

ARIZONA DEPARTMENT OF TRANSPORTATION

Transportation
Environmental Planning
1611 West Jackson Street, Mail Drop EM02
Phoenix, Arizona 85007

Reevaluation of the Final Environmental Assessment

for

STP-024 A(200)T
024 MA 001 H8915 01L/02L
SR 24, Ellsworth Road to Ironwood Road, Phase II Interim

Approved by: DocuSigned by:
Paul O'Brien Date: 1/23/2018
6780E98BC3EB4EE...
PAUL O'BRIEN, P.E.
Administrator
Environmental Planning

Approved by: DocuSigned by:
Alan Hansen Date: 1/24/2018
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KARLA S. PETTY
Division Administrator
Federal Highway Administration

This Environmental Assessment Re-evaluation has been prepared in accordance with provisions and requirements of Chapter 1, Title 23 USC; 23 CFR 771.129(c) relating to the implementation of the National Environmental Policy Act of 1969; and 23 CFR 774 relating to Section 4(f) of the Department of Transportation Act of 1966.

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Intermodal Transportation

Douglas A. Ducey, Governor
John S. Halikowski, Director
Dallas Hammit, State Engineer

January 23, 2018

Karla S. Petty, P.E.
Arizona Division Administrator
Federal Highway Administration
4000 North Central Avenue, Suite 1500
Phoenix, Arizona 85012-1906

ATTN: Eunice Chan, Federal Highway Administration Area Engineer

Subject: Reevaluation of the Final Environmental Assessment
STP-024 A(200)T
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SR 24, Ellsworth Road to Ironwood Road, Phase II Interim

Dear Ms. Petty:

The previous National Environmental Policy Act (NEPA) compliance for the proposed construction of a new controlled-access high-speed freeway along an east-west alignment between SR Loop 202 (SR 202L) milepost (MP) 34.50 and Ironwood Road was originally documented in the *Final Environmental Assessment for State Route SR 802, Williams Gateway Freeway*¹ (2011 Final EA). The 2011 Final EA (Federal Highway Administration [FHWA] Federal Aid Number NH-802-A[AUG], Arizona Department of Transportation [ADOT] Project Number 802 MA 999 H6867 01L) was released for public review in 2010 and the Finding of No Significant Impact (FONSI) was signed by FHWA on May 6, 2011. The *Final Design Concept Report, SR 24, Gateway Freeway (SR 202L – Ironwood Road)* (2011 Final DCR) was completed by ADOT concurrently with the 2011 Final EA.

The Selected Alternative analyzed in the 2011 Final DCR and EA included a new approximately 7-mile-long freeway between SR 202L MP 34.50 and Ironwood Road, a SR 202L/SR 24 traffic interchange (TI), TIs at major crossroads along the SR 24 alignment (Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road), associated drainage basins and culverts, a drainage canal, road widening and lane additions on select major crossroads along SR 24; and improvements along SR 202L. The SR 202L improvements extended from west of the Higley Road TI (MP 31.0) to the Baseline Road TI (MP 39.0) and included lane additions, widening existing overpasses, and changing existing exit/entrance ramps to accommodate the freeway-to-freeway connections. The Selected Alternative

¹ During preparation of the 2011 EA, the State Transportation Board changed the route designation from SR 802 to SR 24. However, due to the advanced stage of the EA at the time of redesignation, the 2011 EA refers to the proposed freeway as SR 802. Subsequent documents regarding the project, including this EA reevaluation, refer to the proposed freeway as SR 24.

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was separated into three phases based on funding source and availability. Phase I in the 2011 EA, which included the freeway segment from SR 202L to Ellsworth Road and an interim SR 202L/SR 24 TI, was constructed with available funds and was opened to traffic in May 2014. Phases II and III in the 2011 EA consist of the remaining portions of the proposed improvements located within Maricopa County and Pinal County, respectively, and have not yet been constructed.

Current and projected development in the vicinity of the proposed SR 24 corridor, including the proposed expansion of the Phoenix-Mesa Gateway Airport (PMGA; PMGA 2012), is occurring at a more rapid rate than estimated in the 2011 EA, resulting in a more immediate need for a regional transportation corridor in the project vicinity. The PMGA has grown since 2011 and is proposing an expansion in their Northeast Area, which would further contribute to the need for an east-west transportation corridor in the vicinity of the study area. The airport currently generates more than \$1.3 billion of annual economic impact for Arizona and supports over 10,000 jobs regionally (City of Mesa 2017), which is up from the \$534.6 million and 4,075 jobs in 2007/2008 previously stated in the 2011 EA. Based on US Census Bureau data for the study area, most (69.7%) of local residents are employed in areas outside their community and nearly all travel to and from work via automobile (US Census Bureau 2014a and 2014b).

In March 2015, MAG prepared the *SR-24 Williams Gateway Freeway, Ellsworth Road – Ironwood Road Interim Phase II Feasibility Study* (Feasibility Study) to evaluate the need and potential benefits for an interim solution for the region that would be completed prior to the construction of the Ultimate Improvements. The Traffic Study conducted for the Feasibility Study that was based on 2012–2014 ADOT traffic counts showed that the completed SR 24 intersection with Ellsworth Road was operating at a Level of Service (LOS)² D/E in the AM peak hour and at a LOS B/E in the PM peak hour, the year after it opened to the public. The Traffic Study also showed that the future SR 24/Ellsworth Road TI with the Selected Alternative ultimate lane configuration is anticipated to operate at a LOS F/D during the AM peak hour and a LOS D/F during the PM peak hour in 2035. Projected traffic volumes for the Ellsworth Road TI were extrapolated to the remaining future TIs along SR 24 (Williams Field, Signal Butte, Meridian Road, and Ironwood Road), as those TIs would operate at an LOS similar to Ellsworth Road once opened to the public. An interim roadway, with two lanes in each direction, was projected to operate at a LOS C based on 2030 traffic volumes. A Traffic Analysis Report was prepared in September 2017 to evaluate the project based on MAG's updated 2040 traffic volumes; the analysis used updated existing traffic data from January 2016 for existing conditions. The Traffic Analysis Report indicated that the intersection at Ellsworth Road and SR 24 has an existing LOS D/C in the AM peak hour and an existing LOS C/E in the PM peak hour, with a couple turn movements operating at a LOS F. The results for future

² LOS is a qualitative measure of the overall operation of a roadway segment or an intersection; it is expressed as LOS A to LOS F. LOS A represents little to no congestion; LOS F represents a considerable level of congestion, long queues, and delays conditions.

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LOS in 2040 predicted that all study intersection approaches and movements would operate at LOS D or better during the peak hours for the interim roadway (ADOT 2017b).

The DCR for the project was updated in January 2017 (*Final Design Concept Report, SR-24, Ellsworth Road to Ironwood Drive, Interim Phase II* [ADOT 2017a]) to incorporate a proposed interim roadway into the 2011 Selected Alternative design. The proposed Phase II Interim Improvements incorporates an interim roadway, as well as other associated improvements, that would be constructed prior to the Ultimate Improvements. The purpose of the Phase II Interim Improvements is to provide a transportation corridor that supports existing and predicted traffic demands and improve connectivity in the region prior to 2027 when funding is anticipated to become available for the SR 24 Ultimate Improvements.

The proposed Phase II Interim Improvements (STP-024 A[200]T; 024 MA 001 H8915 01L/02L) were developed with consideration to the design for the future SR 24 Ultimate Improvements as presented in the 2011 Final DCR and EA. However, during the design of the proposed Phase II Interim Improvements, revisions to the vertical alignment for the previously approved Ultimate Improvements were also developed in order to reduce project costs; specifically, the SR 24 mainline was modified to be at- or above-grade throughout. The proposed changes to the SR 24 project include the addition of an interim roadway with associated improvements to be constructed between Ellsworth Road and Ironwood Road in advance of the future ultimate build-out of SR 24, as well as modifications to the vertical alignment of the ultimate build-out of the freeway. The project would require approximately 0.9 acre of additional new right-of-way (ROW) along Crismon Road and 2.4 acres of additional new ROW along Mountain Road (see Figure 3 and Attachment 1), but the proposed design changes would reduce the overall footprint by approximately 35 acres, for a net reduction of approximately 31.7 acres. The detailed scope of work for the proposed Phase II Interim Improvements and the modified Ultimate Improvements (collectively referred to in this document as Proposed Modified Project) is outlined in the Overview section below.

1.0 Project Location

The study area for the Proposed Modified Project is located along the same alignment and within the same footprint as the segment of the 2011 EA study area between the Powerline Floodway (located along the Ray Road alignment) and Ironwood Road (Figures 1 through 3). The Proposed Modified Project also added approximately 13.5 acres to the study area to account for the proposed grade-separated crossing over SR 24 along Mountain Road (Figure 2 and 3).

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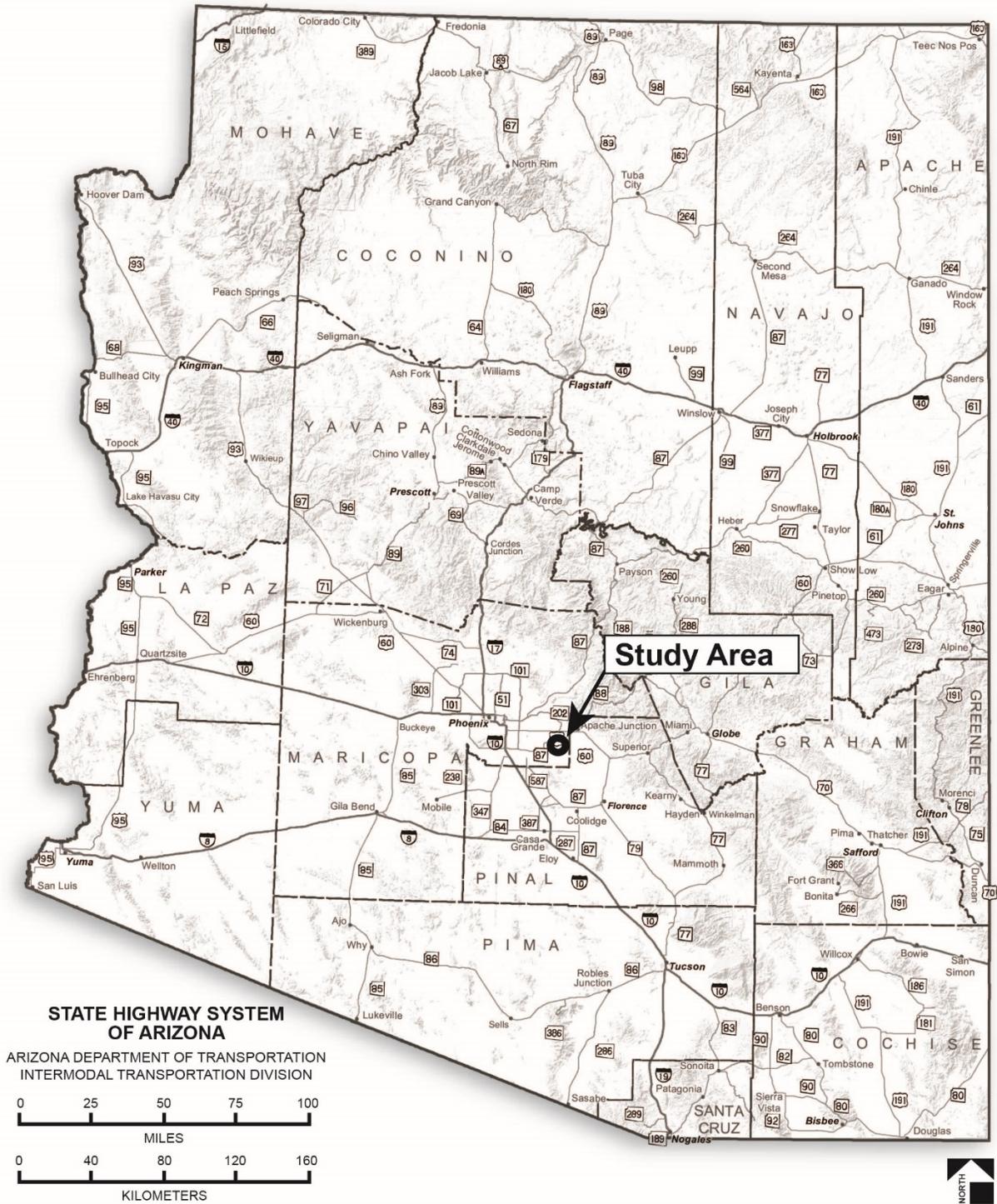
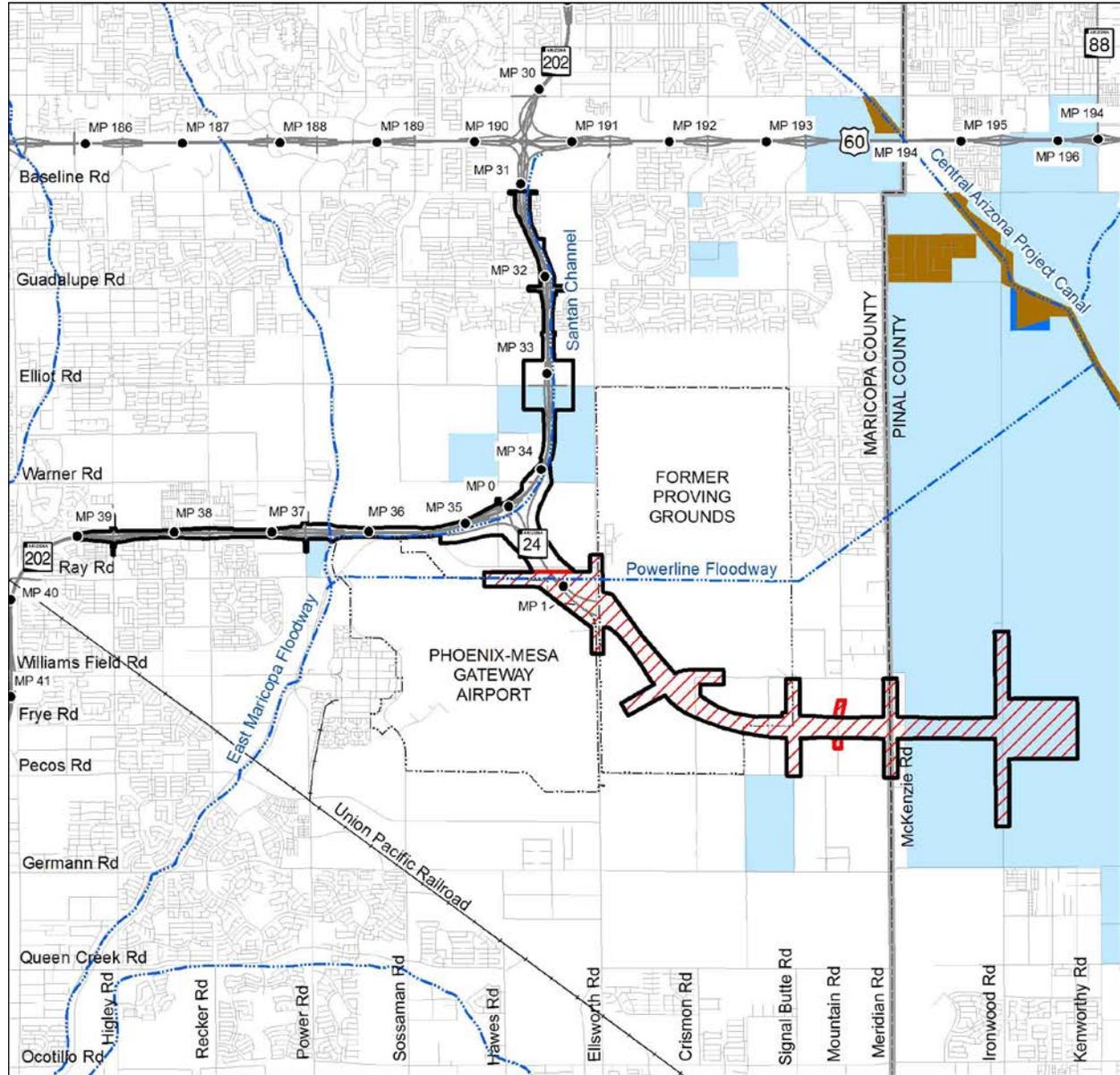


Figure 1. State location map

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Source: Land ownership GIS coverage provided by Arizona State Land Department; Arizona Transportation Information System GIS Coverage (2013)

Key

- | | |
|--|---|
|  Canal |  Bureau Of Reclamation |
|  2011 EA Study Area |  Other |
|  Proposed Modified Project Study Area |  Private Land |
| |  State Trust Land |

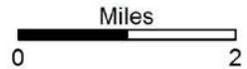
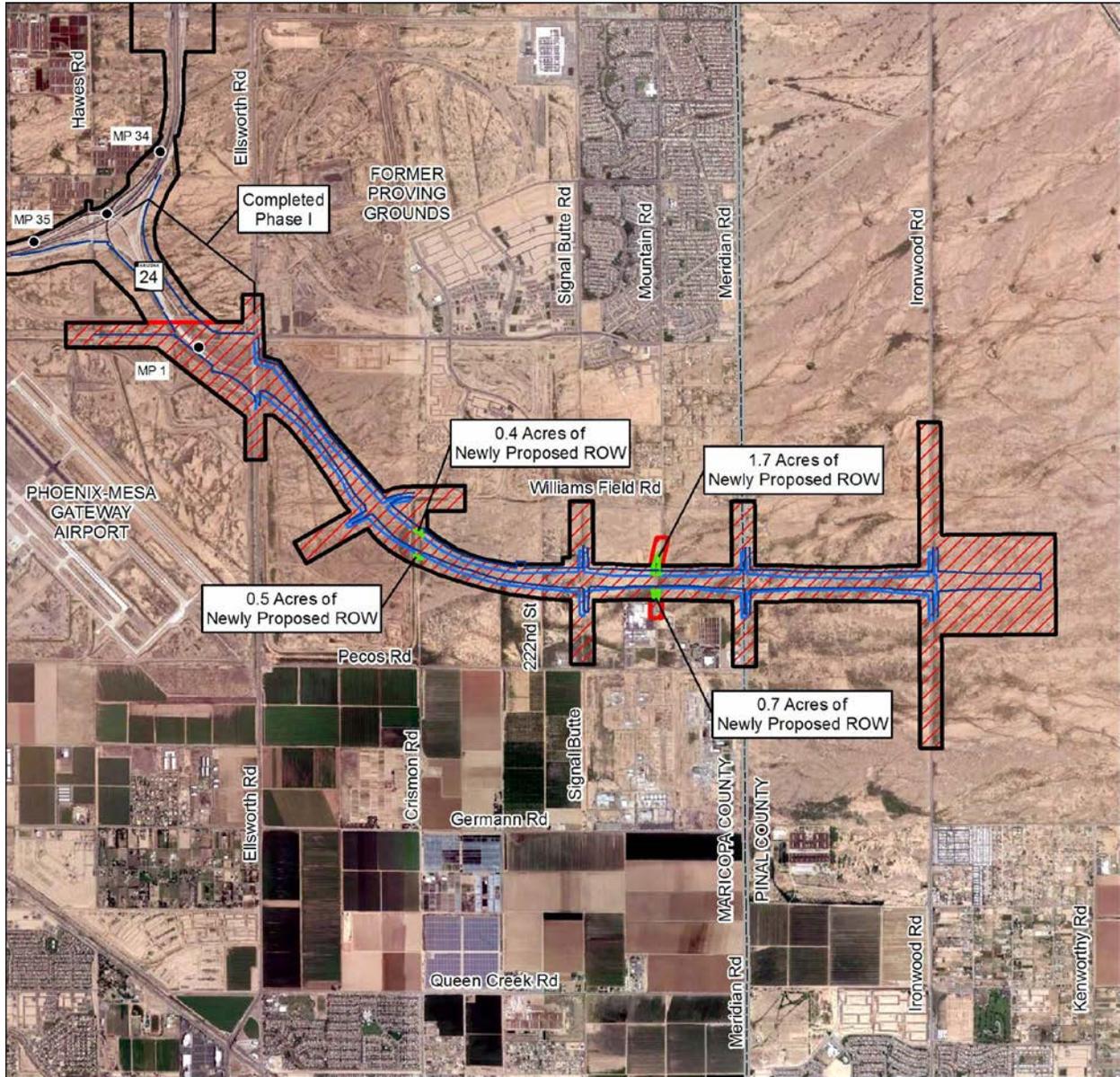


Figure 2. Project vicinity map

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Source: Arizona Transportation Information System GIS Coverage (2013);
Google Earth Aerial Imagery (3/2015)

Key

-  2011 EA Study Area
-  Proposed Modified Project Study Area
-  Proposed ROW
-  Newly Proposed ROW



Figure 3. Project aerial map

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2.0 Overview

The Proposed Modified Project adds new scope of work items and replaces some items that were previously approved in the 2011 Final DCR and EA. Unless otherwise noted in this section, the project would also include the scope of work features described in the 2011 EA. The proposed new scope of work items for the Proposed Modified Project located within the 2011 study area boundary includes the following:

- Construction of a new interim divided roadway with two paved travel lanes in each direction and an earthen median from Ellsworth Road to Ironwood Road;
- Construction of interim 6-foot-wide paved inside shoulders and 12-foot-wide paved outside shoulders along lanes on the ultimate mainline of SR 24;
- Construction of interim 2-foot-wide paved inside shoulders and 2-foot-wide paved outside shoulders along lanes on the ultimate entrance and exit ramps of SR 24;
- Widening the following intersecting roadways: Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road;
- Installation of the ultimate drainage improvements and modification of the Ellsworth Road basin;
- Widening Powerline Floodway west of Ellsworth Road within the ADOT ROW;
- Installation of roadway striping and signage;
- Construction of at-grade intersections at Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road. These intersections may be controlled with signs, signals, or roundabouts;
- Widening select exit and entrance ramps at Ellsworth Road, Williams Field Road, Signal Butte Road, and Meridian Road to accommodate 2 lanes, instead of 1 lane;
- Modifying the ultimate SR 24 vertical alignment to be at-grade at Crismon Road and Mountain Road, and to be above-grade at Signal Butte Road and Meridian Road; and
- Closure of the northernmost driveway and construction of a retaining wall at the Fujifilm Corporation (Fujifilm) industrial property located west of Mountain Road and south of the SR 24 alignment.

The Proposed Modified Project scope of work also includes the following item outside the 2011 Final DCR and EA study area boundary, which required an expansion of the study area:

- Construction of a grade-separated bridge at Mountain Road. Mountain Road would cross over SR 24 with no direct access to SR 24.

The proposed changes to the ultimate SR 24 vertical alignment would create an at-grade or elevated freeway between Ellsworth Road and Ironwood Road, which would eliminate the need for the on-site drainage pump station depicted in the 2011 Final DCR and EA. The elimination of this pump station could reduce construction and maintenance costs for the SR 24 freeway. The Proposed Modified Project with the proposed vertical alignment modifications described above would include above-grade

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mainline overpass structures at the Ellsworth Road, Williams Field Road, Signal Butte Road, and Meridian Road TIs; at-grade mainline underpasses (no TI) at Crismon Road and Mountain Road; and an at-grade end-of-freeway intersection with Ironwood Road (see Table 1). The proposed interim roadway travel lanes would be at-grade and the construction of the elevated TI bridges would not occur until the ultimate freeway build-out anticipated after 2027, with the exception of the Mountain Road bridge. The interim roadway and SR 24 freeway would not provide direct access to any properties. Access control is anticipated to be obtained along the mainline interim freeway and would extend along cross roads to the applicable Roadway Design Guidelines (RDG) length (typically 660 feet down the crossroad).

Since there would not be a TI constructed at Mountain Road, the Mountain Road bridge would be constructed during construction of the interim roadway in order to allow for continued connectivity along Mountain Road to the north and to the south of the SR 24 alignment. Construction of the underpass/overpass bridge structures at remaining TIs and grade-separated crossing would be deferred until the Ultimate Improvements. The TI exit/entrance ramps would serve as sections of the interim roadway and would provide access to Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road until the Ultimate Improvements are constructed.

The proposed interim roadway would connect to the current terminus of SR 24 at Ellsworth Road and extend east to Ironwood Road, within the footprint of the SR 24 Ultimate Improvements. The vertical and horizontal alignment of the travel lanes for the interim roadway would match either the proposed modified mainline travel lanes or the TI exit/entrance ramps of the ultimate build-out condition wherever possible in order to minimize “throw away” construction. The median for the interim roadway would eventually accommodate the additional mainline travel lanes for the ultimate build-out condition. The outside edge of pavement for the interim roadway would be out of the wheel path of the ultimate lane configuration (in the middle of the ultimate travel lane). Therefore, the mainline of the SR 24 freeway under the Ultimate Improvements could be constructed in the future, at-grade, separate from and adjacent to the operating roadway. The interim roadway would also serve to maintain through traffic during construction of the Ultimate Improvements.

TABLE 1. PROPOSED MODIFIED PROJECT TI AND GRADE SEPARATIONS SUMMARY

Crossroad	Intersection Type	Structure Approved in 2011 EA	Structure with Proposed Modified Project
Ellsworth Road	TI	Above-grade SR 24 mainline overpass structure; Ellsworth Road at grade	Same
Williams Field Road	TI	Above-grade SR 24 mainline overpass structure; Williams Field Road at grade	Same

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Crossroad	Intersection Type	Structure Approved in 2011 EA	Structure with Proposed Modified Project
Crismon Road	Grade separation (no SR 24 access)	Above-grade SR 24 mainline overpass structure; Crismon Road at grade	At-grade SR 24 mainline underpass (no mainline structure); above-grade Crismon Road overpass bridge structure
Signal Butte Road	TI	Below-grade SR 24 mainline underpass; Signal Butte Road bridge at grade	Above-grade SR 24 mainline overpass structure; Signal Butte Road at grade
Mountain Road	Grade separation (no SR 24 access)	Below-grade SR 24 mainline underpass; Signal Butte Road bridge at grade	At-grade SR 24 mainline underpass (no mainline structure); above-grade Mountain Road overpass bridge structure
Meridian Road	TI	Below-grade SR 24 mainline underpass; Meridian Road bridge at-grade	Above-grade SR 24 mainline overpass structure; Meridian Road at-grade
Ironwood Road	TI	At-grade end-of-freeway intersection (no structure)	Same

During construction of the Proposed Modified Project, traffic restrictions would be required at all crossroad locations, but through traffic on existing roadways would be maintained whenever practicable. Detours, if needed, would be located adjacent to the affected roadway(s) and would be within the study area. Contractor use areas for staging and stockpiling would be located within the study area.

The current Maricopa Association of Governments (MAG) 2040 Regional Transportation Plan (RTP) and Fiscal Year 2018-2022 MAG Transportation Improvement Program (TIP) Amendment #2 were approved by MAG on September 27, 2017 (MAG 2017a, MAG 2017b). The MAG TIP Amendment #2 includes approximately \$145.3 million in funds for design, ROW acquisition, and construction of the Interim Improvements under the Proposed Modified Project between Ellsworth Road and Ironwood Road, with construction programmed in fiscal year 2020 (MAG 2017b; see Table 2). The MAG RTP estimates that constructing the ultimate freeway section between SR 202L and Ellsworth Road, as well as converting the interim roadway to the ultimate build-out condition between Ellsworth Road and Ironwood Road as proposed under the Proposed Modified Project would occur between fiscal years 2027 and 2040 and would cost a total of approximately \$100.9 million³ (MAG 2017a).

³ MAG identified the construction of the SR 24 Ultimate Improvements as "24 (Gateway): 202L to Ellsworth Rd Construct ultimate freeway section" and "24 (Gateway) Ellsworth Rd to Meridian Rd (Ironwood Dr) Convert to full freeway." These were identified as Plan Group 3, which ranges from fiscal year 2027 to fiscal year 2040. MAG defines Plan Groups for

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TABLE 2. SR 24 PROJECT FUNDING SUMMARY PER THE MAG TIP AMENDMENT #2

Location	Work Year	Work	Funds
Ellsworth Road to Ironwood Road, Interim Improvements ⁴	2018	Design	\$8,400,000
	2018	ROW	\$65,800,000
	2020	Construct	\$71,070,000
Total Funds			\$145,270,000

3.0 Affected Environment and Environmental Impacts

This EA reevaluation identifies whether any changes in anticipated impacts documented in the 2011 EA and FONSI would result from the Proposed Modified Project or from changes in existing conditions in the study area. The reevaluation also considers any new or changed state and federal regulations, study area changes, or other new available information since the completion of the 2011 Final EA. Unless otherwise noted, the affected environment evaluated in this document includes the Proposed Modified Project Study Area (see Figures 2 and 3).

The Proposed Modified Project was determined to have no change to impacts that were identified in the 2011 Final EA and the original NEPA decision remains valid for the following resources:

- land jurisdiction
- prime and unique farmland
- socioeconomic conditions (social environment and economic conditions)
- utilities
- drainage and floodplain considerations

No further discussion of these resources is included in this reevaluation. In addition, the presence or absence of resources protected under Section 6(f) of the Land and Water Conservation Fund (LWCF) Act was not discussed in the 2011 Final EA. However, a search of sites that received funding through the LWCF Act was conducted and none were identified within the study area. Therefore, no resources protected under Section 6(f) would be impacted by the Proposed Modified Project.

freeway/highway projects as the general period in which the majority of a project is programmed for construction activity. Projects may be programmed for design and/or ROW acquisition in earlier periods (MAG 2017a).

⁴ MAG identified the Interim Improvements between Ellsworth and Meridian as "Phase 1." However, to avoid confusion with "Phase 1" identified in the 2011 EA and DCR, which consisted of the segment between SR 202L and Ellsworth Road, the summary table uses the term "Interim Improvements" in place of "Phase 1."

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Additional analyses were completed to determine whether changes to existing conditions or the inclusion of the Proposed Modified Project would change the original NEPA decisions on the following resources disclosed in the 2011 EA:

- land ownership and land use
- environmental justice
- cultural resources
- Section 4(f) resources
- air quality
- noise
- visual resources
- Clean Water Act Sections 404/401 and Section 402
- biological resources
- hazardous materials
- secondary impacts
- cumulative impacts

3.1 Land Ownership and Land Use

3.1.1 *Existing Conditions*

Land Ownership

Since the completion of the 2011 EA, the following changes to the project scope have occurred that would affect land ownership for the study area:

- Approximately 0.9 acres of land along Crismon Road would be acquired to accommodate the bridge proposed under the Proposed Modified Project. The acquisition of this privately owned land was not included in the 2011 EA, but the land was included within the 2011 EA study area (see Figure 3 and Attachment 1).
- Approximately 2.4 acres of land along Mountain Road would be acquired to accommodate the bridge proposed under the Proposed Modified Project. The acquisition of this privately owned land was not included in the 2011 EA, and is located outside of the 2011 EA study area (see Figures 2 and 3 and Attachment 1).

Existing Land Use

Changes to existing land use within the Proposed Modified Project study area since the 2011 EA include new industrial development on previously vacant lands, including an expansion of the Fujifilm facility and construction of new facilities for Bridgestone Tire and Matheson Tri Gas Inc. along Mountain Road and Meridian Road near Pecos Road.

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Planned Land Use

The following local planning documents have been updated since the 2011 EA and were reviewed for possible changes to planned land uses in the project vicinity:

- City of Mesa 2040 Transportation Plan (City of Mesa 2014a)
- City of Mesa 2040 General Plan (City of Mesa 2014a)
- PMGA Final Technical Report Northeast Area Development Plan (PMGA 2012)
- Apache Junction Comprehensive Transportation Study (Apache Junction 2012)
- MAG 2040 RTP (MAG 2017a)
- MAG Fiscal Year 2018-2022 TIP Amendment #2 (MAG 2017b)
- Maricopa County Vision 2030 Comprehensive Plan (Maricopa County 2016)
- Town of Queen Creek General Plan Land Use Map (Town of Queen Creek 2016)
- Town of Gilbert General Plan (Town of Gilbert 2012)

Planned land uses in the Proposed Modified Project study area are the same as disclosed in the 2011 EA, with the exception of the following:

- The City of Mesa is planning a shared-use pathway that would cross through the SR 24 alignment. Refer to Section 3.4 Section 4(f) Resources and Figure 4 for more information about the planned pathway.

The dominant influences on planning for the study area continue to be the City of Mesa, the PMGA Authority, and the private developers that own the former General Motors Proving Grounds (Former Proving Grounds). Zoning has remained consistent in the vicinity of the Proposed Modified Project study area, and growth is still anticipated in the region. The City of Mesa 2040 General Plan identifies the study area and surrounding vicinity as part of the Phoenix-Mesa Gateway Growth Area (City of Mesa 2014). The City of Mesa has also identified the area adjacent to the north of the SR 24 alignment between Ellsworth Road and Signal Butte as a Planned Community District (City of Mesa 2017c). Pinal County identified the vicinity of the study area as the Gateway/Superstition Vistas Growth Area in their Comprehensive Plan (Pinal County 2015). The 2011 EA accounted for the expansion of PMGA and redevelopment of the Former Proving Grounds with master-planned communities. However, plans for expansion of the PMGA and redevelopment of the Former Proving Grounds have progressed since the preparation of the 2011 EA and now include the following updates:

- A variety of studies, planning documents, and improvement projects are underway or have been completed at the PMGA; updates for the PMGA expansion are posted on the airport's website (PMGA 2017).
- The Eastmark mixed-use, master-planned community, located within the Former Proving Grounds north of the planned Cadence development (see Figure 4), is currently under construction (City of Mesa 2017).

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- The Cadence master-planned development is located in the study area in the Former Proving Grounds within the City of Mesa's Planned Community District; the area is platted for single family residence development and construction will be starting soon on the infrastructure (John Wesley with the City of Mesa, personal email communication with Ivan Racic and John Wennes with ADOT, January 26, 2017).
- A major shopping center has been designed (by Wendell Pickett) for the northeast corner of SR 24 and Ellsworth Road.

3.1.2 Environmental Consequences

The total estimated ROW acquisition that would be required for the Proposed Modified Project is approximately 294 acres. In comparison to the 2011 Selected Alternative, the Proposed Modified Project would require a net reduction of approximately 31.7 acres between Ellsworth Road and Ironwood Road (see Attachment 1 for a summary table and maps of the changes in ROW acquisition needs). The Proposed Modified Project would require approximately 0.9 acre of new ROW along Crismon Road and 2.4 acres of new ROW along Mountain Road, but adjusting the roadway profile to be at-grade between the TIs would reduce the overall footprint by approximately 35 acres, for a net reduction of approximately 31.7 acres. Following ROW acquisition, land ownership for the acquired parcels along Crismon Road and Mountain Road would be transferred from private ownership to ADOT ownership, and land use would change to transportation facility use.

The industrial land needed for this new ROW along Mountain Road is located west of Mountain Road and south of the SR 24 alignment, and is currently developed as a driveway and retention basin for the Fujifilm industrial facility. Construction of the proposed above-grade bridge along Mountain Road would require the closure of the northernmost driveway and construction of a retaining wall at the Fujifilm property. The driveway currently provides access to the parking lot for the property. The four additional existing driveways that provide access to the Fujifilm Property, including two that provide access to the parking lot, would not be impacted. The retaining wall would allow Fujifilm to maintain their on-site retention basins along the frontage of their property with Mountain Road. The number of parking spaces in the parking lot would not be affected.

The land needed for the new ROW at Crismon Road is currently vacant.

Temporary Construction Easements (TCEs) may also be required for the construction of the Proposed Modified Project, but TCEs would not affect land ownership or land use. The TCE locations and limits would be determined during final design but would be located entirely within the study area. The TCEs would be in use only for the duration of construction.

The Proposed Modified Project would continue to conform to the local and regional planning documents, including the updated land use and transportation plans listed above. The construction of the Proposed Modified Project would be compatible with the conversion of land surrounding the project

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vicinity to residential and industrial uses as described in the planning documents for the region. ADOT and FHWA are working closely with local and state agencies and other stakeholders to ensure that the project continues to be in accordance with local goals and objectives. The Proposed Modified Project would not alter the 2011 Final EA finding for land use.

3.1.3 Mitigation Measures

No mitigation measures for land use or land ownership were recommended in the 2011 EA. The following mitigation measure is for all land acquisition:

Design Responsibility

- All right-of-way acquisition will be implemented by the Arizona Department of Transportation's Right-of-Way Group in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 US Code Chapter 61).

3.2 Environmental Justice

3.2.1 Existing Conditions

Following the completion of the 2011 EA, the following changes to the study area were reviewed for potential environmental justice impacts:

- Approximately 0.9 acres of land along Crismon Road would be acquired to accommodate the bridge proposed under the Proposed Modified Project. The acquisition of this privately owned land was not included in the 2011 EA, but the land was included in the 2011 EA study area.
- Approximately 2.4 acres of land along Mountain Road would be acquired to accommodate the bridge proposed under the Proposed Modified Project. The acquisition of this privately owned land was not included in the 2011 EA, and is located outside of the 2011 EA study area (see Figures 2 and 3).

Based on a review of the 2010 US Census Bureau and 2014/2015 American Community Survey (ACS) data, the following census tracts have a higher percent of disabled, low-income, elderly, Limited English Proficiency, female head-of-household, and/or minority populations when compared to their respective county:

- 4226.40 (disabled, elderly, Native Hawaiian and Other Pacific Islander Alone, Two or More Races)
- 4226.41 (Native Hawaiian and Other Pacific Islander Alone, Some Other Race Alone, Two or More Races)
- 5228 (low-income, female head-of-household, Black or African American Alone, American Indian and Alaska Native Alone, Asian Alone, Native Hawaiian and Other Pacific Islander Alone, Two or More Races)
- 8147 (female head-of-household, Asian Alone, Some Other Race Alone, Two or More Races)

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- 8148 (female head-of-household, Black or African American Alone, Asian Alone, Some Other Race Alone, Two or More Races)
- 8176 (low-income, Limited English Proficiency, American Indian and Alaska Native Alone, Hispanic or Latino, total minority)
- 2.04 (Asian Alone, Some Other Race Alone, Two or More Races)

Refer to Attachment 2 for a detailed summary of the updated demographic data for the study area.

3.2.2 Environmental Consequences

The Proposed Modified Project would require relocation of approximately four households along the SR 24 alignment. One household is located in Census Tract 2.04, on the northeast corner of Meridian Road and the SR 24 alignment. Three households are located in Census Tract 8176, with one at Signal Butte Road and two west of Signal Butte Road along the SR 24 alignment. Both Census Tract 8176 or Census Tract 2.04, both of which contain protected populations. However, no disproportionately high and adverse effects on protected populations would occur under the Proposed Modified Project. Similar to the 2011 Selected Alternative, the Proposed Modified Project is anticipated to improve the transportation system in the study area and surrounding vicinity. Minority populations, as well as the general public, would benefit from the improvements because mobility would be improved, congestion on local roads would be reduced, local commute times and emergency response times would improve, and accessibility to regional public and private facilities and services would be improved. The Proposed Modified Project would maintain access to businesses and homes, would not bisect local residential areas or interrupt community cohesion, would not impede the movement of people or goods, and would not limit the accessibility of local emergency services because local roads would pass over or under the interim roadway and the ultimate SR 24 freeway. ADOT has conducted early and continuous outreach, including conducting multiple public meetings and agency stakeholder meetings and sending updated public outreach letters; ADOT will continue outreach to solicit public input as the project proceeds into final design.

With the Proposed Modified Project, additional ROW would need to be acquired along Crismon Road and along Mountain Road, where a portion of the Fujifilm industrial facility currently developed as a driveway and retention basin would be impacted. The overall acreage of ROW needs has been minimized and reduced since the 2011 Final EA, thereby minimizing the magnitude of project impacts where possible. In comparison to the 2011 Selected Alternative, the Proposed Modified Project would require a net reduction of approximately 31.7 acres between Ellsworth Road and Ironwood Road (see Attachment 1 for a summary table and maps of the changes in ROW acquisition needs). Acquisition of any properties would occur in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 US Code [USC] Chapter 61), and its implementing regulations (49 Code of Federal Regulations [CFR] Part 24).

The Proposed Modified Project would not alter the 2011 Final EA finding for environmental justice.

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3.2.3 Mitigation Measures

No mitigation measures for environmental justice were recommended in the 2011 EA. The following mitigation measure is for all land acquisition:

Design Responsibility

- All right-of-way acquisition will be implemented by the Arizona Department of Transportation's Right-of-Way Group in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 US Code Chapter 61).

3.3 Cultural Resources

3.3.1 Existing Conditions

A Class III pedestrian cultural resources survey of the new 13.5 acres of study area was conducted in June 2016. The results are summarized in the report "A Cultural Resources Survey of 13.51 Acres for Interim Phase II of the State Route 24 Gateway Freeway, City of Mesa, Maricopa County, Arizona." No cultural resources were identified.

3.3.2 Environmental Consequences

Although no cultural resources were identified during the recent survey of the new 13.5 acres of study area, cultural resources were previously identified within other portions of the APE. Because of previously identified cultural resources within the APE as a whole, the project finding of effect continues to be "adverse effect." To address the Proposed Modified Project and the results of the Class III survey findings within the new 13.5 acres, FHWA and ADOT consulted with appropriate parties per Section 106 of the National Historic Preservation Act of 1966. Consulted parties included Arizona State Historic Preservation Office (SHPO), Arizona State Land Department (ASLD), Arizona State Museum, City of Mesa, US Army Corps of Engineers, Federal Aviation Administration, Ak-Chin Indian Community, Gila River Indian Community, Hopi Tribe, Pascua Yaqui Tribe, Salt River Pima-Maricopa Indian Community, San Carlos Apache Tribe, Tohono O'odham Nation, Yavapai-Apache Nation, and Yavapai Prescott Indian Tribe on the updated area of potential effect and the finding of "adverse effect" on December 12, 2016 and September 1, 2017. Additionally, because the current guidelines to consult with all of the Four Southern Tribes when one of them is a consulting party was not in place in 2010 when the programmatic agreement was executed, FHWA and ADOT invited the Ak-Chin Indian Community, the Salt River Pima Maricopa Indian Community, and the Tohono O'odham Nation to participate in the programmatic agreement during the December 2016 consultation. No response was received from the Ak-Chin Indian Community, the Salt River Pima Maricopa Indian Community, or the Tohono O'odham Nation regarding the December 2016 consultation or the request to participate in the programmatic agreement. No update has been made to the programmatic agreement since it was executed by FHWA, SHPO, and ADOT in 2010. Concurrences on the continuing Section 106 consultation and finding of

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“adverse effect” were received from SHPO, ASLD, City of Mesa, Hopi Tribe, San Carlos Apache Tribe, and Tohono O’odham Nation at the time of this document (see Attachment 3).

The Proposed Modified Project would not have any additional impacts to cultural resources and would not alter the 2011 Final EA finding for cultural resources.

3.3.3 Mitigation Measures

There are no recommended mitigation measures for cultural resources from the Proposed Modified Project. The mitigation measures for cultural resources from the 2011 EA have not been modified and would apply to the Proposed Modified Project. See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

3.4 Section 4(f) Resources

3.4.1 Existing Conditions

Since the 2011 EA, the City of Mesa has planned additional pathways within ¼ mile of the study area (see Figure 4). The City of Mesa 2040 Transportation Plan (City of Mesa 2014b) includes planned shared-use pathways along SR 202L within the City limits and along Signal Butte Road from the City’s southern boundary to Pecos Road, adjacent to and south of the study area. Additionally, during development of the Proposed Modified Project, the City of Mesa notified ADOT that they were planning an additional shared-use pathway not shown in the City of Mesa 2040 Transportation Plan that would extend along SR 24 between Ellsworth Road and Meridian Road (see Figure 4). The City of Mesa asked that the project design accommodate that future shared-use pathway within the SR 24 corridor. The City of Mesa indicated that the pathway may be constructed and opened for use prior to the ultimate construction of SR 24.

3.4.2 Environmental Consequences

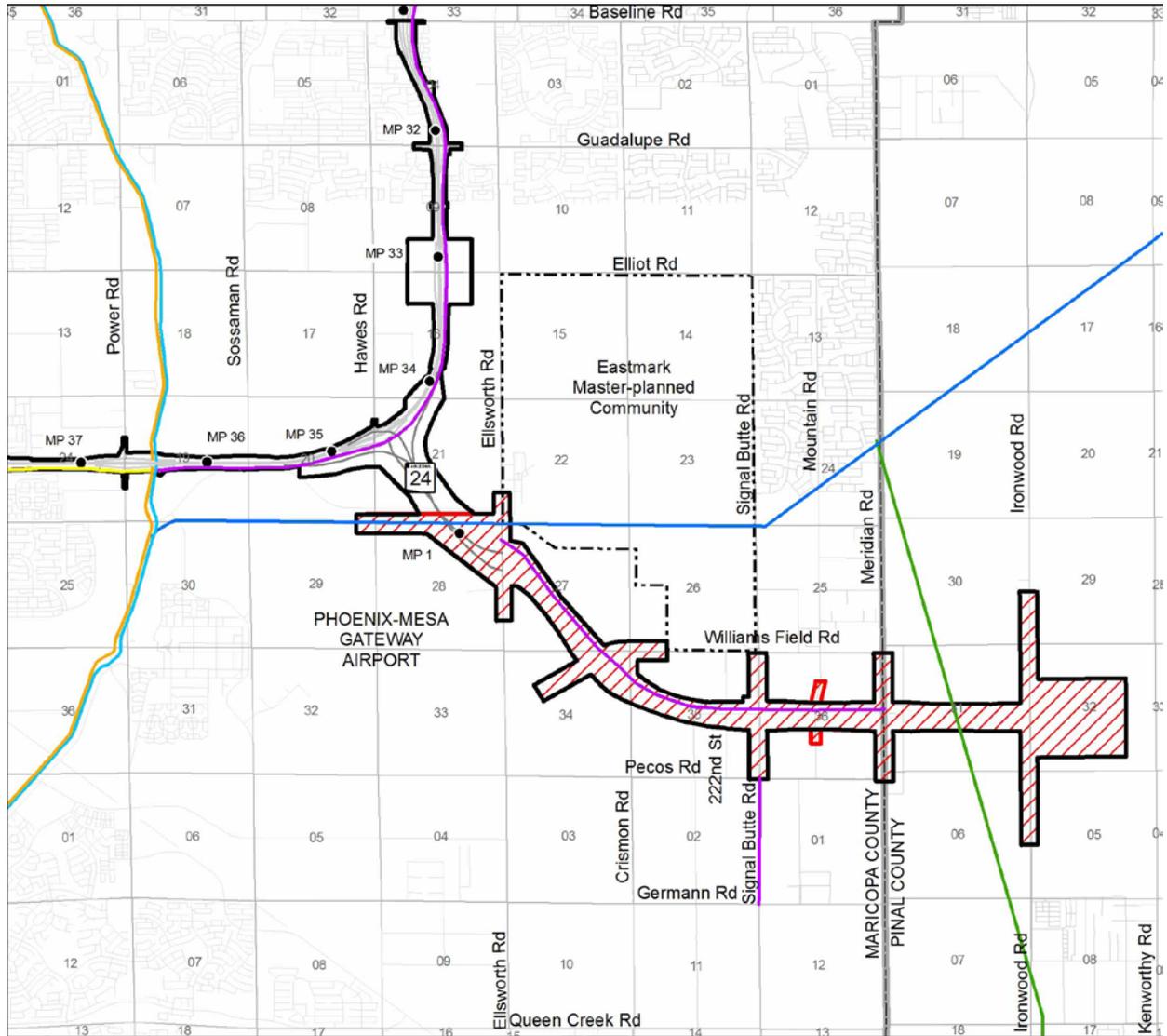
In coordination with the City of Mesa and in response to their request, the Proposed Modified Project would accommodate a shared-use pathway within the proposed new ROW. The area north of the SR 24 alignment and the proposed drainage channel maintenance road, within the new ROW boundary between Ellsworth Road and Ironwood Drive, has been set aside for a future pathway. However, since the City of Mesa share-use pathway would be jointly developed with SR 24, the requirements of Section 4(f) would not apply to the subsequent use of the reserved area for its intended transportation purpose. It is understood that any future highway or transportation needs that require use of the pathways within ADOT ROW would not constitute a use of land subject to the provisions of Section 4(f) of the Department of Transportation Act of 1966 (as amended; 49 USC 303). The planned City of Mesa shared-use pathway would be allowed to be in ADOT ROW where the primary purpose is a transportation facility. Therefore, the portion of the planned pathway within the ADOT ROW would not be protected under Section 4(f). The area reserved for the future City of Mesa pathway would be seeded

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upon completion of the Proposed Modified Project if the pathway is not yet constructed by the City of Mesa. An Intergovernmental Agreement has not yet been completed but will be initiated in early 2018 to identify City of Mesa and ADOT responsibilities regarding the pathway.

As with the 2011 Selected Alternative, the Proposed Modified Project would not result in direct or constructive use of the Gilbert Central Trail (existing or proposed segments), Roosevelt Water Conservation District (RWCD) Canal, or planned Maricopa Trail and no measures to minimize harm are required. In addition, the future construction of the planned Powerline Floodway Trail, planned Pinal County Trail, and newly identified planned City of Mesa shared-use pathways would not be impeded or inhibited by the Proposed Modified Project. Details to maintain the continuity of the planned trails and pathways would be determined during future final design as needed.

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Source: Arizona Transportation Information System GIS Coverage (2013)

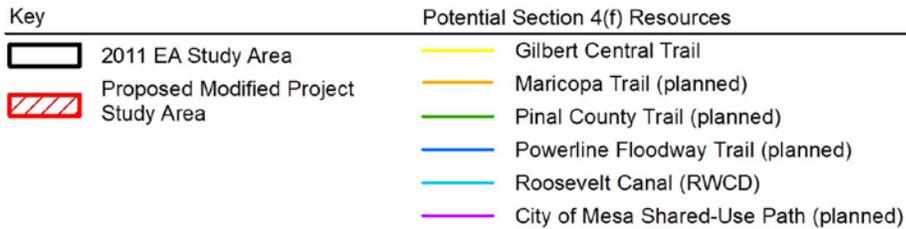


Figure 4. Section 4(f) resources map

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The Proposed Modified Project would not have any additional impacts to Section 4(f)-protected resources and would not alter the 2011 Final EA finding for Section 4(f) resources.

3.4.3 Mitigation Measures

The mitigation measures for Section 4(f) resources from the 2011 EA have not been modified and would apply to the Proposed Modified Project. The following additional mitigation measure is recommended for Section 4(f) resources:

Design Responsibility

- During final design, the Arizona Department of Transportation will design the State Route 24 freeway to maintain the continuity of the Gilbert Central Trail, Roosevelt Water Conservation District (RWCD) Canal, planned Maricopa Trail, planned Powerline Floodway Trail, planned Pinal County Trail, and planned City of Mesa shared-use pathways where they intersect project area.

See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

3.5 Air Quality

3.5.1 Existing Conditions

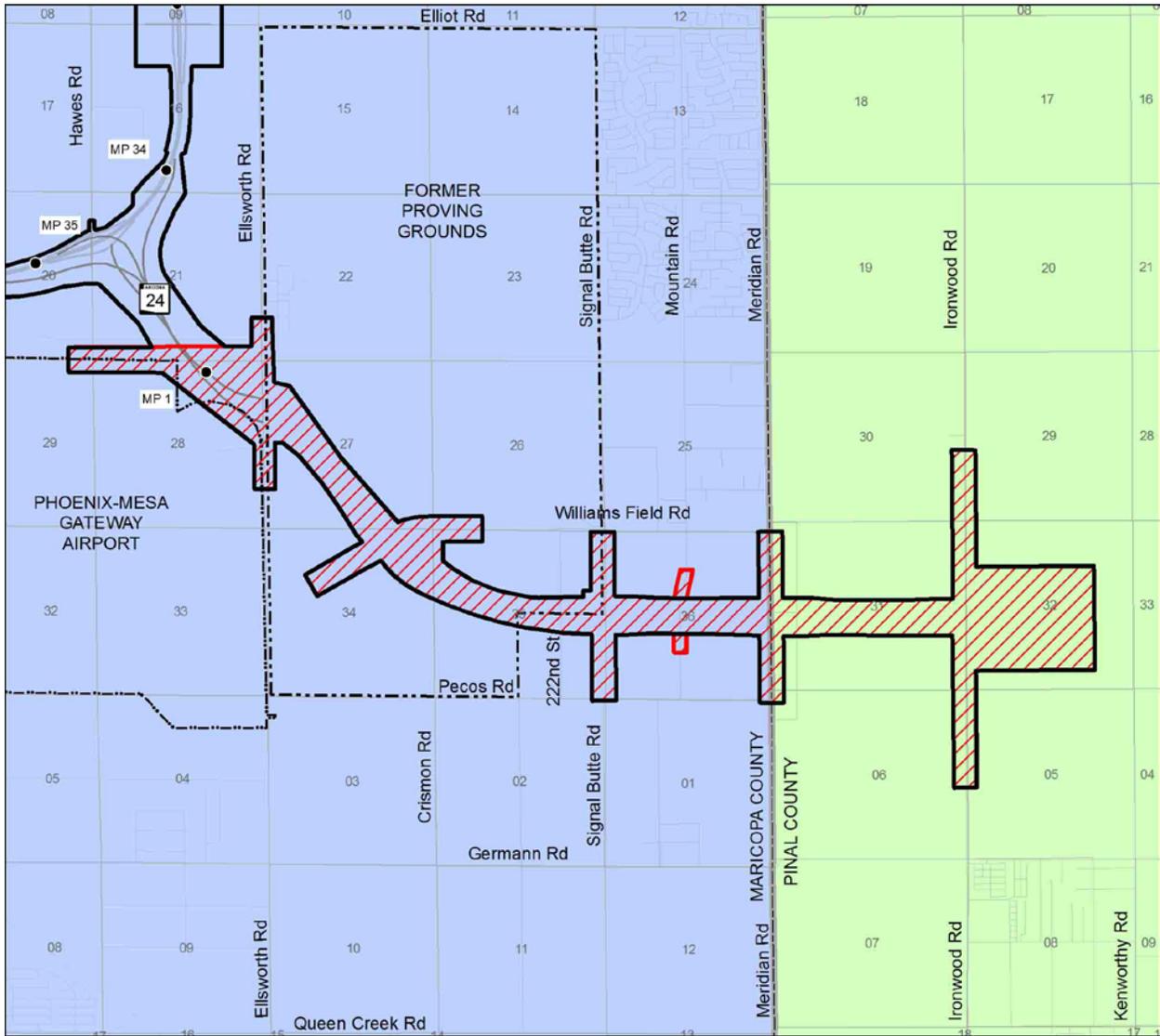
To support the 2011 Final EA, the project was evaluated for potential air quality impacts in the 2010 *Air Quality Assessment SR 802: Williams Gateway Freeway (SR 202L – Ironwood Road)* (2010 Air Quality Assessment). Since the completion of the 2010 Air Quality Assessment, the following updates have occurred that may affect the potential air quality impacts:

- The project design concept and scope has been modified
- A portion of Pinal County was designated as the West Pinal Moderate Nonattainment Area for particulate matter 10-microns in diameter or less (PM10)
- New guidance from FHWA has been released for Mobile Source Air Toxics (MSATs)
- New Transportation Conformity Rule PM2.5 and PM10 Amendments and new emission model has been release by Environmental Protection Agency (EPA)
- Applicable State Implementation Plans (SIPs) have been updated

PM10 Nonattainment Area Updates

Since the 2011 EA, the portion of the study area within a PM10 nonattainment area was increased and both the Maricopa County and the Pinal County portions of the study area are now within a nonattainment area for PM10 (see Figure 5). On May 31, 2012, the EPA designated a portion of Pinal County as the West Pinal Nonattainment Area for 24-hour PM10; the designation became effective July 2, 2012. EPA classified the nonattainment area as moderate. The West Pinal PM10 Nonattainment Area is located in Central Arizona, within a basin between the Phoenix and Tucson metropolitan areas, and covers approximately 1,326 square miles in the western half of Pinal County.

