

# **VALENCIA ROAD: ALVERNON WAY TO WILMOT ROAD ENVIRONMENTAL ASSESSMENT AND MITIGATION REPORT**

Prepared for



**PIMA COUNTY DEPARTMENT OF TRANSPORTATION**  
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Pima County Project Number 4VAKDP

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## DOCUMENTS AVAILABLE ON PROJECT WEBSITE

(<http://www.roadprojects.pima.gov/valenciawilmot/>)

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Design Concept Report	Psomas Engineering. May 2011
Stage I (15%) Design Plans	Psomas Engineering. May 2011
Initial Drainage Report	Psomas Engineering. April 2011
Traffic Engineering Report	Psomas Engineering. July 2011
Environmental Screening Report	URS Corporation. June 2011
Noise Analysis Report	Sound Solution, July 2011
Preliminary Initial Site Assessment (hazardous materials)	URS Corporation. April 2011
Visual and Aesthetic Resources Report	Wheat-Scharf Associates. June 2011
Biological Evaluation	URS Corporation. Available October 2011



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## LIST OF ACRONYMS

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ACM	asbestos containing materials
ADA	Americans with Disabilities Act
ADEQ	Arizona Department of Environmental Quality
AGFD	Arizona Game and Fish Department
AZPDES	Arizona Pollutant Discharge Elimination System
CAC	Community Advisory Committee
CO	carbon monoxide
CRHPO	Cultural Resources and Historic Preservation Office
Corps	U.S. Army Corps of Engineers
CWA	Clean Water Act
dba	A-weighted decibel
DMAFB	Davis Monthan Air Force Base
EAMR	environmental assessment and mitigation report
FEMA	Federal Emergency Management Agency
FUP	Floodplain use permit
I-10	Interstate 10
LBP	lead-based paint
m <sup>3</sup>	cubic meter
µg	microgram
mph	miles per hour
NO <sub>2</sub>	nitrogen dioxide
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
O <sub>3</sub>	ozone
PAG	Pima Association of Governments
PCDOT	Pima County Department of Transportation
PCNAP	Pima County Noise Abatement Procedure
PDEQ	Pima County Department of Environmental Quality
PISA	Preliminary initial site assessment
PM <sub>2.5</sub>	fine particulate matter (2.5 microns in diameter or less)
PM <sub>10</sub>	particulate matter (10 microns in diameter or less)
ppm	parts per million
RTA	Regional Transportation Authority
R/W	right-of-way
SO <sub>2</sub>	sulfur dioxide
SWPPP	Stormwater Pollution Prevention Plan
TEP	Tucson Electric Power
UPRR	Union Pacific Railroad
USFWS	U.S. Fish and Wildlife Service
WUS	Waters of the United States



## **EXECUTIVE SUMMARY**

### **ENVIRONMENTAL ASSESSMENT AND MITIGATION REPORT**

**July 2011**

#### **Project Limits**

The project limits are 3.25 miles along Valencia Road, approximately 900 feet east of Alvernon Way to 750 feet east of Wilmot Road. The typical project right-of-way is 150 feet to 250 feet wide. The project is located in portions of Township 15 South, Range 14 East, Sections 10, 11, 12, 14, and 15; Township 15 South, Range 15 East, Section 7. The project is located in eastern Pima County, in the southeast corner of the Tucson metropolitan region. Existing right-of-way is Pima County or City of Tucson. Adjacent land ownership and land use include Arizona State Trust Land, Arizona Department of Transportation, Davis Monthan Air Force Base, and private land of residential or commercial land use.

#### **Project Scope**

The project is a part of the Regional Transportation Authority's (RTA) Transportation Plan approved by voters in 2006. Financing for the Valencia Road corridor will come from the RTA and City of Tucson funds. The RTA plan identified a total of \$46,317,000 in funds available for Valencia Road between Alvernon Way and Kolb Road (four miles). Of that amount, \$43.3 million will come from the half-cent tax approved by voters in 2006. The remaining \$3.0 million will come from the City of Tucson. The RTA funding is expected to be available in Period 2 (2012 - 2016) of the plan. The project is anticipated to begin construction in Fiscal Year 2012/2013.

The proposed project is needed to respond to a number of deficiencies that exist along Valencia Road from Alvernon Way to Wilmot Road, including meeting 2035 traffic demands, increasing safety, improving multimodal connectivity, and relieving congestion. Traffic congestion has been a concern in project area for a number of years, and it is becoming more prevalent as traffic volume increases. Valencia Road carries a daily traffic volume of 24,500 to 26,500 vehicles and is projected to carry between 39,400 and 42,400 vehicles per day in 2035. Currently, Valencia Road experiences heavy traffic volumes during peak travel hours along many segments, resulting in a poor level of service that impedes the efficient movement of traffic in this area. Congested travel in the project area increases local and regional travel times and transportation costs.

The proposed project involves the widening and reconstruction of Valencia Road to six lanes between Alvernon Way and Wilmot Road. The proposed project will include widening the roadway under the existing Interstate 10 bridge; widening the existing bridge over the Union Pacific Railroad; realigning Littletown Road and adding signalization at the new intersection; improving turn lane capacity and safety at Benson Highway/Swan Road, Craycroft Road, and Wilmot Road; and improve pedestrian mobility through the provision of a continuous sidewalk and 6-foot multi-use lanes for bicycle access.



In accordance with Pima County's Community Participation and Mitigation Ordinance (Pima County Code § 10.560.010 et seq.), an Environmental Assessment and Mitigation Report (EAMR) is required for major transportation projects. This document was prepared to comply with ordinance requirements and to be consistent with EAMR guidance in the Pima County Roadway Design Manual.

## EVALUATION

### Environmental and Project Documents

The following documents were used to prepare the EAMR: Design Concept Report, Stage I (15%) Design Plans, Initial Drainage Report, Traffic Analysis, Environmental Screening Report, Noise Analysis Report, Visual Analysis Report, Cultural Resources Report, Biological Evaluation Report, and Preliminary Initial Site Assessment Report.

### Evaluated Resources

**Biological Resources:** The proposed project will not result in disturbance to areas that provide sensitive species habitat.

**Drainage and Clean Water Act:** Soil disturbance and excavation will impact waters of the U.S. A Clean Water Act Section 404 Nationwide Permit 14 Preconstruction Notice and Section 401 Water Quality Certification will be submitted to the U.S. Army Corps of Engineers. In compliance with Section 402, a Stormwater Pollution Prevention Plan will be prepared and a Notice of Intent will be submitted to the Arizona Department of Environmental Quality. Should drainage improvements impact more than 1/3 acre of designated riparian habitat protected under the Pima County Regional Flood Control District Riparian Ordinance, a Flood Use Permit will be obtained from Pima County Regional Flood Control District.

**Floodplain:** Adverse impacts to floodplains have not been identified.

**Air Quality:** The proposed project would have only temporary, short-term, and minimal impacts to particulate levels during project construction. The project would improve long-term air quality by decreasing traffic congestion and improving access for alternative modes of transportation.

**Noise:** The noise analysis results show that a noise barrier does not meet Pima County Noise Abatement Procedure criteria for cost reasonability. No noise barriers are recommended.

**Utilities:** Throughout the project limits, the utilities will be primarily impacted by the roadway widening, the relocation of catch basins, and installation of new storm drain. Utility relocation will result in temporary short-term service interruptions to area residents and businesses. Utility contractors will provide notice to customers 14 days prior to service interruptions.

**Hazardous Materials:** No Recognized Environmental Conditions such as leaking underground storage tanks, landfills, or land use associated with hazardous materials use have been identified within the



existing right-of-way. Additional testing for lead-based paint or asbestos will be required prior to demolition of structures that may contain such materials.

**Construction:** Although access will be maintained, traffic control measures will temporarily slow traffic during construction. Construction activities are likely to generate dust and noise in the immediate project area.

**Historic/Cultural Resources:** Under the provisions of Pima County's Intergovernmental Agreement with the State Historic Preservation Office, the Pima County Cultural Resources and Historic Preservation Office has determined that the project will have no effect on cultural resources and no further investigations are recommended.

**Visual Resources:** This portion of Valencia Road has "Minimal" scenic quality. Overall, expected visual contrast is low since the horizontal and vertical roadway alignments will not be changing.

**Right-of-Way Acquisition/Displacement:** No new right-of-way needs are anticipated as part of the proposed project. Drainage easements, slope easements, or temporary construction easements will be required. Right-of-Way permits from Arizona Department of Transportation and Union Pacific Railroad will be needed for work in the right-of-way.

**Access and Parking:** The project will improve vehicle and multimodal transportation access in the project area. During construction, temporary delays to access will occur. Valencia Road does not accommodate on-street parking; therefore, no impact to parking is anticipated. During construction, the contractor shall designate pedestrian and bicyclist routes around the work zone where possible.

**Neighborhood Disruption:** Project construction will result in temporary neighborhood disruptions. Construction will produce dust, noise, and traffic delays within the project area. Access to schools, residences and businesses will be maintained throughout the construction period. No detour routes onto area streets are anticipated.

**Parks and Recreation:** Roadway construction will result in temporary access disruptions to the Julian Wash River Park, which crosses under Valencia Road at the existing cross drainage structure at the Julian Wash. Realignment of Littleton Road will result in temporary access disruption to Thomas Jay Regional Park.

## **PUBLIC PARTICIPATION**

Public involvement activities have included informational meetings, selection and development of a Community Advisory Committee, ongoing contact with affected parties, media relations, development of informational materials, and development and implementation of a project website. The goals of the public involvement effort are to educate the public about the project's purpose and need, solicit the public's comments on the project, review public comments and adjust the roadway design concept to address the public concerns to the greatest extent possible and within the constraints of the project,



including safety and cost. The following specific strategies have been or will be used in order to involve residents, businesses, and other project stakeholders:

- Public Open Houses
- Community Advisory Committee
- Project website (<http://www.roadprojects.pima.gov/valenciawilmot/>)

**Mitigation Measures**

Potential Impacts	Recommended Mitigation	Agency Coordination and Consultation	Parties Responsible for Implementation
Removal of native plants	Comply with Arizona Native Plant Law and Pima County Environmentally Sensitive Roadway Design Guidelines; mitigate removed or relocated protected native plants to match existing densities of adjacent, undisturbed areas. Saguaro will be mitigated at a 1:1 ratio.	Arizona Department of Agriculture	Pima County and Contractor
	File a Notice of Intent with the Arizona Department of Agriculture 60 days prior to the removal or salvage of applicable native plants.	Pima County Arizona Department of Agriculture	Pima County and Contractor
Impacts to waters of the United States	The County will operate using a 404 Nationwide Permit and comply with permit conditions and Clean Water Act Section 401 water quality requirements.	United States Army Corps of Engineers and Arizona Department of Environmental Quality	Pima County and Contractor
Regulated riparian habitat impacts	A riparian impact assessment will be prepared and, if needed, mitigation will be developed in conjunction with the Pima County Regional Flood Control District to compensate for impacts to regulated riparian habitat.	Pima County Regional Flood Control District	Pima County and Contractor
Stormwater impacts resulting from soil erosion and dust	The County and Contractor will file a separate Notice of Intent to use the Arizona Pollutant Discharge Elimination System Construction General Permit with the Arizona Department of Environmental Quality. Pima County Department of Transportation will prepare and contractor will implement a Stormwater Pollution Prevention Plan. Utilities are responsible for preparing a separate Stormwater Pollution Prevention Plan and getting Notice of Intent for their activities.	Pima County Arizona Department of Environmental Quality	Pima County and Contractor
Dust during construction	Implement standard specifications for dust suppression and comply with the Stormwater Pollution Prevention Plan (referenced above). Obtain an Air Quality Activity Permit from the Pima County Department of Environmental Quality.	Pima County Department of Environmental Quality	Pima County and Contractor
Traffic noise	Noise barriers are not recommended in the traffic noise report.	Pima County Department of Transportation	Pima County



