



Transportation Alternatives Application for  
FY 2015, 2016, and 2017 Projects

CITY OF LITCHFIELD PARK PEDESTRIAN REFUGE

CITY OF LITCHFIELD PARK

APPLICATIONS ARE DUE AT MAG OFFICES BY  
Tuesday, October 22, 2013 at 10:00 a.m.

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

<b>PART A - CONTACT AND PROJECT DESCRIPTION</b>	
<b>Contact Information</b>	
1. Name of Sponsoring Agency	Litchfield Park
2. Agency Contact Name	Darryl H. Crossman
3. Phone Number of Agency Contact	623-935-5033
4. E-Mail Address of Agency Contact	<a href="mailto:dcrossman@litchfield-park.org">dcrossman@litchfield-park.org</a>
5. Mailing Address of Agency Contact	214 W. Wigwam Boulevard Litchfield Park, Arizona 85340
<b>Project Description</b>	
6. Please provide the Project Title.	Litchfield Road: At Bird Lane; Design and Construct Multi-Use Path and Median Refuge
7. Please provide a concise, specific description of the project (250 character limit):	<p>This project proposes to provide a sidewalk connection/link from historic old town Litchfield in Litchfield Park to areas on the north side of the Litchfield Park geographical area. The project improvements will provide for an ADA, hard-surface, traversable, pedestrian route that currently has no pedestrian provisions within the area.</p> <p>The project involves the design and construction of curb, gutter and 6 foot wide minimum corridor from the south side of Bird Lane, along the east edge of Litchfield Road to a point approximately 250 feet north of the intersection lane. A median refuge area will be constructed high visibility crosswalk lines and in pavement crosswalk lighting is proposed that also includes solar powered flashing beacon advanced warning signage, along with with solar powered track or pedestrian lighting from the intersection of Bird Lane north to the crossing area and within the median refuge and west side of Litchfield Road that connects into a pathway along the west side of Litchfield Road.</p> <p>The median refuge shall have offset openings and cordoned off fenced areas that will encourage users to execute a two phased crossing maneuver, whereby pedestrians cross two lanes of free flow traffic at a time. The curved nature of Litchfield Road requires this type of offset to orient pedestrians to see oncoming traffic before crossing.</p> <p>The project limit is 300 feet of a six foot wide minimum pedestrian corridor and a median refuge of approx. 400 square feet protected by curbs and hand rail.</p>
8. Please provide the project limits:	Total length of the project includes approx. 300 feet of a minimum six-foot wide corridor and a median refuge of approx. 400 square feet protected by curbs and hand rail and solar pedestrian lighting.
<b>Safe Routes to School (if project is NOT a Safe Routes to School project, proceed to Part B)</b>	
9. School Name	Litchfield Elementary School
10. School Address	255 E Wigwam Blvd
11. School City, State, ZIP Code	Litchfield Park, Arizona, 85340

**PART B-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 12-13 and 15-18, 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. What type of project is this? (Check only one)

<input type="checkbox"/>	Bicycle lane (4' min. w/o curb/gutter)	<input type="checkbox"/>	Wide Sidewalk (8' min.)
<input type="checkbox"/>	Bicycle lane (5' min. with curb/gutter)		
<input type="checkbox"/>	Shared-use path (10' min.)	Other:	
<input type="checkbox"/>	Detached Sidewalk with 4' min. buffer		
<input checked="" type="checkbox"/>	Sidewalk (5' min.)		

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

<input type="checkbox"/>	Bridge (overpass)	<input type="checkbox"/>	0	Number of new openings in street walls
<input type="checkbox"/>	Tunnel (underpass)	<input type="checkbox"/>	0	Number of Trees
<input type="checkbox"/>	Safe Routes to School	<input type="checkbox"/>	0	Number of Shade Structures
<input type="checkbox"/>	Signalized Crossing	<input type="checkbox"/>	0	Number of Seating/Rest Area(s)
<input type="checkbox"/>	Signalized midblock crossing/HAWK	<input type="checkbox"/>	0	Number of bicycle/pedestrian counting devices
<input type="checkbox"/>	Countdown Pedestrian Signal	Other:		
<input type="checkbox"/>	Number of Bike racks/lockers			
<input type="checkbox"/>	Number of Drinking Fountains			
<input type="checkbox"/>	Number of Way-finding Signs			
<input type="checkbox"/>	Number of Trash receptacles			

High visibility crosswalk markings with in pavement solar lighting and flashing beacon (solar powered) advanced warning

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

The current area has no hard surfaced ADA traversable paths to connect the north geographic area of Litchfield Park into the main old town area of litchfield Park. A CMAQ sidewalk project just south and east of this project is currently underway with design. This project is a second link that will finalize this connection to the current CMAQ Sidewalk project.

