

PROPOSED CONDITIONS REPORT

MOBILITY AREA 2



INDIAN SCHOOL-GRAND NEIGHBORHOODS

PREPARED FOR

City of Phoenix

PREPARED BY

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Proposed Conditions Report

Indian School-Grand Canal Neighborhoods (Mobility Area 2)

Mobility Area

Study Area

T2050 Mobility Assessment Study Area 2, Indian School-Grand Neighborhoods, is a 0.4 square mile area bounded by 23rd Avenue on the west, 18th Avenue on the east, Turney Avenue on the north, and Clarendon Avenue on the south.

Current Conditions

There are currently bus routes within the study area along Indian School Road and 19th Avenue. 23rd Avenue has been identified as a bikeway in the City of Phoenix Master Bike Plan. Currently, there are existing sidewalk gaps and bike lane gaps along 23rd Avenue. In addition to gaps in the sidewalk, there are many locations where existing curb ramps and driveways do not meet current standards. Recently the pedestrian bridge over the Grand Canal south of Indian School Road has been closed. This bridge is an important part of the local mobility network and should be reopened.

Purpose and Need

Many of the people living within the study area do not own a vehicle making them mobility dependent. The study will identify areas of improvement for all users. Initial engagement with the public, has brought to light many safety concerns. Their concerns include:

- Heavy afternoon rush hour traffic traveling northbound on 23rd Avenue south of Indian School Road and excessive vehicle speeds on 23rd Avenue, and 22nd Avenue
- Vehicles exiting the business onto Indian School Road at the northeast corner of 23rd Avenue and Indian School Road adjacent to the traffic signal causes conflict between turning vehicles and pedestrians crossing Indian School Road
- Difficulties for users with disabilities crossing Indian School Road at 23rd Avenue due to placement of pedestrian push buttons in relation to curb ramps
- No crosswalks on 23rd Avenue north of Indian School Road
- Improved street lighting at various locations throughout the study area

Other areas identified for improvement include gaps in the sidewalk system and bike lanes on 23rd Avenue, curb ramps, driveways, and pedestrian push buttons locations at

Proposed Conditions Report

23rd Avenue and 19th Avenue intersections with Indian School Road that do not meet current standards.

Photo 1 - Area 2

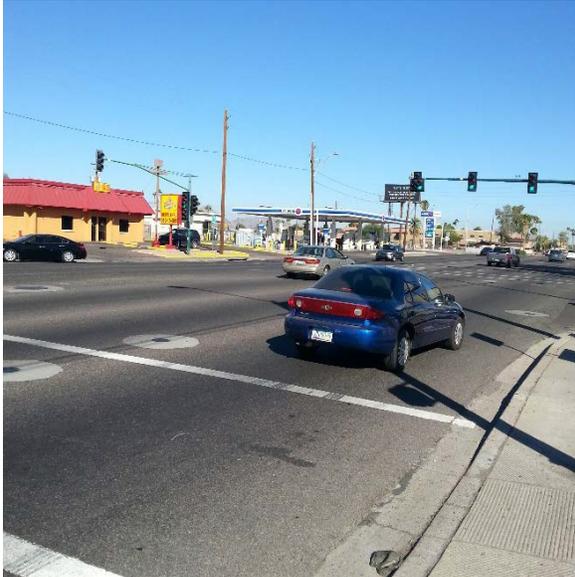


Photo 2 - Area 2



Photo 3 - Area 2



Photo 4 - Area 2



Draft Recommendations

Potential improvements within the study area have been developed and divided into projects based on project type and geographic locations. Projects have been identified by category, see Table 1 - Project Categories.

Table 1 - Project Categories

Project Category	Identification
ADA Compliance Improvements	A#
Bike Lane Improvements	B#
Sidewalk Improvements	S#
Safety Improvements	SF#
Intersection Improvements	I#

ADA Improvement projects

Driveway and curb ramp projects are listed in Table 2 - ADA Improvements. The individual projects have been divided into specific areas or districts. The projects are shown on Map 2 – Sidewalk/Curb Ramp Improvements. Improvements, to meet current standards include reconstruction of curb ramps and driveways where necessary. In some locations, improvements will require relocation of existing utility poles to remove barriers to pedestrians with mobility disabilities.

References:

United States Access Board - Transportation

<https://www.access-board.gov/guidelines-and-standards/transportation/facilities/ada-standards-for-transportation-facilities>

United States Access Board – Public Right of Ways

<https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way>

United States Department of Justice

<https://www.ada.gov/>

Table 2 - ADA Improvements

ADA Improvement Projects	
A1	23 rd Avenue ADA Improvements
A2	Indian School Road ADA Improvements
A3	19 th Avenue ADA Improvements

Bicycle Improvements projects

The Bicycle Improvement project is listed in Table 3 - Bicycle Improvements. The individual bicycle improvement project has been specified on 23rd Avenue from Indian School Road south, to the pedestrian bridge over the canal.

Bicycle improvements include installation of new bike lane striping, and signage.

Table 3 - Bicycle Improvements

Bicycle Improvement Project	
B1	23 rd Avenue Bike Lanes West Improvements

Sidewalk improvement projects

Sidewalk improvement projects are listed in Table 4 - Sidewalk Improvements. The individual sidewalk projects have been divided into specific areas or districts. The projects are shown on Map 2 – Sidewalk/ADA Improvements. Sidewalk improvements shall include the installation of new sidewalk to eliminate gaps in the existing sidewalk system, and sidewalk reconstruction to meet current standards.

Table 4 - Sidewalk Improvements

Sidewalk Improvement Projects	
S1	23 rd Avenue Sidewalk Improvements
S2	23 rd Avenue Sidewalk Improvements West

Safety improvements

The safety improvement is listed in Table 6 – Intersection Improvements. Stakeholder has identified the need for traffic calming features on 22nd Avenue to slow traffic speeds.

