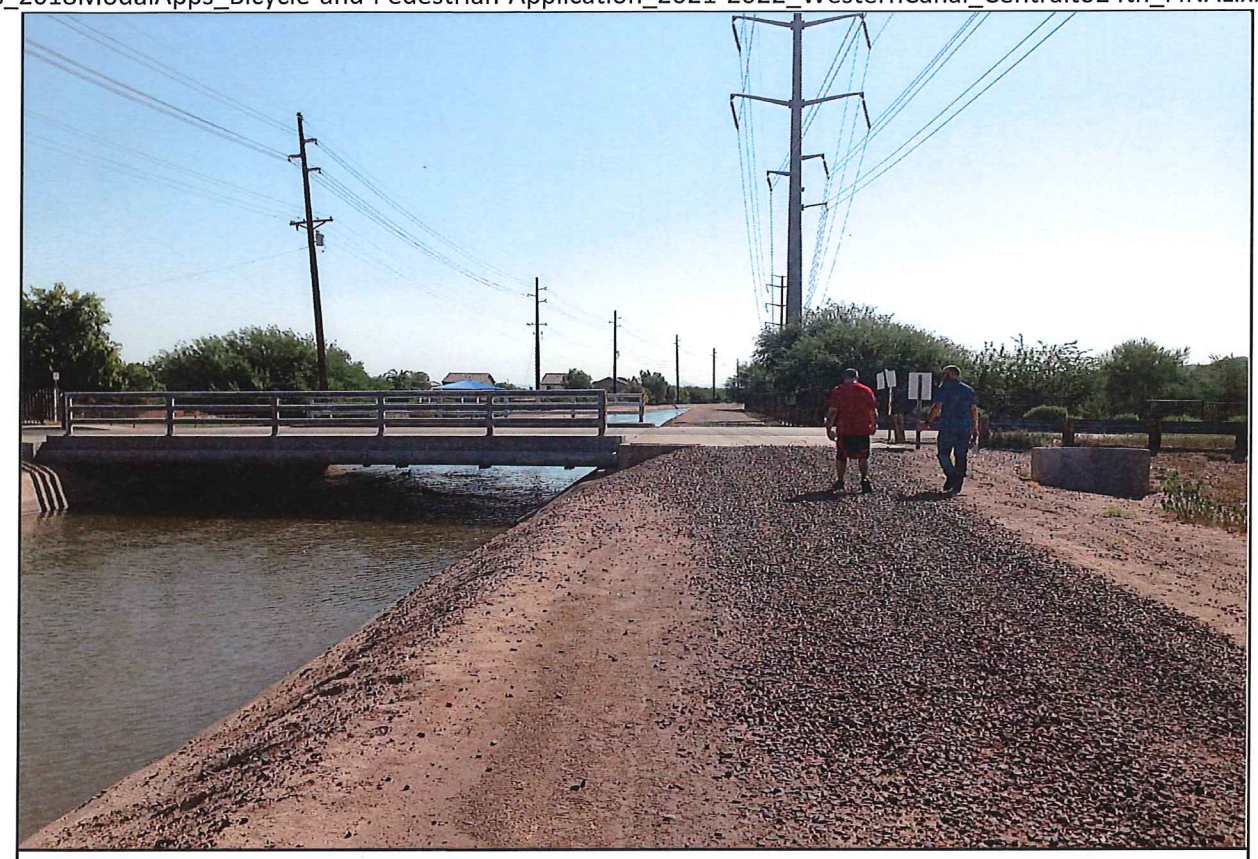

Transportation Alternatives / CMAQ Application for FY 2021 and FY 2022 Projects

Western Canal: Central Avenue to 24th Street Shared Use Path

City of Phoenix

APPLICATIONS ARE DUE AT MAG OFFICES BY
Monday, September 25, 2017 at 10:00 a.m.

(LATE AND/OR INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED)

Phoenix: Western Canal: Central to 24th Street

PART A - CONTACT AND PROJECT DESCRIPTION

Contact Information	
1. Name of Sponsoring Agency	Phoenix
2. Agency Contact Name	Eileen Yazzie
3. Phone Number of Agency Contact	602.534.5692
4. E-Mail Address of Agency Contact	eileen.yazzie@phoenix.gov
5. Mailing Address of Agency Contact	200 W. Washington, 5th Floor Phoenix, AZ 85003
Project Description	
6. Please provide the Project Title.	Western Canal: Central to 24th Street

7. Please provide a concise, specific description of the project (250 character limit):

The proposed multi-modal, shared use path on Western Canal between Central Avenue to 24th Street will provide a safe off-street bicycle and pedestrian corridor that adds to the area's robust transportation network that includes connections to a park and ride, local and Rapid bus routes, the existing bicycle and sidewalk network, and future light rail and bus rapid transit,. The project will also include treatments at intersecting roads that will provide for safe crossings. The Western Canal is also part of a regional off-street shared use path system that runs through Tempe, Mesa and Gilbert.

8. Please provide the project limits:

Western Canal: Central Avenue to 24th Street

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

This part of the form identifies the current characteristics and proposed improvements for each project.

The purpose of Part B is to provide sufficient information to evaluate the cost estimate for the project and to provide assurance that the project will be capable of meeting the ADOT administered federal design review and clearance process. This process requires environmental, ROW and utilities clearances and a bid ready design prior to FHWA approval to encumber federal funding for construction.

NOTE: For Part B, Questions 14-20, the specified distance will vary (and update automatically) depending on the project type identified in Part B, Question 1. Pedestrian-only projects will use a distance of 1/4 mile, while bicycle and Shared-Use projects will use a distance of 1/2 mile.

1. Please select which funding source(s) this project is applying for. Check all that apply.

X	Congestion Mitigation and Air Quality (CMAQ)
X	Transportation Alternatives (TA)

2. What type of project is this? (Check all that apply)

	Bicycle Lane (4' min. w/o curb/gutter)
	Bicycle Lane (5' min. with curb/gutter)
	Buffered Bike Lane
	Protected Bike Lane
X	Shared-use path (10' min.)
X	Sidewalk (5' min.)
	Planning Study
	Shoulder paving is within 4-miles of a PM-10 Monitor
X	Wide Sidewalk (8' min.)
	Detached Sidewalk with 4' min. buffer
X	Signalized Crossing

Other:

The shared use path will be betweeen 8 -10 feet wide, and is proposed to provide 2 connecting sidewalks to neighborhoods near 20th Street alignment.

3. What other major elements are included in this project? (Check all that apply)

	Bridge (overpass)
	Tunnel (underpass)
X	Signalized midblock crossing/HAWK
X	Countdown Pedestrian Signal

Other:

The project includes 3 HAWK signals: 7th Street, 16th Street, and 24th Street; and pathway lighting.

4. What amenities are included in this project?

	Number of Bike racks/lockers
	Number of Drinking Fountains
20	Number of Way-finding Signs
	Number of Trash receptacles
50	Number of Trees
	Number of new openings in street walls
	Number of Shade Structures
	Number of Seating/Rest Area(s)
	Number of bicycle/pedestrian counting devices
	Number of bicycle/pedestrian counting devices

Other:

5. Please describe the existing condition of the project site and any problem(s) being addressed.

Western Canal between Central Avenue and 24th Street has unimproved canal banks on both the north and south sides. The canal banks are compressed dirt. At all street intersections: Central Avenue, Jesse Owens Parkway, 7th Street, 10th Street, 16th Street, and 24th Street, there are no signalized, signed, or marked crossings for east/west travel along the Western Canal.