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

A median refuge area will be constructed high visibility crosswalk lines and solar powered, in-pavement crosswalk lighting is proposed that also includes solar powered flashing becaon advanced warning signage, along with with solar powered tract or pedestrian lighting from the intersection of Bird Lane north to the crossing area and within the median refuge and west side of Litchfield Road that connects into a pathway along the west side of Litchfield Road.

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

Final connection between north geographic area of Litchfield Park to the CMAQ Sidewalk project which connects into old Town Litchfield Park.

6. Please provide a site safety / crash history, and provide a source for this information.

Please describe any car-bicycle and car-pedestrian crashes on streets within 1/4 mile for pedestrian projects, 1/2 mile for bicycle projects (within the last 5 years). You may attach crash reports or summarize their results below.

Litchfield Park has requested crash data for this project through MAG. As crash data will not be available prior to the TA application deadline, MAG will provide the crash data as an attachment prior to releasing the application to the evaluation panel for review.

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

<input type="checkbox"/>	Wide bike lanes (6'-7')	Buffer Zone, Width	
<input type="checkbox"/>	Wide sidewalk (8' min.)		
<input type="checkbox"/>	Grade-separated crossing (overpass or underpass)	Other	
<input type="checkbox"/>	Signalized crossing/Ped countdown/HAWK		
<input checked="" type="checkbox"/>	Lighting		
<input checked="" type="checkbox"/>	Striping/re-striping of roadway		
<input type="checkbox"/>	Countdown signals		

High visibility crosswalk markings with in pavement solar lighting and flashing beacon (solar powered)

**PART B-PROJECT DESCRIPTION**

8. How does this project improve upon an existing safety issue?

Providing hard surface traversable corridor that is separated from the drive lanes of Litchfield Road, pedestrians are removed from walking along the street shoulder and now on a corridor with lighting that enables the proposed facility to be used at night and day. Also, the median refuge shall have offset openings and courdened off fenced areas that will encourage users to execute a two phased crossing maneuver, whereby pedestrians cross two lanes of free flow traffic at

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

This project proposes to provide an ADA hard surface traversable corridor, pedestrians are removed from walking along the street shoulder and now on a corridor with lighting that enables the proposed facility to be used at night and day.

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

Thematically, Litchfield Park has been envisioned as a pedestrian friendly City by the founder, Paul W. Litchfield that has always lead a charter to promote connectivity and beauty with pigmented paths, large palm and orange tree lined

11. Connectivity: (Check all that apply)

Project fills a gap in the system

Explain:

This project proposes to provide a sidewalk connection/link from historic old town Litchfield in Litchfield Park

Project connects to other local bikeways

List of connected bikeways:

Bike path along north Litchfield and Camelback intesection is provided with this project when constructed

Multi Jurisdicional Project

List of Participating Jurisdictions:

2 Total length of facilities connected by this project (in miles)

12. 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.

0 Within 1/4 mile

List routes and frequency:

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

0 Within 1/4 mile

List:

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

This project proposes to provide a sidewalk connection/link from historic old town Litchfield in Litchfield Park to areas on the north side of the litchfield park area. Specifically, the La Loma Senior Active Adult facility at Camelback and Litchfield (~1300 feet north of Bird and Litchfield). Moreover, residential areas of Litchfield Greens on the west side and residential areas on the east side of Litchfield Road.

**PART B-PROJECT DESCRIPTION**

15. Number of activity centers (parks, libraries, senior centers, recreational centers, etc.) this project will benefit:

Within 1/4 mile

List:

This project proposes to provide a sidewalk connection/link from historic old town Litchfield in Litchfield Park to areas on the north side of the Litchfield park area. Specifically, the La Loma Senior Active Adult facility at

16. 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):

Within 1/4 mile

List:

CVS Pharmacy, Ground Control, Beauty Shop, Doctor/Dentistry Facilities at Camelback and Litchfield Bypass

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

Within 1/4 mile

List:

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

Within 1/4 mile

List:

19. What are the demographics of the area served:

[MAG Demographic Mapping](#)

People Per Square Mile

% Families in Poverty

Use the MAG Demographic Mapping link above. Zoom in to your project area. On the right-hand side of the screen, under "Reporting," select "Custom." Next, select "Corridor of Interest." Left-click to begin drawing. Draw a line through all census blocks 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 blocks 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.

**PART B-PROJECT DESCRIPTION**

20. 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:

Bird Lane north 250 feet

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

Litchfield Road

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:

Arterial Road

0.2 Length (in Miles)

40 Posted Speed Limit (MPH)

4 Number of Travel Lanes

21. Please provide an estimated traffic volume (ADT) below. If project is not on a road (ex. Canal path), use nearest parallel arterial.

