



DESIGN ASSISTANCE APPLICATION
for FY 2016

THE MISSING LINK

TEMPE

**APPLICATIONS ARE DUE VIA ONLINE SUBMITTAL BY
10:00 AM ON MONDAY, JUNE 29, 2015**

DESIGN ASSISTANCE FY 2016 APPLICATION

Tempe: The Missing Link

PART A - CONTACT AND PROJECT DESCRIPTION

Contact Information	
1. Name of Sponsoring Agency	Tempe
2. Project Manager Name and Title	Eric Iwersen - Principal Planner
3. Phone Number of Project Manager	(480) 350-8810
4. E-Mail Address of Project Manager	eric_iwersen@tempe.gov
5. Mailing Address of Project Manager	City of Tempe Public Works Department - Transportation; 200 E 5th St, 2nd Floor; Tempe, AZ 85281
Project Description	
6. Please provide the Project Title.	The Missing Link
7. Please provide the amount of funding requested:	\$55,000
8. Please provide a specific description of the project (i.e. bike path or sidewalk, width, length, cement or asphalt, etc.) (250 character limit):	
<p>The Missing Link is proposed to be a 10' wide concrete shared-use path and on-street facility running .5 miles connecting the Highline and Western Canal pathways. The project will link local and regional facilities, other canal paths, a bicycle boulevard (the "Brake" route in Tempe's BIKEiT system), the Tempe rail spur path (programmed) and run through a public golf course, a Salt River Project facility and across a major arterial. The newly formed connection is currently used illegally by travellers and this new facility will reduce vehicle-ped conflicts, introduce lighting, landscaping, and art features; while remaining ADA/MUTCD/AASHTO compliant.</p>	
9. Please provide the project limits:	
<p>The project will be a half mile total extending from the west at the Highline Canal to the east at the Western Canal, along Divot/Mineral Road and through Ken McDonald Golf Course.</p>	

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PART B - PROJECT DESCRIPTION

1. What type of project is this?

<input type="checkbox"/>	Bicycle lane (4' min. w/o curb/gutter)	<input type="checkbox"/>	Grade-separated crossing
<input type="checkbox"/>	Bicycle lane (5' min. with curb/gutter)	<input type="checkbox"/>	Sidewalk (5' min.)
<input type="checkbox"/>	Buffered Bike Lane	<input type="checkbox"/>	Wide Sidewalk (8' min.)
<input type="checkbox"/>	Protected Bike Lane	<input type="checkbox"/>	Detached Sidewalk with 4' min. buffer
<input checked="" type="checkbox"/>	Shared-use path (10' min.)	<input checked="" type="checkbox"/>	Midblock Crossing

2a. Please describe the existing condition of the project site and any problem(s) being addressed.

Currently, access to/from Western to the Highline and Kyrene Canals SUP involves trespassing and scaling a fence to gain access through the Ken McDonald Golf Course, crossing a 45 MPH major arterial street (Kyrene), over a railroad crossing, and travelling along an SRP service road. This .5 mile gap in the path system discourages bicyclists, pedestrians and people with mobility constraints from utilizing almost 20 miles of local and regional shared use facilities, like Kyrene, Western and Highline Canal SUPs. This .5 mile gap discourages the residents of Tempe, Chandler, Gilbert, Mesa and Guadalupe, and especially the disabled clients of The Centers for Habilitation from using these improved shared use paths.

2b. Why is this project important to the community?