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Potential Impacts	Recommended Mitigation	Agency Coordination and Consultation	Parties Responsible for Implementation
Construction Noise	The contractor will comply with Pima County's Noise Ordinance (Pima County Code Chapter 9.30.070), which sets the construction start and stop times in order to avoid noise disruptions at night. If nighttime work is required, the contractor will need to obtain a permit from Pima County.	Pima County Department of Transportation	Pima County and Contractor
Utility service interruptions	Customers will be notified 14 days in advance of any planned utility service interruptions.	Applicable utility	Utility or contractor
Exposure of unanticipated hazardous materials	If suspected hazardous materials are encountered during construction, work shall cease at the location and the Pima County Engineer shall be contacted to arrange for proper assessment, treatment, or disposal of those materials.	Pima County Department of Transportation	Contractor
Asbestos and lead emissions	As needed, an Asbestos Hazard Emergency Response Act Certified Building Inspector will complete asbestos and lead testing of the structures, and conduct lead/asbestos abatement.	Pima County Department of Transportation	Pima County and Contractor
Bridge demolition	Prior to any work associated with the widening of the bridge at the UPRR and the I-10 underpass a NESHAP permit will be obtained.	Pima County Department of Environmental Quality	Pima County and Contractor
The contractor shall maintain access to residences, schools, community center, parks, and business and industrial properties	The contractor shall maintain access to residences, schools, community center, parks, and business and industrial properties. The contractor shall provide signs to identify property access during construction.	Pima County Department of Transportation	Pima County and Contractor
Pedestrian and bicyclist routing during construction	During construction, the contractor shall designate a pedestrian and bicyclist route around the work zone when needed and when possible.	Pima County Department of Transportation	Pima County and Contractor
Disturbance of cultural resources	If any previously unidentified cultural resources are encountered during construction, construction work at that location shall be halted immediately and the finds shall be secured and protected. The Arizona State Museum and the Pima County Office of Cultural Resources and Historic Preservation shall be contacted immediately	Arizona State Museum and Pima County Office of Cultural Resources and Historic Preservation	Pima County and Contractor
Visual impact associated with road construction	Include landscaping plantings, structural treatments and public art where practicable to soften the appearance of the hardscape.	Pima County Department of Transportation	Pima County
Permanent acquisition and temporary use of property	The county will compensate property owners at fair market value for easements or temporary use of property as mitigation consistent with federal and state law.	Pima County Department of Real Property	Pima County



## 1.0 BACKGROUND

The Pima County Department of Transportation (PCDOT) in cooperation with the Regional Transportation Authority (RTA) proposes to widen 3.25 miles of Valencia Road from a four-lane arterial roadway into a six-lane arterial roadway between Alvernon Way and Wilmot Road. This project, in conjunction with other RTA funded projects on Valencia Road, will ultimately serve as the major east-west arterial corridor that links Interstate 19 in the west, to Houghton Road/Interstate 10 (I-10) in the east. Construction of the Valencia Road project is planned for the 2012 to 2016 implementation period of the 20 year RTA plan.

**Project Name:** Valencia Road: Alvernon Way to Wilmot Road

**Pima County Project Number:** 4VAKDP

**Project Location and Limits:** The project is located in eastern Pima County, in the southeast corner of the Tucson metropolitan region (Figure 1). 3.25 miles along Valencia Road, approximately 900 feet east of Alvernon Way to 750 feet east of Wilmot Road. The typical project right-of-way (R/W) is 150 feet to 250 feet wide. The project is located in portions of Township 15 South, Range 14 East, Sections 10, 11, 12, 14 and 15; Township 15 South, Range 15 East, Section 7 (Figure 2).

In accordance with Pima County's Community Participation and Mitigation Ordinance (Pima County Code § 10.560.010 et seq.), an Environmental Assessment and Mitigation Report (EAMR) is required for major transportation projects. This document was prepared to comply with ordinance requirements and to be consistent with EAMR guidance in the Pima County Roadway Design Manual (PCDOT 2010a).

### 1.1 PROJECT COST AND FUNDING

Financing for the Valencia Road corridor will come from the RTA and City of Tucson funds. The RTA plan identified a total of \$46,317,000 in funds available for Valencia Road between Alvernon Way and Kolb Road (four miles). Of that amount, \$43.3 million will come from the half-cent tax approved by voters in 2006. The RTA funding is expected to be available in Period 2 (FY 2012-FY 2016) of the plan. The remaining \$3.0 million will come from the City of Tucson.

Valencia Road is also identified in the 2040 Regional Transportation Plan published by Pima Association of Governments (PAG) (PAG 2010). The segment from Alvernon Way to Kolb Road (Plan ID#152.08) is proposed for the early period with a budget of \$44,994,000.

Overall, it is anticipated that the funds allocated by the RTA to Valencia Road (\$46.3 M) will be sufficient to complete the project, as this segment, which represents 75-80% of the corridor length, is expected to cost \$38 million, or approximately 82% of the funds available for the project. However, given



that the funds are allocated for the entire corridor, this assessment will depend on the estimated costs for the segment to the east of this project.

## **1.2 DIRECTION BY BOARD OF SUPERVISORS**

On May 16, 2006, the citizens of Pima County approved a \$2.1 billion Regional Transportation Plan administered by the RTA, to be funded by a 1/2-cent increase in the local sales tax (RTA 2006). The approved transportation plan included improvements to Valencia Road: Alvernon Way to Wilmot Road (Project #4VAKDP). The Pima County Board of Supervisors approved the contract for the design of this project in January 2010. A notice to proceed was issued by the PCDOT director in August 2010.

## **1.3 PROJECT DESIGN PROCESS**

The design process started in August 2010, and the following tasks have been completed:

- Public Involvement Plan
- Quality Control Plan
- Community Advisory Committee meetings
- Design Concept Report
- Stage I Roadway Design Plans
- Traffic Engineering Report
- Drainage Report
- Environmental Screening Memorandum
- Preliminary Initial Site Assessment (hazardous materials)
- Cultural Resources Investigations
- Noise Analysis Report
- Visual and Aesthetics Resource Report
- Biological Evaluation
- Native plants survey

Completion of the project design is planned for Summer 2012, with advertisement for construction bids occurring in Fall 2012.



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*Environmental Assessment and Mitigation Report*



**Figure 1      Project Location Map**



**Figure 2      Project Vicinity Map**



## **2.0 PROJECT PURPOSE AND NEED**

The proposed project is needed to respond to a number of deficiencies that exist along Valencia Road from Alvernon Way to Wilmot Road, including meeting 2035 traffic demands, increasing safety, improving multi-modal connectivity, and relieving congestion. Traffic congestion has been a concern in the project area for a number of years, and it is becoming more prevalent as traffic volumes increase. Valencia Road carries a daily traffic volume of 24,600 to 26,500 vehicles and is projected to carry between 39,400 and 42,400 vehicles per day in 2035. Currently, Valencia Road experiences heavy traffic volumes during peak travel hours along many segments, resulting in a poor level of service that impedes the efficient movement of traffic in this area. Congested travel in the project area increases local and regional travel times and transportation costs.

The project proposes to widen Valencia Road between Alvernon Way and Wilmot Road to a six-lane divided road in order to provide capacity for future travel needs. The project is proposed due to recognition that if the project is not built, there could be increased congestion, delay, and accidents as traffic volumes increase over time as a result of local development and increased regional traffic volumes. The purpose of the project is to reduce delays caused by heavy traffic volumes during peak travel hours and reduce future traffic congestion on Valencia Road by providing additional capacity and more efficient intersection operation. The project will also improve pedestrian mobility through the provision of a continuous sidewalk and multi-use lanes for bicycle access, while meeting Americans with Disabilities Act (ADA) requirements. These amenities will be located on the north and south side of Valencia Road. The Valencia Road and Littletown Road intersection will be realigned and a traffic signal added in order to improve traffic operations and safety. The project will also provide for an expanded bridge crossing at Union Pacific Railroad (UPRR) overpass. The underpass at I-10 will be expanded to six lanes with a raised multi-use lane for bicycle and pedestrian use. The projects purpose is consistent with the RTA Plan that identifies specific improvements to address cross-town mobility, reduce traffic congestion, improve safety and security, improve travel modes, and improve bicycle and pedestrian options in the region.



### **3.0 PROJECT SETTING**

Project area characteristics and description is provided in the Design Concept Report (Psomas Engineering 2011a) and summarized below. Please refer to the Design Concept Report for additional information on project setting. For more information, please refer to the document located on the project website at: <http://www.roadprojects.pima.gov/valencia-wilmot/>

The project area is located along Valencia Road from 900 feet east of Alvernon Way to 750 feet east of Wilmot Road. Portions of the project are located within both unincorporated Pima County and the City of Tucson jurisdictions (Figure 3). The project also intersects rights-of-way associated within I-10 and UPRR.

Valencia Road between Alvernon Way and Wilmot Road is currently a four-lane, curbed, divided road with traffic signals at the intersections of Swan Road, I-10 and South Wilmot Road. The existing roadway has four travel lanes (two eastbound, two westbound), two bicycle lanes within the striped road shoulder (one eastbound, one westbound), and a stormdrain system. I-10 spans Valencia Road with two four-span concrete bridges. Valencia Road spans the UPRR tracks with a three-span concrete bridge. There are six traffic signals within the project limits. The signals are located at Alvernon Way, Desert View High School, Benson Highway/Swan Road, the eastbound I-10 ramps, the westbound I-10 ramps and Wilmot Road. There is no street lighting along this segment of Valencia Road, except for safety lighting at the signalized intersections listed above. Utilities with this portion of Valencia Road include service, distribution, and transmission of gas, electric, communications, potable water, and wastewater. The majority of utility facilities run parallel to Valencia Road on both sides of the roadway and along all major cross streets. Right-of-way widths along the Valencia Road corridor vary. To the west of I-10, the R/W is nominally between 225 and 285 feet and is not centered on the roadway, while to the east of I-10 it is nominally 150 feet wide and is generally centered on the roadway.