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

6. Please describe the work being done and improvements being made as part of this project.

The project proposes an 8 to 10 foot concrete pathway on either the north or south side of the Western Canal. The project will include pedestrian lighting, minimal landscaping, and two connecting pathways to neighborhoods between 16th street and 24th Street. Additionally, it will address ADA compliance issues at each intersecting streetd and related bridges. The crossing improvement at Central Avenue will be included in the South Central light rail project, the intersection at Jesse Owens Parkway will be done by the City of Phoenix separately, the 10th Street crossing is part of this application and will include additional upgrades for ADA compliance at the bridge, and signing and striping for a crosswalk, and three new HAWKS are proposed at 7th Street, 16th Street, and 24th Street.

7. What do you hope to achieve with this project?

Western Canal is identified as priority #33 in the City's adopted Bicycle Master Plan. The City is moving this project to a higher priority to be able to provide a comprehensive transportation network in the South Phoenix area. This project is proposed in conjunction's with the City's investment of the light rail on Central Avenue and bus rapid transit on Baseline Road. The project will provide a safe, off-street corridor, that connects to existing north/south pedestrian, transit, and bicycling options.

8. Safety improvements to be included for this project: (Check all that apply)

	Medians with pedestrian crossing islands
	Roadway Reconfiguration (Road Diet)
	Striping/re-striping to narrow vehicle lanes
	Color pavement or similar treatment
X	Lighting
	Landscape buffer between sidewalk and roadway
	Rectangular Rapid Flash Beacon (RRFB)
	Driver Feedback Sign

Other

This project proposes the following intersection treatments: 7th Street - HAWK, 10th Street - signing and striping for a crosswalk, 16th Street - HAWK, 24th Street - HAWK. The intersection of Western Canal and Central Avenue will have a traffic signal installed as part of the light rail project.

9. Does this project include a road safety education component?

	Yes
X	No

Please Explain:

10. How does this project or planning study address safety?

The project puts safety as a top priority proposing an off-street east west mulit-modal corridor that provides safe crossings at the intersecting streets. It will accomplish this by including 3 HAWKs, and pathway lighting. The pathway will also provide connections to sidewalks and bicycle lanes to access transit, commercial centers, housing, and the South Mountain Community College.

11. How does the project improve ADA facilities for persons with disabilities?

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

The pathway provides an immediate enhancement for all users by establishing a consistent shared-use pathway for all users. When connecting to the bridge structures and the instersecting streets, connecting sidewalks will be made ADA compliant and provide accessible push-buttons for all users.

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

12. Describe how this project will improve access from nearby neighborhoods and/or adjacent uses:

The Western Canal abuts both numerous single family and multi-family residential developments, commerical developments, an elementary school, and a community college. This pathway will provide connecting access from neighborhoods, some off which have existing pathways to the canal, and use existing north/south streets and a bridge at South Mountain Community College to access both sides. This will also provide a safe, off-street option for people walking and biking that need to directly connect to existing transit routes on Baseline Road, Central Avenue, 7th Street, 16th Street, and 24th Street. The project will also be a supportive asset for the future light rail at Central Avenue and bus rapid transit on Baseline Road.

13. How does the project create a sense of place?

The project will transform the Western Canal from a dirt pathway to a low stress shared use pathway that the neighborhood can embrace as a unique feature in the South Mountain Community. The project includes improvements to several intersections and crosswalks in the vicinity of the Western Canal that are intended to make it easier and safer for cyclists and pedestrians to cross arterial streets.

14. Connectivity: (Check all that apply)

[X] Project fills a gap in the system

Explain:

This project will provide a paved pathway for all users. Currently, the banks of both sides of the Western Canal are dirt. At all street intersections: Central Avenue, Jesse Owens Parkway, 7th Street, 10th Street, 16th Street, and 24th Street, there are no signalized, signed, or marked crossings for east/west travel along the Western Canal.

[X] Project connects to other local bikeways

List of connected bikeways:

This project will connect to streets that have existing bicycle lanes: Central Avenue, 7th Street, and 24th Street.

[ ] Multi Jurisdictional Project (please include letter of support (See Part C)

List of Participating Jurisdictions:

[14] Total length of bikeways directly connected by this project (in miles)

15. Number of transit stops this project will connect to. Do NOT count major transit facilities (park and rides, transit centers, etc.) in this question. List associated route(s) and their peak frequency, using Valley Metro as the source.

[32] Within 1/2 mile

16. Number of transit routes serviced by the transit stops in question 15 that this project will connect to. List associated route(s) and their peak frequency, using Valley Metro as the source.

[5] Within 1/2 mile

List routes and frequency:

Route 70 - 15 minutes, Route 77 - Baseline - 30 minutes, Central South Mountain East RAPID - 25 minutes, Route 16 - 15 minutes, Route 7 - 20 minutes, Route 0 - 10 minutes

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

17. Number of major transit facilities (park and rides, transit centers, etc.) served by this project:

1 Within 1/2 mile

List:

24th Street Park and Ride

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

18. Number of non-commercial activity centers (parks, libraries, senior centers, recreational centers, etc.) this project will benefit:

1 Within 1/2 mile

List:

South Mountain Community Library

19. Number of commercial and employment destinations (malls, retail centers, business parks, etc.) this project will benefit (for example, a mall is ONE destination; do NOT count every store in a mall as a separate destination):

1 Within 1/2 mile

List:

Post Office

20. Number of K-8 public schools this project will benefit:

5 Within 1/2 mile

List:

Summit Elementary, Amy L Houston Academy, C O Greenfield School, John F Kennedy School, T G Barr School, Our Lady of Sorrows Academy

21. Number of other schools (charter schools, high schools, colleges, and universities) this project will benefit:

3 Within 1/2 mile

List:

South Mountain Community College, AZ Agribusiness and Equine Center High School, 91st Psalm Christian School

22 Number of activity centers for air quality cost effectiveness (i.e. bank, church, hospital, health care facility, light rail station, park-and-ride lot, office park, post office, public library, shopping area, grocery store, university or junior college):

6 Within 1/4 miles

List:

3 Shopping Area/Grocery Store complexes, City of Phoenix Water - Customer Service Center, Our Lady of Sorrows Church, Riverside Missionary Baptist Church,

0 1/4 miles to 1/2 miles

List:

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

23. What are the demographics of the area served: MAG Demographic Mapping

3,541	People Per Square Mile
17	% Families in Poverty

Use the MPO/COG Demographic Mapping link above. Zoom in to your project area. On the right-hand side of the screen, under "Reporting," select "Custom Summary." Next, select "Corridor of Interest." Left-click to begin drawing. Draw a line through all census block groups adjacent to your project, left-clicking where needed to change the direction of the line. Double-click to finish drawing the line. The selected census block groups will become highlighted in blue. A pop-up box will appear with "Results for Selected Block Groups." Select the "Summary Report" tab, and use the data found there. You may export the results to Excel (click the printer icon at the top-right side of the pop-up window) for your records.