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Source: Arizona Transportation Information System GIS Coverage (2013);
US EPA Region 9 AIR Division

Key

-  2011 EA Study Area
-  Proposed Modified Project Study Area
-  Phoenix (Maricopa County) PM10 Nonattainment Area
-  West Pinal PM10 Nonattainment Area



Figure 5. PM10 Nonattainment Areas

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Transportation Conformity Rule Updates

In December 2010, the EPA issued the PM_{2.5} and PM₁₀ Amendments to the Transportation Conformity Rule, which required that all PM hot-spot analyses must be quantitative rather than qualitative. This requirement went into effect in December 2012, after a two-year grace period. A November 2015 update required the use of the MOVES2014 model (or later approved version) effective October 7, 2016. Since the study area is located within PM₁₀ nonattainment areas, the project was evaluated to determine if a PM₁₀ hot-spot analysis was required; the study area is not located within a PM_{2.5} nonattainment or maintenance area. The results are discussed in Section 3.5.2 Environmental Consequences below.

On March 14, 2012, EPA published the Transportation Conformity Rule Restructuring Amendments, which restructured sections 40 CFR 93.109 and 93.119 so that they apply to any new or revised federal air quality standard. The amendments to the rule also allow any nonattainment area that EPA determines has clean air quality data to satisfy transportation conformity test requirements by using on-road emissions from the most recent year of clean data as the budgets for that standard rather than using the interim emissions tests per 40 CFR 93.119 (EPA, 2012a).

Project Conformity

Due to the changes since the 2011 EA as noted above, the project was reevaluated to ensure that it maintains conformity with the SIPs. The Proposed Modified Project study area is located in the Phoenix (Maricopa County) Serious PM₁₀ Nonattainment Area, West Pinal Moderate PM₁₀ Nonattainment Area, Phoenix-Mesa (Maricopa County) Moderate Eight-Hour Ozone Marginal Nonattainment Area, and Phoenix (Maricopa County) Carbon Monoxide (CO) Maintenance Area (see Figure 5 and Figure 6). Therefore, the following SIPs apply to the study area:

- 2012 *Five Percent Plan for the Maricopa County Nonattainment Area*
 - Approved by EPA on June 10, 2014; effective July 10, 2014
- 2015 *West Pinal Moderate PM₁₀ Nonattainment Area Plan* (PENDING)
 - The West Pinal Moderate PM₁₀ Nonattainment Area Plan is not yet approved by EPA.⁵
- 2013 *Carbon Monoxide Maintenance Plan for the Maricopa County Area*
 - Approved by EPA on March 3, 2016; effective April 4, 2016
- 2014 *Maricopa Eight-Hour Ozone Marginal Nonattainment Maintenance Area Plan*
 - Approved by EPA on October 16, 2015; effective December 15, 2015⁶

⁵ On December 21, 2015, ADEQ submitted the 2015 West Pinal Moderate PM₁₀ Nonattainment Area SIP to EPA. In January 2017, EPA indicated they will not find to be adequate or approve the 2018 emissions budget in the 2015 West Pinal Moderate PM₁₀ Nonattainment Area SIP. Therefore, the 2018 PM₁₀ budget in that SIP was not included in the 2017 MAG Conformity Analysis. Since there is no emissions budget that has been found to be adequate or approved by EPA, an action/baseline analysis for the Conformity Analysis was performed in accordance with the latest EPA conformity guidance (EPA's *Transportation Conformity Regulations as of April 2012*) (MAG 2017c).

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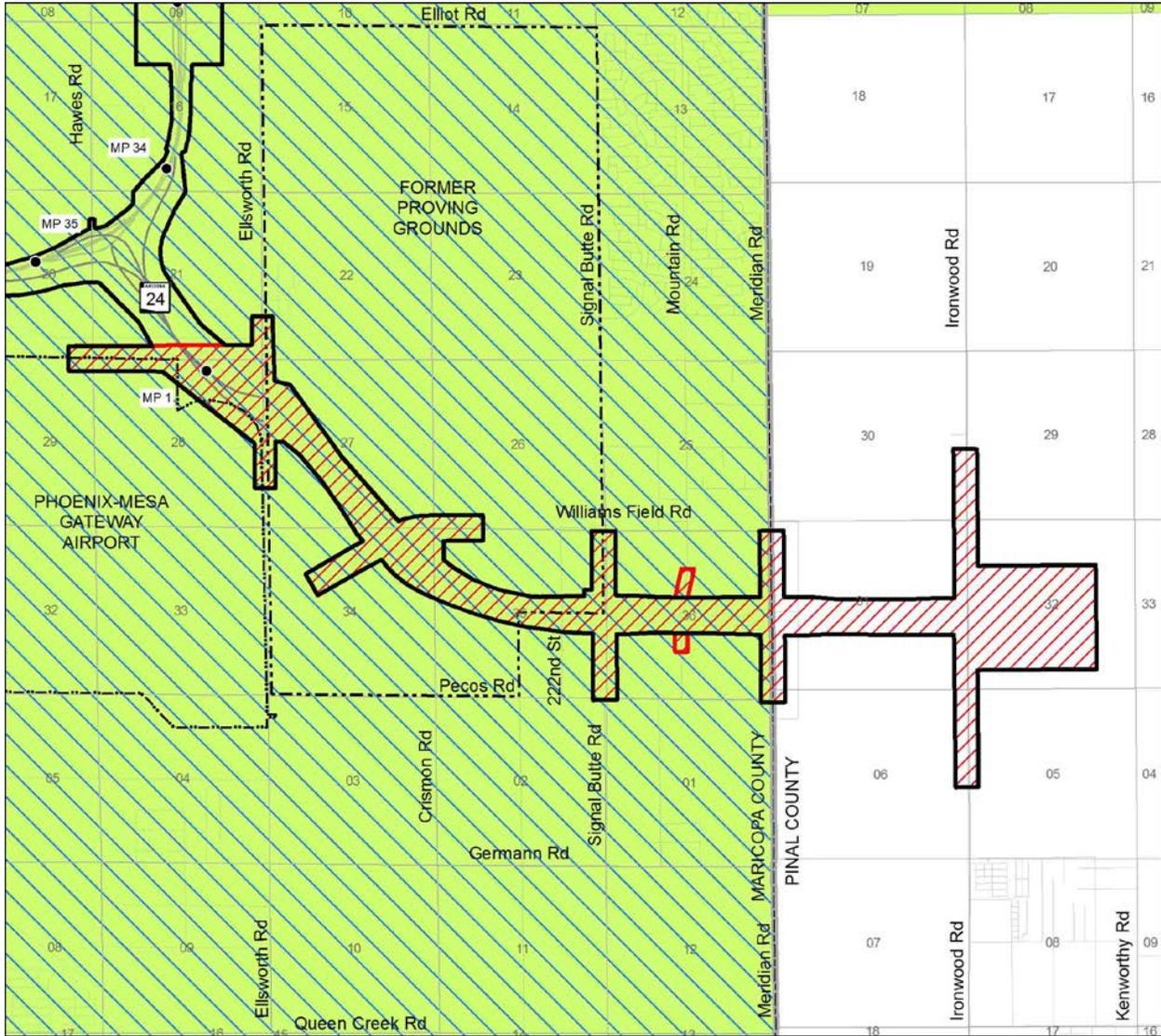
- Note: The MAG 2017 Eight-Hour Ozone Moderate Area Plan for the Maricopa Nonattainment Area was submitted to EPA in December 2016 and is pending approval.

As required under the Clean Air Act (CAA), MAG performs conformity analyses on their transportation improvement programs and regional transportation plans to ensure that transportation projects, programs, and plans do not cause or contribute to violations of the federal air quality standards in Maricopa and Pinal County nonattainment and maintenance areas. The project is listed in the MAG 2040 RTP/TIP and Regional Conformity Analysis as approved by Regional Council on September 27, 2017. The September 2017 MAG Conformity Analysis, which included the Proposed Modified Project, concluded:

- For carbon monoxide, the total vehicle-related emissions associated with implementation of the TIP and RTP for the analysis years 2025, 2035, and 2040 are projected to be less than the approved 2025 emissions budget. The applicable conformity test for carbon monoxide is therefore satisfied.
- For eight-hour ozone, the total vehicle-related volatile organic compound and nitrogen oxide emissions associated with implementation of the TIP and RTP for the analysis year of 2018 are projected to be less than the approved 2008 emissions budgets. In addition, the volatile organic compound and nitrogen oxide emissions for the analysis years of 2025, 2035, and 2040 are projected to be less than the approved 2025 emissions budgets. The applicable conformity tests for eight-hour ozone are therefore satisfied.
- For the PM₁₀ Maricopa County Nonattainment Area, the diesel truck-related emissions associated with implementation of the TIP and RTP for the analysis years of 2025, 2035, and 2040 are projected to be less than the approved 2012 emissions budget and the approved 2006 emissions budget. The conformity test for PM₁₀ is therefore satisfied.
- For the PM₁₀ Pinal County Nonattainment Area, the diesel truck-related emissions associated with implementation of the TIP and RTP for the analysis years of 2018, 2025, 2035, and 2040 the Action Scenario are projected to be less than or equal to the Baseline Scenario. The Interim Emissions conformity test for Pinal County PM₁₀ Nonattainment area is therefore satisfied.

⁶ The EPA strengthened the national ambient air quality standard (NAAQS) for eight-hour ozone from 0.075 parts per million (ppm) to 0.070 ppm on October 1, 2015. However, the Maricopa Eight-Hour Ozone Nonattainment Area is currently designated as a marginal area for the 2008 standard of 0.075 ppm. The EPA proposed implementation requirements for the new 0.070 ppm standard on November 17, 2016 and anticipates finalizing the designations, classifications, and attainment dates for the new standard by October 2017. Transportation conformity would apply one year after the effective date (MAG 2017c). The NAAQS for the remaining criteria pollutants are the same as disclosed in the 2011 EA (EPA 2016).

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Source: Arizona Transportation Information System GIS Coverage (2013);
Arizona Department of Environmental Quality

Key

-  2011 EA Study Area
-  Proposed Modified Project Study Area
-  Phoenix (Maricopa County) CO Maintenance Area
-  Phoenix-Mesa (Maricopa County) Eight-Hour Ozone Nonattainment Area



Figure 6. CO and Ozone Nonattainment Areas

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Motor Vehicle Emissions Simulator (MOVES) Emissions Model and MSAT Guidance Updates

In 2014, the EPA released a major update of the Motor Vehicle Emissions Simulator (MOVES) vehicle emissions model for transportation conformity analyses. Beginning October 7, 2016, the MOVES2014 model (or other approved updates such as MOVES2014a) must be used to conduct emissions analysis for both transportation conformity determinations and for NEPA evaluations. In October 2016, FHWA updated their *Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents* to incorporate the new analysis conducted using MOVES2014a. Based on FHWA's analysis using MOVES2014a, diesel particulate matter (diesel PM) remains the dominant MSAT of concern for highway projects.

The MOVES2014 model incorporates substantial new data for emissions, fleet, and activity developed since the release of MOVES2010, including:

- New emissions data are for light- and heavy-duty vehicles, exhaust and evaporative emissions, and fuel effects;
- Updated vehicle sales, population, age distribution, and vehicle miles travelled (VMT) data; and
- Effects of three new Federal emissions standard rules not included in MOVES2010: Tier 3 emissions and fuel standards starting in 2017 (79 FR 60344), heavy-duty greenhouse gas regulations that phase in during model years 2014-2018 (79 FR 60344), and the second phase of light-duty greenhouse gas regulations that phase in during model years 2017-2025 (79 FR 60344) (FHWA 2016).

Additionally, EPA's issuance of MOVES2014a adds new options for on-road emissions for the input of local VMT, includes minor updates to the default fuel tables, and corrects an error in MOVES2014 brake wear emissions. The change in brake wear emissions results in small decreases in PM emissions, while emissions for other criteria pollutants remain essentially the same as MOVES2014 (FHWA 2016).

FHWA conducted model runs in September 2016 using the MOVES2014a model to estimate total annual MSAT emissions. Based on those model runs, FHWA estimates that, despite the forecasted 45 percent increase in vehicle miles traveled (VMT) from 2010 to 2050, the total annual emissions for the priority MSATs is projected to have a combined reduction of 91 percent for the same time period (see Figure 7).

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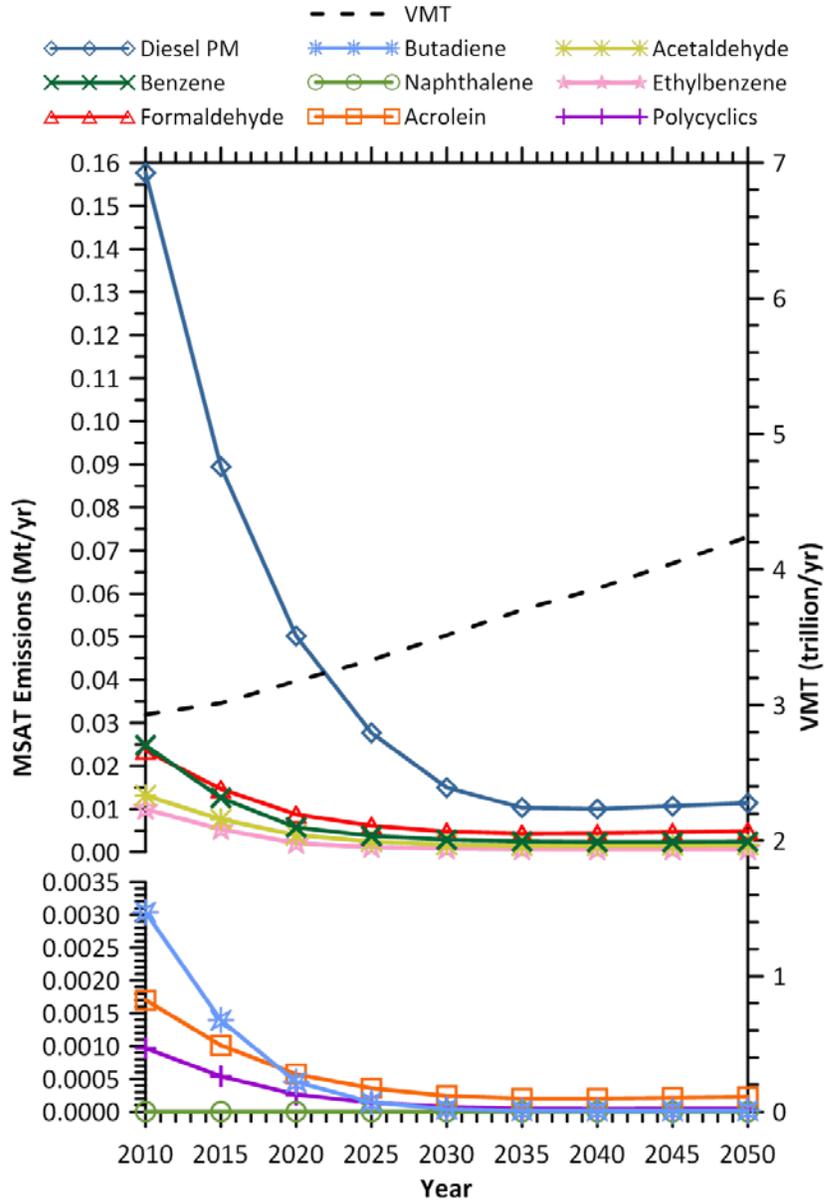


Figure 7. FHWA Projected National MSAT Emission Trends 2010 – 2050, for Vehicles Operating on Roadways Using EPA’s MOVES2014a Model

FHWA notes that trends for specific locations may be different, depending on locally derived information representing VMT, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors. As seen in Figure 7, Diesel PM is the dominant component of MSAT emissions, making up 50 to 70 percent of all priority MSAT pollutants by mass, depending on calendar year.

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3.5.2 Environmental Consequences

Projects in nonattainment and maintenance areas are required to demonstrate that they will not cause or contribute to a localized exceedance of the national ambient air quality standard (NAAQS) for which the area was designated. Since the project design was modified, ADOT reevaluated the current transportation conformity requirements for PM₁₀ using the *Project Level PM Quantitative Hot-Spot Analysis Project of Air Quality Concern (POAQC) Questionnaire* and for CO using the *Project Level CO Hot-Spot Analysis Questionnaire*. The CO Questionnaire determined that the project did not require a quantitative CO hot-spot analysis; no further action is required for conformity since the project level CO hot-spot requirements have been met. Note that the portion of the project in Pinal County is outside of the CO Maintenance Area.

On October 20, 2017, ADOT provided a copy of the POAQC Questionnaire to the following consultation parties: the Environmental Protection Agency (EPA), FHWA, MAG, ADEQ, and the Pinal County Air Quality Department and Maricopa County Air Quality Department as the local air agencies in Pinal and Maricopa Counties (see Attachment 4). A comment was received requesting additional information on trucks at the intersections; this information was included in the Appendix of the questionnaire. There were no objections to the project determination and on November 6, 2017 ADOT concluded interagency consultation by notifying interested parties that this project will proceed as a project that does not require a quantitative PM₁₀ hot-spot analysis under 40 CFR 93.123(b). Based on the reevaluation of conformity and interagency consultation, it was determined that the Interim Improvements portion of the Proposed Modified Project is not a project of air quality concern for PM₁₀, and no quantitative or qualitative PM₁₀ hot-spot analysis is needed.

The proposed Interim Improvements between Ellsworth Road and Ironwood Road were determined to be in conformity since they are included in the conforming 2017 MAG 2040 RTP, with consistent design concept and scope, and they comply with and do not interfere with the implementation of the control measures included in the applicable SIPs. The questionnaires and associated interagency consultation only address the fiscally-constrained portion of the Proposed Modified Project, which includes the construction of the Interim Improvements between Ellsworth Road and Ironwood Road. Potential impacts to air quality due to the construction of the Ultimate Improvements as proposed under the Proposed Modified Project will be addressed upon inclusion of the proposed Ultimate Improvements in a fiscally-constrained TIP and Regional Conformity Analysis. Evaluation of the proposed Ultimate Improvements will occur prior to construction of the ultimate build-out condition.

Per FHWA's updated *Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*, it was determined that the Proposed Modified Project is a project with Low Potential for MSAT Effects since the 2040 design year traffic is projected to be less than 140,000 to 150,000 annual average daily traffic (AADT). Therefore, a qualitative assessment of MSAT emissions projections was conducted.

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Regardless of the proposed changes to the 2011 Selected Alternative, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent from 2010 to 2050 (*Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*, FHWA, October 12, 2016). Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in virtually all locations.

In sum, under the Proposed Modified Project in the 2040, it is expected there would be reduced MSAT emissions in the immediate area of the project due to the reduced VMT associated with more direct routing, and due to EPA's MSAT reduction programs.

As stated in the 2011 EA, future MSAT emissions would be significantly lower than current emissions due to stricter controls on vehicle emissions. Construction activity may generate a temporary increase in MSAT emissions, but construction mitigation with strategies that reduce engine activity or reduce emissions per unit of operating time will be evaluated during final design.

Similar to the 2011 Selected Alternative, the Proposed Modified Project would reduce regional impacts of air quality in the long-term, but there is potential for short-term exceedances of CO and PM10 during construction. The Proposed Modified Project would not have any additional impacts to air quality compared to the 2011 Final EA and would not alter the 2011 Final EA finding for air quality. The project is consistent in design concept and scope with the project as defined in the MAG 2040 RTP/TIP.

3.5.3 Mitigation Measures

There are no recommended mitigation measures for air quality from the Proposed Modified Project. The mitigation measures for air quality from the 2011 EA have not been modified and would apply to the Proposed Modified Project. See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

3.6 Noise

A Final Noise Analysis Technical Report for this project was completed in May 2010 as part of the 2011 EA. The noise level impact determination used in the analysis was based on the December 2005 ADOT Noise Abatement Policy (NAP). However, in 2017 ADOT developed the Noise Abatement Requirements (NAR) in coordination with FHWA Arizona Division to comply with the noise regulations and address the requirements stipulated by 23 CFR 772 - Procedures for Abatement of Highway Traffic Noise and Construction Noise. Additionally, FHWA has issued a guidance memorandum titled *Highway Traffic Noise - Guidance on Pavement as a Noise Abatement Measure* (FHWA-HEP-16-015) reiterating that regulations in 23 CFR 772 do not allow for the use of pavement type or surface texture as a noise

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abatement measure (FHWA 2017a). In order to address these regulatory changes, as well as updates to the predicted traffic volumes for the project area, the noise analysis was updated and the results are presented in the October 2017 Noise Analysis Technical Memorandum (see Attachment 5).

The 2017 ADOT NAR provisions that may be considered relevant for this EA reevaluation are as follows:

- Establishing approach level when determining a traffic noise impact as 1 A-weighted decibels (dBA) less than FHWA Noise Abatement Criteria (NAC), as defined under 23 CFR 772.11(e).
- The maximum reasonable abatement cost-per-benefited-receptor is \$49,000, with barrier costs calculated at \$35 per square foot or \$85 per square foot if constructed on a structure.
- Maximum height of noise barrier is increased up to 24 feet, in specific circumstances.
- More details for representation of noise sensitive areas (e.g., Activity Category C sites such as schools) in modeling, and field noise measurements.
- Provides methodology improvements incorporating the best practices to accurately, consistently, and efficiently model traffic noise in line with the Recommended Best Practices for the Use of the FHWA Traffic Noise Model (TNM) (FHWA 2017b); it aligns its provisions to accommodate future implementation and capabilities of FHWA Traffic Noise Model (TNM) 3.0, and streamlining of the traffic noise analysis process in line with ADOT continuous improvement efforts.
- For a noise barrier to be considered there are number of factors that are all to be collectively met, and in this order:
 - Engineering feasibility factors (it does not pose a potential safety hazard and does not hinder access to properties, drainage, utilities, and maintenance)
 - Acoustic feasibility factor (it achieves at least 5 dBA traffic noise reduction at 50% of impacted receptors, i.e. residences)
 - Reasonableness criteria
 - provides 7 dBA reduction for >50% of first row benefited receptors (i.e. residences - recipient of an abatement measure that receive a noise reduction of at least 5 dBA)
 - cost effectiveness (cost of building barrier is under \$49,000 per benefited receptor)
 - viewpoint of property owners (property owners of benefited receptors may choose to have a barrier built, or not built)

The updated noise analysis in the Noise Analysis Technical Memorandum has taken the following into consideration:

- The provisions of the 2017 ADOT NAR,
- The most current information regarding existing and planned land developments in the project vicinity, and
- Traffic conditions for 2025 and 2040.

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ADOT NAR requires that “worst-case” noise conditions are used in determining existing and predicting future traffic noise levels from highway projects, and that provision was applied here to SR 24. Although the worst-case predicted noise levels are not likely to be prevailing, using worst-case conditions will ensure that any potential impact is captured and eventual noise abatement measure determination is the appropriate one.

3.6.1 Existing Conditions

Changes to the existing and planned land use within and adjacent to the study area since the 2011 EA are described in the Land Ownership and Land Use section above. Land use relevant to potential noise impacts are also discussed in the Noise Analysis Technical Memorandum. The current land use information was used in the updated analysis of potential noise impacts.

3.6.2 Environmental Consequences

The roadway geometry data used for the noise modeling effort, such as roadway width, lane width, and horizontal and vertical coordinates, was based on the electronic roadway geometry data and plans provided within the 2017 Final DCR. For the interim condition under the Proposed Modified Project, there will be two general-purpose travel lanes in the eastbound and westbound directions along SR 24 between Ellsworth Road and Ironwood Road. Between the TIs, the interim travel lanes are modeled on the same horizontal alignment as the two outside lanes designed for the Ultimate Improvements. At the TIs, the interim travel lanes would follow the entrance and exit ramp alignments designed for the Ultimate Improvements.

ADOT NAR provides guidelines on the traffic volumes for use in the noise model, in which a “worst-case” approach should be used. In general, this should reflect the LOS C traffic condition, which is the free-flowing traffic volumes for a given travel lane of a roadway configuration at the posted speed limit to capture the peak noise hour and modeled with the traffic moving at 5 miles per hour (mph) above the posted speed limit. If no other traffic information is available, then the peak hourly volume should be 10% of the predicted annual average daily traffic (AADT) volume, which is provided in the September 2017 Traffic Analysis Report. The traffic volumes are predicted to increase substantially, except the section between Meridian Road and Ironwood Road. The noise analysis reflects traffic conditions for both 2025 and 2040.

The predicted noise levels along the SR 24 alignment in the vicinity of Ellsworth Road, Williams Field Road, Signal Butte Road, and Meridian Road are less than 64 dBA outside the contour line 400 to 500 feet from the edge of the roadway. These noise levels are not anticipated to increase substantially (15 dBA or higher) in comparison to the existing noise levels. For the Proposed Modified Project, the noise levels are predicted to be highest where the two proposed eastbound travel lanes get closer to the proposed westbound travel lanes between the TIs from Ellsworth Road and Ironwood Road. These noise

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levels are provided in Table 3 below. Modeling results determined that existing residences are not predicted to be impacted, as defined in ADOT NAR.

TABLE 3. SUMMARY OF NOISE MODELING RESULTS

Segment	Ellsworth Rd – Signal Butte Rd		Signal Butte Rd – Meridian Rd		Meridian Rd – Ironwood Road	
Year	2025	2040	2025	2040	2025	2040
All Scenarios (L_{eq1hA})	53-64	57-65 (67) ⁽¹⁾	58-61	56-64	58-65	57-64

(1)- Receptor R-1-SB NW, in Option A-2040, if not acquisitioned

Higher values represent noise levels at or in proximity of ROW, for land planning purposes.

dba – A-weighted decibel

The Proposed Modified Project study area has land use categorized as Activity Category B (residential), E (offices), F (industrial, warehousing and agriculture), and G (undeveloped areas). These Activity Categories were covered by modeled receivers to provide noise levels at the locations to local authorities in line with the principles of noise-compatible land use planning. The predicted noise levels for the Proposed Modified Project along SR 24 between Ellsworth Road and Ironwood Road are less than 66 dBA, and are not anticipated to increase substantially (15 dBA) above the existing noise levels. Isolated property located right on the ROW line northwest of Signal Butte TI may experience noise levels that are considered as an impact in line with ADOT NAR (i.e., 67 dBA) for the Interim - Option A condition in 2040, but not in the Ultimate build-out condition. Although the property is likely to be acquisitioned, a noise barrier was considered to ensure the consideration of noise abatement measures, in line with ADOT NAR. To meet the noise reduction design goal (7 dBA), the barrier would need to be located at the ROW line, and be at least 400 feet long and 8 to 10 feet high. The cost of such a barrier is estimated at \$119,184, which is above the \$49,000 cost-per-benefited-receptor (CPBR) criterion as prescribed by ADOT NAR.

No noise barriers are recommended for the Proposed Modified Project because they do not qualify for the ADOT NAR “reasonableness” criteria for mitigation. Further noise analysis might be needed if design elements were to change during the final design stages.

The Proposed Modified Project would not result in impacts to receivers that warrant mitigation per ADOT NAP, although some receivers would be temporarily affected by construction noise. The Proposed Modified Project would not have any additional noise impacts that were not disclosed in the 2011 EA and would not alter the 2011 Final EA finding for this resource.

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3.6.3 Mitigation Measures

The mitigation measures for noise from the 2011 EA have not been modified and would apply to the Proposed Modified Project. The following additional mitigation measure is recommended for noise:

Environmental Planning Responsibility

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

See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

3.7 Visual resources

3.7.1 Existing Conditions

The visual character of the Proposed Modified Project study area varies from urban to rural and has not changed noticeably since the 2011 EA.

3.7.2 Environmental Consequences

The Proposed Modified Project includes changes to the vertical alignment that would cause the ultimate freeway to be more visible along select segments. Above-grade structures at Signal Butte Road, Mountain Road, and Meridian Road are proposed in replacement of the below-grade or at-grade structures at these locations included in the 2011 Selected Alternative. The Proposed Modified Project would create additional noticeable built features in the environment but would not cause a change in visual character that is substantially different from the Selected Alternative as described in the 2011 Final EA. The visual impacts would be limited in the short term since the interim roadway travel lanes would be at-grade and the construction of the elevated TI bridges would not occur until the ultimate freeway build-out anticipated after 2027, with the exception of the Mountain Road bridge. Visibility of the corridor would decrease with distance, especially once future planned residential and industrial development occurs in the vicinity of the study area. Therefore, the Proposed Modified Project would not alter the 2011 Final EA finding for this resource.

3.7.3 Mitigation Measures

There are no recommended mitigation measures for visual resources from the Proposed Modified Project. The mitigation measures for visual resources from the 2011 EA have not been modified and would apply to the Proposed Modified Project. See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

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3.8 Section 404/401 of the Clean Water Act and Pollution Discharge Elimination System

3.8.1 *Existing Conditions*

Fieldwork and the initial documentation for a Clean Water Act Section 404 preliminary jurisdictional delineation was completed in 2015 and 2016 for the Proposed Modified Project study area since the area had not previously been surveyed during preparation of the 2011 EA. A ground survey to evaluate the presence of waters of the United States (Waters) in the Proposed Modified Project study area (i.e., survey area) was conducted by Jeremy Casteel with Logan Simpson on November 23, 2015; January 28, 2016; February 5, 2016; August 3, 2016, and December 28, 2016. The survey area has little topographic relief and is dominated by sheet flow conditions with few identifiable drainage features. All irrigation canals, including the Powerline Floodway, observed within the survey area were determined to be non-jurisdictional. All the identified natural drainage features in this survey area are ephemeral, flowing only during brief periods immediately following storm events and were determined to be swales or erosional features without clear ordinary high water mark (OHWM) characteristics. The 0.14-acre patch of wetland noted in the 2011 EA was not observed during the 2015 and 2016 ground surveys. Therefore, no identifiable potential jurisdictional Waters, including wetlands or special aquatic sites, were identified within the survey area.

The updated 2016 list of Outstanding Arizona Waters (Arizona Administrative Code R18-11-112[G]) and Arizona's 2012/2014 303(d) List of Impaired and Not Attaining Waters (ADEQ 2016) were reviewed to determine whether any unique or impaired waters are present. No Outstanding Arizona Waters or waters designated as non-attaining or impaired by Arizona Department of Environmental Quality (ADEQ) or Environmental Protection Agency (EPA) occur in or within 1 mile of the study area.

3.8.2 *Environmental Consequences*

No jurisdictional Waters regulated under Section 404 of the Clean Water Act were observed in the Proposed Modified Project study area during the preliminary jurisdictional delineation ground survey in 2015 and 2016. Therefore, no impacts to jurisdictional Waters are anticipated to occur and no Section 404 permit or Section 401 certification would be required for ground-disturbing activities located in the Proposed Modified Project study area. Any impacts to Waters anticipated in the 2011 EA occurred during construction of the Phase I Interim Improvements that were completed in May 2014.

Since greater than 1 acre of ground disturbance would occur for the Proposed Modified Project, a Section 402 Arizona Pollutant Discharge Elimination System (AZPDES) permit and associated Storm Water Pollution Prevention Plan (SWPPP) would be needed for construction activities. The contractor would be required to implement best management practices and the SWPPP to ensure protection of water quality. The Proposed Modified Project would have no anticipated impacts to jurisdictional

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Waters and negligible impacts on water quality. The Proposed Modified Project would not alter the 2011 Final EA finding for this resource.

3.8.3 Mitigation Measures

There are no recommended mitigation measures for compliance with Section 404/401 and 402 of the Clean Water Act from the Proposed Modified Project. The mitigation measures for Section 402 of the Clean Water Act from the 2011 EA have not been modified and would apply to the Proposed Modified Project. The mitigation measure for compliance with Section 404/401 of the Clean Water Act from the 2011 EA has been modified as follows since no potential waters of the US are present within the Proposed Modified Project study area:

Environmental Planning Responsibility

- Prior to construction of improvements along State Route 202 Loop, the Arizona Department of Transportation will reevaluate the project area for the presence of potential waters of the United States and determine the need for a US Army Corps of Engineers for a Clean Water Act Section 404 permit. No work will occur within jurisdictional waters of the United States until the appropriate Clean Water Act Section 401 certification and 404 permits are obtained.

See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

3.9 Biological resources

3.9.1 Existing Conditions

A Biological Resources Reevaluation technical memorandum was prepared for the study area in March 2017 (see Attachment 6). Existing conditions for threatened and endangered species, critical habitat, other special status species, migratory birds, invasive species, protected native plants, and wildlife movement and corridors are detailed in the memorandum and summarized below.

The Biological Resources Reevaluation concluded the following:

- There is no suitable habitat or designated critical habitat for any threatened, endangered, proposed, or candidate species in the study area and no Endangered Species Act-listed species were observed during the site visit on August 3, 2016.
- Three special status species listed as Species of Greatest Conservation Need in the Arizona Game and Fish Department's (AGFD's) 2012 State Wildlife Action Plan (AGFD 2012) may be present in the study area: the Sonoran desert tortoise (*Gopherus morafkai*), western burrowing owl (*Athene cunicularia hypugaea*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*).
- Numerous species of migratory birds are also present in the study area. Inactive bird nests were observed during the August 3, 2016 site visit.

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- Several invasive species are present, including tamarisk (*Tamarix* sp.), Mediterranean grasses (*Schismus* spp.), Russian thistle (*Salsola tragus*), and buffelgrass (*Pennisetum ciliare*).
- Protected native plant species present in the study area include velvet mesquite trees (*Prosopis velutina*), paloverde trees (*Parkinsonia* spp.), ironwood trees (*Olneya tesota*), and crucifixion thorn (*Castela emoryi*).
- No priority wildlife linkages were identified in the study area.

As of 2014, the Tucson Shovel-nosed Snake is no longer a candidate for federal listing under the Endangered Species Act. The snake is considered a USFWS Species of Concern but was not identified as potentially occurring within the project area in USFWS's updated Information, Planning, and Conservation (IPaC) list. Therefore, the Tucson Shovel-nosed Snake was not addressed in the Biological Resources Reevaluation or the revised mitigation measures.

3.9.2 Environmental Consequences

The effects of the Proposed Modified Project on wildlife movements would be similar to those described in the 2010 BE and 2011 Final EA, except that a smaller overall area would be impacted due to the approximately 31.7-acre reduction in ROW that would need to be acquired. Construction of the project would result in approximately 31.7 fewer acres of ground disturbance as compared to the 2011 Selected Alternative. As noted in the 2011 EA, the majority of general vegetation and wildlife species present in the area are widespread and relatively common, and the project would not cause a substantial loss of high-quality wildlife habitat.

The Proposed Modified Project would not impact Endangered Species Act-listed threatened, endangered, proposed, or candidate species since no suitable habitat or designated critical habitat for any listed species is present in the study area. Potential adverse impacts on protected biological resources including special status species (i.e., Sonoran desert tortoise, western burrowing owl, and pocketed free-tailed bat), migratory birds, and protected native plants would be reduced by following the proposed mitigation measures. Mitigation measures would also prevent the spread of invasive species during construction.

As part of the additional agency scoping that was conducted for this reevaluation, a letter describing the project was sent to the AGFD to inform them of the Proposed Modified Project and to solicit comments. The AGFD's responded with a letter requesting a meeting with ADOT to clarify how this project integrates with the ongoing North-South Corridor Study. AGFD's stated concerns also included impacts to wildlife travel corridors along drainages, potential impacts to western burrowing owls, replacement of wildlife habitat to ensure no net loss, and maintaining access for recreational hunting. ADOT has committed to further coordination with the AGFD during the planning phase of this project. The ADOT Biologist contacted AGFD informing them that the project is in the early planning stages and all available information was provided to AGFD. ADOT will continue to coordinate with AGFD and will arrange for a meeting when project updates become available regarding the design concept.

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The effects determinations made in the 2010 BE and 2011 Final EA for threatened, endangered, proposed, and candidate species and other special status species were supported as a result of the Biological Resources Reevaluation. There have been no changes in the project plan or refinements in design that would result in impacts to biological resources that were not previously analyzed or disclosed in the 2010 BE and 2011 Final EA. The Proposed Modified Project would not have any additional biological impacts and would not alter the 2011 Final EA finding for this resource.

3.9.3 Mitigation Measures

There are no recommended mitigation measures for biological resources from the project scope item changes in the Proposed Modified Project. However, the mitigation measures for biological resources from the 2011 EA have been revised or supplemented to reflect current agency protocols and/or updated resource information.

Mitigation measures for Sonoran Desert tortoises, western burrowing owls, invasive species, and protected native plants were carried forward from the 2011 EA but were updated to reflect current ADOT protocols. Mitigation related to the Tucson Shovel-nosed Snake from the 2011 EA was removed since the species is no longer a candidate for federal listing and was not identified as potentially occurring within the project area in USFWS's updated IPaC list. Since inactive bird nests were observed during the August 3, 2016 site visit, mitigation measures for migratory birds are now included that provide for preconstruction searches and the avoidance of active bird nests during construction. Additionally, AGFD requested a meeting with ADOT during the recent agency scoping efforts, and ADOT has committed to arrange a meeting with AGFD once project updates become available. The mitigation measures below for biological resources would supersede the biological resource mitigation measures in the 2011 Final EA:

Design Responsibility

- All disturbed soils not paved that will not be landscaped or otherwise permanently stabilized by construction will be seeded using species native to the project vicinity.

Arizona Department of Transportation Environmental Planning Responsibility

- During final design, the Arizona Department of Transportation Environmental Planning will arrange a meeting with the Arizona Game and Fish Department to discuss any concerns that Arizona Game and Fish Department may have regarding the project.

Arizona Department of Transportation Central District Responsibilities

- If the contractor encounters any Sonoran desert tortoise during construction, the Engineer will report all encountered tortoises (live, injured, or dead) to the Arizona Department of Transportation Environmental Planning Biologist (email: jfife@azdot.gov) within 24 (twenty-four) hours of the encounter using the attached Arizona Department of Transportation Sonoran

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Desert Tortoise Observation Form. Photos should be taken of tortoises encountered and included in the report, if possible.

- If burrowing owls or active burrows are identified during the pre-construction surveys or during construction, no construction activities will take place within 100 feet of any active burrow until the owls are relocated.
- If any active bird nests cannot be avoided by vegetation clearing or construction activities, the Engineer will contact the Environmental Planning Biologist (602.712.7134 or 602.712.7767) to evaluate the situation.
- If active bird nests are identified within the project limits, construction activities will avoid disturbing any active nest. Avoidance areas, if necessary, will be marked in the field with temporary fencing or t-posts with flagging by the approved biologist. The Engineer will confer with the approved biologist to determine the appropriate avoidance strategies until the nestlings have fledged from the nest and the nest is no longer active.

Contractor Responsibilities

- If any Sonoran Desert tortoises are encountered during construction, the contractor shall adhere to the attached Arizona Game and Fish Department's "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects" revised September 22, 2014. If any tortoise is encountered during construction, the contractor shall notify the Engineer to report the encounter.
- The contractor shall employ a biologist to complete a pre-construction survey for burrowing owls 96 hours prior to construction in all suitable habitats that would be disturbed. The biologist shall possess a burrowing owl survey-protocol training certificate issued by the Arizona Game and Fish Department. Upon completion of the surveys, the contractor shall contact Arizona Department of Transportation Environmental Planning at (602.712.7134 or 602.712.7767) to provide survey results.
- If the Engineer in cooperation with the Arizona Department of Transportation Environmental Planning Biologist determines that burrowing owls cannot be avoided, the contractor shall employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate.
- If any burrowing owls or active burrows are identified the contractor shall notify the Engineer immediately. No construction activities shall take place within 100 feet of any active burrow.
- If clearing, grubbing, or tree/limb removal will occur between March 1 and August 31, the contractor shall employ a qualified biologist to conduct a migratory bird nest search of all vegetation within the 10 (ten) days prior to removal. Vegetation may be removed if it has been surveyed and no active bird nests are present. If active nests cannot be avoided, the contractor shall notify the Engineer to evaluate the situation. During the non-breeding season (September 1 – February 28), vegetation removal is not subject to this restriction.

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- The contractor shall develop a Noxious and Invasive Plant Species Treatment and Control Plan in accordance with the requirements in the contract documents. Plants to be controlled shall include those listed in the State and Federal Noxious Weed and the State Invasive Species list in accordance with State and Federal Laws and Executive Orders. The plan and associated treatments shall include all areas within the project right of way and easements as shown on the project plans. The treatment and control plan shall 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, the contractor shall arrange for and perform the control of noxious and invasive species in the project area.
- To prevent the introduction of invasive species seeds, the contractor shall inspect all earthmoving and hauling equipment at the storage facility. All vehicles and equipment shall be washed and free of all attached plant/vegetation and soil/mud debris prior to entering the construction site.
- To prevent invasive species seeds from leaving the site, the contractor shall inspect all construction equipment and remove all attached plant/vegetation and soil/mud debris prior to leaving the construction site.
- All disturbed soils not paved that will not be landscaped or otherwise permanently stabilized by construction shall be seeded using species native to the project vicinity.

Arizona Department of Transportation Roadside Development Section Responsibilities

- The Arizona Department of Transportation Roadside Development Section will provide special provisions for the control of noxious and invasive plant species during construction that may require treatment and control within the project limits.
- Protected native plants within the project construction limits will be impacted by this project; therefore, the Arizona Department of Transportation Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Arizona Department of Transportation Roadside Development Section will send the notification at least 60 (sixty) calendar days prior to the start of construction.

See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

3.10 Hazardous materials

3.10.1 Existing Conditions

The May 2010 Preliminary Initial Site Assessment (PISA) discussed in the 2011 EA identified two moderate risk sites and one high-risk site of potential concern within the Proposed Modified Project study area (see Figure 8). To evaluate the potential for hazardous materials concerns within the

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approximately 13.5 acres of new study area along Mountain Road, Phase I environmental site assessments (ESAs) were conducted and documented in the following reports:

- Phase I Environmental Site Assessment, State Route 24, Ellsworth to Ironwood (Fuji Films Site), 6550 South Mountain Road, Mesa, Maricopa County, Arizona (February 5, 2016)
- Phase I Environmental Site Assessment, State Route 24, Ellsworth to Meridian, Mesa, Maricopa County, Arizona (October 5, 2016) (see Attachment 7)

The February 2016 Phase I ESA of the Fuji Films Site identified one Recognized Environmental Conditions (REC) and no Controlled RECs (CRECs). The REC was identified as multiple piles of dumped fill soil with an unknown origin located on a site north of the Fujifilm developed area within the footprint of the SR 24 travel lanes (see Figure 8). The amount of material was estimated to be approximately 60 cubic yards. This Phase I ESA recommended conducting a limited site investigation to evaluate the REC associated with the soil of unknown origin.

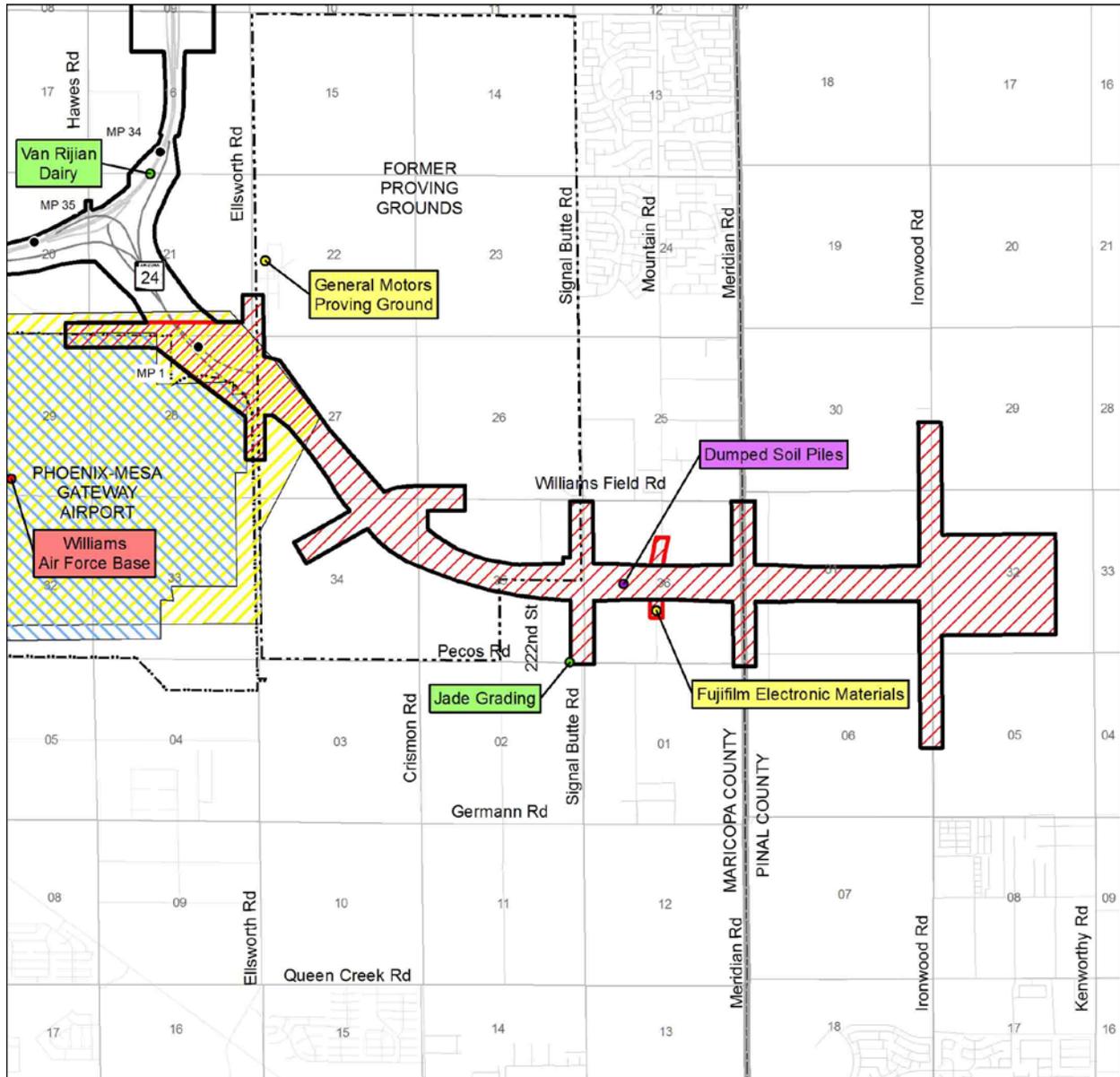
The October 2016 Phase I ESA of the five additional parcels located within the 13.5 acres of new study area identified no RECs or CRECs. As such, additional investigation was not recommended.

The ADOT Hazardous Materials Coordinator approved the Phase I ESAs on March 3, 2016 and November 1, 2016, respectively. The results of the Phase I ESAs remain valid for six months, as per ASTM, with the availability for updating in accordance with ASTM standards. Hazardous materials assessments for the project would be updated during final design.

3.10.2 Environmental Consequences

The Proposed Modified Project would impact three sites of potential moderate- or high-risk concern and one REC found during the Phase I ESA investigations. The REC, as well as the high and moderate risk sites that were identified in the May 2010 PISA, would be investigated as needed prior to construction. Hazardous materials assessments for the study area, including the Phase I ESAs and May 2010 PISA, would be updated during final design within the parameters prescribed by ASTM and the EPA since the assessments remain valid for only six months after preparation. Follow-up assessment work may be needed in the form of Preliminary Site Investigations (Phase II) at the high risk sites and the REC, and possibly the moderate risk sites, to determine specific locations and severity of impacts prior to completion of final design and construction of the project.

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Source: Arizona Transportation Information System GIS Coverage (2013)

Key

- | | | | |
|---|--|---|---------------------|
|  | 2011 EA Study Area |  | Low Risk Level |
|  | Proposed Modified Project Study Area |  | Moderate Risk Level |
|  | Recognized Environmental Concern (REC) |  | High Risk Level |
|  | Federal Department of Defense (DOD) Site |  | Superfund Site |



Figure 8. Hazardous Materials map

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Any contamination found during follow-up assessments would be remediated as needed prior to construction. Impacts to hazardous materials will be re-evaluated after those assessments are updated and any necessary investigations are complete. The Proposed Modified Project would not alter the 2011 Final EA finding for this resource.

3.10.3 Mitigation Measures

The following mitigation measures for hazardous materials from the 2011 EA have been modified to reflect current agency protocols and/or updated resource information:

Environmental Planning Responsibilities

- During the early stages of final design, the Arizona Department of Transportation will prepare a follow-up assessment (Preliminary Site Investigations - Phase I, II, and/or III) at the high-risk sites, moderate-risk sites, and Recognized Environmental Condition to determine specific locations and severity of impacts to the design and construction of the project.
- The Arizona Department of Transportation will test for lead-based paint prior to the start of construction activities on any painted surfaces that will be disturbed.

The following additional mitigation measures are recommended for hazardous materials:

Design Responsibilities

- The project manager will contact the Arizona Department of Transportation Environmental Planning hazardous materials coordinator (602.920.3882 or 602.712.7767) 30 (thirty) days prior to bid advertisement to determine the need for additional site assessments and confirm that the asbestos report is still valid.
- During final design, the Arizona Department of Transportation will update the hazardous materials assessments as needed.
- During final design, the piles of dumped fill soil identified as a Recognized Environmental Condition on the site north of the Fujifilm developed area must be sampled for potential contaminants. The project manager will notify the Arizona Department of Transportation Environmental Planning hazardous materials coordinator (602.920.3882 or 602.712.7767) a minimum of 14 calendar days prior to the soil sampling and will provide the sampling results once complete.

Contractor Responsibilities

- For milling activities, the roadway surface preceding the milling machine shall be kept sufficiently wet so as to prevent the generation of any visible fugitive dust particles, but not so wet as to cause excess runoff from the roadway surface onto the roadway shoulder.

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- If detectable levels of lead are found, the contractor shall notify their employees prior to any disturbance where lead is present in the paint below the 0.5 percent US Department of Housing and Urban Development/US Environmental Protection Agency action levels, but above the US Department of Labor Occupational Safety and Health Administration detection level. As part of the notification, the contractor shall make the US Department of Labor Occupational Safety and Health Administration publication_number_3142-12R_2004_Lead_in_Construction (<http://www.osha.gov/Publications/osha3142.pdf>) available to workers.

The remaining mitigation measures for hazardous materials from the 2011 EA have not been modified and would apply to the Proposed Modified Project. See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

3.11 Secondary Impacts

As noted in Section 2.0 Overview above, the Proposed Modified Project adds new scope of work items and replaces some items that were previously approved in the 2011 Final DCR and EA. However, the Proposed Modified Project will still be constructed along the same alignment through a mostly undeveloped area (see Figure 3). The proposed interim roadway would have similar secondary impacts as the ultimate build-out of SR 24 but would incur those impacts earlier in time since the ultimate build-out would not be constructed until 2027 at the earliest. The construction of the proposed interim roadway would create a vital transportation corridor that supports existing and predicted traffic demands and improved connectivity in the region until 2027 when the funding for the ultimate build-out of SR 24 is anticipated to be available.

The access control plan for the SR 24 corridor as presented in the 2011 Final EA and preserved in the Proposed Modified Project is anticipated to increase the roadway's suitability for residential, commercial or industrial applications. The development of this area for residential, commercial or industrial use is consistent with the various plans outlined in Section 3.1 Land Ownership and Land Use. Increased future development adjacent to the interim roadway is anticipated to occur, similar to the anticipated development adjacent to the ultimate build-out of SR 24 described in the 2011 Final EA. The potential for induced development will result in a long-term beneficial change in land use since the impact will be consistent with the plans for the MAG, Maricopa County, PMGA Authority, Apache Junction, City of Mesa, Town of Queen Creek, and Town of Gilbert.

The 2011 Final EA concluded that the controlled access facility would increase the efficiency and sustain the planned redevelopment of the PMGA and associated new development of the surrounding area. The Proposed Modified Project would result in similar benefits to the PMGA and associated new development but would incur those impacts earlier in time. No other secondary impacts as discussed in the 2011 Final EA are expected to change as a result of the Proposed Modified Project.