These shared-use paths serve as safe, off-street bike and pedestrian facilities providing access to recreational, commercial, educational, and employment centers throughout Tempe and the region for users of all abilities. The .5 mile connection would allow residents from Guadalupe, Chandler, Gilbert and Mesa easier access to employment centers like Honeywell, shopping centers like AZ Mills Mall and the Chandler Mall at I-10, regional parks like Kiwanis, and other regionally and economically significant destinations along Priest Drive and Warner and Elliot roads near the I-10, like Ikea. The .5 mile gap

3. Connectivity: (Check all that apply)

- Project fills a gap in the regional system
 Explain:
 The Highline SUP connects Tempe with Guadalupe, Phoenix and Chandler. The Western Canal connects Tempe
- Project connects to other local facilities
 List the connected facilities:
 Highline Canal, Kyrene Canal, Future North/South rail spur path, the future bike crossing at I-10 and Guadalupe
- Multi Jurisdictional Project
 List of Participating Jurisdictions:
 The proposed project is located only within the City of Tempe, but the Western and Highline canals connect
- Total length of facilities connected by this project (in miles)
 12.5

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

This project will provide for the only safer and direct connection to/from the Western and Highline canals, directly connecting 12.5 miles of SUP, but also improving overall regional connectivity. This project will link adjacent neighborhoods such as the existing single family neighborhoods, the new high density multi-family residential in Chandler and Tempe, and the Town of Guadalupe, to employment centers on the west side of Tempe and Phoenix. By providing for a safe network of travel within Tempe and regionally to users of all abilities, it will encourage biking, walking, and transit as a more attractive option for travel. This connection will enable direct, safe and easy access to local schools, churches, large and small commercial centers,

5. Describe how this project will improve access to transit:

Along the east/west portion of the Western Canal there are two major regional transit routes, #81 and #72 which connect Tempe with Scottsdale, Chandler, and Paradise Valley. Additionally, along the entire portion of the Western and Highline canals within Tempe there are two express bus lines (520 and 521) and five other fixed routes (56, 62, 108, 65, 66). It should also be noted that this connection will also soon be serviced by the planned and funded Tempe circulator route; the Orbit Saturn. With easy access to intersecting transit lines, users of these canal pathways can safely travel to nearby bus stops and travel easily both locally and regionally. There are about 100 bus stops within 1/4 mile of the canals that will be easier to

6. Describe how this project will address bike/vehicle or pedestrian/vehicle conflicts:

The current conditions harbor unsafe interactions between pedestrians and bikes wishing to travel to/from the Western, Kyrene, and Highline canals; today users must go to a major arterial to get from one canal to the other. This path will provide a nearly car-free access. It is the city's intent to install a signalized dedicated crossing at the mid-block location of a 45 MPH major arterial at Kyrene. In addition, this project will further reduce bike/ped/vehicle conflicts by implementing a safe railroad crossing, and designating a well lit, wide, buffered shared-use path. Users wanting to make this connection today have to trespass on SRP and Ken McDonald Golf Course property at their own risk. In response, it is the city's intention to

7. What are the demographics of the area served:

[MAG Demographic Mapping](#)

2,211 People Per Square Mile

13 % Families in Poverty

9 % Age 65 Plus

Use the MAG Demographic Mapping link above. Zoom in to your project area. On the right-hand side of the screen, under "Reports," select "Custom Summary." 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 "Report 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 Excel icon at the top right side of the pop-up window) for your records.

8. How will this project benefit families in poverty?

By closing the missing gap, Tempe, Guadalupe, Chandler, Phoenix and other East Valley residents will now have a direct and safe connection to major employment, commercial, educational, and recreational facilities in and around Tempe. The project will provide safe and easy access to transit connecting Scottsdale, Phoenix, Gilbert, Chandler, and Mesa. Adjacent to the "missing link" is among the highest zero car household census tracts in Tempe. Families in poverty residents in the cities of Tempe, Guadalupe, Chandler and Phoenix, whose likely mode of transportation depends on transit, biking, or walking, will especially benefit from the improved regional connection.

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9. How will this project benefit minority residents?