24. Please provide the following information on the facility on which the improvement will be located.

For a linear project, please enter the Facility Name, Starting Limit and Ending Limit:

Western Canal: Central Avenue to 24th Street. Nearest Arterial is Baseline Roadway

For a point project (e.g. an intersection or crossing), please enter a Facility Name and a Crossing Feature:

Federal Functional Classification of the Facility:

Minor Arterial

Link to MAG webpage for Federal Functional Classification Map

Type of Facility the Improvement will be located on:

Project is Off-Street

2.5	Length (in Miles)
45	Posted Speed Limit (MPH)
6	Number of Travel Lanes Before Project
6	Number of Travel Lanes After Project

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

25. Please provide an estimated traffic volume (ADT) on the nearest parallel arterial.

43,789 ADT Estimate

9/1/09 Date Counted

Name of road the traffic count was taken from

Baseline Road

Description of Methodology and Source used for the ADT Estimate

Existing daily traffic volumes were obtained from the counts collected in 2009 by the City of Phoenix. City traffic volume counts using pnuematic tubes and 24-hour weekday averages.

26. Federal law requires that all federally funded projects comply with a federal environmental clearance. For projects that have a minimum ground disturbance, environmental surveys are required and an environmental document will need to be prepared, which typically requires 12 months to complete.

Describe any known cultural, historical and biological resources, hazardous materials or other environmental issues that could affect work on the segment.

The canals in the metro Phoenix area usually have a cultural, biological, and historical component with them. The City of Phoenix just successfully completed the environmental process and received authorization for another federal funded canal project. Knowing that the City is actively working with Bureau of Land Management and Salt River Project (SRP) and the environmental assessment process for canal projects, the City is confident in it's ability to complete the NEPA process for this project in a timely fashion.

27. Current ROW: (Check all that apply)

	Agency owns all ROW Needed		Agency owns easement
X	ROW to be acquired		Agency has right-of-use (i.e. canal)
	Owners will donate ROW		Condemnation may be required

28. Please describe any right of way issues associated with the project.

The Bureau of Land Management (BLM) is the ultimate land owner of the Western Canal and its banks. Salt River Project (SRP) is the long term operator. The City of Phoenix will work with both agencies to obtain necessary rights-of-way easements and permits, and construct the project that meets the guidelines of bothe SRP and the City. Knowing that the City is actively working with SRP and BLM for different canal projects, the City is confident in completing the right of way process for this project in a timely fashion.

29. Please indicate whether all parcels for this project have been inventoried.

	Yes	X	No

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

30. Current Utilities in or abutting the alignment: (Check all that apply)

	No Utility in or abutting the alignment
X	Canals & Drainage
X	Power Lines & Cables
	Pipelines, Sewer and Water
	Private Structures

Other:

31. Please describe any utility conflicts that will need to be addressed.

The Western Canal has both water and power utilities in the corridor, and a few drainage ways that connect to the canal. The power/overhead utility lines meander from the north to south bank throughout the project. Working closely with SRP on the Grand Canal project, the City of Phoenix is well versed in location of the pathway, utility conflict review, needed access for utility work, guidelines for placement of vertical structures, and acceptable landscaping. The City is prepared to work closely with SRP and the neighborhood to find the right path forward.

32. Guidelines used to develop project: (Check all that apply)

X	AASHTO Guide for Bicycle Facilities
X	MAG Pedestrian Policies and Design Guidelines
	MAG Complete Streets Guide
X	MAG Designing Transit Accessible Communities
	MAG Valley Path Brand & Wayfinding Signage Guidelines
X	NACTO Urban Bikeway Design Guide
	RPTA Bus Stop Program and Standards

Other:
Phoenix Bicycle Master Plan
Phoenix Complete Street Ordinance

33. Jurisdiction has the following policies for improved bicycle/shared use faculties:

With new development and capital improvement projects, bike lanes on arterial streets are:	Not Addressed
With new development and capital improvement projects, bike lanes on collector streets are:	Not Addressed
With pavement restoration or regular pavement maintenance on arterial streets, bike lanes are:	Recommended
With new development or during development retrofits, shared-use paths are:	Recommended
Bicycle program implemented, including bike education, safety events, and bike maps	Yes
Complete Streets Policy	Yes

34. The project is: (Check one)

X Identified in General Plan, council adopted policy, or Capital Improvements Program (provide source)

List:
The Western Canal is identified in the adopted City of Phoenix Comprehensive Bicycle Master Plan

X Consistent with general policy/practices, but not formally identified (provide source)

Explain:
General Plan

Not addressed by jurisdiction's plans, policies, or practices

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

Explain:

Phoenix : Western Canal: Central to 24th Street

PART B-DETAILED PROJECT DESCRIPTION

35. How will the applicant measure the success of this project?

By evaluation of increased walking/biking activity and reviewing collision records.

36. Will bicycle/pedestrian count technology be incorporated? Will the devices broadcast automatic updates or require manual data collection? If manual, how will the agency identify staff resources to dedicate to collecting the data?

Working with SRP, this may be part of the project.

37. Will the project include an education/marketing component upon completion of construction, to publicize the project and increase citizen awareness of the project impact and benefits? If yes, please describe below.

The project area will be included in the Phoenix Bicycle and Pedestrian Safety Program and School Safety Program both administered in the Traffic Services Division of the Street Transportation Department. The Department will utilize it's Public Information Process and publize the project through it's media and neighborhood resources.

38. Will the project include wayfinding signage elements? If yes, please describe below.

Yes. Wayfinding signage will be implemented in certain areas along the corridor to show locations of major area activity centers and provide a unifying theme.

Part C - Required Attachments

Listed below are the required attachments for this project application. These attachments are intended to demonstrate the need of the project. They should clearly show the segment alignment and features that connect to other bicycle, pedestrian, and/or shared-use facilities, as well as washes, canals, railroad crossings, and other crossing features that may affect the project.

PLEASE INCLUDE EACH ATTACHMENT AS A SEPARATE .JPEG OR .PDF FILE ON YOUR APPLICATION CD.

Please insert ALL attachments at the end of your printed application, in the order they are listed below. See below for alternate submission requirements for GIS coverage files.

Required Attachments:

1) Please attach a map showing the general location of the proposed project in relation to the region, including a north arrow.

2) Please attach a map with streets labeled showing the detailed location(s) of the proposed project, including a north arrow.

3) Please attach up to four photos indicating existing conditions in the project area (two 4x6 photos per page).

4) Please attach a simple diagram of the current typical cross section of the segment, that shows the right of way limits, widths, sidewalks and shoulders (if any), and the lanes of travel.

OPTIONAL Attachments:

(OPTIONAL) Attach up to two photos showing what the completed project will look like, if available (these can be photoshop, renderings, etc.).

(OPTIONAL) Attach up to three (3) letters of support for the project.

(OPTIONAL) If the applicant will be providing a GIS coverage (shapefile or geodatabase), please see the tab labeled "GIS Transmittal Instructions"

PART D - TRANSPORTATION ALTERNATIVES COST ESTIMATE FORM

Please provide a detailed cost estimate for this project. The data entered in this cost estimate sheet will automatically transfer into the correct fields in Part E. Rows 1-9 will remain visible at the top of this page at all times.