17,200 ADT Estimate

Date Counted

Name of road the traffic count was taken from

In 2012 county by MCDOT and taken from MCDOT website

Description of Methodology and Source used for the ADT Estimate

In 2012 county by MCDOT and taken from MCDOT website

22. 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.

None noted

23. Current ROW: (Check all that apply)

Agency owns all ROW Needed

ROW to be acquired

Owners will donate ROW

Agency owns easement

Agency has right-of-use (i.e. canal)

Condemnation may be required

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

None noted

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

No Utility in or abutting the alignment

Canals & Drainage

Power Lines & Cables

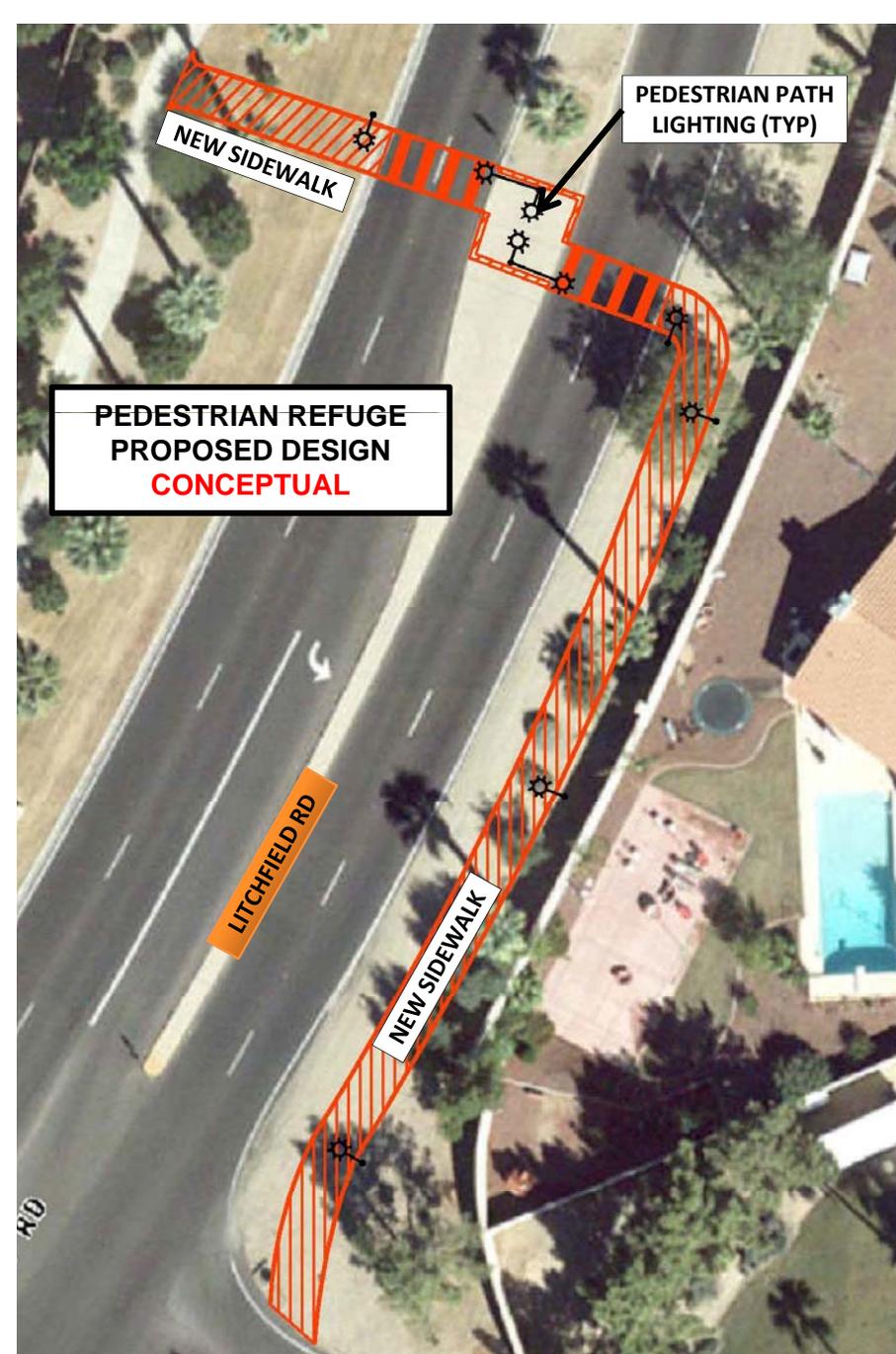
Pipelines, Sewer and Water

Private Structures

Other:

City owned drip irrigation systems within ROW

PART B-PROJECT DESCRIPTION															
26.	Please describe any utility conflicts that will need to be addressed.  <div style="border: 1px solid black; padding: 5px; min-height: 60px;">None noted except for City owned drip irrigation systems within ROW</div>														
27.	Guidelines used to develop project: (Check all that apply)  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><input type="checkbox"/></td> <td style="width: 45%;">AASHTO Guide for Bicycle Facilities</td> <td style="width: 40%;">Other:</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>MAG Pedestrian Policies and Design Guidelines</td> <td rowspan="5" style="border: 1px solid black; min-height: 40px;"></td> </tr> <tr> <td><input type="checkbox"/></td> <td>MAG Complete Streets Guide</td> </tr> <tr> <td><input type="checkbox"/></td> <td>MAG Designing Transit Accessible Communities</td> </tr> <tr> <td><input type="checkbox"/></td> <td>NACTO Urban Bikeway Design Guide</td> </tr> <tr> <td><input type="checkbox"/></td> <td>RPTA Bus Stop Program and Standards</td> </tr> </table>	<input type="checkbox"/>	AASHTO Guide for Bicycle Facilities	Other:	<input checked="" type="checkbox"/>	MAG Pedestrian Policies and Design Guidelines		<input type="checkbox"/>	MAG Complete Streets Guide	<input type="checkbox"/>	MAG Designing Transit Accessible Communities	<input type="checkbox"/>	NACTO Urban Bikeway Design Guide	<input type="checkbox"/>	RPTA Bus Stop Program and Standards
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<input type="checkbox"/>	RPTA Bus Stop Program and Standards														
28.	Jurisdiction has the following policies for improved bicycle/shared use facilities:  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 75%;">With new development and capital improvement projects, bike lanes on arterial streets are:</td> <td style="border: 1px solid black; text-align: center;">Required</td> </tr> <tr> <td>With new development and capital improvement projects, bike lanes on collector streets are:</td> <td style="border: 1px solid black; text-align: center;">Required</td> </tr> <tr> <td>With pavement restoration or regular pavement maintenance on arterial streets, bike lanes are:</td> <td style="border: 1px solid black; text-align: center;">Not Addressed</td> </tr> <tr> <td>With new development or during development retrofits, shared-use paths are:</td> <td style="border: 1px solid black; text-align: center;">Not Addressed</td> </tr> <tr> <td>Bicycle program implemented, including bike education, safety events, and bike maps</td> <td style="border: 1px solid black; text-align: center;">No</td> </tr> <tr> <td>Complete Streets Policy</td> <td style="border: 1px solid black; text-align: center;">Yes</td> </tr> </table>	With new development and capital improvement projects, bike lanes on arterial streets are:	Required	With new development and capital improvement projects, bike lanes on collector streets are:	Required	With pavement restoration or regular pavement maintenance on arterial streets, bike lanes are:	Not Addressed	With new development or during development retrofits, shared-use paths are:	Not Addressed	Bicycle program implemented, including bike education, safety events, and bike maps	No	Complete Streets Policy	Yes		
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Bicycle program implemented, including bike education, safety events, and bike maps	No														
Complete Streets Policy	Yes														
29.	The project is: (Check one)  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><input type="checkbox"/></td> <td style="width: 85%;">Identified in General Plan, council adopted policy, or Capital Improvements Program (provide source) List: <div style="border: 1px solid black; min-height: 20px;"></div></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Consistent with general policy/practices, but not formally identified (provide source) Explain: <div style="border: 1px solid black; padding: 2px;">General planning and zoning desire for critical pedestrian links to be established such as previous approved</div></td> </tr> <tr> <td><input type="checkbox"/></td> <td>Not addressed by jurisdiction's plans, policies, or practices Explain: <div style="border: 1px solid black; min-height: 20px;"></div></td> </tr> </table>	<input type="checkbox"/>	Identified in General Plan, council adopted policy, or Capital Improvements Program (provide source) List: <div style="border: 1px solid black; min-height: 20px;"></div>	<input checked="" type="checkbox"/>	Consistent with general policy/practices, but not formally identified (provide source) Explain: <div style="border: 1px solid black; padding: 2px;">General planning and zoning desire for critical pedestrian links to be established such as previous approved</div>	<input type="checkbox"/>	Not addressed by jurisdiction's plans, policies, or practices Explain: <div style="border: 1px solid black; min-height: 20px;"></div>								
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30.	Identify the organization(s) responsible for on-going maintenance and repairs of the project:  <div style="border: 1px solid black; padding: 5px; min-height: 60px;">City of Litchfield Park Public Works Department</div>														
31.	How will the applicant measure the success of this project?  <div style="border: 1px solid black; padding: 5px; min-height: 60px;">General outreach and inquiry through annual Town Hall Meeting and as general to the public during town council and surveys on City website and City news letter</div>														
32.	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?  <div style="border: 1px solid black; padding: 5px; min-height: 60px;">No</div>														
33.	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.  <div style="border: 1px solid black; padding: 5px; min-height: 60px;">Yes, through school outreach, publication on City website and City news letter along with city festival events for public awareness of the project. Arts festival, winter festival, etc.</div>														