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3.11.1 Mitigation Measures

No mitigation measures for secondary impacts were recommended in the 2011 EA, and there are no recommended mitigation measures for secondary impacts from the Proposed Modified Project. See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

3.12 Cumulative Impacts

All known past, present, ongoing, and reasonably foreseeable future actions in the vicinity of the Proposed Modified Project study area were addressed in the 2011 Final EA. The Proposed Modified Project, when combined with past, present, and future actions would improve access to and promote development in currently undeveloped portions of the project vicinity and northeast Pinal County. As noted in the 2011 Final EA, this expansion of infrastructure and development would permanently cause substantial negative impact to wildlife and its habitat, cultural resources, and the natural drainage system. The Proposed Modified Project would not result in additional cumulative impacts to those resources as compared to the 2011 Selected Alternative.

3.12.1 Mitigation Measures

No mitigation measures for cumulative impacts were recommended in the 2011 EA, and there are no recommended mitigation measures for cumulative impacts from the Proposed Modified Project. See Section 5.0 Mitigation Measures for a complete list of mitigation measures.

3.13 Summary of Impacts

In general, the Proposed Modified Project would cause impacts similar to the 2011 Selected Alternative. The Proposed Modified Project would not alter the 2011 Final EA findings, and the FONSI would remain valid.

Table 4 summarizes and compares the environmental impacts of the 2011 Selected Alternative and the Proposed Modified Project.

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TABLE 4. SUMMARY OF ENVIRONMENTAL IMPACTS

Resource	2011 Final EA Finding for the Selected Alternative	Finding for the Proposed Modified Project
Land Ownership, Jurisdiction, and Land Use (including Prime and Unique Farmland)	Would conform to local and regional planning documents; therefore, would cause minimal change to existing and future land uses.	Same
Socioeconomic Conditions (Social Environment, Environmental Justice, and Economic Conditions)	Would require the relocation of approximately four households along the SR 24 alignment; there are no protected populations within the study area; therefore, would not impact these populations; no neighborhoods would be bisected by the Preferred Alternative, and access to local services and facilities would be enhanced due to reduced traffic congestion of surface streets	Would require the relocation of approximately four households along the SR 24 alignment. Protected populations are present within the study area; however, no neighborhoods would be bisected by the Preferred Alternative, and access to local services and facilities would be enhanced due to reduced traffic congestion of surface streets
Cultural Resources	Would impact historic properties and require the preparation of documents for treating and mitigating cultural resources (PA and treatment plan)	Same
Section 4(f)	Would result in direct impact to one planned recreational trail; impacts could be mitigated by design measures	Would result in direct impact to two planned recreational trails (City of Mesa planned shared-use pathway and Pinal County planned trail); impacts would be mitigated by design measures
Air Quality	Would reduce regional impacts of air quality; potential short-term exceedances of CO and PM10 during construction	Same
Noise	Would not result in impacts to receivers that warrant mitigation per ADOT NAP; some receivers would be temporarily affected by construction noise	Same
Utilities	Would require several utility relocations	Same
Visual Resources	Would be a noticeable feature in the landscape; however, impacts are anticipated to be low due to low scenic value throughout the study area and presence of few sensitive viewers	Same

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Resource	2011 Final EA Finding for the Selected Alternative	Finding for the Proposed Modified Project
Drainage and Floodplains	Would traverse two floodplains in the project construction limits—the EMF and a designated 100-year floodplain near the proposed SR 24/Meridian Road TI; potential impacts to the 100-year floodplains would be addressed during the final design; coordination with the floodplain managers would occur during the final design	Same
Clean Water Act Sections 404/401 and Section 402	Would cause temporary and permanent impacts to waters of the US, and the project would require a Section 404 permit; would generate greater than 1 acre of ground disturbance and an AZPDES permit with a SWPPP and Storm Water Monitoring Plan would be required	Would not cause additional impacts on jurisdictional Waters; would require an AZPDES permit with a SWPPP
Biological Resources	Would impact general vegetation and wildlife; would not impact currently listed Threatened or Endangered Species; would impact one candidate species and species protected under the Migratory Bird Treaty Act	Same
Hazardous Materials	Would impact four sites of potential moderate- or high-risk concern	Same, with the addition of impacts to the REC found during the Phase I ESA investigations.
Secondary Impacts	Would tend to create permanent, substantially negative impacts that would fragment habitat, increase the potential for road related mortalities of wildlife, facilitate further destruction of approximately 545 acres of natural desert, threaten cultural resources, and cause additional loss of the natural drainage system	Same
Cumulative Impacts	Would tend to create permanent, substantially negative impacts that would fragment habitat, increase the potential for road related mortalities of wildlife, facilitate further destruction of natural desert, threaten cultural resources, and cause additional loss of the natural drainage system	Same

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4.0 Public and Agency Scoping

As part of this EA reevaluation to incorporate the Proposed Modified Project, additional public and agency scoping was conducted. Public and agency scoping letters were distributed via mail and email on August 11, 2016. At the time of this document, comments were received via letter, email, and telephone from 7 agencies and 20 members of the public in response to the 2016 scoping efforts. The public and agency commenters were generally in favor of the Proposed Modified Project. Several agencies requested additional project information and some specified their preferred contact for future project information distribution. AGFD also expressed concerns regarding cumulative impacts considering the ongoing North-South Corridor Study and impacts to wildlife, wildlife habitat, and access for recreational hunting. Comments from the public included inquiries on how the project would impact their private property and what the project construction schedule would be, as well as notification of an error on the provided map. ADOT responded to public and agency comments as needed. Attachment 8 includes the agency and public distribution lists and a summary table of all comments received with ADOT's responses.

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5.0 Mitigation Measures

The following mitigation measures for the construction of SR 24 Proposed Modified Project include applicable mitigation measures from the 2011 Final EA, as well as new and revised mitigation measures. In addition to a universal change of the route designation from SR 802 to SR 24, some measures from the 2011 Final EA have been revised or deleted to reflect current agency protocols, regulatory requirements, new project scope items, and/or updated resource information. The mitigation measures listed below would apply to the Proposed Modified Project, which includes both the Interim Phase II and Ultimate improvements within the Proposed Modified Project Study Area. The mitigation measures listed below would supersede the measures listed in the 2011 Final EA. Any mitigation measures that were revised or added since the 2011 Final EA are included in bold; mitigation measures that have been deleted are not shown here. Standard specifications included as mitigation measures in the 2011 Final EA are also included below.

These mitigation measures are not subject to change without prior written approval from the Federal Highway Administration.

Design Responsibilities

- All right-of-way acquisition will be implemented by the Arizona Department of Transportation's Right-of-Way Group in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 US Code Chapter 61).
- The Arizona Department of Transportation will perform any residential relocation in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 US Code Chapter 61).
- During final design, the Arizona Department of Transportation will design the State Route 24 freeway to accommodate the future planned trails in the *Maricopa County Regional Trail System Plan* and *Pinal County Open Space and Trails Master Plan* that will intersect the freeway alignment. **The design will maintain the continuity of the Gilbert Central Trail, Roosevelt Water Conservation District (RWCD) Canal, planned Maricopa Trail, planned Powerline Floodway Trail, planned Pinal County Trail, and planned City of Mesa shared-use pathways where they intersect project area.**
- During final design, the Arizona Department of Transportation will evaluate strategies that reduce engine activity or reduce emissions per unit of operating time to reduce construction impacts on air quality.
- During final design, the Arizona Department of Transportation will coordinate relocation of utilities with the affected utility companies.
- If service disruption will be required for utility relocation, the Arizona Department of Transportation will coordinate with the utility companies to ensure customers are notified prior to service disruption.
- To reduce light spillover, shielded or cut-off light fixtures will be utilized wherever feasible.

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Design Responsibilities (continued)

- During final design the Arizona Department of Transportation will evaluate the feasibility of painting or adding visual elements to bridge and wall structures to reduce impacts to visual resources.
- During final design of each construction phase, the floodplain managers or Engineering Department with local jurisdiction will be provided an opportunity to review and comment on the design plans.
- **All disturbed soils not paved that will not be landscaped or otherwise permanently stabilized by construction will be seeded using species native to the project vicinity.**
- **The project manager will contact the Arizona Department of Transportation Environmental Planning hazardous materials coordinator (602.920.3882 or 602.712.7767) 30 (thirty) days prior to bid advertisement to determine the need for additional site assessments and confirm that the asbestos report is still valid.**
- During final design, the Arizona Department of Transportation will update the hazardous materials assessments as needed.
- During final design, the piles of dumped fill soil identified as a Recognized Environmental Condition on the site north of the Fujifilm developed area must be sampled for potential contaminants. The project manager will notify the Arizona Department of Transportation Environmental Planning hazardous materials coordinator (602.920.3882 or 602.712.7767) a minimum of 14 calendar days prior to the soil sampling and will provide the sampling results once complete.

Roadside Development Section Responsibilities

- **The Arizona Department of Transportation Roadside Development Section will provide special provisions for the control of noxious and invasive plant species during construction that may require treatment and control within the project limits.**
- Protected native plants within the project construction limits will be impacted by this project; therefore, the Arizona Department of Transportation Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Arizona Department of Transportation Roadside Development Section will send the notification at least 60 (sixty) calendar days prior to the start of construction.

Environmental Planning Responsibilities

- Prior to construction, a treatment plan will be developed and implemented to mitigate the adverse effects of the project on historic properties, as outlined in the project's programmatic agreement.
- **During final design, the Arizona Department of Transportation Environmental Planning will update the noise analysis if changes to design elements occur that have the potential to increase impacts on receivers.**

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Environmental Planning Responsibilities (continued)

- **Prior to construction of improvements along State Route 202 Loop, the Arizona Department of Transportation will reevaluate the project area for the presence of potential waters of the United States and determine the need for a US Army Corps of Engineers for a Clean Water Act Section 404 permit. No work will occur within jurisdictional waters of the United States until the appropriate Clean Water Act Section 401 certification and 404 permits are obtained.**
- During final design, the Arizona Department of Transportation Environmental Planning will reevaluate potential project-related effects to species protected by the Federal Endangered Species Act.
- **During final design, the Arizona Department of Transportation Environmental Planning will arrange a meeting with the Arizona Game and Fish Department to discuss any concerns that Arizona Game and Fish Department may have regarding the project.**
- **During the early stages of final design, the Arizona Department of Transportation will prepare a follow-up assessment (Preliminary Site Investigations - Phase I, II, and/or III) at the high-risk sites, moderate-risk sites, and Recognized Environmental Condition to determine specific locations and severity of impacts to the design and construction of the project.**
- The Arizona Department of Transportation will test for asbestos prior to the start of construction activities on any structures to be demolished or modified.
- If asbestos-containing materials are found, the Arizona Department of Transportation will contract with an asbestos consultant to provide full-time oversight for all abatement activities.
- **The Arizona Department of Transportation will test for lead-based paint prior to the start of construction activities on any painted surfaces that will be disturbed.**

Central District Responsibilities

- Access to businesses in the project vicinity will be maintained during construction.
- Fugitive dust generated from construction activities will be controlled in accordance with Maricopa County Rule 310 and ADOT Standard Specifications for Road and Bridge Construction, Section 104.08 (2000 Edition), special provisions, as well as other local rules and ordinances.
- Upon approval of the Storm Water Pollution Prevention Plan and Storm Water Monitoring Plan by the Arizona Department of Environmental Quality, the Arizona Department of Transportation will file a Notice of Intent to the Arizona Department of Environmental Quality. Upon final acceptance of the project, the Arizona Department of Transportation shall file a Notice of Termination for the project to the Arizona Department of Environmental Quality.
- The Engineer will submit the Contractors' Arizona Pollutant Discharge Elimination System Notice of Intent and the Notice of Termination to the Environmental Coordinator.

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Central District Responsibilities (continued)

- **If the contractor encounters any Sonoran desert tortoise during construction, the Engineer will report all encountered tortoises (live, injured, or dead) to the Arizona Department of Transportation Environmental Planning Biologist (email: jfife@azdot.gov) within 24 (twenty-four) hours of the encounter using the attached Arizona Department of Transportation Sonoran Desert Tortoise Observation Form. Photos should be taken of tortoises encountered and included in the report, if possible.**
- **If burrowing owls or active burrows are identified during the pre-construction surveys or during construction, no construction activities will take place within 100 feet of any active burrow until the owls are relocated.**
- **If any active bird nests cannot be avoided by vegetation clearing or construction activities, the Engineer will contact the Environmental Planning Biologist (602.712.7134 or 602.712.7767) to evaluate the situation.**
- **If active bird nests are identified within the project limits, construction activities will avoid disturbing any active nest. Avoidance areas, if necessary, will be marked in the field with temporary fencing or t-posts with flagging by the approved biologist. The Engineer will confer with the approved biologist to determine the appropriate avoidance strategies until the nestlings have fledged from the nest and the nest is no longer active.**
- **If asbestos-containing materials are found, the Engineer will review the National Emissions Standards for Hazardous Air Pollutants notification received from the contractor. The contractor cannot start work associated with the demolition or removal of asbestos-containing materials until 10 working days have passed since the submittal of the notification to the regulatory agencies.**

Contractor Responsibilities

- Access to businesses in the project vicinity shall be maintained during construction.
- Any trails in place at the time of construction shall be kept open at all times through the duration of the construction project.
- Fugitive dust generated from construction activities shall be controlled in accordance with Maricopa County Rule 310 and ADOT Standard Specifications for Road and Bridge Construction, Section 104.08 (2000 Edition), special provisions, as well as other local rules and ordinances.
- Equipment shall be maintained on a regular basis; new equipment should be subject to new product noise emission standards.
- Stationary equipment shall be located as far away from sensitive receivers as possible.
- The public shall be adequately notified of construction operations; methods such as construction alert publications shall be provided to handle complaints in an expeditious manner.
- The contractor shall obtain the most current copy of the Arizona Department of Transportation Best Management Practices for incorporation in the Storm Water Pollution Prevention Plan.

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Contractor Responsibilities (continued)

- The contractor shall implement a Storm Water Pollution Prevention Plan with Storm Water Monitoring Plan. The contractor shall also prepare a Notice of Intent and a Notice of Termination meeting the terms and conditions of the Arizona Pollutant Discharge Elimination System general permit.
- Upon approval of the Storm Water Pollution Prevention Plan with Storm Water Monitoring Plan by the Arizona Department of Environmental Quality, the Arizona Department of Transportation, and contractor shall each file a Notice of Intent to the Arizona Department of Environmental Quality. Upon final acceptance of the project by Arizona Department of Transportation, the Arizona Department of Transportation and the contractor shall each file a Notice of Termination for the project to the Arizona Department of Environmental Quality. The contractor shall provide copies of the completed final Storm Water Pollution Prevention Plan, Storm Water Monitoring Plan and contractor Notice of Intent and Notice of Termination to Arizona Department of Transportation.
- **If any Sonoran Desert tortoises are encountered during construction, the contractor shall adhere to the attached Arizona Game and Fish Department's "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects" revised September 22, 2014. If any tortoise is encountered during construction, the contractor shall notify the Engineer to report the encounter.**
- The contractor shall employ a biologist to complete a pre-construction survey for burrowing owls 96 hours prior to construction in all suitable habitats that would be disturbed. The biologist shall possess a burrowing owl survey-protocol training certificate issued by the Arizona Game and Fish Department. Upon completion of the surveys, the contractor shall contact Arizona Department of Transportation Environmental Planning at (602.712.7134 or 602.712.7767) to provide survey results.
- **If the Engineer in cooperation with the Arizona Department of Transportation Environmental Planning Biologist determines that burrowing owls cannot be avoided, the contractor shall employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate.**
- **If any burrowing owls or active burrows are identified the contractor shall notify the Engineer immediately. No construction activities shall take place within 100 feet of any active burrow.**
- **If clearing, grubbing, or tree/limb removal will occur between March 1 and August 31, the contractor shall employ a qualified biologist to conduct a migratory bird nest search of all vegetation within the 10 (ten) days prior to removal. Vegetation may be removed if it has been surveyed and no active bird nests are present. If active nests cannot be avoided, the contractor shall notify the Engineer to evaluate the situation. During the non-breeding season (September 1 – February 28), vegetation removal is not subject to this restriction.**

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Contractor Responsibilities (continued)

- **The contractor shall develop a Noxious and Invasive Plant Species Treatment and Control Plan in accordance with the requirements in the contract documents. Plants to be controlled shall include those listed in the State and Federal Noxious Weed and the State Invasive Species list in accordance with State and Federal Laws and Executive Orders. The plan and associated treatments shall include all areas within the project right of way and easements as shown on the project plans. The treatment and control plan shall 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, the contractor shall arrange for and perform the control of noxious and invasive species in the project area.**
- **To prevent the introduction of invasive species seeds, the contractor shall inspect all earthmoving and hauling equipment at the storage facility. All vehicles and equipment shall be washed and free of all attached plant/vegetation and soil/mud debris prior to entering the construction site.**
- To prevent invasive species seeds from leaving the site, the contractor shall inspect all construction equipment and remove all attached plant/vegetation and soil/mud debris prior to leaving the construction site.
- All disturbed soils not paved that will not be landscaped or otherwise permanently stabilized by construction shall be seeded using species native to the project vicinity.
- If asbestos-containing materials are found, no activities associated with the demolition or removal of asbestos-containing materials shall be allowed to occur until the Asbestos Removal and Disposal Plan is approved by the Arizona Department of Transportation.
- If asbestos-containing materials are found, the contractor shall complete a National Emissions Standards for Hazardous Air Pollutants notification for work associated with the demolition or removal of asbestos-containing materials and submit it to the Engineer for review. After Engineer approval, the notification shall be submitted to the Arizona Department of Transportation for a 5-working-day review and approval. Upon approval by the Arizona Department of Transportation, the contractor shall file the notification with the Maricopa County Air Quality Department at least 10 working days prior to demolition associated with the removal of asbestos-containing materials.
- If asbestos-containing materials are found, an approved contractor shall develop and implement an Asbestos Removal and Disposal Plan for the demolition and removal of asbestos-containing materials. The plan shall be submitted to the Arizona Department of Transportation for review and approval at least 10 working days prior to implementation. The contractor shall follow all applicable local, state, and federal codes and regulations related to the treatment, handling, and disposal of asbestos.

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Contractor Responsibilities (continued)

- If regulated amounts of asbestos are found, no demolition or removal of load-bearing concrete shall occur until the Asbestos Removal and Disposal Plan is approved and implemented. If lead-based paint is found on any surfaces that will be disturbed during construction, an approved contractor shall develop and implement a lead-based paint abatement plan for the removal of the lead based paint, Toxicity Characteristic Leaching Procedure testing of the generated waste stream, and proper disposal of the waste stream derived from the removal of the lead-based paint within the project construction limits. The contractor shall follow all applicable local, state and federal codes and regulations related to the treatment and handling of lead-based paint.
- If lead-based paint is found, the contractor shall submit a lead-based paint removal and disposal plan for the removal of lead-based paint within the project construction limits to the Engineer for review and approval at least 10 working days prior to disturbing the painted surface.
- No disturbance of the lead-based paint shall occur until the lead-based paint abatement plan is approved by the Department Hazardous Material Coordinator and implemented.
- **For milling activities, the roadway surface preceding the milling machine shall be kept sufficiently wet so as to prevent the generation of any visible fugitive dust particles, but not so wet as to cause excess runoff from the roadway surface onto the roadway shoulder.**
- **If detectible levels of lead are found, the contractor shall notify their employees prior to any disturbance where lead is present in the paint below the 0.5 percent US Department of Housing and Urban Development/US Environmental Protection Agency action levels, but above the US Department of Labor Occupational Safety and Health Administration detection level. As part of the notification, the contractor shall make the US Department of Labor Occupational Safety and Health Administration publication_number_3142-12R_2004_Lead_in_Construction (<http://www.osha.gov/Publications/osha3142.pdf>) available to workers.**

Standard Specifications included as Mitigation Measures

- According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction*, Section 107 Legal Relations and Responsibility to Public, Subsection 05 Archaeological Features (2008 Edition), —When archaeological, historical, or paleontological features are encountered or discovered during any activity related to the construction of the project, the contractor shall stop work immediately at that location and shall take all reasonable steps to secure the preservation of those features and notify the Engineer. The Arizona Department of Transportation Engineer would, in turn, notify the Arizona Department of Transportation Historic Preservation Team to evaluate the significance of the resources. If human remains are encountered during any phase of the project on non-federal land, all work must stop and the Engineer would contact Arizona Department of Transportation Historic Preservation Team and the Arizona State Museum.

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- According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction*, Section 104 Scope of Work, Subsection 08 Prevention of Air and Noise Pollution (2008 Edition), —The contractor shall control, reduce, remove or prevent air pollution in all its forms, including air contaminants, in the performance of the contractor's work. Fugitive dust generated from construction activities would be controlled in accordance with the Arizona Department of Transportation's Erosion and Pollution Control Manual for Highway Design and Construction, special provisions, and local rules or ordinances. The contractor would comply with all applicable air pollution ordinances, regulations, and orders during construction. All dust-producing surfaces would be watered or otherwise stabilized to reduce short-term impacts associated with an increase in particulate matter attributable to construction activity.
- According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction*, Section 104 Scope of Work, Subsection 08 Prevention of Air and Noise Pollution (2008 Edition), — The contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract. Each internal combustion engine used for any purpose on the work or related to the work shall be equipped with a muffler of a type recommended by the manufacturer.
- According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction*, Section 104 Scope of Work, Subsection 09 Prevention of Landscape Defacement; Protection of Streams, Lakes, and Reservoirs (2008 Edition), —The contractor shall take sufficient precautions, considering various conditions, to prevent pollution of streams, lakes, and reservoirs with fuels, oils, bitumens, calcium chloride, fresh Portland cement, fresh Portland cement concrete, raw sewage, muddy water, chemicals or other harmful materials. None of these materials shall be discharged into any channels leading to such streams, lakes or reservoirs.
- According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction*, Section 104 Scope of Work, Subsection 09 Prevention of Landscape Defacement; Protection of Streams, Lakes, and Reservoirs (2008 Edition), —The contractor shall give special attention to the effect of its operations upon the landscape and shall take special care to maintain natural surroundings undamaged.
- According to Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction*, Section 107 Legal Relations and Responsibility to Public, Subsection 07 Sanitary, Health, and Safety Provisions (2008 Edition), —During construction operations, should material be encountered which the contractor believes to be hazardous or contaminated, the contractor shall immediately do the following: a) Stop work and remove workers within the contaminated area... b) Barricade the area and provide traffic control... and c) Notify the [Arizona Department of Transportation] Engineer. The Arizona Department of Transportation Engineer would arrange for proper assessment, treatment, or disposal of those materials. Such locations would be investigated and proper action implemented prior to the continuation of work in that location.

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6.0 Conclusion

A review of the EA, project design plans, and additional environmental investigations confirms that the Proposed Modified Project would not alter the 2011 Final EA findings, and the FONSI would remain valid. If you concur that the FONSI issued on May 6, 2011, remains valid, please sign the signature page of this reevaluation. If you have questions or would like further information, please contact John Wennes at 602.712.6974 or by e-mail at jwennes@azdot.gov.

Attachments

1. ROW acquisition changes summary table and maps
2. Updated US Census Bureau and Arizona Department of Administration data
3. Cultural concurrence letters from ASLD, City of Mesa, Hopi Tribe, San Carlos Apache Tribe, Tohono O'odham Nation, and SHPO (continuing consultation on project effect)
4. *Project Level PM Quantitative Hot-Spot Analysis Project of Air Quality Concern Questionnaire* and interagency consultation documentation for the PM10 questionnaire
5. Noise Analysis Technical Memorandum
6. Biological Resources Reevaluation technical memorandum, including:
 - o AGFD's "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects" revised September 22, 2014
 - o ADOT Sonoran Desert Tortoise Observation Form
7. Phase I ESA Report cover pages and executive summaries
8. Public and agency scoping distribution lists and summary table

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ATTACHMENT 1

ROW acquisition changes summary table and maps

SR 24 Right of Way Acquisition of Parcels in Maricopa and Pinal Counties

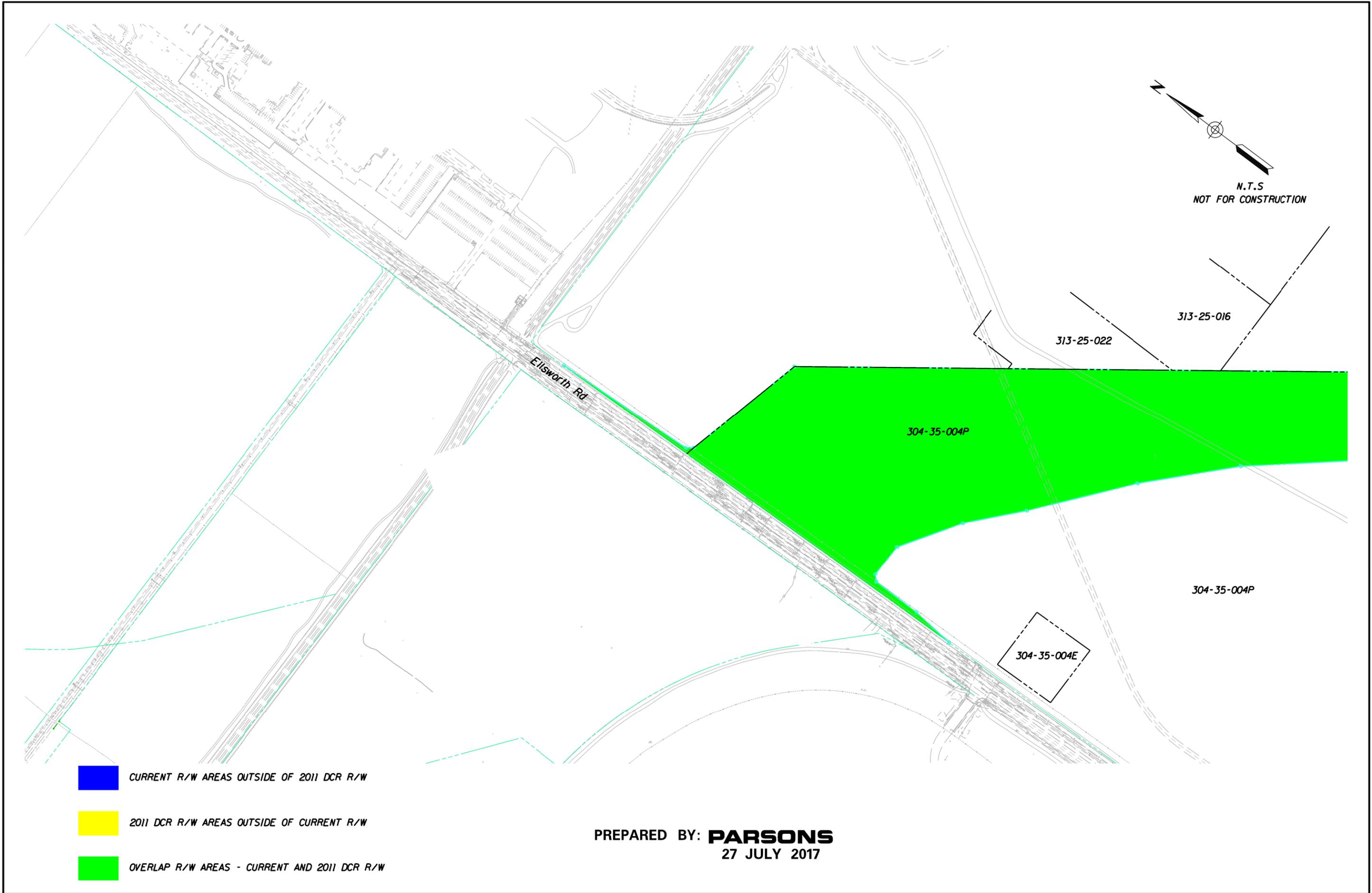
Maricopa County

ADOT Parcel Number	APN	Owner	Total Parcel Area (ac)	2011 DCR ROW Areas Overlaps with New ROW (ac)	New Additional ROW (ac)	2011 ROW Areas Outside of the New ROW (ac)	Change in a ROW (ac)
7-10753	304-35-004P	PACIFIC PROVING LLC	1191.39	143.05	0.87	7.37	-6.50
7-10753	304-35-004M	PACIFIC PROVING LLC	3.08	3.08	0.00	0.00	0.00
7-10758	304-34-015B	TUCKER PROPERTIES LTD	76.70	5.88	0.00	0.93	-0.93
7-10745	304-34-204	HANSON LARRY R/PAMELA TR	9.60	3.74	0.00	0.39	-0.39
7-10745	304-34-017X	HANSON LARRY R/PAMELA TR	9.24	4.12	0.00	0.23	-0.23
7-10756	304-34-025A	STRINGHAM CINDY L	2.31	0.08	0.00	0.00	0.00
7-10756	304-34-025E	GREWAL TEJINDER/RUPINDER TR/SARAN JD/HARKA TR	1.40	0.07	0.00	0.00	0.00
7-10756	304-34-025C	FERGUSON DAN NORVIL/TERRY JEAN	0.20	0.07	0.00	0.00	0.00
7-10756	304-34-025D	STRINGHAM CINDY L	0.19	0.07	0.00	0.00	0.00
7-10756	304-34-034	HANSON LARRY R/PAMELA	0.76	0.76	0.00	0.00	0.00
7-10752	304-34-016L	BRUCE NAEGELI GST EXEMPT DECEDEENTS TRUST	1.51	1.51	0.00	0.00	0.00
7-10752	304-34-016G	BRUCE NAEGELI GST EXEMPT DECEDEENTS TRUST	37.57	9.40	0.00	0.71	-0.71
7-10739	304-34-021N	DEMURO PROPERTIES	17.55	0.27	0.00	0.00	0.00
7-10735	304-34-021P	DASIA HOLDINGS LLC	5.00	3.95	0.00	0.26	-0.26
7-10737	304-34-021Q	DEMURO SUSAN A TRUST	4.75	2.82	0.00	1.05	-1.05
7-10746	304-34-019K	CHROME INC	10.00	5.34	0.00	0.25	-0.25
7-10743	304-34-019L	FRYE SIGNAL BUTTE VENTURES L L C	4.76	3.65	0.00	1.10	-1.10
7-10746	304-34-019F	FUJIFILM ELECTRONIC MATERIALS USA INC	5.00	0.56	0.00	0.00	0.00
7-10746	304-34-019N	FUJIFILM ELECTRONIC MATERIALS USA INC	9.71	0.21	0.00	0.00	0.00
7-10742	304-34-041	FUJIFILM ELECTRONIC MATERIALS USA INC	9.86	4.89	0.00	1.75	-1.75
7-10742	304-34-042A	FUJIFILM ELECTRONIC MATERIALS USA INC	1.80	0.00	0.22	0.00	0.22
7-10742	304-34-042B	FUJIFILM ELECTRONIC MATERIALS USA INC	7.33	4.75	0.27	1.19	-0.92
7-10893	304-34-203A	DASIA EQUITIES LLC	9.71	0.00	0.59	0.00	0.59
7-10893	304-34-203B	METRIC GROUP LLC	16.13	0.00	0.09	0.00	0.09
7-10742	304-34-035C	FUJIFILM ELECTRONIC MATERIALS USA INC	24.30	0.00	0.06	0.00	0.06
7-10732	304-34-202	ASPIRE PROPERTIES LLC	21.44	0.00	0.59	0.00	0.59
7-10733	304-34-926	BAWOLEK EDWARD J/SUSAN J TR	9.62	6.29	0.21	0.86	-0.65
7-10886	304-34-927	STATE OF ARIZONA	4.81	3.29	0.00	1.45	-1.45
7-11353	304-34-036A	ALLIED WASTE TRANSPORTATION INC	13.52	0.00	0.10	0.00	0.10
7-10887	304-34-928A	STEHLY J/C TR/LERNER FRED/ CAROL TR/MESA EH I	4.99	0.00	0.28	0.00	0.28
7-10763	304-34-057C	PM INDUSTRIAL HOLDINGS LP/ETAL	88.45	20.54	0.00	2.77	-2.77
Subtotal				228.40	3.27	20.30	-17.03

Pinal County

104-080-16A	DUARTE GILBERTO & ROSMERY	1.88	1.39	0.00	0.09	-0.09	
104-080-016B	MORGAN SUSAN E	1.82	1.15	0.00	0.30	-0.30	
104-080-170	RAB INVESTMENT TRUST	2.27	2.20	0.00	0.00	0.00	
104-080-180	DBJ INVESTMENTS TRUST	2.17	2.19	0.00	0.00	0.00	
104-080-19A	RAB INVESTMENT TRUST	2.27	1.44	0.00	0.30	-0.30	
104-080-19B	RAB INVESTMENT TRUST	2.16	1.11	0.00	0.43	-0.43	
104-080-200	BUCKHORN RUN LLC	4.38	0.24	0.00	0.00	0.00	
104-080-21A		1.25	0.06	0.00	0.00	0.00	
104-080-21B		1.26	0.08	0.00	0.00	0.00	
104-080-220	MARXMAN ANDREW	4.34	0.07	0.00	0.00	0.00	
104-080-140	DOAK IRA IRENE	1.86	0.14	0.00	0.00	0.00	
104-080-13A	PETTY SHAWN C & AMANDA R	2.26	0.13	0.00	0.00	0.00	
104-080-12A	PETTY SHAWN C & AMANDA R	2.26	0.04	0.00	0.00	0.00	
104-077-040	STATE OF ARIZONA	640.00	53.28	0.04	13.56	-13.52	
104-077-060	STATE OF ARIZONA	640.30	2.72	0.00	0.00	0.00	
Subtotal				66.24	0.04	14.68	-14.64

Total	294.64	3.31	34.98	-31.67
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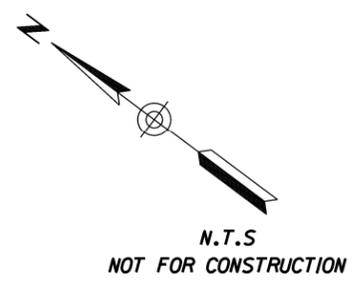


■ CURRENT R/W AREAS OUTSIDE OF 2011 DCR R/W

■ 2011 DCR R/W AREAS OUTSIDE OF CURRENT R/W

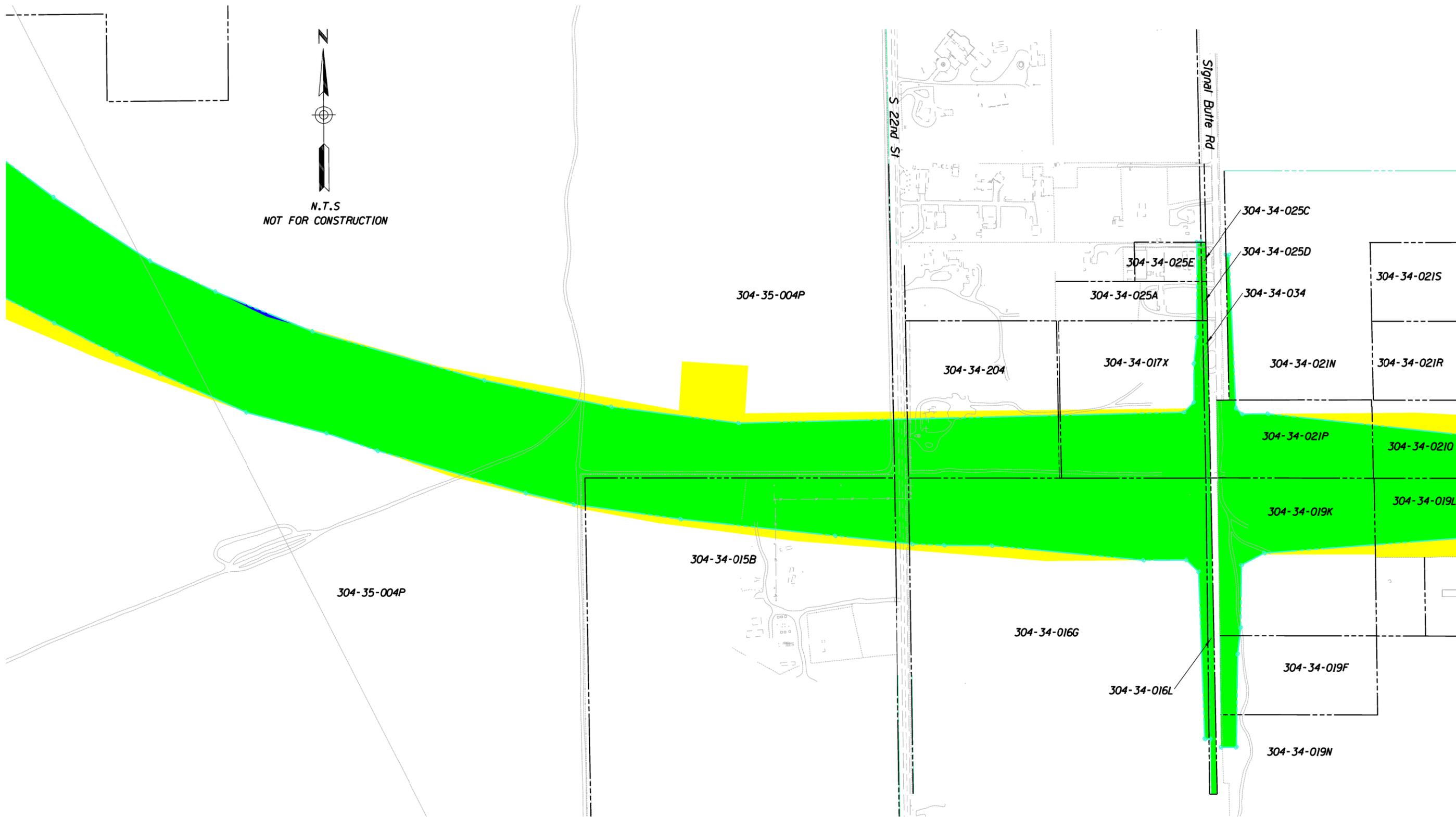
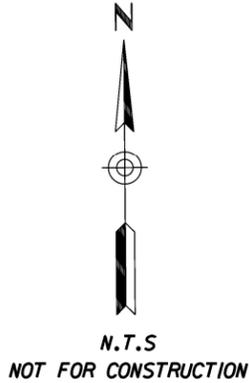
■ OVERLAP R/W AREAS - CURRENT AND 2011 DCR R/W

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27 JULY 2017



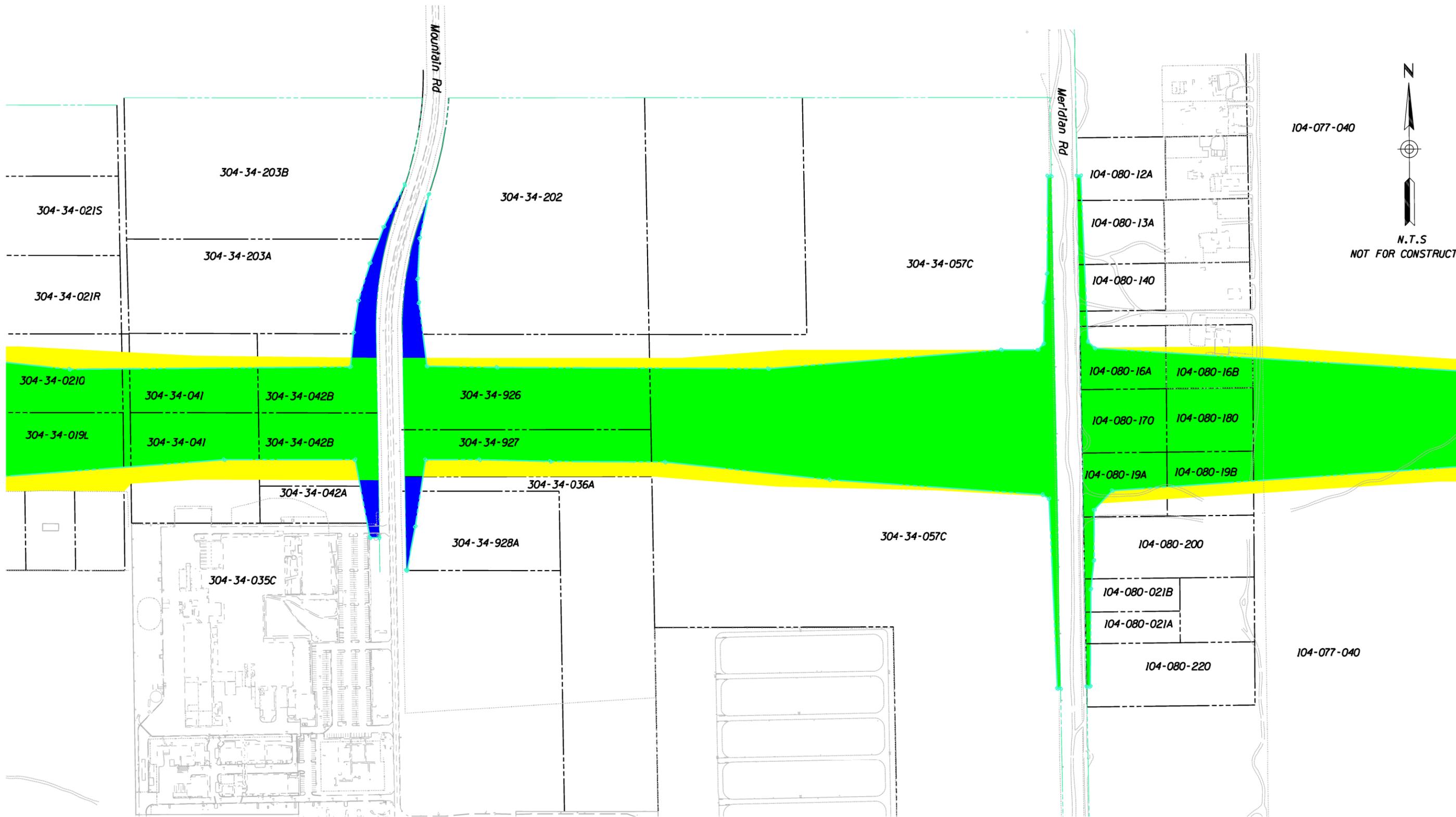
-  CURRENT R/W AREAS OUTSIDE OF 2011 DCR R/W
-  2011 DCR R/W AREAS OUTSIDE OF CURRENT R/W
-  OVERLAP R/W AREAS - CURRENT AND 2011 DCR R/W

PREPARED BY: **PARSONS**
27 JULY 2017



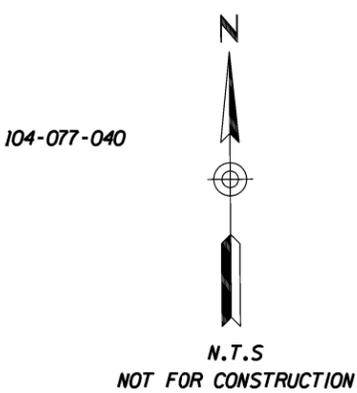
-  CURRENT R/W AREAS OUTSIDE OF 2011 DCR R/W
-  2011 DCR R/W AREAS OUTSIDE OF CURRENT R/W
-  OVERLAP R/W AREAS - CURRENT AND 2011 DCR R/W

PREPARED BY: **PARSONS**
27 JULY 2017



- CURRENT R/W AREAS OUTSIDE OF 2011 DCR R/W
- 2011 DCR R/W AREAS OUTSIDE OF CURRENT R/W
- OVERLAP R/W AREAS - CURRENT AND 2011 DCR R/W

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27 JULY 2017



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ATTACHMENT 2

Updated US Census Bureau and Arizona Department of Administration data

Updated Demographic Data
STP-024 A(200)T; 024 MA 001 H8915 01L/02L
SR 24, Ellsworth Road to Ironwood Road, Phase II Interim

Updated US Census Bureau, American Community Survey (ACS), and Arizona Department of Administration data were reviewed for the Proposed Modified Project study area. The US Census Bureau redefined the census tracts in the vicinity of the study area and the number of census tracts that overlap the study area, including the 13.5 acres of new study area along Mountain Road, increased from 7 to 9 tracts. The updated census tracts (refer to Figure 9) were used to evaluate the study area.

Population Growth

A review of currently available Arizona Department of Administration Employment and Population Statistics shows a continued trend of high population growth within Maricopa and Pinal counties and the communities surrounding the study area (Table 5).

TABLE 5. POPULATION GROWTH

	2000 Population	2010 Population	2015 population	2000-2015 Growth	Average Annual Growth Rate between 2000 and 2015
Maricopa County	3,072,149	3,824,058	4,076,438	33%	2%
Pinal County	179,727	376,369	406,468	126%	8%
Queen Creek	4,316	26,448	33,967	687%	46%
Mesa	396,375	439,929	460,950	16%	1%
Gilbert	109,697	209,048	242,857	121%	8%
Apache Junction	31,814	35,828	38,437	21%	1%

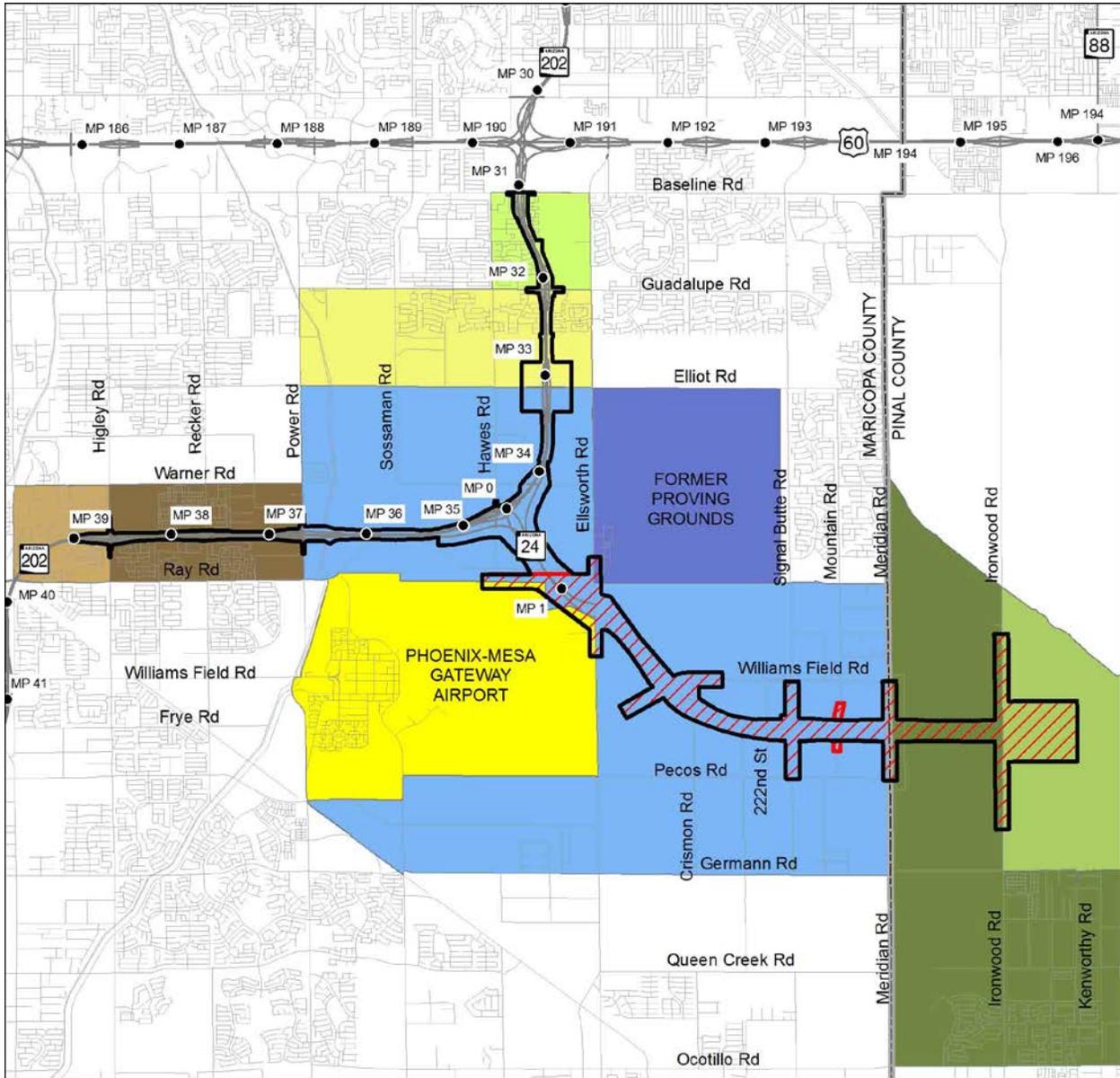
Source: Arizona Department of Administration Employment and Population Statistics, 2000, 2010, 2015

Race and Ethnicity

According to the US Census Bureau 2010 data, the study area is comprised primarily of populations identified as white, representing approximately 68.7% of the 40,931 individuals recorded within the nine tracts (Table 6; Figure 9). This percentage is similar to census data recorded for Maricopa County (58.7%), Pinal County (58.7%), Apache Junction (81.3%), Gilbert (72.9%), Mesa (64.3%), and Queen Creek (74.0%). No other substantial populations, meaning those populations that comprise greater than 50% of a population, are located within the study area. However, Maricopa County, Pinal County, Mesa, Census Tract 8176 in Maricopa County, and Census Tract 2.07 in Pinal County contain individuals of Hispanic or Latino ethnicity representing over 25% of the tallied populations. The summation between percentages of the racial categories and those of the ethnicity categories—some other race alone, two or more races, and Hispanic or Latino—may equal more than 100% of the total population. This is because some respondents that identify themselves as “white” or of another race may also be of Hispanic descent and consider themselves under both criteria.

This data represents a decrease in the populations identified as white and an increase in the populations identified as Hispanic or Latino as compared to the data available in the 2011 EA.

Attachment 2. Updated Demographic Data
 Reevaluation of the Final Environmental Assessment
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Source: Land ownership GIS coverage provided by Arizona State Land Department; Arizona Transportation Information System GIS Coverage (2013)

Key

	2011 EA Study Area		4226.41
	Proposed Modified Project Study Area		5228.00
Census Tract			
	0002.04		8147.00
	0002.07		8148.00
	4226.40		8176.00
			9806.00



Figure 9. Project Vicinity Census Tracts

Attachment 2. Updated Demographic Data
Reevaluation of the Final Environmental Assessment
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Title VI and Environmental Justice

A review of disabled, low-income, elderly, Limited English Proficiency, female head-of-household, and minority population percentages by census tracts was conducted of the study area and the municipalities and counties that the study area is located within and is shown in Table 6, Table 7, and Table 8. The data for surrounding municipalities of Queen Creek and Apache Junction are also presented for reference since they were presented in the 2011 EA. Below are the most current data for the study area; refer to Figure 9 for a map of the census tracts that intersect the study area.

Elderly Populations: While the percentage of elderly varies in the study area from 0% to 35.4%, the percentage of elderly for the combined tracts is approximately 11.3%, which is lower than the percentages for Maricopa County (17.1%), Pinal County (19.7%), and the municipalities of Apache Junction (33.7%) and Mesa (19.0%). The percentage of elderly is higher in the census tracts that overlap the study area than in Gilbert and Queen Creek, at 9.9% and 8.8%, respectively (Table 7).

Limited English Proficiency: Based on the 2015 US Census Bureau ACS data, the percentage of residents that speak English less than “well” is less than 10% for all Census Tracts, cities, and counties that the study area is located within. Approximately 84% of the Limited English Proficiency population in Maricopa County and approximately 90% of the Limited English Proficiency population in Pinal County speak primarily Spanish (Table 8).

Low-Income Populations: The 2017 poverty guidelines for a family of 4 in Arizona is \$24,600 (ASPE 2017). The percentage of households living below the poverty level for the study area (9.4%) is lower than found in the surrounding communities except for Gilbert and Queen Creek, which have percentages of 6.8% and 8.6%, respectively (Table 7).

Disabled Populations: Based on the 2014 US Census Bureau ACS data, 8.2% of the population within the nine census tracts analyzed are classified as disabled (Table 7). This percentage is less than the populations in Maricopa County, Pinal County, Mesa, and Apache Junction (10.2%, 12.7%, 11.7%, and 20.0%, respectively), and slightly greater than the populations in Queen Creek and Gilbert (6.0% and 6.8%, respectively).

Female Head-of-Household Populations: The percentage of households identified as “female head-of-household” for the nine tracts at 11.8% is still less than the percentages for Maricopa County at 12.8% and just above Pinal County at 11.7% (Table 7).

The average minority population (Black or African American, Hispanic, Asian American, American Indian/Alaskan Native, and Native Hawaiian or Pacific Islander) for all tracts that overlap the study area is 31.3%, which is lower than the average minority population in the applicable counties (41.3%) or cities/towns (31.9%). Census Tract 8176 has the highest minority population in the vicinity of the study area at 42.9%; however, this is less than 2% higher than the county average of 41.3%. Additionally, the average elderly, low income, disabled, and female heads-of-household populations for all tracts that overlap the study area (11.3%, 9.4%, 8.2%, and 11.8% respectively) is lower than the averages for those populations within the applicable counties and cities/towns.

