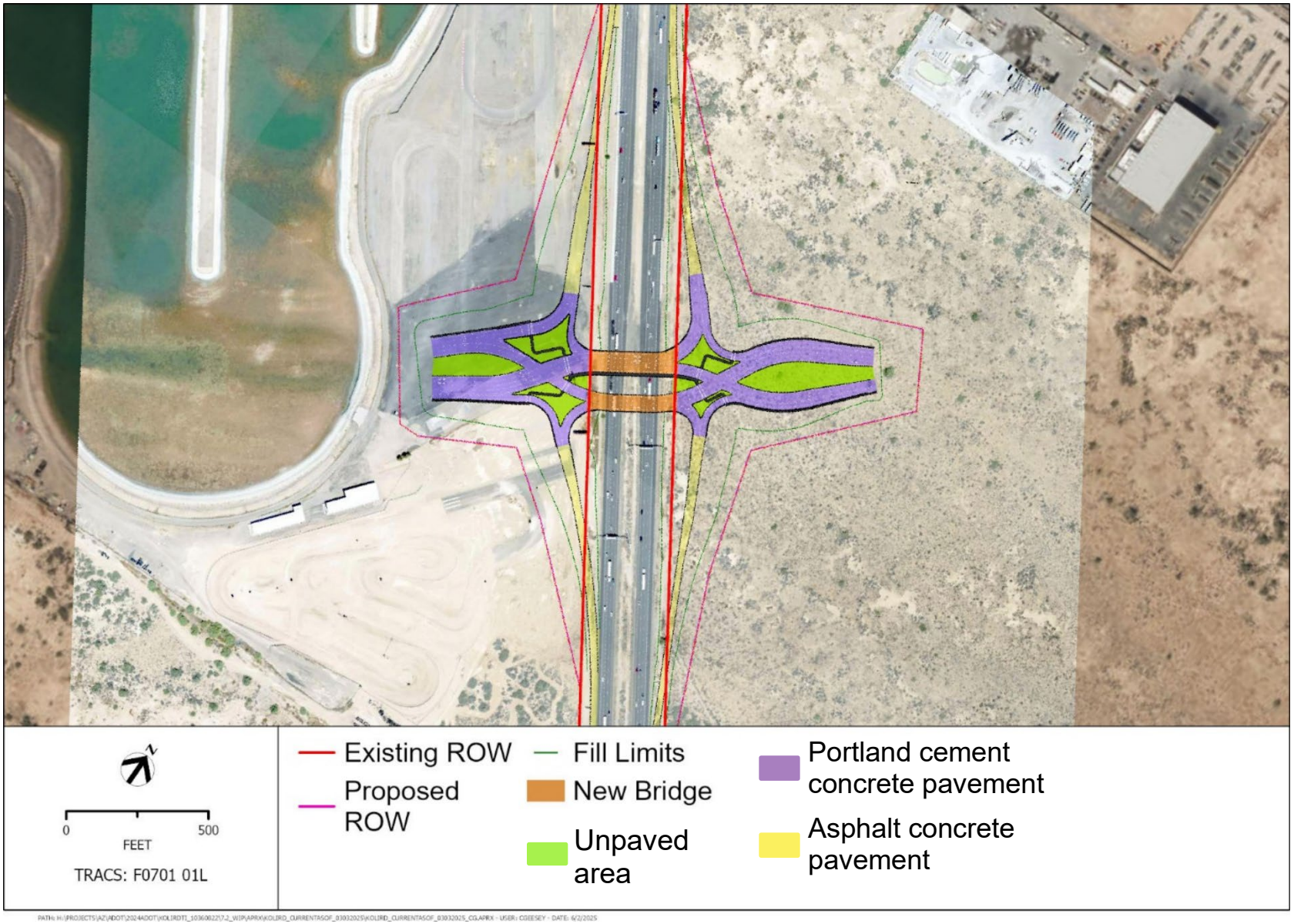
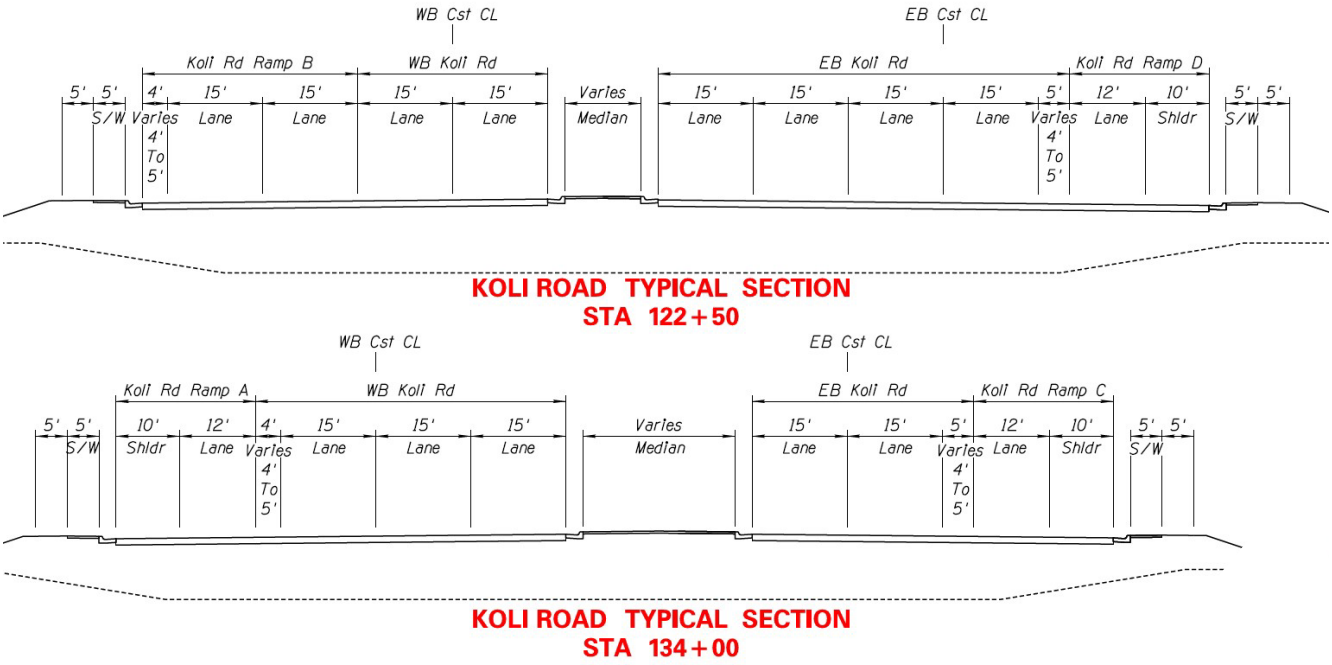


Figure 11. Koli Road typical sections on TI bridges



Notes: EB = eastbound, WB = westbound

Sidewalks and shoulders would be provided on the TI. The K2 Alternative would connect with an extension of Koli Road from Maricopa Road toward I-10, to be built as a separate project by the Community. In the future, it is expected to connect with an extension of Kyrene Road on the east side of I-10, also to be built by the Community as a separate project.

The preliminary estimated design and construction cost of the K2 Alternative is $69.5 million, plus $1.4 million for utility relocations. It would require 0.9 acre of new long-term freeway easement from Tribal land, but no billboard relocations. For allotted land, which is held in trust for the benefit of individual tribal members rather than the Tribe, the K2 Alternative would require 34.9 acres of new long-term freeway easement and three billboard relocations. The cost of the freeway easement would be determined through negotiations with the Tribe and allottees, in compliance with federal and state laws.

D. Recommended Build Alternative

The K2 Alternative (diverging diamond TI) discussed in the previous section represents the Recommended Build Alternative for the proposed Koli Road TI. ADOT and the Community evaluated the alternatives in close coordination with key stakeholders. The alternatives evaluation process used high-level analyses based on preliminary engineering designs developed to an equal level of detail for all build alternatives. As shown in Figure 10, the Recommended Build Alternative was refined by modifying the ramps and crossroads on the western and eastern sides of the TI to pose fewer potential restrictions on the design of the Community's connecting road extensions.

A detailed discussion of the Recommended Build Alternative's potential environmental impacts is presented in this EA in Part IV, based on more refined designs developed for the Design Memo—for example, the preliminary acquisition area for the K2 Alternative was 34.9 acres of allotted land (see Figure 7), and the refined area was reduced to 28.5 acres (see Table 4).

E. General Project Schedule

On June 21, 2024, the State Transportation Board approved ADOT's *2025–2029 Five-Year Transportation Facilities Construction Program*. The proposed Koli Road TI is currently identified in the program. MAG has allocated $77.6 million for the proposed Project, including $54.9 million for construction, $18.9 million for land acquisition and utility relocations, and $3.8 million for final design. This funding is provided by Maricopa County's 2004 voter-approved Proposition 400 transportation half-cent sales tax.

If the proposed Project is approved, ADOT and the Community would prefer to implement the Koli Road TI improvements as part of the larger I-10 Wild Horse Pass Corridor project. The construction start date would depend on the timing of the final NEPA determination (that is, issuance of a finding of no significant impact, or Record of Decision, if an environmental impact statement were needed), should the Recommended Build Alternative be approved, and the procurement of a contractor, but ADOT anticipates construction in the summer of 2027. The Project construction would last 18 months.

IV. Affected Environment, Environmental Consequences, and Mitigation

This part of the EA discusses environmental resources that may be affected by the Recommended Build Alternative. The environmental impact evaluation analyzed the improvements that make up the Recommended Build Alternative (see Part I, *Introduction*, Section C, *Project Background and Overview*) with regard to the general Study Area and the environmental footprint, as shown on figures in this chapter. Appendix C, *Regulatory Background*, contains information on the regulations that apply to the resource areas discussed in this part of the EA. The Study Area is delineated to assist with the determination of indirect effects. The TI construction footprint, existing ADOT right-of-way (ROW), new ROW/easement plus a 150-foot buffer, is the area where the Project could have direct effects.

Issues Eliminated from Detailed Study. Based on early coordination and a review of the Study Area, the Recommended Build Alternative would not affect wild and scenic rivers, outstanding waters, sole-source aquifers, wilderness areas, national natural landmarks, scenic roads and parkways, coastal zones or barriers, sole source aquifers, and prime and unique farmland[3] because these resources do not exist in the Study Area or, in accordance with federal guidance, do not require consideration.

A. Land Ownership, Jurisdiction, and Land Use

This section describes land ownership, jurisdiction, and land use in the Study Area. The more detailed *Land Use and Socioeconomic Report* is available in Appendix D.

Affected Environment and Environmental Consequences

The proposed Koli Road TI is located entirely on Community Reservation land in south-central Maricopa County, just south of the cities of Phoenix and Chandler. Existing land uses in the Study Area are primarily vacant, industrial, and passive/restricted open space. For this analysis, the area up to 150 feet beyond the required ROW/easement was evaluated. No construction would occur within the 150-foot buffer beyond the ROW/easement, but the area is being evaluated in case it is needed for construction staging or access. Use of the 150-foot buffer would require temporary construction easements from the Community and allottees.

Existing Land Use

Existing land uses in the Study Area were identified using the MAG Existing Land Use dataset (2022).[4] While the Study Area consists of multiple land uses, those immediately adjacent to the TI include vacant, public/special event/military, and passive/restricted open space. As illustrated in Figure 12 and summarized in Table 4, the predominant land use in the Study Area is vacant (29.7 percent), followed by industrial and passive/restricted open space (both at 18.7 percent). Together, these uses account for

[3] Farmland in the Study Area no longer requires compliance with the federal Farmland Protection Policy Act. In accordance with the National Food Security Act Manual, Section 658.2 – Definitions, “farmland” does not include land already in or committed to urban development or water storage.
[4] Future land use data for this area were not available on the MAG Open Data site.

approximately 67.1 percent of the land in the Study Area. The portion of the Study Area identified as water use (4.4 percent) encompasses Firebird Lake, which the Community has drained and is being decommissioned and redeveloped by the Community for purposes independent of the proposed action.

Table 4. Existing land use

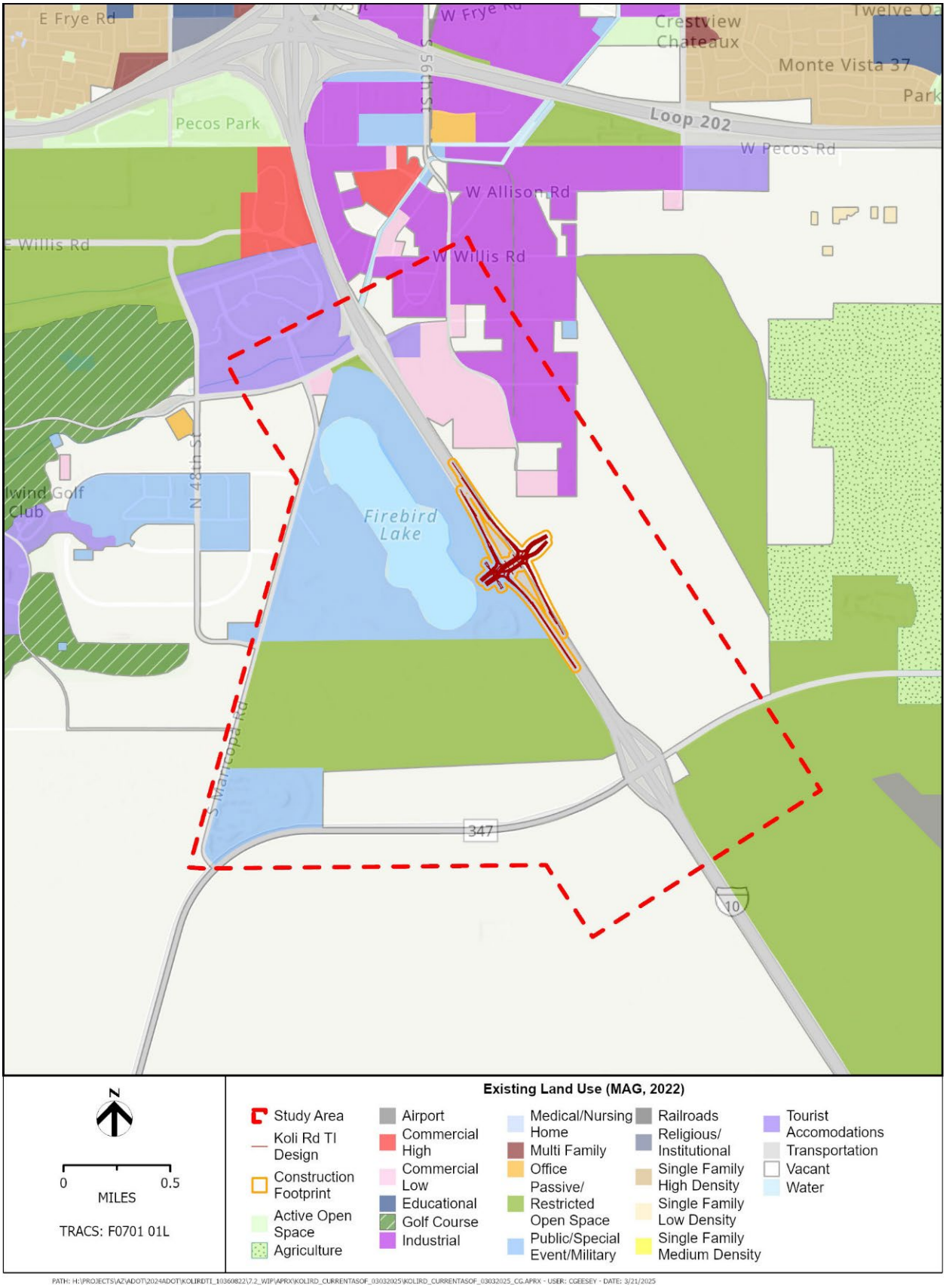
Category	Acres	Percentage of total
Commercial low	94.53	3.2
Industrial	558.39	18.7
Passive/Restricted open space	558.18	18.7
Public/Special event/Military	385.32	12.9
Railroads	106.86	3.6
Tourist accommodations	63.70	2.1
Transportation	194.81	6.5
Vacant	886.37	29.7
Water	131.80	4.4
Total	**2,979.96**	**100.0%**

Source: MAG Existing Land Use Dataset, 2022

Future Land Use

Future land uses in the Study Area were obtained through a review of Community planning documents. The area of the Community from the northern boundary with Phoenix and Chandler south to the SR 347/Queen Creek Road TI in the Wild Horse Pass area is planned as infill development of currently undeveloped parcels. The Community has a Master Plan for additional commercial and event uses on the western side of I-10. Planned development includes over 3,000 acres to be completed in various phases between 2030 and 2060. As part of this master plan, Firebird Lake has been drained and is being decommissioned to facilitate other land uses. In addition, industrial, mixed use, and commercial uses would infill existing vacant parcels east of I-10.