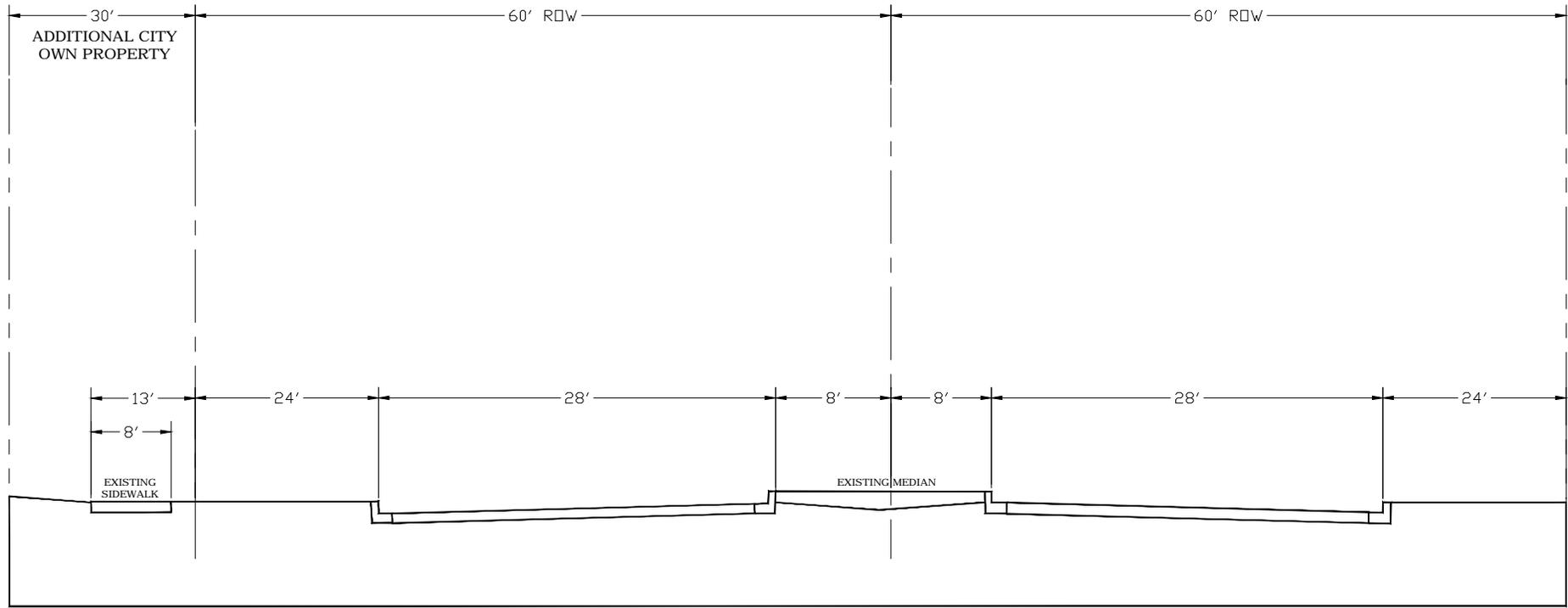
**LICHFIELD ROAD PEDESTRIAN REFUGE PROPOSED AREA**



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**LICHFIELD ROAD PEDESTRIAN REFUGE PROPOSED AREA**



SCHEMATIC ONLY

**EXISTING LITCHFIELD ROAD CROSS-SECTION - LOOKING NORTH AT LITCHFIELD ROAD**

**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	\$3,800.00	\$3,800.00	No	\$0.00	\$3,800.00		
	2. PROJECT ASSESSMENT REPORT or DETAILED WORKPLAN	LS	1	\$15,000.00	\$15,000.00	No	\$0.00	\$15,000.00		
	3. ENVIRONMENTAL DETERMINATION (Infrastructure projects, including technical supporting documents)	LS	1	\$25,000.00	\$25,000.00	No	\$0.00	\$25,000.00		
	4. HAZMAT ASSESSMENT	LS	1	\$6,000.00	\$6,000.00	No	\$0.00	\$6,000.00		
	<b>Subtotal Scoping (Part A)</b>				<b>\$49,800.00</b>		<b>\$0.00</b>	<b>\$49,800.00</b>		
B. Final Preliminary Engineering Design - Stages II, III, IV and PS&E	1. Plans, Special Provisions or Bid Manual, Cost Estimate & Schedules.	LS	1	\$45,000.00	\$45,000.00	No	\$0.00	\$45,000.00		
	2. GEOTECHNICAL INVESTIGATION and Materials & Pavement Design Report	LS	1	\$12,000.00	\$12,000.00	No	\$0.00	\$12,000.00		
	3. DRAINAGE REPORT	LS	1	\$8,000.00	\$8,000.00	No	\$0.00	\$8,000.00		
	4. SWPPP	LS	1	\$5,000.00	\$5,000.00	No	\$0.00	\$5,000.00		
	<b>Subtotal PE (Part B)</b>				<b>\$70,000.00</b>		<b>\$0.00</b>	<b>\$70,000.00</b>		
	<b>Subtotal Preliminary Engineering (Part A + Part B)</b>				<b>\$119,800.00</b>		<b>\$0.00</b>	<b>\$119,800.00</b>		
C. Right-of-Way Acquisition	1. Right-of-Way Acquisition	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00		
	<b>Subtotal Right-of-Way Acquisition (Part C)</b>				<b>\$0.00</b>		<b>\$0.00</b>	<b>\$0.00</b>		
D. Utility Relocation	1. Utility Relocation	LS	1	\$10,000.00	\$10,000.00	No	\$0.00	\$10,000.00		
	<b>Subtotal Utility Relocation (Part D)</b>				<b>\$10,000.00</b>		<b>\$0.00</b>	<b>\$10,000.00</b>		
E. Construction Or Implementation (For Non-Infrastructure Projects (No Ground Disturbing Activities), Address Only Part 4)	1. Hardscape Construction	LS	1	\$5,000.00	\$5,000.00	Yes	\$4,715.00	\$285.00		
	Site Preparation	LS	1	\$5,000.00	\$5,000.00	Yes	\$4,715.00	\$285.00		
	Demolition	Sawcut	LF	120	\$2.00	\$240.00	Yes	\$226.32	\$13.68	
		Remove Structures and Obstructions	LS	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
		Remove Fencing	LF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