Land use along Valencia Road is varied and includes residential (single-family homes), commercial, Davis Monthan Air Force Base (DMAFB), Pima Air and Space Museum, I-10, UPRR and vacant lands. Along Valencia Road between Alvernon Way to I-10 land use includes: Desert View High School, the Desert Vista Terrace Subdivision, Valstate II Subdivision, Town & Country Mobile Estates, Diamond Shamrock Gas Station, and vacant land. On the south side of Valencia Road between Alvernon Way and Swan Road vacant land is owned by the State of Arizona. The Earp Wash crosses Valencia Road in this area. From I-10 to Craycroft Road, development is relatively sparse and limited to the south of Valencia Road, with the exception of the mixed use Jack in the Box Restaurant/ Chevron gas station, immediately east of I-10. The land use then transitions to single-family medium density residential development, Billy Lane Lauffer Middle School, and Craycroft Elementary School, which are all located just outside the project area boundary. North of Valencia Road in this area is vacant land. The Julian Wash and UPRR cross Valencia Road in this area. Between Craycroft and Wilmot Roads, the Pima Air and Space Museum is located directly south of Valencia Road. DMAFB is located north of Valencia Road from Craycroft



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Road to Wilmot Road. The Wilmot Road entrance to DMAFB is off Wilmot Road approximately 0.5 mile north of Valencia Road intersection.

The majority of the project area is comprised primarily of previously disturbed bare ground with scattered area of vegetation dominated by disturbance-related vegetation that included both native and invasive non-native species. Vegetation commonly occurring includes scattered mesquite, palo verde, creosote, desert broom, prickly pear, barrel cactus, and mixed grasses. Vegetation adjacent to developed and disturbed areas includes a mix of native and non-native species. Invasive weeds are present throughout the project area.

A further detailed description of the existing conditions related to the issues evaluated in this report are provided in Section 5.0, Environmental Assessment and Mitigation, including biological resources, drainage, water quality, floodplains, air quality, noise, utilities, hazardous materials, cultural resources, visual resources, parking, and neighborhoods.



**Figure 3      Project Setting**



## 4.0 PROPOSED PROJECT

This section summarizes the proposed project description presented in the Design Concept Report. Please refer to the Design Concept Report for additional information on the proposed project description. For more information, please refer to the document located on the project website at: <http://www.roadprojects.pima.gov/valenciawilmot/>

The project includes the construction of the following improvements:

**Design Speed:** Design speed for Valencia Road will be 55 miles per hour (mph) and will be posted for 50 mph

**Right-of-Way:** No new R/W needs are anticipated. Drainage easements, slope easements, or temporary construction easements will be required.

**Roadway Section:** Six-lane roadway (three lanes in each direction) with a raised median, multiuse lanes, curb, and a continuous sidewalk system. At the I-10 underpass, the multi-use lane and sidewalk on each side of the roadway will be combined, elevated and placed behind the bridge.

**Drainage Improvements:** There is one major drainage crossing along the roadway corridor at the Julian Wash which is currently passing under the roadway through a 5-10'x9' reinforced concrete box culvert (RCBC). This culvert will be extended outside of the clear zone, and two reinforced concrete pipe (RCP) culverts will also be improved. There is also extensive storm drain along the project corridor. To the east of I-10, the existing catch basins will be relocated to the new curb line, and a portion of the storm drain trunk line will be upsized to capture the additional drainage flow from the expanded pavement section. To the west of I-10, the existing catch basins will be relocated to the new curb line and will tie into existing pipes which outlet directly into an adjacent channel.

**Utility and Railroad Improvements:** Overhead electric line from Alvernon Way through I-10 will be relocated to the south. Communication line vaults will be relocated. Other utility impacts may arise as the conflicts with drainage and roadway elements are assessed during the project. The existing bridge at the UPRR will be widened to six lanes with pedestrian facilities and maintain the existing vertical clearance for the railroad. No permanent railroad impacts or R/W needs are anticipated for the bridge widening.

**Signalization and Lighting:** Existing traffic signals at Desert View High School, Benson Highway/Swan Road, the eastbound and westbound I-10 ramps, and Wilmot Road will be modified to accommodate the roadway widening and intersection improvements. A traffic signal will be installed at the new Littletown Road intersection with Valencia Road. Conduit for a future traffic signal will be installed at the Craycroft Road intersection. Street lighting will be included at all signalized intersections.

**Intersection Improvements:** A new signalized intersection with Littletown Road will be included approximately 500 feet east of the existing Littletown Road intersection. At Benson Highway/Swan Road, Craycroft Road, and Wilmot Road intersections, side streets will be widened to accommodate intersection improvements.



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**Landscaping:** Install landscape improvements within the project R/W limits and easements. Landscaping will focus on a design based on sustainable objectives and will serve as a sustainable landscape requiring limited irrigation and reduced maintenance.

**Safety Features:** New concrete barrier with crash cushion end treatments will be installed at the I-10 underpass to protect traffic from the existing bridge piers. Pedestrian facilities at the I-10 underpass will be raised and separated from the roadway to enhance safety. New ADA-compliant handicap accessible ramps will be included at all intersections, and continuous sidewalk will be added through the length of the project. New guardrail will be installed at the UPRR Bridge and pedestrian facilities will be protected from traffic by a concrete barrier.

**Public Art:** Las Artes has been selected to complete the public art component of this project. The design team will coordinate with the artist during the development of the project construction documents to incorporate artwork into the plans.



## 5.0 ENVIRONMENTAL SCREENING

An Environmental Screening Memorandum was completed in May 2011 (URS Corp. 2011a). Environmental screening is conducted early in the project development to identify environmental conditions requiring consideration in the environmental review and project design process, including anticipated permit requirements and environmental investigation needs. This process involves determining areas of impact (through completion of the PCDOT questionnaire, Environmental Screening: Questionnaire for Establishing Potential Areas of Impact) and summarizing environmental categories that may be affected in a matrix. The environmental screening process considered the construction and operation activities related to the proposed improvements to Valencia Road and identified potential impacts to the following environmental categories: waters of the United States, biological resources, air quality, noise, utilities, hazardous materials, cultural resources, and neighborhoods/social conditions. The complete Environmental Screening Report is available for review on the project website at:

<http://www.roadprojects.pima.gov/valenciawilmot/>

## 6.0 ENVIRONMENTAL ASSESSMENT AND MITIGATION

### 6.1 NATURAL/PHYSICAL ENVIRONMENT

#### 6.1.1 Biological Resources

Existing biological resources are analyzed in the Biological Evaluation Report (URS Corp. 2011b). This section summarizes data presented in the Draft Biological Evaluation Report. For more information, please refer to the document located on the project website at:

<http://www.roadprojects.pima.gov/valenciawilmot/>

##### 6.1.1.1 Existing Conditions

The project is located in the central part of the Tucson basin. Vegetation associations and landcover in the project area include Sonoran palo verde mixed-cactus desert scrub, Sonoran creosotebush bursage desert scrub, disturbed invasive herbaceous-shrub complex, and urban developed areas. Natural vegetation chiefly occurs in patchy and scattered distribution throughout the project area and in a 15 acre section near the Union Pacific Railroad that could serve as the project construction staging area. Vegetation adjacent to developed and disturbed areas includes a mix of native and non-native species. Many areas adjacent to subdivisions include denser strands of larger mesquite and paloverde trees. Common non-native plants in these areas include Russian thistle (*Salsola tragus*) and buffelgrass (*Cynodon dactylon*). A complete list of vegetation found in the project area is found in the Draft Biological Evaluation Report. In addition, two native plant inventories, Releve Survey and Protected Native Plant Survey, will be completed as part of the project Landscaping Plan and in accordance with PCDOT Environmental Sensitive Roadway Design Guidelines (PCDOT 2010b).



The wildlife in the project area is typical of similar sites in this part of the Sonoran Desert that occur at the “urban wildland interface.” The urban wildland interface is where urban landscapes are mixed with natural landscapes. As a result, wildlife species common to both urban and natural landscapes occur in these places. Typical wildlife species may include zebra-tailed lizard (*Callisaurus draconoides*), desert spiny lizard (*Sceloporus magister*), common king snake (*Lampropeltis getula*), gopher snake (*Pituophis melanoleucus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), mourning dove (*Zenaidura macroura*), Gambel’s quail (*Callipepla gambelii*), desert cottontail (*Sylvilagus audubonii*), round-tailed ground squirrel (*Spermophilus tereticaudus*), collared peccary (*Tayassu tajacu*), and coyote (*Canis latrans*).

#### 6.1.1.2 *Habitat Connectivity*

PCDOT has evaluated wildlife movement patterns during the planning of this project. The cross drainage feature at the Julian Wash and bridge at the Union Pacific Railroad would provide for local wildlife movements. Other cross drainage structures do not have adequate size or design to support wildlife movement. At-grade crossings for wildlife likely occur throughout the project area.

#### 6.1.1.3 *Sensitive Habitats*

The project area includes two types of sensitive environmental designation identified in the Sonoran Desert Conservation Plan. The R/W from about Craycroft Road to Wilmot Road is part of a designated priority conservation area for the western burrowing owl (*Athene cunicularia hypugaea*), but the habitat within the project limits is highly disturbed by current land use and would be unsuitable for burrowing owls. The project limits north of portions of section 15 and 16 are designated as part of a priority conservation area for the Pima pineapple cactus (*Coryphantha scheeri var. robustispina*).

#### 6.1.1.4 *Sensitive Species*

The Biological Evaluation Report evaluated Federally-listed, State-listed, and County-listed sensitive species. The U.S. Fish and Wildlife Service (USFWS) list of federally-listed species for Pima County (USFWS 2011), Arizona; AGFD On-line Environmental Review Tool (AGFD 2010); and Pima County Map Guide list of Priority Vulnerable Species were reviewed to determine potential sensitive species in the project area (Pima County Map Guide 2011). Two endangered species, the Pima pineapple cactus and lesser long-nosed bat (*Leptonycteris yerbabuenae*); the western burrowing owl (*Athene cunicularia hypugaea*), protected by the Migratory Bird Treaty Act, Mexican long-tongued bat (*Choeronycteris Mexicana*), listed as a Wildlife Species of Concern; and cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*), proposed for relisting and listed as a Pima County Priority Vulnerable Species were evaluated.

#### 6.1.1.5 *Potential Impacts*

No Federal threatened, endangered, proposed, candidate; Arizona State Wildlife Species of Concern; Pima County Priority Vulnerable Species or other sensitive species are likely to occur in the project area; therefore, the proposed project would have no effect on these species. The proposed project limits will



only incorporate disturbed land within the established R/W that is already dominated by disturbance-related vegetation.