Figure 12. Existing land use



Source: MAG Existing Land Use Dataset, 2022

Recommended Build Alternative

The Recommended Build Alternative would require 28.5 acres of new, long-term easement, converting existing land use, including vacant parcels and portions of the Wild Horse Pass Motorsports Park (outside the boundary of Firebird Lake), to a transportation land use. Of the total acreage required for additional easement, only allotted land would be affected. As summarized in Table 5, the Koli Road TI would require no new long-term freeway easement or billboard relocations from Tribal land. For allotted land, which is held in trust for the benefit of individual tribal members rather than the Tribe, and is under the jurisdiction of the BIA, the Recommended Build Alternative would require 28.5 acres of new long-term freeway easement and three billboard relocations. The relocation of billboards would be coordinated with the Community. The cost of the new long-term freeway easement would be determined through negotiations with the Tribe, BIA, and allottees. None of the allottee parcels include any development that would be affected, and parcel access is not expected to materially change from the existing conditions today. If parcel access were affected, adequate compensation would be provided to parcel allottees during the acquisition process.

Table 5. Additional new ADOT easement from tribal and allotted land

Location	Tribal land acreage	Allotted land acreage	Number of allotted parcels affected
Koli Road TI	0.0	28.5	11

No-Build Alternative

The No-Build Alternative would not result in changes to existing or future land use patterns or the acquisition of land in the Study Area. Under the No-Build Alternative, Firebird Lake would still be decommissioned and converted to commercial and event uses. The No-Build Alternative would not conform to plans and policies established by regional planning organizations, ADOT, and the Community regarding future development based on an efficient transportation system. It is possible that development could slow without convenient access to and from I-10.

Mitigation

No mitigation measures are needed because no adverse impacts on existing land use would occur.

B. Social and Economic Considerations

This section describes the potential social and economic impacts of the proposed action on the local and surrounding population. The more detailed *Land Use and Socioeconomic Report* is available in Appendix D.

Affected Environment and Environmental Consequences

Community Facilities

Community facilities in the Study Area include the Community Fire Station 429 at 5002 N. Maricopa Road and the Huhugam Heritage Center at 21359 S. Maricopa Road. Major attractions in the Study Area include the Wild Horse Pass Motorsports Park at 20000 S. Maricopa Road and the Gila River Resorts & Casinos – Wild Horse Pass at 5040 Wild Horse Pass Boulevard.

Recommended Build Alternative. The proposed TI would benefit community facilities in the Study Area by improving access to I-10 and reducing traffic on local roadways. This would be particularly beneficial for the Community Fire Station 429, providing quicker access to I-10 and an alternative route to reach I-10 when other nearby TIs experience congestion during special events.

No-Build Alternative. With the No-Build Alternative, limited access to I-10 would continue. People traveling to and from the Study Area's community facilities would need to use adjacent TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road for access to and from I-10.

Community Character and Cohesion

The northern portion of the Study Area features commercial and industrial development, including the Wild Horse Pass Motorsports Park. The southern portion of the Study Area is characterized by undeveloped land. No residential development exists in the Study Area.

Recommended Build Alternative. No impacts on community character and cohesion would occur with the proposed TI. The TI would be built adjacent to the Wild Horse Pass Motorsports Park and would not be out of character with the area. The Recommended Build Alternative's construction limits would not intersect Firebird Lake and would not divide any established residential areas.

No-Build Alternative. No impacts on community character and cohesion would occur with the No-Build Alternative because no new facility would be built.

Demographic Characteristics

Population and employment data were obtained from MAG for the portion of the Community within Maricopa County. The Community population is projected to remain essentially the same between 2020 and 2050. Employment is projected to grow by 72 percent (Table 6), contributing to increased traffic levels on I-10 and local roadways in the Study Area.

Table 6. Population and employment projections

Location	2020	2040	2050	% increase (2020–2050)
Population				
Gila River Indian Community in Maricopa County[a]	3,583	3,589	3,590	0.2%
Employment				
Gila River Indian Community in Maricopa County[a]	6,857	11,136	11,785	71.9%

Source: MAG 2023 Socioeconomic Projections
[a] regional analysis zone 324

Recommended Build Alternative: The proposed TI would support the expected employment growth in the Community by providing additional access to I-10 and local roadways for employees in the Wild Horse Pass area.

No-Build Alternative. With the No-Build Alternative, the expected growth in employment would pose a burden on the existing I-10 TIs and local roadways because no new facilities would be built to accommodate additional traffic related to employment growth.

Economic Conditions

Major employers in and near the Study Area include hospitality, tourism, and recreation businesses in the Wild Horse Pass area west of I-10 and manufacturing businesses in the Lone Butte Industrial Park east of I-10. The GRD Master Plan proposes extensive future development in the Wild Horse Pass area, including apartments, hotels, a casino, office and retail space, restaurants, medical facilities, a museum, a stadium, sports facilities, a water park, outdoor festival venues, and a convention center.

Recommended Build Alternative: The new TI would support continued economic growth in the Community by providing additional access to I-10 and local roadways for businesses in the Wild Horse Pass area, including the Huhugam Heritage Center and Sheraton Grand at Wild Horse Pass. The Wild Horse Pass Motorsports Park would be affected by construction of the TI, which would remove a parking area at the eastern end of the facility and interrupt the motorsports park's internal road system. However, the motorsports park has other parking areas available, and an equipment underpass would allow vehicles to pass underneath the Koli Road Extension, thus maintaining traffic circulation in the area. The motorsports park is currently being reimagined, however, and if needed during construction, detour routes would be provided to maintain circulation within the motorsports park. The proposed TI would also affect three billboards along I-10; however, the impact would be temporary and the billboards would be relocated.

No-Build Alternative. With the No-Build Alternative, the expected economic growth in the Wild Horse Pass area would pose a burden on the existing I-10 TIs and local roadways because no new TI would be built to accommodate travel by additional employees and visitors. The adjacent I-10 TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road would have to handle additional employee and visitor traffic to and from the Wild Horse Pass area.

Title VI of the Civil Rights Act

This section discusses minority populations in the Study Area and region. ADOT must comply with Title VI, which states that no person "shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination" under any federally funded program or activity (Public Law 88-352).

The Study Area lacks residential areas and, therefore, has no residential population. It is within census tract 9411, which measures 35 square miles and extends from SR 202L on the north to the Maricopa County line on the south, and from approximately the 40th Street alignment on the west to the Old Price Road alignment on the east. Census tract 9411 encompasses land that is largely undeveloped, or developed with commercial and industrial uses, and thus has a small population of only 31. Table 7 shows minority and language demographic information for census tract 9411, as compared with Maricopa County. As shown in the table, census tract 9411 has a much higher Asian population percentage (100 percent) than Maricopa County (4.3 percent), and more people with limited English proficiency (16.1 percent) than Maricopa County (8.3 percent).

Table 7. Minority and language demographic information

Minority population/language	Population % in census tract 9411	Population % in Maricopa County
Hispanic or Latino	0.0	31.7
Black or African American	0.0	5.7
American Indian or Alaskan Native	0.0	1.9
Asian	100.0	4.3
Native Hawaiian or Other Pacific Islander	0.0	0.2
Two or more races	0.0	13.5
Some other race	0.0	7.6
Limited English proficiency[a]	16.1	8.3

Source: U.S. Census Bureau, 2018–2022 American Community Survey 5-Year Estimates, Tables DP05 and C16001
[a] Defined as individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.

In a larger context, the Study Area is within the Community, which encompasses 583 square miles and has a population of 12,179. The Community's population is 85 percent Native American (U.S. Census Bureau 2022). I-10 is an important route through the Community, connecting Community members based in Sacaton, Casa Blanca, Bapchule, and other residential areas south of the Study Area to Community enterprises in the Wild Horse Pass area and to the larger Phoenix metropolitan area.

Table 8 shows the percentages of low-income and other vulnerable populations in census tract 9411 and in Maricopa County.

Table 8. Low-income and other demographic information

Low-income or vulnerable population	Population % in census tract 9411	Population % in Maricopa County
Low-income households[a]	0.0	12.0
Elderly – over age 65	0.0	15.6
Disabled – under age 65	0.0	6.9
Female head of household	0.0	14.8

Source: U.S. Census Bureau, *2018–2022 American Community Survey 5-Year Estimates,* Tables B17021, B01001, B18101, and B11002
[a] A low-income population is defined as having a median household income at or below the U.S. Department of Health and Human Services poverty guidelines for a four-person household in 2022, which was $27,750.

Recommended Build Alternative. Because no residential areas occur in the Study Area, the build alternative would not cause displacements or relocations. People traveling through the area on I-10 would experience some short-term construction impacts, such as lane restrictions, during construction of the Koli Road TI. These short-term impacts, however, would affect all populations traveling on I-10 during construction in the same manner. Minority populations in census tract 9411 and in the larger Community would benefit, along with all populations, from the additional access to attractions and employers in the Study Area that would be provided by the new TI. The impacts on Wild Horse Pass Motorsports Park related to parking and traffic circulation would be minor and temporary because the motorsports park has other parking areas available and because detour routes within the motorsports park property would be provided during construction, if necessary. Traffic circulation would be restored once construction of the equipment/vehicle underpass underneath the Koli Road Extension is completed.

No-Build Alternative. No impacts on minority populations would occur with the No-Build Alternative because no new facilities would be built. Minority populations and non-minority populations would continue to use the existing TIs and roadway network to reach attractions and employers in the Study Area.

Mitigation

The following mitigation measures are proposed to address potential impacts related to social and economic considerations.

Arizona Department of Transportation Design Responsibilities

- The Arizona Department of Transportation design team would continue to review community access impacts, mobility, and impacts on community services, community cohesion, aesthetics, and community values in all areas affected by the Project to include the traditionally underserved communities that were identified in the Study Area, including short-term impacts.

Contractor Responsibilities

- The contractor would use the most current Arizona Department of Transportation best management practices to reduce short-term adverse construction impacts related to air quality (from dust and exhaust); noise and vibration; surface and groundwater quality (from runoff); the transport, use, storage, and disposal of hazardous materials and waste; and related pollution control measures and practices during construction.
- The contractor would ensure the construction project would be managed in such a manner as to minimize temporary impacts on businesses, community facilities, and the traveling public, such as noise, vibration, dust, exhaust, traffic restrictions, and potential road closures during construction.

C. Cultural Resources

This section discusses cultural resources, which include archaeological sites, historic architecture, and places of traditional, religious, and cultural importance.

National Historic Preservation Act Section 106 consultations completed thus far for the Project are provided in Appendix E, *Cultural Resources Information*. A historic property is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). This term includes artifacts, records, and remains that are related to and located within such properties. The phrase “eligible for inclusion in the NRHP” means properties formally determined as such by the Secretary of the Interior or by FHWA in consultation with the State Historic Preservation Office or Tribal Historic Preservation Office (THPO). Properties that have been determined eligible for inclusion are accorded the same protections as properties listed in the NRHP [36 CFR 800.16(l)(1)]. The area of potential effects for the Project is defined as the Recommended Build Alternative, if chosen, including any area of new easement or temporary construction easements.

Affected Environment and Environmental Consequences

The Community’s Cultural Resource Management Program (CRMP) provided all of the background data for the cultural Class I report that was completed for the Project (Heilman 2025). The portion of the area of potential effects subject to direct effects for the proposed TI has been surveyed for cultural resources (Ayres 1975; Brodbeck and James 2000; Burton 1975; Gilpin et al. 2014; Johnson 1975; Lascaux and Ravesloot 1994; Loendorf 2010; Neily et al. 1999; Weaver 1976; Weaver and Rosenburg 1975; Wells and Greenspan 2002a, 2002b; Wood 1971a, 1971b, 1972). The Class I effort identified a single archaeological site within the footprint of the Recommended Build Alternative, AZ U:9:2(ARS), which was previously determined not eligible for inclusion in the NRHP; therefore, the site would require no treatment.

Firebird Lake was not included in the initial Class I background information obtained from CRMP because, at the time, the property was not 50 years of age and had not been assessed for the NRHP. The lake was recently assessed for NRHP eligibility, as reported in *Firebird Lake: National Register Eligibility Evaluation & Assessment of Effect, Chandler, Maricopa County, Arizona* (Logan Simpson 2025) and was found to be eligible for inclusion under Criteria A and C. The lake is not within the current area of potential effects and would not be affected by the Project.

No traditional cultural properties are within the Study Area.

Recommended Build Alternative

The Recommended Build Alternative would affect a single site, AZ U:9:2(ARS). Because the site has previously been determined as not eligible for the NRHP, no treatment is required.

No-Build Alternative

No cultural resources would be directly or indirectly affected by the No-Build Alternative because no construction would take place.

Mitigation

No cultural resources eligible for the NRHP are present within the footprint of the proposed TI; however, general mitigation measures are required.