		Remove Structural Concrete	CY	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
	Earthwork	Remove Asphaltic Concrete Pavement	CY	14	\$100.00	\$1,400.00	Yes	\$1,320.20	\$79.80	
		Remove Concrete Sidewalks, Slabs	CY	12	\$150.00	\$1,800.00	Yes	\$1,697.40	\$102.60	
		Hazmat Abatement	LS	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
		Retaining Wall - Reinforced Concrete Cantilevered	SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
	Earthwork	General Excavation	CY	100	\$19.00	\$1,900.00	Yes	\$1,791.70	\$108.30	
		Drainage Excavation	CY	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
		Structural Excavation	CY	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
		Structural Backfill	CY	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
	Curb & Gutter	Borrow (in Place)	CY	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
			LF	500	\$25.00	\$12,500.00	Yes	\$11,787.50	\$712.50	
	Aggregate Base		CY	4,524	\$25.00	\$113,100.00	Yes	\$106,653.30	\$6,446.70	
		Concrete	SF	4,524	\$6.50	\$29,406.00	Yes	\$27,725.86	\$1,676.14	
		Colored Concrete	SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
		Stamped Color Concrete	SF	4,524	\$1.50	\$6,786.00	Yes	\$6,399.20	\$386.80	
	Pathway Or Sidewalk Materials	Precast Concrete Pavers	SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
		Asphaltic Concrete	Ton	12	\$90.00	\$1,080.00	Yes	\$1,018.44	\$61.56	
		Polymer or Resin Stabilized Surface	SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
		Concrete Pavers	SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
	Crosswalk Enhancement	Stamped Asphalt	SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
Stamped Concrete		SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Concrete		SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Integral Color Concrete		SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Pedestrian ADA Ramp		SF	4	\$2,500.00	\$10,000.00	Yes	\$9,430.00	\$570.00		
	Culvert Extensions	LF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Pedestrian Lighting including Conduit and Trenching		Each	7	\$15,936.32	\$111,554.24	Yes	\$105,195.65	\$6,358.59		
	Standard Handrail	LF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Subtotal Hardscape Construction			125	\$50.00	\$6,250.00	Yes	\$5,895.75	\$356.25		
					<b>\$306,016.24</b>		<b>\$288,373.31</b>	<b>\$17,442.93</b>		