#### 6.1.1.6 *Mitigation Measures*

- USFWS Technical Assistance will be requested for guidance with the project findings of no effect to federally listed species. The Biological Evaluation Report will be provided to the USFWS for review and guidance with effects determination.
- A Landscape Plan will identify protected native plants that are to be preserved in place or mitigated in accordance with the Environmental Sensitive Roadway Design Guidelines. The plan is expected to match the vegetation density of the undisturbed surrounding areas and approximate the mitigation densities of the Environmentally Sensitive Roadway Guidelines.
- In compliance with the Arizona Native Plant Law, PCDOT will file a Notice of Intent (NOI) with the Arizona Department of Agriculture for the removal or salvage of applicable native plants.
- Buffelgrass is found in the project area and could be disturbed during construction. A Buffelgrass Eradication plan will be completed by the contractor to address treatment of infested areas.

#### 6.1.1.7 *Permits*

- PCDOT will file a NOI to clear land with the Arizona Department of Agriculture 60 days prior to the removal or salvage of native plants.

### 6.1.2 **Drainage and Clean Water Act**

This section identifies major washes, existing stormwater and cross drainage facilities, and evaluates the project impacts to washes and facilities. This section also addresses washes regulated under Section 404 of the Clean Water Act (CWA) and regulated by the U.S. Army Corps of Engineers (Corps), and evaluates project activities subject to Sections 401 and 402 of the CWA.

#### 6.1.2.1 *Existing Conditions*

Existing drainage conditions are analyzed in the Initial Drainage Report (Psomas Engineering 2011b). This section summarizes data presented in the Initial Drainage Report. For more information, please refer to the document located on the project website at: <http://www.roadprojects.pima.gov/valenciawilmot/>.

In general, offsite runoff originates to the southeast and is conveyed via channels or shallow sheet flow to the northwest. The vast majority of offsite flow is conveyed to the Julian Wash, which crosses Valencia Road between Littletown Road and Craycroft Road, or is collected and conveyed by the unnamed channel to the regional detention basin located west of the project limits. The remaining watersheds contributing to drainage crossings under Valencia Road are relatively small. All other runoff impacting this project is generated within the roadway and is conveyed through various stormdrain systems.

Within the project limits there are multiple stormdrain systems, two minor cross culverts, driveway culverts, roadside channels, and the Julian Wash crossing. Between Alvernon Way and I-10, stormdrain



systems collect pavement and off-site runoff and discharges into an unnamed channel along the south side of Valencia road that flows west to an off-site regional detention basin. Between I-10 and Wilmot Road, stormdrain systems collect pavement and off-site runoff and discharges into the Julian Wash. Culvert crossings are located (1) east of Swan Road, (2) under the I-10 southbound off-ramp, (3) east of the I-10 northbound onramp, (4) Julian Wash, and (5) UPRR.

The project will include potential jurisdictional waters of the U.S. (WUS) at the Julian Wash, Earp Wash, three stormdrain channels, and one ephemeral wash. The Julian Wash crosses under Valencia Road at an existing concrete box culvert. Flows in the Earp Wash do not cross Valencia Road, but are intercepted by an existing stormdrain channel and conveyed to an off-site detention basin. Three stormdrain channels are located: (1) south of Valencia Road between I-10 and Alvernon Way, (2) south of Valencia Road between I-10 and the Julian Wash, and (3) south of Valencia Road from Craycroft Road to the Julian Wash. The unnamed ephemeral wash crosses Craycroft Road at grade 500 feet north of Valencia Road. The Preliminary Jurisdictional Delineation Report (URS Corp. 2011c) provides more information on WUS in the project area.

#### **6.1.2.2 *Potential Impacts***

The Preliminary Jurisdiction Delineation identified the Julian Wash, Earp Wash, three stormdrain channels, and one ephemeral wash as WUS and under the jurisdiction of the CWA. Project impacts to WUS are currently being evaluated, but are anticipated to meet the requirements of a CWA Section 404 Nationwide Permit 14 for transportation projects.

The proposed improvements to the drainage structures throughout the project include culvert extensions, new culverts, culvert replacements, stormdrain lateral extensions, stormdrain mainline upsizing, construction of new catch basins and area inlets, and may include channel or ditch modifications.

Roadside channels will be reconstructed to maintain existing capacity. As necessary stormdrain grate inlets located along the south side of the roadway will be relocated to the south. No additional channels or grate inlets are anticipated. Existing culverts will be extended or reconstructed to ensure the headwater elevation is below the edge of pavement. The existing culvert at Julian Wash will be extended to move the culvert out of the roadway clear zone. One new culvert will be required under a new turnout located east of Littletown Road.

Project construction will temporarily disturb and expose soil along the R/W and could temporarily introduce potential stormwater pollutants associated with construction equipment and materials. Soil disturbance of greater than 1 acre would occur. Soil disturbance and excavation will also occur in washes during installation of flood control features (culverts, intake structures, etc.). Impacts to potential WUS are anticipated at the Julian Wash and stormdrain channels.

#### **6.1.2.3 *Mitigation Measures***

- A Preliminary Jurisdictional Delineation for the project will be provided to the Corps.



- The project would disturb more than 1 acre, PCDOT and the contractor, in compliance with Section 402, will file a NOI to use the statewide Construction General Permit (CGP AZG 2008-001) with the Arizona Department of Environmental Quality (ADEQ) and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP).
- An in-lieu fee will be provided to the Corps for impacts to WUS.

#### 6.1.2.4 *Permits*

- A Preliminary Jurisdictional Delineation for the project will be provided to the Corps.
- PCDOT will obtain a CWA Section 404 Nationwide Permit No. 14 and comply with the permit conditions. This permit will provide conditional water quality certification for the jurisdictional washes in the project area in compliance with Section 401 of the CWA.
- Under Section 402 of the CWA, construction disturbing one acre or more of land during excavation and/or grading activities must comply with the Arizona Pollutant Discharge Elimination System (AZPDES) General Construction Permit held by the ADEQ. To comply with the Construction General Permit, both PCDOT and the contractor will file an NOI with ADEQ and receive authorizations for construction. A SWPPP will be prepared by PCDOT. The SWPPP will include temporary and permanent sediment and erosion control measures, and good housekeeping practices to control and prevent the release of potential water pollutants.

### 6.1.3 **Floodplain**

This section evaluates potential impacts to Federal Emergency Management Agency (FEMA) floodplain areas as defined on FEMA Flood Insurance Rate Maps, and other areas that may be subject to inundation. Requirements of the Pima County Riparian Ordinance are also located within this section. This section summarizes data presented in the Initial Drainage Report. For more information, please refer to the document located on the project website at: <http://www.roadprojects.pima.gov/valenciawilmot/>.

#### 6.1.3.1 *Existing Conditions*

Two Flood Insurance Rate Maps, as well as, the new “L” Series FIRM Panels were reviewed and showed that the project is in areas designated as Zone A and X- shaded as described in Table 1.

Protected riparian habitat categorized as Xeroriparian Class C and Xeroriparian Class D are found in three locations within the project area: (1) Earp Wash at Valencia Road, (2) south of the UPRR crossing at Valencia Road, and (3) Craycroft Road north of Valencia Road.



**Table 1 Floodplain Designation in the Project Area**

Zone	Description	Locations
A	Areas within the 100-year flood zone where no base flood elevations have been determined	<ul style="list-style-type: none"> <li>Valencia Road and Swan Road, to the immediate west of the intersection is the Earp Wash, which crosses the roadway, flowing from south to the north.</li> </ul>
X-Shaded	Area of 500-year flood ; or area of 100-year flooding with average depths of one foot; or with drainage areas less than one square mile; or areas protected by levees from the 100-year flood.	<ul style="list-style-type: none"> <li>I-10 to the UPRR tracks, areas containing the Julian Wash</li> </ul>

Source: FEMA FIRM Map No. 04019C2245K (February 8, 1999), 04019C2265K (February 8, 1999) and the new “L” Series FIRM Panels 04019C2295L and 04019C2315L (June 16, 2011). Initial Drainage Report- Valencia Road: Alvernon Way to Wilmot Road (Psomas Engineering 2011b)

<sup>a</sup>Floodplain designated as X-Shaded were differentiated through shading of the area within the 500-year flood zone on the FIRM map, with no shading for areas outside the 500-year flood zone.

**6.1.3.2 Potential Impacts**

No adverse impacts to floodplains have been identified. Drainage improvements will affect regulated riparian habitat protected under the Pima County Regional Flood Control District Riparian Ordinance District. Amount of disturbance will be calculated during the final design phase.

**6.1.3.3 Mitigation Measures**

- Impacts to regulated riparian habitat will be assessed in coordination with Pima County Regional Flood Control District. If 1/3 acre or more of protected riparian habitat is impacted, PCDOT will provide on-site mitigation through landscaping of impacted riparian areas and/or provide an in-lieu fee to Pima County Regional Flood Control District.

**6.1.3.4 Permits**

- Should drainage improvements impact more than 1/3 acre of designated riparian habitat protected under the Pima County Regional Flood Control District Riparian Ordinance, a Flood Use Permit will be obtained from Pima County Regional Flood Control District.

**6.1.4 Air Quality**

The U.S. Environmental Protection Agency has established National Ambient Air Quality Standards for six criteria pollutants: ground-level ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), and lead. This section evaluates the project impacts related to these criteria pollutants. National Emission Standards for Hazardous Air Pollutants (NESHAP) is discussed in Section 7.1.7 Hazardous Materials.

**6.1.4.1 Existing Conditions**

The Pima County Department of Environmental Quality (PDEQ) has jurisdiction over air quality programs in Pima County, including the project area. The PDEQ operates a series of air quality monitoring stations throughout Pima County to monitor the criteria air pollutants, except lead. The closest



monitoring station to the project corridor is located at the intersection of Golf Links and Kolb. This station was established as a special purpose site to monitor carbon monoxide. The monitoring station located at Santa Clara School only monitors PM<sub>10</sub>. The monitoring station at Rose Elementary measures O<sub>3</sub> and PM<sub>2.5</sub> data.

#### 6.1.4.2 *Potential Impacts*

The following table presents the federal standards and the averaging period over which the standard is measured for the pollutants listed. The table also compares the results from the sites from the 2009 Air Quality Summary Report of Pima County, Arizona (PDEQ 2009) to the National Ambient Air Quality Standards.

**Table 2 Air Quality Monitoring Data**

<b>Pollutant</b>	<b>Averaging Period</b>	<b>Federal Standard</b>	<b>Monitored 2009 Value</b>
Particulate matter (PM <sub>10</sub> ) <sup>a</sup>	24-hour Average	150 µg/m <sup>3</sup>	90 µg/m <sup>3</sup>
	Annual Average	Revoked	26.5 µg/m <sup>3</sup>
Particulate matter (PM <sub>2.5</sub> ) <sup>b</sup>	24-hour Average	35 µg/m <sup>3</sup>	22.3 µg/m <sup>3</sup>
	Annual Average	15 µg/m <sup>3</sup>	5.44 µg/m <sup>3</sup>
Carbon monoxide (CO) <sup>c</sup>	1-hour Average	35 ppm	1.7 ppm
	8-hour Average	9 ppm	1.1 ppm
Ozone (O <sub>3</sub> ) <sup>b</sup>	8-hour Average	0.075 ppm	0.061 ppm
Nitrogen dioxide (NO <sub>2</sub> ) <sup>d</sup>	Annual arithmetic mean concentration	0.03 ppm	0.001 ppm

Source: PDEQ 2009

µg/m<sup>3</sup> = micrograms per cubic meter of air

ppm = parts per million

*Note: Pollutant values derived from the following air quality monitoring stations:*

<sup>a</sup> Santa Clara School – 6910 S. Santa Clara Ave.