Sponsoring Agency: | **Project Title:** | **Application Date:**

Part	Item Description			Unit	Quan.	Unit Price	Total	Federally Eligible	Federal Funds (94.3%)	Local Funds (5.7%)	Note(s)
A. Scoping (15% Preliminary Engineering Design)	1. SITE TOPOGRAPHIC SURVEY			LS	1		$0.00	No	$0.00	$0.00	
	2. PROJECT ASSESSMENT REPORT or DETAILED WORKPLAN			LS	1	$25,000.00	$25,000.00	No	$0.00	$25,000.00	
	3. ENVIRONMENTAL DETERMINATION (Infrastructure projects, including technical supporting documents)			LS	1	$3,500.00	$3,500.00	No	$0.00	$3,500.00	
	4. HAZMAT ASSESSMENT			LS	1		$0.00	No	$0.00	$0.00	
	Subtotal Scoping (Part A)						**$28,500.00**		**$0.00**	**$28,500.00**	
B. Final Preliminary Engineering Design - Stages II, III, IV And PS&E	1. Plans, Special Provisions or Bid Manual, Cost Estimate & Schedules.			LS	1	$553,000.00	$553,000.00	No	$0.00	$553,000.00	
	2. GEOTECHNICAL INVESTIGATION and Materials & Pavement Design Report			LS	1		$0.00	No	$0.00	$0.00	
	3. DRAINAGE REPORT			LS	1		$0.00	No	$0.00	$0.00	
	4. SWPPP			LS	1		$0.00	No	$0.00	$0.00	
	SRP Design Review Fee			LS	5	$10,000.00	$50,000.00				
	Design Admin Fee & Soft Costs for Materials and Utility			LS	1	$300,000.00	$300,000.00	No			
	Procurement			LS	1	$3,000.00	$3,000.00				
	Environemental Clearance			LS	1	$45,000.00	$45,000.00				
	Subtotal PE (Part B)						**$951,000.00**		**$0.00**	**$553,000.00**	
	Subtotal Preliminary Engineering (Part A + Part B)						**$979,500.00**		**$0.00**	**$581,500.00**	
C. Right-of-Way Acquisition	1. Right-of-Way Acquisition			LS	1		$0.00	No	$0.00	$0.00	
	Real Estate TCE Charge for Federal Aid projects				5	$10,800.00	$54,000.00				
	Subtotal Right-of-Way Acquisition (Part C)						**$54,000.00**		**$0.00**	**$0.00**	
D. Utility Relocation	1. Utility Adjustment and Inspection			LS	1	$221,500.00	$221,500.00	No	$0.00	$221,500.00	
	Subtotal Utility Relocation (Part D)						**$221,500.00**		**$0.00**	**$221,500.00**	
E. Construction Or Implementation [For Non-Infrastructure Projects (No Ground Disturbing Activities), Address Only Part 4]	1. Hardscape Construction	Installation Of SWPP Measures		LS	1		$19,200.00	Yes	$18,105.60	$1,094.40	
		Site Preparation		LS	1		$0.00	Yes	$0.00	$0.00	
		Demolition	Sawcut	LF	1		$0.00	Yes	$0.00	$0.00	
			Remove Structures and Obstructions	LS	1		$58,614.00	Yes	$55,273.00	$3,341.00	
			Remove Fencing	LF	1		$0.00	Yes	$0.00	$0.00	
			Remove Structural Concrete	CY	1		$0.00	Yes	$0.00	$0.00	
			Remove Asphaltic Concrete Pavement	CY	1		$0.00	Yes	$0.00	$0.00	
			REMOVE CONCRETE D/W, S/W, VG, SLAB, ETC.	SF	2,310	$6.50	$15,015.00	Yes	$14,159.15	$855.86	
		Hazmat Abatement		LS	1		$0.00	Yes	$0.00	$0.00	
		Retaining Wall - Reinforced Concrete Cantilevered		SF	1		$0.00	Yes	$0.00	$0.00	
		Earthwork	General Excavation	CY	1		$0.00	Yes	$0.00	$0.00	
			Drainage Excavation	CY	1		$0.00	Yes	$0.00	$0.00	
			Structural Excavation	CY	1		$0.00	Yes	$0.00	$0.00	
			Structural Backfill	CY	1		$0.00	Yes	$0.00	$0.00	
			Borrow (In Place)	CY	1		$0.00	Yes	$0.00	$0.00	
		Curb & Gutter		LF	1		$0.00	Yes	$0.00	$0.00	
		Aggregate Base		CY	1		$0.00	Yes	$0.00	$0.00	
		Pathway Or Sidewalk Materials	Concrete	SF	1		$0.00	Yes	$0.00	$0.00	
			Colored Concrete	SF	1		$0.00	Yes	$0.00	$0.00	
			Stamped Color Concrete	SF	1		$0.00	Yes	$0.00	$0.00	
			Precast Concrete Pavers	SF	1		$0.00	Yes	$0.00	$0.00	
			Asphaltic Concrete	Ton	1		$0.00	Yes	$0.00	$0.00	
			Polymer or Resin Stabilized Surface	SF	1		$0.00	Yes	$0.00	$0.00	
			Concrete Pavers	SF	1		$0.00	Yes	$0.00	$0.00	
			Stamped Asphalt	SF	1		$0.00	Yes	$0.00	$0.00	

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Sponsoring Agency:		Project Title:		Application Date:	

Part	Item Description			Unit	Quan.	Unit Price	Total	Federally Eligible	Federal Funds (94.3%)	Local Funds (5.7%)	Note(s)
			Stamped Concrete	SF	1		$0.00	Yes	$0.00	$0.00	
			Concrete	SF	1		$0.00	Yes	$0.00	$0.00	
		Crosswalk Enhancement	Integral Color Concrete	SF	1		$0.00	Yes	$0.00	$0.00	
		Pedestrian ADA Ramp		SF	1		$0.00	Yes	$0.00	$0.00	

PART D - TRANSPORTATION ALTERNATIVES COST ESTIMATE FORM

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Sponsoring Agency:		Project Title:		Application Date:	