Arizona Department of Transportation Environmental Planning Responsibilities

- Cultural awareness training would be required of contractors.

Arizona Department of Transportation Major Projects Responsibilities

- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor would stop work immediately at that location, notify the Engineer, and take all reasonable steps to secure the preservation of those resources. The Engineer would contact the Arizona Department of Transportation Environmental Planning Historic Preservation Team (480-489-9256 or 480-486-0049), which would immediately make arrangements for proper treatment of those resources in coordination with the Gila River Indian Community Tribal Historic Preservation Office, the Gila River Indian Community Cultural Resource Management Program, and the Bureau of Indian Affairs Regional Archaeologist.

Contractor Responsibilities

- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor would stop work immediately at that location, notify the Engineer, and take all reasonable steps to secure the preservation of those resources. The Engineer would contact the Arizona Department of Transportation Environmental Planning Historic Preservation Team (480-489-9256 or 480-486-0049), which would immediately make arrangements for proper treatment of those resources in coordination with the Gila River Indian Community Tribal Historic Preservation Office, the Gila River Indian Community Cultural Resource Management Program, and the Bureau of Indian Affairs Regional Archaeologist.

D. Section 4(f) and 6(f) Resources

This section discusses the Recommended Build Alternative's potential use of (impacts on) recreational and historic resources protected under Section 4(f) of the Department of Transportation Act of 1966, as amended. It should be noted that Section 106 consultation on determination of effect for historic resources has not occurred and the conclusions reached regarding historic Section 4(f) properties are not final until this consultation occurs. Preliminary conclusions are, however, based on coordination with Community representatives during Project development.

Additionally, this section discusses the Recommended Build Alternative's potential impacts on recreational resources protected under Section 6(f) of the Land and Water Conservation Fund Act of 1965.

Affected Environment and Environmental Consequences

Section 4(f) Resources

There are no publicly owned parks or recreation areas, or publicly owned wildlife and waterfowl refuges, or NRHP-eligible historic sites in the area of potential effects.

The Community's CRMP and THPO have assessed Firebird Lake for NRHP eligibility because it will reach historic age in mid-2025. Results from the Community indicate that Firebird Lake is eligible for the NRHP under Criteria A and C[5] and, therefore, the lake is being treated as a Section 4(f) property. The Community has stated that the historic boundary of the eligible resource is essentially confined to the lake itself.

Section 6(f) Resources

A review of the Land and Water Conservation Fund database[6] determined that no Section 6(f) properties are present in the Study Area.

Recommended Build Alternative

Based on eligibility results from the Community's CRMP, Firebird Lake is the only Section 4(f) property in the Project vicinity. No temporary occupancy of property within the historic boundary of Firebird Lake is anticipated during construction of the Project. Based on discussion with the Community, the Recommended Build Alternative would not encroach into the historic boundary of the lake; therefore, there would be no Section 4(f) use of (impact to) Firebird Lake.

The Community has indicated that the Recommended Build Alternative would have no adverse effect on Firebird Lake. As a result, there could be no substantial impairment of the lake from proximity effects and there would be no constructive use under Section 4(f).

No Section 6(f) properties exist in the Study Area; therefore, there would be no conversion of Section 6(f) property from a recreation use to a transportation use.

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[5] Section 106 of the NHPA specifies four criteria of significance: Criterion A (association with an important event), Criterion B (association with an important person significant in the past), Criterion C (embodiment of a distinctive design of a given type, period, or method of construction), and Criterion D (has yielded, or is likely to yield, information important in prehistory or history).

[6] https://lwcf.tplgis.org/mappast/

No-Build Alternative

The No-Build Alternative would not result in effects on properties afforded protection under Section 4(f) or Section 6(f).

Measures to Minimize Harm/Mitigation Measures

Because no direct or constructive use of Section 4(f) properties would occur, no measures to minimize harm or mitigation measures are required.

E. Traffic and Transportation

This section discusses the existing transportation system in the Study Area and the effects from the proposed Koli Road TI. Additional traffic information may be reviewed in Appendix F, *Traffic Analysis Information.*

Affected Environment and Environmental Consequences

The transportation system in the Study Area includes I-10 and streets within the Community. Maricopa Road is a north-to-south arterial road providing a connection between Wild Horse Pass Boulevard and SR 347. Koli Road is a local east-to-west road that ends at Maricopa Road.

Recommended Build Alternative

Future traffic volumes are generated using MAG's adopted travel demand model for the entire region. MAG's model works by projecting traffic growth based on future land use plans and planned and approved developments. Estimates of future travel demand are then assigned to the transportation network anticipated for a given horizon year. Table 9 shows the 2023 average daily traffic estimates and 2050 traffic forecasts from MAG's 2024 regional travel demand model. These traffic forecasts show that the proposed Koli Road TI would redistribute traffic between I-10 and the Wild Horse Pass area. Traffic redistributed along Koli Road and Maricopa Road would result in slightly lower traffic volumes on I-10. Traffic simulations prepared for 2050 for the Recommended Build Alternative show that the proposed Koli Road TI would operate at level of service B[7] or better in both the morning and afternoon peak hours.

Table 9. Study Area traffic forecasts

Segment	2023 existing average daily traffic	2050 No-Build Alternative average daily traffic	2050 Recommended Build Alternative average daily traffic
I-10: Wild Horse Pass Blvd. to Koli Road	104,000	180,000	189,000
I-10: At the Koli Road TI	104,000	180,000	171,000
I-10: Koli Road to Queen Creek Road	104,000	180,000	175,000
Koli Road: Maricopa Road to I-10	0	0	22,300
Koli Road: Between I-10 ramps	0	0	11,100
Koli Road: I-10 eastbound off ramp	0	0	9,400
Koli Road: I-10 eastbound on ramp	0	0	1,800
Koli Road: I-10 westbound off ramp	0	0	2,000
Koli Road: I-10 westbound on ramp	0	0	9,100
Maricopa Road: South of Koli Road	10,600	30,300	36,500

[7] Level of service B represents reasonably free-flow conditions. The ability to maneuver within the traffic stream is only slightly restricted.

Segment	2023 existing average daily traffic	2050 No-Build Alternative average daily traffic	2050 Recommended Build Alternative average daily traffic
Maricopa Road: North of Koli Road	8,400	34,000	27,500
48th Street: West of Maricopa Road	5,900	24,600	22,500

Source: MAG 2024 regional travel demand model

No-Build Alternative

The No-Build Alternative would continue maintenance activities on I-10 with no new access to the Community. Emergency vehicle response times during special events would be inadequate, and I-10 would have continued traffic management issues during incidents and events. Traffic from anticipated Wild Horse Pass area population and employment growth would increase traffic on local roads and disrupt access to I-10, resulting in longer out-of-direction travel.

Mitigation

No mitigation measures are proposed for traffic and transportation.

F. Air Quality

This section describes the potential air quality impacts of the proposed action, as required under the Clean Air Act. Additional information is provided in Appendix G, *Air Quality Report*.

Affected Environment and Environmental Consequences

The Study Area lies in the Phoenix nonattainment area for particulate matter (PM_{10}). The nearest air quality monitoring site in Maricopa County is the West Chandler site (located at Frye Road and Ellis Street in Chandler). This monitoring site collects data on concentrations of 24-hour PM_{10}, 8-hour ozone (O_3), and 8-hour carbon monoxide (CO) to determine whether any exceedances of the National Ambient Air Quality Standards occur. The West Chandler site recorded exceedances of PM_{10} air quality standards in 2021 and 2022. From 2021 to 2023, the West Chandler monitoring site recorded 4 exceedances of the PM_{10} standards and 14 exceedances of the O_3 standards, but no exceedances of the CO standards.

The adjacent monitoring sites in the Community closest to the Project are the Casa Blanca site (3455 West Casa Blanca Road) and St. Johns site (4665 West Pecos Road). The Casa Blanca monitoring site collects data on concentrations of 24-hour PM_{10}. The St. John's monitoring site collects data on concentrations of 24-hour PM_{10} and 8-hour O_3. Table 10 summarizes air monitoring data at the three sites.

Table 10. Air quality monitoring data

Monitoring site	Pollutant	Averaging time	2021		2022		2023	
			Concentration	# of exceedances	Concentration	# of exceedances	Concentration	# of exceedances
West Chandler	PM_{10}	24-hour	181 µg/m^3	3	191 µg/m^3	1	152 µg/m^3	0
	O_3	8-hour	0.081 ppm	8	0.083 ppm	4	0.075 ppm	2
	CO	8-hour	1.2 ppm	0	1.1 ppm	0	1.1 ppm	0
Casa Blanca	PM_{10}	24-hour	259 µg/m^3	3	774 µg/m^3	3	216 µg/m^3	1
St. Johns	PM_{10}	24-hour	223 µg/m^3	3	259 µg/m^3	4	260 µg/m^3	2
	O_3	8-hour	0.076 ppm	2	0.077 ppm	3	0.076 ppm	5

Sources: EPA, Outdoor Air Quality Data, accessed on January 10, 2025; Maricopa County Air Quality Department, 2022–2024 Air Monitoring Network Plans, Final; Community 2021–2023 Ambient Air Monitoring Network Review and 2022–2024 Plans
Notes: µg/m^3 = micrograms per cubic meter, ppm = parts per million

Recommended Build Alternative

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

Particulate Matter. On December 20, 2024, 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, Arizona Department of Environmental Quality (ADEQ), Maricopa County Air Quality Department, and Community. There were no objections to the Project determination and, on February 6,

2025, ADOT concluded interagency consultation by notifying interested parties that this Project would proceed as a project that does not require a quantitative PM_{10} hot-spot analysis under 40 CFR 93.123(b).

Mobile Source Air Toxics. For the Recommended Build 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 Recommended 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.

No-Build Alternative

Under the No-Build Alternative, the Koli Road TI 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 Recommended Build Alternative.

Mitigation

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

Conformity

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 conforming metropolitan transportation plan and TIP for project-level conformity determination. On September 25, 2023, a Finding of Conformity was made on the MAG *MOMENTUM 2050 Regional Transportation Plan* and Fiscal Year 2022–2025 TIP and 2040 Regional Transportation Plan Update.

FHWA's provision of project-level conformity is pending.

G. Noise

This section presents the analysis conducted to assess the potential noise impacts of the proposed action. As described in Appendix H, *Noise Report*, potential noise impacts were evaluated through ambient (existing) noise monitoring and predictions of future traffic noise levels for the design year (2050) under both the No-Build and Recommended Build 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.

Affected Environment and Environmental Consequences

Existing land uses in the Study Area consist of the Wild Horse Pass entertainment and event complex, commercial, office, industrial and vacant. No residential uses (Activity Category B) are within the Study Area. Activity Category C includes a proposed water park in the Wild Horse Pass entertainment and event complex. Activity Category E includes the Gila River Resort & Casinos, offices, and hotels. Activity Category F includes industrial facilities. Activity Category G includes undeveloped land.

In total, 51 noise receivers were evaluated in the noise model for different land use categories. Three monitoring sites were selected to document existing traffic noise levels, with noise levels ranging from 58 to 66 dBA equivalent sound level (L_{eq}). The lowest noise level was recorded from a vacant parcel just south of the Rock Solid Concrete Plant, while the highest noise level was recorded from a vacant parcel just east of the same plant. The noise level evaluation took into account the proposed Koli Road TI and the future (2050) peak-hour traffic volumes. Detailed results are available in Appendix H, *Noise Report*.

Recommended Build 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 Recommended Build Alternative would range from 58 to 77 dBA L_{eq} for the 51 noise receivers. Twenty-five modeled receptors were identified north of the proposed Koli Rd TI, with two office buildings reaching the ADOT Noise Abatement Requirements threshold of 71 dBA for Activity Category E, and these were assessed for noise mitigation. The interior noise level for these offices, considering a 25-dBA transmission loss, would be 46 dBA, below the noise abatement Criterion D threshold of 51 dBA, and thus no noise mitigation would be required.

Twenty-six modeled receptors south of the proposed Koli Road TI were identified, representing the future Wild Horse Pass redevelopment and undeveloped lands. The noise analysis determined that the noise impact would result from I-10 main line traffic, not from the Koli Road TI Project. The analysis indicated that a barrier could reduce noise levels by at least 5 dBA for 42 equivalent receptors representing the water park at the Wild Horse Pass redevelopment. However, the cost of such a barrier would exceed the ADOT Noise Abatement Requirements criterion of $49,000 per benefited receptor. Additionally, the Wild Horse

Pass redevelopment does not have detailed final site plans or a construction permit available. Therefore, the addition of a barrier on I-10 is not recommended.

The noise analysis concluded that noise barriers are not recommended for this Project because the Recommended Build Alternative would not generate noise—rather traffic on the existing I-10 would be the primary noise generator. Barriers on I-10 in the vicinity of the Recommended Build Alternative are not recommended because predicted noise levels would be below the ADOT Noise Abatement Requirements thresholds, or because the evaluated barriers would not meet the Noise Abatement Requirements criteria.

No-Build Alternative

Under the No-Build Alternative, the Koli Road TI would not be built and noise would be caused by traffic on I-10 in its existing configuration. The proposed Project would not increase capacity on I-10 main line. As such, the No-Build Alternative would generally result in similar noise levels at the evaluated receivers as what would occur with the Recommended Build Alternative. Predicted future peak-hour noise levels for the No-Build Alternative would range from 57 to 77 dBA L_{eq} for the 51 receivers.

Mitigation

The noise analysis indicated that noise barriers are not recommended in the build condition for this Project because none of the evaluated barriers met ADOT Noise Abatement Requirements criteria. Therefore, no additional mitigation measures would be needed.

H. Utilities

Utilities in the Study Area were identified and reviewed for potential impacts from the proposed action.

Affected Environment and Environmental Consequences

Existing utilities were identified based on previous utility surveys and available as-built information from ADOT and local utility providers. In the Study Area, utilities were identified west of I-10 located along Maricopa Road, 48th Street, SR 347, within Firebird Lake/Wild Horse Pass Motorsports Park, and within the I-10 ROW/easement (Figure 13).