<sup>b</sup> Rose Elementary School – 710 W. Michigan St.

<sup>c</sup> Golf Links & Kolb – 2601 S. Kolb Rd.

<sup>d</sup> 22<sup>nd</sup> and Craycroft – 1237 S Beverly Ave.

Metropolitan planning organizations are required the Clean Air Act to ensure that all transportation projects conform to the approved air quality State Implementation Plan. This project is included within the PAG FY2009–2013 Transportation Improvement Program, which was adopted by the PAG Regional Council on June 26, 2008. The PAG FY2009–2013 Transportation Improvement Program conforms to the State Implementation Plan and, therefore, is in conformity with air quality standards.

Pima County is in attainment for all critical pollutants mentioned above. The proposed project would have only temporary, short-term, and minimal impacts to particulate levels during project construction. The project may improve long-term air quality by decreasing traffic congestion and improving alternative modes of transportation.



#### 6.1.4.3 *Mitigation Measures*

- The contractor will limit the amount of dust generated to a maximum standard opacity of 20 percent. The contractor will follow the PCDOT standard specifications for dust suppression during construction.
- The contractor shall comply with dust control measures identified in the SWPPP (see Section 7.1.2 Drainage and Clean Water Act)

#### 6.1.4.4 *Permits*

- The contractor will secure an Air Quality Activity Permit from PDEQ prior to initiating any construction activities, and it will require dust control measures. PDEQ will issue a permit for both the Pima County and City of Tucson portions of the project.

### 6.1.5 **Noise**

Existing conditions are analyzed in the Noise Analysis Report (Sound Solution 2011). This section summarizes data presented in the document. For more information, please refer to the document located on the project website at: <http://www.roadprojects.pima.gov/valenciawilmot/>.

This section evaluates potential noise impacts to sensitive properties in the project area based on a project-specific traffic noise report that models existing and future traffic noise levels along Valencia Road.

According to the Pima County Noise Abatement Procedure (PCNAP) (PCDOT 2008), noise abatement would be considered if noise levels reach 66 decibels (dBA) or higher at noise-sensitive properties. Mitigation measures will be considered for noise-sensitive properties if predicted traffic noise levels show a 15-dBA increase between the existing noise levels and the future noise levels. The PCNAP provides criteria for use of noise walls for mitigation based on consideration of the following conditions:

- The cost of the noise abatement shall not exceed \$35,000 per benefited receiver, at \$25 per square foot of constructed barrier
- The noise barrier will benefit more than one sensitive property
- The noise barrier will provide a 5-dBA noise reduction without being more than 10 feet high

The PCNAP includes a provision for the use of rubberized asphalt, which reduces roadway noise by 3 dBA.

#### 6.1.5.1 *Existing Conditions*

Noise sensitive properties within the project area include single-family homes schools, Thomas Jay Regional Park, Littletown Community Center and the Julian Wash River Park. Noise impacts also have the potential to impact Pima Air and Space Museum visitors and the Army National Guard Base.



The dominant noise source during peak traffic hours in the project area is roadway noise. Field readings were taken at 14 locations along Valencia Road to measure existing noise conditions during peak-hour traffic flows and to compare them with the predicted sound levels using the noise model.

#### 6.1.5.2 *Potential Impacts*

Traffic volumes on Valencia Road are expected to increase because of regional growth and expanded roadway capacity associated with the improvements. The increase in traffic volumes will result in an increase in traffic noise along the roadway. Likewise, adding lanes to the road will move traffic closer to noise sensitive properties, thus increasing traffic noise levels at these properties. The project will use rubberized asphalt, which lessens the noise produced by traffic on the road.

Future (2035) noise levels were predicted at 14 locations. These locations included residential and commercial properties. Future peak-hour noise levels will range from 58 to 68 dBA. At 9 locations the predicted future noise levels met PCNAP criteria. Predicted future noise levels exceed the PCNAP criteria at four locations. See Section 6.1.8, Construction Activities, regarding construction noise impacts.

#### 6.1.5.3 *Mitigation Measures*

Predicted future noise levels exceed the noise abatement criteria at four locations. The provision of noise barriers was evaluated for feasibility and reasonableness for all of these locations. At three locations, a noise barrier would not result in at least a 5 dBA noise reduction, as required by PCNAP; therefore, a noise barrier is not warranted at these locations.

- North side of Valencia Road on the west side of Mesquite Desert Trail
- South side of Valencia Road and is west of I-10
- South of Valencia Road and east of I-10

The noise level exceeds the PCDOT limits at four of these residences on the north side of Valencia Road between Columbus Blvd and Ocotillo Desert Trail. A noise wall 630 feet in length and 8 feet height would provide at least 5 dBA noise reduction at six residences between Columbus Blvd and Ocotillo Desert Trail. Using the PCNAP recommend cost of \$25/ft<sup>2</sup>, the total cost of the wall would be \$126,000. In addition, a water line would need to be relocated from the proposed noise wall location. The cost of relocating the water line is \$142,000. The total cost to build the noise wall and move the water line is \$288,000. The cost per benefited receiver is \$48,000, which is more than the PCNAP requirement of \$35,000 per benefited receiver. Therefore a noise wall is not considered reasonable based on cost and is not recommended.

#### 6.1.5.4 *Permits*

No permits required.



### 6.1.6 Utilities

This section identifies the utilities present in the project area, describes potential impacts to utility customers, anticipated utility relocation, and the party responsible for notifying utility customers regarding any service interruptions. For more information, please refer to the DCR document located on the project website at: <http://www.roadprojects.pima.gov/valenciawilmot/>.

#### 6.1.6.1 Existing Conditions

Utilities within the project area include service, distribution, and transmission of gas, electric, communications, potable water, and wastewater facilities. The majority of utility facilities run parallel to Valencia Road on both sides of the roadway and along all major cross streets. The location of utilities within the project R/W will be identified in order to assess potential conflicts and design mitigation solutions. Table 3 provides a summary of the utilities located within the project R/W and the different providers.

**Table 3 Existing Utilities**

<b>Provider</b>	<b>Utility</b>
AT&T	AT&T has an underground facility that crosses Valencia Road that will not be impacted by the proposed roadway improvements.
Cox Communication	Cox Communications has underground facilities located along the north side of Valencia Road. These facilities will not be affected by the proposed improvements. Cox has overhead facilities, located on TEP poles, will need to be relocated as part of this project.
El Paso Gas	El Paso Gas has facilities that that cross Valencia Road that will not be impacted by this project.
Kinder Morgan	Kinder Morgan has 16", 12", 8", and 6" gasoline lines located along the south side of the UPRR R/W at the Valencia Road UPRR Bridge that will not be impacted by the proposed bridge improvements. There is a 6" Kinder Morgan line located along the south side of Valencia Road that will be impacted by the proposed catch basin relocations and roadway widening.
Level 3	Level 3 has facilities that run north and south along the west side of Wilmot Road and cross Valencia Road that may be impacted by the project. Level 3 also has facilities located along the south side of the UPRR R/W that should not be impacted by the proposed Valencia Road UPRR Bridge Improvements.
Pima County Wastewater	Pima County Wastewater has several sewer facilities located along the project limits. There is a 12" sewer located along the south side of Valencia that will not be impacted by the proposed roadway improvements. This 12" sewer line continues east across Wilmot Road along the south side of Valencia Road and will need to be taken into consideration during the design of the storm drain and catch basin relocations. There is an 8" sewer line along the south side of Valencia Road and a 12" sewer line that crosses Valencia Road at Swan Road. Relocation of sewer facilities are not expected, with the exception of manhole adjustments.
Qwest Communications	There are several Qwest facilities that will be affected due to the roadway widening, storm drain extensions and catch basin relocations. Quest underground telecommunication lines and pull boxes will require relocation. Qwest also has facilities north of the UPRR R/W at the Valencia Road UPRR Bridge that should not be affected by the proposed bridge improvements.



Provider	Utility
Qwest National	Qwest National is located within the UPRR right of way and should not be impacted by the proposed Valencia Road roadway widening or UPRR Bridge Improvements.
Ray Water Company	Ray Water Company has facilities located north of the project area, west of Swan Road that should not be impacted by the proposed project improvements.
Southwest Gas	Southwest Gas has several facilities located within the project area. It is anticipated that Southwest Gas underground gas lines will not be impacted by the project. There is a house at Wilmot Road that across Valencia Road that may be impacted due to the intersection reconstruction.
Tucson Electric Power (TEP)	Tucson Electric Power has 46 Kv overhead facilities along the south side of Valencia that will need to be relocated due to the proposed roadway widening. TEP has underground facilities along the south side of Valencia east of Wilmot Road that will be impacted by the proposed roadway widening and relocation of catch basins. There is a 138 Kv transmission tower located at the southwest corner of the Valencia Road and Swan Road intersection that will not be impacted by the project.
Tucson Water	Tucson Water has facilities located along the project limits including 12" and 16" water lines that will be impacted due to the roadway widening and catch basin relocation. Water Valve adjustments will be required for valves located along the roadway.

#### 6.1.6.2 *Potential Impacts*

Impacts on utilities in the project will primarily occur from roadway widening, relocating catch basins, and installing new storm drains. Underground and overhead utilities will be relocated to accommodate drainage facilities, changes in grade for the new roadway, or to allow future access to utilities for repairs or maintenance.

Utility relocation will result in temporary short-term service interruptions to area residents and businesses. Utilities that will be temporarily impacted include water, gas, electric, wastewater, and cable communications. Service interruptions can generally be limited to a few non-peak hours per day, over a few days, or a half-day interruption. Some utility work may be conducted at night when service demand is low to minimize effects on customers; this will reduce direct utility impacts, but may result in temporary noise impacts during relocation.

Relocation of SWG and TEP facilities may have seasonal work restrictions. These restrictions will also require coordination with the design schedule and construction phasing.

#### 6.1.6.3 *Mitigation Measures*

- The proposed design will utilize all available and appropriate design options to mitigate conflicts and relocation work to the extent possible. Planned utility system upgrades will be coordinated with the project team and other utility companies to reduce design and construction conflicts and maximize the use of limited R/W.
- The utility provider will notify customers 14 days in advance of an interruption. Utility providers endeavor to minimize service interruptions and will reroute service where feasible.



- Any necessary relocation of high-voltage electric lines, high-pressure gas lines, and water lines will be conducted during months when demand for these services is lower.