With the proposed connection, minority residents who are transit dependent will benefit from improved access to more job destinations through regional and local routes. The project will benefit all residents, including the large concentration of minority residents close to the proposed project site in Tempe, Phoenix, Chandler and Guadalupe. By making the proposed connection, residents will have more direct and safe access to major employment, commercial, educational, and recreational facilities in and around Tempe. Minority residents in the cities of Tempe, Guadalupe, Chandler and Phoenix, whose daily work commute include transit, biking, or walking will benefit from the improved regional shared-use path connection and

10. How will this project benefit elderly residents?

Older residents, with limited mobility will benefit greatly from the proposed connection. Wider sidewalks and pathways will better accommodate different speeds and modes of transportation (i.e., wheelchairs, walkers, etc.). This proposed connection will enable elderly residents easier access to medical appointments, entertainment, and other services locally and regionally by having more transit options available. Lighting and shade will provide a more attractive and safer environment to access elderly oriented services and a safe and inviting venue for exercise and travel.

11. How will this project benefit school children?

School children will benefit from better access to transit, safer streets, and improved pedestrian and bike facilities. Tempe provides free neighborhood circulators and free buss passes to kids age 6-18 to ride transit. The proposed connection will connect to the extensive BIKEIT Boulevard network of offstreet, low-stress bike/ped facilities for younger, less confident bikers and pedestrians. With such a network in place, school children will have safe and direct access to schools, recreation (such as the Tempe YMCA), and parks (such as Kiwanis).

12. Please list any schools within 1/4 mile of the project:

Although there are not any schools within a 1/4 of the project, the Western Canal has five schools within a 1/2 mile buffer, which include Pinnacle High School, Aguilar Elementary School, Ascending Roots Scholastic & Athletic Premise (charter k-8th), Kyrene De los Ninos "dual language" Elementary School and Kyrene del Norte Elementary School.

13. How does the project benefit persons with disabilities?

This project will be universally accessible to all users of varying abilities. The project will be designed and constructed exceeding ADA recommended standards. The project will provide a 10' wide well-lit shared-use path, signalized mid-block crossing and improved railroad crossing, protective netting next to the golf course and trees. Enhanced lighting will accommodate users with varying vision ability to navigate safely. In addition, the wide 10' path will allow users needing to travel with powerchairs and other mobility aids to easily navigate the path and the railroad and arterial crossings. Entrances and egresses will be designed to facilitate ADA access to the path and crossings.

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14. The project is: (Check one)

- Identified in General Plan, council adopted policy, or Capital Improvements Program (provide source)
List:
- Consistent with general policy/practices, but not formally identified (provide source)
Explain:
- Not addressed by jurisdiction's plans, policies, or practices
Explain:

15. List the community partners that will be supporting the development and promotion of this project. Include city departments that will also be supporting the project.

16. Does the jurisdiction have a dedicated staff person to manage the project? Which city department will be responsible to provide information to the consultant?

17. Does the jurisdiction have base information available (topo survey, aerial photography, ALTA survey in electronic/digital format, easement information, utility placement information)?

Part C - 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 IN YOUR ELECTRONIC SUBMITTAL.

1. Please attach a map with street names clearly showing the project area boundaries and surrounding land uses, including a north arrow.

2. Please attach up to 2 aerial photos, if available (two 4x6 photos per page).

3. Please attach up to 4 photographs with captions of the study area showing the problems/issue (two 4x6 photos per page).

4. If the applicant is not the owner(s) of the project area, a letter of support and cooperation from the property owner(s) is required. This letter shall state that the property owner(s) agree to participate in the development of preliminary plans, and to permit improvements that may be identified as a result of this program.

5. (OPTIONAL) Up to 3 letters of support for the project.

