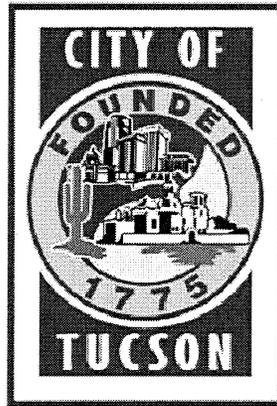


**Final Project Assessment
for
Columbus Corridor Pedestrian Path
From
22nd Street to Timrod Street**

Transportation Enhancement Project
TRACS Number: 0000 PM TUC SL637 01C
Federal ID Number: TEA TUC 0(218) A

Sponsored by:



Prepared by:
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Tucson, Arizona 85712

Submitted to
Arizona Department of Transportation

September 2010

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1.0 INTRODUCTION

Project Number: TEA TUC 0(218) A
 TRACS Number: 0000 PM TUC SL637 01C
 TIP ID #: 105.08
 Project: **Columbus Corridor Pedestrian Path**
 ADOT District: Tucson
 ADOT Contact: Natalie Clark
 Local Contact: Catesby Suter, phone 520.837.6624
Catesby.Suter@Tucsonaz.gov

This Project Assessment Document has been prepared to present pertinent information on the Columbus Corridor Pedestrian Path project located in the City of Tucson, Pima County Arizona. This project involves installing a 6 foot wide pedestrian path along the east side of Columbus Boulevard, just north of 22nd Street to the south side of Timrod Street. No new right-of-way will be required for this project.

This project is included in the 2010 – 2014 Pima Association of Governments Regional Transportation Improvement Program (TIP) as TIP #105.08, Columbus Corridor Pedestrian Path. It will be designed by a consultant under the City's competitively awarded on-call design contract.

Funding for this project will be provided through a combination of federal Transportation Enhancement (TE) Funds and Regional Transportation Authority (RTA) 100% local funds.

The estimated project costs are shown below:

Project Phase	Totals	TE	Local Funds (34%)
Estimated Design Costs:			
Phase I Public Outreach/Planning	\$ 2,900		\$ 2,900
Phase II Project Assessment	\$ 14,800		\$ 14,800
Phase III Environmental	\$ 18,100		\$ 18,100
Phase IV Cultural	\$ 5,000		\$ 5,000
Phase V Final PS&E	\$ 34,300	\$ 24,791	\$ 9,509
ADOT Processing Fee	\$ 3,000		\$ 3,000
Estimated Construction Costs:			
Construction	\$ 175,700	\$ 165,270	\$ 10,430
Administration (15%)	\$ 35,100		\$ 35,100
Total Project Costs	\$ 288,900	\$ 190,061	\$ 98,839

The project schedule calls for the project to be designed from July 2010 to March 2011. The project is tentatively scheduled to go to bid in March 2011 with construction anticipated to begin in May 2011 and completion expected before the end of August 2011. The City of Tucson will perform construction administration and has certification acceptance. A detailed project schedule is included in Section 10.0.

2.0 BACKGROUND DATA

2.1 Purpose and Justification

This project will enhance pedestrian access and passage to Lineweaver Elementary School for residents in the vicinity of Columbus Boulevard. It will provide improved pedestrian access to bus stops, schools, churches and businesses along 22nd Street to the south of the project.

Presently, there are no sidewalks or defined pedestrian paths through this project area, which makes ADA accessibility difficult in good weather and nearly impossible during inclement weather. Students and pedestrians normally walk on the loose dirt or on the paved bike lane next to the vehicular travel lane. Lack of ADA accessibility limits uses by wheelchairs and strollers.

The new path will begin on the east side of Columbus Boulevard across from Camino de Palmas and continue along the east edge of the Columbus right-of-way to the south side of Timrod Street. In between, a majority of the driveways are gravel, with only two being paved with asphalt abutting the roadway edge. Three side streets, Eastland, Ware, and Montecito, intersect Columbus on the east side. Concrete headers provide pavement edge definition at Eastland Street, with existing sidewalks on either side of the street continuing east into the neighborhood. The other two side streets are strip paved, without sidewalk or headers.