TABLE 6. MINORITY DEMOGRAPHIC COMPARISONS, 2010 CENSUS DATA

	2010 Total Population	White Alone		Black or African American Alone		American Indian and Alaska Native Alone		Asian Alone		Native Hawaiian and Other Pacific Islander Alone		Some Other Race Alone		Two or More Races		Hispanic or Latino		Total Minority	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Census Tract 4226.40, Maricopa County	4,647	3,598	77.4%	136	2.9%	57	1.2%	106	2.3%	24	0.5% ¹	3	0.1%	92	2.0%	631	13.6%	1,049	22.6%
Census Tract 4226.41, Maricopa County	6,346	4,314	68.0%	234	3.7%	41	0.6%	183	2.9%	26	0.4%	12	0.2%	149	2.3%	1,387	21.9%	2,032	32.0%
Census Tract 5228, Maricopa County	1,685	1,169	69.4%	110	6.5%	84	5.0%	60	3.6%	5	0.3%	1	0.1%	61	3.6%	195	11.6%	516	30.6%
Census Tract 8147, Maricopa County	4,148	2,908	70.1%	151	3.6%	29	0.7%	234	5.6%	3	0.1%	13	0.3%	121	2.9%	689	16.6%	1,240	29.9%
Census Tract 8148, Maricopa County	5,465	3,544	64.8%	274	5.0%	40	0.7%	348	6.4%	7	0.1%	15	0.3%	218	4.0%	1,019	18.6%	1,921	35.2%
Census Tract 8176, Maricopa County	998	570	57.1%	2	0.2%	21	2.1%	7	0.7%	0	0.0%	0	0.0%	9	0.9%	389	39.0%	428	42.9%
Census Tract 9806, Maricopa County	0 ²	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Census Tract 2.04, Pinal County	6,610	4,693	71.0%	214	3.2%	34	0.5%	199	3.0%	23	0.3%	12	0.2%	130	2.0%	1,305	19.7%	1,917	29.0%
Census Tract 2.07, Pinal County	11,032	7,314	66.3%	272	2.5%	76	0.7%	95	0.9%	11	0.1%	13	0.1%	176	1.6%	3,075	27.9%	3,718	33.7%
ALL TRACTS	40,931	28,110	68.7%	1,393	3.4%	382	0.9%	1,232	3.0%	99	0.2%	69	0.2%	956	2.3%	8,690	21.2%	12,821	31.3%
Maricopa County	3,817,117	2,240,055	58.7%	177,490	4.6%	59,252	1.6%	128,301	3.4%	6,723	0.2%	5,508	0.1%	71,047	1.9%	1,128,741	29.6%	1,577,062	41.3%
Pinal County	375,770	220,486	58.7%	16,007	4.3%	17,410	4.6%	6,114	1.6%	1,489	0.4%	487	0.1%	6,800	1.8%	106,977	28.5%	155,284	41.3%
Queen Creek	26,361	19,516	74.0%	841	3.2%	123	0.5%	709	2.7%	31	0.1%	30	0.1%	545	2.1%	4,566	17.3%	6,845	26.0%
Mesa	439,041	282,505	64.3%	14,101	3.2%	8,359	1.9%	8,174	1.9%	1,532	0.3%	555	0.1%	8,062	1.8%	115,753	26.4%	156,536	35.7%
Gilbert	208,352	151,930	72.9%	6,606	3.2%	1,394	0.7%	11,877	5.7%	406	0.2%	264	0.1%	4,902	2.4%	31,074	14.9%	56,523	27.1%
Apache Junction	35,840	29,130	81.3%	392	1.1%	320	0.9%	266	0.7%	25	0.1%	20	0.1%	534	1.5%	5,153	14.4%	6,710	18.7%
ALL CITIES	709,594	483,081	68.1%	21,940	3.1%	10,196	1.4%	21,026	3.0%	1,994	0.3%	869	0.1%	14,043	2.0%	156,546	22.1%	226,614	31.9%

Source: US Census Bureau, 2010 Census Summary File 1

¹Bolded percentages are higher than in their respective county.²Census Tract 9806 in Maricopa County is located on the Former Proving Grounds, which did not have any residents as of the 2010 Census.

TABLE 7. ENVIRONMENTAL JUSTICE POPULATIONS BY CATEGORY

	Total Population in 2010 ¹	Age 60 Years and Over in 2010 ¹		Total Population Estimate in 2014 ²	Below Poverty Level in 2014 ²		Total Civilian Non-institutionalized Population Estimate in 2014 ³	Civilian Non-institutionalized Disabled in 2014 ³		Total Households Estimate in 2014 ³	Female Head-of-Household in 2014 ³	
		#	%		#	%		#	%		#	%
Census Tract 4226.40, Maricopa County	4,647	1,647	35.4% ⁴	4,692	362	7.7%	4,702	495	10.5%	1,960	137	7.0%
Census Tract 4226.41, Maricopa County	6,346	511	8.1%	6,087	559	9.2%	6,087	409	6.7%	1,897	175	9.2%
Census Tract 5228, Maricopa County	1,685	24	1.4%	1,053	327	31.1%	1,366	67	4.9%	360	88	24.4%
Census Tract 8147, Maricopa County	4,148	375	9.0%	4,520	236	5.2%	4,520	280	6.2%	1,386	200	14.4%
Census Tract 8148, Maricopa County	5,465	208	3.8%	6,784	687	10.1%	6,784	305	4.5%	2,093	459	21.9%
Census Tract 8176, Maricopa County	998	118	11.8%	1,072	363	33.9%	1,072	54	5.0%	312	28	9.0%
Census Tract 9806, Maricopa County	0 ⁵	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
Census Tract 2.04, Pinal County	6,610	933	14.1%	7,414	273	3.7%	7,414	827	11.2%	2,347	157	6.7%
Census Tract 2.07, Pinal County	11,032	806	7.3%	9,794	1,076	11.0%	9,919	1,016	10.2%	3,054	341	11.2%
ALL TRACTS	40,931	4,622	11.3%	41,416	3,883	9.4%	41,864	3,453	8.2%	13,409	1,585	11.8%
Maricopa County	3,817,117	652,489	17.1%	3,895,963	666,748	17.1%	3,918,121	399,455	10.2%	1,424,244	182,168	12.8%
Pinal County	375,770	74,125	19.7%	364,937	61,397	16.8%	366,822	46,667	12.7%	126,128	14,788	11.7%
Queen Creek	26,361	2,316	8.8%	28,411	2,435	8.6%	28,529	1,726	6.0%	8,307	714	8.6%
Mesa	439,041	83,429	19.0%	448,455	72,986	16.3%	450,572	52,567	11.7%	167,609	20,943	12.5%
Gilbert	208,352	20,682	9.9%	222,348	15,042	6.8%	222,796	15,220	6.8%	71,614	7,893	11.0%
Apache Junction	35,840	12,063	33.7%	36,571	8,727	23.9%	36,881	7,369	20.0%	15,519	1,825	11.8%
ALL CITIES	709,594	118,490	16.7%	735,785	99,190	13.5%	738,778	76,882	10.4%	263,049	31,375	11.9%

¹ Source: US Census Bureau, 2010 Census² Source: US Census Bureau, 2014 ACS 5-Year Estimate S1701. This data is not available from the 2010 Census.³ Source: US Census Bureau, 2014 ACS 5-Year Estimate DP02. This data is not available from the 2010 Census.⁴ Bolded percentages are higher than in their respective county.⁵ Note: Census Tract 9806 in Maricopa County is located on the Former Proving Grounds, which did not have any residents as of the 2010 Census or 2014 ACS.

TABLE 8. LIMITED ENGLISH PROFICIENCY

	Estimate Total Population ¹	SPANISH ONLY Limited English Proficiency ² (Speaks English less than "well") ¹	TOTAL Limited English Proficiency ² (Speaks English less than "well") ¹	Percent of Total Population
Census Tract 4226.40, Maricopa County	4,399	75	75	1.70%
Census Tract 4226.41, Maricopa County	5,496	81	138	2.51%
Census Tract 5228, Maricopa County	1,077	-	12	1.11%
Census Tract 8147, Maricopa County	4,278	-	-	0.00%
Census Tract 8148, Maricopa County	6,153	-	19	0.31%
Census Tract 8176, Maricopa County	1,166	112	112	9.61% ³
Census Tract 9806, Maricopa County	146	-	-	0.00%
Census Tract 2.04, Pinal County	7,311	39	39	0.53%
Census Tract 2.07, Pinal County	9,897	236	236	2.38%
Apache Junction	34,374	450	774	2.25%
Gilbert	212,305	1,568	3,546	1.67%
Mesa	427,292	19,123	21,835	5.11%
Queen Creek	27,079	164	242	0.89%
Maricopa County	3,745,433	171,440	205,294	5.48%
Pinal County	364,260	11,731	13,103	3.60%

¹Source: U.S. Census Bureau, 2011-2015 ACS 5-Year Estimates, Table B16005: Nativity by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over (2015)

²Limited English Proficiency (LEP) is defined as the population 5 years of age and older who speak English less than well (which includes the categories "not well" and "not at all")

³Bolded percentages are higher than in their respective county.

Business Types and Distribution

The US Census Bureau County Business Patterns database was reviewed for the two most current years 2010 and 2014 (US Census Bureau 2016) for the zip codes that intersect the study area: 85208, 85212, 85236, and 85142. The results show that there was a total increase in employment establishments of 67% during that 4-year time span (average of approximately 17% per year) for those zip codes (Table 9). This growth appears to be steady over time when compared to the total increase in employment establishments of 114% during the 7-year time span between 2000 and 2007 (average of approximately 16% per year) that was presented in the 2011 EA. The sectors of employment that had the greatest increase in establishments as a part of all establishments, include construction (15.3%), retail trade (12.1%), and health care and social assistance (13.1%).

Attachment 2. Updated Demographic Data
 Reevaluation of the Final Environmental Assessment
 STP-024 A(200)T; 024 MA 001 H8915 01L/02L
 Page A2-7

TABLE 9. 2010 AND 2014 EMPLOYMENT BY SECTOR

	Establishments 2010	Establishments 2014	Change in Number of Establishments (2000-2014)	% Change in Number of Establishments (2000-2014)	% Change as Part of all Establishments (2000-2014)
Agriculture, Forestry, Fishing and Hunting	1	2	1	100.0%	0.2%
Mining, Quarrying, and Oil and Gas Extraction	2	6	4	200.0%	0.7%
Utilities	0	2	2	-	0.3%
Construction	119	210	91	76.5%	15.3%
Manufacturing	11	30	19	172.7%	3.2%
Wholesale Trade	23	58	35	152.2%	5.9%
Retail Trade	127	199	72	56.7%	12.1%
Transportation and Warehousing	27	43	16	59.3%	2.7%
Information	12	16	4	33.3%	0.7%
Finance and Insurance	63	94	31	49.2%	5.2%
Real Estate and Rental and Leasing	56	77	21	37.5%	3.5%
Professional, Scientific, and Technical Services	96	150	54	56.3%	9.1%
Management of Companies and Enterprises	1	3	2	200.0%	0.3%
Administrative and Support and Waste Management and Remediation Services	76	125	49	64.5%	8.3%
Educational Services	12	20	8	66.7%	1.3%
Health Care and Social Assistance	110	188	78	70.9%	13.1%
Arts, Entertainment, and Recreation	8	11	3	37.5%	0.5%
Accommodation and Food Services	71	127	56	78.9%	9.4%
Other Services (except Public Administration)	69	119	50	72.5%	8.4%
Industries not classified	3	1	-2	-66.7%	-0.2%
Total for all sectors	887	1,481	594	67.0%	N/A

Source: US Census Bureau County Business Patterns 2010 and 2014

Attachment 2. Updated Demographic Data
Reevaluation of the Final Environmental Assessment
STP-024 A(200)T; 024 MA 001 H8915 01L/02L
Page A2-8

Travel and Commute Data

Based on US Census Bureau 2014 ACS 5-Year Estimate data, approximately 69.7% of the residents that lived in the census tracts that overlap the study area were employed in areas outside their community. Their commute time varied, but nearly all employees traveled by automobiles between work and home (US Census Bureau 2014a and 2014b).

Reevaluation of the Final Environmental Assessment
STP-024 A(200)T; 024 MA 001 H8915 01L/02L

ATTACHMENT 3

Cultural concurrence letters from ASLD, City of Mesa, Hopi Tribe, San Carlos Apache Tribe, Tohono O'odham Nation, and SHPO (continuing consultation on project effect)



U.S. Department
of Transportation
**Federal Highway
Administration**

Batch
ARIZONA DIVISION

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Phone: (602) 379-3646
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August 31, 2017

In Reply Refer To:

STP-024-A(200)T
TRACS No. 024 MA 001 H8915 01L
SR 24 Ellsworth Road to Ironwood Road Interim Phase II
Continuing Section 106 Consultation
"adverse effect"

Mr. Matthew Behrend, Cultural Resources Section Manager
Arizona State Land Department
1616 West Adams Street
Phoenix, Arizona 85007

Dear Mr. Behrend:

The Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT) are proposing to construct a new interim roadway within the footprint of the future segment of State Route (SR) 24 from Ellsworth Road to just east of Ironwood Road in and adjacent to the City of Mesa (City), Maricopa and Pinal counties, Arizona. The completed design concept report (DCR) and environmental assessment (EA) established a selected alternative for the construction of SR 24 from SR 202 milepost (MP) 34.50 to Ironwood Road. The first 1.4 miles of SR 24 from SR 202 to Ellsworth Road have been constructed and open to traffic since May 2014. While funding for the construction of the segment of SR 24 between Ellsworth Road and Ironwood Road is not anticipated to be available until 2027 or later, current and projected development in the project area, including the proposed expansion of the Phoenix-Mesa Gateway Airport, is occurring at a more rapid rate than calculated, resulting in a more immediate need for a regional transportation corridor in the project vicinity. FHWA and ADOT currently are proposing to construct an interim roadway within the footprint of the future segment of SR 24 between Ellsworth Road and Ironwood Road to provide a transportation corridor that supports existing and predicted traffic demands in the region until 2027 when funding is anticipated to become available for the final SR 24 build-out. As this project would employ federal funds, it is considered an undertaking subject to Section 106 review. This project would occur on City land, on Town of Gilbert land, on unincorporated Maricopa and Pinal County lands, and on privately-owned land.

The proposed scope of work for the interim improvements includes:

- Construction of a new divided roadway with two paved travel lanes in each direction and an earthen median from Ellsworth Road to Ironwood Road within the SR 24 alignment;
- Construction of 6-foot-wide paved inside shoulders and 12-foot-wide paved outside shoulders along lanes on the future mainline of SR 24;
- Construction of 2-foot-wide paved inside shoulders and 2-foot-wide paved outside shoulders along lanes on the future on- and exit ramps of SR 24;

- Widening the following intersecting roadways: Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road;
- Installation of drainage improvements and modification of the Ellsworth Road basin;
- Widening Powerline Floodway west of Ellsworth;
- Installation of roadway striping and signage; and
- Construction of at-grade intersections at Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road. Intersections may be controlled with signs, signals, or roundabouts.
- Construction of a grade-separated underpass bridge at Mountain Road. Mountain Road would cross over SR 24 with no direct access to SR 24. This will be the interim and ultimate condition.
- Widening select exit ramps at Ellsworth Road, Williams Field Road, Signal Butte Road, and Meridian Road to accommodate 2 lanes, instead of 1 lane;
- Modifying the SR 24 vertical alignment to be at-grade at Crismon Road (222nd Street) and Mountain Road, and to be above grade at Signal Butte Road and Meridian Road; and
- Closure of the northernmost driveway and construction of a retaining wall at the Fuji Films property located west of Mountain Road and south of the SR 24 alignment.

The area of potential effects (APE) for the interim project is defined as the footprint of the future SR 24 from existing SR 24 milepost (MP) 1.4 to 0.64 miles east of Ironwood Road on an alignment equidistant between Pecos and Williams Field roads totaling 5.25 miles. The APE also includes areas east and west of the proposed SR 24 alignment at Ray Road and Williams Field Road alignment and north and south of the proposed SR 24 alignment at Ellsworth, Signal Butte, Meridian, and Ironwood roads for traffic interchanges and areas north and south of the proposed SR 24 alignment at Mountain Road for a grade-separated underpass bridge.

Previous inventory of the SR 24 project footprint identified 11 cultural resources all either determined eligible or were unevaluated for the National Register of Historic Places (NRHP) (Hollis [FHWA] to Jacobs [SHPO] June 14, 2010, SHPO concurrence June 17, 2010). Thus, a programmatic agreement (PA), executed in 2010, was drafted regarding construction of both the interim and ultimate improvements along the proposed SR 24 corridor. Signatories and invited signatories to the PA are FHWA, the Arizona State Historic Preservation Office (SHPO), the Arizona State Land Department, ADOT, and the Federal Aviation Administration. Invited parties are the Arizona State Museum, the City, the U.S. Army Corps of Engineers, the Gila River Indian Community, the Hopi Tribe, the Pascua Yaqui Tribe, the San Carlos Apache Tribe, the Yavapai-Apache Nation, and the Yavapai Prescott Indian Tribe.

Because the current guidelines to consult with all of the Four Southern Tribes when one of them is a consulting party was not in place in 2010 when the PA was executed, via separate letters, FHWA/ADOT will invite the Ak-Chin Indian Community, the Salt River Pima Maricopa Indian Community and the Tohono O'odham Nation to participate in the PA.

The need for an underpass along the Mountain Road alignment was recently identified. This portion of the APE along Mountain Road is defined as 903 ft by 403 ft area north of the proposed

SR 24 corridor and the 583 by 400 ft south of the proposed SR 24 corridor centered on the Mountain Road alignment. The survey area is comprised of City and private lands.

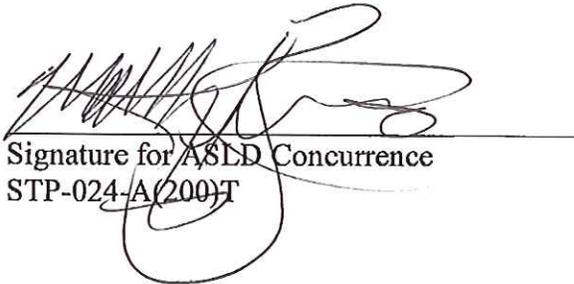
This newly defined portion of the APE was recently surveyed by Logan Simpson, Inc. The results are reported in *A Cultural Resources Survey of 13.51 Acres for Interim Phase II of the State Route 24 Gateway Freeway, City of Mesa, Arizona* (Bustoz 2016), which is enclosed here for your review and comment. No historic properties were identified within this portion of the APE as a result of the survey. Because of previously identified cultural resources within the APE as a whole, the project finding of effect continues to be 'adverse effect'.

Please review the enclosed report and the information provided in this letter. If you find the report adequate and agree with FHWA's continued finding of project effect, please indicate your concurrence by signing below. If you have any questions or concerns, please feel free to contact Historic Preservation Specialist Jill Heilman at 602-712-6371 or e-mail JHeilman@azdot.gov.

Sincerely yours,



Karla S. Petty
Division Administrator



Signature for ASLD Concurrence
STP-024-A(200)T

1 Sept 2017
Date

Enclosure

ecc:

Ms. April Sewequaptewa-Tutt, Archaeological Projects Specialist asewequaptewa-tutt@azland.gov (w/ electronic enclosure)

Ms. Crystal Carrancho, Archaeological Projects Specialist ccarrancho@azland.gov (w/ electronic enclosure)

RYedlin
JHeilman

JAN 09 2017



U.S. Department
of Transportation
**Federal Highway
Administration**

ARIZONA DIVISION

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December 12, 2016

In Reply Refer To:

STP-024-A(200)T
024 MA 001 H8915 01L
SR 24 Ellsworth Road to Ironwood Road Interim Phase II
Continuing Section 106 Consultation
"adverse effect"

Mr. John Wesley
City of Mesa
Acting Historic Preservation Officer
P.O. Box 1466
Mesa, AZ 85211-1466

Dear Mr. Wesley:

The Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT) are proposing to construct a new interim roadway within the footprint of the future segment of State Route (SR) 24 from Ellsworth Road to just east of Ironwood Road in and adjacent to the City of Mesa (City), Maricopa and Pinal counties, Arizona. The completed design concept report (DCR) and environmental assessment (EA) established a selected alternative for the construction of SR 24 from SR 202 milepost (MP) 34.50 to Ironwood Road. The first 1.4 miles of SR 24 from SR 202 to Ellsworth Road have been constructed and open to traffic since May 2014. While funding for the construction of the segment of SR 24 between Ellsworth Road and Ironwood Road is not anticipated to be available until 2027 or later, current and projected development in the project area, including the proposed expansion of the Phoenix-Mesa Gateway Airport, is occurring at a more rapid rate than calculated, resulting in a more immediate need for a regional transportation corridor in the project vicinity. FHWA and ADOT currently are proposing to construct an interim roadway within the footprint of the future segment of SR 24 between Ellsworth Road and Ironwood Road to provide a transportation corridor that supports existing and predicted traffic demands in the region until 2027 when funding is anticipated to become available for the final SR 24 build-out. As this project would employ federal funds, it is considered an undertaking subject to Section 106 review. This project would occur on City land, on Town of Gilbert land, on unincorporated Maricopa and Pinal County lands, and on privately-owned land.

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This newly defined portion of the APE recently was surveyed by Logan Simpson, Inc. The results are reported in *A Cultural Resources Survey of 13.51 Acres for Interim Phase II of the State Route 24 Gateway Freeway, City of Mesa, Arizona* (Bustoz 2016), which is enclosed here for your review and comment. No historic properties were identified within this portion of the APE as a result of the survey. Because of previously identified cultural resources within the APE as a whole, the project finding of effect continues to be ‘adverse effect’.

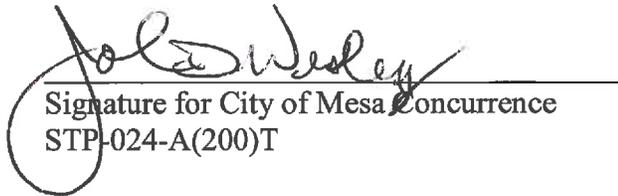
Please review the enclosed report and the information provided in this letter. If you find the report adequate and agree with FHWA’s continued finding of project effect, please indicate your concurrence by signing below.

If you have any questions or concerns, please feel free to contact Historic Preservation Specialist Jill Heilman at 602-712-6371 or e-mail jheilman@azdot.gov.

Sincerely yours,



Karla S. Petty
Division Administrator


Signature for City of Mesa Concurrence
STP-024-A(200)T

12/19/16
Date

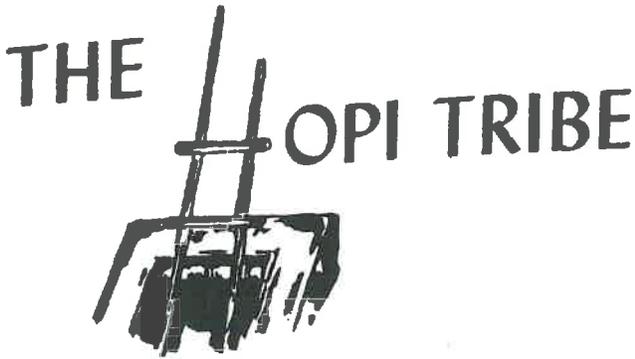
Enclosure

ecc:
RYedlin
JHeilman

JAN 03 2017

Herman G. Honanie
CHAIRMAN

Alfred Lomahquahu Jr.
VICE-CHAIRMAN



December 29, 2016

Karla S. Petty, Division Administrator
Federal Highway Administration, Arizona Division
4000 North Central Ave., Suite 1500
Phoenix, Arizona 85012-3500

Re: SR 24: Ellsworth Road- Ironwood Road Phase II

Dear Ms. Petty,

Thank you for your correspondence dated December 12, 2016, regarding the Federal Highway Administration (FHWA) and Arizona Department of Transportation (ADOT) proposing to construct a new interim roadway within the footprint of the future segment of State Route 24 from Ellsworth Road to Ironwood Road in Mesa. The Hopi Tribe claims cultural affiliation to earlier identifiable cultural groups in Arizona. The Hopi Cultural Preservation Office supports the identification and avoidance of our ancestral sites and Traditional Cultural Properties, and we consider the archaeological sites of our ancestors to be "footprints" and Traditional Cultural Properties. Therefore, we appreciate the FHWA and ADOT's continuing solicitation of our input and your efforts to address our concerns.

The Hopi Cultural Preservation Office understands a 2010 inventory of the SR 24 project footprint identified 11 National Register eligible or unevaluated cultural resources and a Programmatic Agreement was developed. We also understand the need for an underpass along the Mountain Road was recently identified and surveyed for cultural resources and none were identified.

Therefore, we understand that because of the previously identified cultural resources within the area of potential effect, the finding of adverse effect continues to be appropriate for this undertaking. If any of the identified sites that will be adversely affected by the project are prehistoric, then we request continuing consultation on this proposal including being provided with copies of any proposed treatment plans, as well as the treatment reports for review and comment. Should you have any questions or need additional information, please contact Terry Morgart at the Hopi Cultural Preservation Office. Thank you again for your consideration.

Respectfully,

A handwritten signature in blue ink, appearing to read "Leigh J. Kuwanwisiwma", is written over the typed name and title.

Leigh J. Kuwanwisiwma, Director
Hopi Cultural Preservation Office

xc: Arizona State Historic Preservation Office
Jill Heilman, Arizona Department of Transportation



U.S. Department
of Transportation
**Federal Highway
Administration**

ARIZONA DIVISION

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December 12, 2016

In Reply Refer To:

STP-024-A(200)T
024 MA 001 H8915 01L
SR 24 Ellsworth Road to Ironwood Road Interim Phase II
Continuing Section 106 Consultation
"adverse effect"

Mr. Terry Rambler, Chairman
San Carlos Apache Tribe
P.O. Box 0
San Carlos, AZ 85550

Dear Chairman Rambler:

The Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT) are proposing to construct a new interim roadway within the footprint of the future segment of State Route (SR) 24 from Ellsworth Road to just east of Ironwood Road in and adjacent to the City of Mesa (City), Maricopa and Pinal counties, Arizona. The completed design concept report (DCR) and environmental assessment (EA) established a selected alternative for the construction of SR 24 from SR 202 milepost (MP) 34.50 to Ironwood Road. The first 1.4 miles of SR 24 from SR 202 to Ellsworth Road have been constructed and open to traffic since May 2014. While funding for the construction of the segment of SR 24 between Ellsworth Road and Ironwood Road is not anticipated to be available until 2027 or later, current and projected development in the project area, including the proposed expansion of the Phoenix-Mesa Gateway Airport, is occurring at a more rapid rate than calculated, resulting in a more immediate need for a regional transportation corridor in the project vicinity. FHWA and ADOT currently are proposing to construct an interim roadway within the footprint of the future segment of SR 24 between Ellsworth Road and Ironwood Road to provide a transportation corridor that supports existing and predicted traffic demands in the region until 2027 when funding is anticipated to become available for the final SR 24 build-out. As this project would employ federal funds, it is considered an undertaking subject to Section 106 review. This project would occur on City land, on Town of Gilbert land, on unincorporated Maricopa and Pinal County lands, and on privately-owned land.

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FHWA/ADOT will invite the Ak-Chin Indian Community, the Salt River Pima Maricopa Indian Community and the Tohono O'odham Nation to participate in the PA.

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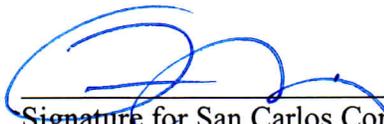
Please review the enclosed report and the information provided in this letter. If you find the report adequate and agree with FHWA's continued finding of project effect, please indicate your concurrence by signing below.

If you have any questions or concerns, please feel free to contact Historic Preservation Specialist Jill Heilman at 602-712-6371 or e-mail jheilman@azdot.gov.

Sincerely yours,

Rebecca Yedlin

Karla S. Petty
Division Administrator



Signature for San Carlos Concurrence
STP-024-A(200)T

12-28-16

Date

cc:

Ms. Vernelda Grant, Tribal Historic Preservation Officer, San Carlos Apache Tribe, P.O. Box 0 San Carlos, AZ 85550 (w/enclosure)

ecc:

RYedlin
JHeilman



U.S. Department
of Transportation
**Federal Highway
Administration**

ARIZONA DIVISION

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December 12, 2016

DEC 22 2016

In Reply Refer To:

STP-024-A(200)T
024 MA 001 H8915 01L
SR 24 Ellsworth Road to Ironwood Road Interim Phase II
Continuing Section 106 Consultation
"adverse effect"

Dr. David Jacobs, Compliance Specialist
State Historic Preservation Office
Arizona State Parks
1300 West Washington
Phoenix, Arizona 85007



Dear Dr. Jacobs:

The Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT) are proposing to construct a new interim roadway within the footprint of the future segment of State Route (SR) 24 from Ellsworth Road to just east of Ironwood Road in and adjacent to the City of Mesa (City), Maricopa and Pinal counties, Arizona. The completed design concept report (DCR) and environmental assessment (EA) established a selected alternative for the construction of SR 24 from SR 202 milepost (MP) 34.50 to Ironwood Road. The first 1.4 miles of SR 24 from SR 202 to Ellsworth Road have been constructed and open to traffic since May 2014. While funding for the construction of the segment of SR 24 between Ellsworth Road and Ironwood Road is not anticipated to be available until 2027 or later, current and projected development in the project area, including the proposed expansion of the Phoenix-Mesa Gateway Airport, is occurring at a more rapid rate than calculated, resulting in a more immediate need for a regional transportation corridor in the project vicinity. FHWA and ADOT currently are proposing to construct an interim roadway within the footprint of the future segment of SR 24 between Ellsworth Road and Ironwood Road to provide a transportation corridor that supports existing and predicted traffic demands in the region until 2027 when funding is anticipated to become available for the final SR 24 build-out. As this project would employ federal funds, it is considered an undertaking subject to Section 106 review. This project would occur on City land, on Town of Gilbert land, on unincorporated Maricopa and Pinal County lands, and on privately-owned land.

The proposed scope of work for the interim improvements includes:

- Construction of a new divided roadway with two paved travel lanes in each direction and an earthen median from Ellsworth Road to Ironwood Road within the SR 24 alignment;
- Construction of 6-foot-wide paved inside shoulders and 12-foot-wide paved outside shoulders along lanes on the future mainline of SR 24;
- Construction of 2-foot-wide paved inside shoulders and 2-foot-wide paved outside shoulders along lanes on the future on- and exit ramps of SR 24;
- Widening the following intersecting roadways: Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road;

- Installation of drainage improvements and modification of the Ellsworth Road basin;
- Widening Powerline Floodway west of Ellsworth;
- Installation of roadway striping and signage; and
- Construction of at-grade intersections at Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road. Intersections may be controlled with signs, signals, or roundabouts.
- Construction of a grade-separated underpass bridge at Mountain Road. Mountain Road would cross over SR 24 with no direct access to SR 24. This will be the interim and ultimate condition.
- Widening select exit ramps at Ellsworth Road, Williams Field Road, Signal Butte Road, and Meridian Road to accommodate 2 lanes, instead of 1 lane;
- Modifying the SR 24 vertical alignment to be at-grade at Crismon Road (222nd Street) and Mountain Road, and to be above grade at Signal Butte Road and Meridian Road; and
- Closure of the northernmost driveway and construction of a retaining wall at the Fuji Films property located west of Mountain Road and south of the SR 24 alignment.

The area of potential effects (APE) for the interim project is defined as the footprint of the future SR 24 from existing SR 24 milepost (MP) 1.4 to 0.64 miles east of Ironwood Road on an alignment equidistant between Pecos and Williams Field roads totaling 5.25 miles. The APE also includes areas east and west of the proposed SR 24 alignment at Ray Road and Williams Field Road alignment and north and south of the proposed SR 24 alignment at Ellsworth, Signal Butte, Meridian, and Ironwood roads for traffic interchanges and areas north and south of the proposed SR 24 alignment at Mountain Road for a grade-separated underpass bridge.

At this time, FHWA is inquiring whether you have any concerns regarding historic properties of religious or cultural importance to your community within the project area. If you have such concerns, any information you might provide within 30 days of receipt of this letter would be considered in the project planning. If your office opts to participate in cultural resource consultation at a later date, FHWA would make a good faith effort to address any concerns.

Previous inventory of the SR 24 project footprint identified 11 cultural resources all either determined eligible or were unevaluated for the National Register of Historic Places (NRHP) (Hollis [FHWA] to Jacobs [SHPO] June 14, 2010, SHPO concurrence June 17, 2010). Thus, a programmatic agreement (PA), executed in 2010, was drafted regarding construction of both the interim and ultimate improvements along the proposed SR 24 corridor. Signatories and invited signatories to the PA are FHWA, the Arizona State Historic Preservation Office (SHPO), the Arizona State Land Department, ADOT, and the Federal Aviation Administration. Invited parties are the Arizona State Museum, the City, the U.S. Army Corps of Engineers, the Gila River Indian Community, the Hopi Tribe, the Pascua Yaqui Tribe, the San Carlos Apache Tribe, the Yavapai-Apache Nation, and the Yavapai Prescott Indian Tribe.

Because the current guidelines to consult with all of the Four Southern Tribes when one of them is a consulting party was not in place in 2010 when the PA was executed, via separate letters, FHWA/ADOT will invite the Ak-Chin Indian Community, the Salt River Pima Maricopa Indian Community and the Tohono O'odham Nation to participate in the PA.

The need for an underpass along the Mountain Road alignment was recently identified. This portion of the APE along Mountain Road is defined as 903 ft by 403 ft area north of the proposed

SR 24 corridor and the 583 by 400 ft south of the proposed SR 24 corridor centered on the Mountain Road alignment. The survey area is comprised of City and private lands.

This newly defined portion of the APE recently was surveyed by Logan Simpson, Inc. The results are reported in *A Cultural Resources Survey of 13.51 Acres for Interim Phase II of the State Route 24 Gateway Freeway, City of Mesa, Arizona* (Bustoz 2016), which is enclosed here for your review and comment. No historic properties were identified within this portion of the APE as a result of the survey. Because of previously identified cultural resources within the APE as a whole, the project finding of effect continues to be 'adverse effect'.

Please review the enclosed report and the information provided in this letter. If you find the report adequate and agree with FHWA's continued finding of project effect, please indicate your concurrence by signing below.

If you have any questions or concerns, please feel free to contact Historic Preservation Specialist Jill Heilman at 602-712-6371 or e-mail jheilman@azdot.gov.

Sincerely yours,

Karla S. Petty
Division Administrator

Signature for SHPO Concurrence
STP-024-A(200)T

15 DEC 16

Date

Enclosure

ecc:
RYedlin
JHeilman

cc: Jill Heilman, AZDOT

Reevaluation of the Final Environmental Assessment
STP-024 A(200)T; 024 MA 001 H8915 01L/02L

ATTACHMENT 4

**Project Level PM Quantitative Hot-Spot Analysis Project of Air Quality Concern
Questionnaire and interagency consultation documentation for the PM₁₀ questionnaire**

SR 24, Ellsworth Road to Ironwood Road Interim Phase I
Federal Project No.: STP-024-A(200)T
ADOT Project No.: 024 MA 000 H8915 01L



Project Level PM Quantitative Hot-Spot Analysis - Project of Air Quality Concern Questionnaire

Project Setting and Description

The Arizona Department of Transportation (ADOT), in association with the Federal Highway Administration (FHWA), proposes to construct a new divided roadway with two paved travel lanes in each direction within the alignment of the future State Route 24 (SR-24) Freeway from Ellsworth Road to Ironwood Road identified as the Interim Phase 1 Project. The first 1.5 miles of SR 24 from SR 202L to Ellsworth Road were completed and opened to traffic in May 2014. According to the Maricopa Association of Governments (MAG) 2040 Regional Transportation Plan, construction of the remaining segment of SR 24 between Ellsworth Road and Ironwood Road is anticipated between Fiscal Year (FY) 2027 - FY 2040. The MAG FY 2018-2022 TIP was amended September 27, 2017 (STIP amendment #41, approved October 12, 2017) to (describe the change, ex. include the Interim Phase 1 Project for construction in 2020). The Interim Phase 1 project is listed as 24 (Williams Gateway): Ellsworth Rd-Ironwood. The TIP identifies the project by phase and different funding sources that are used in Pinal and Maricopa Counties. By 2040, SR 24 is anticipated to be a controlled access freeway, extending from the existing freeway terminus at Ellsworth Road to Ironwood Road. Freeway interchanges will be provided at Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road.

The Interim Phase I project limits will begin west of the existing at-grade intersection of SR-24 at Ellsworth Road and extend east to Ironwood Road, a distance of approximately 4 miles. The purpose of the Interim Phase I project is to provide a transportation corridor that supports existing and predicted traffic demands and promotes economic development in the region until funding becomes available for the ultimate SR 24 build-out.

The proposed project is located a Non-Attainment Area for particulates 10-microns in diameter or less (PM₁₀) for the Maricopa County (Phoenix) and Pinal County (West) areas, a non-attainment area for Ozone 8-hour, and a maintenance area for carbon monoxide. The Maricopa Association of Governments (MAG) issued the 2012 Five Percent Plan for the Maricopa County Nonattainment Area, and the Arizona Department of Environmental Quality (ADEQ) submitted it to the US Environmental Protection Agency (EPA) on May 25, 2012. The US EPA approved this State Implementation Plan (SIP) Revision on May 30, 2014.

The following agencies would be included on interagency consultation and provide input to the POAQC Questionnaire: EPA, ADEQ, MAG, Maricopa Air Quality Department, and Pinal County Air Quality Department.

Project Assessment

The following questionnaire is used to compare the proposed project to a list of project types in 40 CFR 93.123(b) requiring a quantitative analysis of local particulate emissions (Hot-spots) in non-attainment or maintenance areas, which include:

SR 24, Ellsworth Road to Ironwood Road Interim Phase I

Federal Project No.: STP-024-A(200)T

ADOT Project No.: 024 MA 000 H8915 01L



-
- i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
 - ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of an increase in traffic volumes from a significant number of diesel vehicles related to the project;
 - iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
 - iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
 - v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM₁₀ or PM_{2.5} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

If the project matches one of the listed project types in 40 CFR 123(b)(1) above, it is considered a project of local air quality concern and the hot-spot demonstration must be based on quantitative analysis methods in accordance to 40 CFR 93.116(a) and the consultation requirements of 40 CFR 93.105(c)(1)(i). If the project does not require a PM hot-spot analysis, a qualitative assessment will be developed that demonstrates that the project will not contribute to any new localized violations, increase the frequency or severity of any existing violations, or delay the timely attainment of any NAAQS or any required emission reductions or milestones in any nonattainment or maintenance area.

On March 10, 2006, EPA published *PM_{2.5} and PM₁₀ Hot-Spot Analyses in Project-Level Transportation Conformity Determinations for the New PM_{2.5} and Existing PM₁₀ National Ambient Air Quality Standards; Final Rule* describing the types of projects that would be considered a project of air quality concern and that require a hot-spot analysis (71 FR 12468-12511). Specifically on page 12491, EPA provides the following clarification: "Some examples of *projects of air quality concern* that would be covered by § 93.123(b)(1)(i) and (ii) are: A project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic;" .." Expansion of an existing highway or other facility that affects a congested intersection (operated at Level-of-Service D, E, or F) that has a significant increase in the number of diesel trucks;" These examples will be used as the baseline for determining if the project is a project of air quality concern.

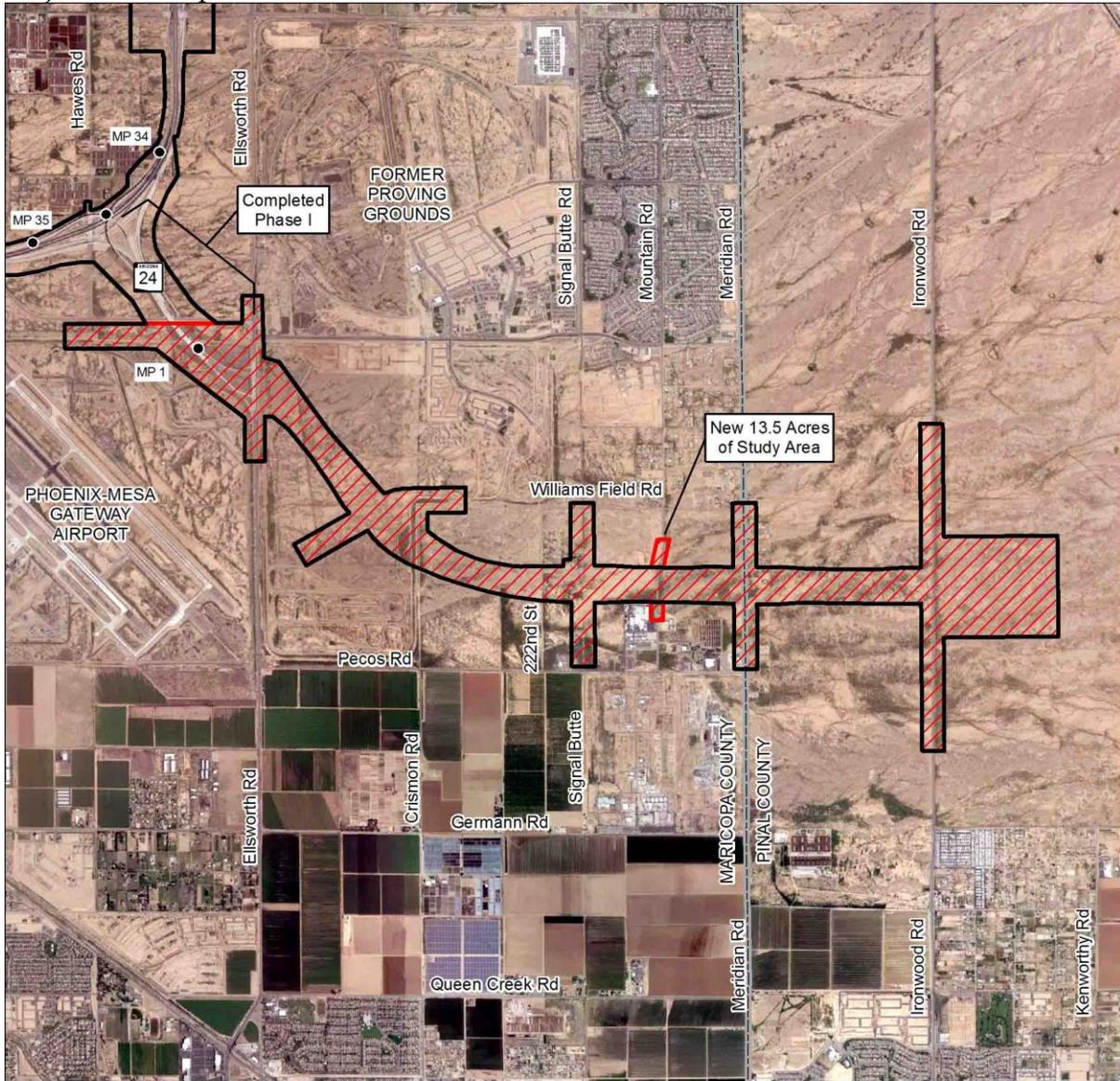
SR 24, Ellsworth Road to Ironwood Road Interim Phase I

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Project Area Map



Source: Arizona Transportation Information System GIS Coverage (2013); Google Earth Aerial Imagery (3/2015)

Key

-  2011 EA Study Area
-  Proposed Modified Project Study Area



SR 24, Ellsworth Road to Ironwood Road Interim Phase I

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New Highway Capacity

Is this a new highway project that has a significant number of diesel vehicles?

Example: total traffic volumes $\geq 125,000$ annual average daily traffic (AADT) and truck volumes $\geq 10,000$ diesel trucks per day (8% of total traffic).

NO – The proposed SR 24 highway is not anticipated to have a significant number of diesel vehicles. The projected Maximum Design Year (2040) AADT for the Build Alternative is 81,873 vehicles per day (vpd) between Ellsworth Road and Williams Field Road (see Table 1). Table 2 shows the total percentage of trucks for Light Duty, Medium Duty, and Heavy Duty Trucks for all fuel types (L,M,H). As a conservative estimate, it is assumed that ALL medium and heavy duty vehicle volumes provided by the MAG model are diesel trucks. In the 2040 build scenario, SR 24 will provide a local connection between Loop 202 and Ironwood Road and no regional connectivity for long distance truck traffic. Therefore, the projected truck traffic is predominantly from light duty vehicles or passenger commuter travel.

Segment Name	AADT ⁽¹⁾
Ellsworth Rd to Williams Field Rd	81,873
Williams Field Rd to Signal Butte Rd	68,228
Signal Butte Rd to Meridian Rd	70,304
Meridian Rd to Ironwood Dr	26,609

(1) Source: MAG Travel Demand Model on August 25, 2017 included in SR 24 Interim Phase II DCR Traffic Analysis Report, September 2017

Parameter	2040
AADT ⁽¹⁾	81,873
Truck Volume	27,344
% Diesel Trucks (M,H)	6.0%
Diesel Truck Volume ⁽¹⁾	4,947

(1) The traffic volumes provided represent the maximum volumes within the project limits.

Projects with Congested Intersections

Is this a project that affects a congested intersection (LOS D or greater) that has a significant number of diesel trucks, OR will change LOS to D or greater because of increase traffic volumes for significant number of diesel trucks related to the project?

NO – This project is not anticipated to create congestion at intersections that have a significant number of diesel trucks. Level of Service (LOS) calculations were completed for the 2040 projections of the new SR 24 interchanges at Williams Field Road, Signal Butte Road, Meridian Road and Ironwood Road and the existing interchange at Ellsworth Road.

For the 2040 horizon year, all intersection movements are expected to operate at a LOS D or better (see Table 3 and Appendix). The two intersections projected to carry LOS D during some peak hours in 2040 include the SR 24 EB Ramps and Meridian Road and the SR 24 EB Ramps and Ironwood Road. There is not a significant volume of diesel vehicles expected at the SR 24 EB Ramps and Ironwood Road since heavy diesel trucks typically avoid peak periods and there are other alternative routes (see the turning movement for medium and heavy trucks included in the Appendix). There is not a significant volume of diesel vehicles expected at the SR 24 EB Ramps and Meridian Road intersection since Meridian Road will provide connectivity for local delivery trucks only.

Intersection	AM LOS	PM LOS
SR 24 WB Ramps and Ellsworth Road	B	C
SR 24 EB Ramps and Ellsworth Road	C	C
SR 24 WB Ramps and Williams Field Road	C	B
SR 24 EB Ramps and Williams Field Road	B	C
SR 24 WB Ramps and Signal Butte Road	B	C
SR 24 EB Ramps and Signal Butte Road	C	C
SR 24 WB Ramps and Meridian Road	B	C
SR 24 EB Ramps and Meridian Road	D	D
SR 24 WB Ramps and Ironwood Road	A	A
SR 24 EB Ramps and Ironwood Road	C	D

SR 24, Ellsworth Road to Ironwood Road Interim Phase II
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 ADOT Project No.: 024 MA 000 H8915 01L



Expanded Highway Capacity

Is this an expanded highway projects that have a significant increase in the number of diesel vehicles?

Example: the build scenario of the expanded highway or expressway causes a significant increase in the number of diesel trucks compared with the no-build scenario, truck volumes > 8% of the total traffic.

NO – SR 24 is not currently built east of Ellsworth Road.

New Bus and Rail Terminals

Does the project involve construction of a new bus or intermodal terminal that accommodates a significant number of diesel vehicles?

NO – These facilities are not included in the project.

Expanded Bus and Rail Terminals

Does the project involve an existing bus or intermodal terminal that has a large vehicle fleet where the number of diesel buses (or trains) increases by 50% or more, as measured by arrivals?

NO – These facilities are not included in the project.

Projects Affecting PM Sites of Violation or Possible Violation

Does the project affect locations, areas or categories of sites that are identified in the PM₁₀ or PM_{2.5} applicable plan or implementation plan submissions, as appropriate, as sites of violation or potential violation?

NO – The project does not impact a monitor that is identified in the MAG PM10 nonattainment area and will not create a possible violation of the PM10 standard.

POAQC Determination

The proposed SR 24 highway is not anticipated to have a significant number of diesel vehicles; the diesel truck volumes are low at 6%. The project also does not impact LOS D or worse intersections with a significant number of diesel vehicles. The project area is generally utilized by local automobile traffic and is not a facility that carries heavy truck traffic. EPA provided a similar example of a project that is not a project of air quality concern, “The following are examples of projects that are not an air quality concern under § 93.123(b)(1)(i) and (ii) of this final rule: Projects that do not meet the criteria under § 93.123(b)(1), such as any new or expanded highway project that primarily services gasoline vehicle traffic (i.e., does not involve a significant number or increase in the number of diesel vehicles), including such projects involving congested LOS D, E, or F;” (71 FR 12491).

Therefore, ADOT is presenting this project for interagency consultation per 40 CFR 93.105, as a Project that is NOT of Air Quality Concern and thereby will not require a PM10 hot-spot analysis. While this project does not require a hot-spot analysis, other conformity provisions apply and will be addressed in the air quality analysis that will be submitted to FHWA.

SR 24, Ellsworth Road to Ironwood Road Interim Phase I
Federal Project No.: STP-024-A(200)T
ADOT Project No.: 024 MA 000 H8915 01L



Interagency Consultation Results

On October 20, 2017 ADOT provided a copy of this questionnaire, to the following consultation parties, the Environmental Protection Agency (EPA), FHWA, MAG, ADEQ and the Pinal County Air Quality Department and Maricopa County Air Quality Department as the local air agencies in Pinal and Maricopa Counties. A comment was received requesting additional information on trucks at the intersections, this information was included in the Appendix. There were no objections to the project determination and on November 6, 2017 ADOT concluded interagency consultation by notifying interested parties that this project will proceed as a project that does not require a quantitative PM10 hot-spot analysis under 40CFR 93.123(b).