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PART D - PROJECT COSTS

1. What is the approximate cost for 15% preliminary plans* for this project? Estimate cost for each task below:

\$3,000	Scope of Work
\$5,000	Stakeholder and Core Team Meetings
\$15,000	Data Collection
\$15,000	Data Analysis
\$10,000	Project Assessment Report (Draft)
\$5,000	Project Assessment Report (Final)
\$2,000	Executive Summary and Regional Significance Report
\$55,000	TOTAL COST ESTIMATE FOR 15% PRELIMINARY PLANS (SHOULD MATCH PART A, #7)

*15% Preliminary Plans generally include:

- Project Information (location, description, map)
- Background data including the need for the project
- Project Scope (length, type of work, how it is to be constructed)
- Project Development
- Environmental overview
- Geotechnical and drainage requirements
- Critical outside agency involvement
- Preliminary Right-of-Way requirements
- Preliminary Utility relocation requirements
- Preliminary Traffic requirements
- Seasonal consideration
- Design Criteria
- Itemized Cost Estimate
- Schedule
- Preliminary Plans
- Preliminary Pathway Horizontal Layout
- Typical Sections
- Preliminary Aesthetic Concept
- Information on potential funding sources
- Executive Summary

2. What is the anticipated cost for the whole project (please break down costs by design, environmental, ROW, utilities, construction, etc)?

Design and Environmental - 160,000.00; Construction \$800,000.

3. Are there designated funds for construction of this project? If yes, what funding sources have been identified?

Transit Tax will be designated to provide the required match for federal funds. Existing funding for bicycle boulevards in the Tempe CIP can be used for this project

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4. If funding has NOT been identified for construction of the project, what efforts have been made to identify funds that could be used for this project?

[Empty response box]

5. Are there funds for maintenance? Who has the responsibility for maintenance?

Yes there will be funds budgeted for maintenance. One constructed, Tempe Transit will maintain the project.

6. Is an easement required for this project? If YES, please attach a Property Owner Letter of Support.

No. The golf course is owned by the City of Tempe. SRP has also supported the project, as it passes by their road.

PART E - SIGNATURE AND CHECKLIST

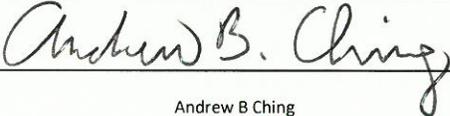
Checklist

This check list is included to facilitate applicant review and verification that all required fields in the form have been completed. **Incomplete applications will not be accepted.**