2.2 Original and Subsequent Construction Projects

This project was included under the Pima Association of Governments Regional Transportation Improvement Program as 105.08. The TIP includes other similar projects that are shown in the table below:

TIP ID #	Project Name	Project Description	Status
32.06	Campbell Main Street	Provide streetscaping and pedestrian amenities	In early design
103.08	Five Points Transportation Enhancement Project	Fill in gaps in pedestrian network	Drafting Project Assessment Document
105.01	South 4 th Avenue Streetscape Enhancement	Install ADA access ramps, repair sidewalks	Construction
18.01	Stone Avenue Corridor: 6 th St. to Speedway	Streetscape, bike and pedestrian improvements	Complete

2.3 Project Area

This project is located on Columbus Boulevard from 22nd Street to Timrod Street in the City of Tucson, Pima County Arizona. Columbus Boulevard is classified as a collector street and runs along the Section line of Section 15, Township 14 South, Range 14 east. The project area is located just south of the Arroyo Chico Wash. Within the project area there are five-foot wide paved shoulders on each side of the roadway with existing “Bike Route” signs. The roadway width is 34 feet and the project length is approximately 3,000 feet. There is one school crossing on Columbus for Lineweaver Elementary School, striped with signage. There is an existing four-foot wide concrete sidewalk extending for about 230 feet from 22nd Street to an asphalt driveway across from Camino de Palmas. This sidewalk will be retained. There are no other sidewalks or curbs in the project area.

The right-of-way width is generally 60 feet, and the right-of-way required by the project is owned by the City of Tucson. No additional right-of-way is needed to accomplish this project.

Stormwater is conveyed via sheet flow across the roadway. The Arroyo Chico is located to the north of the project and the Paseo Grande Wash crosses Columbus Boulevard as two small dip crossings. A preliminary Jurisdictional Delineation will be performed to determine if the Paseo Grande Wash is a jurisdictional water. There are no bridges, box culverts or other structures within the Columbus Boulevard Project limits. This project will not result in impacts on any major structures, underpasses, stormdrains, hydraulic conveyances or canals. This project will not impact the surrounding watershed. This project will not impact any railroad crossings.

3.0 PROJECT SCOPE

3.1 Description

- Approx. 3,000 lineal feet of 6' wide path
- Stamped & colored asphalt
- ADA compliant path
- Relocation of existing street signs as needed
- Connect path to existing sidewalk at south end
- Riprap at dip crossings
- Landscaping, as funds allow
- Water harvesting elements to support landscaping

All of the construction and any associated landscaping will be within the existing right-of-way between the existing pavement and the east property lines. The path will transition around permanent obstacles and surface utilities to minimize conflicts.

There are no expected modifications necessary for private utilities, electric, gas, telecommunication, etc. The City has certification acceptance and in accordance with the approved procedures manual will document that the utilities are cleared prior to obtaining federal funding authorization.

This project will be implemented in accordance with Pima County/City of Tucson Standard Specifications for Public Improvements, 2003 edition, which is consistent with ADOT standards.

Design criteria for this project are based on the standard requirements of the American Association for State Highway and Transportation Officials (AASHTO), the Federal Highway Administration (FHWA), the Arizona Department of Transportation (ADOT) and the City of Tucson and Pima County Standard Specifications and Details.

Design costs for this project are estimated at \$78,100, with construction costs of approximately \$210,800 for a total project cost of \$288,900. Funding for the design and construction of this project will come from federal and local government sources. Federal funds in the amount of \$190,061 will be budgeted from Transportation Enhancement funds. In accordance with the Transportation Enhancement Program, the City of Tucson will provide a matching amount of \$11,488. An additional \$87,351 will be provided by the Regional Transportation Authority (RTA) for project elements which are not eligible for federal funding, including environmental clearance documents.

Impacts to traffic are expected to be minimal during construction of this project. Temporary vehicular and pedestrian traffic controls will be implemented in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). No detours will be required; access will be maintained to residences, businesses and schools. The project will not alter the existing roadway or striping, and will not alter existing drainage.

After project completion, the source of funds for maintenance and operation for the entire design life of the project will be through the City of Tucson's operating budget.

4.0 PROJECT DEVELOPMENT CONSIDERATIONS

4.1 Environmental Overview

As determined by the project scope, it is presumed that this project will qualify for a categorical exclusion. All relevant analysis and investigations will be subject to the FHWA/ADOT environmental approval process. The following environmental requirements have been evaluated:

4.1.1 Species Investigation

Because this is a pedestrian pathway in an urban environment, no impacts to threatened or endangered species habitat are anticipated. However, an Urban Project Biological Evaluation Form will be completed by a qualified biologist during the Environmental Clearance Process.