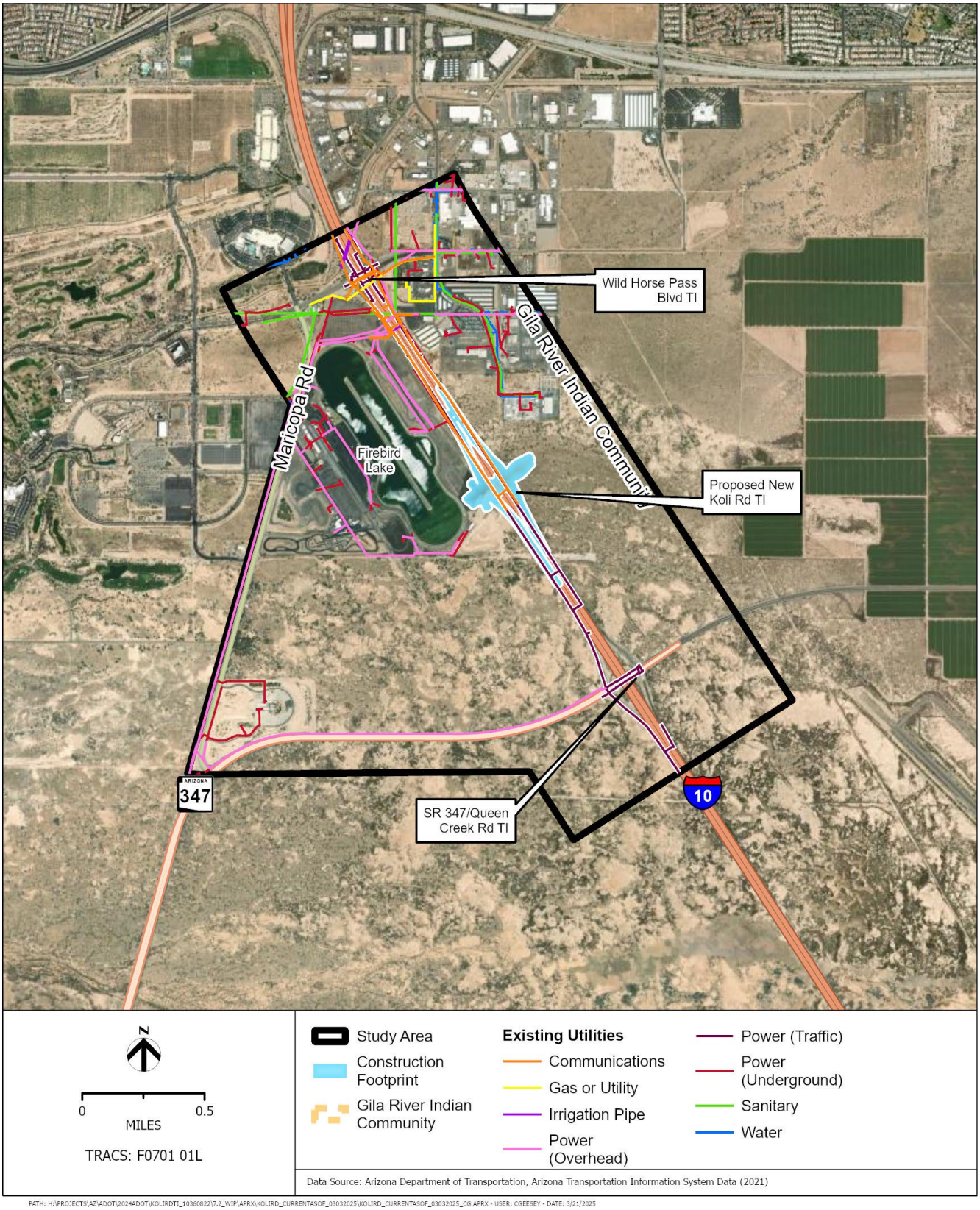
Utilities in the Study Area include the following: overhead and underground power, communications lines, ADOT electrical and intelligent transportation system (ITS) lines, water, sewer, and telecommunications to existing buildings. Major known utilities in the Study Area are listed in Table 11. The utilities in bold text in Table 11 could be affected by the Recommended Build Alternative.

Table 11. Major utilities in the Study Area

Utility type	Provider	Description
Electric power	Salt River Project	Overhead transmission lines
	Gila River Indian Community Utility Authority	Overhead and **underground electric transmission lines**
	San Carlos Irrigation Project	Overhead and underground transmission lines
Communications (fiber optic, coaxial cable, telephone)	Salt River Project	Overhead transmission lines
	Gila River Telecommunications	**Fiber optic, telephone**
Water, reclaimed water, sewer, stormwater	City of Chandler	Water and reclaimed water lines, sewer lines
	Salt River Project	Irrigation
	Lone Butte Development Corporation	Water and sewer lines
	Gila River Indian Community Department of Public Works	Water line

Note: Text in **bold** indicates utilities that could be affected by the Recommended Build Alternative.

Figure 13. Existing utilities



Recommended Build Alternative

The Recommended Build Alternative may affect underground electric power lines from the Gila River Indian Community Utility Authority. In addition, existing Gila River Indian Community Utility Authority fiber optic and underground power lines running parallel to I-10 may also need to be relocated in the bridge abutment and pier areas. Gila River Telecommunications fiber optic and telephone lines may be temporarily disrupted. Affected utilities may require relocation or protection in place.

During construction, the ADOT Utility and Railroad Engineering Section would coordinate with affected utility companies to minimize potential long-term effects. Because impacts on utilities are usually not substantial over the long term, these strategies are a key part of ADOT's best management practices. While utilities could be affected, any adverse impacts would be avoided or minimized.

If any utility relocations are necessary, they would be conducted in accordance with applicable regulations and in a manner that minimizes disruptions to local service. Coordination efforts would focus on avoiding service interruptions and ensuring that all affected utilities are properly documented and adjusted as needed. Any required utility work would be scheduled to reduce impacts on the surrounding community and maintain the functionality of critical infrastructure. The selected design and construction team would be responsible for conducting an independent utility investigation, as required by the contract.

No-Build Alternative

The No-Build Alternative would make no changes or improvements to the Study Area and would have no impact on existing utilities. Existing utilities in the Study Area could be expanded or replaced by their providers in the future.

Mitigation

The Recommended Build Alternative would not cause adverse effects on utilities; therefore, no mitigation is required.

I. Visual Resources

This section discusses how the Recommended Build Alternative would change the Study Area's visual resources and predicts the viewer's response to that change.

Affected Environment and Environmental Consequences

The Study Area features urban development in the northern portion and undeveloped desert in the southern portion. The existing I-10 facility is an asphalt pavement freeway with a narrow median and with lighting, signs, and billboards adjacent to the freeway. The existing TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road are located at the northern and southern ends of the Study Area, respectively.

The area of visual effect is characterized by generally unobstructed views of the foreground, middle ground, and background, given the flat topography and sparse vegetation. Foreground and middle ground views include I-10 itself, commercial and industrial development on both sides of I-10, and desert vegetation in undeveloped areas. Background views include the Sierra Estrella to the west and the South Mountains to the north.

Viewers in the Study Area include travelers on I-10 and Community roads and people who work in or visit the commercial and industrial areas east and west of I-10. The Study Area lacks residential areas. Given that people are traveling through or visiting the business amenities in the Study Area, viewers are expected to have low sensitivity to changes in the viewshed.

Through observation, the Study Area's visual environment was determined to be unharmonious and disorderly because of the contrast between the urban development in the northern portion and the undeveloped desert land in the southern portion (see Figures 14 and 15). The Project environment would be considered coherent because the Project would add similar features to those existing on I-10.

Figure 14. View from westbound I-10 approaching Wild Horse Pass Boulevard, looking north

Source: Google Streetview imagery dated June 2023

Figure 15. View across I-10 north of Queen Creek Road, looking southwest

Source: Google Streetview imagery dated April 2023

Recommended Build Alternative

The new Koli Road TI would be a prominent new feature along I-10, with ramps leading up to the bridges that would carry traffic over I-10. However, the new TI would be in keeping with the size and presence of the adjacent TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road, and it would be located adjacent to existing urban development, including the Wild Horse Pass Motorsports Park. The new TI would be consistent with the existing visual environment of the I-10 corridor, with visual elements including development to the west (motorsports park) and northeast (industrial area) of its proposed location, signs, and lighting. Incorporation of design treatments at the TI are anticipated to use materials with a similar color and texture as those materials used for the Wild Horse Pass Boulevard TI. Considering the context of the area and the low sensitivity of viewers in the Study Area, no adverse impact on visual resources would occur.

No-Build Alternative

With the No-Build Alternative, no new facilities would be built and thus no impacts on visual resources would occur.

Mitigation

No mitigation is necessary to address visual impacts because the Recommended Build Alternative is not expected to result in adverse visual effects. Although no mitigation is necessary, the Koli Road TI's final design would incorporate aesthetic treatments. The scope and the location of those treatments would be determined in final design and in coordination with the Community.

Arizona Department of Transportation Roadside Development Section Responsibilities

- During final design, the Arizona Department of Transportation would coordinate with the Gila River Indian Community regarding the location and scope of aesthetic treatments.

J. Drainage and Floodplain Considerations

This section discusses drainage and floodplains in the Study Area and how the proposed action may affect these resources.

Affected Environment and Environmental Consequences

The proposed Project is located in the Middle Gila Watershed. This watershed encompasses the metropolitan Phoenix area and receives minimal rainfall (approximately 13 inches a year); therefore, surface water flow primarily results from upstream impoundment releases, wastewater treatment plant effluent, agricultural return flow, or precipitation.

There are no irrigation ditches or existing water wells in the Study Area. One canal, the Gila Drain, is north of Wild Horse Pass Boulevard, within the Study Area (Figure 16).

Drainage in the Study Area consists of surface sheet flow and natural swales in response to precipitation. In the undeveloped areas adjacent to I-10 in the Study Area, drainage flows across the landscape but does not channelize. Along I-10, flows are conveyed through culverts and directed away from the freeway and into the relatively flat desert or shallow swales. There are no discernable ephemeral washes or drainages in the Study Area.

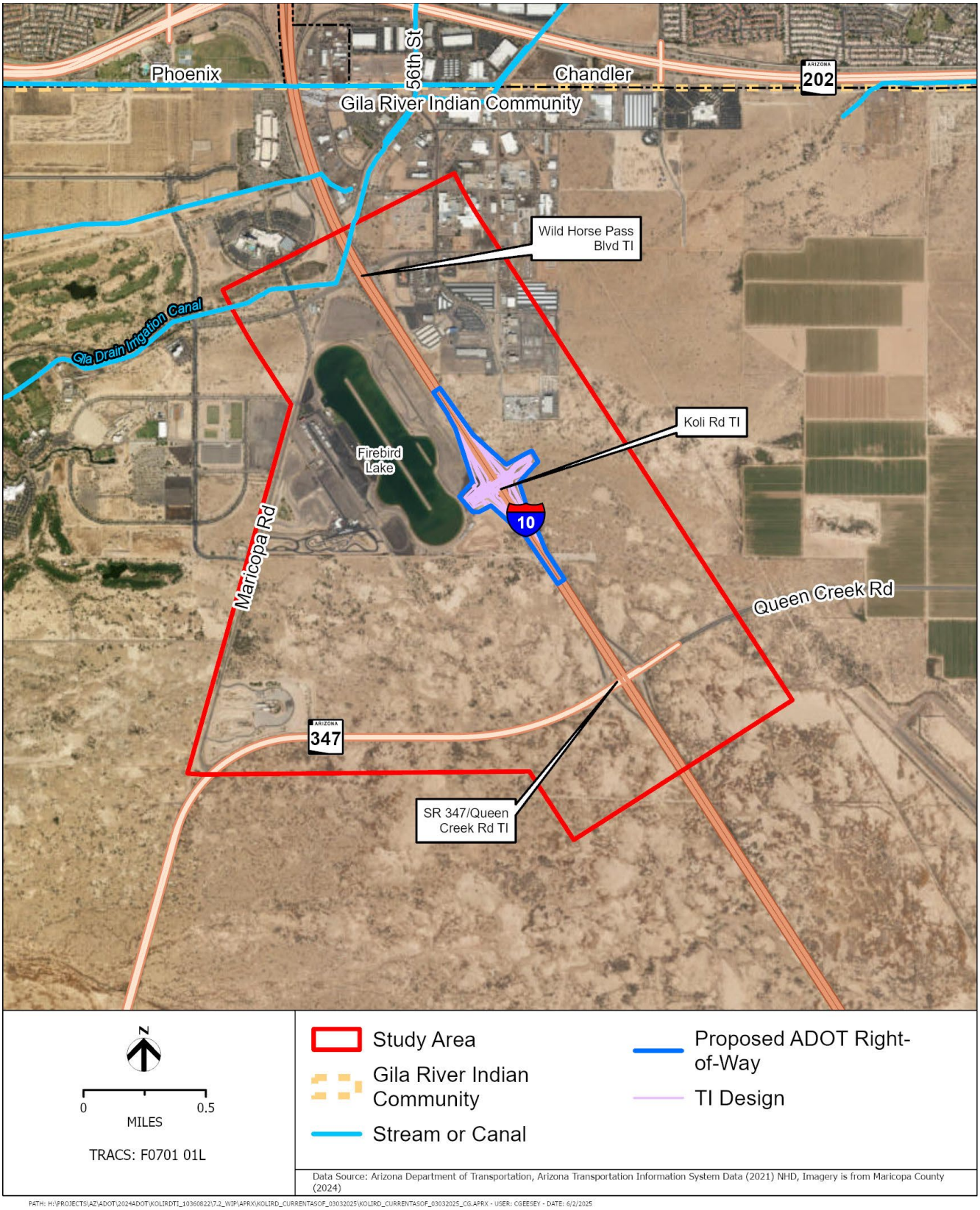
Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps and current flood hazard data were reviewed to identify flood zones in the Study Area. The Study Area is located entirely within FEMA floodplain map 04013C2715L (effective date 10/16/2013.) The area is designated as Zone D, indicating that FEMA has not formally studied this area on the Community lands and has not designated applicable flood zones.

Recommended Build Alternative

The Recommended Build Alternative would not affect any federally mapped floodplains, specific flood hazard zones, or floodplains in the Study Area because none are identified in the Study Area. The Project is not anticipated to increase flooding because it would not increase any flood elevations or result in changes to the watershed.

The Project would increase the amount of impervious surface area due to the addition of the TI and associated Koli Road and ramp additions. The increase in impervious surface would cause some additional roadway runoff, but would be directed to the existing on-site drainage system. The TI construction would require minor modifications to the existing on-site drainage system to accommodate the new configuration. These modifications would include curb and gutter installations, possible infield basins, and a new culvert installation under Koli Road, on the east side of I-10. Curb and gutter would help control drainage spread and depth within the roadway and ramp configurations. The infield basin would be used to collect pavement water runoff. New culvert installation would prevent water from accumulating and causing ponding in the southeastern corner of the TI and would help maintain existing flow patterns. Overall, current on-site surface water drainage patterns would be maintained or improved through the improvements listed above.

Figure 16. Drainages in Study Area



Off-site drainage would be largely unaffected by the Recommended Build Alternative since impacts on drainage outside of the existing roadway alignment would be minor, existing drainage patterns would remain, and there would be no change to the watershed. There would be no impacts to irrigation ditches, the Gila Drain, or Community-owned wells.

No-Build Alternative

The No-Build Alternative would not affect any federally mapped floodplains, specific flood hazard zones, or floodplains because none were identified, and would not affect on- or off-site drainage because no changes to existing conditions would occur.

Mitigation

Because no impacts on floodplains or drainage would occur, no mitigation measures are needed.