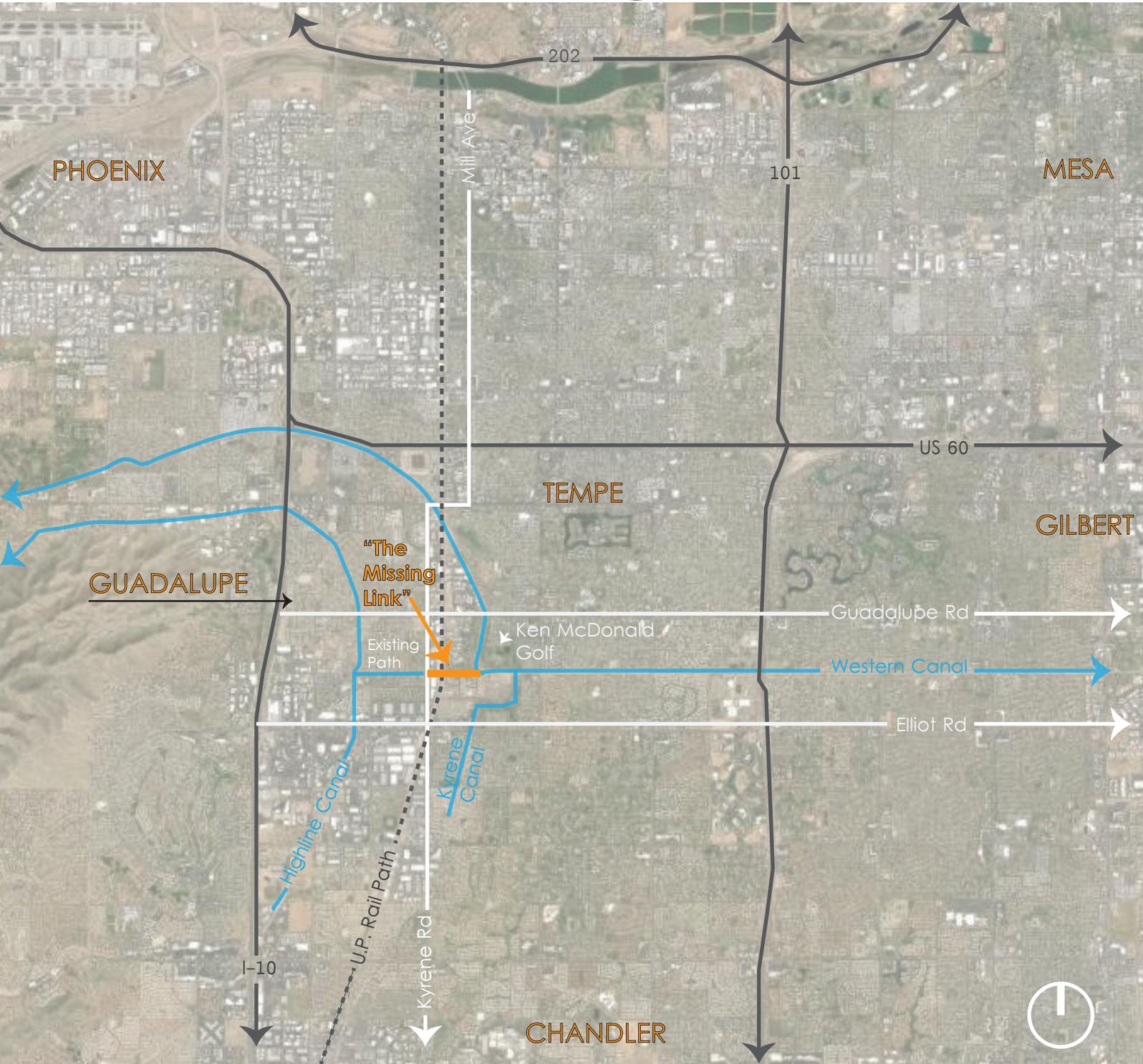
COVER SHEET	Complete?
Cover Sheet is completely filled out	Yes
PART A - Contacts and Project Description Fields	Complete?
Contact Information, fields 1 – 5 are complete	Yes
Project Description, fields 6 - 9 are complete	Yes
PART B - Project Description	Complete?
Fields 1 - 17 are complete	Yes
PART C - Attachments	Complete?
Attachment 1 - Map with street names	Yes
Attachment 2 - Aerial photos (if available)	Yes
Attachment 3 - Photographs with captions of the study area showing the problems/issues	Yes
Attachment 4 - Letter of Support and Cooperation from Property Owner (if required)	Yes
Attachment 5 - Up to 3 Letters of Support (OPTIONAL)	Yes
PART D - Project Costs	Complete?
Fields 1-6 are complete	Yes
PART E - Signature and Checklist	Complete?
Entire checklist is completed.	Yes
Form is signed by MAG member agency's manager or administrator.	Yes
Name, title and date fields under the signature are completed.	Yes

SIGNATURE:

As the MAG member agency's manager or administrator, I certify that this application is accurate and complete, that local agency staff time and data will be required for this project, and that the project will be included in the sponsoring MAG member agency's local CIP/TIP if the project is selected for federal construction funding.