4.1.2 Wetland and Riparian Resources

There are no wetlands or riparian areas within the project vicinity; therefore there will be no impacts to wetlands or riparian areas as a result of this project.

4.1.3 Floodplains

The majority of the project is classified as Zone X in Federal Emergency Management Agency Flood Insurance Rate Map No. 04019C2284L, with the Timrod Street intersection located within Zone AH. This map has a preliminary revision date of May 29, 2009, with a projected effective date of August 29, 2010. The scope of this project involves installation of an ADA accessible path and possibly some scattered landscaping, and will not substantially modify the topography of the project area. Therefore, no floodplain impacts are anticipated. However, during the environmental clearance process, the City of will coordinate with the City Floodplain Manager to verify that the project will not result in floodplain impacts. The two minor drainageways that make up the Paseo Grande Wash will be evaluated to determine its eligibility as a jurisdictional water. If it is found to be jurisdictional, the project should qualify for clearance under Nationwide Permit 14. A memo will be prepared to document floodplain coordination.

4.1.4 Section 401/404

There are no jurisdictional waters within the project limits and therefore, no 404 permit and no 401 certification are required.

4.1.5 AZPDES Stormwater Permit

Because this project will not result in more than one acre of disturbance, no Arizona Pollutant Discharge Elimination System permit and no Stormwater Pollution Prevention Plan will be required. However, as the City of Tucson holds a Municipal Separate Storm Sewer System permit, all work will be required to comply with best management practices to reduce the discharge of pollutants in stormwater to the City's stormdrain system. A Best Management Practices (BMP) plan will be reviewed and approved by the City's Stormwater Management Section, which is responsible for compliance of all City transportation projects with the AZPDES Construction General Permit and the City's municipal stormwater quality permit.

4.1.6 Section 4(f) Impacts

Existing Section 4(f) resources in the area consist of Lineweaver Elementary School, Calvary Baptist Church of Tucson, and Central Church of the Nazarene, which are all located on the west side of Columbus Boulevard, and Living Water

Ministries which is located on 22nd Street. These resources will be identified in the clearance document. However, due to the limited scope of this project, no 4(f) impacts are anticipated.

4.1.7 Hazardous Materials

There are no known contaminated sites within the project limits. However, a Preliminary Initial Site Assessment will be prepared during the environmental clearance process.

4.1.8 Socioeconomic Impacts

This project will enhance pedestrian access to businesses on 22nd Street and other neighborhood destinations such as Toumey Park and Linden Park Playground, as well as to Lineweaver Elementary School, Calvary Baptist Church of Tucson and Church of the Nazarene that are located directly on Columbus Boulevard. Once complete, the path will enhance the visual character of the neighborhood. No permanent adverse social or economic impacts are expected from this project. However, temporary construction impacts are anticipated. During active periods of construction, access to all properties will be maintained. Short-term access restrictions will be limited to less than one day, and the impacted property owners will be notified one week prior to access restrictions. The Special Provisions for this project will include these requirements.

4.1.9 Cultural Resources Investigation

San Clemente Historic District is located at the northwest end of the project area. A cultural resource records review and survey will be conducted during the environmental clearance process. It is expected that a “no adverse effect determination” will be appropriate for this project.

4.1.10 Scenic and Historic Route

No federal or state designated scenic or historic route will be impacted as a result of this project.

4.1.11 Public Participation

This project was initiated and developed by the Toumey Park Neighborhood Association. Between April and June of 2006, the association, which represents the area between 16th Street and 22nd Street and between Columbus Boulevard and Swan Road, conducted a door-to-door survey of the entire neighborhood to solicit resident opinion on neighborhood improvements. Sidewalk and pedestrian access and safety emerged as a priority for the residents.

Pro Neighborhoods of Tucson, an organization of planners and transportation experts, helped identify and prioritize goals for improved pedestrian access along Columbus Boulevard. From committee level discussion of identified projects, the Columbus Corridor was selected and presented to City of Tucson Department of Transportation and Pima County to be the sponsoring agency for the application of Transportation Enhancement funds to help implement the project.