Part	Item Description			Unit	Quan.	Unit Price	Total	Federally Eligible	Federal Funds (94.3%)	Local Funds (5.7%)	Note(s)
		Culvert Extensions		LF	1		$0.00	Yes	$0.00	$0.00	
		Pedestrian Lighting Including Conduit And Trenching		Each	1		$0.00	Yes	$0.00	$0.00	
		Handrail	Standard	LF	1		$0.00	Yes	$0.00	$0.00	
			Decorative	LF	1		$0.00	Yes	$0.00	$0.00	
		Subtotal Hardscape Construction					$92,829.00		$87,537.75	$5,291.25	
E. Construction Or Implementation [For Non-Infrastructure Projects (No Ground Disturbing Activities), Address Only Part 4]	2. Landscaping & Irrigation Items	Requirements		Each	1		$0.00	Yes	$0.00	$0.00	
		Trees (15 Gallon Size)		Each	1		$0.00	Yes	$0.00	$0.00	
		Trees (5 Gallon Size)		Each	500	$20.00	$10,000.00	Yes	$9,430.00	$570.00	
		Shrubs (5 Gallon Size)		Each	1		$0.00	Yes	$0.00	$0.00	
		Shrubs (1 Gallon Size)		Each	1		$0.00	Yes	$0.00	$0.00	
		BOX TREE 24"		Each	50	$250.00	$12,500.00	Yes			
		Cactus (5 Gallon Size)		Each	1		$0.00	Yes	$0.00	$0.00	
		Mulch	Decomposed Granite	CY	1		$0	Yes	$0	$0	
			Organic	CY	1		$0	Yes	$0	$0	
		Topsoil		CY	1		$0	Yes	$0	$0	
		Seeding		Acre	1		$0	Yes	$0	$0	
		Turf Sod		SY	1		$0	Yes	$0	$0	
		Boulders		Each	1		$0	Yes	$0	$0	
		LANDSCAPING (INCL PLANTS, IRRIG, GRANITE, ETC.		SF	7,500	$ 5.00	$37,500	Yes			
		LANDSCAPE CONTROLLER AND REMOTE CONTROL		Each	8	$ 8,000.00	$64,000	Yes			
		Irrigation System	Drip	SF	1		$0	Yes	$0	$0	
			Turf	SF	1		$0	Yes	$0	$0	
		Sleeving For Irrigation System	Directional Bore	LF	1		$0	Yes	$0	$0	
			Cut and Patch	LF	1		$0	Yes	$0	$0	
		Landscape Header Curb		LF	1		$0	Yes	$0	$0	
		Landscape Establishment		LS	1		$0	Yes	$0	$0	
		Subtotal Landscaping & Irrigation Items					$124,000		$9,430	$570	
	3. Site Furnishings	Benches		Each	1		$0	Yes	$0	$0	
		Seatwalls		LF	1		$0	Yes	$0	$0	
		Bike Racks		Each	1		$0	Yes	$0	$0	
		Trash Receptacles		Each	1		$0	Yes	$0	$0	
		Drinking Fountains		Each	1		$0	Yes	$0	$0	
		Signage (Standard Traffic Control)		Each	1		$0	Yes	$0	$0	
		Signage (Wayfinding)		Each	1		$0	Yes	$0	$0	
		Tree Grates		Each	1		$0	Yes	$0	$0	
		Subtotal Site Furnishings					$0		$0	$0	
	4. Other Construction Items. Also, Itemized Line	Bicycle and Pedestrian Counter		Each	1		$0	Yes	$0	$0	
		SUBGRADE PREPARATION		SY	14,550	$ 16.00	$232,796	Yes	$219,527	$13,269	
		EARTHWORK		CY	3,595	$ 18.00	$64,705	Yes	$61,017	$3,688	
		AC PAVEMENT (SURFACE COURSE)		Ton	5,156.00	$ 122.00	$629,032	Yes	$593,177	$35,855	
		AC PAVEMENT (BASE COURSE)		Ton	5,156.00	$ 122.00	$629,032	Yes	$593,177	$35,855	
		SURFACE TREATMENT (MICRO/SLURRY)		SY	5,156.00	$ 7.00	$36,092	Yes	$34,035	$2,057	
		TACK COAT		Ton	12.80	$ 1,250.00	$16,000	Yes	$15,088	$912	
		AGGREGATE BASE COURSE		Ton	2,492.00	$ 17.00	$42,364	Yes	$39,949	$2,415	
		ARCHEOLOGY TRENCHING		Each	2	$ 3,100.00	$6,200	Yes			
		BRIDGE, GUARDRAIL/RAMPS/VEHICULAR IMPACT SUPPORT		Each	1	$225,000	$225,000	Yes			
		CONCRETE DRIVEWAY ENTRANCE		SF	2,500	$15	$37,500	Yes	$35,363	$2,138	
		FOUNDATION FOR SIGN POST		Each	20	$100	$2,000	Yes			

PART D - TRANSPORTATION ALTERNATIVES COST ESTIMATE FORM

Please provide a detailed cost estimate for this project. The data entered in this cost estimate sheet will automatically transfer into the correct fields in Part E. Rows 1-9 will remain visible at the top of this page at all times.

Sponsoring Agency:		Project Title:		Application Date:	

Part	Item Description			Unit	Quan.	Unit Price	Total	Federally Eligible	Federal Funds (94.3%)	Local Funds (5.7%)	Note(s)
	Items For Non-Infrastructure Projects. (Insert Additional Rows If Necessary)	CONCRETE MEDIAN NOSE		SF	100	$15	$1,500				
		HAWK SIGNAL		Each	3	$125,000	$375,000	Yes			
		PAVEMENT MARKING - WHITE		Each	4,340	$2	$8,680	Yes			

Phoenix: Western Canal: 24th Street to 48th Street

PART D - TRANSPORTATION ALTERNATIVES COST ESTIMATE FORM

Please provide a detailed cost estimate for this project. The data entered in this cost estimate sheet will automatically transfer into the correct fields in Part E. Rows 1-9 will remain visible at the top of this page at all times.

Sponsoring Agency: Phoenix **Project Title:** Western Canal: 24th St. to 48th St. **Application Date:** 9/22/2017

Part	Item Description		Unit	Quan.	Unit Price	Total	Federally Eligible	Federal Funds (94.3%)	Local Funds (5.7%)	Note(s)
	4. Other Construction Items. Also, Itemized Line Items For Non-Infrastructure Projects. (Insert Additional Rows If Necessary)	EARTHWORK	CY	3,595	$ 18.00	$64,705	Yes	$61,017	$3,688	
		AC PAVEMENT (SURFACE COURSE)	Ton	5,156.00	$ 122.00	$629,032	Yes	$593,177	$35,855	
		AC PAVEMENT (BASE COURSE)	Ton	5,156.00	$ 122.00	$629,032	Yes	$593,177	$35,855	
		SURFACE TREATMENT (MICRO/SLURRY)	SY	5,156.00	$ 7.00	$36,092	Yes	$34,035	$2,057	
		TACK COAT	Ton	12.80	$ 1,250.00	$16,000	Yes	$15,088	$912	
		AGGREGATE BASE COURSE	Ton	2,492.00	$ 17.00	$42,364	Yes	$39,949	$2,415	
		ARCHEOLOGY TRENCHING	Each	2	$ 3,100.00	$6,200	Yes			
		BRIDGE, GUARDRAIL/RAMPS/VEHICULAR IMPACT SUPPORT	Each	1	$225,000	$225,000	Yes			
		CONCRETE DRIVEWAY ENTRANCE	SF	2,500	$15	$37,500	Yes	$35,363	$2,138	
		FOUNDATION FOR SIGN POST	Each	20	$100	$2,000	Yes			
		CONCRETE MEDIAN NOSE	SF	100	$15	$1,500				
		HAWK SIGNAL	Each	3	$125,000	$375,000	Yes			
		PAVEMENT MARKING - WHITE	Each	4,340	$2	$8,680	Yes			
		SIDEWALK 6FT MAJOR STREET (<1000SF $12)	SF	810	$9	$7,274	Yes			
		SINGLE CURB	LF	130	$22	$2,860				
		SIGN POST (P-1)(PERFORATED)(SINGLE)	Each	20	$200	$4,000	Yes			
		STREETLIGHT - REMOVE/REPLACE WITH LED	Each	10	$5,000	$50,000	Yes			
		STREETLIGHT TRENCHING/POWER/J-BOX	LF	2,500	$40	$100,000	Yes			
		SURVEY	Each	3	$3,000	$9,000	Yes	$8,487	$513	
		Environmental Monitoring	Each	1	$250,000	$250,000				
		PIO	Each	1	$25,000	$25,000				
		Testing & Materials	Each	1	$38,000	$38,000				
		Sutotal Other Construction				$2,792,035		$1,599,820	$96,702	
	5. Mobilization And Administration Costs	Contractor Mobilization	LS	1	$54,830	$54,830	No	$0	$54,830	
		Traffic Control	LS	1	$54,830	$54,830	Yes	$51,705	$3,125	
		Procurement	LS	1	$8,000	$8,000	Yes	$7,544	$456	
		Construction Contingencies	LS	1	$548,300	$548,300	Yes	$517,047	$31,253	
		Construction Administration	LS	1	$700,000	$700,000	Yes	$660,100	$39,900	
		Subtotal Mobilization & Administration Costs				$1,365,960		$1,236,396	$129,564	
	Subtotal Construction Or Implementation Cost (Part E)					**$4,374,824**		**$2,933,183**	**$232,127**	
F. Total Scoping, PE, Right-of-Way Acquisition, Utility Relocation, and Construction (Part A, B, C, D, and E)						**$5,629,824**		**$2,933,183**	**$1,035,127**	
G. Adot Fee Review Fee - $10,000 for Certified Accepted agencies, otherwise $30,0000						**$10,000**	No	$0	$10,000	
H. Total Project Cost Including ADOT Fees (Part F + Part G)						**$5,639,824**		**$2,933,183**	**$1,045,127**	