K. Sections 404, 401, and 402 of the Clean Water Act and National Pollutant Discharge Elimination System

This section discusses the Clean Water Act (CWA) and the National Pollutant Discharge Elimination System (NPDES) and how they pertain to surface waters in the Study Area.

Affected Environment and Environmental Consequences

The immediate Project limits do not contain any natural surface water features, drainages, or dry washes. Firebird Lake, a recreational artificial lake formerly used for boat racing, and the Gila Drain, a constructed drainage canal that conveys nuisance flows from metropolitan Phoenix, are located in the Study Area. Firebird Lake, which has dried up, is adjacent to the west side of the Project limits and the Gila Drain is at the northern edge of the Study Area. Roadway drainage occurs along I-10 in the Study Area but is not associated with channelized drainages off the roadway. The Study Area is in an area delineated as a Zone D floodplain, indicating that—while flood hazards are possible—a flood hazard analysis has not been conducted. Roadway drainage features such as culverts occur along I-10 in the Project limits and are intended to drain into linear basins on site within the ADOT easement.

Recommended Build Alternative

Section 404 and Section 401. Because no surface water features that that have been determined by the U.S. Army Corps of Engineers to be waters of the U.S. (WUS) exist within the Project limits, no Section 404 or 401 permitting is needed for the proposed Koli Road TI. Firebird Lake, a private recreational structure with no natural inflow or outflow, is not a feature that would be considered a WUS and would not be directly affected by the proposed TI. The Gila Drain has been determined by the U.S. Army Corps of Engineers to not be a WUS and would also not be directly affected by the proposed TI.

Section 402. Construction would include ground disturbance of more than 1 acre, and the discharge from stormwater runoff would flow into linear basins on site within the ADOT easement and could flow into ADOT's municipal separate storm sewer system, which may eventually reach and affect water quality in WUS or protected non-WUS downstream. Because the proposed Project would occur on an ADOT easement through the Community, construction would need to comply with an NPDES Construction General Permit, which would contain general conditions and best management practices to protect water quality. In accordance with the NPDES Construction General Permit, a stormwater pollution prevention plan would be developed and implemented during construction, which would include best management practices for erosion and sediment control.

No-Build Alternative

Under the No-Build Alternative, existing conditions would not change within the Project limits and CWA resources would not need to be considered.

Mitigation

Because no impacts on WUS would occur, and Project construction would require a NPDES Construction General Permit, no mitigation measures are required.

L. Biological Resources

This section discusses biological resources in the Study Area and how the proposed action may affect these resources.

Affected Environment and Environmental Consequences

The Project is located in a primarily undeveloped area in the Lower Colorado River subdivision of the Sonoran Desertscrub biotic community (Brown 1994). Most of the Study Area occurs within an existing transportation corridor, where I-10 occurs, and within previously developed land; however, a portion of the Study Area includes undeveloped land with naturally occurring, although sparse, desertscrub vegetation. The vegetative community throughout the area is dominated by creosote bush (*Larrea tridentata*), brittlebush (*Encelia farinosa*), desertbroom (*Baccharis sarathroides*), triangle leaf bursage (*Ambrosia deltoidea*), and scattered velvet mesquite trees (*Prosopis velutina*). Stinknet (*Oncosiphon pilulifer*) and buffelgrass (*Pennisetum ciliare*), which are noxious and invasive plant species, have been documented within or near the construction footprint. No riparian or xeroriparian habitat exists in the Study Area.

Wildlife in the area likely consists of small mammals, reptiles, and birds. Mourning doves (*Zenaida macroura*), Gambel's quail (*Callipepla gambelii*), roadrunners (*Geococcyx californianus*), desert cottontails (*Sylvilagus audubonii*), spiny lizards (*Sceloporus* spp.), and Western diamondback rattlesnakes (*Crotalus atrox*) may be found in the desertscrub in the Study Area. Wildlife species may move through the undeveloped desertscrub on either side of I-10.

To determine whether Endangered Species Act (ESA)-listed species may be present in the Study Area, a U.S. Fish and Wildlife Service Information for Planning and Consultation Official Species List was obtained (see Appendix I, *Biological Resources Information*). The monarch butterfly (*Danaus plexippus*), proposed for ESA listing as a threatened species, is the only ESA species identified that may be present in the Study Area. Several bird species protected by the Migratory Bird Treaty Act are likely to be found and nest in the Study Area. The Western burrowing owl (*Athene cunicularia hypugaea*) has been documented in the Study Area. Plant species listed in the Community's Native Plant Ordinance and Focal Species list are found in the Study Area. Plant species included in the Community's Native Plant Ordinance that have suitable habitat and may be present include palo verde species (*Parkinsonia* spp.), mesquite species (*Prosopis* spp.), and cactus species (*Cactaceae* family). Community Focal Species that have suitable habitat in the Study Area include plants, such as white brittlebush (*Encelia farinosa*) and snakeweed (*Gutierrezia sarothrae*), and animals, such as desert cottontail (*Sylvilagus audubonii*), Gambel's quail (*Callipepla gambelii*), and mourning dove (*Zenaida macroura*).

Recommended Build Alternative

The Recommended Build Alternative would include construction activities in undisturbed desert habitat and would involve permanent disturbance, converting permeable surfaces to impermeable surfaces. The Recommended Build Alternative would require approximately 28.5 acres of long-term easement acquisition that would mostly be permanently disturbed. Permanent ground disturbance would affect approximately 14 acres of previously disturbed and cleared areas, and approximately 15 acres of undisturbed Sonoran desertscrub habitat.

Ground disturbance would include clearing and grubbing, including vegetation removal. Vegetation removal would affect plant species listed in the Community's Native Plant Ordinance, including mesquites and cactus. ADOT would coordinate with the Community's Department of Environmental Quality to ensure compliance with the Native Plant Ordinance. Vegetation removal has the potential to affect habitat for wildlife living in the Study Area, including the monarch butterfly, migratory birds, and Community Focal Species. General construction activities and vegetation removal could increase the possibility of introduction and spread of noxious and invasive plant species. Community Focal animal species that inhabit the Study Area could be directly affected, but would likely move into similar, adjacent desertscrub habitat, and the Project would not be likely to jeopardize the continued existence of any species. The proposed Project would have no effect on ESA-protected species or their habitat. Further analysis for these Project impacts, including a detailed species analysis of the monarch butterfly, can be found in Appendix I, *Biological Resources Information*. ADOT would implement mitigation measures to protect special-status species and limit the introduction and spread of noxious and invasive species.

No-Build Alternative

With the No-Build Alternative, there would be no impacts on vegetation and wildlife, including ESA-protected species, because the proposed action would not be built.

Mitigation

The discussion of environmental commitments and mitigation measures in this document does not obligate ADOT to their implementation. ADOT may choose to modify, delete, or add to these measures.

Arizona Department of Transportation Major Projects Responsibilities

- During final design, a qualified biologist would complete surveys for nesting birds protected under the Migratory Bird Treaty Act, as necessary, and develop mitigation measures to avoid impacts on nesting birds during construction.

Arizona Department of Transportation Roadside Development Section Responsibilities

- The Arizona Department of Transportation Roadside Development Section would provide special provisions for the control of noxious and invasive plant species during construction that may require treatment and control within the Project limits.
- Plants protected by the Gila River Indian Community's Native Plant Ordinance would be impacted by this project; therefore, the Arizona Department of Transportation Roadside Development Section would coordinate with the Gila River Indian Community to ensure compliance with the Community Native Plant Ordinance.

Contractor Responsibilities

- During final design, a qualified biologist would complete surveys for nesting birds protected under the Migratory Bird Treaty Act, as necessary, and develop mitigation measures to avoid impacts on nesting birds during construction.

- Prior to construction, all personnel who would be on-site, including, but not limited to, contractors, contractors' employees, supervisors, inspectors, and subcontractors, would 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 would notify the Engineer immediately. No construction activities would take place within 100 feet of any active burrow.
- If the Engineer in cooperation with the Arizona Department of Transportation Biologist, determines that burrowing owls cannot be avoided, the contractor would employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate.
- The contractor would develop a Noxious and Invasive Plant Species Treatment and Control Plan in accordance with the requirements in the contract documents. Plants to be controlled would include those listed in the state and federal noxious weed and the state invasive species lists in accordance with state and federal laws and executive orders. The plan and associated treatments would include all areas within the project right-of-way and easements as shown on the project plans. The treatment and control plan would be submitted to the Engineer for the Arizona Department of Transportation Construction Professional Landscape Architect for review and approval prior to implementation by the contractor.
- Prior to the start of ground-disturbing activities and throughout the duration of construction and any landscape establishment period, the contractor would arrange for and perform the control of noxious and invasive species in the project area.

M. Hazardous Materials

This section discusses hazardous materials sites in the Study Area and how the Recommended Build Alternative may affect such sites.

Affected Environment and Environmental Consequences

The Preliminary Initial Site Assessment for the Project was approved by the ADOT hazardous materials coordinator on March 31, 2025. Available records from federal, state, local, and Tribal databases were reviewed in March 2025 from a database report generated on January 23, 2025, to evaluate the presence of sites with the potential for hazardous contamination that may affect the Study Area.[8] Two listings were found in the environmental database report, and both listings were greater than one-eighth mile from the Study Area limits. The first listing was for an exempt, aboveground storage tank (AST2 database) located at a facility approximately 1,185 feet north-northeast of the Study Area in the Pima Chandler Industrial Park. The second finding was on the Mineral Resource Data System database, for a reported non-metallic gravel pit located approximately 1,147 feet west of the Study Area. Neither of these listings present an environmental concern relative to the Study Area or immediate surroundings (see Appendix J, *Hazardous Materials Information*, for additional details).

The site reconnaissance determined that the eastern segment of the Study Area (east of I-10) consists of native desert land, while the western segment of the Study Area (west of I-10) is developed as a segment of a staging area occasionally used for the present-day Radford Racing School track located farther to the northwest, and a dirt racing track located farther to the southeast. The surface is primarily covered with asphalt millings in this area, with some old asphalt-paved portions associated with the track. Some *de minimis* oil staining was noted in this area, but this *de minimis* staining does not constitute an environmental concern for the Study Area. The central segment of the Study Area crosses over I-10, with no environmental concerns noted. No historic development was observed in the Study Area from the review of aerial photography, and no other environmental concerns were identified.

The potential presence of asbestos-containing materials and lead-based paint was also investigated for the Study Area through the collection of samples of suspect materials for laboratory analysis. The asbestos and lead assessment for the Project was approved by the ADOT hazardous materials coordinator on March 31, 2025. Review of the laboratory analytical results did not indicate the presence of asbestos-containing materials or lead-based paint in the Study Area.

Recommended Build Alternative

No specific hazardous materials sites of concern were identified in or adjoining the Study Area, and no asbestos-containing materials or lead-based paint were identified as part of the hazardous materials evaluation of existing suspect materials; therefore, the risk of environmental impacts in the Study Area is low, and no environmental commitments or mitigation measures are required. However, the Recommended Build Alternative would require approximately 28.5 acres of long-term easement acquisition

[8] The environmental database report included an approximate quarter-mile buffer from the Study Area boundaries.

that would mostly be permanently disturbed. As part of the acquisition, a Phase I Environmental Site Assessment may need to be completed.

No-Build Alternative

No impacts on hazardous materials sites would be associated with the No-Build Alternative because there are no specific sites of concern in or adjoining the Study Area and no asbestos-containing materials or lead-based paint are present.

Mitigation

No environmental commitments or mitigation measures are recommended since no specific hazardous materials sites of concern were identified in or adjoining the Study Area, and no asbestos-containing materials or lead-based paint were identified as part of the hazardous materials evaluation of existing suspect materials.

N. Materials Sources and Waste Materials

This section discusses the earthen construction materials that would be needed for, and waste generated by, construction of the proposed action.

Affected Environment and Environmental Consequences

The contractor would acquire the earthen materials needed for construction by using either an ADOT-licensed source or a contractor-furnished source. In either case, the materials would require environmental analysis and approval by ADOT prior to use.

A number of landfills and transfer stations are located in Maricopa County within 20 miles of the Study Area and could be used to dispose of waste materials, including Waste Management's Sky Harbor Transfer Station and Butterfield Station Landfill, Rio Salado Landfill, and Salt River Landfill. However, the anticipated demolition and waste quantities would be minimal.

Recommended Build Alternative

Preliminary calculations indicate that construction of the Recommended Build Alternative would require approximately 505,000 cubic yards of borrow materials from an off-site location for fill materials, embankments, road base, and related construction needs (Table 12). This amount of borrow materials is not excessive for a potential project of this size, and multiple sources of the necessary materials are available relatively nearby.

Table 12. Borrow materials required

Construction component	Total shrink/swell-adjusted excavation[a] (cut) (cubic yards)	Total embankment (fill) (cubic yards)	Net borrow required (cubic yards)
Koli Road TI	64	505,000	505,000

[a] Shrink is the decrease in volume of soil once it has been replaced and compacted, compared with the volume of soil in its natural state. Swell can increase the volume of soil, typically as a result of additional moisture.

No adverse impacts are anticipated from the transport, storage, use, and disposal of borrow material that would be required as part of the construction of this proposed action.

No-Build Alternative

The No-Build Alternative would not result in the need for material sources for construction or require the use of borrow material or waste disposal sites. Therefore, the No-Build Alternative would have no impact related to the use of materials sources or waste sites.

Mitigation

No adverse effects related to material sources and waste materials are anticipated; therefore, no mitigation is warranted.

O. Secondary Impacts

This section identifies potential secondary impacts (or indirect impacts) that could result from the proposed action. Secondary impacts are impacts that are caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable. Secondary impacts may include growth-inducing impacts and other impacts related to changes in the pattern of land use, population density or growth rate, and related impacts on air and water and other natural systems. Actions that may induce secondary impacts can be less obvious than those identified as direct impacts. Potential secondary impacts are qualitatively discussed and based on reasonably foreseeable future actions in the Study Area that are attributable to the construction of the Recommended Build Alternative. Secondary impacts on resources described in this EA are considered in this section. No secondary impacts were identified for floodplains, drainage patterns, and WUS. For most resources, the No-Build Alternative did not result in any adverse impacts. Therefore, secondary impacts for the No-Build Alternative are noted only when present.

Affected Environment and Environmental Consequences

Reasonably foreseeable secondary impacts would primarily involve the relationship between the GRD Master Plan, I-10, local roads, and land use. The Koli Road TI would increase access to the local community and its planned land uses, and potentially relieve congestion along I-10, improving traffic operations and travel times on the freeway and local highways in the Study Area.

Recommended Build Alternative

TRANSPORTATION AND LAND USE

According to the GRD Master Plan, the western side of I-10 is designated for expanded commercial and event-oriented developments, while the eastern side is planned for a mix of industrial, commercial, and mixed-use developments. The proposed TI could increase the rate of development in the area, causing accelerated conversion of land uses that, in turn, could increase the need for additional improvements to the local transportation system. These changes would require improved infrastructure and traffic management to support increased vehicle volumes and enhance access to new developments to meet the Community's growing needs.