The Neighborhood Association will continue to be involved during the design and construction of the pedestrian path. This project was developed during an extensive neighborhood planning process. Public support for this project has been documented through the attendance at these meetings. Additional public outreach will be conducted during the environmental clearance process and will be documented and provided to ADOT Environmental Planning Group.

4.1.12 Sole Source Aquifer

The City of Tucson is located within a sole source aquifer and a letter for this project will be prepared and submitted to the Environmental Protection Agency. ADOT Environmental Planning Group will be provided with a copy.

4.1.13 Air Quality

Because this project is strictly for pedestrians, it is believed to be exempt with no meaningful potential Mobile Source Air Toxic effects.

4.1.14 Noise

This project will not add to the capacity of the roadway. Proposed improvements are for pedestrian traffic and landscaping; therefore it is assumed that no noise analysis will be required.

Categorical Exclusion and Technical Report documents will be prepared by the City's consultant, reviewed by the City of Tucson and then submitted for review and approval by ADOT's Environmental Planning Group.

4.2 Critical Outside Agency Involvement

The City of Tucson will be affected by this project. Members of the public traveling along Columbus Boulevard may experience minor impacts associated with the construction of this project. The City will coordinate construction activities with the City of Tucson Police Department, the City of Tucson Fire Department, and the nearby school and churches to avoid any conflicts. This information is summarized in the Service Involvement Sheet in Section 11.0. Adjacent property owners will be notified as discussed under 4.1.6 above.

4.3 Right of Way Requirements

No new right-of-way or temporary construction easements are needed for this project. Documentation of date and method of property acquisition, and the completed Right-of-Way Certification Form will be submitted to ADOT prior to submittal of the request for funding authorization.

4.4 Utility Relocation Requirements

The existing utilities within the project limits are listed in the table below:

Owner	Utility/Facility
Tucson Water	Potable Water
Cox Communication	Coax Cable TV, Fiber Optics
Pima County Wastewater Management	Sanitary Sewer
Qwest	Telephone, Fiber Optics
Southwest Gas	Natural Gas
Tucson Electric Power	Electric, Street Lighting
Tucson Water	Water, Reclaimed Water

No utility relocations will take place because of this project. Excavation for the asphalt path is limited to only 7 inches in depth and therefore should not disturb any underground utility lines. The only adjustments anticipated are for water valve boxes which may be in the alignment of the new path. These valve boxes will be adjusted to the new grades.

The placement of any plants will be coordinated to avoid underground utility lines or above ground poles and wires to avoid utility impacts. Water harvesting elements will be incorporated into the landscaping so no new point of service and no permanent irrigation system will be required. Water valve or meter box adjustments are considered minor utility relocations and under state law, utilities in the public right-of-way are required to relocate at their expense when requested by the City of Tucson due to a public improvement project. There are no known prior rights issues in the project area, however, the project will go through the City's utility coordination procedure as outlined in the City's Certification Acceptance Procedures Manual.

4.5 Seasonal Considerations

Because the project will involve placement of asphalt pavement within City of Tucson right-of-way, no construction activities will occur during inclement weather. Placement of concrete and bituminous compounds will be conducted in accordance with temperature requirements as specified in the Pima County/City of Tucson Standard Specifications for Public Improvements, 2003 edition. City policy requires implementation of a Holiday Season Moratorium for all transportation related projects. This moratorium requires work stoppage from Thanksgiving week until January 1 to avoid disrupting traffic during seasonally expected traffic increases.

Coordination with the churches will help to minimize impacts. If construction of this project takes place during the school year, construction will be coordinated with the school to avoid conflicts.

4.6 Traffic Requirements

Impacts to traffic are expected to be minimal. If needed, traffic control will be in accordance with the most current *Manual on Uniform Traffic Control Devices for Streets and Highways*, published by the US Department of Transportation, Federal Highway Administration including any revisions or additions, and/or associated provisions in the project plans, as determined by the City of Tucson during the administration of the project.

4.7 Design Criteria

The project will be implemented in accordance with Pima County/City of Tucson Standard Specifications for Public Improvements, 2003 edition, which is consistent with Arizona Department of Transportation standards. No AASHTO design exceptions apply to this project.

5.0 OTHER REQUIREMENTS

Design and construction of this project will be paid from federal and local government funding sources under the Transportation Enhancement Program. A Categorical Exclusion will be required.