Phoenix: Western Canal: Central to 24th Street

PART E - TOTAL PROJECT SCHEDULE AND BUDGET

Please verify that the cost and programming estimates for the total project are correct below. The numeric values on this sheet (in GREY) are automatically populated from the cost estimate sheet (Part D) and cannot be modified. If there are any errors in the numeric values on this sheet, please verify and correct the numbers you have entered into the cost estimate sheet (Part D). You MUST fill in the GREEN portions of Part E manually.

The design for the project should be programmed at least 1 year, preferably 2 years, prior to construction. Utilities and right of way should be programmed at least 1 year prior to construction, but may occur in the same year as construction depending on utility and right of way concerns that are identified in questions 24-27 in Part B.

Cost Estimate for the Project Including ALL Segments	Cost	Additional Notes (if needed)
1. ADOT Fee	$10,000	
2. Design	$979,500	
3. Right of way	$54,000	
4. Utilities	$221,500	
5. Construction	$4,374,824	20% contingency included
6. Contingency		
7. Total Cost	$5,639,824	

8. Will the agency maintain the improvement after it is completed? Yes

9. Expected Annual Maintenance Cost $ 7,500.00

10. Identify Source of Maintenance Funds Street Transportation Dept. operating expenses

Requested MAG Programming	Year	Short Work Description (E.g. Construct Multiuse Path)	Local Funding Source	Local Cost	Federal Cost	Total Cost	Local Share
11. Design (Optional)	2019	Funding is from SRP Aesthic funds and Capital Construction funds	Other	$989,500	Not Available	$989,500	100.0%
12. Right of way (Optional)	2020	Funding is from Capital Construction funds	Other	$54,000	Not Available	$54,000	100.0%
13. Utilities (Optional)	2020	Funding is from Capital Construction funds	Other	$0	Not Available	$0	
14. Other (Optional)				$0	Not Available	$0	
15. Construction	2022	Construct shared use path. This includes Utility relocation costs. Funding is from SRP Aesthic funds and Capital Construction funds	Other	$1,635,324	$3,000,000	$4,635,324	35.3%
16. Total Costs				$2,678,824	$3,000,000	$5,678,824	47.2%

PART F - SIGNATURE AND CHECKLIST

Checklist

This checklist is included to facilitate applicant review and verification that all required fields in the form have been completed.

COVER SHEET

Cover Sheet is completely filled out

PART A - Contacts and Project Description Fields

Contact Information, fields 1 – 5 are complete

Project Description, fields 6 - 8 are complete

PART B - Project Description

Fields 1 - 14 (Project Description) are complete

Fields 15 - 17 (Transit) are complete

Fields 18 – 22 (Attractors and Demographics) are complete

Fields 23 – 30 (Traffic, Environmental, ROW, and Utilities) are complete

Fields 31 – 33 (Guidelines, Policies, and Plans) are complete

Fields 34 – 37 (Maintenance, Performance Measurement, and Wayfinding) are complete

PART C - Required Attachments

Field 1 - Map showing the general location of the proposed project in relation to the region, including a north arrow provided in the printed application and th PDF application.

Field 2 - Map with streets labeled showing the detailed location(s) of the proposed project, including a north arrow provided in the printed application and the PDF application.

Field 3 - Up to four (4) photos of existing conditions are provided in the printed application and the PDF application (two 4x6 per page).

Field 4 -Simple diagram of the current typical cross section of the segment, that shows the right of way limits, widths, sidewalks and shoulders (if any), and the lanes of travel in the printed application and the PDF application.

(OPTIONAL)- Up to two (2) photos/renderings of the completed project are provided in the printed application and the PDF application.

(OPTIONAL) - Up to three (3) letters of support for the project are provided in the printed application and the PDF application.

(OPTIONAL) - GIS coverage (shapefile or geodatabase) is provided on the CD with the application.

PART D - Cost Estimate Worksheet

Sponsoring Agency, Project Title, and Application Date are complete

Part A - Scoping is complete

Part B - Final Preliminary Engineering Design is complete

Part C - Right-of-Way Acquisition is complete

Part D - Utility Relocation is complete

Part E - Construction or Implementation is complete

Parts F, G, and H - Costs are complete and accurate

PART E - Total Project Schedule and Budget Including All Segment Fields

Fields 1 – 7 are complete and costs are accurate

Field 8 - 10 are complete
Fields 11 – 15 Years are complete
Fields 11 – 15 Local Funding Sources are complete
Fields 11 – 15 Local Costs are complete and accurate