#### 6.1.6.4 *Permits*

- A public sewer construction permit will be required from Pima County Regional Wastewater Reclamation District and will provide for construction coordination, as well as reporting, coordination, and guidance for cleanup in the event of any wastewater release.
- Prior to utility relocation, utility company contractors must obtain a Pima County Right-of-Way Use Permit.
- Utility relocation outside of the project R/W is not covered by PCDOT CWA permits obtained for road construction (i.e. see Section 7.1.2 Drainage and Clean Water Act).

#### 6.1.7 **Hazardous Materials**

This section evaluates the project impacts related to hazardous materials based on a hazardous materials investigation including a Preliminary Initial Site Assessment (PISA) (URS Corp. 2011d). For more information, please refer to the document located on the project website at: <http://www.roadprojects.pima.gov/valenciawilmot/>.

##### 6.1.7.1 *Existing Conditions*

A PISA was conducted to identify potential recognized environmental conditions associated with individual parcels within the project area, and to identify those properties requiring more detailed investigation. The PISA included the following activities: a site reconnaissance and photo documentation, and a review of federal and state environmental records.

No recognized environmental conditions such as leaking underground storage tanks, landfills, or land use associated with hazardous materials use have been identified within the existing R/W. Commercial airplane maintenance and demolition facilities located in the project vicinity would not impact the project. Painted road structures such as bridge piers and roadway stripping may require additional testing for lead-based paint (LBP) and concrete structures such as drainage boxes which may require additional testing for asbestos.

The Valencia Road bridge at the UPRR and the Valencia Road underpass at I-10 are NESHAP regulated structures.

##### 6.1.7.2 *Potential Impacts*

The project includes excavation and earthmoving activities. Based on the hazardous materials investigations, subsurface hazardous materials issues associated with past contamination are not anticipated and would not be impacted by the project. Relocation or demolition of painted road structures may require additional testing for LBP. Similarly, modification to or demolition of existing concrete structures may require additional testing for asbestos for structures manufactured prior to 1985.



Expansion of the existing bridge at Valencia Road and UPRR and widening of the underpass at Valencia Road and I-10 would impact NESHAP regulated structures.

#### 6.1.7.3 *Mitigation Measures*

- If any suspected hazardous materials are encountered during construction, work shall cease at the location and the Pima County Engineer shall be contacted to arrange for proper assessment, treatment, or disposal of those materials.
- Milling of asphalt with paint stripes does not require LBP testing, however, for all other removal methods, sampling of suspect LBP materials should be conducted prior to demolition and removal.
- Prior to demolition or disposal of structures, an Asbestos Hazard Emergency Response Act Certified Building Inspector should conduct sampling on all suspect asbestos-containing load-bearing structures installed prior to 1985.
- If asbestos-containing materials (ACM) are present, a certified asbestos abatement contractor shall develop and implement an Asbestos Removal and Disposal Plan for the removal of all identified LBP and ACM.
- The contractor shall complete a NESHAP notification for work associated with (1) expansion of the existing bridge at Valencia Road and UPRR, and (2) widening of the underpass at Valencia Road and I-10 and submit to PCDOT for review. Upon approval by PCDOT the contractor shall file the notification with the Arizona Department of Environmental Quality and the Pima County Department of Environmental Quality at least 10 working days prior to construction at the bridge structures listed above.

#### 6.1.7.4 *Permits*

- The contractor may need to prepare a NESHAP notification through the PDEQ to complete the bridge renovation if asbestos-containing materials are present.

### 6.1.8 **Construction**

This section evaluates impacts that may result from construction activities associated with the project such as traffic control, dust generation, and construction noise.

#### 6.1.8.1 *Existing Conditions*

Construction activities will include earthwork, excavation, bridge construction, milling and overlay, painting, and other activities associated with road construction. Construction equipment and machinery would include those typically used in road construction.

#### 6.1.8.2 *Potential Impacts*

Project construction is expected to begin in 2012 and last from 18 to 24 months. Although access will be maintained, traffic control measures will temporarily slow traffic during construction. No detours routes onto area streets are anticipated. Earthmoving, grading, and demolition activities will temporarily



generate dust within the project area (see Section 6.1.4, Air Quality). Construction of the proposed improvements will cause temporary noise impacts associated with the operation of construction equipment during site clearing, earthwork/grading, foundation preparation, and base preparation. Construction equipment operations can vary from intermittent to fairly continuous, with multiple pieces of equipment operating concurrently.

#### 6.1.8.3 *Mitigation Measures*

- A traffic control plan will be implemented by the contractor in conjunction with PCDOT's Field Engineering Division, and will employ measures such as construction signs, cones, and reduced speed limits.
- The contractor shall maintain access to businesses and residences, and provide signs to identify business access during construction.
- Noise impacts from construction equipment may be minimized through use of properly designed equipment, good maintenance of equipment, and placement of equipment away from noise sensitive properties.
- The contractor will comply with Pima County's Noise Ordinance (Pima County Code Chapter 9.30.070), which sets the construction start and stop times in order to avoid noise disruptions at night. If nighttime work is required, the contractor will need to obtain a permit from Pima County.
- The contractor shall comply with dust control measures identified in the SWPPP (see Section 7.1.2 Drainage and Clean Water Act) and Air Quality Activity Permit (see Section 7.1.4 Air Quality)

#### 6.1.8.4 *Permits*

No permits required.

### 6.1.9 **Historic/Cultural Resources**

This section discusses potential impacts to cultural resources based on a project-specific cultural resource assessment conducted in accordance with Section 106 of the National Historic Preservation Act (NRHP) (SWCA 2011). The report presents the results of a records check and pedestrian survey, and evaluates the potential impacts of the project to cultural resources.

#### 6.1.9.1 *Existing Conditions*

Three previously recorded historic-age sites/structures, one newly recorded archaeological site, and 14 isolated occurrences were identified within the project area. The three eligible sites intersect portions of the Valencia Road project area, but the intersecting segments of two sites are to the non-contributing components to their NRHP eligibility, and the third site is an in-use natural gas pipeline and, therefore, exempt from the requirements of Section 106 of the National Historic Preservation Act. The newly recorded late historic-era trash scatter and 14 isolated occurrences are not eligible for listing in the NRHP. In addition, two road side memorials were identified during survey of the project area.



#### 6.1.9.2 *Potential Impacts*

The report has been reviewed by the Pima County Cultural Resources and Historic Preservation Office (CRHPO). Under the provisions of Pima County's Intergovernmental Agreement with the State Historic Preservation Office, CRHPO has determined that the project will have no effect on cultural resources and no further investigations are recommended.

Roadside memorials within the project R/W would be impacted during construction.

#### 6.1.9.3 *Mitigation Measures*

- The Pima County CRHPO has made a determination of no historic properties affected, and no mitigation measures are warranted.
- If any previously unidentified cultural resources are encountered during construction, construction work at that location shall be halted immediately and the finds shall be secured and protected. The Arizona State Museum and the Pima County Office of Cultural Resources and Historic Preservation shall be contacted immediately.
- Prior to construction, the project area will be surveyed for roadside memorials. Where possible, disturbance of roadside memorials within the project area will be avoided. Where disturbance of roadside memorials is unavoidable, removal and/or relocation shall be in accordance with Pima County policy.

#### 6.1.9.4 *Permits*

No permits required.

### 6.1.10 **Visual Resources**

This section describes characteristics of various viewsheds within the project area and analyzes impacts to viewers and viewsheds. Existing conditions are analyzed in the "Visual and Aesthetics Resource Report" (Wheat-Scharf Associates 2011). This section summarizes data presented in the Visual and Aesthetic Resources Report. For more information, please refer to the document located on the project website at: <http://www.roadprojects.pima.gov/valenciawilmot/>. Visual resources inventory and analysis was conducted in compliance with methods described in PCDOT Environmentally Sensitive Roadway Design Guidelines.

#### 6.1.10.1 *Existing Conditions*

The setting of the Valencia Road study area is developed due to the moderate level of development adjacent to the project area. Existing visual conditions are described in terms of foreground, middle ground, and background viewsheds; and viewer types.

Foreground – Slightly rolling topography and desert scrub vegetation dominates the foreground views to and from the project area. The Valencia Road Bridge over the UPRR is the highest point in the foreground and from the top of the bridge one can take in 360 degree views of the entire Tucson Basin.



Power poles run parallel to Valencia Road on the south side of the roadway, and Valencia Road itself is the most dominant feature of the foreground.

Middle ground – Slightly rolling topography and desert scrub vegetation dominates the middle ground views to and from the project area; however, some areas of residential, industrial, and commercial development can be seen in the middle ground.

Background – The four major Tucson basin ranges; the Catalina, the Rincon, the Santa Rita, and the Tucson Mountains comprise the background views to and from the roadway project area.

Viewer Types: The specific groups of viewers accounted for in this report are listed below:

- Valencia Road motorists, bicyclists, and pedestrians.
- Desert View High School, Craycroft Elementary School, and Billy Lane Lauffer Middle School students, faculty and staff.
- Residents on Valencia Road.
- Staff and visitors to the Pima Air and Space Museum and commercial/industrial areas (including DMAFB).

Future viewer types that are considered are as follows:

- Future residents along the north and south side of Valencia Road between I-10 and the UPRR Bridge.
- Potential staff and users of a proposed City of Tucson Park on the south side of Valencia Road between Alvernon Way and Swan Road.

#### 6.1.10.2 *Potential Impacts*

This portion of Valencia Road has “Minimal” scenic quality. Most segments west of the UPRR Bridge have high visual sensitivity ratings due to the prevalence of residential land use. East of the bridge is largely low visual sensitivity due to industrial land uses with the localized exception of the Pima Air and Space Museum.

Overall, expected visual contrast is low since the horizontal and vertical roadway alignments will not be changing. Greatest contrast will be in the area of the UPRR Bridge due to elevated landform of the approaches and the bridge structure itself, which can be seen at varying distances from the surrounding residences, future residential areas, schools and a park.



### 6.1.10.3 *Mitigation Measures*

- Revegetating the disturbed areas with native vegetation currently found in the surrounding project area will aid in blending the existing color and texture from the rolling topography into the proposed project areas, thereby reducing the overall visual impact.
- Applying a subtle texture and painting the new retaining walls at the I-10 underpass a color that is similar to the surrounding soil could reduce the overall visual impact of the retaining wall.
- Strategies for mitigation at the UPRR bridge and embankments include provide the greatest allowable openness for the bridge fence structures, paint the metal fence a color similar to the surroundings (either a color similar to the soil or a blue color similar to the sky), vary the height of vertical elements, and establishing plantings of various heights at or near the tops of the embankments.
- The existing entry sign and sculpture at the Pima Air and Space Museum entrance may actually become easier for motorists to see since the road edge will be moving closer to them; however, planting in the area must be carefully designed to frame rather than obscure entrance visibility.
- Incorporate public art into portions of the roadway improvements to be constructed such as buffer or retaining walls, paving and railings, particularly at the I-10 underpass and the UPRR Bridge.

### 6.1.10.4 *Permits*

No permits required.

## **6.2 NEIGHBORHOOD / SOCIAL ENVIRONMENT**

This section evaluates impacts to the neighborhood and social environment, including R/W acquisition and displacement, temporary and permanent access, parking, neighborhood disruption, parks and recreational areas, and consistency with other plans.