The City of Tucson has certification acceptance to self-administer the project. The City will design, advertise, bid and administer construction of the project in accordance with local criteria and standards. A detailed project schedule is included in Section 8.0.

6.0 ESTIMATED COST

Preliminary costs for this project are based on an engineer's estimate. There are no right-of-way costs, as no additional right-of-way will be required. A detailed cost estimate is presented in Section 6.1. The total construction costs are estimated at \$210,800. Of this amount, \$190,061 will be funded with Federal Aid funds. The remaining \$98,839 will be the responsibility of the City.

The estimated project costs are shown below:

Project Phase	Totals	TE	Local Funds (34%)
Estimated Design Costs:			
Phase I Public Outreach/Planning	\$ 2,900		\$ 2,900
Phase II Project Assessment	\$ 14,800		\$ 14,800
Phase III Environmental	\$ 18,100		\$ 18,100
Phase IV Cultural	\$ 5,000		\$ 5,000
Phase V Final PS&E	\$ 34,300	\$ 24,791	\$ 9,509
ADOT Processing Fee	\$ 3,000		\$ 3,000
Estimated Construction Costs:			
Construction	\$ 175,700	\$ 165,270	\$ 10,430
Administration (15%)	\$ 35,100		\$ 35,100
Total Project Costs	\$ 288,900	\$ 190,061	\$ 98,839