OTHER RESOURCES

Secondary impacts induced by the Recommended Build Alternative could include the following:

- additional local access improvements, including a new roadway connection, which would assist the Community in realizing land use plans for the Wild Horse Pass area and other areas and would facilitate expected employment growth and economic activity in the area
- improvements resulting in a more beneficial relationship between I-10, land use, and future development potential
- new discoveries of previously unknown cultural resources, such as archaeological sites, should new development occur
- reduced traffic on Wild Horse Pass Boulevard and SR 347/Queen Creek Road

- additional vehicular air pollutants and increased noise from additional development
- changes in visual character in undeveloped areas of the Community from potential new development

No-Build Alternative

Under the No-Build Alternative, land use plans for the Community, including development in the vicinity of the proposed Koli Road TI, may take longer to implement, or may not be fully realized because of access issues. Traffic impacts on local roads in the Community would likely result because vehicles would use local roads to access future development near Koli Road. With the No-Build Alternative, traffic from increased congestion on the I-10 main line and the rerouting of traffic after crashes, or bypass and cut-through traffic seeking alternative routes, may increase.

Mitigation

No mitigation measures are required or applicable for secondary impacts by ADOT because such impacts would occur after the Recommended Build Alternative is operational and would affect land or property that does not include ADOT easement.

P. Cumulative Impacts

The cumulative impacts analysis assessed the full range of consequences from the proposed action—the impacts of the Recommended Build Alternative on a resource when viewed in the context of other past, present, and reasonably foreseeable actions in the area. For this assessment, past, present, and reasonably foreseeable future transportation projects and non-transportation-related projects were considered.

Affected Environment and Environmental Consequences

Past and present actions are those actions that have contributed and are contributing to the current condition of resources in the Study Area. Reasonably foreseeable future actions include those caused by implementation of the proposed action, other planned and programmed transportation projects, and other planned development likely to occur in the Study Area. Table 13 describes past and present actions and reasonably foreseeable actions in the Study Area that contribute to cumulative effects on the environment.

Table 13. Past and present actions and reasonably foreseeable actions

Past and present actions	Reasonably foreseeable actions
Establishment of the Community in 1859	Chandler Loop 202/I-10 Growth Center, between I-10, Kyrene Road, SR 202L, and Chandler Boulevard. Expected completion date of 2027.
Development in the Community (gaming, entertainment, event, commercial, industrial park, and agricultural)	Community open space conversion to mixed-use, commercial, residential, and transportation use between the SR 347/Queen Creek Road TI and just south of the Riggs Road TI (west of I-10 between 2030 and 2060). New local roadway connection with the Community.
Construction of the I-10, SR 202L to SR 387, corridor project, which involves widening I-10, improving TIs, and providing new TIs at Seed Farm and Casa Blanca Roads	ADOT-planned SR 347 improvements between city of Maricopa and I-10, which involve widening the highway (estimated construction advertisement date is fall 2025).
State and local highways and roads (including SR 202L and SR 101L), utilities, and other infrastructure in Phoenix, Chandler, and the Community	Community build-out of the 3,000-acre Wild Horse Pass entertainment and event complex (west of I-10) between 2030 and 2060. As more undeveloped land is developed, more impervious surfaces are created, leading to increased stormwater runoff, which can affect surface water quality.
Chandler master-planned community—residential, recreational, and office park	Community agriculture conversion to mixed-use development between 2030 and 2040.
Development in Phoenix (residential, commercial, mixed-use, community, recreational) and in Chandler (manufacturing, warehousing, distribution, commercial)	Community build-out of remaining open space between its northern boundary and the SR 347/Queen Creek Road TI (industrial and commercial uses east of I-10) between 2030 and 2060.

The classification of cumulative impacts, in accordance with FHWA guidance, is presented in Table 14.

Table 14. Cumulative impact classification

Impact category	Impact classification	Description
Type	Neutral, positive, or negative	Identifies whether cumulative impacts on a resource would be beneficial, adverse, or negligible (or would constitute no impact).
Intensity	Minor, moderate, or substantial	Evaluates the degree to which the cumulative impacts of past, present, and foreseeable actions would affect natural, human-made, and cultural resources.
Duration	Temporary or long-term	Assumes a long-term duration, unless otherwise specified.

This qualitative assessment of cumulative impacts focused on how the Recommended Build Alternative would contribute to regional impacts on the transportation system, land use, and environmental resources near the Study Area.

Recommended Build Alternative

A substantial amount of reasonably foreseeable development is likely to occur in the Study Area, where growth is expected from the Community's northern boundary south to SR 347/Queen Creek Road. Major development is planned near the Koli Road TI. Potential cumulative impacts are listed in Table 15.

Table 15. Potential cumulative impacts

Resource	Location and impact	Type, intensity, and duration of impact
Land use	Rapid transition from open space and vacant land to more urbanized uses in the Wild Horse Pass area by 2060.	Positive, substantial, long-term
Population and employment growth	Continuing rapid employment growth, particularly at the Wild Horse Pass entertainment complex and in the area around the proposed TI, and the build-out of the Chandler Loop 202/I-10 Growth Center. The Community's population would remain generally the same, but more visitors are expected.	Positive, substantial, long-term
Access and quality of life	Improved access from I-10 to the Wild Horse Pass entertainment complex and the likely build-out of the Chandler Loop 202/I-10 Growth Center. The build-out of Wild Horse Pass would improve the local and regional quality of life with additional entertainment and event venues.	Positive, moderate to substantial, long-term
Cultural resources	Impacts on archaeological sites, historic buildings and structures, and other cultural resources would continue where land disturbance results from rapid development, along with identification of new cultural resources in these areas, especially archaeological sites. Cumulative impacts from present and future development may be offset by mitigation through data recovery and information housed by the Arizona State Museum and Huhugam Heritage Center.	Negative, moderate, long-term
Air quality	Planned growth would increase vehicular traffic in the PM_{10} nonattainment areas in Maricopa County, which could further degrade air quality in these areas.	Negative, moderate, long-term
Noise	The planned build-out of the Wild Horse Pass area and the Chandler Loop 202/I-10 Growth Center would increase noise from increased traffic. No sensitive receptors are currently in the Study Area, although future development could introduce sensitive receptors.	Negative, minor, long-term
Visual resources	Continued development would result in a more visually cluttered urban environment, and new buildings would block background views of the mountains.	Negative, moderate, long-term

Resource	Location and impact	Type, intensity, and duration of impact
Water quality	An increased amount of impervious land surface would occur as undeveloped land becomes part of the built environment with new development in these areas, increasing the volume and rate of stormwater runoff, which could affect surface water quality and sediment loads. The use of stormwater pollution prevention plans during the development process would help offset negative impacts on water quality.	Negative, minor, long-term
Flooding	According to the GRD Master Plan, substantial future development is anticipated, which may affect floodplains and drainage patterns. However, it is unknown whether there are areas at risk for flooding, given the lack of FEMA floodplain mapping in the Community.	Negative, minor, long-term
Biological resources	The loss of marginal wildlife and plant habitat would continue as open space and vacant land are developed into urbanized uses in the Community, particularly when the Community implements its long-term build-out plans.	Negative, minor, long-term

To summarize, cumulative impacts are likely to occur with the Recommended Build Alternative—when evaluated in the context of other past, present, and reasonably foreseeable actions in the area—as the Study Area continues to rapidly urbanize. Cumulative impacts related to the conversion of land to more economically valuable uses, population and employment growth, and accessibility and quality of life are considered positive and substantial over the long term. Cumulative impacts related to adverse effects on cultural and natural resources, or the loss of such resources, are considered negative and minimal to moderate. Most impacts on natural resources can be reduced through mitigation measures, best management practices, permits, municipal ordinances and oversight, and related means and methods aimed at protecting such resources over the long term.

No-Build Alternative

Under the No-Build Alternative, no new TI would be constructed on I-10 in the Study Area and no cumulative impacts would occur. The No-Build Alternative would not prevent continued development in the area, which would continue to have cumulative impacts on the area's built and natural environments. However, this alternative would perpetuate existing issues such as poor and inefficient access to Community land, delays in emergency response times during special events, traffic management challenges during incidents, and inadequate infrastructure to accommodate projected visitor population and employment growth. These issues would likely intensify over time as the GRD Master Plan is implemented. The No-Build Alternative provides a baseline for assessing the cumulative impacts of the proposed action versus the consequences of not proceeding with the Project.

Mitigation

The evaluation of cumulative impacts does not require ADOT to implement mitigation to address such impacts. ADOT or the contractor would be responsible for construction of the Recommended Build Alternative, should that alternative be selected—not any additional development or projects in the Study Area. Project-specific mitigation measures proposed to address direct impacts would also reduce cumulative impacts.

Q. Conclusion

Table 16 summarizes the potential environmental impacts associated with the Recommended Build and No-Build Alternatives. Potential environmental impacts of the Recommended Build Alternative were evaluated based on the context of the impacts in the Study Area and the type (adverse or beneficial, direct or indirect), intensity (severity of the impact), and duration (short- or long-term) of such impacts based on the evaluation documented in this EA.

Table 16. Summary of environmental impacts

Recommended Build Alternative	No-Build Alternative
Land use	
The Recommended Build Alternative (RBA) would require approximately 28.5 acres of new, long-term easement converting existing land use, primarily vacant parcels, to a transportation use. Three billboards on the west side of I-10, outside ADOT's easement, would be relocated, in coordination with the Community. The Koli Road Extension would block access between the Radford Racing School and Wild Horse Pass Motorsports Park. ADOT would construct an equipment underpass for vehicles to maintain that connection.	The No-Build Alternative would not result in changes to existing or future land use patterns or the acquisition of land in the Study Area. Under the No-Build Alternative, Firebird Lake would still be decommissioned and converted to commercial and event uses. The No-Build Alternative would not conform to plans and policies established by regional planning organizations, ADOT, and the Community regarding future development based on an efficient transportation system.
Social and economic considerations	
Land acquisition: Approximately 28.5 acres of allotted lands would need to be acquired for the proposed Project.	**Land acquisition**: The No-Build Alternative would not result in the acquisition of tribal or allotted land in the Study Area because no new easement would be required. Billboards would remain in place.
Community facilities: The RBA would benefit community facilities in the Study Area by improving access to I-10. This would be particularly beneficial for the Community Fire Station 429 during special events when traffic congestion occurs.	**Community facilities**: Limited access to I-10 would continue. People traveling to and from the Study Area's community facilities would need to continue to use the Wild Horse Pass Boulevard and SR 347/Queen Creek Road TIs for access to I-10.
Community character and cohesion: The RBA would not affect community character or cohesion, nor would it divide any established residential areas.	**Community character and cohesion**: The No-Build Alternative would not affect community character or cohesion because no facility would be built.
Economic conditions: The RBA would not directly affect community facilities or businesses, except for three billboards to be relocated. No access impacts are anticipated because the RBA would include an equipment underpass to maintain connections on either side of the Koli Road Extension.	**Economic conditions**: Under the No-Build Alternative, employment growth would continue in the Wild Horse Pass area but there would be less convenient access to the area. Employees and patrons would have to continue using the adjacent TIs to access the area.
Title VI: The RBA would not displace residents (there are none in the Study Area) or businesses, but could result in short-term construction impacts on all populations. RBA benefits, such as increased access to attractions and employers in the Study Area, would accrue for all populations.	**Title VI**: Under the No-Build Alternative, there would be no disruptions from construction but also no benefits from the RBA.

Recommended Build Alternative	No-Build Alternative
Cultural resources	
There are NRHP-eligible cultural resources within the Study Area but these are outside the Project limits and would be avoided by Project activities. There are no known NRHP-eligible sites or traditional cultural properties in the Project limits.	The No-Build Alternative would not affect cultural resources properties because no new facility would be built.
Section 4(f) and Section 6(f) resources	
Firebird Lake is a Section 4(f) property in the Study Area but would not be affected. No Section 6(f) properties exist in the Study Area.	The No-Build Alternative would not affect properties afforded protection under Section 4(f) or Section 6(f) because no new facility would be built.
Traffic and transportation	
The RBA would redistribute existing traffic between I-10 and the Wild Horse Pass area. By 2050, the RBA is expected to operate at level of service B or better in both the morning and afternoon peak hours. The RBA would provide efficient access to I-10, improve emergency vehicle response times, and improve I-10 incident traffic management. The RBA would also help manage special event traffic at Wild Horse Pass. The RBA would accommodate 2050 employment growth in the area.	The No-Build Alternative would continue maintenance activities on I-10 with no new access to the Community. Emergency vehicle response times during special events would be inadequate, and I-10 would have continued traffic management issues during incidents. Traffic from anticipated Wild Horse Pass area population and employment growth would face circuitous and inefficient access to I-10, resulting in longer out-of-direction travel.
Air quality	
The Study Area is in a PM_{10} nonattainment area. However, through interagency consultation, the Project was determined not to be a project of air quality concern and hot-spot modeling was not required. The RBA would not cause or contribute to any new violation of air quality standards. EPA's national control programs are projected to reduce annual MSAT emissions by over 76 percent between 2020 and 2060; therefore, MSATs are not an issue for the proposed Project.	Under the No-Build Alternative, the Koli Road TI 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 RBA.
Noise	
The Koli Road TI would not introduce noise levels exceeding ADOT's mitigation criteria.	The No-Build Alternative would have no effect on noise levels.
Utilities	
The RBA would affect existing utilities, resulting in the need to relocate or protect-in-place certain utilities before or during construction. Utility relocations could result in minor service disruptions during construction, with prior notice provided to local customers.	The No-Build Alternative would have no impact on existing utilities.