### **6.2.1 Right-of-way Acquisition and Displacement**

This section describes the existing land use, zoning, and planned development in the project area, and evaluates the potential impacts resulting from acquisition of new easements for the project, including displacement of uses.

#### **6.2.1.1 Existing Conditions**

Land use in the project area includes residential (single-family homes), commercial, institutional and industrial, vacant land, washes, and railroad. Zoning in the Tucson portion of the project area is predominantly Urban Residential Zone (R-3) on the western portion and Light Industrial Zone (I-1) on the eastern extent. Zoning in the unincorporated Pima County portion of the project area is a mix of Trailer Homesite Zone (TH), General Business Zone (CB-2), Single Residence Zone (CR-3), Mixed-Dwelling Type Zone (CR-4), and General Industrial Zone (CI-2). The density of residential development in the area is consistent with a suburban setting, with a majority of the surrounding area unoccupied vacant land.



Littletown Road will be realigned as part of the proposed project in accordance with a development agreement with Diamond Ventures Inc. The realigned roadway will intersect with Valencia Road approximately 500 feet east of the current intersection location, and will extend approximately 1000 feet southwest of the new intersection to connect with the existing Littletown Road alignment in the vicinity of Craycroft Elementary School.

Roadway improvements at the Valencia Road Bridge and the UPRR and at the Valencia Road underpass at I-10 will require construction with UPRR and ADOT R/W, respectively.

#### 6.2.1.2 *Potential Impacts*

No right-of-way acquisition is anticipated as part of this project. Limited drainage easements, slope easements, and temporary construction easements may be required and will be identified further into the design process. No commercial or residential displacement would result from the project, and no adverse impacts associated with property acquisitions have been identified. The new alignment of Littletown Road will pass through land that is currently privately held by Diamond Ventures Inc. and Pima County will receive dedicated right-of-way as part of the development agreement with Diamond Ventures Inc. Expansion of the existing bridge at Valencia Road and UPRR; and widening of the underpass at Valencia Road and I-10 would require access to and construction within UPRR and ADOT R/W.

#### 6.2.1.3 *Mitigation Measures*

- Damage to any property amenities (driveways, mailboxes, landscaping, etc.) will either be compensated or repaired/replaced as part of project construction.
- A property acquisition program would be implemented in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), the Uniform Relocation Act Amendments of 1987 (Public Law 100-17), Title VI of the Civil Rights Act of 1964, and Arizona law.
- Private property owners would be compensated at fair market value for land to be acquired for project easements.

#### 6.2.1.4 *Permits*

- Arizona Department of Transportation Right-of-Way permits
- Union Pacific Railroad Right-of-Way permits

### 6.2.2 **Temporary and Permanent Access and Parking Impacts**

This section evaluates the potential impacts to access and parking resulting from the project, including access for cars, buses, pedestrians, and bicyclists, as well as compliance with ADA requirements.

*(See also Noise; Section 6.1.8, Construction Activities)*



#### 6.2.2.1 *Existing Conditions*

Valencia Road between Alvernon Way and Wilmot Road is currently a four-lane, curbed, divided road with traffic signals at the intersections of Swan Road, I-10 and South Wilmot Road. The existing roadway has four travel lanes (two eastbound, two westbound) and two bicycle lanes within the striped road shoulder (one eastbound, one westbound). I-10 spans Valencia Road with two eastbound and two westbound access ramps. Valencia Road spans the UPRR tracks with a three-span concrete bridge. There are six traffic signals within the project limits. The signals are located at Alvernon Way, Desert View High School, Benson Highway/Swan Road, the eastbound I-10 ramps, the westbound I-10 ramps and Wilmot Road. There is no street lighting along this segment of Valencia Road, except for safety lighting at the signalized intersections listed above. SunTran Route 26 operates weekday service every 1/2 hour along the extent of Valencia Road between Alvernon Way and Craycroft Road, with a bus stop pullout located near Alvernon Way. Valencia Road does not accommodate on-street parking.

#### 6.2.2.2 *Potential Impacts*

The project will improve vehicle and multimodal access by providing adding travel lanes, bicycle access along the paved road shoulder, sidewalk, and bus pullouts. Crosswalks and access ramps will be ADA compliant.

Roadway construction will temporarily affect bicycle, pedestrian and vehicle use of the roadway corridor. During construction, pedestrians, bicyclists, bus travelers and motorists may experience delays, restricted access, bus stop closures or relocation, and lane closures. No substantial adverse impacts on parking have been identified. No detours routes onto area streets are anticipated.

#### 6.2.2.3 *Mitigation Measures*

- A traffic control plan will be implemented by the contractor (see Section 7.1.8 Construction)
- Access to residences and businesses will be maintained throughout the project corridor during construction and provide signs to identify business access during construction.
- Adjacent schools, residences and businesses will be notified 14 days in advance of the construction start date and will be notified of any access changes.
- During construction, the contractor will designate pedestrian and bicyclist routes around the work zone where possible.

#### 6.2.2.4 *Permits*

No permits required.

### 6.2.3 *Neighborhood Disruption*

This section evaluates potential impacts to the neighborhood in which the project is located. Neighborhood disruption is largely related to construction, access, noise, and other topics that were



previously addressed in this report. Key impacts covered in those sections will be summarized in this section.

*(See also Sections 6.15, Noise; Section 6.1.8, Construction Activities; and Section 6.2.2, Temporary and Permanent Access and Parking Impacts.)*

#### **6.2.3.1 Existing Conditions**

Between Benson Highway/Swan Road and I-10 development is located to the south of Valencia Road and includes a single-family medium density residential development. Valencia Road crosses under the I-10 freeway. Commercial properties within the project area include the Diamond Shamrock Gas Station, Jack in the Box Restaurant, and Chevron-Quick Stop Gas Station.

From I-10 to Craycroft Road, development is relatively sparse and limited to the south of Valencia Road, with the exception of the mixed use Jack in the Box Restaurant/ Chevron gas station, immediately east of I-10. The land use then transitions to single-family medium density residential development, Billy Lane Lauffer Middle School, and Craycroft Elementary School, which are all located just outside the project area boundary. North of Valencia Road in this area is vacant land.

Between Craycroft and Wilmot Roads, the Pima Air and Space Museum is located directly south of Valencia Road and serves as a regional attraction to the area. DMAFB is located approximately 0.5 mile north of Valencia Road, between Craycroft and Wilmot Roads.

#### **6.2.3.2 Potential Impacts**

The following neighborhood resources and locations would be impacted by roadway construction resulting in temporary access disruptions, traffic delays, construction noise, and other construction activity related impacts.

- Schools – Desert View High School, Billy Lane Lauffer Middle School, and Craycroft Elementary School.
- Parks/Museums – Thomas Jay/Littletown Regional Park and Pima Air and Space Museum
- Commercial – Diamond Shamrock Gas Station, Jack in the Box Restaurant, and Chevron-Quick Stop Gas Station
- Residential – Desert Vista Terrace, Rancho Valencia, and Empire Vista.
- Public Transportation – SunTran Route 26
- Emergency Services – Rural/Metro Fire Department Station 71.

#### **6.2.3.3 Mitigation Measures**

- A traffic control plan will be implemented to minimize neighborhood disruptions resulting from temporary access disruptions and traffic delays (see Section 7.1.8 Construction).



- The contractor will comply with Pima County's Noise Ordinance (Pima County Code Chapter 9.30.070) to minimize neighborhood disruptions resulting from construction noise (see Section 6.1.8 Construction).
- The contractor shall comply with dust control measures identified in the SWPPP (see Section 7.1.2 Drainage and Clean Water Act) and Air Quality Activity Permit (see Section 7.1.4 Air Quality) to minimize neighborhood disruptions resulting from fugitive dust.

#### 6.2.3.4 *Permits*

No permits required

### 6.2.4 **Parks and Recreation Areas**

This section identifies parks and recreation areas adjacent to the project including parks, trails, and school facilities, and evaluates any resulting impacts on these facilities.

#### 6.2.4.1 *Existing Conditions*

The Julian Wash River Park is the primary multiple use trail that runs from northwest to the southeast (Figure 3). The River Park is unpaved through the Valencia Road project corridor and appears to experience heavy off-road vehicle traffic. The Julian Wash River Park also serves as an active pedestrian corridor towards the Thomas Jay Regional Park.

The Thomas Jay Regional Park has been recently updated with new playground equipment; ball fields; ball courts; ramadas with tables and grill; restrooms and an active community center. The Littletown Community and the neighboring Craycroft Elementary and Lauffer Middle Schools predominantly use the Park.

#### 6.2.4.2 *Potential Impacts*

Roadway construction associated with the widening of the cross drainage structure at the Julian Wash River Park will result in temporary closure during construction at that location. Access to the Thomas Jay Regional Park will be impacted during realignment of Littletown Road.

#### 6.2.4.3 *Mitigation Measures*

- PCDOT will coordinate with Pima County Natural Resources, Parks and Recreation Department to ensure that roadway improvements at the Julian Wash River Park are consistent with the Eastern Pima Trail System Master Plan.
- A traffic control plan will be implemented to minimize temporary access disruptions to Thomas Jay Regional Park (see Section 7.1.8 Construction).

#### 6.2.4.4 *Permits*

No permits required.



## 6.2.5 Consistency with Other Plans

This section evaluates the project's consistency with applicable Pima County plans including the Pima County Comprehensive General Plan Update (Pima County 2004), the Regional Transportation Plan, and the Pima County Roadway Design Manual.

### 6.2.5.1 *Consistency with the Regional Transportation Plan*

The purpose of the project is to implement improvements to Valencia Road consistent with the Regional Transportation Plan, which provides for widening Valencia Road between Alvernon Way and Wilmot Road to a six-lane divided arterial road. The RTA goals are consistent with this project. The project will also improve pedestrian mobility through the provision of a continuous sidewalk system and 6-foot multi-use lanes for bicycle access, multi-use paths (underneath the I-10 overpass); while meeting ADA requirements and completing drainage improvements.

### 6.2.5.2 *Consistency with the Pima County Roadway Design Manual and Environmentally Sensitive Roadway Guidelines*

This project is being designed and evaluated to be constant with the Pima County Roadway Design Manual (PCDOT 2010a) and in Chapter 4 of the Environmentally Sensitive Roadway Guidelines document, with the exception of the following items:

Design Speed/Posted Speed: Pima County will specify a design speed for each project, with the maximum design speed being 60 miles per hour (mph).

The design speed will remain the same as existing at 55 mph.

“Number of Through Lanes: Maximum of 4-lanes (2 per direction).”

- One additional lane will be added in each direction.

The project has also been designed and evaluated for consistency in accordance with Pima County's Community Participation and Mitigation Ordinance (Pima County Code § 10.560.010 et seq.), an Environmental Assessment and Mitigation Report (EAMR) is required for major transportation projects. This document was prepared to comply with ordinance requirements and to be consistent with EAMR guidance in the Pima County Roadway Design Manual (PCDOT 2010a).