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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)		
E. Construction Or Implementation [For Non-Infrastructure Projects (No Ground Disturbing Activities), Address Only Part 4]	2. Landscaping & Irrigation Items	Requirements	Each	\$0.00	\$0.00	Yes	\$0.00	\$0.00			
		Trees (15 Gallon Size)	Each	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Trees (5 Gallon Size)	Each	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Shrubs (5 Gallon Size)	Each	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Shrubs (1 Gallon Size)	Each	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Cactus (5 Gallon Size)	Each	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Mulch	CY	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Organic	CY	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Topsoll	CY	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Seeding	Acre	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Turf Sod	SY	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Boulders	Each	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Irrigation System	SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Drip Turf	SF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Sleeving For Irrigation System	LF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Cut and Patch	LF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Landscaping Establishment	LS	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
		Subtotal Landscaping & Irrigation Items				\$0.00	\$0.00	Yes	\$0.00	\$0.00	
		3. Site Furnishings		Benches	Each	\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Seawalls	LF	1	\$0.00	\$0.00	Yes	\$0.00	\$0.00
Bike Racks	Each			1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Trash Receptacles	Each			1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Drinking Fountains	Each			1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Signage (Standard Traffic Control)	Each			1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Signage (Wayfinding)	Each			1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Tree Grates	Each			1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Subtotal Site Furnishings						\$0.00	Yes	\$0.00	\$0.00		
Bicycle and Pedestrian Counter	Each			1	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
						\$0.00	Yes	\$0.00	\$0.00		
						\$0.00	Yes	\$0.00	\$0.00		
						\$0.00	Yes	\$0.00	\$0.00		
						\$0.00	Yes	\$0.00	\$0.00		
						\$0.00	Yes	\$0.00	\$0.00		
						\$0.00	Yes	\$0.00	\$0.00		
						\$0.00	Yes	\$0.00	\$0.00		
						\$0.00	Yes	\$0.00	\$0.00		
						\$0.00	Yes	\$0.00	\$0.00		
4. Other Construction Items. Also, Itemized Line Items For Non-Infrastructure Projects. (Insert Additional Rows If Necessary)				Subtotal Other Construction	LS	\$5,000.00	\$5,000.00	No	\$0.00	\$5,000.00	
		Contractor Mobilization	LS	\$15,000.00	\$15,000.00	Yes	\$14,145.00	\$855.00			
		Traffic Control	LS	\$3,300.00	\$3,300.00	Yes	\$3,300.50	\$199.50			
		Construction Survey & Layout	LS	\$33,000.00	\$33,000.00	Yes	\$31,119.00	\$1,881.00			
		Construction Contingencies	LS	\$15,500.00	\$15,500.00	Yes	\$14,616.50	\$883.50			
		Construction Administration	LS	\$72,000.00	\$72,000.00	Yes	\$63,181.00	\$8,819.00			
		Subtotal Mobilization & Administration Costs				\$378,016.24	\$351,754.31	\$26,261.93			
		Subtotal Construction Or Implementation Cost (Part E)				\$378,016.24	\$351,754.31	\$26,261.93			
		F. Total Scoping, PE, Right-of-Way Acquisition, Utility Relocation, and Construction (Part A, B, C, D, and E)				\$20,000.00	\$0.00	\$20,000.00			
		G. Adot Fee For Pe Reviews And Staff Charges (The Higher of \$20,000 or 2% of Total Cost (Part F))				\$27,754.31	\$0.00	\$27,754.31			
		H. Total Project Cost Including ADOT Fees (Part F + Part G)				\$405,770.55	\$351,754.31	\$54,016.24			

Litchfield Park: Litchfield Road: At Bird Lane; Design and Construct Multi-Use Path and Median Refuge

**PART E - TOTAL PROJECT SCHEDULE AND BUDGET INCLUDING ALL SEGMENTS**

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 23-26 in Part B.

<b>Cost Estimate for the Project Including ALL Segments</b>	<b>Cost</b>	<b>Additional Notes (if needed)</b>			
1. ADOT Fee	\$20,000				
2. Design	\$119,800				
3. Right of way	\$0				
4. Utilities	\$10,000				
5. Construction	\$378,016				
6. Total Cost	\$527,816				
7. Will the agency maintain the improvement after it is completed?		Yes			
8. Expected Annual Maintenance Cost		6,000			
9. Identify Source of Maintenance Funds		General Fund			
Requested MAG Programming	Year	Local Funding Source	Local Cost	Federal Cost	Total Cost
10. Design	2015	General Fund	\$119,800	Not Available	\$119,800
11. ADOT Fee	2015	General Fund	\$20,000	Not Available	\$20,000
12. Right of way and Utilities	2015	General Fund	\$10,000	Not Available	\$10,000
13. Construction	2017	General Fund	\$26,262	\$351,754	\$378,016
14. Total Costs			\$176,062	\$351,754	\$527,816