SR 24, Ellsworth Road to Ironwood Road Interim Phase I
 Federal Project No.: STP-024-A(200)T
 ADOT Project No.: 024 MA 000 H8915 01L



Appendix

2040 SR24 Freeway Signalized Intersections Operations Analysis (Synchro Results)

SR 24 WB Ramps and Ellsworth Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
17.8	B	NB	Left	10.0	A	1050
			Through	<5	A	925
		SB	Through	45.5	D	425
			Right	<5	A	750
		WB	Left	47.0	D	50
			Right	53.9	D	300
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
28.3	C	NB	Left	30.0	C	1225
			Through	<5	A	1275
		SB	Through	52.4	D	1275
			Right	<5	A	1050
		WB	Left	34.3	C	25
			Right	37.2	D	200

SR 24 EB Ramps and Ellsworth Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
26.8	C	NB	Through	31.7	C	1400
			Right	24.0	C	25
		SB	Left	48.7	D	100
			Through	<5	A	375
		EB	Left	28.7	C	575
			Right	<5	A	750
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
30.5	C	NB	Through	48.5	D	1525
			Right	36.5	D	150
		SB	Left	45.8	D	200
			Through	3.7	A	1100
		EB	Left	28.6	C	975
			Right	<5	A	1250

SR 24, Ellsworth Road to Ironwood Road Interim Phase I

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SR 24 WB Ramps and Williams Field Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
25.4	C	NB	Left	11.0	B	25
			Through	<5	A	400
		SB	Through	11.4	B	50
			Right	39.3	D	775
		WB	Left	34.2	C	25
Right	34.4		C	25		
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
12.0	B	NB	Left	10.7	B	25
			Through	<5	A	900
		SB	Through	11.3	B	25
			Right	26.3	C	650
		WB	Left	34.2	C	25
Right	34.4		C	25		

SR 24 EB Ramps and Williams Field Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
19.9	B	NB	Through	30.7	C	75
			Right	30.9	C	25
		SB	Left	23.9	C	25
			Through	5.2	A	50
		EB	Left	18.8	B	350
			Right	16.9	B	25
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
21.2	C	NB	Through	31.7	C	25
			Right	32.4	C	25
		SB	Left	26.4	C	25
			Through	8.0	A	25
		EB	Left	21.0	C	900
			Right	14.8	B	25

SR 24, Ellsworth Road to Ironwood Road Interim Phase I

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SR 24 WB Ramps and Signal Butte Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
17.5	B	NB	Left	13.6	B	275
			Through	<5	A	875
		SB	Through	36.9	D	550
			Right	34.8	C	50
		WB	Left	35.3	D	75
			Right	36.6	D	150
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
27.1	C	NB	Left	48.6	D	425
			Through	<5	A	800
		SB	Through	30.0	C	1300
			Right	26.4	C	150
		WB	Left	36.3	D	375
			Right	41.0	D	400

SR 24 EB Ramps and Signal Butte Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
26.8	C	NB	Through	33.2	C	1050
			Right	36.9	D	275
		SB	Left	22.0	C	75
			Through	<5	A	550
		EB	Left	35.9	D	100
			Right	40.5	D	325
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
20.8	C	NB	Through	28.1	C	1150
			Right	28.8	C	250
		SB	Left	37.0	D	150
			Through	<5	A	1525
		EB	Left	33.7	C	75
			Right	48.3	D	600

SR 24, Ellsworth Road to Ironwood Road Interim Phase I

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ADOT Project No.: 024 MA 000 H8915 01L



SR 24 WB Ramps and Meridian Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
17.9	B	NB	Left	17.9	B	2050
			Through	<5	A	700
		SB	Through	55.0	D	250
			Right	<5	A	225
		WB	Left	49.9	D	50
			Right	47.4	D	50
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
20.9	C	NB	Left	21.9	C	1550
			Through	<5	A	825
		SB	Through	44.0	D	600
			Right	<5	A	525
		WB	Left	42.9	D	25
			Right	42.8	D	50

SR 24 EB Ramps and Meridian Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
36.5	D	NB	Through	40.8	D	2525
			Right	19.6	B	50
		SB	Left	34.4	C	25
			Through	<5	A	275
		EB	Left	36.9	D	225
			Right	<5	A	725
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
41.1	D	NB	Through	53.7	D	2125
			Right	25.9	C	50
		SB	Left	39.9	D	75
			Through	<5	A	550
		EB	Left	26.4	C	250
			Right	<5	A	3000

SR 24, Ellsworth Road to Ironwood Road Interim Phase I

Federal Project No.: STP-024-A(200)T

ADOT Project No.: 024 MA 000 H8915 01L

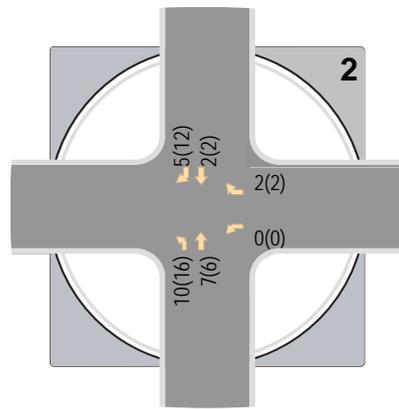


SR 24 WB Ramps and Ironwood Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
4.2	A	NB	Left	<5	A	1275
			Through	<5	A	750
		SB	Through	19.0	B	375
			Right	17.3	B	50
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
9.7	A	NB	Left	13.0	B	1100
			Through	<5	A	750
		SB	Through	13.4	B	1000
			Right	9.2	A	50

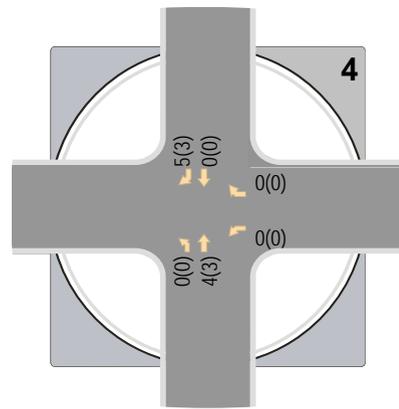
SR 24 EB Ramps and Ironwood Road						
2040 Volumes - AM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
20.7	C	NB	Through	22.0	C	2000
		SB	Through	<5	A	375
		EB	Left	23.3	C	25
			Right	29.8	C	575
2040 Volumes - PM Peak Hour						
Intersection Delay	Intersection LOS	Approach	Movement	Movement Delay	Movement LOS	Traffic Volume (veh/h)
45.0	D	NB	Through	50.5	D	1800
		SB	Through	38.3	D	1000
		EB	Left	10.8	B	50
			Right	44.2	D	1725

AM{Midday}(PM)

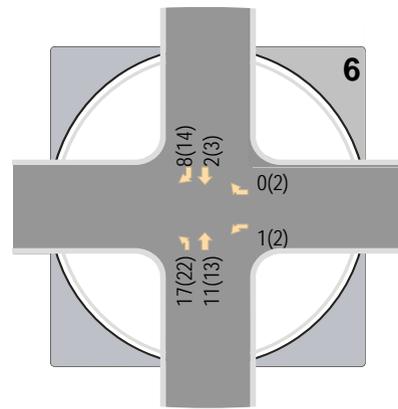
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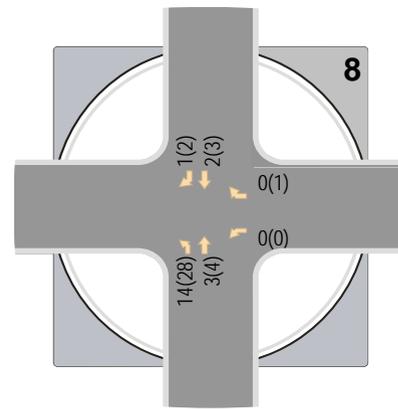
Ellsworth Road & WB SR 24 Ramps



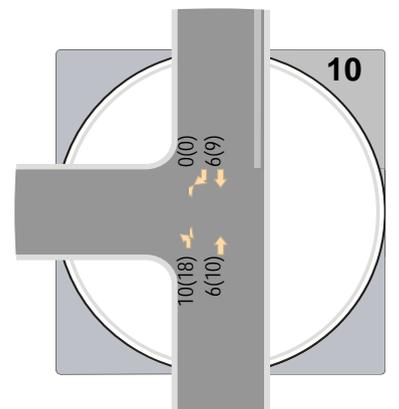
Williams Field Road & WB SR 24 Ramps



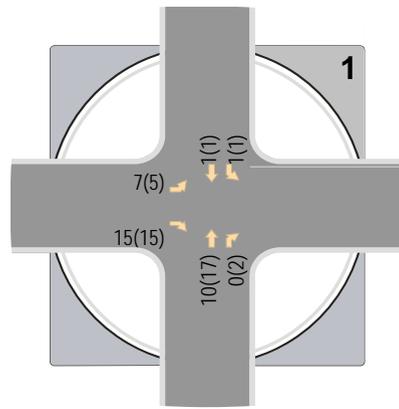
Signal Butte Road & WB SR 24 Ramps



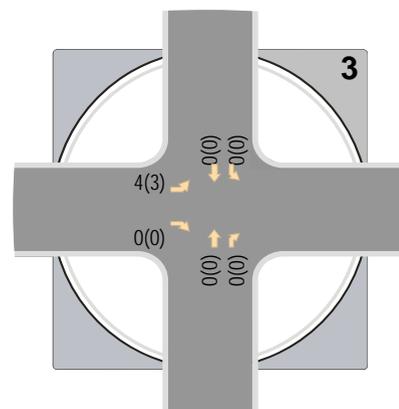
Meridian Road & WB SR 24 Ramps



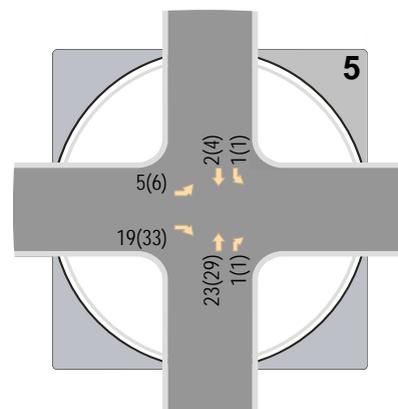
Ironwood Drive & WB SR 24 Ramps



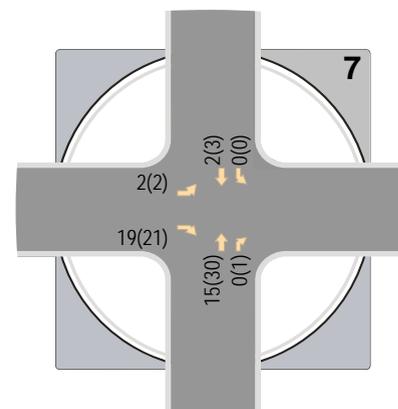
Ellsworth Road & EB SR 24 Ramps



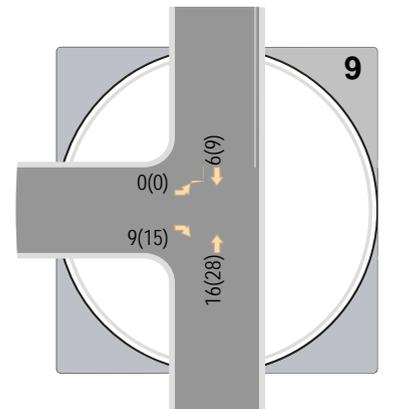
Williams Field Road & EB SR 24 Ramps



Signal Butte Road & EB SR 24 Ramps



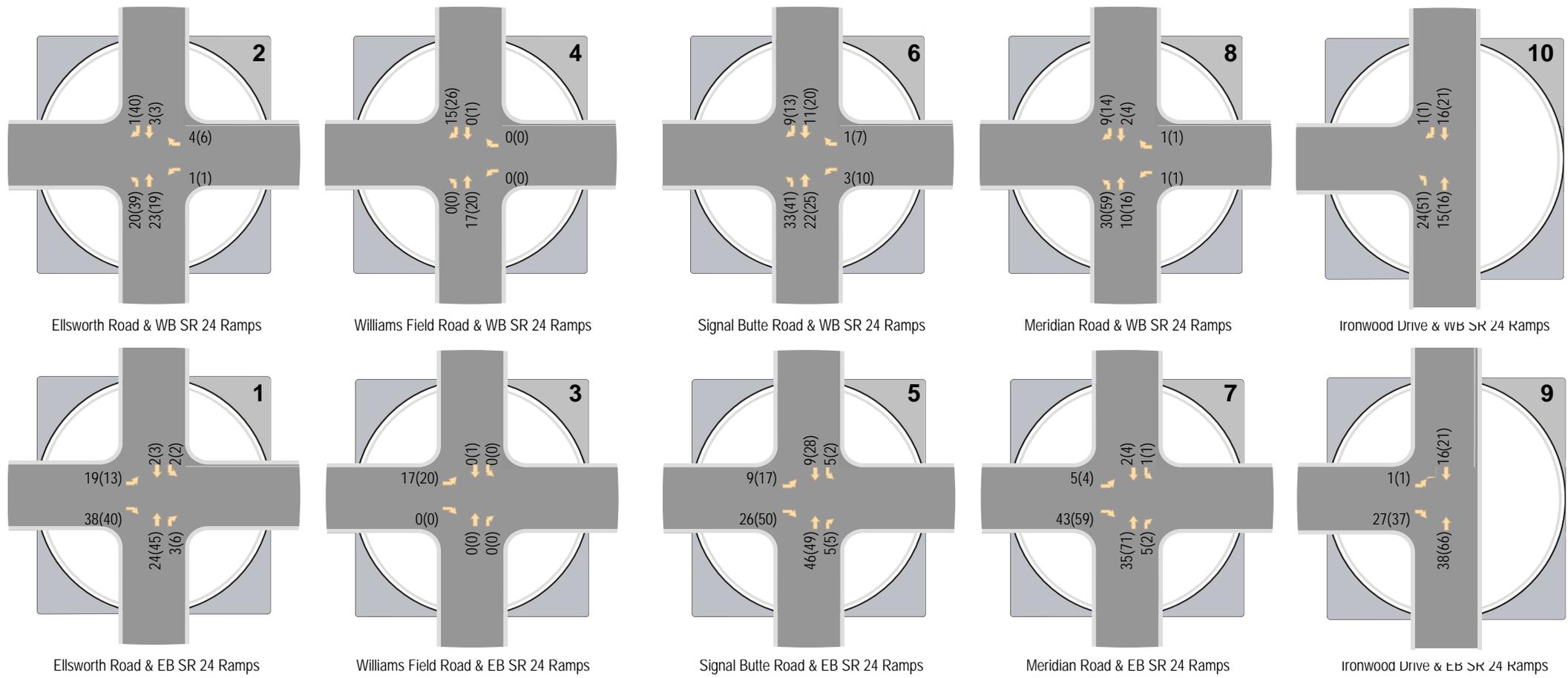
Meridian Road & EB SR 24 Ramps



Ironwood Drive & EB SR 24 Ramps

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2040 Peak Hour Medium Volumes-2017-09-12 - Copy.xls



Reevaluation of the Final Environmental Assessment
STP-024 A(200)T; 024 MA 001 H8915 01L/02L

ATTACHMENT 5

Noise Analysis Technical Memorandum

Noise Analysis Technical Memorandum

SR 24, Williams Gateway Freeway, Ellsworth Rd to Ironwood Road

October 10, 2017

EXECUTIVE SUMMARY

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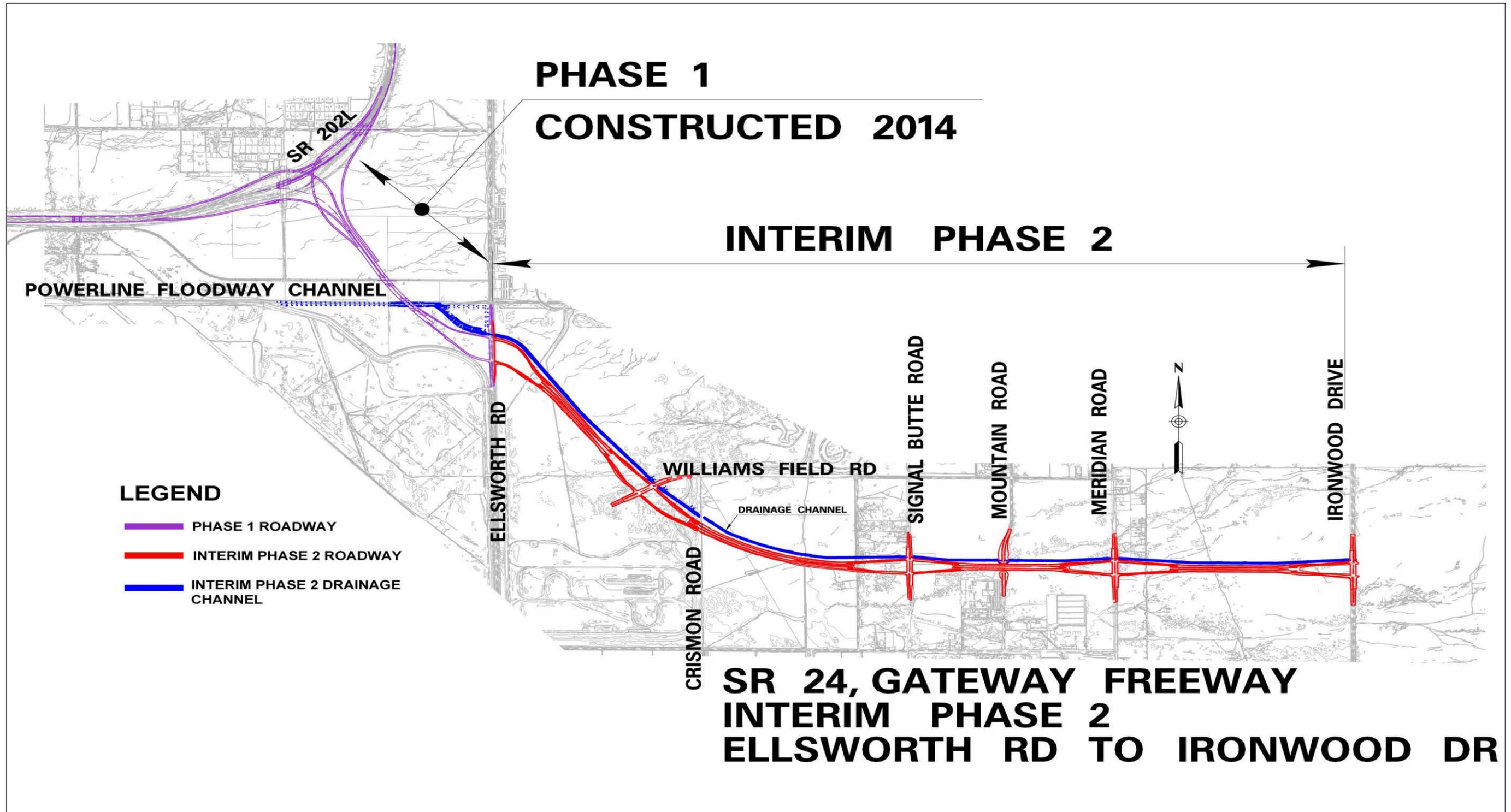
This technical memorandum is produced in support of the EA re-evaluation for the proposed design changes to the planned SR 24 freeway project, including State Route 24 (SR 24). The EA re-evaluation is being prepared to evaluate the impacts from the addition of an interim roadway and associated improvements to be constructed between Ellsworth Rd and Ironwood Rd in advance of the future ultimate build-out of SR 24, as well as modifications to the vertical alignment of the ultimate build-out of the freeway, i.e. "the Proposed Modified Project" (see Figure 1). There is an existing segment of SR 24 that is approximately 1.3 miles long and connects SR 202 L to Ellsworth Rd. The segment between Ellsworth Rd and Ironwood Rd has not yet been constructed. The 2017 Final Design Concept Report, SR-24, Ellsworth Rd to Ironwood Rd, Interim Phase II (2017 DCR) evaluates the operation of the existing conditions and of the Proposed Modified Project. The information provided thereby is used in production of this technical memorandum. This Noise Analysis Technical Memorandum takes into consideration the provisions of the 2017 ADOT Noise Abatement Requirements (NAR) in determining impacts.

Illustration 1 – Noise levels (L_{eq1hA}) within approximately 800 ft of SR 24 - all scenarios - 2040

Segment	Ellsworth Rd - Signal Butte Rd		Signal Butte Rd - Meridian Rd		Meridian Rd - Ironwood Rd	
Year	2025	2040	2025	2040	2025	2040
All Scenarios (L_{eq1hA})	53-64	57-65 (67) ⁽¹⁾	58-61	56-64	58-65	57-64
(1)- Receptor R-1-SB NW, in Option A-2040, if not acquisitioned Higher values represent noise levels at or in proximity of Right-of-Way (RoW), for land planning purposes. dBA - A-weighted decibel						

For all Build scenarios (Option A, ultimate build-out) in 2040 at modeled receivers representing residences outside RoW, the predicted noise levels on this section of SR 24 are less than 66 dBA and are not anticipated to increase substantially (15 dBA) above the existing noise levels. In the event the receptor R-1-SB NW, Figure 5, is not going to be acquisitioned, a barrier was analyzed for Option A in 2040 (predicted noise level in this scenario was 67 dBA) that would meet noise reduction design goal (7 dBA). Such a barrier would be located at RoW line, at least 400 ft long, 8 ft height, with cost of \$119,184, which is above \$49,000 cost-per-benefited-receptor (CPBR) criterion as prescribed by ADOT NAR. Therefore, noise abatement measures are not recommended for the project for any of the scenarios. Any significant change in the design and/or traffic data, during or after the completion of the project's final design, is to be re-evaluated and recorded in the form of an Addendum to this document.

Figure 1 - Project Limits and phases



SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

LAND USE DATA

In line with ADOT NAR - Section 2.6 for any project where there is Activity Category G – undeveloped land (see Table 1), future noise levels at and approximately 300' away from the RoW line will be predicted for each segment of undeveloped lands.

Ellsworth Rd – Signal Butte Rd

Area south of SR 24 between Ellsworth Rd and Williams Field Rd, and further to Signal Butte Rd, is characterized as undeveloped land. The area north of SR 24 between Ellsworth Rd and Williams Field Rd, is zoned Planned Community District City of Mesa. Activity Category for this area is G – undeveloped land. Potential developments/residences are represented by receivers located according to ADOT NAR - Section 2.6.

Signal Butte Rd and South 222nd Street

The majority of residences are northwest from the future Signal Butte Rd TI, and closer to South 222nd Street. Predominant Activity Category for this area is B - residential, and partially G – undeveloped land. Potential developments/residences are represented by receivers located according to ADOT NAR - Section 2.6. There is a single residence within RoW northwest of TI, and an isolated single residence outside RoW southwest of TI. All residences are represented as separately modeled receivers.

South Mountain Rd

In the area south of SR 24, and west of South Mountain Rd, there is a business complex that consists of parking and significant warehousing operations close to SR 24 alignment, with office space further south. Existing noise environment is predominantly characterized by significant transportation machinery operations and ventilation/air conditioning units operations, aircrafts, and light traffic on South Mountain Rd. Predominant Activity Category for this area is F – industrial, manufacturing facilities, with a small part of Category E – office.

Meridian Rd, West Frye Rd, and North McKenzie Rd, to Ironwood Rd

Northeast of new Meridian Rd, along W Frye Rd and N McKenzie Rd, there are 7 residences within 1500 ft from WB SR 24; one of them is close to the RoW line or partially within. To the southeast there are two residences, one at approximately 680 ft (close to the Meridian Rd), and one at approximately 1500 ft from EB SR 24. In the area south of SR 24, and west of Meridian Rd, there is a business complex that consists of parking and substantial warehousing operations. All residences and other areas are represented as separately modeled receivers. Predominant Activity Category for this area is F – agricultural and partially G – undeveloped land. Potential developments/residences are represented by receivers located according to ADOT NAR - Section 2.6.

SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

NOISE IMPACT CRITERIA

The Arizona Department of Transportation (ADOT) has developed the NAR in coordination with the Federal Highway Administration (FHWA), Arizona Division, in compliance to the Code of Federal Regulations (CFR), noise regulation at 23 CFR 772. The ADOT NAR is the guideline used to assess the potential impacts from the highway traffic noise levels. The ADOT NAR is based on the noise levels “approaching” the FHWA Noise Abatement Criteria (NAC) for different land use categories. ADOT defines “approaching” as within 1 dBA of the FHWA NAC for Categories A, B, C, D and E. There are no noise impact thresholds for Categories F or G. Table 1 shows the FHWA NAC for all land use categories.

Table 1 - FHWA Noise Abatement Criteria^[1]

Activity Category	dBA, L_{eq1hA}^[2]	Activity Description
A	57 (exterior)	Land on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	67 (exterior)	Residential
C	67 (exterior)	Active sports areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio structures, recording studios, schools, and television studios
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in categories A–D or F
F	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	---	Undeveloped lands that are not permitted

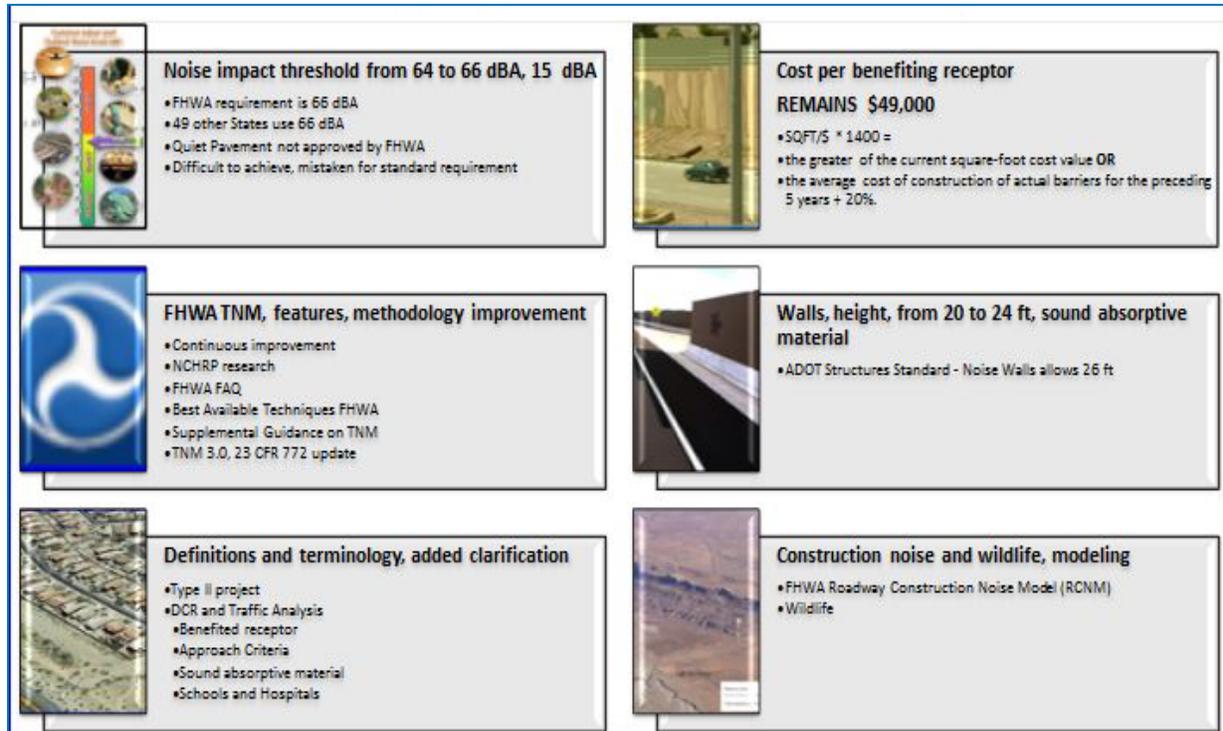
¹ Sources: Federal Highway Administration (2011); 23 Code of Federal Regulations § 772

² The 1-hour equivalent loudness in A-weighted decibels, which is the logarithmic average of noise over 1-hour period. Used as noise descriptor for determination of impact.

SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

Category B land use represents residential areas, and Category C land use includes schools and parks among other uses. The ADOT NAR determines highway traffic noise level impacts and considers mitigation for Category B land uses when the predicted noise level is equal to or greater than the noise impact threshold of 66 dBA. ADOT also considers an impact threshold for customers with a substantial increase in noise levels due to the operation of their facilities. The ADOT NAR defines a “substantial increase” as 15 dBA greater than existing noise levels. ADOT also indicated that noise levels should be rounded to the nearest integer prior to impact determination and in project reports.

Figure 2 - 2017 ADOT NAR update summary



EXISTING – NO BUILD –ENVIRONMENT

The methodology used for the highway noise level measurement is to comply with procedures specified in Section 4 - Existing-Noise Measurements in the Vicinity of Highways - of the FHWA document [FHWA-PD-96-046/DOT-VNTC-FHWA-96-5](#), *Measurement of Highway-Related Noise (FHWA, 1996)*. Measurements are taken under meteorologically acceptable conditions, with winds less than 12 mph and dry pavement. All measurement equipment had a valid calibration certificate.

In general for all Activity Categories, existing noise levels can be established by:

- field measurements alone during **worst noise hour** (The [worst noise hour](#) resulting from the combination of natural and mechanical sources and human activity usually present

SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

in a particular area, in this case aircraft operating in the area or other noise sources, like productions or warehousing operations) or

- field measurements in combination with FHWA TNM model, and if necessary other noise prediction models depending on the existence of the background noise sources.

Field measurements are required, as existing background noise is usually a composite from many sources, and noise prediction models are applicable only to noise originating from a specific source. If it is clear that existing noise levels at locations of interest are predominantly due to a highway, then the existing noise levels may be calculated using the validated FHWA highway traffic noise prediction model.

For the purpose of validation of the FHWA TNM, the noise level measurements taken must be representative of free-flow conditions, without traffic controls, away from sound reflective objects (warehouses, parked trucks, privacy walls etc.), without being influenced by other noise sources (aircrafts, lawn mowers, engines running, running water, loud insects, birds, animals), and with a clear view to the roadway.

The measurements were taken in April 2016 and October 2017. The noise environment in the area is significantly influenced by aircraft-generated noise due to proximity of Phoenix-Mesa Gateway Airport. The equipment used for the noise level measurements were the Larson Davis (LD) Model 812 precision integrating sound level meters (SLMs), with a valid Calibration Certificate. Results are presented in [Table 2](#), along with other noise levels.

FUTURE – BUILD – ENVIRONMENT

The FHWA-approved Traffic Noise Model version 2.5 (TNM 2.5) is used for the prediction of roadway traffic noise levels. The results of the model are dependent upon variables which include roadway geometry, traffic volumes, vehicle mix, vehicle speed, sound propagation intervening features such as, topographic data, ground types, weather conditions, and locations of noise receptors. In line with ADOT NAR, in predicting traffic noise levels from SR 24 “worst-case” noise conditions are used.

Roadway Geometry, Topographic Data, and Ground Type

The roadway geometry data used for the noise modeling effort, such as roadway and lane width, horizontal and vertical coordinates, were based on the electronic roadway geometry data and plans provided within the 2017 DCR, Figure 3. In the interim condition there will be two general-purpose lanes in the eastbound and westbound direction of travel on SR 24 between Ellsworth Rd and Ironwood Rd. Between the TIs, the interim lanes are modeled on the same horizontal alignment as the two outside lanes of the ultimate freeway mainline. At the TIs, the interim lanes follow the entrance and exit ramps alignments of the ultimate freeway build-out. For the ultimate build-out, SR 24 will be a controlled access freeway that is at or above grade between Ellsworth Rd and Ironwood Rd, with underpass/overpass bridge

SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

structures at the TIs. The changes in vertical alignment are shown in Figure 4. Jersey barriers are modeled on on-structure sections of the roadway.

Figure 3 - Typical Section - SR 24

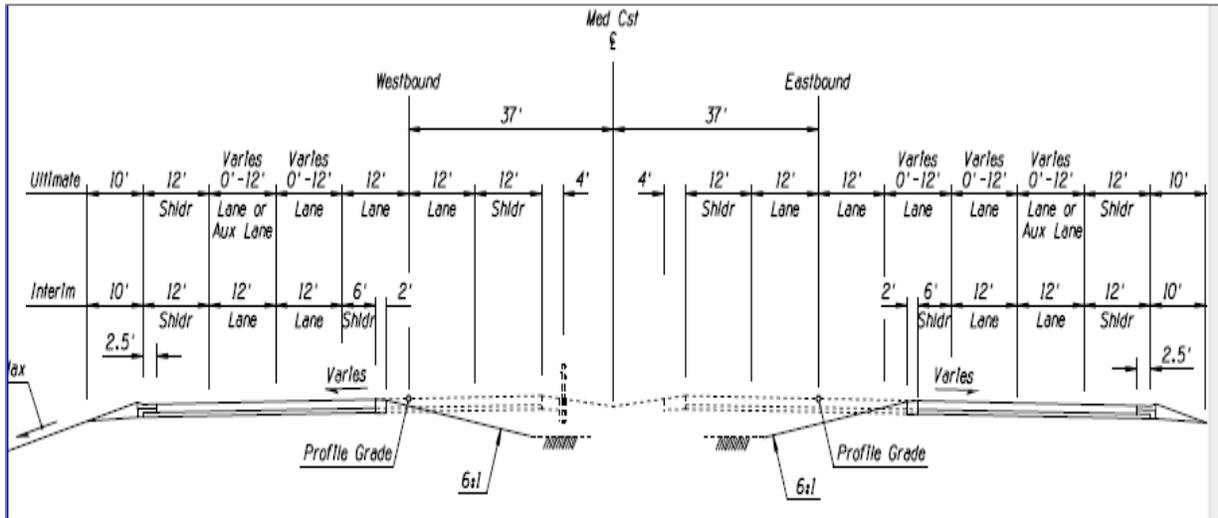
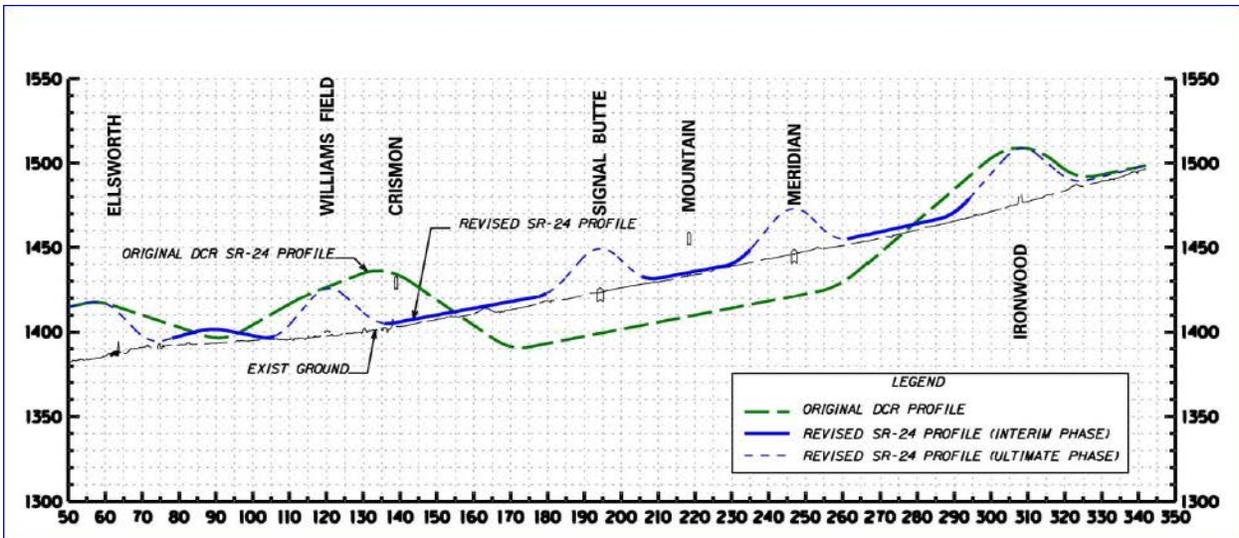


Figure 4 - Revised SR 24 Profile configuration



Terrain lines determine the elevation of sound propagation interfering feature between source and the noise receiver. Terrain lines used in noise model were based on digital terrain model (DTM) data and on-site survey. Ground type for modeling purposes is determined as loose soil.

Traffic Volumes, mix and speed

ADOT NAR provides guidelines on the traffic volumes for use in the noise model, in which a “worst-case” approach should be used. In general, this should reflect the Level of Service (LOS) C traffic condition, which is the free-flowing traffic volumes for a given travel lane of a roadway configuration at the posted speed limit to capture the peak noise hour and modeled with the traffic moving at 5 miles per hour (mph) above the posted speed limit. If no other traffic

SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

information is available, then the peak hourly volume should be 10% of the predicted average daily traffic (AADT) volume. AADT traffic volumes, and peak hours traffic mix was used in the models for 2025 and 2040. SR 24 is classified as a controlled access Urban Principal – Freeway/Expressway. The interim facility will not operate as a Freeway/Expressway, however the criteria used for the interim design was the same as the ultimate facility design criteria. The design speed is 65 mph (DCR – January 2016). The speed modeled in 2025 and 2040 is 65 mph for the mainline, and 50 mph for the ramps. Traffic volumes/mix used in TNM model, for different sections of the SR 24, years 2025 and 2040, are provided in the Appendix A to the memorandum, and are taken from DCR – Traffic Report (September 2017). The predicted noise levels were evaluated for 4 scenarios: Interim Option A in 2025, Interim Option B in 2025, and Option A - Ultimate Build-out in 2040. Interim Option A consists of an at-grade interim roadway between Ellsworth Rd and Ironwood Rd. Option B consists of an at-grade interim roadway between Ellsworth Rd and Signal Butte Rd. The Ultimate Build-out consists of an at- or above-grade controlled access freeway between Ellsworth Rd and Ironwood Rd (see Figure 4). Traffic on arterial streets is not taken into consideration in predicting future noise levels.

Receptor and Receiver Locations

The ADOT NAR defines a “receptor” as a discrete or representative location of a noise sensitive area(s) for any of the land uses listed in Table 1. The “receiver” is defined as a location used in noise modeling to represent the measured and predicted noise level at a particular point. The noise-sensitive receptors are located in the backyard or common outdoor areas of residential properties with frequent human occupancy. Undeveloped areas were covered by modeled receivers, within approximately 1000 ft from the RoW, to provide noise levels at the locations to local authorities in line with the principles of noise compatible land use planning. Area between Ellsworth Rd, SR 24, E Ray Rd, and Williams Field Rd is considered as zoned Planned Community District of City of Mesa.

Other Variables

Noise level is affected by temperature and humidity. At distances beyond 1500 ft due to air temperature inversions and wind, noise levels may differ significantly (over 10 dBA). For noise modeling purposes, FHWA recommends the default values for the temperature of 68 degrees Fahrenheit and the humidity of 50 percent; FHWA TNM 2.5 is mostly effective in predicting traffic noise levels at distances below approximately 850-1000 ft due to various factors, including fluctuations in atmospheric conditions. Another variable that affects the noise model is the pavement type. This noise analysis uses the average pavement type. The FHWA has issued an updated memo to clarify its position on use of pavement as a noise abatement measure. The memo reiterates that regulations at 23 CFR 772 do not allow for the use of pavement type or surface texture as a noise abatement measure. The predicted noise levels are based on the assumptions described in this report, and the actual noise levels may differ due to factors beyond the scope of this effort.

SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

NOISE LEVEL RESULTS

The predicted noise levels along SR 24, in the vicinity of Ellsworth Rd, Williams Field Rd, Signal Butte Rd and Meridian Rd, are less than 66 dBA outside the contour line 300 ft from the edge of the roadway, and are not predicted to increase substantially (15 dBA or higher) in comparison to the measured noise levels in the revised Build scenarios. There are two residences close to the SR 24 Rd alignment. The isolated property represented by receiver R-1-SB NW (Figure 5, located along S 222nd Street near SR 24, northwest of Signal Butte Rd) is assumed to be acquisitioned as it is at or within RoW. The noise levels in 2040 are predicted to be 67 dBA and 65 dBA in Option A and Ultimate respectively (see Appendix B for a map with 2040 noise levels). Property represented by the receiver R-17-SB NW (Figure 6, northwest of N McKenzie Rd), is predicted to experience noise levels at 62 dBA in 2025 and 64 dBA in 2040, Option A, and 63 dBA in ultimate build-out.

Figure 5 – SR 24 - Property at South 222nd St near Signal Butte Rd (R-1-SB NW)

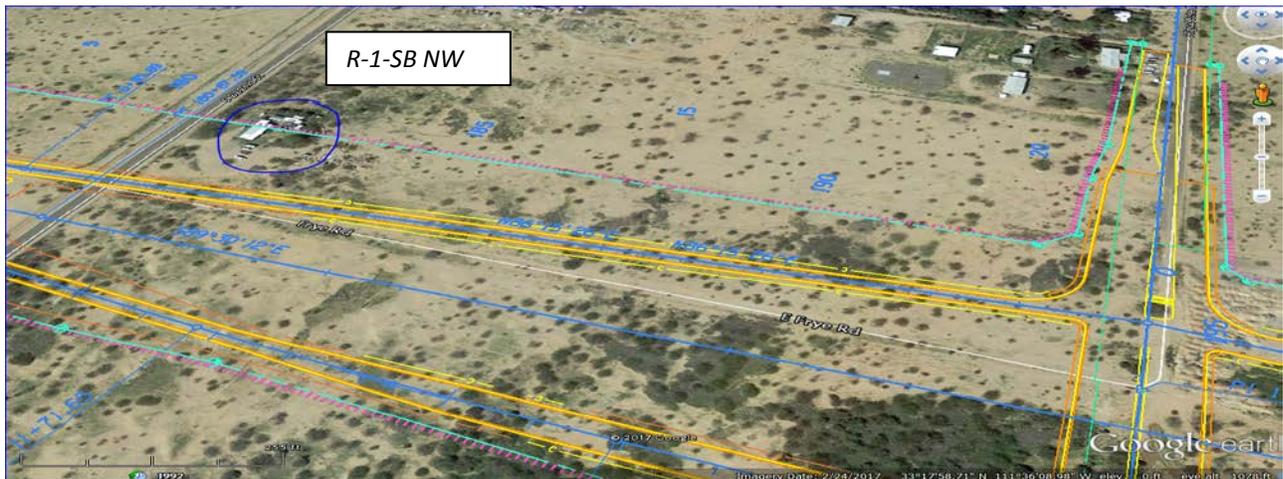
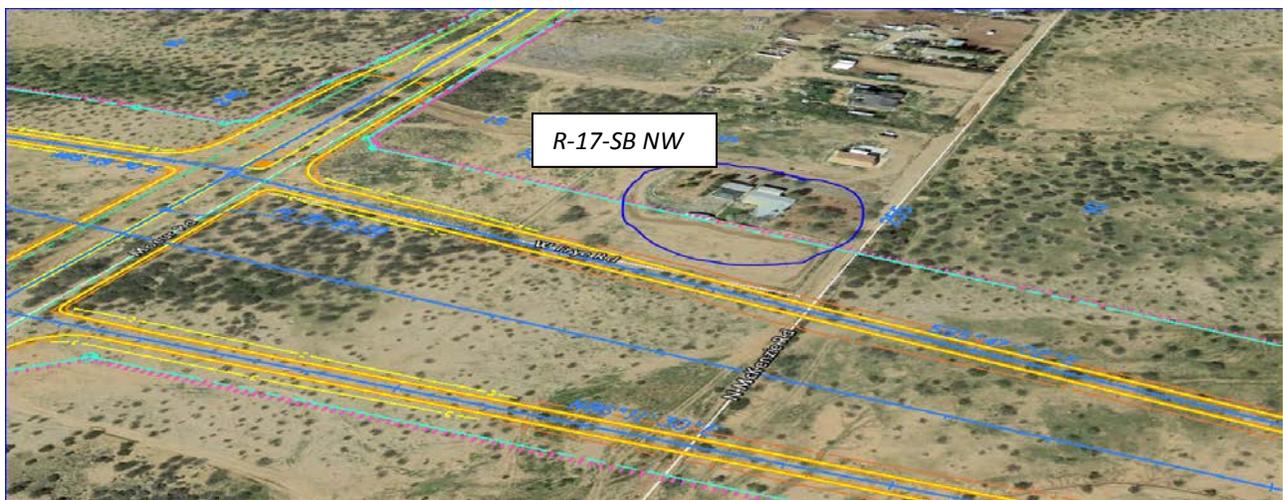


Figure 6 - SR 24 - Property at new Meridian Rd near crossing North McKenzie Rd - West Frye Rd (R-17-SB NW)



SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

Table 2 – Predicted Noise Levels for Build and No Build Scenarios

Receiver	NO BUILD (determined by field measurements)	BUILD				Remarks
		2025		2040		
		Interim Option A	Interim Option B	Interim Option A	Ultimate	
		Ellsworth Rd to Ironwood Rd	Ellsworth Rd to Signal Butte Rd	Ellsworth Rd to Ironwood Rd	Ellsworth Rd to Ironwood Rd	
dBA	dBA	dBA	dBA	dBA		
R-1-Ells-Will-N	48-58	(58)	(58)	(59)	(55)	Area north of SR 24, between Williams Field Rd and Ellsworth Rd. ⁽¹⁾
R-2-Ells-Will-N		(58)	(57)	(61)	(61)	
R-3-Ells-Will-N		(58)	(57)	(61)	(60)	
R-4-Ells-Will-N		(61)	(60)	(64)	(62)	
R-5-Ells-Will-N		(59)	(58)	(62)	(62)	
R-6-Ells-Will-N		(53)	(52)	(60)	(60)	
R-7-Ells-Will-N		(59)	(59)	(60)	(59)	
R-8-Ells-Will-N		(57)	(56)	(61)	(62)	
R-9-Ells-Will-N		(58)	(57)	(62)	(61)	
R-10-Ells-Will-N		(57)	(56)	(61)	(61)	
R-11-Ells-Will-N		(56)	(55)	(59)	(59)	
R-1-Ells-Will-S	48-58	(63)	(62)	(65)	(61)	Area south of SR 24, between Williams Field Rd and Ellsworth Rd. ⁽¹⁾
R-2-Ells-Will-S		(62)	(61)	(64)	(63)	
R-3-Ells-Will-S		(61)	(60)	(64)	(64)	
R-4-Ells-Will-S		(60)	(58)	(62)	(62)	
R-1-SB SW	49	(60)	(59)	(63)	(63)	Isolated property @Signal Butte Rd
R-1-SB NW	58	(64)	(64)	(67)	(65)	At or Within RoW @Signal Butte Rd
R-2-SB NW	48	(52)	(51)	(55)	(58)	Residences near Signal Butte Rd (the higher values are near S 222nd St, lower values further north and in the middle between S 222nd St and Signal Butte Rd)
R-3-SB NW		(51)	(50)	(55)	(59)	
R-4-SB NW		(53)	(52)	(57)	(61)	
R-5-SB NW		(51)	(49)	(54)	(57)	
R-6-SB NW		(50)	(49)	(54)	(57)	
R-7-SB NW		(50)	(48)	(53)	(57)	
R-8-SB NW	48-58	(51)	(49)	(55)	(60)	
R-9-SB NW		(49)	(48)	(53)	(55)	
R-10-SB NW		(49)	(47)	(52)	(55)	
R-11-SB NW		(49)	(47)	(53)	(56)	
R-12-SB NW		(49)	(47)	(53)	(57)	
R-13-SB NW		(49)	(47)	(54)	(57)	
R-14-SB NW	(48)	(46)	(52)	(54)		
R-15-SB NW	(46)	(44)	(50)	(52)		
R-16-SB NW	49-52	(47)	N/A	(50)	(52)	Residences near Meridian Rd
R-17-SB NW		(62)		(64)	(63)	
R-18-SB NW		(55)		(57)	(62)	
R-19-SB NW		(52)		(54)	(60)	
R-20-SB NW		(49)		(51)	(57)	
R-21-SB NW		(47)		(49)	(55)	
R-22-SB NW	(46)	(49)	(54)			
R-1-Property 2-M_SE	48	(45)	(48)	(52)	Near Meridian Rd	
R-1-Williams-N	48-50	(52)	(50)	(54)	(54)	Area south of SR 24, between Williams Field Rd and Signal Butte Rd. ⁽¹⁾
R-1-Williams-SE		(54)	(53)	(57)	(54)	
R-1-Williams-NW		(48)	(47)	(51)	(50)	
R-1-Ironwood-NW	48-64	(56)	N/A	(57)	(57)	Area near Ironwood Rd ⁽¹⁾
R-2-Ironwood-NW		(55)		(56)	(53)	
R-1-Ironwood-SW		(61)		(61)	(62)	
R-2-Ironwood-SW		(57)		(57)	(55)	
R-1-SB-M-N	48-50	(59)		(64)	(64)	Area north of SR 24 between Signal Butte Rd and Meridian Rd near Mountain Rd ⁽¹⁾
R-2-SB-M-N		(56)		(61)	(61)	
R-3-SB-M-N		(50)		(55)	(59)	
R-4-SB-M-N		(56)		(61)	(61)	
R-5-SB-M-N		(54)		(60)	(62)	
R-1-Meridian-SE	48-50	(49)		(52)	(57)	Isolated property
R-2-Meridian-SE		(60)		(60)	(62)	Area south of SR 24 between Meridian Rd and Ironwood Rd ⁽¹⁾
R-3-Meridian-SE		(59)	(60)	(60)		
R-4-Meridian-SE		(55)	(56)	(57)		
Business Facility	61	(56)	(61)	(61)	Activity Category F	
Warehouse Facility	48-61	(50)	(55)	(56)		

1. For Noise compatible planning, as per 23 CFR 772.17(a)(1).

MITIGATION ANALYSIS

The focus of this re-evaluation is Proposed Modified Project, including the interim roadway and the modifications to the vertical alignment of the ultimate freeway, between Ellsworth Rd and Ironwood Rd. The area has land use categorized as Activity Category B, Residential, and Activity Categories E (offices), F (industrial, warehousing, agriculture) and G (undeveloped land). Undeveloped areas, Activity Category G, were covered by modeled receivers to provide noise levels at the locations to local authorities in line with the principles of noise compatible land use planning.

ADOT NAR Chapter 4 – Noise Abatement Measures stipulates that as a minimum noise barrier (wall, berm, or a combination of) are considered for noise abatement, if an impact has been identified. Benefited receptor is any receptor (such is in this case a residence) that achieves noise level reduction of at least 5 dBA due to being shielded by the noise barrier. Noise barriers should be tall enough and long enough so that only a small portion of sound diffracts around the edges. A rule-of-thumb is that a barrier should be long enough such that the distance between a receiver and a barrier end is at least four times the perpendicular distance from the receiver to the barrier along a line drawn between the receiver and the roadway. Another way of looking at this rule is that the angle subtended from the receiver to a barrier end should be at least 80 degrees, as measured from the perpendicular line from the receiver to the roadway.

For all Build scenarios (Option A, ultimate build-out) in 2040 at modeled receivers representing residences outside RoW, the predicted noise levels on this section of SR 24 are less than 66 dBA, and are not anticipated to increase substantially (15 dBA) above the existing noise levels. In the event that the receptor R-1-SB NW, Figure 5, is not acquisitioned, a barrier was analyzed for Option A in 2040 (predicted noise level in this scenario was 67 dBA) that would meet noise reduction design goal (7 dBA). Such a barrier would be located at RoW line, at least 400 ft long, 8 ft height, with cost of \$119,184, which is above \$49,000 cost-per-benefited-receptor (CPBR) criterion as prescribed by ADOT NAR.

Therefore, noise abatement measures are not recommended for the project for any of the scenarios.

CONSTRUCTION NOISE

Depending on the nature of construction operations, the duration of the noise could last from seconds (e.g. a truck passing a customer) to months (e.g. 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. Construction equipment is typically considered as a point source, as opposed to traffic which is considered as a line source; therefore the noise level decreases, theoretically, by 6 dB(A) per doubling the distance from it, as opposed to 3 dB(A) for line source. Noise levels, at distances relevant to the project and

SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

listed equipment (calculated by FHWA Roadway Construction Noise Model), are shown in Table 3. ADOT has set forth guidelines for construction noise in the [Standard Specifications for Rd and Bridge Construction](#), 2008. Per ADOT specifications 104.08 Prevention of Air and Noise Pollution:

“The contractor shall comply with all local sound control and noise rules, regulations and ordinances which apply to any work pursuant to the contract. Each internal combustion engine used for any purpose on the work or related to the work shall be equipped with a muffler or a type recommended by the manufacturer. No internal combustion engine shall be operated on the work without its muffler being in good working condition.”

Table 3 - Construction noise levels (in dBA) at various distances from the equipment

Equipment/Distance from	Land Use	Residential	Descriptor		$L_{10}^{(1)}$
	300 ft	600 ft	900 ft	1200 ft	1500 ft
Auger Drill Rig	64.8	58.8	55.3	52.8	50.8
Boring Jack Power Unit	67.4	61.4	57.9	55.4	53.4
Compactor (ground)	63.7	57.7	54.1	51.6	49.7
Concrete Mixer Truck	62.3	56.2	52.7	50.2	48.3
Dump Truck	59.9	53.9	50.4	47.9	45.9
Excavator	64.2	58.1	54.6	52.1	50.2
Generator	65.1	59	55.5	53	51.1
Compressor (air)	61.1	55.1	51.6	49.1	47.1
Grader	68.5	62.4	58.9	56.4	54.5
Warning Horn	57.6	51.6	48.1	45.6	43.6
All Other Equipment > 5 HP	69.4	63.4	59.9	57.4	55.4
Bar Bender	60.4	54.4	50.9	48.4	46.5
Concrete Pump Truck	61.8	55.8	52.3	49.8	47.9
Soil Mix Drill Rig	64.4	58.4	54.9	52.4	50.4
Concrete Saw	70	64	60.5	58	56
Auger Drill Rig	64.8	58.8	55.3	52.8	50.8
Roller	60.4	54.4	50.9	48.4	46.5

L_{10} - Noise descriptors are used to describe the time-varying nature of noise. The L_{10} and L_{eq} noise descriptors are used in the abatement procedures. The former is the noise level exceeded 10% of the time in the noisiest hour of the day. The latter is the constant, average sound level, which over a period of time contains the same amount of sound energy as the varying levels of the traffic noise. Usually $L_{10} = L_{eq} + 3$ dBA

SR 24, Williams Gateway Freeway (Ellsworth to Ironwood)

Ground vibration and ground-born noise can also be a source of annoyance to individuals who live or work close to vibration-generating activities. Pile driving, demolition activity, blasting, and crack-and-seat operations are the primary sources of vibration, while the impact pile driving can be the most significant source of vibration at construction sites. It is recommended to apply methods that may be practical and appropriate in specific situations, to reduce vibration to an acceptable level. Such measures may be:

- Jetting,
- Predrilling
- Cast-in-place or auger cast piles
- Non-displacement piles
- Pile cushioning
- Using alternative non-impact drivers
- Scheduling activities to minimize disturbance at near-construction sites

REFERENCES

1. Arizona Department of Transportation, Noise Abatement Requirements, May 30, 2017
2. Arizona Department of Transportation, Final Noise Analysis Technical Report, SR 202L HOV Lanes, Gilbert Rd to I-10, December 18, 2009.
3. ADOT 2016 SR- 24 Design Concept Report
4. ADOT 2017 SR 24 DCR – Traffic Report
5. Arizona Department of Transportation, Standard Specifications for Rd and Bridge Construction, ADOT, 2008.
6. Federal Highway Administration, FHWA Traffic Noise Model, Version 1.0: Technical Manual and Addendums (FHWA PD-96-010,) February, 1998.
7. Federal Highway Administration, Highway Traffic Noise Analysis and Abatement Policy and Guidance, June 1995.
8. Federal Highway Administration, Measurement of Highway Related Noise (FHWA PD-96-010), May 1996.
9. U.S. Code of Federal Regulations, Title 23, Part 772. Procedures for Abatement of Highway Traffic Noise and Construction Noise.