Signature:	
Name:	Andrew B Ching
Title:	City Manager
Date:	26-Jul-15

The Missing Link - Area Map



Current Arterial Crossing Routes to/from Canals



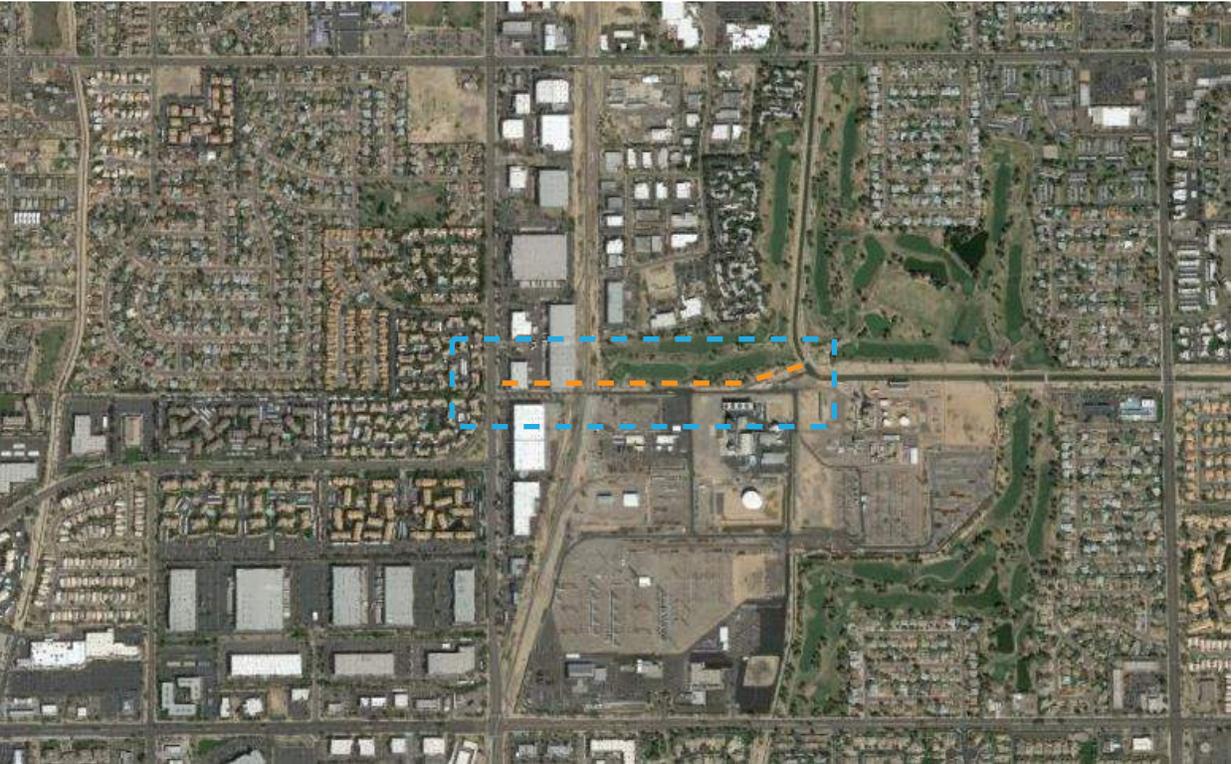
Bike/Ped Accidents 09'-12'
Source: ADOT



● Ped. Accident ● Bike Accident

Within .5 Mile of Tempe Western Canal

- 5 Schools
- 5 Parks
- + Arizona Mills Mall
Ken McDonald Golf
Tempe Y.M.C.A
Kiwanis Park





Simulated path connection to existing Western Canal Shared-Use Path, adjacent to SRP Plant and along edge of Ken McDonald Golf Course, with Sun Circle Trail signage (facing west)



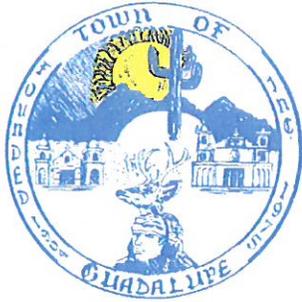
Path alignment where golf course meets SRP drive and is separated by chain link fencing (facing east)



Missing Link connection at approved railroad crossing, SRP drive and golf course access (facing east)



Missing Link connection across Kyrene Road and future signalized crossing to existing pathway that connects to Highline Canal Path (facing west)



Town of Guadalupe

9241 South Avenida Del Yaqui ♦ Guadalupe, Arizona ♦ 85283-2598 ♦ Phone: (480) 730-3080

June 24, 2015

Maricopa Association of Governments
Regional Bicycle and Pedestrian Committee
302 N. 1st Avenue, Suite 300
Phoenix Arizona 85003