6.1 Itemized Estimate

COLUMBUS CORRIDOR PEDESTRIAN PATH

Transportation Enhancement Project

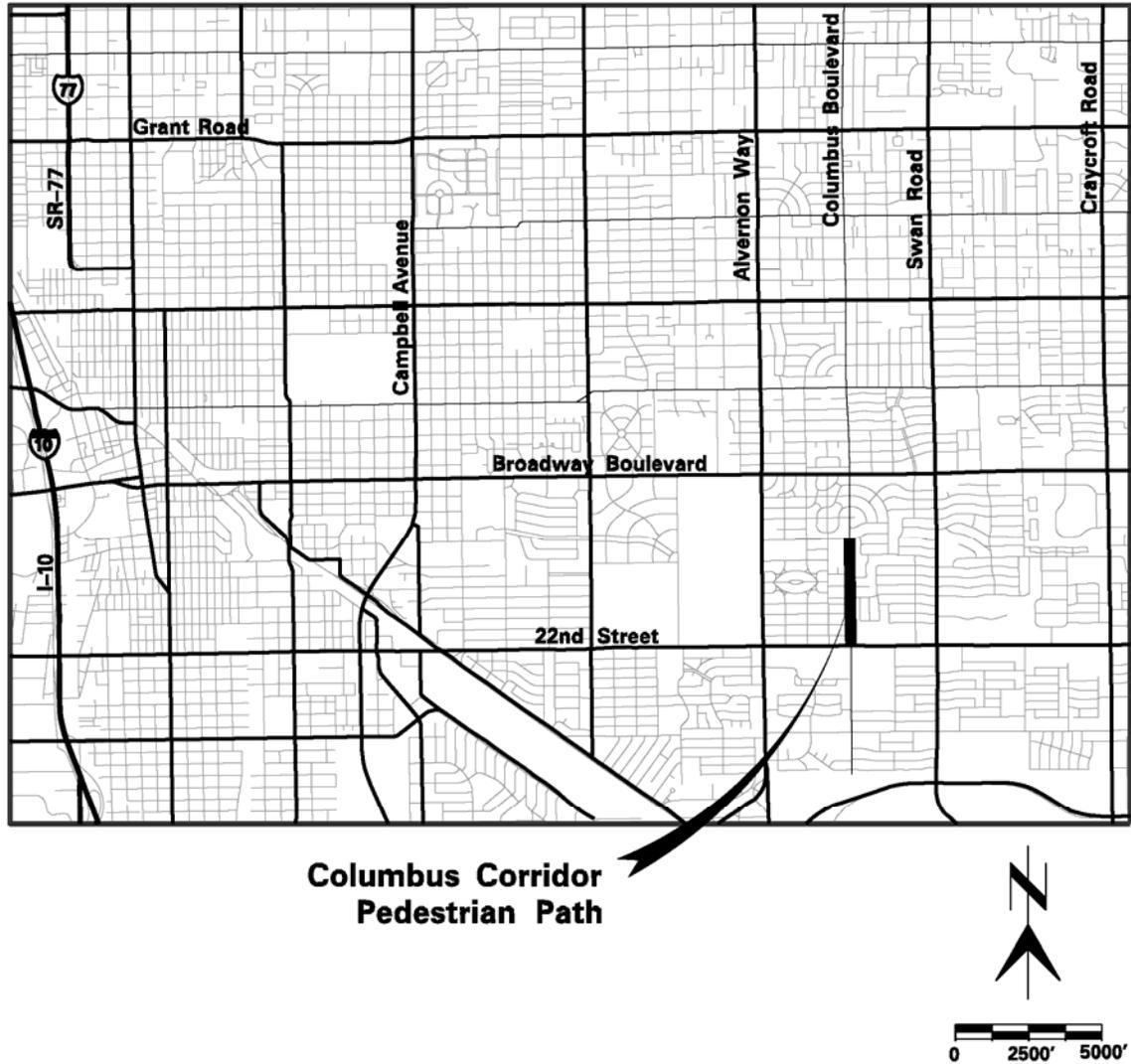
TRACS Number: 0000 PM TUC SL637 01C

Federal ID Number: TEA TUC 0(218) A

Item No.	Item Description	Unit	Est. Qty.	Unit Price	Total
2010001	Clearing and Grubbing	LS	1	\$ 500.00	500.00
2030201	Excavation	CY	10308	\$ 7.00	72,156.00
3030301	Aggregate Base Course	CY	218	\$ 20.00	4,360.00
4060017	Asphalt Concrete (COT Mix #3)	TON	324	\$ 35.00	11,340.00
	Stamp & Color Asphalt	SF	17463	\$ 4.00	69,852.00
6080101	School Signs & Delineators	LS	1	\$ 2,700.00	2,700.00
7010006	Furnish And Install Temporary Traffic Control Devices	LS	1	\$ 4,950.00	4,950.00
8060001	Planting Trees, Shrubs & Plants	LS	1	\$ 1,254.00	1,254.00
8070001	Landscape Establishment	LS	1	\$ 200.00	200.00
8101007	RipRap (Hand Placed)	CY	15	\$ 60.00	900.00
9240018	Stormwater Pollution Prevention	LS	1	\$ 5,000.00	5,000.00
9250001	Construction Surveying and Layout	LS	1	\$ 2,475.00	2,475.00
Total Bid Items					175,687.00
	Construction Contingencies (5%)	LS	1	\$ 8,784.00	8,784.00
	Construction Administration (18%)	LS	1	\$ 26,353.00	26,353.00
CONSTRUCTION TOTAL =					210,824.00