APPENDIX A – TRAFFIC DATA

SR-24, Williams Gateway Freeway (Ellsworth to Ironwood)

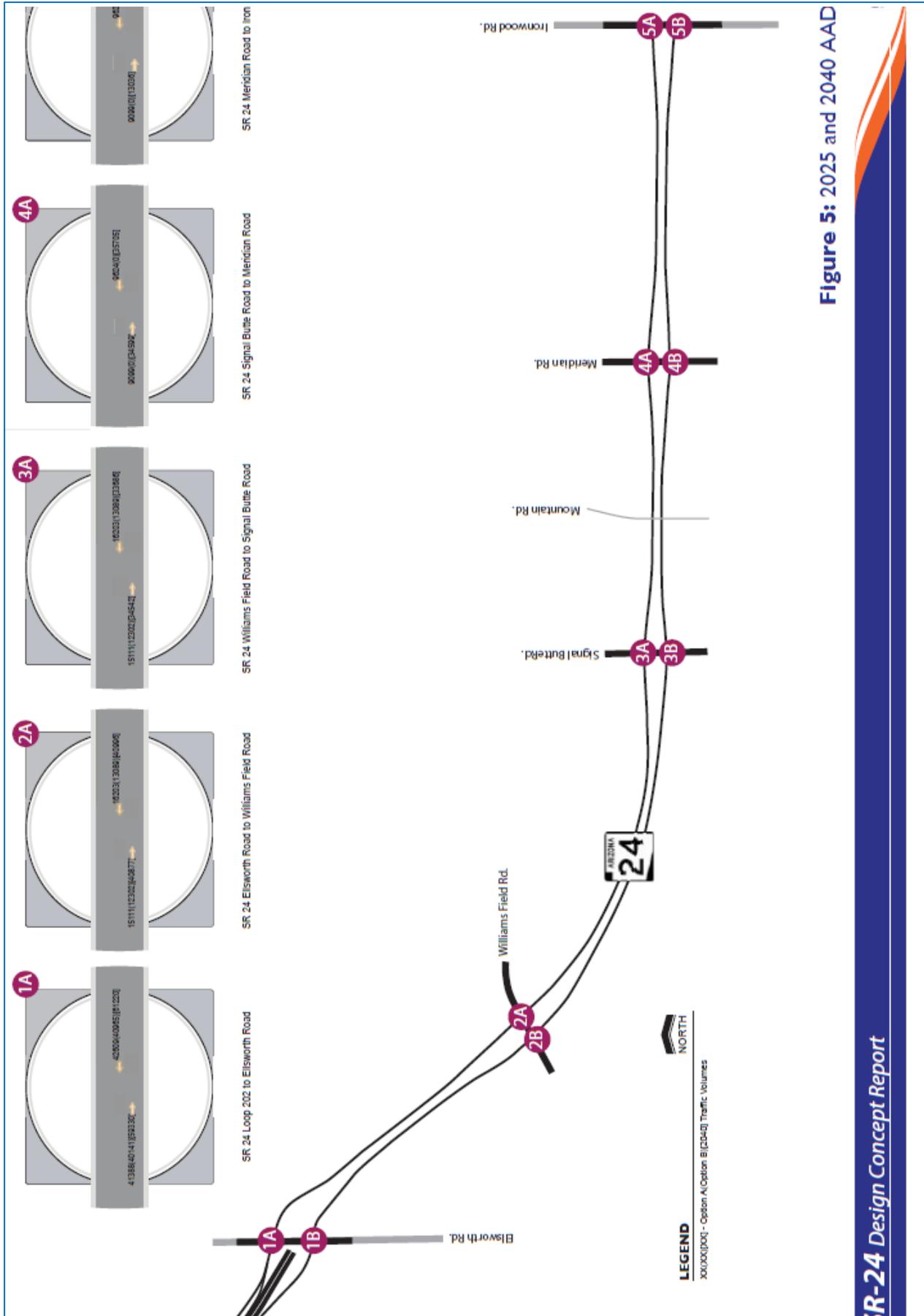


Figure 5: 2025 and 2040 AAD

SR-24, Williams Gateway Freeway (Ellsworth to Ironwood)

SR 24 Mainline Peak Hour Volumes

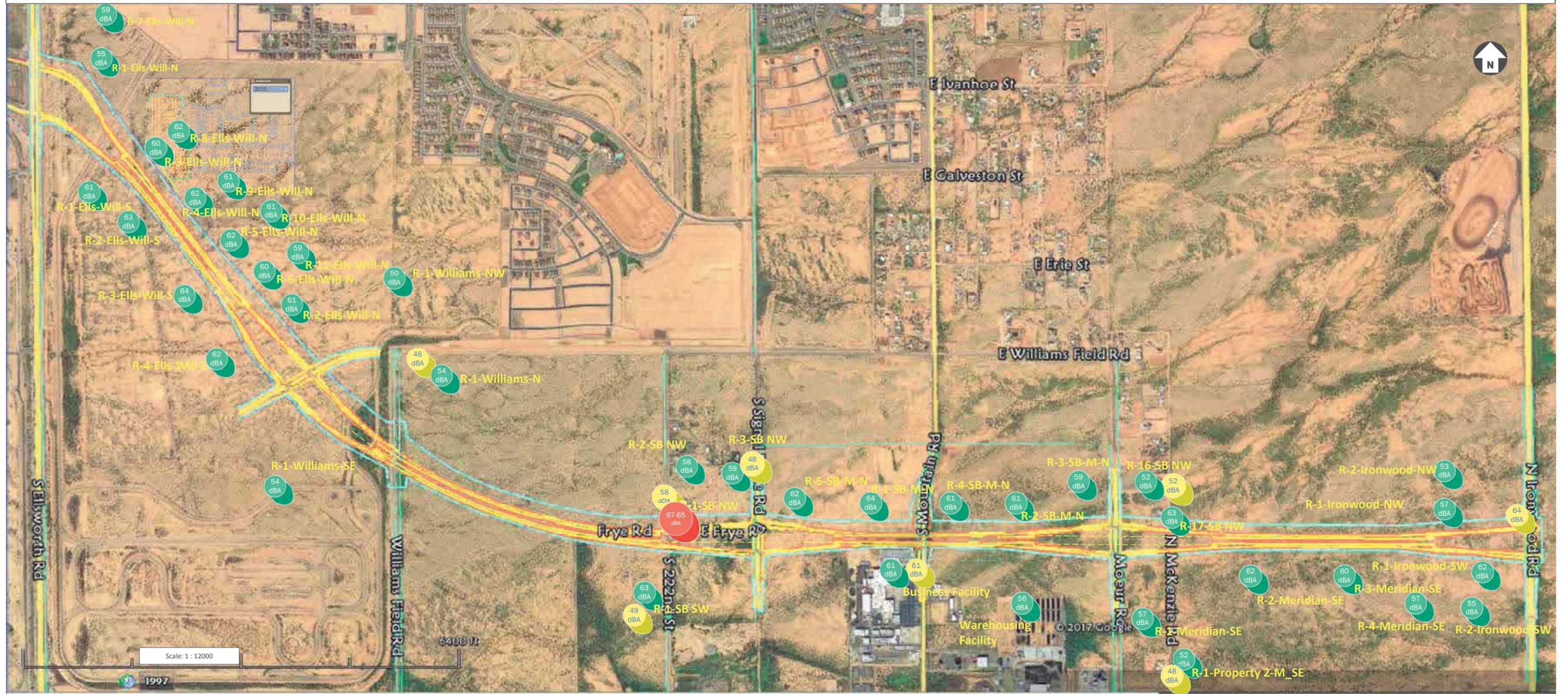
	AM	PM										
Light Truck Volumes	1006	1668	782	1321	679	1170	637	1205	252	461	252	461
Medium Truck Volumes	248	250	116	178	100	152	62	115	25	44	25	44
Heavy Truck Volumes	64	110	52	84	50	79	25	48	10	18	10	18
Total Volumes	5850	5675	4400	3500	3610	3000	3500	3175	1300	1150	1300	1150
WB												
EB												
Total Volumes	5150	7975	1925	6078	1800	5175	1500	4925	600	1775	600	1775
Heavy Truck Volumes	75	96	55	79	51	75	31	38	10	15	10	15
Medium Truck Volumes	266	223	113	177	96	157	71	96	28	38	28	38
Light Truck Volumes	1110	1700	753	1329	654	1199	668	1117	264	430	264	430
AM			AM									
PM			PM									

APPENDIX B – 2040 Noise Levels - Maps

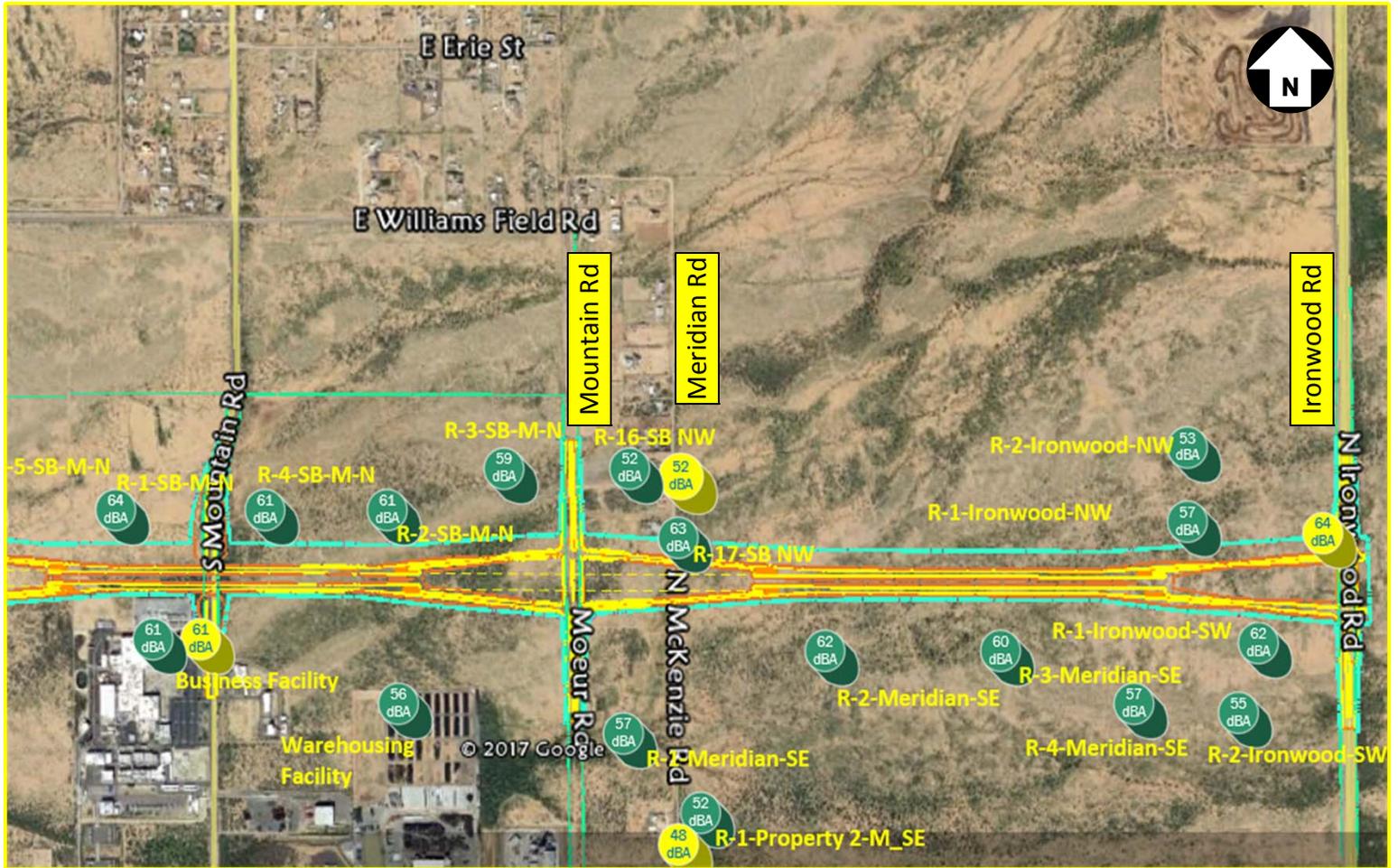
Project No: 024 MA 001 H8915 01L/02L

Title: SR 24, GATEWAY FREEWAY, ELLSWORTH ROAD TO IRONWOOD ROAD

Scenario: 2040 - Ultimate build-out of the freeway



- Existing Noise level - Field Noise Measurement
- Modeled - Not Impacted
- Modeled - Impacted



-  Existing Noise level - Field Noise Measurement
-  Modeled – Not Impacted
-  Modeled - Impacted

Reevaluation of the Final Environmental Assessment
STP-024 A(200)T; 024 MA 001 H8915 01L/02L

ATTACHMENT 6

Biological Resources Reevaluation technical memorandum, including

- **Arizona Game and Fish Department's "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects" revised September 22, 2014**
- **Arizona Department of Transportation Sonoran Desert Tortoise Observation Form**



Arizona Department of Transportation

Environmental Planning

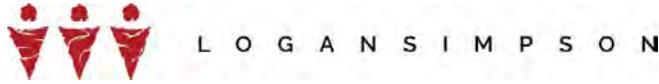
Biological Resources Reevaluation

SR 24 Ellsworth Road to Ironwood Road, Interim Phase II

**Federal Project No. STP-024-A(200)T
TRACS No. 024 MA 001 H8915 01L/02L**

**March 8, 2017
Submittal Number 2**

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TECHNICAL MEMORANDUM

To: Audrey Navarro, Arizona Department of Transportation
From: Ian Tackett, Logan Simpson
Date: March 8, 2017
Project Name: SR 24 Ellsworth Road to Ironwood Road, Interim Phase II
Federal Project No.: STP-024-A(200)T
TRACS No.: 024 MA 001 H8915 01L/02L
Subject: Biological Resources Reevaluation

INTRODUCTION

The Arizona Department of Transportation (ADOT) and Federal Highway Administration (FHWA) completed a Design Concept Report (DCR) and Final Environmental Assessment (EA) for the State Route (SR) 24 Williams Gateway Freeway (formerly SR 802) in April 2011. The 2011 DCR and Final EA established a Selected Alternative that included improvements along SR Loop 202 (SR 202L) from west of the Higley Road traffic interchange (TI) (milepost [MP] 31.0) to the Baseline Road TI (MP 39.0) and construction of a new controlled-access high-speed transportation facility along an east-west alignment originating at SR 202L MP 34.50 and terminating at Ironwood Road with a freeway-to-freeway system TI with SR 202L and other associated improvements (see Attachment A: Figures 1–3). The project limits include the City of Mesa, Town of Gilbert, unincorporated Maricopa County, and unincorporated Pinal County, Arizona. On May 6, 2011, FHWA issued a Finding of No Significant Impact (FONSI) for the SR 24 project (NH-802-A[AUG], 802 MA 999 H6867 01L). The first 1.5 miles of SR 24 from SR 202L to Ellsworth Road (Phase I of the 2011 DCR and Final EA) were completed and opened to traffic in May 2014.

Funding for the construction of the segment of SR 24 between Ellsworth Road and Ironwood Road is not anticipated to be available until 2027 or later. However, current and projected development in the area, including the proposed expansion of the Phoenix-Mesa Gateway Airport, is occurring at a more rapid rate than calculated in the 2011 Final EA, resulting in a more immediate need for a regional transportation corridor in the project vicinity. ADOT and FHWA are currently developing a solution that includes construction of an interim roadway within the footprint of the future segment of SR 24 between Ellsworth Road and Ironwood Road. ADOT and FHWA are also revisiting the vertical alignment for the ultimate SR 24 design in order to identify cost saving improvements.

The proposed interim improvements are being developed with consideration to the final SR 24 design as presented in the 2011 DCR and Final EA. Preparation of an updated DCR and EA Reevaluation is underway to examine the addition of the proposed interim roadway improvements that could be completed several years prior to the final buildout of SR 24, contingent on funding as well as potential modifications to the vertical alignment of the final build-out of SR 24.

The purpose of this memorandum is to summarize the project background and associated biological resource evaluations that have been conducted to date, and to identify if there are any additional

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Biological Resources Reevaluation – SR 24 Ellsworth Road to Ironwood Road Improvements, Interim Phase II

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impacts to biological resources that need to be addressed as a result of modifications to the proposed action, the implementation of new regulations, or subsequent species listings under the Endangered Species Act (ESA).

B A C K G R O U N D

The 2011 Final EA divided the Selected Alternative into two phases, Phase I Interim Improvements and SR 24 Ultimate Improvements. These two phases are summarized as follows:

Phase I Interim Improvements: As presented in the 2011 Final EA, this phase included construction of SR 24 between SR 202L and Ellsworth Road with two lanes in each direction, a fully directional interim TI at SR 202L, additional lanes along SR 202L approaching and departing the SR 202L/SR 24 TI from west of Sossaman Road to north of Warner Road, drainage basins west of Ellsworth Road, a box culvert under Ellsworth Road, and widening and lane additions to Ellsworth Road to accommodate the traffic movements to and from SR 24. As previously mentioned, the Phase I Interim Improvements were completed and opened to traffic in May 2014.

Ultimate Improvements: As presented in the 2011 Final EA, this phase includes adding travel lanes along SR 24 west of Ellsworth Road and constructing travel lanes for SR 24 east of Ellsworth Road. The ultimate configuration of SR 24 will have five travel lanes in each direction at the SR 202L/SR 24 TI that taper to three lanes in each direction east of Williams Field Road. Along SR 24, TIs will be constructed at Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road. Grade-separated crossings will be constructed at Ray Road, Crismon Road, and Mountain Road to allow local street connectivity across the SR 24 corridor. The median will have a sufficient width to accommodate future high-occupancy vehicle (HOV) lanes. A drainage channel will be constructed adjacent to the north side of SR 24, and will connect to the drainage basins west of Ellsworth Road that were completed in May 2014. The Ultimate Improvements also include construction of additional lanes on eastbound SR 202L from Power Road to Guadalupe Road and on westbound SR 202L from Elliot Road to Recker Road, with connections to the SR 202L/SR 24 TI.

D E S C R I P T I O N O F T H E P R O P O S E D A C T I O N

The proposed interim roadway improvements that are the subject of this EA Reevaluation would be part of a new third phase: Phase II Interim Improvements. This phase includes a proposed interim roadway within the footprint of the future segment of SR 24 between Ellsworth Road and Ironwood Road (refer to Attachment A: Figures 2 and 3). The proposed Phase II Interim Improvements were not included in the 2011 Final DCR and EA, but are detailed below.

The proposed scope of work for the Phase II Interim Improvements within the project limits of the 2011 DCR and Final EA includes the following:

- Construction of a new divided roadway with two paved travel lanes in each direction and an earthen median from Ellsworth Road to Ironwood Road;
- Construction of 6-foot-wide paved inside shoulders and 12-foot-wide paved outside shoulders along lanes on the future mainline of SR 24;
- Construction of 2-foot-wide paved inside shoulders and 2-foot-wide paved outside shoulders along lanes on the future on- and exit ramps of SR 24;
- Widening the following intersecting roadways: Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road;
- Installation of drainage improvements and modification of the Ellsworth Road basin;
- Widening Powerline Floodway west of Ellsworth;
- Installation of roadway striping and signage; and

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- Construction of at-grade intersections at Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road. Intersections may be controlled with signs, signals, or roundabouts.

The proposed scope of work for the Phase II Interim Improvements outside the project limits of the 2011 DCR and Final EA includes the following:

- Construction of a grade-separated underpass bridge at Mountain Road. Mountain Road would cross over SR 24 with no direct access to SR 24. This will be the interim and ultimate condition.

In addition to the Phase II Interim Improvements, proposed scope of work modifications to the SR 24 Ultimate Improvements, as depicted in the 2011 DCR and Final EA, include the following:

- Widening select exit ramps at Ellsworth Road, Williams Field Road, Signal Butte Road, and Meridian Road to accommodate 2 lanes instead of 1 lane;
- Modifying the SR 24 vertical alignment to be at-grade at Crismon Road (222nd Street) and Mountain Road, and to be above grade at Signal Butte Road and Meridian Road; and
- Closure of the northernmost driveway and construction of a retaining wall at the Fuji Films property located west of Mountain Road and south of the SR 24 alignment.

The proposed changes to the vertical alignment of SR 24 would create an at-grade or elevated freeway between Ellsworth Road and Ironwood Road, which could eliminate the need for the on-site drainage pump station depicted in the 2011 DCR and Final EA. The elimination of this pump station could reduce construction and maintenance costs for the final build-out of SR 24. The SR 24 Ultimate Improvements with the proposed vertical alignment modifications described above would pass over Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road; and would pass under Crismon Road and Mountain Road. The Phase II Interim Improvements and modified SR 24 Ultimate Improvements would have traffic interchanges at Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road; no other roadways would directly connect with SR 24. The interim roadway and final build-out of SR 24 would not provide direct access to any properties. Access control is planned to be obtained along the mainline interim freeway and extend along cross roads to the applicable Roadway Design Guidelines length (typically 660 feet down the crossroad).

The interim roadway would connect to the current terminus of SR 24 at Ellsworth Road and extend east to connect to Ironwood Road, largely within the footprint of the SR 24 Ultimate Improvements. The vertical and horizontal alignment of the travel lanes for the interim roadway would match either the mainline of the SR 24 Ultimate Improvements or the on- and off-ramps of the SR 24 Ultimate Improvements wherever possible in order to minimize “throw away” construction. The median for the interim roadway would eventually accommodate the additional travel lanes for the ultimate build-out condition. The outside edge of pavement for the interim roadway would be out of the wheel path of the ultimate lane configuration (in the middle of the ultimate travel lane). Therefore, the mainline of the SR 24 Ultimate Improvements could be constructed in the future, at-grade, separate from and adjacent to the operating roadway. The interim roadway would also serve to maintain through traffic during construction of the SR 24 Ultimate Improvements.

The majority of the land within the project limits for the Phase II Interim Improvements is within the 2011 Final EA limits for the SR 24 Ultimate Improvements. However, approximately 13.5 acres of additional new right-of-way (ROW) would be needed from private landowners along Mountain Road for the proposed grade-separated crossing over SR 24. The overall ROW needs for the Phase II Interim Improvements and the modified SR 24 Ultimate Improvements would be reduced from the total disclosed in the 2011 Final EA. The footprint and associated ROW needs of the modified SR 24 Ultimate Improvements have been reduced by adjusting the profile grade to be at-grade between the interchanges. The Phase II Interim Improvements would be located entirely within the footprint of the modified SR 24 Ultimate Improvements. The total estimated ROW acquisition required for the Phase II

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Interim Improvements and modified SR 24 Ultimate Improvements is 294 acres. Compared to the 2011 Final DCR and EA, the overall ROW acquisition required would be reduced by approximately 90 acres.

Temporary construction easements (TCEs) may also be required for the construction of the Phase II Interim Improvements, but would not affect landownership, jurisdiction, or land use. The TCE locations and limits will be determined during final design but will be located entirely within the study area. Contractor use areas for staging and stockpiling would be located within the project limits. The construction duration is anticipated to be 18 months.

ECOLOGICAL SETTING

The project area is located within the Sonoran Desert Ecoregion, which has high summer temperatures, mild winters, and a characteristic bimodal rainfall pattern (Marshall et al. 2000). The topography in the project area is flat; the nearest notable topographical feature is the San Tan Mountains, located approximately 8.5 miles to the south of the project area. The project area is largely undeveloped, there are several areas of low-density residential development immediately adjacent to the planned roadway and several master planned residential communities are being constructed in the project vicinity. A portion of the project area (near its western end) is located within the now-defunct General Motors Proving Grounds, and the Phoenix-Mesa Gateway Airport is located immediately to the west of the project area.

The project area occurs within the Lower Colorado River Valley subdivision of the Sonoran Desertscrub Biotic Community, which is characterized by high temperatures, generally low precipitation, and an assemblage of vegetation and wildlife species that is specifically adapted to these conditions (Turner and Brown 1994). Vegetation in the project area is a simple and open desertscrub community dominated by native vegetation consisting primarily of creosotebush (*Larrea tridentata*) and velvet mesquite trees (*Prosopis velutina*). Triangle-leaf bursage (*Ambrosia deltoidea*), crucifixion thorn (*Castela emoryi*), wolfberry (*Lycium* sp.), paloverde trees (*Parkinsonia* spp.), and ironwood trees (*Olneya tesota*) are also present in very low densities. Desert broom (*Baccharis sarothroides*) and alkali goldenbush (*Isocoma acradenia*) are common species in areas with disturbed soils (e.g., the General Motors Proving Grounds). Right-of-way areas that were previously disturbed during construction of the existing segment of SR 24 are dominated by saltbushes (*Atriplex polycarpa* and *A. lentiformis*), globemallow (*Sphaeralcea ambigua*), brittlebush (*Encelia farinosa*), and purple threeawn (*Aristida purpurea*), which were seeded into the disturbed areas. Photographs of the project area resulting from a site visit conducted on August 3, 2016, are provided as Attachment B.

BIOLOGICAL RESOURCES REEVALUATION

Threatened and Endangered Species

Since the publication of the 2010 BE and 2011 Final EA, several species have been added to and others removed from the US Fish and Wildlife Service (USFWS) list of threatened, endangered, proposed, and candidate species potentially occurring in the project area. As part of the reevaluation of potential impacts to biological resources, the USFWS's Information, Planning, and Conservation (IPaC) decision support system was accessed to obtain a species list for the project area on January 5, 2017 (Consultation Code 02EAAZ00-2016-SLI-0640; see Attachment C). The habitat requirements and current distribution information for each of the species on the USFWS list were reviewed by a qualified biologist (Ian Tackett, Logan Simpson) to determine if any of these species have the potential to occur in the project area and to determine if the proposed action would result in any impacts to ESA-listed species

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that were not disclosed in the 2010 BE and 2011 Final EA. Table 1 summarizes the current USFWS species list for the project area, and includes an evaluation of the potential for any of these species to be present. Based on the habitat evaluation presented in Table 1, it was determined that there is no suitable habitat for any threatened, endangered, proposed, or candidate species in the project area. Therefore, this project and the resulting stormwater pollution prevention plan will have no effect on the species listed in Table 1.

Table 1. Evaluation of the USFWS list of threatened, endangered, proposed, and candidate species potentially occurring in the project area

Species Name	Status ^a	Habitat Requirements	Suitable Habitat Present?
Fish			
Roundtail chub (<i>Gila robusta</i>)	ESA PT	Cool to warm waters of rivers and streams from 1,000 to 7,500 feet, often occupying the deepest pools and eddies.	No suitable habitat present – there are no aquatic habitats in the project area
Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	ESA LT	Cienegas, stock tanks, large-river riparian woodlands and forests, and streamside gallery forests from 130 to 8,500 feet.	No suitable habitat present – there are no aquatic or streamside habitats in the project area
Birds			
California least tern (<i>Sterna antillarum browni</i>)	ESA LE	Open, bare or sparsely vegetated sand, sandbars, gravel pits, or exposed flats along shorelines of inland rivers, lakes, reservoirs, or drainage systems at elevations below 2,000 feet. Breeding occasionally documented in Arizona; migrants may occur more frequently.	No suitable habitat present – there are no shoreline habitats in the project area
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	ESA LT	Large blocks of riparian woodlands (cottonwood, willow, or tamarisk) below 6,500 feet.	No suitable habitat present – there are no riparian habitats in the project area
Mammals			
Lesser long-nosed bat (<i>Leptonycteris curasoae yerbabuena</i>)	ESA LE	Desert grassland and scrubland up to oak transition areas with columnar cacti or agave at elevations from 1,600 to 7,500 feet.	No suitable habitat present – there are no suitable roost sites in the project area and there are only a few saguaro cacti (i.e., potential food plants) in the project area

Source: US Fish and Wildlife Service Information, Planning, and Conservation (IPaC) decision support system, <<http://ecos.fws.gov/ipac/>>, accessed January 5, 2017.

^aStatus definitions: ESA=Endangered Species Act, LE=Listed Endangered, LT=Listed Threatened, PT=Proposed Threatened

Critical Habitat

There are no critical habitats that have been designated or proposed under the Endangered Species Act (ESA; 16 U.S.C. 1531–1544, as amended) in the project area.

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Other Special Status Species

Other special status species that were addressed in the 2010 BE and 2011 Final EA included the Sonoran desert tortoise (*Gopherus morafkai*), western burrowing owl (*Athene cunicularia hypugaea*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*).

Subsequent to the publication of the 2011 Final EA a multi-agency Candidate Conservation Agreement (CCA) was established for the Sonoran desert tortoise, to which ADOT is a signatory agency. The 2010 BE and 2011 Final EA noted that, while there is a low potential for the Sonoran desert tortoise to occur in the project area due to the lack of its preferred habitat (i.e., rocky slopes), tortoises could be injured or killed by construction activities. It was determined that the project may impact individual Sonoran desert tortoises, but would not be likely to contribute to a trend toward federal listing or a loss of viability. The 2011 Final EA included a commitment to follow the Arizona Game and Fish Department's (AGFD) *Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects* in the event that a tortoise is encountered during construction. This mitigation measure will be carried forward for implementation during construction of the interim improvements, and supplemented with an additional mitigation measure to ensure that any Sonoran desert tortoise encounters during construction are reported to ADOT (see the Mitigation Measures section below). The AGFD's *Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects* are included in Attachment F and ADOT's Sonoran Desert Tortoise Observation Form is included in Attachment G. The effects of the proposed action on the Sonoran desert tortoise would be similar to those described in the 2010 BE and 2011 Final EA, except that a smaller area of suitable habitat (approximately 90 fewer acres) would be directly impacted due to the decrease in right-of-way that would be acquired.

The western burrowing owl is protected under the Migratory Bird Treaty Act, which prohibits the take, transport, or possession of migratory birds or their parts, nests, or eggs. Western burrowing owls and potential burrows were documented in the project area during fieldwork for the 2010 BE. Potential impacts that were identified included disturbance to suitable owl nesting and foraging habitats. It was determined that the project may impact individual burrowing owls, but would not be likely to contribute to a trend toward federal listing or a loss of viability. The 2011 Final EA included several mitigation measures that provided for preconstruction surveys and the relocation of burrowing owls, if necessary, prior to ground-disturbing construction activities. These measures will be carried forward for implementation during construction of the interim improvements and supplemented with additional mitigation measures to conform to ADOT's current standards (see the Mitigation Measures section below). The effects of the proposed action on the western burrowing owl would be similar to those described in the 2010 BE and 2011 Final EA, except that a smaller area of suitable habitat (approximately 90 fewer acres) would be directly impacted due to the decrease in right-of-way that would be acquired.

The pocketed free-tailed bat is identified as a "Species of Greatest Conservation Need" in *Arizona's State Wildlife Action Plan: 2012–2022* (AGFD 2012a). The 2010 BE and 2011 Final EA discussed impacts to potential foraging habitat for bats and noted the lack of any suitable roost sites for this species in the project area. Due to the expected loss of potential foraging habitat within the project limits it was determined that the project may impact individual pocketed free-tailed bats, but would not be likely to contribute to a trend toward federal listing or a loss of viability. The 2011 Final EA did not identify any project-specific measures for the protection of bats. The effects of the proposed action on the pocketed free-tailed bat would be similar to those described in the 2010 BE and 2011 Final EA, except that a smaller area of suitable habitat (approximately 90 fewer acres) would be directly impacted due to the decrease in right-of-way that would be acquired.

The AGFD's On-line Environmental Review Tool was accessed on January 5, 2017, to obtain an updated list of special status species that have been documented in the project vicinity (Project ID HGIS-4096;

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see Attachment D). The western burrowing owl and bald eagle (*Haliaeetus leucocephalus*) were identified as having been reported within 3 miles of the project area. As noted above, the western burrowing owl was previously addressed in the 2010 BE and 2011 Final EA and various mitigation measures will be implemented to minimize potential impacts to this species during construction of the interim improvements. The AGFD provided additional information regarding bald eagle occurrences in the project vicinity and indicated that there is a breeding area approximately 5 miles to the northwest of the project area near the Gilbert Riparian Preserve (see Attachment D). There are suitable foraging habitats for incidentally occurring bald eagles at golf courses within 3–7 miles of the project area; bald eagles do not typically nest at golf courses, though there was a newly established nest in a Phoenix area golf course in 2016. There are no suitable habitats for bald eagles in the project area due to the absence of any lotic or lentic habitats that would provide suitable nesting or foraging areas. Construction of the interim improvements will not impact bald eagles or their habitat; therefore, no project-specific measures are necessary for the protection of bald eagles.

Migratory Birds

The 2010 BE and 2011 Final EA documented the presence of numerous species of migratory birds in the project area, and identified the potential for impacts to migratory bird nests if construction activities were to take place during the breeding season. It was determined that the project may impact individual migratory birds, but would not be likely to contribute to a trend toward federal listing or loss of viability for any migratory bird species. The 2011 Final EA included mitigation measures to address potential impacts to western burrowing owls, but did not include any specific mitigation measures that would address potential impacts to the active nests of migratory bird species. Inactive bird nests were observed during a site visit that was conducted in support of this reevaluation on August 3, 2016. Mitigation measures that provide for preconstruction searches and the avoidance of active bird nests during construction are now included in the Mitigation Measures section below.

Approximately 294 acres would be disturbed during construction of the proposed roadway improvements. The effects of the proposed action on migratory birds is expected to be reduced from what is described in the 2010 BE and 2011 Final EA, given that 1) a smaller overall area (approximately 90 fewer acres) would be disturbed during construction due to the decrease in right-of-way that would be acquired, and 2) ADOT would take a more proactive approach to identifying and avoiding the active nests of migratory bird species during construction.

Invasive Species

The 2011 Final EA noted the presence of tamarisk (*Tamarix* sp.) within the project limits and suggested that other invasive species may also be present. Species observed during a site visit that was conducted in support of this reevaluation on August 3, 2016, included tamarisk and Mediterranean grasses (*Schismus* spp.). Russian thistle (*Salsola tragus*) was observed in roadsides throughout the project area and one state-listed noxious weed, buffelgrass (*Pennisetum ciliare*), was also observed within the project limits along Ironwood Road. The 2011 Final EA included several mitigation measures to prevent the introduction or spread of invasive species during construction; these measures will be carried forward for implementation during construction of the interim improvements and supplemented with additional measures to conform to ADOT's current standards (see the Mitigation Measures section below). The potential for the introduction or spread of invasive species is expected to be reduced from what is described in the 2010 BE and 2011 Final EA, given that 1) a smaller overall area (approximately 90 fewer acres) would be disturbed during construction due to the decrease in right-of-way that would be acquired, and 2) ADOT would take a more proactive approach to preventing the spread of invasive species by requiring the contractor to prepare and implement a Noxious and Invasive Plant Species Treatment and Control Plan during construction.

Logan Simpson Technical Memorandum

Biological Resources Reevaluation – SR 24 Ellsworth Road to Ironwood Road Improvements, Interim Phase II

March 8, 2017

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Protected Native Plants

The presence of protected native plants within the project limits was noted in the 2010 BE and 2011 Final EA and confirmed during a site visit that was conducted in support of this reevaluation on August 3, 2016. Species that were noted include velvet mesquite, paloverde, and ironwood trees. Crucifixion thorn, another protected native plant species, was also observed during the site visit. Notification to the Arizona Department of Agriculture prior to the removal of protected native plants was included as a mitigation measure in the 2011 Final EA; this measure will be carried forward for implementation during construction of the interim improvements (see the Mitigation Measures section below). The effects of the proposed action on protected native plants would be similar to those described in the 2010 BE and 2011 Final EA, except that fewer individual plants would be impacted due to the decrease in right-of-way that would be acquired.

Wildlife Movement and Corridors

ADOT, AGFD, FHWA, and representatives from other agencies have completed a Wildlife Linkages Assessment to address important wildlife movement corridors in Arizona. No priority linkages were identified in the project area in *Arizona's Wildlife Linkages Assessment* (Arizona Wildlife Linkage Workgroup 2006) or in *The Maricopa County Wildlife Connectivity Assessment: Report on Stakeholder Input* (AGFD 2012b). The 2010 BE and 2011 Final EA identified various potential adverse effects associated with road construction in the project area. The effects of the proposed action on wildlife movements would be similar to those described in the 2010 BE and 2011 Final EA, except that a smaller overall area (approximately 90 fewer acres) would be impacted due to the decrease in right-of-way that would be acquired.

AGENCY COORDINATION

A letter describing the project was sent to the AGFD to inform them of the proposed interim improvements and to solicit comments. The letter requested any specific concerns, suggestions or recommendations the agency may have related to the project. The AGFD's response letter is provided as Attachment E. In the letter, the AGFD requested a meeting with ADOT to clarify how this project integrates with the ongoing North-South Corridor Study. AGFD's stated concerns also included impacts to wildlife travel corridors along drainages, potential impacts to western burrowing owls, replacement of wildlife habitat to ensure no net loss, and maintaining access for recreational hunting. ADOT has committed to further coordination with the AGFD during the planning phase of this project.

MITIGATION MEASURES

The 2011 Final EA included various mitigation measures to address potential impacts to protected native plants and western burrowing owls, and to prevent the introduction or spread of invasive species. The mitigation measures in the 2011 Final EA were reviewed and updated to conform to ADOT's current standards, resulting in the following list of mitigation measures that will be carried forward as part of the EA reevaluation:

Sonoran Desert Tortoise

The following mitigation measures would be implemented to avoid impacts to any Sonoran desert tortoises that might be present within the project limits at the time of construction:

ADOT Central District Responsibility

- If the contractor encounters any Sonoran desert tortoise during construction, the Engineer will report all encountered tortoises (live, injured, or dead) to the Arizona Department of Transportation

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Biological Resources Reevaluation – SR 24 Ellsworth Road to Ironwood Road Improvements, Interim Phase II

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Environmental Planning Biologist (email: jfife@azdot.gov) within 24 (twenty-four) hours of the encounter using the attached Arizona Department of Transportation Sonoran Desert Tortoise Observation Form. Photos should be taken of tortoises encountered and included in the report, if possible.

Contractor Responsibility

- If any Sonoran Desert tortoises are encountered during construction, the contractor shall adhere to the attached Arizona Game and Fish Department's "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects" revised September 22, 2014. If any tortoise is encountered during construction, the contractor shall notify the Engineer to report the encounter.

Western Burrowing Owl

The following mitigation measures would be implemented to avoid impacts to any western burrowing owls that might be present within the project limits at the time of construction:

ADOT Central District Responsibility

- If burrowing owls or active burrows are identified during the pre-construction surveys or during construction, no construction activities will take place within 100 feet of any active burrow until the owls are relocated.

Contractor Responsibilities

- The contractor shall employ a biologist to complete a pre-construction survey for burrowing owls 96 hours prior to construction in all suitable habitats that would be disturbed. The biologist shall possess a burrowing owl survey-protocol training certificate issued by the Arizona Game and Fish Department. Upon completion of the surveys, the contractor shall contact Arizona Department of Transportation Environmental Planning at (602.712.7134 or 602.712.7767) to provide survey results.
- If the Engineer in cooperation with the Arizona Department of Transportation Environmental Planning Biologist determines that burrowing owls cannot be avoided, the contractor shall employ a qualified biologist holding a permit from the US Fish & Wildlife Service to relocate burrowing owls from the project area, as appropriate.
- If any burrowing owls or active burrows are identified the contractor shall notify the Engineer immediately. No construction activities shall take place within 100 feet of any active burrow.

Migratory Birds

The following mitigation measures would be implemented to address potential impacts to migratory birds if vegetation removal would occur during the breeding season.

ADOT Central District Responsibilities

- If any active bird nests cannot be avoided by vegetation clearing or construction activities, the Engineer will contact the Environmental Planning Biologist (602.712.7134 or 602.712.7767) to evaluate the situation.
- If active bird nests are identified within the project limits, construction activities will avoid disturbing any active nest. Avoidance areas, if necessary, will be marked in the field with temporary fencing or t-posts with flagging by the approved biologist. The Engineer will confer with the approved biologist to determine the appropriate avoidance strategies until the nestlings have fledged from the nest and the nest is no longer active.

Logan Simpson Technical Memorandum

Biological Resources Reevaluation – SR 24 Ellsworth Road to Ironwood Road Improvements, Interim Phase II

March 8, 2017

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Contractor Responsibility

- If clearing, grubbing, or tree/limb removal will occur between March 1 and August 31, the contractor shall employ a qualified biologist to conduct a migratory bird nest search of all vegetation within the 10 (ten) days prior to removal. Vegetation may be removed if it has been surveyed and no active bird nests are present. If active nests cannot be avoided, the contractor shall notify the Engineer to evaluate the situation. During the non-breeding season (September 1 – February 28), vegetation removal is not subject to this restriction.

Invasive Species

The following mitigation measures would be implemented to prevent the introduction or spread of invasive weed species during construction.

Design Responsibility

- All disturbed soils not paved that will not be landscaped or otherwise permanently stabilized by construction will be seeded using species native to the project vicinity.

ADOT Roadside Development Section Responsibility

- The Arizona Department of Transportation Roadside Development Section will provide special provisions for the control of noxious and invasive plant species during construction that may require treatment and control within the project limits.

Contractor Responsibilities

- The contractor shall develop a Noxious and Invasive Plant Species Treatment and Control Plan in accordance with the requirements in the contract documents. Plants to be controlled shall include those listed in the State and Federal Noxious Weed and the State Invasive Species list in accordance with State and Federal Laws and Executive Orders. The plan and associated treatments shall include all areas within the project right of way and easements as shown on the project plans. The treatment and control plan shall 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, the contractor shall arrange for and perform the control of noxious and invasive species in the project area.
- To prevent the introduction of invasive species seeds, the contractor shall inspect all earthmoving and hauling equipment at the storage facility. All vehicles and equipment shall be washed and free of all attached plant/vegetation and soil/mud debris prior to entering the construction site.
- To prevent invasive species seeds from leaving the site, the contractor shall inspect all construction equipment and remove all attached plant/vegetation and soil/mud debris prior to leaving the construction site.
- All disturbed soils not paved that will not be landscaped or otherwise permanently stabilized by construction shall be seeded using species native to the project vicinity.

Protected Native Plants

The following mitigation measure would be implemented to address impacts to protected native plants within the project limits.

Logan Simpson Technical Memorandum

Biological Resources Reevaluation – SR 24 Ellsworth Road to Ironwood Road Improvements, Interim Phase II

March 8, 2017

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ADOT Roadside Development Section Responsibility

- Protected native plants within the project construction limits will be impacted by this project; therefore, the Arizona Department of Transportation Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Arizona Department of Transportation Roadside Development Section will send the notification at least 60 (sixty) calendar days prior to the start of construction.

C O N C L U S I O N

The effects determinations made in the 2010 BE and 2011 Final EA for threatened, endangered, proposed, and candidate species and other special status species were supported as a result of this reevaluation. There have been no changes in the project plan or refinements in design that would result in impacts to biological resources that were not previously analyzed or disclosed in the 2010 BE and 2011 Final EA. Mitigation measures have been carried forward from the 2010 BE and 2011 Final EA and updated or supplemented, as appropriate, to address potential impacts to protected biological resources (i.e., special status species, migratory birds, protected native plants) and prevent the spread of invasive species during construction.

L I T E R A T U R E C I T E D

Arizona Game and Fish Department. 2012a. *Arizona's State Wildlife Action Plan: 2012-2022*. Arizona Game and Fish Department, Phoenix, Arizona.

———. 2012b. *The Maricopa County Wildlife Connectivity Assessment: Report on Stakeholder Input*. Arizona Game and Fish Department, Phoenix.

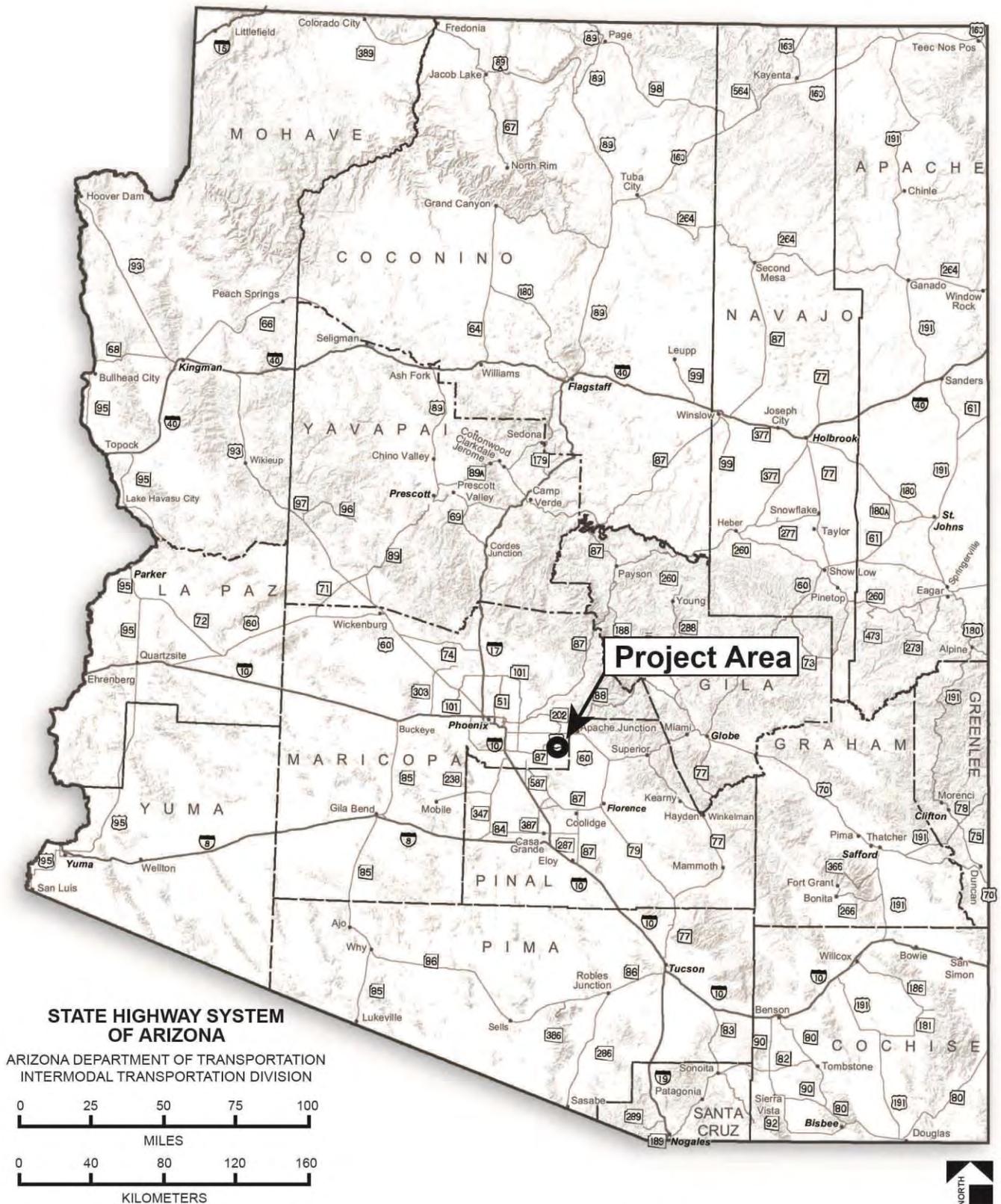
Arizona Wildlife Linkages Workgroup. 2006. *Arizona's Wildlife Linkages Assessment*. The Arizona Wildlife Linkages Workgroup, Phoenix.

Marshall, R. M., S. Anderson, M. Batchler, P. Comer, S. Cornelius, R. Cox, A. Gondor, D. Gori, J. Humke, R. Paredes Aguilar, I. E. Parra, S. Schwartz. 2000. *An Ecological Analysis of Conservation Priorities in the Sonoran Desert Ecoregion*. Prepared by The Nature Conservancy Arizona Chapter, Sonoran Institute, and Instituto del Medio Ambiente y el Desarrollo Sustentable del Estado de Sonora with support from Department of Defense Legacy Program, Agency and Institutional partners.

Turner, R. M. and D. E. Brown. 1994. "Sonoran Desertscrub." In *Biotic Communities of the Southwestern United States and Northwestern Mexico*, edited by D. E. Brown, 181–221. University of Utah Press, Salt Lake City.

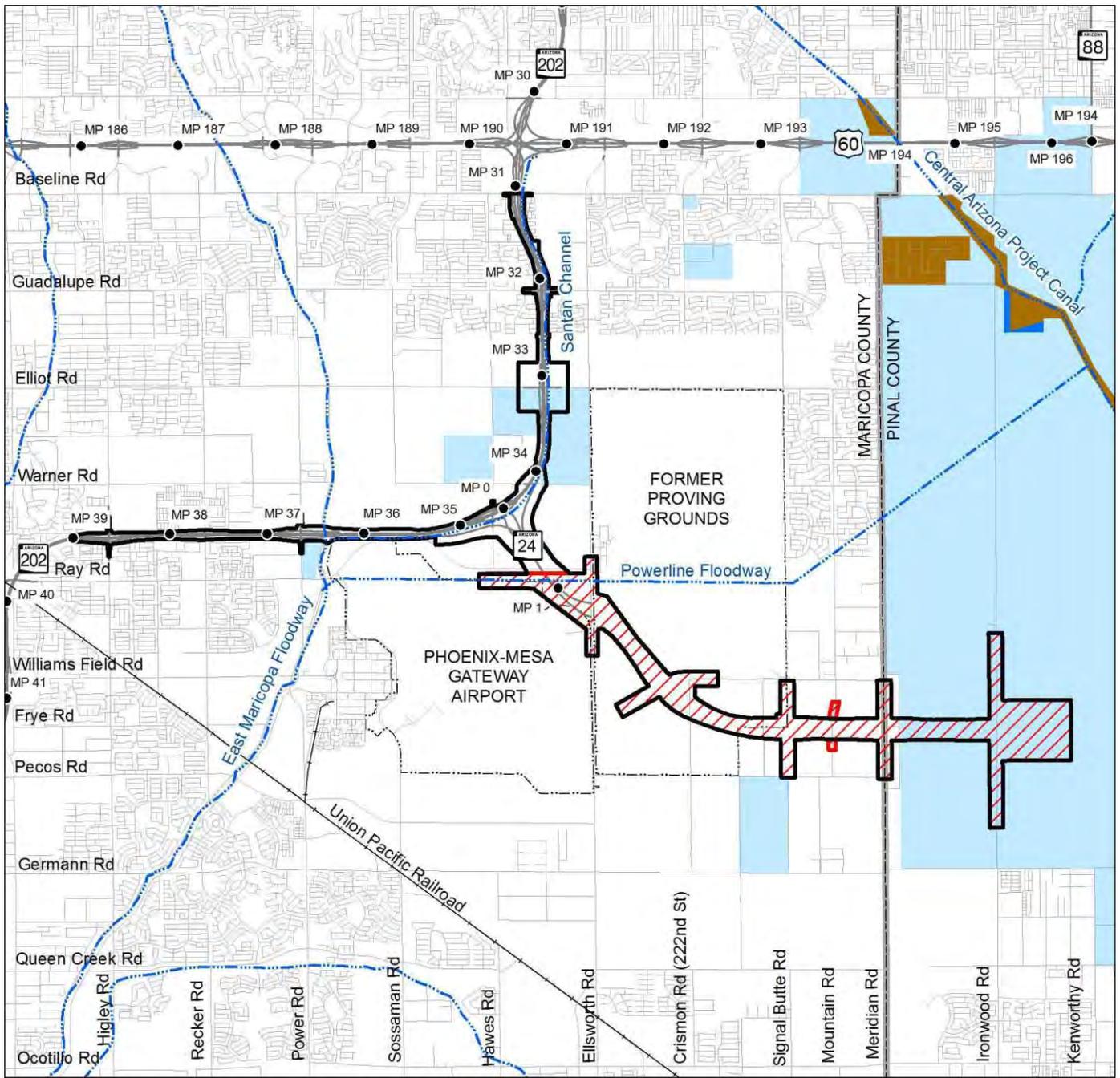
Attachment A

Project Area Maps



Project Name: SR 24 Ellsworth Road to Ironwood Road,
Interim Phase II
Federal Project Number: STP-024-A(200)T
TRACS Number: 024 MA 001 H8915 01L/02L

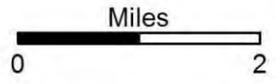
Figure 1. State location



Source: Land ownership GIS coverage provided by Arizona State Land Department; Arizona Transportation Information System GIS Coverage (2013)

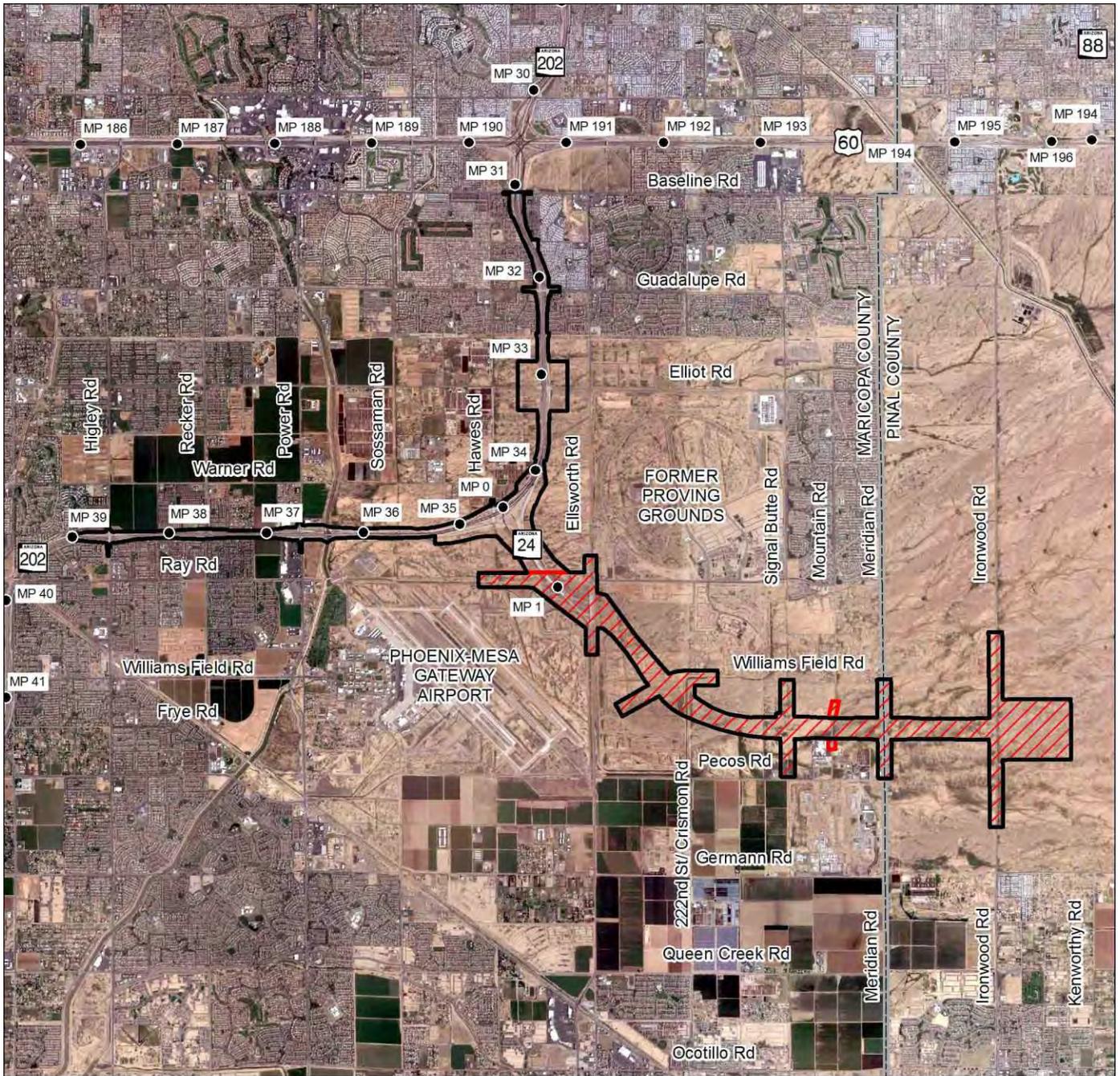
Key

- Canal
- 2011 EA Limits
- Project Limits for Phase II Interim Improvements
- Bureau Of Reclamation
- Other
- Private Land
- State Trust Land



Project Name: SR 24 Ellsworth Road to Ironwood Road, Interim Phase II
 Federal Project Number: STP-024-A(200)T
 TRACS Number: 024 MA 001 H8915 01L/02L

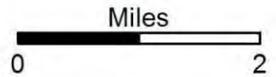
Figure 2. Project vicinity



Source: Arizona Transportation Information System GIS Coverage (2013); Google Earth Aerial Imagery (3/2015)

Key

-  2011 EA Limits
-  Project Limits for Phase II Interim Improvements



Project Name: SR 24 Ellsworth Road to Ironwood Road,
Interim Phase II
Federal Project Number: STP-024-A(200)T
TRACS Number: 024 MA 001 H8915 01L/02L

Figure 3. Project area

Attachment B

Project Area Photographs (August 3, 2016)

Project Area Photographs (August 3, 2016)



Photo 1. View to the east along eastbound SR 24, just west of Ellsworth Road.