RE: Western and Highline Canal Path Connection: "The Missing Link"

Dear Review Committee:

This letter is in support of a grant request by the City of Tempe for a design study of a .5-mile shared-use path and bicycle boulevard connection for Tempe's emerging BIKEiT system. The project would complete a gap in a 14 mile path system and link the regional Highline and Western Canal paths. It would travel through a Tempe owned golf course, along a Salt River Project access drive and onto Kyrene Road and pathway that ties in with the Highline Canal. The Highline and Western Canals serve as important regional off-street transportation networks that connect Gilbert, Phoenix, Chandler, Guadalupe and Tempe neighborhoods, other bike/ped facilities, and industrial employment and business centers. This design funding would enable Tempe, in concert with the Town of Guadalupe, to identify optimal methods and designs to maximize usage of this potential path with existing pathway assets.

This design study would provide the solutions for the pathway through the golf course, street crossing alternatives across Kyrene Road, safety measures and right-of-way needs associated with the Highline and Western Canal connection project. The project would also complete the 4 mile "Brake" Route bicycle boulevard extending to the Chandler city limit on the east. Any construction efforts that may be identified by this study would involve commitments from SRP Union Pacific, city Parks Division and other possible partners. This study would enable Tempe and other agencies to identify lighting, pavement, public art and landscaping elements.

For many years, the Town of Guadalupe, along with Tempe, advocated for the use of the regional canal system as a recreation and transportation corridor. We have made great progress toward a sustainable and attractive network of path facilities for all of our citizens along Salt River Canals. We feel the funding for this study is a positive and necessary step to better advance this project and begin concept development of the Western and Highline Canal connection.

Thank you for the opportunity to express our support for this project.

Sincerely,

TOWN OF GUADALUPE

Rose Mary Arellano
Interim Town Manager

June 23, 2015

Maricopa Association of Governments
Regional Bicycle and Pedestrian Committee
302 N. 1st Avenue, Suite 300
Phoenix Arizona 85003

RE: Western and Highline Canal Path Connection: "The Missing Link"

Dear Review Committee:

This letter is in support of a grant request by the City of Tempe for design of a .5-mile shared-use path and bicycle boulevard connection for Tempe's emerging BIKEiT system. The project would complete a gap in an 11 mile path system and link the regional Highline and Western Canal paths. It would travel from the Western Canal path through a Tempe owned golf course, along a Salt River Project access drive and onto Kyrene Road then linking an existing pathway that ties in with the Highline Canal. The Highline and Western Canals serve as important regional off-street transportation networks that connect Gilbert, Phoenix, Chandler, Guadalupe and Tempe neighborhoods, other bike/ped facilities, and industrial employment and business centers. This design funding would enable Tempe, in concert with our organization, to identify optimal designs to maximize usage of this potential path with existing pathway assets.

This design study would provide the solutions for the pathway through the golf course, street design solutions, and a preferred method for crossing Kyrene Road, safety measures and right-of-way needs associated with the Highline and Western Canal connection project. Any construction efforts that may be identified by this study would involve commitments from SRP, Union Pacific, city Parks Division and other possible partners. This study would enable Tempe and other agencies to identify lighting, pavement, public art and landscaping elements.

For many years, Tempe Bicycle Action Group, along with Tempe, advocated for the use of the regional canal system as a recreation and transportation corridor. We have made great progress toward a sustainable and attractive network of path facilities for all of our citizens along canals. We feel the funding for this study is a positive and necessary step to better advance this project and begin concept development of the Western and Highline Canal connection.

Thank you for the opportunity to express our support for this project.