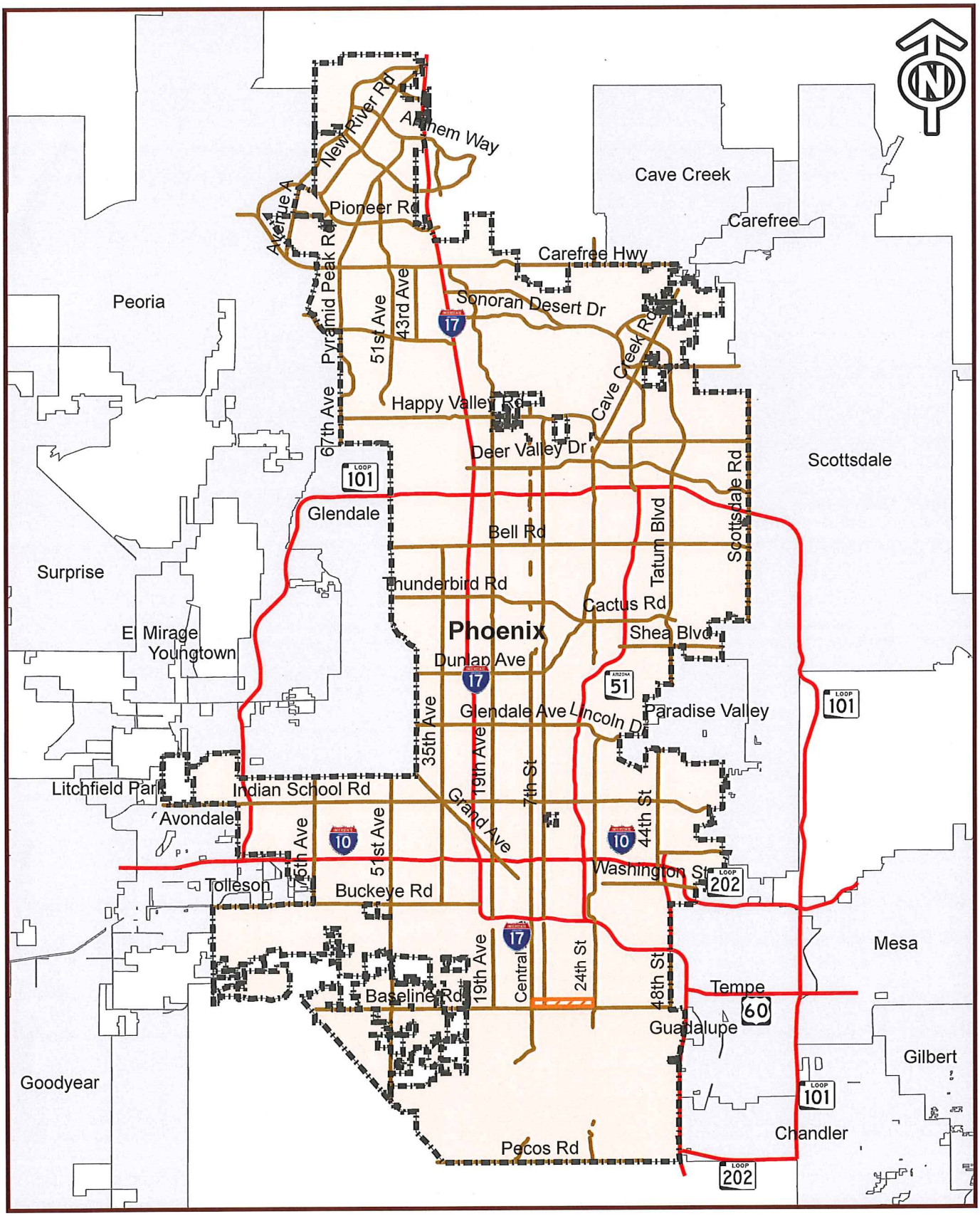
Field 11 - 15 Federal Costs are complete and accurate
Field 16 Total Costs are complete and accurate
PART F - Signature and Checklist
Entire checklist is completed.
Form is signed by MAG member agency's manager/administrator or designated representative.
Name, title and date fields under the signature are completed.

SIGNATURE(S):

As the MAG member agency's *manager/administrator or designated representative*, I certify that this application is accurate and complete and that the p included in the sponsoring MAG member agency's local CIP/TIP if the project is selected for federal funding.

Signature:	9/22/17
Name:	~~Ray Dovalina~~, P.E. Kini Knudson
Title:	Assistant Street Transportation Director / City Engineer
Date:	9/21/2017

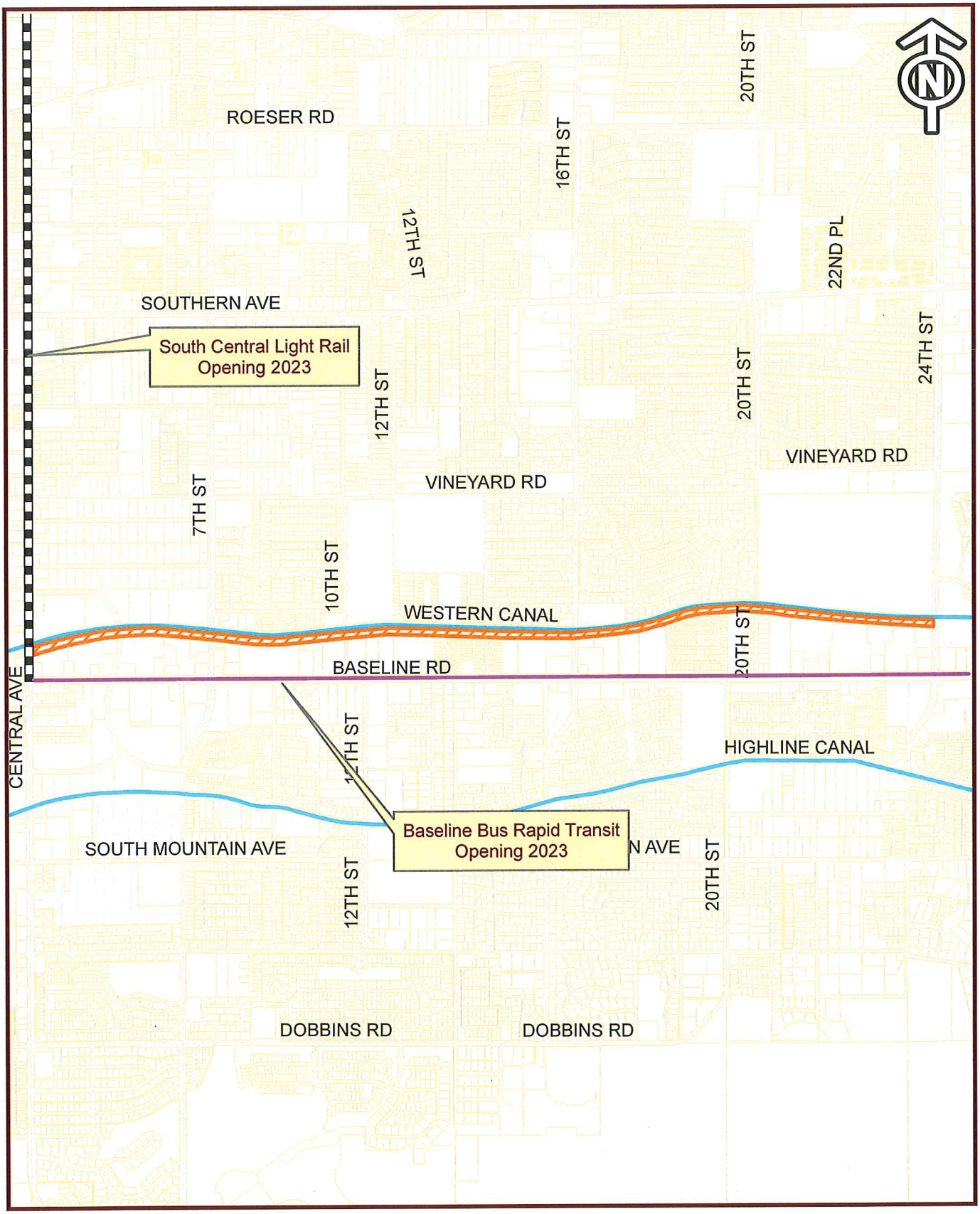
Vicinity Map
Western Canal: Central Ave to 24th St
City of Phoenix