## PART F - SIGNATURE AND CHECKLIST

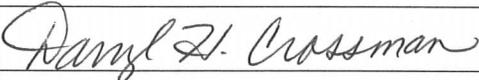
## Checklist

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

COVER SHEET	Complete?
Cover Sheet is completely filled out	Yes
PART A - Contacts and Project Description Fields	Complete?
Contact Information, fields 1 – 5 are complete	Yes
Project Description, fields 6 - 8 are complete	Yes
Safe Routes to School, fields 9-12 are complete (if applicable)	
PART B - Project Description	Complete?
Fields 1 - 11 (Project Description) are complete	Yes
Fields 12– 14 (Transit and Access) are complete	Yes
Fields 15 – 19 (Attractors and Demographics) are complete	Yes
Fields 20 – 26 (Traffic, Environmental, ROW, and Utilities) are complete	Yes
Fields 27 – 29 (Guidelines, Policies, and Plans) are complete	Yes
Fields 30 – 33 (Maintenance and Performance Measurement) are complete	Yes
PART C - Required Attachments	Complete?
Field 1 - Project map is provided in the printed application and the PDF application	Yes
Field 2 - Up to 4 photos of existing conditions are provided in the printed application and the PDF application (two 4x6 per page).	Yes
Field 3 - Cross-section(s) provided in the printed application and the PDF application.	Yes
(OPTIONAL)- Up to 2 photos/renderings of the completed project are provided in the printed application and the PDF application.	No
(OPTIONAL) - Crash report(s) are provided in the printed application and the PDF application	No
(OPTIONAL) - GIS coverage (shapefile or geodatabase) is provided on the CD with the application.	No
PART D - Cost Estimate Worksheet	Complete?
Sponsoring Agency, Project Title, and Application Date are complete	Yes
Part A - Scoping is complete	No
Part B - Final Preliminary Engineering Design is complete	No
Part C - Right-of-Way Acquisition is complete	No
Part D - Utility Relocation is complete	No
Part E - Construction or Implementation is complete	No
Parts F, G, and H - Costs are complete and accurate	No
PART E - Total Project Schedule and Budget Including All Segment Fields	Complete?
Fields 1 – 6 are complete and costs are accurate	Yes
Field 7 - 9 are complete	Yes
Fields 10 – 13 Years are complete	Yes
Fields 10 – 13 Local Funding Sources are complete	Yes
Fields 10 – 13 Local Costs are complete and accurate	Yes
Field 10 - 13 Federal Costs are complete and accurate	Yes
Field 14 Total Costs are complete and accurate	Yes
PART F - Signature and Checklist	Complete?
Entire checklist is completed.	Yes
Form is signed by MAG member agency's manager/administrator or designated representative.	Yes
Name, title and date fields under the signature are completed.	Yes
(SAFE ROUTES TO SCHOOL PROJECTS ONLY) - Additional signatures and related name, date, and title 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 project will be included in the sponsoring MAG member agency's local CIP/TIP if the project is selected for federal funding.

Signature:	
Name:	Darryl H. Crossman
Title:	City Manager
Date:	10/22/2013

### Complete the following ONLY if this is a Safe Routes to School Project.

Note: All signatures indicate an agreement in principle and a partnership on this project between the applicant and the signing organization. Although not all signatures are required, applications that include more signatures will be ranked higher

<b>School/Site Official (required):</b> (Principal, assistant principal, teacher-in-charge, PE Teacher, SRTS coordinator)	
Signature:	
Name:	
Title:	
Date:	
<b>School District official (required):</b>	
Signature:	
Name:	
Title:	
Date:	
<b>Law Enforcement Official (required):</b>	
Signature:	
Name:	
Title:	
Date:	

## ATTACHMENT: MAG CRASH DATA

MAG has provided crash summaries for this project, as requested by the agency,  
in reference to Part B, Question 6 of the MAG Transportation Alternatives Application

<b>Litchfield Park, Project #1, Pedestrian</b>						
<b>Year</b>	<b>Severity</b>					<i>5 total</i>
	1	2	3	4	5	
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	1	0	0	1
2011	0	0	0	0	0	0
2012	0	0	0	0	0	0
2013	0	0	0	0	0	0
<i>total</i>	0	0	1	0	0	1

<b>Litchfield Park, Project #1, Bicyclist</b>						
<b>Year</b>	<b>Severity</b>					<i>5 total</i>
	1	2	3	4	5	
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	0	0	0	0	0	0
2012	1	0	0	0	0	1
2013	0	0	0	0	0	0
<i>total</i>	1	0	0	0	0	1