Recommended Build Alternative	No-Build Alternative
Visual resources	
The RBA would be in keeping with the size and presence of the adjacent TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road, and it would be located adjacent to existing urban development, including the Wild Horse Pass Motorsports Park. Considering the context of the area and the low sensitivity of viewers in the Study Area, no adverse impact on visual resources would occur.	With the No-Build Alternative, no new facility would be built and thus there would be no impacts on visual resources.
Drainage and floodplain considerations	
Current on-site surface water drainage patterns would be maintained or improved through the installation of a new culvert, infill basins, curb and gutter, etc. Any off-site drainage improvements in the Study Area would be constructed as part of the Wild Horse Pass corridor project. There would be no impacts to irrigation ditches, the Gila Drain, or Community-owned wells. No federal floodplain mapping has occurred in the Study Area.	The No-Build Alternative would not affect any federally mapped floodplains and would not affect on- or off-site drainage because there would be no changes to existing conditions.
CWA and NPDES	
There are no WUS in the Study Area. Construction would involve ground disturbance of more than 1 acre and would discharge stormwater runoff into linear basins on site, which may eventually reach and affect water quality in WUS or protected non-WUS downstream. The conditions and best practices required by the Project's NPDES permit would protect water quality.	The No-Build Alternative would not affect any surface water or result in ground disturbance.
Biological resources	
Vegetation and wildlife: The RBA would permanently disturb approximately 15 acres of undisturbed Sonoran desertscrub habitat. Construction would cause both temporary and permanent impacts on potentially suitable foraging, breeding, or dispersal habitat for wildlife species and would affect Community focal species. However, all impacts would be minor, occurring in previously disturbed areas adjacent to I-10 or within habitat that is of low value to wildlife. The Study Area contains invasive plant species, which would be mitigated to prevent their spread. **Sensitive species**: Several sensitive species, including monarch butterflies, western burrowing owls, migratory birds, and Community Focal Species, could be directly or indirectly affected by the RBA, if present during construction. However, many of these species would avoid the construction area in favor of nearby similar habitat. Permanent loss of habitat for sensitive species may also result, although such losses would be minor because all habitat affected by the RBA is of low value to wildlife. The Project may affect individuals of a sensitive species but is not likely to result in a trend toward federal listing or loss of viability. With the implementation of mitigation measures, no adverse impact on sensitive species would occur.	The No-Build Alternative would have no impact on vegetation, wildlife, or sensitive species other than what currently occurs with ongoing maintenance.

Recommended Build Alternative	No-Build Alternative
Hazardous materials	
No specific hazardous materials sites of concern were identified in or adjoining the Study Area, and no asbestos-containing materials or lead-based paint were identified as part of the hazardous materials evaluation of existing suspect materials. Therefore, the risk of environmental impacts in the Study Area is low. A Phase I Environmental Site Assessment may need to be completed for the easement to be acquired.	No impacts on hazardous material sites would be associated with the No-Build Alternative because no ground-disturbing activity would occur.
Materials sources and waste materials	
Approximately 505,000 cubic yards of dirt/earth materials from an off-site location would be required to construct the RBA. The transport, storage, use, and disposal of all such materials, including waste and construction debris, would be managed in accordance with ADOT standards.	The No-Build Alternative would have no impact related to the use of construction materials or waste sites.
Secondary impacts	
The RBA would increase access and could induce or increase the rate of land development adjacent to and near the Koli Road TI. Other potential secondary impacts include loss of open space, new discoveries of unknown archeological sites, and changes in visual character.	No secondary impacts related to the RBA would occur with the No-Build Alternative because no new facility would be built. With the No-Build Alternative, there would be no additional access and the rate of development of the area could slow.
Cumulative impacts	
Cumulative impacts would be likely to occur as the Community continues rapidly urbanizing and replacing vacant land. The cumulative impacts related to conversion of land to higher and more valuable forms of use, population and employment growth, and accessibility are considered positive and substantial over the long term. Cumulative impacts related to adverse effects on cultural and natural resources, or the loss of such resources, are considered negative and minimal to moderate and would occur with future development near the Study Area.	Under the No-Build Alternative, no new TI would be constructed on I-10 in the Study Area. The No-Build alternative would perpetuate existing issues such as poor and inefficient access to Community land, delays in emergency response times during special events, traffic management challenges during incidents, and inadequate infrastructure to accommodate projected visitor population and employment growth. These issues would likely intensify over time as the GRD (formerly WHPDA) Master Plan is implemented.

V. Public Involvement and Coordination

ADOT, in partnership with the Community, gathered input from agency representatives and members of the public regarding the need for the proposed Koli Road TI, the alternatives being considered for such improvements, and the potential environmental impacts that may result from the improvements. The feedback helped ADOT make decisions regarding the alternative that would best meet the purpose and need of the proposed Project while addressing agency and public concerns. This part of the EA describes the agency and public outreach efforts and the input received. It also provides information on opportunities for the public to review and comment on this EA and the Design Memo. Additional information is available in Appendix K, *Agency and Public Involvement*.

ADOT's *Public Involvement Plan* (ADOT 2023) was prepared to outline the various outreach efforts to be conducted during the study. The plan included information regarding Title VI, minority, low-income, and limited English proficiency populations in the Study Area, so that public outreach efforts could be tailored to best engage area residents and stakeholders.

A. Agency Involvement

The agency outreach effort involved representatives from local, state, and federal agencies; councils of government; the Community; emergency service providers; utilities; and environmental stakeholder groups. It began with an agency scoping meeting held at the onset of the study and continued with additional agency and stakeholder meetings held throughout the course of the study. Multiple meetings with various stakeholders have occurred, including biweekly meetings with the Community and BIA, milestone meetings with the Community and BIA, and individual stakeholder meetings discussing topics related to both the EA and Design Memo.

Agency Scoping Meeting

Prior to the public and agency scoping process, the study team collaborated with the Community to establish meeting plans and strategies, which were approved by Community leadership.

The study team sent a letter to agency representatives on December 2023, to introduce the proposed Koli Road TI and to invite them to an agency scoping meeting. Table 17 lists the agencies invited to the meeting.

On December 12, 2023, the agency scoping meeting was held at the Wild Horse Pass Corporate Center in Chandler, with options for virtual attendance (17 people attended in person and 19 attended virtually). The meeting provided stakeholders with an overview of the Project, covering engineering, environmental, and public engagement aspects. The presentation outlined key elements, such as the Project overview, Study Area, preliminary purpose and need, schedule, and how to provide input. Attendees were invited to comment and ask questions.

Participants provided input on the study schedule, the engineering and environmental analyses, and efforts to gather agency and public input throughout the study process.

The comment period, which lasted from December 12, 2023, to January 31, 2024, yielded 27 email submissions and eight phone comments. Common themes included requests for information on the

preferred alternative, ROW acquisition concerns, and potential impacts on small businesses. Specific comments are shown in Table 18.

Table 17. Agencies invited to scoping meeting

Local agencies	Federal agencies
• Maricopa County	• Federal Highway Administration
• Maricopa County Planning and Development Department	• BIA, Western Regional Office
• Community Development Advisory Committee	• BIA, Pima Agency
• Maricopa County Department of Transportation	**Emergency services**
• Flood Control District of Maricopa County	• Maricopa County Sheriff's Office
Councils of government	• Department of Emergency Management
• MAG	• Gila River Fire Department
State agencies	• Gila River Police Department
• Arizona Game and Fish Department	• Gila River Emergency Medical Services
• Arizona Department of Public Safety	• Gila River Office of Emergency Management
• Arizona State Land Department	• Hau'pal (Red Tail Hawk) Health Center
• Arizona Department of Public Safety	
Tribes	**School districts**
• Community	• Office of the Maricopa County School Superintendent
• Community Office of the General Counsel	• Tribal Education Department
• WHPDA (now GRD)	**Utilities**
• Lone Butte Development, LLC	• San Carlos Irrigation and Drainage District
• Community Department of Transportation	**Environmental stakeholder groups**
• Community CRMP	• Audubon Arizona
• Community THPO	• Center for Biological Diversity
• Community Department of Land Use Planning and Zoning, Flood Control	
• Community District 4 – San Tan	
• Community Department of Public Works	
• Community Council Secretary's Office	

Table 18. Agency comments

Comment	Response
Community Governor	
Indicated that the Germann (Koli) Road interchange is critical for land access, emergency vehicle access, and meeting future traffic needs in the Wild Horse Pass corridor.	Thank you for your support.
Community Office of General Counsel	
Clarify study limits vs. improvement limits.	The improvement limits, or environmental footprint, is the area of ground disturbance from the proposed Project. The Study Area, or study limits, include the improvement limits, the existing I-10 easement plus the new easement needed for the TI, and additional areas to analyze indirect effects. At the start of the study, the Study Area was extended to the adjacent interchanges on I-10 because the study team was looking at physical improvements to address potential weaving issues on I-10 between Koli Road and the Wild Horse Pass and SR 347/Queen Creek Road TIs. The Study Area was extended to Maricopa Road to include logical termini for the TI.
Suggested moving study limits to GRIC [Community] boundary to the north due to future potential development.	The geographic extent of the study of cumulative impacts is often larger than the Study Area. The no-action and build alternatives analysis would typically include new projects and developments that are already authorized, budgeted, and scheduled. For instance, a major transportation project or development in Phoenix just north of the Community boundary would still be considered in cumulative impacts, even though the physical Study Area does not extend that far to the north.
Suggested incorporating intersection of Maricopa/347 into study limits.	With the expansion of the Study Area to Maricopa Road, ADOT feels the Study Area is adequate.
WHPDA (now GRD)	
Firebird raceway will remain open. May need to incorporate raceway access into design alternatives. Alignment study data for Germann crossroad will be released shortly	The ADOT team will work closely with the Community and GRD to account for the Wild Horse Pass area existing and planned developments. The design team understands that the GRD development site plan has changed from what was shown in the Wild Horse Pass Master Plan and Traffic Impact Analysis. The ADOT design team used the new information provided by the Community and GRD (Koli Road alignment study, Firebird Raceway Reimagined new layout, Firebird Lake decommissioning timeline and new layout) in developing the Koli Road TI layout.
Firebird Lake won't necessarily be completely filled in, excavated area has potential to be used for future development or stormwater retention.	
Future event attendance in the area could exceed 40,000. Study should evaluate needs during events.	

Comment	Response
Gila River Police Department	
Germann interchange provides more options for traffic management during events and traffic diversions due to incidents.	Comment acknowledged.
Gila River Fire Department	
Event traffic has limited fire station access in the past.	The addition of the Koli Road TI would provide more access and connections to I-10 from the local arterial network and should mitigate future congestion of the local streets.
Community	
GRIC is in the process of compiling scoping comments, will submit to the study team prior to the comment deadline.	Comment acknowledged.
The Gila River Indian Community (GRIC or the Community) appreciates the opportunity to provide its comments on the Germann Road Traffic Interchange Project's (Project) initial scoping materials, which were presented in a letter to the Community dated November 7, 2023, and at an Agency Scoping meeting held on December 12, 2023. The Community notes that the comments below do not constitute the Community's formal or official comments on the overall Project, or any specific aspect of the Project, other than the initial scoping for the Project.	ADOT has received and thanks the Community for the correspondence dated January 3, 2024, providing scoping comments to the Project team for the I-10 Koli Road TI study. There will be multiple opportunities for the Community to continue to provide comments on the Project, including, but not limited to, public meetings.
Gila River Indian Community utility infrastructure. The Project area contains utility infrastructure owned or operated by Gila River Indian Community Utility Authority (GRICUA), Gila River Telecommunications, Inc. (GRTI), and the Community's Department of Public Works (DPW) that the Project could potentially impact (depending on the Project's final scope and design). Similarly, the Project may provide an opportunity for utility lines (e.g., fiber optic lines) to cross the I-10 utilizing (i.e., attached to) the Germann Road TI infrastructure. For this Project and other recent projects, the Arizona Department of Transportation (ADOT) has engaged with the Community's utilities at an early stage to assist in facilitating a design that will minimize disruption to utility operations and services to the Community. The Community appreciates these efforts and coordination, and requests that these coordination meetings related to possible relocations, removals of services, new services, and easement crossings continue as the Project progresses.	Thank you for providing the information concerning the utility infrastructure in the Study Area. ADOT will evaluate impacts to utilities as the study progresses and will attempt to avoid impacts where possible. Where it is not possible to avoid utility impacts, ADOT will engage with the utilities to minimize disruptions to the utilities' operations and services. Thank you for informing ADOT of the potential desire to use the Koli Road TI as a way for utility lines to cross I-10. This will be discussed further in coordination meetings as the study progresses.

Comment	Response
Traffic benefits. Adding this extra traffic interchange would help relieve traffic congestion throughput on the I-10, while also managing ingress and egress at the I-10 Wild Horse Pass Boulevard and Queen Creek Traffic Interchanges during major events hosted by and held in the Wild Horse pass area, which could include multiple events on multiple sites throughout the Wild Horse Pass area on the same day/evening. Additionally, the Project may connect with other interior corridors for relief of I-10 traffic.	Thank you for the comment. ADOT will continue to coordinate with the Community throughout the Koli Road TI Project and will share the results of the traffic analysis that will be completed for the Koli Road TI Project.
TI capacity. Wild Horse Pass Blvd Overpass only has one (1) left hand turn lane to enter the I-10 E/B from Westbound Wild Horse Pass Blvd. This causes traffic to have to sit through multiple light cycles, especially during busy rush hours times due to the high number of commercial motor vehicles. To avoid these circumstances, the Germann Road TI should have at least two lanes in each direction along with at least two left hand turn lanes on the overpass to account for the large amounts of traffic/trucks that we currently experience on Wild Horse Pass Blvd and Queen Creek Road.	Thank you for the comment. ADOT will be completing a full traffic analysis on the Koli Road TI as part of the study. The results of the traffic analysis will be shared with the Community and the Community will be included in the discussion concerning the TI lane configuration.
East and west exits. The Project should provide for access and egress to I-10 from the east and the west. By including east and west exits, cargo truck traffic could be moved from the Wild Horse Pass/Sundust Rd exits if the Community were to extend Nelson Drive to the off-ramp. This would be more accommodating to the Wild Horse Pass Entertainment District as a whole.	ADOT will coordinate with the Community, GRD, and Lone Butte on the approaches to the Koli Road TI. ADOT will be using the Community/GRD-supplied Koli Road Alignment Study to inform the study on the Community's preferred Koli Road approach alignments.
Limit impacts to commercial properties. There are existing commercial properties to the east of I-10 in the Lone Butte Industrial Park. Ramp configuration should be designed to avoid, to the greatest extent possible, impacts to existing commercial properties.	ADOT will attempt to avoid impacts to the existing commercial properties on the east side of I-10 in the Lone Butte Industrial Park. As the study progresses, if there are any concepts that impact the commercial properties in Lone Butte, ADOT will coordinate with the Community on the evaluation of impacts to the properties, potential mitigation measures, and determining the feasibility of the concept.
Minimize impacts to cultural resources. The Community's Cultural Resources Management Program (CRMP) has been working with ADOT to examine cultural resources within the Project's Study Area. Based upon current information, it appears that the sites in the Project area that are the most likely to be affected are those within the Wild Horse Pass Motorsports complex (which have previously been addressed as part of actions within the Motorsports complex).	As part of the EA process currently being undertaken by ADOT, impacts to the Community's cultural resources will be evaluated in accordance with Section 106 of the National Historic Preservation Act and NEPA, and coordinated with CRMP and the Community's THPO. If there are adverse effects to cultural resources, ADOT would work closely with the CRMP and THPO to determine the best treatment of these resources.