Photo 2. View to the west of the existing portion of SR 24 at Ellsworth Road.



Photo 3. View to the east along the planned alignment of SR 24 within the former General Motors Proving Grounds (opposite view from the previous photo).



Photo 4. View to the northwest along the planned alignment of SR 24 from within the former General Motors Proving Grounds.



Photo 5. View to the southeast along the planned alignment of SR 24 from within the former General Motors Proving Grounds (opposite view from the previous photo).



Photo 6. View to the west along the planned alignment of SR 24 at 222nd Street/Crismon Road.



Photo 7. View to the east along the planned alignment of SR 24 at 222nd Street/Crismon Road (opposite view from the previous photo).



Photo 8. View to the west along the planned alignment of SR 24 at Signal Butte Road.



Photo 9. View to the east along the planned alignment of SR 24 at Signal Butte Road (opposite view from the previous photo).



Photo 10. View to the west along the planned alignment of SR 24 at Mountain Road.



Photo 11. View to the east along the planned alignment of SR 24 at Mountain Road (opposite view from the previous photo).



Photo 12. View to the west along the planned alignment of SR 24 at Meridian Road.



Photo 13. View to the east along the planned alignment of SR 24 at Meridian Road (opposite view from the previous photo).



Photo 14. View to the west along the planned alignment of SR 24 at Ironwood Road.



Photo 15. View to the east along the planned alignment of SR 24 at Ironwood Road (opposite view from the previous photo).

Attachment C

US Fish and Wildlife Service
Official IPAC Species List



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Arizona Ecological Services Field Office

9828 NORTH 31ST AVE, #C3

PHOENIX, AZ 85051

PHONE: (602)242-0210 FAX: (602)242-2513

URL: www.fws.gov/southwest/es/arizona/;

www.fws.gov/southwest/es/EndangeredSpecies_Main.html

Consultation Code: 02EAAZ00-2016-SLI-0640

January 05, 2017

Event Code: 02EAAZ00-2017-E-00369

Project Name: STP-024-A(200)T; 024 MA 001 H8915 01L/02L; SR 24 Ellsworth Road to Ironwood Road

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The Fish and Wildlife Service (Service) is providing this list under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The list you have generated identifies threatened, endangered, proposed, and candidate species, and designated and proposed critical habitat, that *may* occur within one or more delineated United States Geological Survey 7.5 minute quadrangles with which your project polygon intersects. Each quadrangle covers, at minimum, 49 square miles. Please refer to the species information links found at http://www.fws.gov/southwest/es/arizona/Docs_Species.htm or <http://www.fws.gov/southwest/es/arizona/Documents/MiscDocs/AZSpeciesReference.pdf> for a quick reference, to determine if suitable habitat for the species on your list occurs in your project area.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect federally listed species and/or designated critical habitat. A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If the Federal action agency determines that listed species or critical habitat *may be affected* by a federally funded, permitted or authorized activity, the agency must consult with us pursuant to 50 CFR 402. Note that a "may affect" determination includes effects that may not be adverse and that may be beneficial, insignificant, or discountable. An effect exists even if only one individual or habitat segment may be affected. The effects analysis should include the entire action area, which often extends well outside the project boundary or "footprint" (e.g., downstream). If the Federal action agency determines that the action may jeopardize a *proposed* species or adversely modify *proposed* critical habitat, the agency must enter into a section 7 conference. The agency may choose to confer with us on an action that may affect proposed species or critical habitat.

Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event they become proposed or listed prior to project completion. More information on the regulations (50 CFR 402) and procedures for section 7 consultation, including the role of permit or license applicants, can be found in our Endangered Species Consultation Handbook at: <http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>.

In addition to species listed under the Act, we advise you to consider species protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668 *et seq.*). Both laws prohibit the take of covered species. The list of MBTA-protected birds is in 50 CFR 10.13 (for an alphabetical list see <http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/MBTANDX.HTML>). The Service's Division of Migratory Birds is the lead for consultations under these laws (Southwest Regional Office phone number: 505/248-7882). For more information regarding the MBTA, BGEPA, and permitting processes, please visit the following web site: <http://www.fws.gov/migratorybirds/mbpermits.html>. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g. cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/southwest/es/arizona/CellTower.htm>

Although bald eagles (*Haliaeetus leucocephalus*) are no longer listed under the Act, they are protected under both the BGEPA and the MBTA. If a bald eagle nest occurs in or near the proposed project area, our office should be contacted. An evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles (see <http://www.fws.gov/southeast/es/baldeagle/>) and the Division of Migratory Birds consulted if necessary. The National Bald Eagle Management Guidelines provide recommendations to minimize potential project impacts to bald eagles (see <http://www.fws.gov/midwest/eagle/pdf/NationalBaldEagleManagementGuidelines.pdf>).

Activities that involve streams and/or wetlands are regulated by the U.S. Army Corps of Engineers (Corps). We recommend that you contact the Corps to determine their interest in proposed projects in these areas. For activities within a National Wildlife Refuge, we recommend that you contact refuge staff for specific information about refuge resources.

If your action is on Indian land or has implications for off-reservation tribal interests, we encourage you to contact the tribe(s) and the Bureau of Indian Affairs (BIA) to discuss potential

tribal concerns, and to invite any affected tribe and the BIA to participate in the section 7 consultation. In keeping with our tribal trust responsibility, we will notify tribes that may be affected by proposed actions when section 7 consultation is initiated. For more information, please contact our tribal coordinator, John Nystedt, at (928) 556-2160 or John_Nystedt@fws.gov.

The State of Arizona protects some species not protected by Federal law. We recommend you contact the Arizona Game and Fish Department (AGFD) for animals and Arizona Department of Agriculture for plants to determine if species protected by or of concern to the State may occur in your action area. The AGFD has an Environmental Review On-Line Tool that can be accessed at <http://www.azgfd.gov/hgis/>. We also recommend that you coordinate with the AGFD regarding your project.

For additional communications regarding this project, please refer to the consultation Tracking Number in the header of this letter. We appreciate your concern for threatened and endangered species. If we may be of further assistance, please contact Brenda Smith at 928/556-2157 for projects in Northern Arizona, our general Phoenix number (602/242-0210) for central Arizona, or Jean Calhoun at 520/670-6150 (x223) for projects in southern Arizona.

Sincerely,

/s/

Steven L. Spangle

Field Supervisor

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: STP-024-A(200)T; 024 MA 001 H8915 01L/02L; SR 24 Ellsworth Road to Ironwood Road

Official Species List

Provided by:

Arizona Ecological Services Field Office

9828 NORTH 31ST AVE

#C3

PHOENIX, AZ 85051

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

http://www.fws.gov/southwest/es/EndangeredSpecies_Main.html

Consultation Code: 02EAAZ00-2016-SLI-0640

Event Code: 02EAAZ00-2017-E-00369

Project Type: TRANSPORTATION

Project Name: STP-024-A(200)T; 024 MA 001 H8915 01L/02L; SR 24 Ellsworth Road to Ironwood Road

Project Description: The Arizona Department of Transportation (ADOT), in coordination with the Federal Highway Administration (FHWA), completed a design concept report (DCR) and environmental assessment (EA) for the State Route 24 (SR 24) Gateway Freeway (formerly known as SR 802) in April 2011. The first 1.5 miles of SR 24 from SR 202L to Ellsworth Road (Phase I of the 2011 DCR and Final EA) were completed and opened to traffic in May 2014. Preparation of an updated DCR and EA Reevaluation is currently underway to examine the addition of a proposed interim roadway that could be completed several years prior to the final buildout of SR 24, contingent on funding as well as potential modifications to the vertical alignment of the final build-out of SR 24. The proposed interim roadway would be a new divided roadway with two paved travel lanes in each direction from Ellsworth Road to Ironwood Road. The interim roadway and final build-out of SR 24 would have traffic interchanges at Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road; no other roadways would directly connect with the interim roadway or SR 24. The majority of the land within the project limits for the interim improvements is within the 2011 Final EA limits. However, approximately 13.5 acres of additional new right-of-way would be needed from private landowners along Mountain Road for the proposed grade-separated crossing over SR 24. The construction duration is anticipated to be 18 months.



United States Department of Interior
Fish and Wildlife Service

Project name: STP-024-A(200)T; 024 MA 001 H8915 01L/02L; SR 24 Ellsworth Road to Ironwood Road

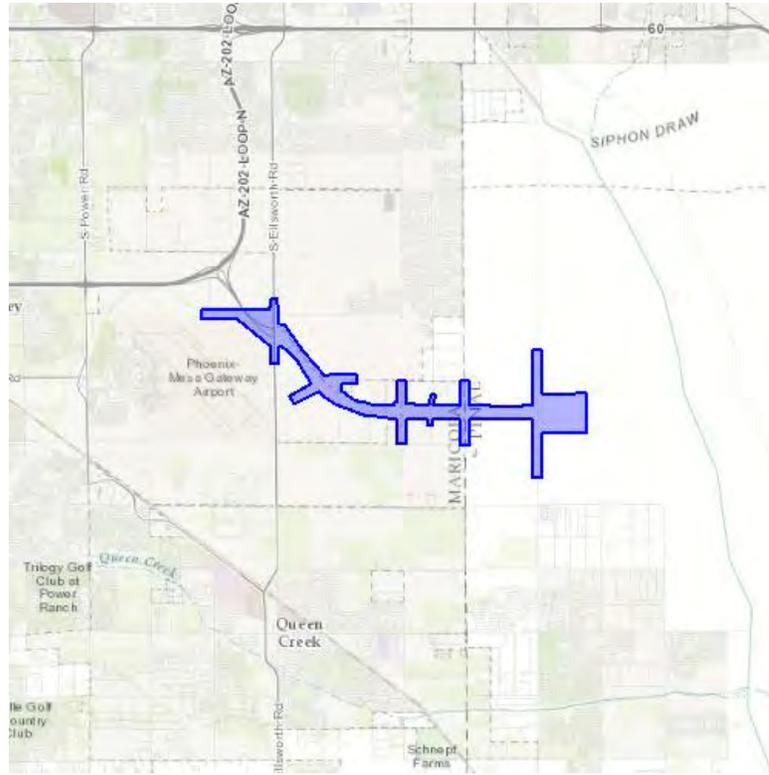
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: STP-024-A(200)T; 024 MA 001 H8915 01L/02L; SR 24 Ellsworth Road to Ironwood Road

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Maricopa, AZ | Pinal, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: STP-024-A(200)T; 024 MA 001 H8915 01L/02L; SR 24 Ellsworth Road to Ironwood Road

Endangered Species Act Species List

There are a total of 5 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
California Least tern (<i>Sterna antillarum browni</i>) Population: Wherever found	Endangered		
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Proposed Threatened		
Mammals			
Lesser Long-Nosed bat (<i>Leptonycteris curasoae yerbabuena</i>) Population: Wherever found	Endangered		
Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>) Population: Wherever found	Threatened	Proposed	



United States Department of Interior
Fish and Wildlife Service

Project name: STP-024-A(200)T; 024 MA 001 H8915 01L/02L; SR 24 Ellsworth Road to Ironwood Road

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Attachment D

Arizona Game and Fish Department (AGFD)
On-line Environmental Review Tool Report
and
Additional Species Occurrence Information Provided by the AGFD (Email)

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

H8915, SR 24 Ellsworth Road to Ironwood Road

User Project Number:

STP-024-A(200)T; 024 MA 001 H8915 01L/02

Project Description:

The Arizona Department of Transportation (ADOT), in coordination with the Federal Highway Administration (FHWA), completed a design concept report (DCR) and environmental assessment (EA) for the State Route 24 (SR 24) Gateway Freeway (formerly known as SR 802) in April 2011. The first 1.5 miles of SR 24 from SR 202L to Ellsworth Road (Phase I of the 2011 DCR and Final EA) were completed and opened to traffic in May 2014. Preparation of an updated DCR and EA Reevaluation is currently underway to examine the addition of a proposed interim roadway that could be completed several years prior to the final buildout of SR 24, contingent on funding as well as potential modifications to the vertical alignment of the final build-out of SR 24. The proposed interim roadway would be a new divided roadway with two paved travel lanes in each direction from Ellsworth Road to Ironwood Road. The interim roadway and final build-out of SR 24 would have traffic interchanges at Ellsworth Road, Williams Field Road, Signal Butte Road, Meridian Road, and Ironwood Road; no other roadways would directly connect with the interim roadway or SR 24. The majority of the land within the project limits for the interim improvements is within the 2011 Final EA limits. However, approximately 13.5 acres of additional new right-of-way would be needed from private landowners along Mountain Road for the proposed grade-separated crossing over SR 24. The construction duration is anticipated to be 18 months.

Project Type:

Transportation & Infrastructure, Road construction (including staging areas), Realignment/new roads

Contact Person:

Ian Tackett

Organization:

Logan Simpson Design Inc.

On Behalf Of:

ADOT

Project ID:

HGIS-04096

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

Locations Accuracy Disclaimer:

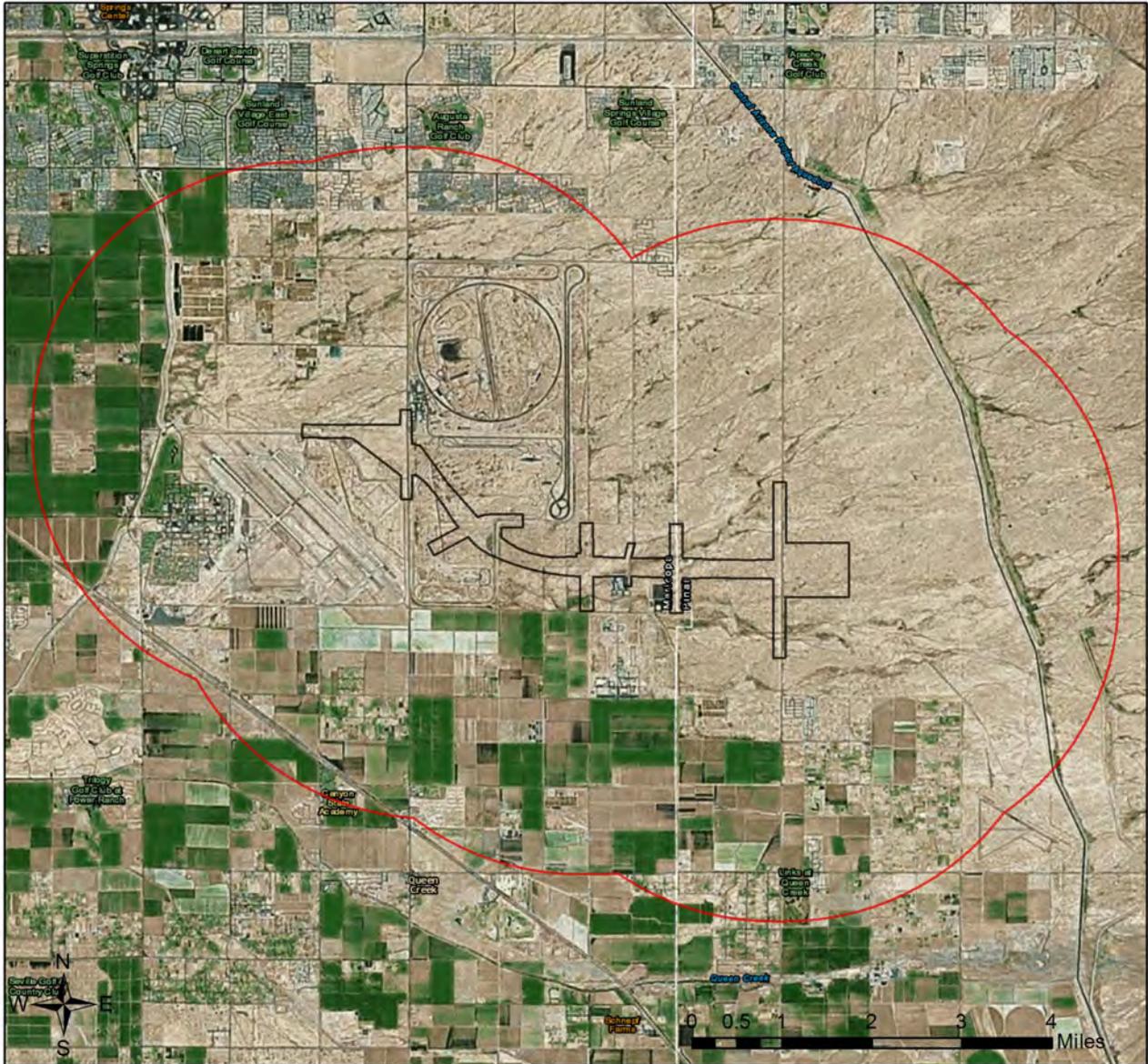
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
Project Evaluation Program, Habitat Branch
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086-5000
Phone Number: (623) 236-7600
Fax Number: (623) 236-7366
Or
PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

H8915, SR 24 Ellsworth Road to Ironwood Road

Aerial Image Basemap With Locator Map



- Project Boundary
- Buffered Project Boundary

Project Size (acres): 1,586.03

Lat/Long (DD): 33.2991 / -111.6027

County(s): Maricopa; Pinal

AGFD Region(s): Mesa

Township/Range(s): T1S, R7E; T1S, R8E; T2S, R7E +

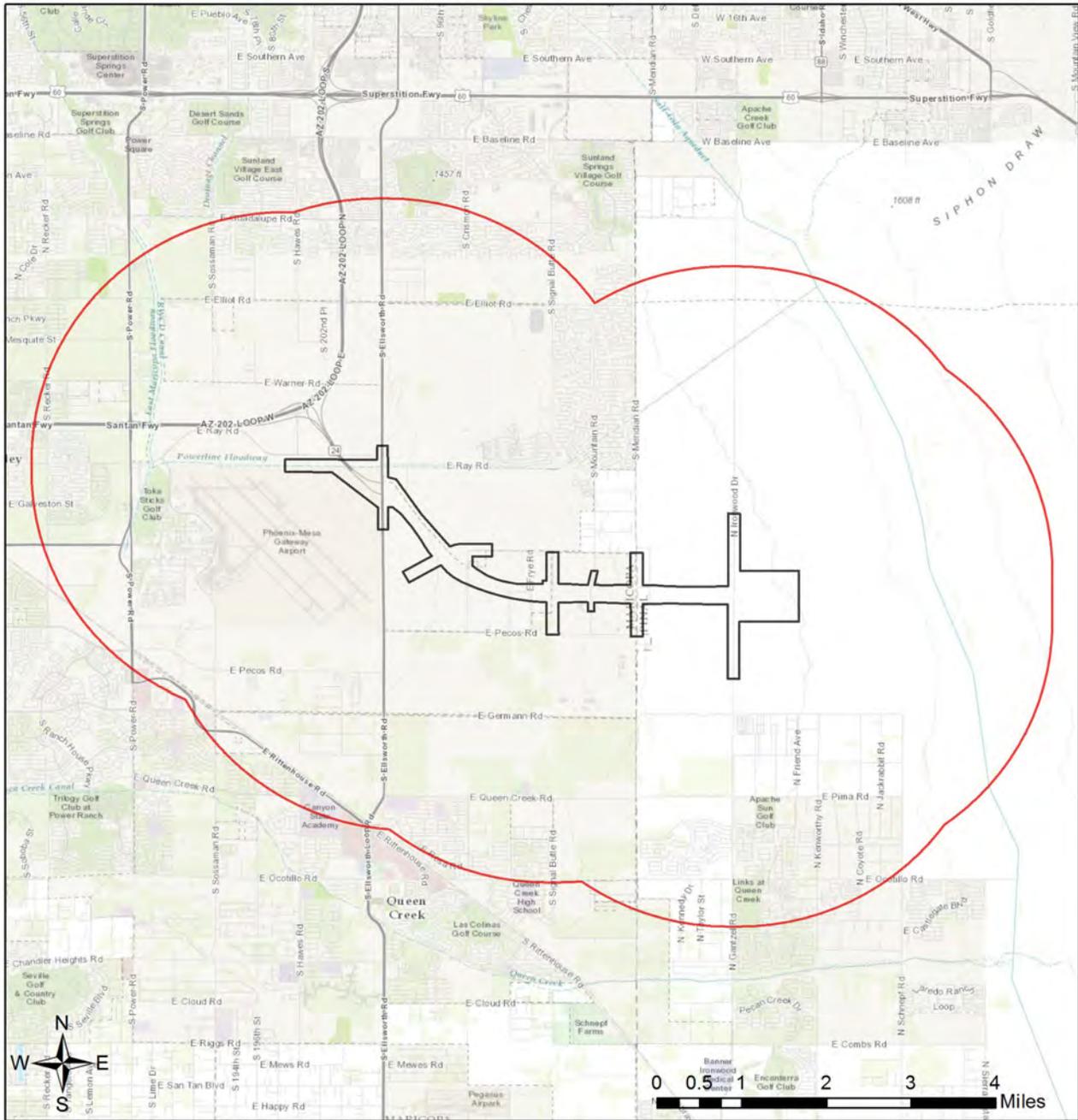
USGS Quad(s): HIGLEY; DESERT WELL

Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong),



H8915, SR 24 Ellsworth Road to Ironwood Road

Web Map As Submitted By User



- Project Boundary
- Buffered Project Boundary

Project Size (acres): 1,586.03

Lat/Long (DD): 33.2991 / -111.6027

County(s): Maricopa; Pinal

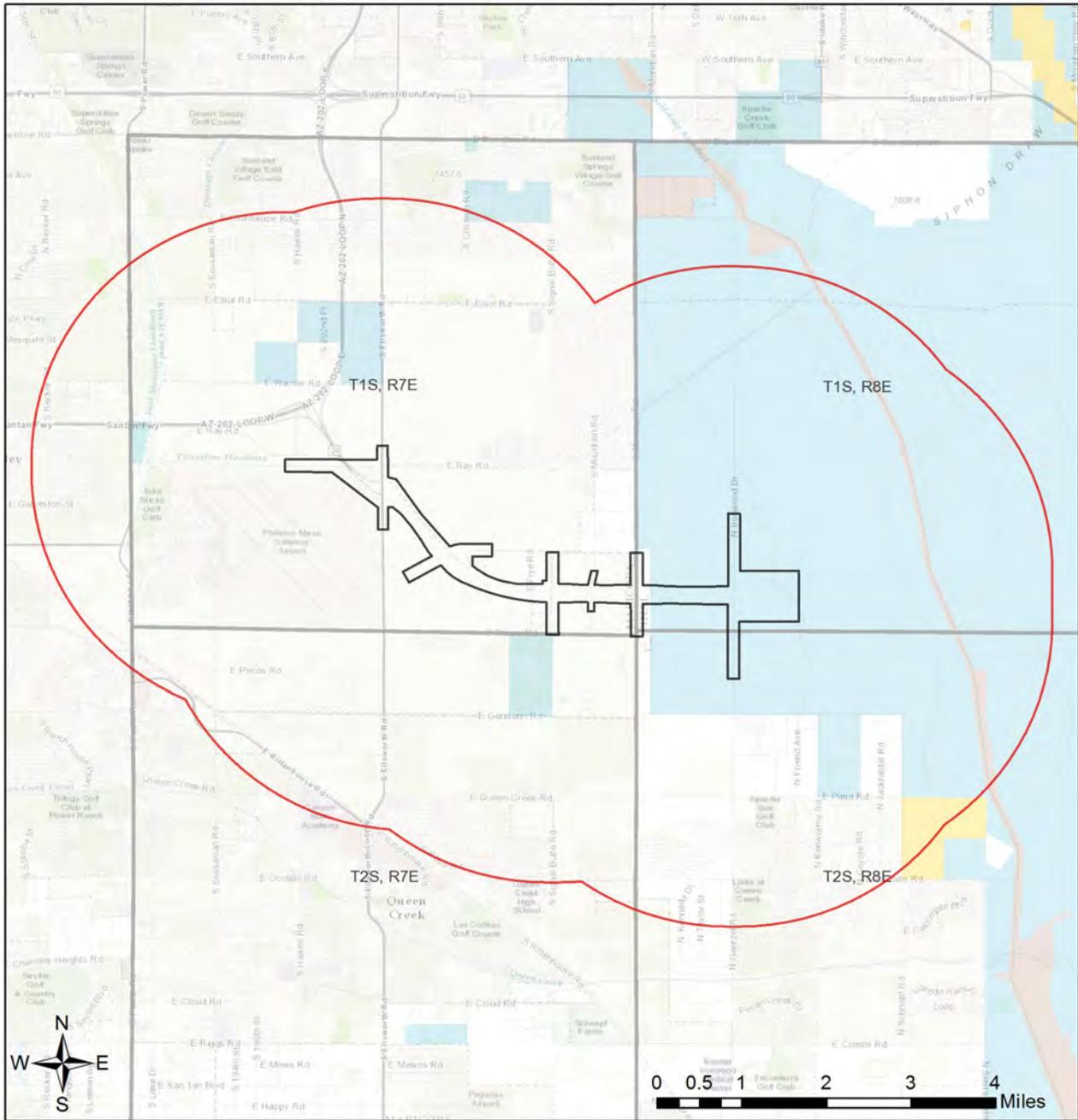
AGFD Region(s): Mesa

Township/Range(s): T1S, R7E; T1S, R8E; T2S, R7E +

USGS Quad(s): HIGLEY; DESERT WELL

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

H8915, SR 24 Ellsworth Road to Ironwood Road Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Ranges | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 1,586.03
 Lat/Long (DD): 33.2991 / -111.6027
 County(s): Maricopa; Pinal
 AGFD Region(s): Mesa
 Township/Range(s): T1S, R7E; T1S, R8E; T2S, R7E +
 USGS Quad(s): HIGLEY; DESERT WELL

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Haliaeetus leucocephalus pop. 3	Bald Eagle - Sonoran Desert Population	SC,BG A	S	S		1A

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/>

**Species of Greatest Conservation Need
Predicted within Project Vicinity based on Predicted Range Models**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aix sponsa	Wood Duck					1B
Ammospermophilus harrisi	Harris' Antelope Squirrel					1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Botaurus lentiginosus	American Bittern					1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Chilomeniscus stramineus	Variable Sandsnake					1B
Chionactis occipitalis klauberi	Tucson Shovel-nosed Snake	SC				1A
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S			1A
Colaptes chrysoides	Gilded Flicker			S		1B
Coluber bilineatus	Sonoran Whipsnake					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus tigris	Tiger Rattlesnake					1B
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S			1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B
Lasiurus xanthinus	Western Yellow Bat		S			1B
Leopardus pardalis	Ocelot	LE				1A
Leptonycteris curasoae yerbabuena	Lesser Long-nosed Bat	LE				1A
Lepus alleni	Antelope Jackrabbit					1B
Macrotus californicus	California Leaf-nosed Bat	SC		S		1B
Melanerpes uropygialis	Gila Woodpecker					1B
Melospiza lincolni	Lincoln's Sparrow					1B

**Species of Greatest Conservation Need
Predicted within Project Vicinity based on Predicted Range Models**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Melospiza aberti	Abert's Towhee		S			1B
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Panthera onca	Jaguar	LE				1A
Passerculus sandwichensis	Savannah Sparrow					1B
Perognathus amplus	Arizona Pocket Mouse					1B
Phrynosoma goodei	Goode's Horned Lizard					1B
Phrynosoma solare	Regal Horned Lizard					1B
Phyllorhynchus browni	Saddled Leaf-nosed Snake					1B
Progne subis hesperia	Desert Purple Martin			S		1B
Rallus obsoletus yumanensis	Yuma Ridgeway's Rail	LE				1A
Setophaga petechia	Yellow Warbler					1B
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Toxostoma lecontei	Le Conte's Thrasher					1B
Troglodytes pacificus	Pacific Wren					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vulpes macrotis	Kit Fox					1B

Species of Economic and Recreation Importance Predicted within Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Odocoileus hemionus	Mule Deer					
Pecari tajacu	Javelina					
Zenaidura macroura	White-winged Dove					
Zenaidura macroura	Mourning Dove					

Project Type: Transportation & Infrastructure, Road construction (including staging areas), Realignment/new roads**Project Type Recommendations:****Bridge Maintenance/Construction**

Identify whether wildlife species use the structure for roosting or nesting during anticipated maintenance/construction period. Plan the timing of maintenance/construction to minimize impacts to wildlife species. In addition to the species list generated by the Arizona's On-line Environmental Review Tool, the Department recommends that surveys be conducted at the bridge and in the vicinity of the bridge to identify additional or currently undocumented bat, bird, or aquatic species in the project area. To minimize impacts to birds and bats, as well as aquatic species, consider conducting maintenance and construction activities outside the breeding/maternity season (breeding seasons for birds and bats usually occur spring - summer). Examining the crevices for the presence of bats prior to pouring new paving materials or that the top of those crevices be sealed to prevent material from dripping or falling through the cracks and potentially onto bats. If bats are present, maintenance and construction (including paving and milling) activities should be conducted during nighttime hours, if possible, when the fewest number of bats will be roosting. Minimize impacts to the vegetation community. Unavoidable impacts to vegetation should be mitigated on-site whenever possible. A revegetation plan should be developed to replace impacted communities.

Consider design structures and construction plans that minimize impacts to channel geometry (i.e., width/depth ratio, sinuosity, allow overflow channels), to avoid alteration of hydrological function. Consider incorporating roosting sites for bats into bridge designs. During construction, erosion control structures and drainage features should be used to prevent introduction of sediment laden runoff into the waterway. Minimize instream construction activity. If culverts are planned, use wildlife friendly designs to mitigate impacts to wildlife and fish movement. Guidelines for bridge designs to facilitate wildlife passage can be found on our Wildlife Friendly Guidelines web page under the Wildlife Planning button, at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/>.

Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the Wildlife Planning button at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/>.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/>.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, cantered, or cut to ensure that light reaches only areas needing illumination.

Project ID: HGIS-04096

Minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails), and other organisms (e.g., microbes), which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g., livestock forage reduction, increase wildfire risk). The terms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before leaving the site. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants, <https://agriculture.az.gov/>. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including: pesticide, herbicide, biological control agents, and mechanical control, <http://www.usda.gov/wps/portal/usdahome>. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information <https://www.azgfd.com/hunting/regulations>.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (<http://azstateparks.com/SHPO/index.html>).

Trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herptefauna (snakes, lizards, tortoise) from entering ditches.

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/>.

Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required (<http://www.azdeq.gov/>).

Based on the project type entered, coordination with U.S. Army Corps of Engineers may be required (<http://www.usace.army.mil/>)

Based on the project type entered, coordination with County Flood Control district(s) may be required.

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

Project ID: HGIS-04096

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly. PEP@azgfd.gov

Project Location and/or Species Recommendations:

HDMS records indicate that one or more listed, proposed, or candidate species or Critical Habitat (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at <http://www.fws.gov/southwest/es/arizona/> or:

Phoenix Main Office

2321 W. Royal Palm Rd, Suite 103
Phoenix, AZ 85021
Phone: 602-242-0210
Fax: 602-242-2513

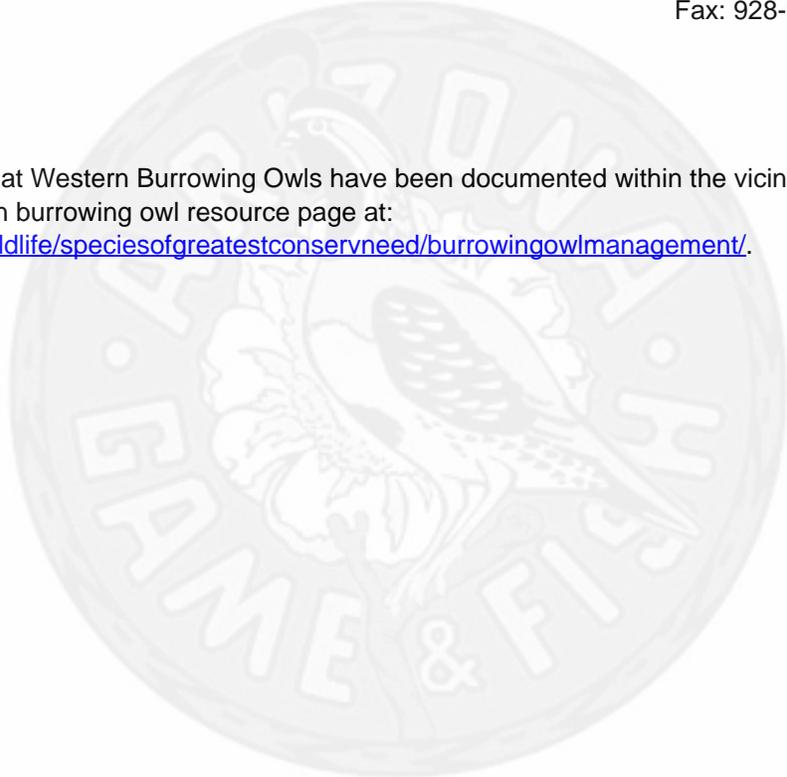
Tucson Sub-Office

201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office

SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

HDMS records indicate that Western Burrowing Owls have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at:
<https://www.azgfd.com/wildlife/speciesofgreatestconservneed/burrowingowlmanagement/>.



Ian Tackett

From: Sabra Tonn <STonn@azgfd.gov>
Sent: Tuesday, February 21, 2017 3:46 PM
To: Ian Tackett
Subject: RE: SR 24 Ellsworth Road to Ironwood Road - Request for additional species information

Ian,

We don't track records of any incidental bald eagles or just singles. The bald eagles will either say "wintering" or just bald eagle (=nesting) with population 3 being the desert birds that were once part of the Distinct Population Segment before delisting. What happened with eagle is that the USFWS has asked us to put a 5 mile buffer around all eagles due to the BGA. They want assessments of all eagles within 7-10 miles of a project. Because we add a minimum of 2 mile buffer to all projects, we agreed to buffer eagle locations by 5 miles. In this case, there is a nest within 5 miles to the west of your project. This is an urban nest south of the Gilbert Water Ranch Preserve. 2012 there was an egg, but the nest failed. It was unoccupied 2013 and 2014. We don't have 2015 data yet. It is called the "Gilbert Breeding Area" in the reports. Also, just as an FYI, there was a pair that nested on a golf course in Scottsdale last year in a eucalyptus tree – fledged 2.

Hope that helps.

Sabra

From: Ian Tackett [<mailto:ITackett@LOGANSIMPSON.COM>]
Sent: Tuesday, February 21, 2017 11:07 AM
To: Sabra Tonn <STonn@azgfd.gov>
Subject: SR 24 Ellsworth Road to Ironwood Road - Request for additional species information

Hi Sabra,

We are in the process of updating an environmental assessment for ADOT and they would like me to include more information regarding the documented occurrence(s) of bald eagles in the project vicinity since this species is listed as occurring within 3 miles of the project area on the AGFD online review tool report (see attached). I'm guessing that some incidental occurrences of bald eagles have been documented at the Phoenix-Mesa Gateway Airport and/or some of the nearby golf courses? Any additional info that you can provide would be appreciated.

Thanks!

Ian

Ian Tackett
Senior Biologist

Logan Simpson
51 W. 3rd St., Ste. 450
Tempe, AZ 85281
P (480) 967-1343
C (602) 513-3319
F (480) 966-9232

ITackett@logansimpson.com
www.logansimpson.com

Attachment E

Arizona Game and Fish Department
Agency Scoping Response Letter



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
PHOENIX, AZ 85086-5000
(602) 942-3000 • WWW.AZGFD.GOV

REGION VI, 7200 E. UNIVERSITY DRIVE, MESA, AZ 85207

GOVERNOR

DOUGLAS A. DUCEY

COMMISSIONERS

CHAIRMAN, EDWARD "PAT" MADDEN, FLAGSTAFF
JAMES R. AMMONS, YUMA
JAMES S. ZIELER, ST. JOHNS
ERIC S. SPARKS, TUCSON
KURT R. DAVIS, PHOENIX

DIRECTOR

LARRY D. VOYLES

DEPUTY DIRECTOR

TY E. GRAY



October 5, 2016

Victoria Casteel
Logan Simpson Design
51 West Third Street
Suite 450
Tempe, Arizona 85281

RE: SR24 Ellsworth Road to Ironwood Road – Interim Phase II

Dear Ms. Casteel,

The Arizona Game and Fish Department (Department) has reviewed the current outlined proposed scope of work outlined in your letter regarding the reevaluation of the 2011 Environmental Assessment (EA) for the State Route 24 (SR24) Gateway Freeway (formerly known as SR802). The Department understands there is an immediate need for this corridor which includes an interim roadway within the footprint; this roadway was not analyzed within the 2011 EA. In addition, the Department understands preparation of an updated Design Concept Report (DCR) and EA reevaluation is under examination, to include the interim roadway and potential additional modifications to the vertical alignment and final build out of SR24.

The Department provides the following initial comments on the scope of work with anticipation of further involvement in the reevaluation process:

- The Department requests further clarification as to how this project integrates with the North South Corridor Study and how the cumulative impacts analysis is being developed with these additional connecting projects. We would like to request a brief meeting for clarification of ADOT's approach, as well as our role in providing additional technical expertise as the project and all its segments are reanalyzed.
- The Department is concerned with the number of drainages within the right-of-way (ROW) as the project moves east of Meridian Road. These areas remain primarily undeveloped, with various vegetated drainages crossing the area. These drainages provide travel corridors for many of the wildlife species in the area. We would like to discuss how these drainages will be crossed by the proposed roadway, and assist in identifying those crossings most important to maintain for wildlife movement through the area.
- In addition, known occurrences of western burrowing owl are located within the proposed ROW; these would potentially need to be relocated from the area of construction. The western burrowing owl is a special status species that is regulated under the Migratory Bird

October 5, 2016
Ms. Victoria Casteel
2

Treaty Act (MBTA). The Department recommends conducting an occupancy survey for western burrowing owl to determine if this species occurs within your project footprint. Guidelines for conducting this survey are found in *Burrowing Owl Project Clearance Guidance for Landowners* which can be accessed on-line through the Department's website. Please note that the survey should be conducted by a surveyor that is certified by the Department. If an active burrowing owl burrow is detected, please contact the Department and the U.S. Fish and Wildlife Service for direction, in accordance with the *Burrowing Owl Project Clearance Guidance for Landowners*.

http://www.azgfd.gov/pdfs/w_c/owl/BurrowingOwlClearanceProtocol.pdf

- The Arizona Game and Fish Commission policy on Wildlife and Wildlife Habitat Compensation (AGFD 1994) states, "The Department shall seek compensation at a 100% level, when feasible, for actual or potential habitat losses resulting from land and water projects." This includes habitat for special status species and economically important wildlife species, where the value, quantity, and quality of habitats may be impacted by proposed projects. The proposed project is within undisturbed Sonoran Desert vegetation with limited riparian and/or mesquite bosque communities. The Department mitigation goal includes no net loss of habitat value, and the Department considers these habitats to be of moderate to high value for wildlife. The Department recommends replacement of habitat values in-kind so that no net loss would occur.
- In addition, the project area provides habitat for species of economic importance including: white winged and mourning dove, javelina, mule deer and Gambel's quail. This area remains important to hunters due to the proximity to the urban areas and remains a hot spot for recreation activity. Access to these areas must remain open for recreational use.

The Department appreciates the opportunity to provide comments on this project and looks forward to meeting with you as the designs advance. If you have any questions, or to schedule the requested meeting, please contact Kelly Wolff-Krauter directly at 480-324-3550 or kwolff-krauter@azgfd.gov.

Sincerely,



Cheri A. Bouchér
Project Evaluation Program Specialist

Cc: Laura Canaca, Project Evaluation Program Supervisor
Jay Cook, Region VI Supervisor

AGFD #M16-08240329

Attachment F

Arizona Game and Fish Department
Guidelines for Handling Sonoran Desert Tortoises
Encountered on Development Projects
(Revised September 22, 2014)

GUIDELINES FOR HANDLING SONORAN DESERT TORTOISES ENCOUNTERED ON DEVELOPMENT PROJECTS

Arizona Game and Fish Department
Revised September 22, 2014

The Arizona Game and Fish Department (Department) has developed the following guidelines to reduce potential impacts to desert tortoises, and to promote the continued existence of tortoises throughout the state. These guidelines apply to short-term and/or small-scale projects, depending on the number of affected tortoises and specific type of project.

The Sonoran desert tortoise occurs south and east of the Colorado River. Tortoises encountered in the open should be moved out of harm's way to adjacent appropriate habitat. If an occupied burrow is determined to be in jeopardy of destruction, the tortoise should be relocated to the nearest appropriate alternate burrow or other appropriate shelter, as determined by a qualified biologist. Tortoises should be moved less than 48 hours in advance of the habitat disturbance so they do not return to the area in the interim. Tortoises should be moved quickly, kept in an upright position parallel to the ground at all times, and placed in the shade. Separate disposable gloves should be worn for each tortoise handled to avoid potential transfer of disease between tortoises. Tortoises must not be moved if the ambient air temperature exceeds 40° Celsius (105° Fahrenheit) unless an alternate burrow is available or the tortoise is in imminent danger.

A tortoise may be moved up to one-half mile, but no further than necessary from its original location. If a release site or alternate burrow is unavailable within this distance, and ambient air temperature exceeds 40° Celsius (105° Fahrenheit), contact the Department for guidance. Tortoises salvaged from projects which result in substantial permanent habitat loss (e.g. housing and highway projects), or those requiring removal during long-term (longer than one week) construction projects, may be placed in the Department's tortoise adoption program. *Managers of projects likely to affect desert tortoises should obtain a [scientific collecting license](#) from the Department to facilitate handling or temporary possession of tortoises.* Likewise, if large numbers of tortoises (>5) are expected to be displaced by a project, the project manager should contact the Department for guidance and/or assistance.

Please keep in mind the following points:

- Use the Department's [Environmental On-Line Review Tool Department](#) during the planning stages of any project that may affect desert tortoise habitat.
- Unless specifically authorized by the Department, or as noted above, project personnel should avoid disturbing any tortoise.
- Take is prohibited by state law.
- These guidelines do not apply to Mojave desert tortoises (north and west of the Colorado River). Mojave desert tortoises are listed as threatened under the Endangered Species Act, administered by the U.S. Fish and Wildlife Service.
- These guidelines are subject to revision at the discretion of the Department.

Attachment G

Sonoran Desert Tortoise Observation Form

Arizona Department of Transportation
Sonoran Desert Tortoise Observation Form



Date of Observation

Time

Observed By

ADOT Work Unit

Work Telephone Number

Location- Route

Location- Milepost

ADOT District

Project TRACS #

Description of Encounter

Description of encounter should include as much information possible: site description, project activities, weather conditions and information on the animal (condition, behavior) etc.

Photo(s)

GPS (if available)

Adjacent Land Owner

Return to:

ADOT Environmental Planning Group Biology Team

1611 W. Jackson, MD EM02

Phoenix , AZ 85007

or via email to: jfife@azdot.gov

Reevaluation of the Final Environmental Assessment
STP-024 A(200)T; 024 MA 001 H8915 01L/02L

ATTACHMENT 7

Phase I ESA Report cover pages and executive summaries

Phase I Environmental Site Assessment

State Route 24, Ellsworth to Ironwood (Fuji Films Site)

6550 South Mountain Road

Mesa, Maricopa County, Arizona

February 5, 2016

Terracon Project No. 65157586



Approved
Ed Green
03 Mar 16

Concur with recommendation
for limited site investigation of
soil piles prior to final clearance.

Prepared for:
Logan Simpson
Tempe, Arizona

Prepared by:
Terracon Consultants, Inc.
Tempe, Arizona

terracon.com

Terracon

Environmental



Facilities



Geotechnical



Materials

February 5, 2016



Logan Simpson
51 West Third Street
Suite 450
Tempe, Arizona 85281

Attn: Ms. Vicki Casteel
P: (480) 967-1343
E: vcasteel@logansimpson.com

Re: Phase I Environmental Site Assessment
State Route 24, Ellsworth to Ironwood (Fuji Films Site)
6550 South Mountain Road
Mesa, Maricopa County, Arizona 85212
Terracon Project No. 65157586

Dear Ms. Casteel:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase I Environmental Site Assessment (ESA) report for the above-referenced site. This assessment was performed in accordance with Terracon Proposal No. P65150358-C dated July 23, 2015.

We appreciate the opportunity to be of service to you on this project. In addition to Phase I services, our professionals provide geotechnical, environmental, construction materials, and facilities services on a wide variety of projects locally, regionally and nationally. For more detailed information on all of Terracon's services please visit our website at www.terracon.com. If there are any questions regarding this report or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,
Terracon Consultants, Inc.


Eric Lyding, E.I.
Field Project Manager

 FOR:
David M. Matson, CHMM
Environmental Department Manager

Attachments

Terracon Consultants Inc. 4685 S. Ash Ave. Suite H-4 Tempe, AZ 85282

P 480-897-8200 F 480-897-1133 terracon.com

Environmental



Facilities



Geotechnical



Materials

Phase I Environmental Site Assessment

State Route 24, Ellsworth to Ironwood (Fuji Films Site) ■ Mesa, Arizona

February 5, 2016 ■ Terracon Project No. 65157586

**EXECUTIVE SUMMARY**

This Phase I Environmental Site Assessment (ESA) was performed in accordance with Terracon Proposal No. P65150358-C dated July 23, 2015, and was conducted consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The ESA was conducted under the supervision or responsible charge of Eric Lyding, Environmental Professional. Mr. Lyding performed the site reconnaissance on January 13, 2016.

Findings

A summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

Site Description and Use

The site is located at 6550 South Mountain Road in Mesa, Maricopa County, Arizona. The site consists of four parcels which comprise an approximate 43.3-acre tract of land developed with an industrial facility with asphalt paved parking lot and landscaped areas. The site is occupied by Fujifilm Electronic Materials USA, Inc. and utilized for industrial purposes. In addition, undeveloped land is present on the north part of the site, north of the industrial facility.

Historical Information

Based on a review of the historical information, the site was desert land from at least 1949 until the industrial facility was developed circa 1995. The site has remained relatively unchanged since that time. In general, the surrounding properties consisted of primarily desert land from at least 1949 through the 2000s. Industrial facilities to the south and east were developed by 2013 and 2015, respectively. Based on the historical information, RECs were not identified.

Records Review

Selected federal and state environmental regulatory databases as well as responses from state and local regulatory agencies were reviewed. The industrial facility on the site is listed as Drywell, RCRA-LQG, and SPILLS facility. Based on the file review information, the regulatory status, depth to groundwater, and/or apparent topographic gradient, these listings do not appear to represent a REC for the site. Based on distance, environmental setting and/or facility characteristics, the remaining identified off-site facilities and inquiry results from the local agencies do not constitute RECs in connection with the site at this time.

Phase I Environmental Site Assessment

State Route 24, Ellsworth to Ironwood (Fuji Films Site) ■ Mesa, Arizona
February 5, 2016 ■ Terracon Project No. 65157586



Site Reconnaissance

Based on the site reconnaissance, RECs were not identified associated with the current site operations. The unknown origin of observed fill soil dumped on the site north of the Fujifilm developed area represents a REC for the site.

Adjoining Properties

The site is adjoined to the north by undeveloped land with a paved airstrip for model hobby planes; to the east by Mountain Road followed by Bridgestone Biorubber Process Research Center and undeveloped land; to the south by Fujifilm Electronic Materials (additional portions of the facility on the site) followed by MGC Pure Chemical America; and to the west by undeveloped land. Indications of RECs were not observed with the adjoining properties.

Opinions and Conclusions

We have performed a Phase I ESA consistent with the procedures included in ASTM Practice E 1527-13 at 6550 South Mountain Road, Mesa, Maricopa County, Arizona, the site. The following Recognized Environmental Conditions (RECs) or Controlled RECs (CRECs) were identified in connection with the site:

- The unknown origin of fill soil dumped on the site north of the Fujifilm developed area observed during the site reconnaissance represents a REC.

Significant Data Gaps

There were no significant data gaps identified.

Recommendations

Based on the scope of services, limitations, and conclusions of this assessment, Terracon recommends the following additional actions.

- Terracon recommends conducting a limited site investigation to evaluate the REC associated with the fill soil of unknown origin on the north part of the site.

Phase I Environmental Site Assessment

State Route 24, Ellsworth to Meridian

Mesa, Maricopa County, Arizona

October 5, 2016

Terracon Project No. 65157586



Approved

Ed Green

01 Nov 16

Prepared for:

Logan Simpson

Tempe, Arizona

Prepared by:

Terracon Consultants, Inc.

Tempe, Arizona

terracon.com

Environmental



Facilities



Geotechnical



Materials

October 26, 2016



Logan Simpson
51 West Third Street
Suite 450
Tempe, Arizona 85281

Attn: Ms. Vicki Casteel
P: (480) 967-1343
E: vcasteel@logansimpson.com

Re: Phase I Environmental Site Assessment
State Route 24, Ellsworth to Meridian
Mesa, Maricopa County, Arizona
Terracon Project No. 65157586

Dear Ms. Casteel:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase I Environmental Site Assessment (ESA) report for the above-referenced site. This assessment was performed in accordance with the Terracon Project No. 65157586 Change Order – Phase I Environmental Site Assessment dated January 26, 2016.

We appreciate the opportunity to be of service to you on this project. In addition to Phase I services, our professionals provide geotechnical, environmental, construction materials, and facilities services on a wide variety of projects locally, regionally and nationally. For more detailed information on all of Terracon's services please visit our website at www.terracon.com. If there are any questions regarding this report or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,
Terracon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "William Coleman".

For:

William Coleman
Field Scientist

A handwritten signature in blue ink, appearing to read "David M. Matson".

David M. Matson, CHMM
Senior Associate
Environmental Department Manager

Attachments

Terracon Consultants Inc. 4685 S. Ash Ave. Suite H-4 Tempe, AZ 85282

P 480-897-8200 F 480-897-1133 terracon.com



Environmental

Facilities

Geotechnical

Materials

EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment (ESA) was performed in accordance with Terracon Project No. 65157586 Change Order – Phase I Environmental Site Assessment dated January 26, 2016, and was conducted consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The ESA was conducted under the supervision or responsible charge of Dave M. Matson, Environmental Professional. Mr. Eric Lyding and William Coleman performed the site reconnaissance on September 6, 2016.

Findings

A summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

Site Description and Use

The site is located south of East Williams Field Road, east and west of South Mountain Road in Mesa, Maricopa County, Arizona. The portion of the site east of South Mountain Road is undeveloped land used for livestock processes; the portion west of South Mountain Road is partially graded, undeveloped land. The site is within a parent tract of an approximate 57.07-acre area, comprised of Maricopa Assessor Parcel Nos. (APN) 304-34-203B, 304-34-203A, 304-34-202, 304-34-036A, and 304-34-928A.

Historical Information

Based on a review of the historical information, the site was desert land from at least 1937 until the portion of the site west of South Mountain Road was graded and contained commercial structures circa 2006; the commercial structures were cleared circa 2007. The site has remained relatively unchanged since that time. In general, the surrounding properties consisted of primarily desert land from at least 1937 through the 1980s. Industrial facilities southwest and southeast of the parent tract were developed circa 1996 and 2013, respectively. Based on the historical information, RECs were not identified.

Records Review

Selected federal and state environmental regulatory databases as well as responses from state and local regulatory agencies were reviewed. The site was not identified in the regulatory databases. Based on distance, environmental setting and/or facility characteristics, the identified facility and inquiry results from the local agencies do not constitute recognized environmental conditions (RECs) in connection with the site at this time.

Phase I Environmental Site Assessment

State Route 24, Ellsworth to Meridian ■ Mesa, Arizona

October 26, 2016 ■ Terracon Project No. 65157586



Site Reconnaissance

Based on the site reconnaissance, RECs were not identified associated with the current site operations.

Adjoining Properties

The site is adjoined to the north, east, and west by undeveloped land; to the southwest by undeveloped land and FUJI Films; to the southeast by undeveloped land and Bridgestone Biorubber Process Research Center. Indications of RECs were not observed with the adjoining properties.

Opinions and Conclusions

We have performed a Phase I ESA consistent with the procedures included in ASTM Practice E 1527-13 at APNs 304-34-203B, 304-34-203A, 304-34-202, 304-34-036A, and 304-34-928A, Mesa, Maricopa County, Arizona, the site. RECs or Controlled RECs (CRECs) were not identified in connection with the site.

Significant Data Gaps

There were no significant data gaps identified.

Recommendations

Based on the scope of services, limitations, and findings of this assessment, Terracon did not identify RECs or CRECs, and as such, additional investigation does not appear warranted at this time.