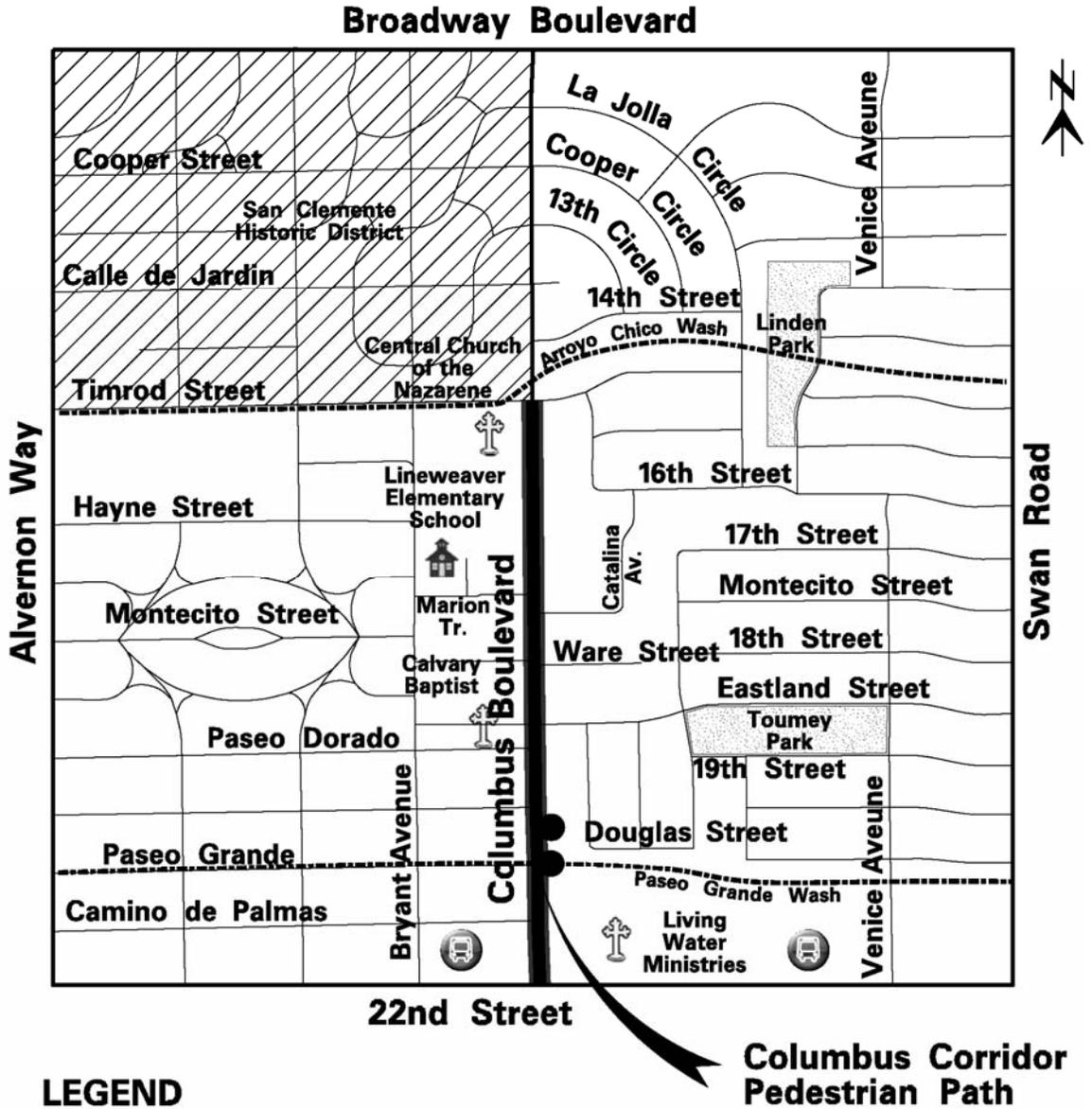
8.0 PROJECT VICINITY MAP

Project Number: TEA TUC-0(218) A
TRACS Number: 0000 PM TUC SL637 01C
Project Name: Columbus Corridor Pedestrian Path