Sincerely,

Patrick Valandra
President, Tempe Bicycle Action Group



Chandler · Arizona
Where Values Make The Difference

June 23, 2015

Maricopa Association of Governments
Regional Bicycle and Pedestrian Committee
302 N. 1st Avenue, Suite 300
Phoenix Arizona 85003

RE: Western and Highline Canal Path Connection: "The Missing Link"

Dear Review Committee:

This letter is in support of a grant request by the City of Tempe for design of a .5-mile shared-use path and bicycle boulevard connection for Tempe's emerging BIKEIT system. The project would complete a gap in an 11 mile path system and link the regional Highline and Western Canal paths. It would travel from the Western Canal path through a Tempe owned golf course, along a Salt River Project access drive and onto Kyrene Road then linking an existing pathway that ties in with the Highline Canal. The Highline and Western Canals serve as important regional off-street transportation networks that connect Gilbert, Phoenix, Chandler, Guadalupe and Tempe neighborhoods, other bike/ped facilities, and industrial employment and business centers. This design funding would enable Tempe, in concert with our organization, to identify optimal designs to maximize usage of this potential path with existing pathway assets.

This design study would provide the solutions for the pathway through the golf course, street design solutions, and a preferred method for crossing Kyrene Road, safety measures and right-of-way needs associated with the Highline and Western Canal connection project. Any construction efforts that may be identified by this study would involve commitments from SRP, Union Pacific, city Parks Division and other possible partners. This study would enable Tempe and other agencies to identify lighting, pavement, public art and landscaping elements.

For many years, our organization along with Tempe, advocated for the use of the regional canal system as a recreation and transportation corridor. We have made great progress toward a sustainable and attractive network of path facilities for all of our citizens along canals. We feel the funding for this study is a positive and necessary step to better advance this project and begin concept development of the Western and Highline Canal connection.

Thank you for the opportunity to express our support for this project.

Sincerely,

Jason Crampton
City of Chandler



Mailing Address
Mail Stop 412
PO Box 4008
Chandler, Arizona 85244-4008

Transportation & Development Department
Transportation
Telephone (480) 782-3440
Fax (480) 782-3495
Web www.chandleraz.gov

Location
975 E. Armstrong Way
Building C
Chandler, Arizona 85286

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www.srpnet.com

June 23, 2015

Maricopa Association of Governments
Regional Bicycle and Pedestrian Committee
302 North 1st Avenue, Suite 300
Phoenix, Arizona 85003

Subject: Western and Highline Canal Path Connection: "The Missing Link"

Dear Review Committee:

This letter is in support of a grant request by the City of Tempe for design of a one-half mile shared-use path and bicycle boulevard connection for Tempe's emerging BIKEiT system. The project would complete a gap in an 11-mile path system and link the regional Highline and Western Canal paths. It would travel from the Western Canal path through a Tempe owned golf course, along a Salt River Project access drive and onto Kyrene Road then linking an existing pathway that ties in with the Highline Canal. The Highline and Western Canals serve as important regional off-street transportation networks that connect Gilbert, Phoenix, Chandler, Guadalupe and Tempe neighborhoods, other bike/pedestrian facilities, and industrial employment and business centers. This design funding would enable Tempe, in concert with our organization, to identify optimal designs to maximize usage of this potential path with existing pathway assets.

This design study would provide the solutions for the pathway through the golf course, street design solutions, and a preferred method for crossing Kyrene Road, safety measures and right-of-way needs associated with the Highline and Western Canal connection project. Any construction efforts that may be identified by this study would involve commitments from SRP, Union Pacific, City Parks Division and other possible partners. This study would enable Tempe and other agencies to identify lighting, pavement, public art and landscaping elements.

For many years, our organization along with Tempe, advocated for the use of the regional canal system as a recreation and transportation corridor. We have made great progress toward a sustainable and attractive network of path facilities for all of our citizens along canals. We feel the funding for this study is a positive and necessary step to better advance this project and begin concept development of the Western and Highline Canal connection.

Thank you for the opportunity to express our support for this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Duncan". The signature is fluid and cursive, with a large initial "J" and "D".

Jim Duncan
Principal Engineering Analyst