City Limits | Project Location | Freeways | Major Streets

Date: 9/13/2017

Project Location Map
Western Canal: Central Ave to 24th St
City of Phoenix



Future Light Rail

Future Bus Rapid Transit

Project Location

Canals

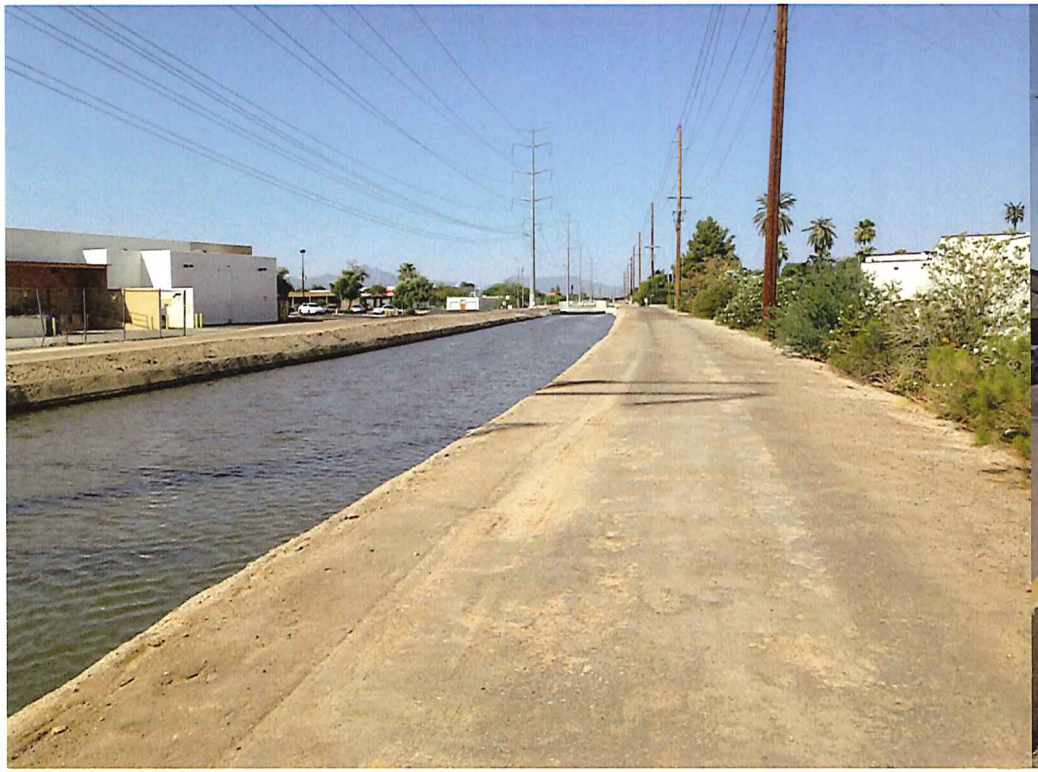
Date: 9/13/2017

Western Canal: Central Avenue to 24th Street

1) On south bank of Western Canal, west of 24th Street looking west; no pathway.

2) On south bank of Western Canal, west of 24th Street looking east; missing connection to neighborhood

Western Canal: Central Avenue to 24th Street

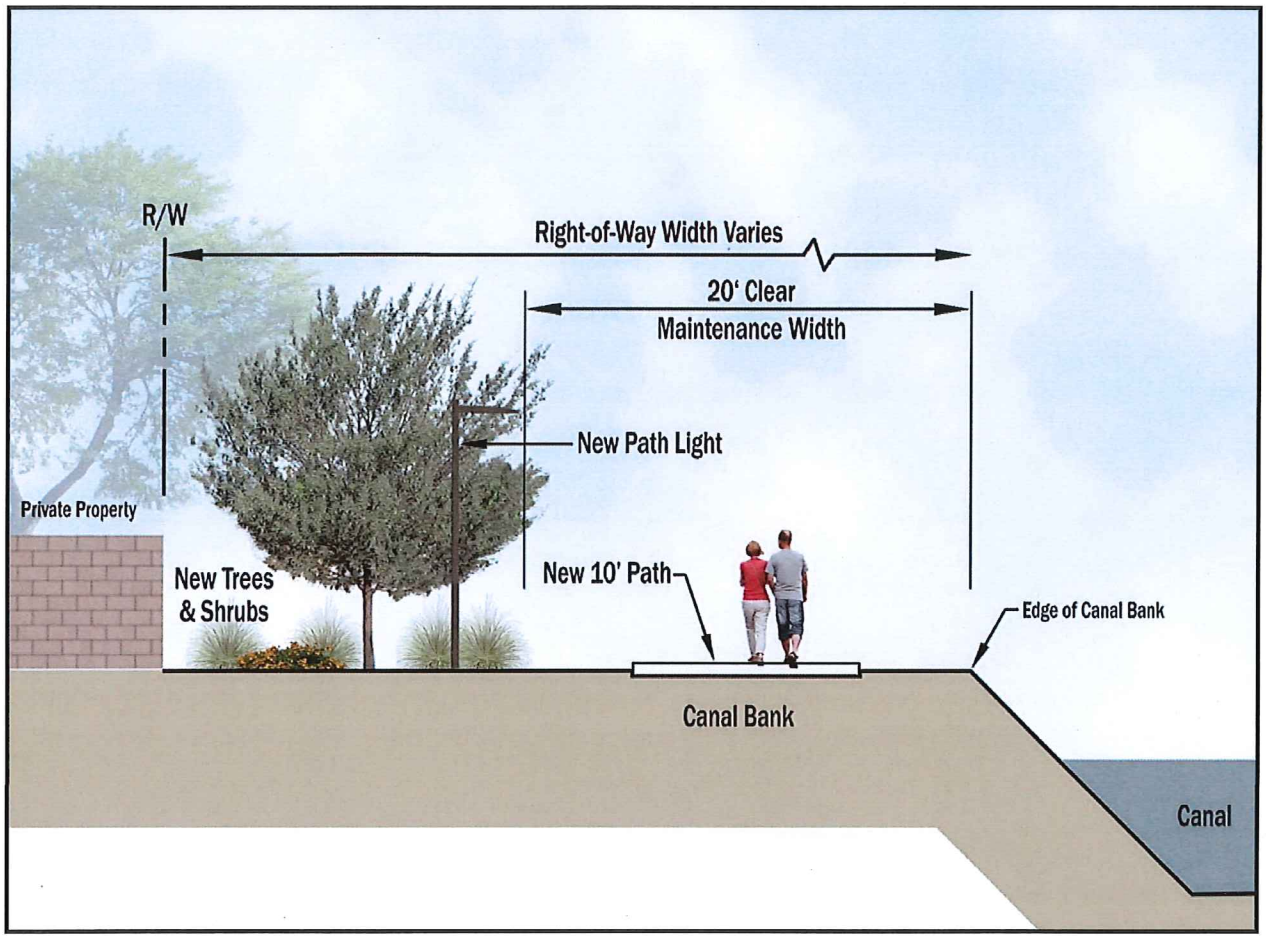


3) On north bank of Western Canal, between Jesse Owens Parkway and Central Avenue looking west; no pathway.

4) On south bank of Western Canal approaching 7th Street from the west; no safe crossing.

Western Canal: Central to 24th Street

Cross Section



Note: Landscaping and lighting is dependent on the Salt River Project (SRP) required 20-foot clearance for maintenance operations. SRP's preference for the location of the pathway is on the north side; yet maybe open to the pathway on the south side depending on variables. Opportunities for the pathway, landscaping, and lighting will be explored on both sides of the Western Canal.