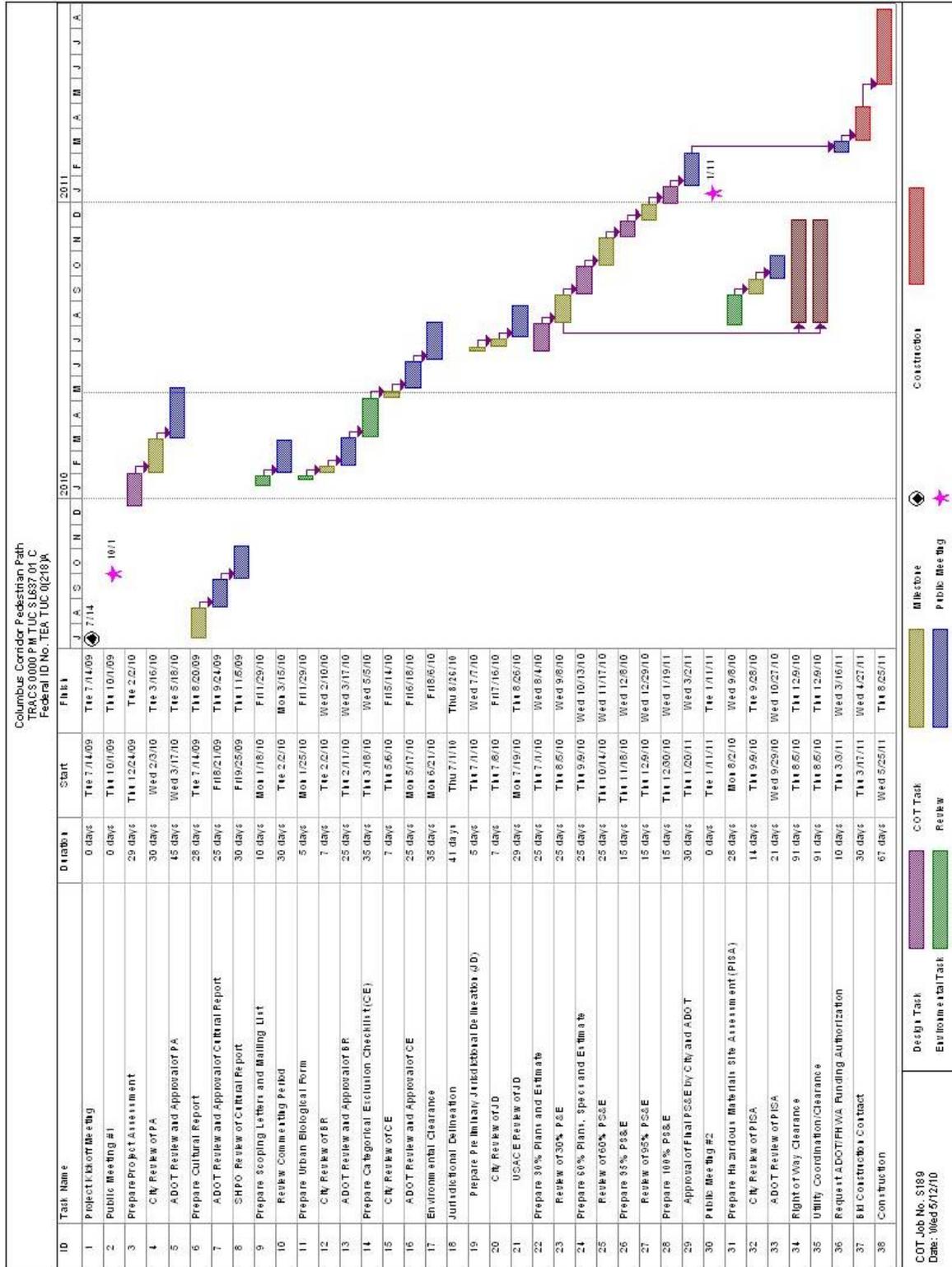
9.0 LOCATION MAP

Project Number: TEA TUC-0(218) A
 TRACS Number: 0000 PM TUC SL637 01C
 Project Name: Columbus Corridor Pedestrian Path



10.0 PROJECT DEVELOPMENT SCHEDULE

Project Number: TEA TUC-0(218) A
 TRACS Number: 0000 PM TUC SL637 01C
 Project Name: Columbus Corridor Pedestrian Path



11.0 SERVICE INVOLVEMENT SHEET

C O N T A C T E D	F I E L D R E V I E W	ORGANIZATION	INVOLVEMENT				COMMENTS (ISSUES THAT MAKE INVOLVEMENT SIGNIFICANT OR MINIMAL)
			S I G N I F I C A N T	M I N I M U M	N O N E	U N K N O W N	
		ADOT Technology Group (For IT)			X		
X		ADOT Local Government Section		X			
		ADOT Tucson Maintenance District			X		
		ADOT Roadway Design			X		QC Review of Design Plans and Specifications
		ADOT Pavement Design			X		
		ADOT Bridge Design			X		
		ADOT Drainage Design			X		
		ADOT Transportation Planning			X		
		ADOT Traffic Design			X		
		ADOT Photogrammetry & Mapping			X		
		ADOT Engineering Survey			X		
		ADOT Geotechnical Services			X		
X		ADOT Environmental Planning Group		X			Preparation of the Categorical Exclusion Document
		ADOT Roadside Development			X		
		ADOT Right-of-Way Group		X			Review Right-of-Way Certification
		ADOT Utilities & Railroads		X			Review Utility Certification
		ADOT Contracts & Specifications		X			QC Review of Contract Documents and Specifications
		ADOT Procurement			X		
		FHWA		X			Cultural Consultation, Approval of Categorical Exclusion Document, Funding Authorization
X		City of Tucson Transportation	X				Project Management
X		Pima Association of Governments		X			Administration of TIP
	X	Pima County					Coordination of Pima County Neighborhood Reinvestment Funds
		City of Tucson Police Department		X			Project Coordination
		City of Tucson Fire Department		X			Project Coordination
		Tucson Unified School District		X			Project Coordination
		Sun Tran Bus Service Provider		X			Project Coordination

12.0 15% PLANS