Reevaluation of the Final Environmental Assessment
STP-024 A(200)T; 024 MA 001 H8915 01L/02L

ATTACHMENT 8

Public and agency scoping distribution lists and summary table

STP-024-A(200)T
024 MA 001 H8915 01L/02L
SR 24 Ellsworth Road to Ironwood Road Interim Phase II
Scoping Contacts

Title	First	Last	Position	Agency	ADDRESS	CITY	STATE	ZIP	Alternate ADDRESS	Phone
Mr.	Michael	Klein	Manager	ADOT Aeronautics Group	P.O. Box 13588	Phoenix	AZ	85002	206 S. 17th Ave. MD 426M, Phoenix AZ 85007	
Ms.	Kristi	Moore	President	Arizona Bicycle Club	P.O. Box 7191	Phoenix	AZ	85011-7191		
Captain	Michael	Prochko	Phoenix - Metro East Director	Arizona Department of Public Safety	2610 South 16th Street	Phoenix	AZ	85005-6638		
Mr.	Thomas	Buschatzke	Director	Arizona Department of Water Resources	3550 N. Central Ave.	Phoenix	AZ	85012-2105		
Ms.	Wendy	Smith-Reeve	Director	Arizona Division of Emergency Management	5636 East McDowell Rd	Phoenix	AZ	85008		
Major General	Michael T.	McGuire	Abjutant General	Arizona National Guard	5636 E. McDowell Rd.	Phoenix	AZ	85008-3495		
Ms.	Leslie	Meyers	Area Manager	Bureau of Reclamation, Phoenix Area Office	6150 W. Thunderbird Rd.	Glendale	AZ	85306-4001		
Mr.	Andy	Smith	Transportation Planning Manager	Central Arizona Association of Governments	1075 S. Idaho Rd. Ste #300	Apache Junction	AZ	85219-6406		
Mr.	Bryant	Powell	City Manager	City of Apache Junction	300 E. Superstition Blvd.	Apache Junction	AZ	85119-2825		
Mr.	Giao	Pham	Public Works Director	City of Apache Junction	575 E. Baseline Ave.	Apache Junction	AZ	85119		
Mr.	Emile	Schmid	City Engineer	City of Apache Junction	300 E. Superstition Blvd.	Apache Junction	AZ	85119-2825		
Chief	Harry	Beck		City of Mesa Fire Administration	13 W. First Street	Mesa	AZ	85201		
Chief	John	Meza		City of Mesa Police Department	P.O. Box 1466	Mesa	AZ	85211-1466		
Dr.	Michael	Cowan	Superintendent	City of Mesa Public Schools	63 East Main Street	Mesa	AZ	85201		
Mr.	Brian	Armstrong	Manager, Los Angeles Airports District Office	Federal Aviation Administration	P.O. Box 92007	Los Angeles	CA	90009-2007		
Mr.	Mike	Williams	Manager	Federal Aviation Administration - Phoenix Airports District Office	3800 N Central Avenue, Suite 1025, 10th Floor	Phoenix	AZ	85012		
Ms.	Jennifer	Mellor	Vice President of Economic Development	Greater Phoenix Chamber of Commerce	201 N. Central Ave., 27th Floor	Phoenix	AZ	85004		
Sir or Madam				Greater Phoenix Convention & Visitors Bureau	400 E. Van Buren St., Suite 600	Phoenix	AZ	85004		
Mr.	Nathan B.	Pryor	Government Relations Manager	Maricopa Association of Governments (MAG)	302 North First Avenue, Suite 300	Phoenix	AZ	85003		602-854-6300
Mr.	Edmund C.	Williams	Engineering Division Manager	Maricopa County	2901 W. Durango	Phoenix	AZ	85009		
Ms.	Joy	Rich	County Manager	Maricopa County	301 West Jefferson Street, 10th Floor	Phoenix	AZ	85003		
Mr.	Pete	Weaver	Director	Maricopa County Department of Emergency Management	5630 E. McDowell Road	Phoenix	AZ	85008		
Mr.	Nicolaas P.	Swart, P.E.	Transportation Systems Management Division Manager	Maricopa County Department of Transportation	2901 West Durango Street	Phoenix	AZ	85009-6357		
Ms.	Jennifer	Toth, P.E.	Director	Maricopa County Department of Transportation	2901 West Durango Street	Phoenix	AZ	85009-6357		
Dr.	Don	Covey	County Superintendent of Schools	Maricopa County Education Service Agency	4041 N. Central Ave., Ste. 1100	Phoenix	AZ	85012		
Ms.	Debra	Stark	Director	Maricopa County Planning and Development Department	501 North 44th Street, Suite 200	Phoenix	AZ	85008		
Sir or Madam			District 6	Maricopa County Sheriff's Office, Queen Creek Substation	22308 S. Ellsworth Road	Queen Creek	AZ	85142		
Mr.	Armando	Charvet	President	Phoenix Metro Bicycle Club	P.O. Box 26788	Tempe	AZ	85285-6788		
Mr.	Steve	Miller	District 3 Supervisor	Pinal County	P.O. Box 827	Florence	AZ	85132		
Mr.	Greg	Stanley	Manager	Pinal County	P.O. Box 827	Florence	AZ	85132		
Mr.	Scott	Bender, P.E.	Engineer	Pinal County	P.O. Box 727	Florence	AZ	85132		
Mr.	Louis	Andersen	Public Works Director	Pinal County	P.O. Box 727	Florence	AZ	85132		
Sheriff	Paul	Babeu		Pinal County	971 Jason Lopez Cir.	Florence	AZ	85132		
Mr.	Charles	Kmet	Emergency Manager	Pinal County Emergency Management	31 N. Pinal Street	Florence	AZ	85132		
Ms.	Elise	Moore	Section Chief	Pinal County Flood Control District	P.O. Box 727	Florence	AZ	85132		
Sir or Madam				Pinal County Operations Office	9221 E. Via de Ventura	Scottsdale	AZ	85258		
Mr.	Jim	Higginbotham	Road Maintenance & Operations Branch Chief	Pinal County Road Maintenance	31 N. Pinal Street	Florence	AZ	85132		
Mrs.	Jill	Broussard	Superintendent	Pinal County School Office	P.O. Box 769	Florence	AZ	85132-0769		
Mr.	Andy	Smith	Transportation Planning Section Chief	Pinal County Transportation Planning	31 N. Pinal Street	Florence	AZ	85132		
Dr.	Perry	Berry	Superintendent	Queen Creek Unified School District	20217 East Chandler Heights Road	Queen Creeek	AZ	85142		480-987-5935
Ms.	Jan	Holder	Executive Director	Sky Island Alliance	PO Box 41165	Tucson	AZ	85717		
Ms.	Acasia	Berry	Interim Executive Director	Sky Island Alliance	PO Box 41165	Tucson	AZ	85717		
Ms.	Sharon	Mitchell	Executive Director	Sun Corridor Metropolitan Planning Organization	211 N Florence Street, Ste. 103	Casa Grande	AZ	85122		
Mr.	Patrick	Banger	Town Manager	Town of Gilbert	50 E. Civic Center Dr.	Gilbert	AZ	85296-3463		
Mr.	Kenneth	Morgan	Public Works Director	Town of Gilbert	50 E. Civic Center Dr.	Gilbert	AZ	85296-3463		
Mr.	Chris	Dovel	Town Engineer	Town of Queen Creek	22358 S. Ellsworth Road	Queen Creek	AZ	85142-9311		
Mr.	John	Kross	Town Manager	Town of Queen Creek	22358 S. Ellsworth Road	Queen Creek	AZ	85142-9311		
Mr.	Tom	Condit	Community Development Director	Town of Queen Creek	22358 S. Ellsworth Road	Queen Creek	AZ	85142-9311		
Mr.	Fred	Brittinham	Planning Staff	Town of Queen Creek	22358 S. Ellsworth Road	Queen Creek	AZ	85142-9311		
Mr.	Wayne	Balmer	Planning Staff	Town of Queen Creek	22358 S. Ellsworth Road	Queen Creek	AZ	85142-9311		

STP-024-A(200)T
024 MA 001 H8915 01L/02L
SR 24 Ellsworth Road to Ironwood Road Interim Phase II
Scoping Contacts

Title	First	Last	Position	Agency	ADDRESS	CITY	STATE	ZIP	Alternate_ADDRESS	Phone
Ms.	Deeann	Thomas	Marketing and Communications	Town of Queen Creek	22358 S. Ellsworth Road	Queen Creek	AZ	85142-9311		
Chief	Ron	Knight		Town of Queen Creek Fire Administration	22358 S. Ellsworth Road	Queen Creek	AZ	85142		
Mr.	Stephen R.	Banta	Chief Executive Director	Valley Metro Regional Public Transit Authority	302 North First Avenue, Suite 700	Phoenix	AZ	85003		
Mr.	Ron	Moulton	Senior VP and Desert Southwest Regional Manager	Western Area Power Administration	P.O. Box 6457	Phoenix	AZ	85005-6457		

Title	First	Last	Position	Agency	ADDRESS	CITY	STATE	ZIP	Alternate_ADDRESS	Email	Phone	Notification Status
Mr.	Al	Zubi		City of Mesa Transportation	P.O. Box 1466	Mesa	AZ	85211		al.zubi@mesaaz.gov	480-644-4912	Sent 8/12/2016
Mr.	Bob	Draper	Engineering & Facilities Director	Phoenix-Mesa Gateway Airport Authority	5835 South Sossaman Road	Mesa	AZ	85212-6014	600 S POWER RD BLDG 41, Mesa AZ 852065219	bdraper@phxmesagateway.org	Office: 480-988-7705; Fax: 480-988-2315; Cell: 480-532-4712	Sent 8/12/2016
Mr.	Tony	Bianchi		Phoenix-Mesa Gateway Airport Authority	5835 South Sossaman Road	Mesa	AZ	85212-6014		tbianchi@phxmesagateway.org		
Mr.	Bob	Hazlett		Maricopa Association of Governments (MAG)	302 North First Avenue, Suite 300	Phoenix	AZ	85003		bhazlett@azmag.gov	602-254-6300	Sent 8/12/2016
Mr.	Bryan	Martyn		Pinal County Board of Supervisors						bryan.martyn@pinalcountyaz.gov	520.866.6107	Email delivery failed
Mr.	Burke	Lokey		Flood Control District of Maricopa County	2801 W. Durango Street	Phoenix	AZ	85009		burkelokey@mail.maricopa.gov		Email delivery failed
Ms.	Carol	Crane		Chandler-Gilbert Community College						carol.crane@cccmil.maricopa.edu	480.732.7030	Sent 8/12/2016
Mr.	Bob	Beane	President	Coalition of Arizona Bicyclists	P.O. Box 54488	Phoenix	AZ	85078		cazbike@cazbike.org; healeyv3ionn3@gmail.com; or bobj@cazbike.org		Sent 8/12/2016
Ms.	Chau	Hill		Maricopa Association of Governments (MAG)	302 North First Avenue, Suite 300	Phoenix	AZ	85003		chill@azmag.gov	602-854-6300	Sent 8/12/2016
Mr.	Doug	Williams		Flood Control District of Maricopa County	2801 W. Durango Street	Phoenix	AZ	85009		daw@mail.maricopa.gov		Sent 8/12/2016
Dr.	Christina M.	Kishimoto	Superintendent	Town of Gilbert Public Schools	140 South Gilbert Road	Gilbert	AZ	85296		dianne_bowers@gilbert.k12.az.us	480.497.3364	Email delivery failed
Ms.	Deanna	Mohr		United States Postal Service						dmohr@usps.gov		Sent 8/12/2016
Mr.	Dave	Moody		Maricopa Association of Governments (MAG)	302 North First Avenue, Suite 300	Phoenix	AZ	85003		dmoody@azmag.gov	602-854-6300	Sent 8/12/2016
Mr.	Erik	Guderian		City of Mesa Transportation	P.O. Box 1466	Mesa	AZ	85211		erik.guderian@mesaaz.gov		Sent 8/12/2016
Ms.	Mary	Gloria		Pan de Vida Foundation	PO Box 745	Queen Creek	AZ	85242		info@pandevidaaz.org		Sent 8/12/2016
Mr.	Jeff	Shelton		Flood Control District of Maricopa County	2801 W. Durango Street	Phoenix	AZ	85009		jefferyshelton@mail.maricopa.gov		Sent 8/12/2016
Chief	Jim	Jobusch		Town of Gilbert Fire	85 E Civic Center Dr	Gilbert	AZ	85296		Jim.Jobusch@gilbertaz.gov		Sent 8/12/2016
Ms.	Julie	Murphree		Arizona Farm Bureau						juliemurphree@azfb.org	480-635-3607	Sent 8/12/2016
Mr.	Ken	Ohman		United States Postal Service						kohman@usps.gov		Email delivery failed
Mr.	Lance	Webb		City of Mesa Engineering	P.O. Box 1466	Mesa	AZ	85211		lance.webb@mesaaz.gov		Sent 8/12/2016
Mr.	Lenny	Hulme		City of Mesa Transportation	P.O. Box 1466	Mesa	AZ	85211		lenny.hulme@mesaaz.gov		Sent 8/12/2016
Mr.	Marc	Ahlstrom		City of Mesa Engineering	P.O. Box 1466	Mesa	AZ	85211		marc.ahlstrom@mesaaz.gov	480-644-4622	Sent 8/12/2016
Ms.	Maria	Deeb		City of Mesa Transportation	P.O. Box 1466	Mesa	AZ	85211		maria.deeb@mesaaz.gov	480-644-2845	Sent 8/12/2016
Mr.	Mark	Eckhoff	Community Development Director	Town of Florence	P.O. Box 2670	Florence	AZ	85132	224 W. 20th Street	mark.eckhoff@florenceaz.gov		Sent 8/12/2016
Dr.	Mike	Thomason	Superintendent	Higley Unified School District	2935 South Recker Road	Gilbert	AZ	85295		mike.thomason@husd.org		Sent 8/12/2016
Mr.	Manny	Patel		Arizona State Land Department	1616 W. Adams Street	Phoenix	AZ	85007		mpatel@azland.gov	602-364-5016	Sent 8/12/2016
Mr.	Michael	Duncan, P.E.		Flood Control District of Maricopa County	2801 W. Durango Street	Phoenix	AZ	85009		mwd@mail.maricopa.gov	602-506-4732	Sent 8/12/2016
Mr.	Peter	Haas		USPS Corporate Communications						phass1@usps.com	602.223.3649	Sent 8/12/2016
Mr.	Marquis	Scott	President & Executive	Queen Creek Chamber of Commerce	22246 South Ellsworth Rd	Queen Creeek	AZ	85142		president@queencreekchamber.org	480-888-1709	Sent 8/12/2016
Mr.	Quinn	Castro		Maricopa Association of Governments (MAG)	302 North First Avenue, Suite 300	Phoenix	AZ	85003		qcastro@azmag.gov	602-854-6300	Sent 8/12/2016
Ms.	Sandy	Bahr	Chapter Director	Sierra Club	514 W. Roosevelt St	Phoenix	AZ	85003		sandy.bahr@sierraclub.org	602-253-8633	Sent 8/12/2016
Mr.	Shahir	Safi		City of Mesa Engineering	P.O. Box 1466	Mesa	AZ	85211		shahir.safi@mesaaz.gov		Sent 8/12/2016
Ms.	Sally	Harrison	Programs	City of Mesa Chamber of Commerce						sharrison@mesachamber.org	480-969-1307	Sent 8/12/2016
Ms.	Tiffany	Sprague	Chapter Coordinator	Sierra Club	514 W. Roosevelt St	Phoenix	AZ	85003		tiffany.sprague@sierraclub.org	602-253-9140	Sent 8/12/2016
Chief	Tim	Dorn		Town of Gilbert Police	75 E. Civic Center Drive	Gilbert	AZ	85296		Tim.Dorn@gilbertaz.gov		Sent 8/12/2016
Mr.	Timothy	McDonald		United States Postal Service						timothy.g.mcdonald@usps.gov		Sent 8/12/2016
Mr.	Jason	Baran	Manager State and Local Government Relations	Salt River Project	P.O. Box 52025	Phoenix	AZ	85072-2025	Headquarters: 1521 N. Project Drive Tempe, AZ 85281-1298	jason.baran@srpnet.com	(602) 236-2467	Sent 8/12/2016
Ms.	Cheri	Bouchér	Transportation Project Evaluation Specialist	Arizona Game and Fish Department WMHB - Project Evaluation Program	5000 W Carefree Highway	Phoenix	AZ	85086-5000		cep@azgfd.gov		Sent 8/12/2016

Title	First	Last	Owner Name	In Care Of	Mailing Address	Mailing Address City	Mailing Address State	Mailing Address Zip Code	Phone	Notes
Mr.	Chase	Kamp	STV Today Newspaper		1105 N Quail	Mesa	AZ	85205	480-207-0848	
Dr.	John	Maher			131 W Canyon St	Apache Junction	AZ	85720	480-982-9898	
Mr.	Hager	Hay			1527 W Cipriano Road	Mesa	AZ	85212	N/A	
Ms.	Tamar	Salpeter			15333 N Pima Rd #215	Scottsdale	AZ	85260	N/A	
	E.	Weech			18119 Via Margarita	Gold Canyon	AZ	85218	520-463-0448	MAIL RETURNED - NO FORWARDING ADDRESS
Mr.	Bill	Stevenson			20646 E Ryan Rd	Queen Creek	AZ	85142	N/A	
Mr.	Don	Walker			3700 S Ironwood Dr # 206	Apache Junction	AZ	85120	480-288-5686	
Mr.	Paul	Cooper			4601 E Indigo St	Gilbert	AZ	85298	480-840-33418	
Mr. and Ms.	Louis and Dolly	Winkelman			5673 S Palo Blanco	Gold Canyon	AZ	85118	480-982-6668	
			202 HOLDINGS		1707 E HIGHLAND AVE STE 100	PHOENIX	AZ	85016		
			ALLIED WASTE TRANSPORTATION INC		18500 N ALLIED WAY STE 100	PHOENIX	AZ	85054		
			Anthony J. Mormino		29100 N 67TH ST	Cave Creek	AZ	85331		
			APERGIS SPIROS		924 E LINDA LN	GILBERT	AZ	85234		
			ASPIRE PROPERTIES LLC		1043 N 47TH AVE	PHOENIX	AZ	85043		
			AV HOMES OF ARIZONA LLC		8601 N SCOTTSDALE RD STE 225	SCOTTSDALE	AZ	85253		
			BD218 LLC		8735 E Warner Rd	Mesa	AZ	85212		
			BILLIE CAUDILL		9548 E PRINCESS DR	MESA	AZ	85207		
			BLUCOR TIERRA HOLDINGS LLC		21738 E ORION WAY	QUEEN CREEK	AZ	85142		
			BRIAN & CJ KAPP		45644 N MCKENZIE RD	MESA	AZ	85212		
			BRIDGESTONE AMERICAS TIRE OPERATIONS LLC		535 MARRIOTT DR	NASHVILLE	TN	37214		
			Bruce A Naegeli		9626 N. 34th Pl.	Phoenix	AZ	85028		MAIL RETURNED - ADDRESS UPDATED AND RE-MAILED
			BRUCE NAEGLI GST EXEMPT DECEDENTS TRUST	BLYTHE G TRETICK	9626 N 34TH PL	PHOENIX	AZ	85028		
			BURT WILLIAM AND SARAH HATCH		41110 N RATTLESNAKE RD	QUEEN CREEK	AZ	85140		
			CARL R SCHRAMM JR TR		6625 INKSTER RD	TAYLOR	MI	48180		
			CARL SCHRAMM JR REVOCABLE LIVING TRUST		25757 VAN BORN	TAYLOR	MI	48180		
			CARLOS GOMEZ PADILLA		7421 E LOMITA AVE	MESA	AZ	85209		
			CARMEN M GULLEY		1439 N 62ND PL	MESA	AZ	85205		
			CHERYL L SMITH, GARY W SMITH, ETAL		46596 N MCKENZIE RD	MESA	AZ	85212		
			Chrome, Inc.		6056 E. Baseline Rd., Suite 155	Mesa	AZ	85206		MAIL RETURNED - ADDRESS UPDATED AND RE-MAILED
			CINDY L STRINGHAM		16014 S SIGNAL BUTTE RD	Mesa	AZ	85242		MAIL RETURNED - ADDRESS UPDATED AND RE-MAILED
			COMMERCIAL METALS COMPANY		6565 N MACARTHUR BLVD STE 800	IRVING	TX	75039		
			CRM OF AMERICA HOLDINGS LLC		15800 S AVALON BLVD	RANCHO	CA	90220		
			DAN NORVIL/TERRY JEAN FERGUSON		1501 W MESQUITE ST	CHANDLER	AZ	85224		MAIL RETURNED - NO FORWARDING ADDRESS
			DASIA EQUITIES LLC		1884 W ASPEN AVE	GILBERT	AZ	85233		
			Dasia Holdings LLC		631 W Commerce Ave	Gilbert	AZ	85233		
			DAWN RIST, DORIS TOLLEY		46530 N MCKENZIE RD	MESA	AZ	85212		
			DEBRA Y & BRETT N SHAFE		46927 N MOEUR RD	MESA	AZ	85212		
			DEMURO PROPERTIES		114 MARY ST	WINNETKA	IL	60093		
			DeMuro Properties		3443 North Central Ave	Phoenix	AZ	85012		
			DIANE SUE ANGELOTTI-DELHOTAL		45339 N MOEUR RD	MESA	AZ	85212		
			DMB MESA PROVING GROUNDS LLC		7600 E DOUBLETREE RANCH RD STE 300	SCOTTSDALE	AZ	85258		
			DONALD J & MARSHA K SELF		46991 N MOEUR RD	MESA	AZ	85212		
			EASTMARK COMMUNITY ALLIANCE INC	DMB ASSOCIATES INC	7600 E DOUBLETREE RANCH RD STE 300	SCOTTSDALE	AZ	85258		
			EB REZZONICO PROPERTIES LLLP	MARNEE PINGREE	PO BOX 42838	PHOENIX	AZ	85080		
			Edward J. & Susan J. Bawolek Revocable Trust		2200 W Sagebrush Court	Chandler	Az	85224		
			ELLSWORTH ROAD 29 LLC/ ELLSWORTH ROAD 30 LLC		460 S GREENFIELD RD STE 2	MESA	AZ	85206		
			Estate of Susan Arnold DeMuro	Ed Childers	4118 W. Whitton	Phoenix	AZ	85019		MAIL RETURNED - ADDRESS UPDATED AND RE-MAILED
			Eugene DeMuro Family Trust ET AL		7502 E Windrose Drive	Scottsdale	AZ	85260		Mail RETURNED - NO FORWARDING ADDRESS
			EUGENE DEMURO TR/JOSEPH BALDELLI		100 E HURON ST #3504	CHICAGO	IL	60611		
			FEMCON INC		2618 W MESQUITE	CHANDLER	AZ	85224		
			FRYE SIGNAL BUTTE VENTURES LLC		P O BOX 1988	TEMPE	AZ	85280		
			Frye/Signal Butte Venture LLC		502 S College Avenue Ste 201	Tempe	AZ	85281		
			Fujifilm Electronic Materials U.S.A. Inc	Patricia Dineen, Esq.	200 Park Avenue	New York	NY	10166		MAIL RETURNED - North Kingstown Address used.
			FUJIFILM ELECTRONIC MATERIALS USA INC		80 CIRCUIT DR	NORTH KINGSTOWN	RI	02852		
			GILBERTO & ROSMERY DUARTE		745 S 96TH ST	MESA	AZ	85208		Dave Edwards to follow up
			GREWAL TEJINDER/RUPINDER TR/SARAN JD/HARKA TR		2472 W SPRUCE DR	CHANDLER	AZ	85286		
			GROH REVOCABLE TRUST	GROH JOHN E/NANCY A TRUSTEES	9844 E GELDING DR	SCOTTSDALE	AZ	85260		
			Gruppo Aztex LTD		2727 North Terrace Circle	Mesa	AZ	85203		
			GRUPO AZTEX LTD LTD		24731 S LINDSAY	CHANDLER	AZ	85249		
			GWEN AND RICHARD E SIEDLER TRS		5912 S STANLEY PL	TEMPE	AZ	85283		
			IRA IRENE DOAK		96 W REXFORD DR	NEWPORT NEWS	VA	23608		
			JAMES SCOTT LEON TR		15855 S 222ND ST	MESA	AZ	85212		
			JENSEN BILMAR REVOCABLE TRUST		1119 LEISURE WORLD	MESA	AZ	85206		

Title	First	Last	Owner Name	In Care Of	Mailing Address	Mailing Address City	Mailing Address State	Mailing Address Zip Code	Phone	Notes
			Jerome & Christina Stehly Family Trust ET AL		3602 Plumrose Dr.	San Diego	CA	92106		MAIL RETURNED - ADDRESS UPDATED AND RE-MAILED
			JERRI STAPLEY		1508 N ALTA MESA DR #110	MESA	AZ	85205		
			JOEL ORTEGA		PO BOX 357	HIGLEY	AZ	85236		
			JOHN WILLIS TOWLER TR		212 E 22ND ST	VANCOUVER	WA	98663		
			JOSE N & DOMINGA MEJIA TRS		9818 E BOULDER DR	MESA	AZ	85207		
			JOSEPH H/WILLIE M LIBBEY		16025 S 222ND ST	Mesa	AZ	85212		MAIL RETURNED - ADDRESS UPDATED AND RE-MAILED
			JULEE BRADY		3044 N 38TH CIR	MESA	AZ	85215		
			KATHY SINCLAIR		16027 S. 222nd St.	Mesa	AZ	85212		MAIL RETURNED - ADDRESS UPDATED AND RE-MAILED
			Larry R. & Pamela J. Hanson Living Trust		19563 N AZ Hwy 188	Roosevelt	AZ	85545		
			LARRY R/PAMELA HANSON		PO BOX 440	QUEEN CREEK	AZ	85242		
			LARRY R/PAMELA HANSON TR		PO BOX 440	ROOSEVELT	AZ	85545		
			LILLIAN M DENNY		46638 N MCKENZIE RD	MESA	AZ	85212		
			MARIE S MARIN		11252 E PRONGHORN AVE	MESA	AZ	85212		
			MATHESON TRI GAS INC		150 ALLEN RD NO 302	BASKING RIDGE	NJ	7920		
			MAX G HIATT JR		46806 N MCKENZIE RD	MESA	AZ	85212		
			MESA AIRPORT GROWTH PROPERTIES LLC		6200 RIVERSIDE DR	CLEVELAND	OH	44135		
			METRIC GROUP LLC		4008 E PRESIDIO ST	MESA	AZ	85215		
			MICHAEL G SCHUERMAN		2675 W MONTGOMERY DR	CHANDLER	AZ	85224		
			MUSHSON PARTNERS LLC		10801 E HAPPY VALLEY RD LOT 133	SCOTTSDALE	AZ	85255		
			OLAYA AND PABEL LOYA		23028 E GALVESTON ST	MESA	AZ	85212		
			PACIFIC PROVING LLC		1702 E HIGHLAND AVE STE 310	PHOENIX	AZ	850164666		
			Pacific Proving LLC	e/o Mariscal Weeks McIntyre & Frie	2901 N Central Ave Unit 200	Phoenix	AZ	85012		MAIL RETURNED - Highland Address used.
			PM INDUSTRIAL HOLDINGS LP/ETAL	SOLID STATE PARTNERS	PO BOX 78325	ATLANTA	GA	30357		
			PM Industrial Holdings. L.P. ET AL		2812 N Norwalk Ste 105	Mesa	AZ	85215		
			PPGN-WILLIAMS LLLP/ PPGN-ELLSWORTH LLLP/ PPGN-CORE LLLP/ PPGN-CRISMON LLLP/ PPGN-RAY LLLP		17700 N PACESETTER WAY STE 100	SCOTTSDALE	AZ	852555457		
			PRAIRIE DOG INVESTMENTS III LLC		7898 E ACOMA DR 108	SCOTTSDALE	AZ	85260		
			RANDALL EUGENE COOL		366 N DELAWARE ST APT B	CHANDLER	AZ	85225		
			RICHARD TODD & LISA M EAMES		46815 N MOEUR RD	MESA	AZ	85212		
			ROBERT M & KAREN L KOMADA		1601 W WILLIAMS FIELD RD	MESA	AZ	85212		
			SHAWN C & AMANDA R PETTY, BRIAN A PULLIN		5975 E EL CAMINO QUINTO	APACHE JUNCTION	AZ	85119		
			SIGNAL BUTTE 10 LLC/ SIGNAL BUTTE 20 LLC/ SIGNAL BUTTE GATEWAY LLC		2251 N 32ND ST UNIT 30	MESA	AZ	85213		
			SMT Investors Limited Partnership ET AL		1242 E JACKSON ST	PHOENIX	AZ	85034		
			STEHLY FAMILY TRUST/LERNER FAMILY TRUST/ETAL		3602 PLUMROSA DR	SAN DIEGO	CA	92106		
			SUPERSTITION VIEW RANCHETTES WATER		1431 W FRYE RD	MESA	AZ	85212		
			SUSAN A DEMURO TRUST		30831 N 56TH ST	PHOENIX	AZ	85331		
			SUSAN M WALDEN		46876 N MCKENZIE RD	MESA	AZ	85212		
			TERENCE R SCHMIDT		4423 W DONNER DR	LAVEN	AZ	85339		
			TERENCE RICHARD SCHMIDT		16006 S SIGNAL BUTTE RD	MESA	AZ	85212		MAIL RETURNED - Donner Dr Address used.
			TERRY FERGUSON		16008 S. Signal Butte Rd	Mesa	AZ	85212		MAIL RETURNED - ADDRESS UPDATED AND RE-MAILED
			Tucker Properties LTD		1855 E Southern Ave Ste 209	Mesa	AZ	85204		MAIL RETURNED - Grove Circle Address used.
			TUCKER PROPERTIES LTD		4010 E GROVE CIRCLE	MESA	AZ	85206		
			WESLEY J/VERLA J DOCKTER TR		23124 E WILLIAMS FIELD RD	MESA	AZ	85212		
			William W. Armstrong ET AL		16014 S Signal Butte Rd	Queen Creek	AZ	85242		MAIL RETURNED - NO FORWARDING ADDRESS
Sir or Madam			Tokastick Golf Course		6910 East Williams Field Rd	Mesa	AZ	85212		
Sir or Madam			Sunland Springs Golf Course		11061 E. Medina	Mesa	AZ	85212		
			GKK Williams Gateway Crismon Land Owner, LLC		638 N. 5th Ave.	PHOENIX	AZ	85003		MAIL RETURNED - In the R/W plans that Dave Edwards sent last year, GKK Williams Gateway Crismon Land Owner LLC was listed. However, the scoping letter we sent them was returned and Maricopa Assessor's website does not list them as a land owner anywhere in the county. The TRS (T15, R7E, Sec 28, NE4) and the only landowners listed in that location are ADOT and Phoenix-Mesa Gateway Airport Authority (who was also scoped). It appears that the parcel may have already been acquired for the portion of SR24 already completed.
Mr.	Ed	Main			N/A	Mesa	AZ	85212	480-343-0629	No address available
			KERRY and GRADY MOSLEY		MAIL RETURN					No address available
			SUSAN E MORGAN		MAIL RETURN					No address available

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 SR 24 Ellsworth Road to Ironwood Road Interim Phase II
 Scoping Contacts

Title	First	Last	Owner Name	In Care Of	Mailing Address	Mailing Address City	Mailing Address State	Mailing Address Zip Code	Phone	Notes
Mr.	Johnny	Bock			N/A				602-717-4789	No address available
Mr.	Jim	Colenberg			N/A				480.963.6343	No address available
Mr.	James E.	Malinowski			16015 S 222ND ST	MESA	AZ	85212		Property Address: 16015 S 222ND ST MESA 85212 Mailing Address: 1345 E CINDY ST CHANDLER AZ 85225 Resent on 9/13/2016 to: 16015 S. 222nd St., Mesa, AZ 85212
Mr.	MARK DAVID/JOYCE	DAVIS			16015 S 222ND ST	MESA	AZ	85212		Property Address: 16015 S 222ND ST MESA 85212 Mailing Address: 16011 S 222ND ST QUEEN CREEK AZ 85242 Resent on 9/13/2016 to: 16011 S. 222nd St., Mesa, AZ 85242

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SR 24 Ellsworth Road to Ironwood Road Interim Phase II

Scoping Contacts

Title	First	Last	Owner Name	In Care Of	Mailing Address	Mailing Address City	Mailing Address State	Mailing Address Zip Code	Email	Phone	Notification Status
Mr.	Adam	Mendoza			9115 E Baseline #102, PMB 62	Mesa	AZ	85209	adam_mendoza@hotmail.com	480-248-3930	Email delivery failed (invalid or disabled address)
Ms.	Cheryl	Maichl			1444 W Cipriano Rd	Mesa	AZ	85212	azcasita@yahoo.com	480-357-9211	Sent 8/12/2016
Mr.	Russ	Brandt	Blue Chip		1837 S 141st Pl	Gilbert	AZ	85295	bluechipland@yahoo.com	N/A	Sent 8/12/2016
Mr.	BR	Moser			N/A				bmoser@brephoenix.com		Sent 8/12/2016
Ms.	Carol	Mulford			43565 N Terrace View	Queen Creek	AZ	85140	csmulford@yahoo.com	480-242-5424	Sent 8/12/2016
Mr.	Don	Pearl			1560 E Artemis Trail	San Tan Valley	AZ	85140	donpearl@cox.net	N/A	Email delivery failed (invalid or disabled address)
Mr. and Ms.	Edward and Yvonne	Amador			18949 E Lark Dr	Queen Creek	AZ	85142	edwardamador2001@yahoo.com	480-988-0278	Sent 8/12/2016
Ms.	Teresa	Whitt			4426 E Shetland Dr	San Tan Valley	AZ	85140	fratiemom@aol.com	480-888-1078	Sent 8/12/2016
Ms.	Georganna	Lagen	Fuji Film Electronic Materials		6550 S Mountain Rd	Mesa	AZ	85212	georganna_lagen@fujifilm-ffem.com	480-987-7057	Sent 8/12/2016
Ms.	Sherri	Glenn			46125 S Antonio Cir	Mesa	AZ	85212	gorjus@juno.com	480-248-7336	Sent 8/12/2016
Mr. and Ms.	Andy and Heather	Clarks			43311 N Ironwood	San Tan Valley	AZ	85140	hclark5501@msn.com	602-524-3565	Sent 8/12/2016
Sir or Madam			Arizona Skyline Communities, Arizona Neighborhoods LLC		P.O. Box 24192	Tempe	AZ	85285	info@arizonaneighborhoods.com		Email delivery failed
Sir or Madam			Revegetation Services		PO BOX 1480	Highley	AZ	85236	info@reveg.net		Sent 8/12/2016
Mr. and Ms.	Kenneth and Linda	Ivey			584 E Harvest Rd	Queen Creek	AZ	85140	ivey.ken@gmail.com	480-634-8125	Sent 8/12/2016
Mr.	John	Hurley			31405 N Traildust Dr	San Tan Valley	AZ	85143	johnhurleymba1@cox.net	480-888-1421	Sent 8/12/2016
Mr.	Kevin	Boesch			4187 S Ponderosa Dr	Gilbert	AZ	85297	kboesch@cox.net	480-619-2602	Sent 8/12/2016
Mr.	Kent	Norcross			4436 E Juanita Ave	Gilbert	AZ	85234	kentnorcross@msn.com	480-654-5455	Sent 8/12/2016
Mr.	Kevin	Stumpff			3503 E Temecula Ct	Gilbert	AZ	85297	kevinstumpff@gmail.com	602-882-1636	Sent 8/12/2016
Mr.	Kyle	Robinson			N/A				krtw@yahoo.com	480-688-9915	Sent 8/12/2016
Mr.	Robert	Warbington			42283 N Jackrabbit	San Tan Valley	AZ	85140	lazywdart1@msn.com	480-987-9363	Sent 8/12/2016
Mr.	Bill	Thompson			2748 S Cholla Cir	Mesa	AZ	85202	lessado2@gmail.com	N/A	Sent 8/12/2016
Ms.	Lonna	Garai			168 N Cavendish	Queen Valley	AZ	85118	lonna.garai@mchsi.com	602-809-3660	Sent 8/12/2016
Ms.	Mary	Gloria	Pan de Vida Foundation		PO BOX 745	Queen Creek	AZ	85241	mary.gloria@pandevida.tv	480-987-0819	Sent 8/12/2016
Ms.	Mary M.	Brooks			7285 W Empire	Queen Creek	AZ	85142	marvmbrooks@yahoo.com	602-390-9110	Sent 8/12/2016
Mr.	Augusto	Meoli	Vision Land		3901 E San Miguel Place	Paradise Valley	AZ	85153	meoli@cox.net	602-300-9290	Email delivery failed
Ms.	Mary	Hazelett			3782 E Santa Clara Dr	San Tan Valley	AZ	85140	mhazelett3@aol.com	480-560-1292	Sent 8/12/2016
Mr.	Steven	Stumpff	MJS Farms, Inc.		9011 Muskrat Pt	Plattsmouth	NE	68048	mjzdsteve@nesnowbirds.com	308-325-2371	Email delivery failed
Mr.	Michael	Miller			N/A				mmiller105@gmail.com		Sent 8/12/2016
Mr.	Mike	Chase			16413 N 11th Place	Phoenix	AZ	85022	mrcjchase@cox.net	602-291-7801	Sent 8/12/2016
Mr.	Nelson	Chandler			N/A				nelson.c.chandler@boeing.com		Sent 8/12/2016
Ms.	Nichelle	Williams			23664 S 220th Street	Queen Creek	AZ	85142	nicranwms@gmail.com	480-659-6917	Sent 8/12/2016
Mr.	Ron	Bertram			15508 S Mountain Rd	Mesa	AZ	85212	ron.bertram@soitec.fr	602-821-4677	Email delivery failed (invalid or disabled address)

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 SR 24 Ellsworth Road to Ironwood Road Interim Phase II
 Scoping Contacts

Title	First	Last	Owner Name	In Care Of	Mailing Address	Mailing Address City	Mailing Address State	Mailing Address Zip Code	Email	Phone	Notification Status
Mr.	Scottee	Eisenhart	DPR Realty		3048 E Baseline Rd	Mesa	AZ	85204	se@serealtor.com	602-480-0641	Sent 8/12/2016
Ms.	Tami	Frank			4296 E Jasper Dr	Gilbert	AZ	85296	tamiannfrank@yahoo.com	602-703-8967	Sent 8/12/2016
Mr.	Jose	Galindo			20937 E Nightingale Rd	Queen Creek	AZ	85142	tasgalindo@hotmail.com	480-241-0935	Sent 8/12/2016
Mr.	Thomas	Krukow			3400 S Ironwood Dr Lot 156	Apache Junction	AZ	85120	tkrukowcom@mchsi.com	480-982-3893	Sent 8/12/2016
Mr.	Chet	Maleski			23229 S 216th St	Queen Creek	AZ	85142	vacuumsew@aol.com	509-948-9802	Sent 8/12/2016
Mr.	Scott	Baxter			N/A				ytwin88b@cox.net		Sent 8/12/2016
Ms.	Paula	Vaughnn	Director, Marketing Communications	First Solar					pvaughnn@firstsolar.com	602.414.9322	Email delivery failed
Mr. and Ms.	Joseph and Kathryn	Stecher			15811 South 222 Street	Mesa	AZ	85212	rtandrnr@hotmail.com	480-221-8086	
Mr.	Mike and Tracy	Michne			4055 S ST CLAIRE	MESA	AZ	85212	mikemichne@hotmail.com	480-427-5101	commented 10/31/2016

Public and Agency Comment/Response Summary
 STP-024 A(200)T
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Commenter	Agency or Public	Comment Date	Comment Summary	Response Date	Response Summary	Additional correspondence needed?
Arizona Game and Fish Department	Agency	10/5/2016	The AGFD sent a letter that requested a meeting with ADOT to clarify how this project integrates with the ongoing North-South Corridor Study. AGFD's stated concerns also included impacts to wildlife travel corridors along drainages, potential impacts to western burrowing owls, replacement of wildlife habitat to ensure no net loss, and maintaining access for recreational hunting.	10/31/2016	ADOT has committed to further coordination with the AGFD during the planning phase of this project. Ms. Audrey Navarro, ADOT Biologist, contacted AGFD informing them that the project will occur within the same project limits as delineated in the 2011 Environmental Assessment and that the project is in the early planning stages and all information was provided to her (Kelly, AGFD) with the email and scoping letter. Ms. Navarro also informed Kelly that ADOT would continue to coordinate with AGFD as will arrange for a meeting when project updates become available regarding the design concept.	Ongoing agency coordination
Mr. Art Soto, realtor representing Mr. Gilberto and Rosemary Duarte (local property owners and members of the public)	Public	9/15/2016	The Duartes received a public scoping letter and they were wondering if their property would be directly affected since they are planning improvements on their property.	9/19/2016	ADOT notified Mr. Soto that the site will have about 70% taken, with an access -controlled remainder. Accordingly, the property will likely result in a future, total taking. Mr. Soto said his client is contemplating development (home) on the site and ADOT informed him that ADOT would not take any steps to thwart any development plans.	No
Mr. Bawden, local property owner and member of the public	Public	8/16/2016	Mr. Bawden asked about construction dates and requested a meeting with ADOT.	8/18/2016	Ron McCally (ADOT Project Manager) spoke with Mr. Bawden and provided additional project information about the project schedule and impact footprint.	No
Ms. Cheryl Maichl, local property owner and member of the public.	Public	12/21/2016	Ms. Maichl requested an update on the project and commented on heavy traffic near her home on Ellsworth, stating she hoped the project would begin soon and reduce this traffic load. She also asked if the exit off of Meridian would be paved down to Pecos Road.	12/29/2016	Logan Simpson responded stating that funding for the project has not been approved yet, and likely would not be until FY 2018, with construction starting a couple years afterwards at the earliest. Logan Simpson also clarified the project construction limits do not extend as far south along meridian to Pecos Road, but would include a freeway traffic interchange at Meridian Road with paving 500 feet to the north and south of the intersection.	No
Mr. Don Palacio, realtor with Realty Executives representing a property in the vicinity of the project.	Public	12/12/2016	Mr. Palacio called Logan Simpson and asked about the effects of the project on a property he is representing. He asked for a sit down with someone to discuss the project.	12/21/2016	ADOT met with Mr. Palacio and Mr. Jim Hadeed (Realty Executives) regarding how and when the ROW acquisition process works. ADOT explained the process and committed to providing Mr. Palacio a copy of the DCR when it is finalized. Once the DCR is posted the ADOT website for public viewing, ADOT will contact Mr. Palacio to provide information on where to find the document.	Ongoing
Mr. Bob Draper, Engineering and Facilities Director, at Phoenix-Mesa-Gateway Airport	Public	8/15/2016	Mr. Draper stated that the airport had no comments or questions at the time, but asked that he and Mr. Tony Bianchi be added to the distribution contact list for the airport.	8/15/2016	Logan Simpson responded that Mr. Bianchi was added to the list and that both Mr. Draper and Mr. Bianchi would be included in future public notifications for the project.	No
Ms. Dianne Evenson, The Reeb Group Ltd./PM Industrial Holdings, L.P.	Public	8/24/2016	Ms. Evenson asked when the projected start date is.	8/24/2016	Logan Simpson responded that there is currently no known start date, but that once funding becomes available future public outreach would include this information.	No
Ms. Lanna Gara, local property owner and member of the public.	Public	8/12/2016 and 2/28/2017	1. Ms. Gara voiced support for the project and asked to be included on future public outreach. 2. Ms. Gara asked why the project was not included in the Draft Fiscal Year (FY) 2018-2022 Transportation Improvement Plan.	8/15/2016 and 3/17/2017	1. Logan Simpson responded that Ms. Gara would be included on future public outreach for the project. 2. MAG responded that the project, during the last recession, was moved out of the Regional Freeway and Highway Program (RF-HP), which is one of three Life Cycle Programs included in the MAG Regional Transportation Plan. However, MAG and ADOT have begun rebalancing the RF-HP and it is anticipated SR 24 will be included in the RF-HP, and possibly the Transportation Improvement Plan. Final determinations are made by the MAG Transportation Committee in the upcoming months.	No
Joseph Stecher, local property owner and member of the public	Public	9/1/2016	Mr. Stecher voiced concerns regarding why he was not included on the mailing list, as well as concerns about the proposed project and its effects on his property in relation to Crismon Road/22nd Street.	9/6/2016	Logan Simpson responded first that the initial mailing list was a limited distribution list and only included landowners directly adjacent to the project limits, but that future notifications would include a broader area when the project is more finalized. Mr. Stecher was added to the project mailing list. Further, Logan Simpson also responded to the confusion regarding Crismon Road and 22nd Street that it was labeled with a secondary name to provide orientation for the local public. Finally, Logan Simpson responded that Mr. Stecher's property would not be landlocked and would have access to Williams Field Road, and that Williams Field Road and Signal butte Road would be his closest access points to SR 24 interim roadway.	No
Ms. Marlene Kantra, Femcon Inc., local landowner	Public	8/20/2016	Ms. Kantra spoke with Logan Simpson on the phone and asked about how her parcels might be affected by the project, and if portions of her parcels would need to be acquired.	8/31/2016	ADOT spoke with Ms. Kantra and explained to her that the project would not require acquisition of any portion of her parcels.	No
Ms. Carrie Kapp, local landowner and member of the public	Public	8/15/2016	Ms. Kapp asked for more detail about how close the project is to her home and the homes of her neighbors. She also asked specifically about noise issues and if the project would include sound barriers in areas homes are found.	8/30/2016	Logan Simpson responded with information from ADOT stating that the project area is 1,500 feet south of Ms. Kapp's residence and that a 2011 Environmental Assessment for the proposed SR 24 project predicted noise levels would not increase substantially, and thus sound barriers were not warranted.	No
Mr. Brian Konderik, Vice President, Land Acquisition and Development - AZ Division, AV Homes Inc.	Public	8/30/2016	Mr. Konderik acknowledged receipt and stated his interest in remaining on the distribution list for the project.	8/30/2016	Logan Simpson responded that Mr. Konderik would be kept on the distribution list for future public notifications for the project.	No
Dr. John Maher, member of the public	Public	8/19/2016	Dr. Maher called and spoke with Logan Simpson and had several questions regarding the project. First, he asked where the road to Florence Junction was, as the possibility of SR 24 connecting with US 60 was discussed at the public hearing in 2010. Next, he asked where the road to Tucson was, as he believed it would be beneficial for the public in the area to be able to fly into Phoenix-Mesa-Gateway airport and drive to Tucson. Finally, he commented that there is urgency for the completion of SR 24 so the retirees that live there can take advantage of the improvements.	8/19/2016	Logan Simpson explained to Dr. Maher the funding constraints that would prohibit the extension of SR 24 to US 60. Logan Simpson told him his suggestions would be forwarded on to ADOT.	No
Maricopa County, Office of the County Manager	Agency	8/16/2016	Ms. JoAnn Rangel, on behalf of the County Manager, commented that Tom Manos had retired and that Joy Rich was the new County Manager.	8/16/2016	Logan Simpson responded that the contact information for the County Manager would be updated in future notifications for the project.	No
Maricopa County Department of Emergency Management (MCDEM)	Agency	8/23/2016	Mr. Pete Weaver, Director of MCDEM stated that MCDEM had no concerns or recommendations pertaining to the project.		No response needed	No
Maricopa County Department of Transportation (MCDOT)	Agency	9/1/2016	Ms. Jennifer Toth, Director of Transportation/County Engineer at MCDOT, expressed concern about the confusion between Crismon Road and 222nd Street, stating that 222nd Street is 2/4 mile to the east of Crismon Road. Further, how circulation would be affected on the local network with no options for SR 24 to cross over or under SR 24. Finally, she asked that MCDOT be included in the development and review of the project and listed Ms. Denise Lacy as the contact person for MCDOT.		Logan Simpson responded to the confusion regarding Crismon Road and 222nd Street that it was labeled with a secondary name to provide orientation for the local public. All other project-related documentation refers to this alignment as Crismon Road only. As for circulation, 222nd Street would remain open and connected to Williams Field Road. Logan Simpson noted that the closest access points to the proposed SR 24 interim roadway for 222nd Street would be Williams Field Road or Signal Butte Road. Finally, the Draft Interim Phase II Design Concept Report package was made available to Ms. Toth and Ms. Lacy on 9/22/2016.	No
Mr. Mark Davis, local landowner and member of the public	Public	9/19/2016	Mr. Davis called and asked if his property would need to be acquired.	9/19/2016	ADOT spoke with Mr. Davis and explained his property is located 1,000 feet north of the proposed SR 24 alignment and would very likely not be acquired, but that these are initial designs and subject to change.	No

Commenter	Agency or Public	Comment Date	Comment Summary	Response Date	Response Summary	Additional correspondence needed?
Mr. Mike Michne, local landowner and member of the public	Public	10/31/2016	Mr. Michne called and had several questions regarding the project: he asked if any improvements would be made to McKenzie road as he would like it paved; he asked about the location of the interim roadway; he asked what improvements would be made to Meridian Road; he asked if it was a state project; he asked about lighting along the interim roadway; and he asked about the timing of the SR 24 ultimate build-out.	10/31/2016	Logan Simpson responded to Mr. Michne's questions with the following answers: the project would not include any improvements to McKenzie Road; the interim roadway would be in the same locations as the ultimate SR 24 build-out, generally along Frye Road in the vicinity of his property; the SR 24 ultimate build-out would include an interchange at Meridian Road, and that the interim roadway would include an at-grade intersection; it is an ADOT project, but Maricopa and Pinal Counties and the City of Mesa are involved; the exact placement of lighting was uncertain but would be installed with the interim roadway; and that the interim roadway is still in the planning staged and not yet funded, and construction would likely not begin for a couple years at the earliest.	No
Ms. Susan Morgan, local landowner and member of the public	Public	8/16/2016 and 8/19/2016	8/16/2016: Ms. Morgan called and asked if Meridian Road would be paved, if anything was planned to deal with flooding in the area, and if her property would be affected by the project or need to be acquired. 8/19/2016: Ms. Morgan commented again regarding flooding and if there was someone she could contact so get help with the flooding issue.	8/16/2016, 8/18/2016, 8/19/2016, and 8/23/2016	8/16/2016: Logan Simpson responded that the project would only include improvements at the intersection with the new interim roadway, that this project would likely not involve any improvements to flood conditions but that her concerns would be forwarded on to the Counties, and that it was unclear if her property would be directly affected by construction but if it needed to be acquired it would be at fair market value. 8/18/2016: The Flood Control District of Maricopa County stated that they had identified improvements for flooding issues in the area but it was uncertain when funding to complete them would be available. 8/19/2016: MCDOT responded that they do not manage Meridian Road. Pinal County Department of Public Works Flood Control District (PCFCD) also responded that they do not manage Meridian Road and that the PCFCD does not have any improvement plans for the area. 8/23/2016: Pinal County Department of Public Works responded that they will make contact with Ms. Morgan again regarding her concerns. 10/11/2017: Christopher Wanamaker with PCFCD responded that an inspector met with Susan Morgan at her property on multiple occasions in 2016. Specifically, an initial site visit was made on 04/01/2016 with a follow up on 06/28/2016. Subsequent visits to the area were also made on 09/15/2016 and 10/3/2016 in response to concerns about potential flooding due to work taking place on several properties. PCFCD addressed the concerns that the parties had and informed Ms. Morgan and the neighbor, Mr. Petty, that their properties are within a floodplain.	No
Mr. Brent Moser, Executive Managing Director, Cushman and Wakefield	Public	8/16/2016 and 4/5/2017	Mr. Moser asked about the timing to begin construction, if coordination with Mesa for an arterial to tie into SR 24 (Signal Butte or meridian) was occurring, what the extent of improvements to Powerline Floodway and if additional ROW would be needed, and if any potential direct access to the future terminal was planned. Mr. Moser asked if he could be provided with updated timing and maps for the project to begin in 2019.	9/9/2016 and 4/11/2017	Logan Simpson responded to Mr. Moser with information from ADOT: construction date is currently unknown; ADOT is working closely with the City of Mesa, including the connections to arterial roadways such as Signal Butte and Meridian Road; the Powerline Floodway would be widened but otherwise remain in its current alignment, and need for additional ROW is still being determined; and finally that the project will support the planned growth of the airport, but it is unknown if direct access to the future terminal will be included. Logan Simpson responded that construction was anticipated to begin in 2020 and last approximately 18 months. Logan Simpson also detailed the limits of the project area.	No
Mr. Dennis O'Neil, Vice-President, Construction, Sunbelt Investment Holdings Inc.	Public	8/24/2016	Mr. O'Neil asked several questions regarding the proposed project: if it is true that only part of the proposed improvements that are directly adjacent to adjacent to his land are related to the widening of the Powerline Floodway; if any other part of the project affects his property; if additional right-of-way would need to be acquired from his property; and what the anticipated schedule for the project is.	8/24/2016	ADOT responded to Mr. O'Neil with the following answers: correct, the Powerline Floodway is the only feature of the Phase II project near his property; no, no other part of the project affects his property; no, no additional right-of-way would need to be acquired from his property; and that the project is currently unfunded but is identified in Fiscal Years 2026-2028.	No
Mr. Shawn Petty, local landowner and member of the public	Public	8/16/2016	Mr. Petty called and had questions regarding how his property would be affected by the proposed project.	8/22/2016	ADOT spoke with Mr. Petty and explained to him his southerly lot would likely need to be taken in full, but his northern lot will be only impacted slightly along the frontage.	No
Pinal County Public Works	Agency	8/18/2016	Mr. Andrew Smith stated Pinal County's receipt of the ADOT's letter regarding the project and supports the proposed interim roadway, and asked if installation of median cable barrier (per ADOT standards) would be considered. Mr. Smith also called and stated that Pinal County may have funding available for part of the Pinal County portion of the project.		No response needed	No
Town of Queen Creek, Town Manager	Agency	9/7/2016	Mr. John Kross, Queen Creek Town Manager, commented strong support for the proposed project.		No response needed	No
Mr. Kyle Robinson, member of the public	Public	8/12/2016	Mr. Robinson commented strong support for the proposed project.		Logan Simpson responded that he would continue to be included on future public notifications regarding the project.	No
Mr. Scott Leon, local landowner and member of the public	Public	8/24/2016	Mr. Leon had a question regarding the alignment of 222nd Street and how it would be affected by SR 24.	8/30/2016	Logan Simpson responded to the confusion regarding Crismon Road and 222nd Street that it was labeled with a secondary name to provide orientation for the local public, but that it is incorrect and should only be Crismon Road. Further, that 222nd Street would dead-end at the interim SR 24 roadway.	No
AZ Department of Emergency and Military Affairs, Construction & Facilities Management Office	Agency	8/31/2016	Ms. Tina Smith, Land Disposition Project Leader, stated that she had no immediate concerns but requested maps depicting the final build-out for SR 24 to determine if there would be any possible impacts upon the completion of SR 24.	9/14/2016	Logan Simpson responded with a map of the interim roadway alignment and stated that the final build-out would be along the same alignment.	No

Total Agency Comments 7
Total Public Comments 20