Comment	Response
Permits and approvals. ADOT should note that any proposed disturbance beyond the limits of existing rights-of-way may require federal and tribal environmental clearances and/or approvals, including clearances administered by the Community's Department of Land Use Planning and Zoning. Early coordination with the LUPZ's Planning Section and Ordinance Section should be conducted to identify permit requirements, address access, and prevent unnecessary delays in design and construction.	The ADOT study team will coordinate with the Community's Department of Land Use Planning and Zoning to identify the permit requirements that will be needed for the Koli Road TI Project.
Requested name change. The Community requests that the Project be renamed the "Koli Road Traffic Interchange Project," as the Community anticipates that the new TI will align with and connect to Koli Road, rather than Germann Road.	ADOT is in agreement to change the name of the project to the Koli Road TI Project. After the agency scoping comment period is completed, all future communications will refer to the Project as the Koli Road TI Project. ADOT will work with MAG to change the official name of the Project.
Drainage. Offsite stormwater runoff currently impacts the westbound lanes of I-10, and therefore could also impact the ramps associated with the new proposed traffic interchange. It is not known whether the I-10 widening Project will address this potential drainage issue. ADOT's design should analyze and address the possible offsite drainage that may impact the traffic interchange.	The portion of I-10 passing through the Community's lands was originally constructed with a pass-through drainage system using frequent culvert pipes and concrete box culverts along the corridor. While widening I-10 is not expected to meaningfully alter the existing drainage condition upstream or downstream of I-10, ADOT will evaluate whether the addition of the Koli Road TI ramps would have a meaningful impact on the existing drainage patterns and potential mitigation measures. The ADOT study team does not have a copy of the Lone Butte and Wild Horse Pass drainage models. If the Community can provide the ADOT study team with these models, it would be appreciated.

B. Public Involvement

Beginning October 1, 2024, the public was invited to provide feedback on the proposed Koli Road TI. The public review and comment period ran from October 1 to November 8, 2024, offering multiple avenues for participation. Comments were accepted during public meetings, including an in-person scoping and alternatives Community meeting on October 1, 2024, at the Community, and a virtual scoping and alternatives public meeting on October 8, 2024.

Public Scoping and Alternative Meetings

The public meetings were a significant component of the public involvement and comment process to gather comments on the Koli Road TI study and to provide information about the ongoing I-10 Wild Horse Pass Corridor Project (SR 202L to SR 387), which is in final design and construction. The public meeting dates, times, locations, and attendance are listed in Table 19.

Table 19. Public meeting dates and locations

Date	Time	Location	Attendance
Tuesday, October 1, 2024	5:30–7:30 p.m.	Gila River Indian Community District 5 Multipurpose Building 3456 W. Casa Blanca Road Bapchule, AZ 85121 (Note: this meeting was advertised only to Community residents)	8
Tuesday, October 8, 2024	5:30–7 p.m.	Virtual meeting held on the Zoom platform	50

Meeting Notices and Informational Materials

The public involvement team coordinated a comprehensive outreach effort to inform the public about the proposed Koli Road TI and encourage participation in the comment process. Advertisements detailing the Project and public meeting dates were published in several outlets, including the *Gila River Indian News*, *Chandler Republic*, and *Ahwatukee Foothills News*. Flyers and posters were also distributed in the Community. Additionally, ADOT disseminated information through GovDelivery emails, reaching over 160,000 recipients, and a MAG news release. Social media posts on platforms such as Facebook, Instagram, and X further amplified the outreach, providing details about the meetings and how to submit comments. All relevant materials were also made available online on the ADOT website (https://azdot.gov/koliroad), providing easy access to the meeting presentations, fact sheets, and display boards in both English and Spanish.

Methods to Provide Input

Meeting attendees received a comment form (in both English and Spanish) that provided the deadline for submitting comments and an area for writing down comments. They could also provide verbal comments during the meeting to a court reporter. Attendees were asked to provide comments by November 8, 2024,

for them to be included in the study record, and were notified of the following methods to submit comments:

Public meetings: Providing written/verbal comments at the in-person scoping and alternatives community meeting on October 1, 2024, on the Community, and the virtual scoping and alternatives public meeting on October 8, 2024.

Study website: Online through a comment form: https://azdot.gov/koliroad

Email: koliroad@azdot.gov

Phone: 855-712-8530

Mail: I-10/Koli Road Traffic Interchange Study Office
6515 South Rural Road, Suite 107
Tempe, AZ 85283

Comments Received

All comments received during the formal comment period were reviewed for the specific issues or recommendations raised by commenters.

- A total of 129 comments was received by November 8, 2024, the last day of the comment period, through the following methods:
  - 11 comments by email
  - 115 comments through the comment form
  - 3 comments as written comments received at the in-person and virtual meetings

Some of the common themes for each question of the comment form are listed below:

- Proximity to Wild Horse Pass Boulevard and SR 347/Queen Creek Road TIs:
  - concerns about need for three TIs close together
  - concerns about traffic flow through the area
- Improvements to SR 347 between I-10 and Maricopa:
  - concerns that Koli Road TI would have no impact or negative impact on SR 347 safety and capacity
  - concerns that funding for Koli Road TI would take funding from SR 347 improvements
- Wild Horse Pass Motorsports Park:
  - concerns that Koli Road TI would affect the facility and its future
- TI alternative preference:
  - no consensus on a preferred alternative

The specific public comments and responses are included in Table 20.

Table 20. Public comments

Comment	Response
Funding	
Comments regarding funding and benefit of the Koli Road TI Project	The Koli Road TI is designed to provide benefits to the broader community, including improved access to public facilities and entertainment. The Project would be funded by MAG through the MAG Freeway Life Cycle Program, with an allocation of $77.6 million for ROW, utility relocation, and construction.
Proximity to Wild Horse Pass Boulevard and SR 347/Queen Creek Road TIs	
Comments regarding traffic congestion and widening needs	I-10 Wild Horse Pass Corridor Project (SR 202L to SR 387) includes redesigning and reconstructing the TIs at Wild Horse Pass Boulevard and SR 347/Queen Creek Road. The design of the proposed Koli Road TI will take these adjacent TI locations and configurations into consideration, and evaluate traffic volumes. During the preliminary evaluation, collector-distributor roads were evaluated but, given the larger footprint, constructability issues, and proximity to SR 202L, this concept was not feasible for the adjacent urban land uses and planned funding levels. The findings will be documented in a Change of Access Report and final Design Memo, including traffic analyses along I-10.
Comments regarding spacing and proximity concerns	Although the proposed TI is close to existing ones, proper design considerations such as collector-distributor lanes and adequate spacing between access points can help mitigate congestion and weaving concerns. The goal is to improve regional connectivity while maintaining traffic flow on I-10.
Comments regarding questionable necessity and waste of resources	The TI is being considered as part of a larger transportation planning effort to accommodate future growth and mobility needs in the region. Infrastructure projects require significant long-term planning, and funding sources may come from a combination of public and private investments, not solely taxpayer dollars.
Comments regarding impact on local infrastructure and land use	Environmental and land use considerations are an important part of the planning process. Project studies will assess the potential impacts on existing infrastructure, including Firebird Lake and surrounding areas, and alternatives will be explored to minimize disruptions while addressing transportation needs.
Improvements to SR 347	
Comments regarding SR 347, traffic congestion, and Project scope	The I-10 Wild Horse Pass Corridor Project (SR 202L to SR 387) includes redesigning and reconstructing the TI at SR 347/Queen Creek Road to improve traffic operations. Additionally, ADOT is conducting a study focused on increasing capacity and enhancing safety on SR 347 from Maricopa to I-10. While the proposed Koli Road TI aims to provide better local access, connectivity to SR 347 by way of Koli Road is beyond the scope of this study. Please refer to the SR 347 Corridor Project website for more information: https://azdot.gov/sr347.
Comments regarding overpasses and additional lanes	The I-10 Wild Horse Pass Corridor Project (SR 202L to SR 387) includes constructing new overpasses at Riggs Road and Casa Blanca Road, in addition to redesigning the TI at SR 347/Queen Creek Road. Furthermore, ADOT is conducting a study to expand capacity and improve safety on SR 347 from Maricopa to I-10, which includes evaluating enhancements to the Riggs Road TI. More details are available at: https://azdot.gov/sr347.

Comment	Response
Comments regarding the need for a larger-scale SR 347 solution	ADOT recognizes the significant traffic challenges on SR 347. ADOT is conducting a study to assess broader capacity expansions and safety improvements along SR 347. This includes exploring solutions to alleviate congestion and enhance regional connectivity. Visit https://azdot.gov/sr347 for updates on this study.
Oversized load permits	
Comment regarding allowing oversize loads to access the ramps or crossover at the TI	The design will follow the ADOT *Roadway Design Guide*, which incorporates design criteria for trucks and accounts for oversize loads.
TI type	
Comments regarding TI design and roundabout evaluation	The Koli Road TI study evaluated several TI options based on engineering and environmental criteria. The alternatives considered include a diamond interchange and a diverging diamond interchange. A roundabout was excluded from the evaluation because it did not meet the Project's purpose and need criteria.
Comments regarding traffic flow, merge lanes, and I-10 connectivity	The study addressed potential issues related to traffic congestion and merging onto I-10, with ramps using auxiliary lanes to reduce bottlenecks and ensure smooth traffic flow. While braided ramps were evaluated, they were deemed infeasible given their complexity, elevated bridge requirements, and cost. The Koli Road TI aims to mitigate congestion, while additional I-10 enhancements are planned through the I-10 Wild Horse Pass Corridor Project (SR 202L to SR 387).
Comments regarding diverging diamond interchange and safety	The diverging diamond interchange was considered given its safety advantages and ability to reduce conflict points. It is recognized for improving traffic flow and operational efficiency. The diverging diamond interchange has been successfully implemented in other locations and provides a safer alternative compared to other TI designs.
Comments regarding traffic safety, emergency access, and event traffic management	Emergency access and managing event traffic were key considerations. The study prioritized safety and evaluated crash risks for the alternatives. The diverging diamond interchange is a safer option, with fewer conflict points and lower risk of severe accidents.
General comments	
Comments regarding I-10 traffic congestion and expansion	Additional I-10 enhancements are planned through the I-10 Wild Horse Pass Corridor Project (SR 202L to SR 387). Visit the website at: https://i10wildhorsepasscorridor.com/.
No-Build Alternative	
Comments in favor of the No-Build Alternative	While the No-Build Alternative would not meet the Project's purpose and need, it serves as a baseline for comparing and evaluating the impacts of the proposed action against the impacts of not undertaking the proposed action.
Wild Horse Pass Motorsports Park concerns	
Comments in in support of Wild Horse Pass Motorsports Park	The Wild Horse Pass Motorsports Park is owned by GRD, which supports the Koli Road TI Project. Comments regarding development of the racetrack and surrounding area should be directed to GRD.

C. Public Hearing

Agency representatives and members of the public are invited to review and comment on this draft EA and the Design Memo. The comment period will begin on July 14, 2025, and end on August 13, 2025. During the comment period, an in-person public hearing and a virtual public hearing (where attendees can attend online or by telephone) will provide an opportunity for further review and comment:

- In-person Public Hearing for the Gila River Indian Community:

  Tuesday, July 29, 2025, 5:30 to 7 p.m.
  Whirlwind Gold Club at Wild Horse Pass Shelde Building
  5692 W. North Loop Rd.
  Chandler, AZ 85226

- Virtual Public Hearing:

  Wednesday, July 30, 2025, 5:30 to 7 p.m.
  Online: bit.ly/3GHOrf5
  Phone: +1 646.876.9923
  Webinar ID: 928 4590 2660
  Passcode: KoliRoad or 70876696

The same information will be shared at both the in-person and virtual public hearings. Attendees will have the opportunity to provide verbal and written comments at both events.

The in-person public hearing will begin with an open house, followed by a formal presentation, followed by a public comment session, and then a return to the open house. The virtual public hearing will be held on Zoom, beginning with a formal presentation, a question and answer session, then formal public comments.

Interested parties may review and make comments on the draft EA and Design Memo by:

- attending one of the public hearings listed above and providing written or verbal comments
- accessing, reviewing, and providing online comments on the draft EA and Design Memo on the study website: azdot.gov/koliroad
- emailing comments to ADOT at: koliroad@azdot.gov
- calling: (602) 522-7777
- mailing comments to ADOT at:

  I-10/Koli Road Traffic Interchange Study Office
  7130 W. Fairview St.
  Chandler, AZ 85226

Printed copies of the draft EA and Design Memo can be reviewed at the repository locations listed below. In addition, the documents are available for viewing or download from the study website at azdot.gov/koliroad. Select technical reports associated with the draft EA will be available upon request. Please email koliroad@azdot.gov or call (602) 522-7777 to make a request.

- Gila River Indian Community Governance Center (520.562.9500)
  525 W. Gu U Ki
  Sacaton, AZ 85147
- Gila River Indian Community District 1: Blackwater (520.215.2110)
  15747 N. Shegoi Rd.
  Coolidge, AZ 85128
- Gila River Indian Community District 2: Hashan Kehk (520.562.3450)
  8070 Park St.
  Sacaton, AZ 85147
- Gila River Indian Community District 3: Sacaton (520.562.3334)
  31 N. Church St.
  Sacaton, AZ 85147
- Gila River Indian Community District 4: Santan (520.418.3661)
  2230 N. Home Run Dr.
  Sacaton, AZ 85147
- Gila River Indian Community District 5: Casa Blanca (520.315.3441)
  3456 W. Casa Blanca Rd.
  Bapchule, AZ 85121
- Gila River Indian Community District 6: Komatke (520.550.3805)
  5230 W. St. Johns Rd.
  Laveen, AZ 85339
- Gila River Indian Community District 7: Maricopa Colony (520.430.4780)
  8035 S. 83rd Ave.
  Laveen, AZ 85339
- Maricopa Association of Governments (602.254.6300)
  302 N. 1st Ave. #200
  Phoenix, AZ 85003
- Chandler Public Library – Downtown (480.782.2800)
  22 S. Delaware St.
  Chandler, AZ 85225
- Ironwood Library (602.262.4636)
  4333 E. Chandler Blvd.
  Phoenix, AZ 85048

D. Conclusion

Since the start of the environmental process in 2023, ADOT has fulfilled NEPA requirements with respect to agency coordination and public involvement. To engage all segments of the public in each step of the EA process, ADOT has used numerous communication tools, met with interested parties upon request, held advertised meetings, and implemented other actions to identify opinions, seek information on key issues, and obtain input on the proposed Koli Road TI. To engage traditionally underserved communities, ADOT has used the following strategies, as identified in the *Public Involvement Plan* (ADOT 2023), which would continue should the proposed action proceed to final design and construction:

- Develop contacts, mailing lists, and other means to initiate and continue communication.
- Conduct interviews, including one-on-one meetings, with local groups and leaders.
- Initiate intergovernmental collaboration.
- Display ADOT's nondiscrimination language on all advertisements and other tools used to publicize public meetings to inform people of their rights to receive accommodations at no cost when needed.
- Select meeting locations that are accessible by public transportation, if and when possible.
- Share information, with permission, at religious centers and common meeting places.
- Host public meetings at practical times and dates based on community profile data and past input.

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