### 6.2.5.3 *Consistency with the Pima County Comprehensive General Plan Update*

Policies from the Circulation Element of the Comprehensive General Plan Update are the most applicable to the project. An evaluation of the project's consistency with key policies is provided below.



A. Timing / Concurrency--Off-site transportation infrastructure shall be developed concurrently with land use development to the greatest extent possible, recognizing that much infrastructure development is needed to meet existing traffic demand.

- Discussed in Section “2.0 Project Propose and Need”

B. Environment--Roadway and transportation infrastructure shall be designed in an environmentally- or context-sensitive manner to the greatest extent feasible

- Discussed in Section “5.0 Environmental Screening”

C. Neighborhoods -- Existing residential areas shall be mitigated from vehicular traffic impacts to the greatest extent feasible when roadway improvements occur.

- Discussed in Section “6.2.3 Neighborhood Disruption”

D. Alternative Modes -- Multi-modal transportation infrastructure shall balance the needs of all users and provide viable alternatives to driving where appropriate and to the greatest extent feasible.

- Discussed in Section “4.0 Proposed Document”

E. Funding -- Alternative and equitable funding sources for transportation infrastructure shall be developed, in addition to current funding sources.

- Discussed in Section “1.1 Project Cost and Funding”

K. Bikeways:

1. All arterial and collector streets which are a part of the Regional Bikeway Plan shall be constructed according to the classification shown on the plan. All other major streets should have sufficient pavement width to accommodate bicycle travel.

- Discussed in Section “2.0 Project Propose and Need”

3. Where appropriate, bike systems within developments shall connect to the Regional Bikeway System. In addition to or in place of connecting to the Regional Bikeway System, a bicycle connection may be provided to adjacent developments. This is encouraged particularly when the adjacent development is adjacent to the Regional Bikeway

- Discussed in Section “2.0 Project Propose and Need”



## **7.0 AGENCY COORDINATION**

This section provides a description of agency coordination. Pima County has and will continue to coordinate with several agencies for this project. These efforts include:

- Pima County is coordinating with the RTA, which is providing funding and conducting business outreach for the project.
- Pima County is coordinating with private and municipal utilities regarding impacts to facilities within the project limits.
- Pima County is coordinating with the City of Tucson on portions of the project with the City of Tucson.
- Pima County is coordinating with DMAFB on future DMAFB projects at Wilmot Road and potential utility relocations.
- Pima County is coordinating with the Corps to obtain a Section 404 CWA permit for work in jurisdictional waters of the United States.
- Pima County is coordinating with ADEQ regarding AZPDES Construction General Permit compliance. AZPDES will require preparation of a SWPPP and filing of a NOI to comply with the Statewide Construction Permit with ADEQ.
- The project involves the removal of native plants and will comply with the Pima County Environmentally Sensitive Roadway Design Guidelines.
- USFWS will be contacted through a scoping letter requesting concerns pertaining to federal threatened and endangered species that may occur within the project area.
- PCDOT will coordinate with the Arizona Department of Agriculture on a NOI to remove or salvage of native plants.
- PCDOT is coordinating with ADOT on a right-of-way permit for work at I-10.
- PCDOT is coordinating with UPRR on a right-of-way permit for work at the UPRR Bridge.
- PCDOT is coordinating with Desert View High School on vehicle and bus access disruptions.
- In addition, Pima County is coordinating with the following Pima County departments: Cultural Resources and Historic Preservation; Environmental Quality; Natural Resources, Parks, and Recreation; Regional Flood Control District; and Regional Wastewater Reclamation.



## **8.0 PUBLIC PARTICIPATION**

### **8.1 PUBLIC PARTICIPATION PLAN**

A summary of the public participation process is included in this section. Pima County Public Relations have been spearheading Public Participation efforts. For more information, please refer to the document located on the project website at: <http://www.roadprojects.pima.gov/valenciawilmot/>

Public involvement activities have included informational meetings, selection and development of a Citizen Advisory Committee (CAC), ongoing contact with affected parties, media relations, development of informational materials, development and implementation of a project website, and the maintenance of an interdepartmental project file. The goals of the public involvement effort are to educate the public about the project's purpose and need, solicit the public's comments on the project, review public comments and adjust the roadway design concept to address the public concerns to the greatest extent possible and within the constraints of the project, including safety and cost. The following specific strategies have been used in order to involve residents, businesses, and other project stakeholders:

- Public Open Houses
- Community Advisory Committee
- Project website (<http://www.roadprojects.pima.gov/valenciawilmot/>)

### **8.2 COMMUNITY ADVISORY COMMITTEE**

#### **Community Advisory Committee Meetings**

The CAC was formed to provide PCDOT with input throughout the design process. Property owners and residents within a 0.5-mile radius of Valencia Road were invited to express interest in joining the CAC.

CAC meetings have been held on the following dates and for the purposes outlined below:

- February 22, 2011 – meeting focused on the description of the project scope and project limits, and an introduction to the project approach
- April 19, 2011 – meeting focused on the preliminary traffic results, geotechnical results and the results of the preliminary meetings with the Union Pacific Railroad. An update on environmental tasks and reports, and an introduction to the noise study was also provided

Each meeting involved CAC member input and meeting summaries were prepared to document that input. Additional CAC meetings will be held to discuss other key stages of the project design.



### **8.3 PUBLIC MEETINGS**

A total of two Public Open Houses are planned during the development of the project. A public hearing of the EAMR will be held before a meeting of the Pima County Board of Supervisors. An Open House will be scheduled prior to the Public Hearing.

### **8.4 COMMUNITY COMMENTS**

Key subjects of community comments arising from public involvement activities are outlined below, followed by Pima County's responses. The responses are based on feedback previously provided to the CAC or public and specific information on the project design.

- Noise barriers: Homeowners in the Desert Vista Terraces community stated they had concerns over additional traffic noise due to the roadway expansion. Noise analysis indicates that a noise wall is not reasonable at this location based on cost. Additional information can be located on the project website: <http://www.roadprojects.pima.gov/valenciawilmot/>
- Access. Desert View High School has expressed concern about bus access and pedestrian safety along the frontage road on Valencia Road. They requested that a bus loading and unloading concept be prepared along the schools frontage road on Valencia Road. Conceptual design was prepared and it was determined that this option was not feasible.



## 9.0 CONCLUSION AND RECOMMENDATIONS

This section summarizes the rationale and recommendations for the roadway improvements and summarizes how the proposed solutions correct the roadway safety issues.

This section provides a summary of proposed mitigation from Section 5.0.

**Table 4 Impact and Mitigation Summary**

Potential Impacts	Recommended Mitigation	Agency Coordination and Consultation	Parties Responsible for Implementation
Removal of native plants	Comply with Arizona Native Plant Law and Pima County Environmentally Sensitive Roadway Design Guidelines; mitigate removed or relocated protected native plants to match existing densities of adjacent, undisturbed areas. Saguaros will be mitigated at a 1:1 ratio.	Arizona Department of Agriculture	Pima County and Contractor
	File a Notice of Intent with the Arizona Department of Agriculture 60 days prior to the removal or salvage of applicable native plants.	Pima County Arizona Department of Agriculture	Pima County and Contractor
Impacts to waters of the United States	The County will operate using a 404 Nationwide Permit and comply with permit conditions and Clean Water Act Section 401 water quality requirements.	United States Army Corps of Engineers and Arizona Department of Environmental Quality	Pima County and Contractor
Regulated riparian habitat impacts	A riparian impact assessment will be prepared and, if needed, mitigation will be developed in conjunction with the Pima County Regional Flood Control District to compensate for impacts to regulated riparian habitat.	Pima County Regional Flood Control District	Pima County and Contractor
Stormwater impacts resulting from soil erosion and dust	The County and Contractor will file a separate Notice of Intent to use the Arizona Pollutant Discharge Elimination System Construction General Permit with the Arizona Department of Environmental Quality. Pima County Department of Transportation will prepare and contractor will implement a Stormwater Pollution Prevention Plan. Utilities are responsible for preparing a separate Stormwater Pollution Prevention Plan and getting Notice of Intent for their activities.	Pima County Arizona Department of Environmental Quality	Pima County and Contractor
Dust during construction	Implement standard specifications for dust suppression and comply with the Stormwater Pollution Prevention Plan (referenced above). Obtain an Air Quality Activity Permit from the Pima County Department of Environmental Quality.	Pima County Department of Environmental Quality	Pima County and Contractor
Traffic noise	Construct noise barriers are not recommended in the traffic noise report.	Pima County Department of Transportation	Pima County
Construction Noise	The contractor will comply with Pima County's Noise Ordinance (Pima County Code Chapter 9.30.070), which sets the construction start and stop times in order to avoid noise disruptions at night. If nighttime work is required, the contractor will need to obtain a permit from Pima County.	Pima County Department of Transportation	Pima County and Contractor



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Potential Impacts	Recommended Mitigation	Agency Coordination and Consultation	Parties Responsible for Implementation
Utility service interruptions	Customers will be notified 14 days in advance of any planned utility service interruptions.	Applicable utility	Utility or contractor
Exposure of unanticipated hazardous materials	If suspected hazardous materials are encountered during construction, work shall cease at the location and the Pima County Engineer shall be contacted to arrange for proper assessment, treatment, or disposal of those materials.	Pima County Department of Transportation	Contractor
Asbestos and lead emissions	As needed, an Asbestos Hazard Emergency Response Act Certified Building Inspector will complete asbestos and lead testing of the structures, and conduct lead/asbestos abatement.	Pima County Department of Transportation	Pima County and Contractor
Bridge demolition	Prior to any work associated with the widening of the bridge at the UPRR and the I-10 underpass a NESHAP permit will be obtained.	Pima County Department of Environmental Quality	Pima County and Contractor
The contractor shall maintain access to residential, schools, community center, parks business and industrial properties	The contractor shall maintain access to residential, schools, community center, parks business and industrial properties. The contractor shall provide signs to identify property access during construction.	Pima County Department of Transportation	Pima County and Contractor
Pedestrian and bicyclist routing during construction	During construction, the contractor shall designate a pedestrian and bicyclist route around the work zone when needed and when possible.	Pima County Department of Transportation	Pima County and Contractor
Disturbance of cultural resources	If any previously unidentified cultural resources are encountered during construction, construction work at that location shall be halted immediately and the finds shall be secured and protected. The Arizona State Museum and the Pima County Office of Cultural Resources and Historic Preservation shall be contacted immediately	Arizona State Museum and Pima County Office of Cultural Resources and Historic Preservation	Pima County and Contractor
Visual impact associated with road construction	Include landscaping plantings, structural treatments and public art where practicable to soften the appearance of the hardscape.	Pima County Department of Transportation	Pima County
Permanent acquisition and temporary use of property	The county will compensate property owners at fair market value for easements or temporary use of property as mitigation consistent with federal and state law.	Pima County Department of Real Property	Pima County



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