Improvements include the installation of speed tables on 22nd Avenue between Fairmount Avenue and Indian School Road.

Table 5 – Safety Improvements

Safety Improvement Projects	
SF1	22 nd Avenue Traffic Calming Improvements

Street Light Improvements

No separate street lighting projects have been identified. Street light improvements are identified as part of the 23rd Avenue and Indian School Road Intersection improvements. Improvements shall include installation of new street light poles and appurtenances to enhance lighting at the intersection.

Trees / Shade

Proposed improvements in the study area do not include separate projects to provide trees for shade. Trees plantings have been included in the sidewalk improvement project on 23rd Avenue between Osborn Road and Fairmount Avenue.

Table 6 – Proposed Trees

Project	Number of Trees
S1 – 23 rd Avenue Sidewalk Improvements	15

Transit

Bus stops within the study area were found to be in accordance with current standards and not in need of sidewalk improvements, therefore no proposed transit stop improvements were identified in the study. However, various bus stops within the study area are missing benches and/or shelters. The installation of shelters and benches will be funded as part of other transit improvement projects.

Intersection Improvements

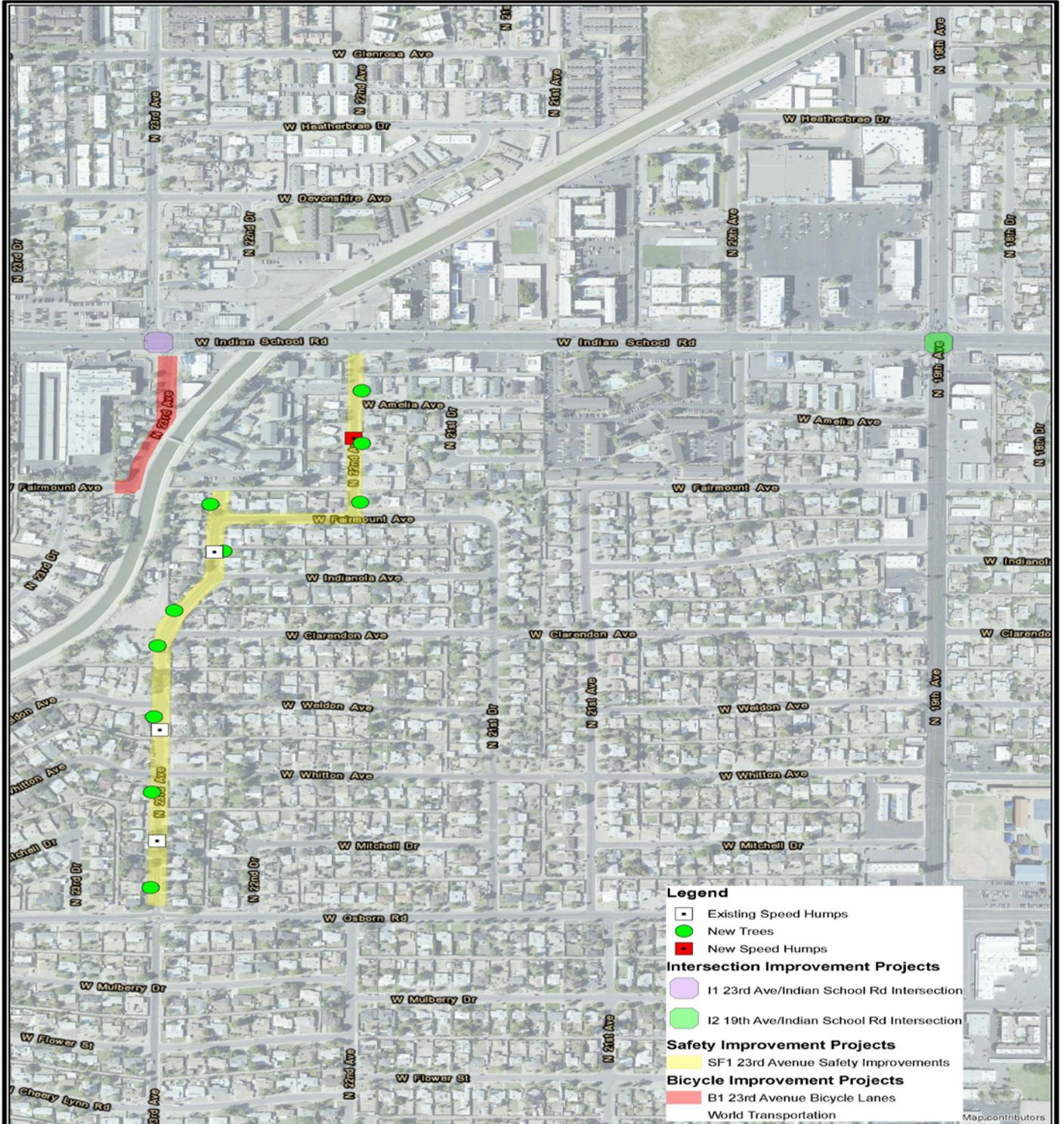
Intersection improvements are listed in Table 6 – Intersection Improvements. Improvements include:

- Relocate pedestrian push buttons, reconstruct curb ramps and restripe crosswalks at the corners of 19th Avenue and Indian School Road intersection
- Relocate pedestrian push buttons, reconstruct curb ramps and restripe crosswalks at the corners of 23rd Avenue and Indian School Road intersection
- Control the access onto Indian School Road by eliminating the business exit only driveway, located at the northeast corner of 23rd Avenue and Indian School Road

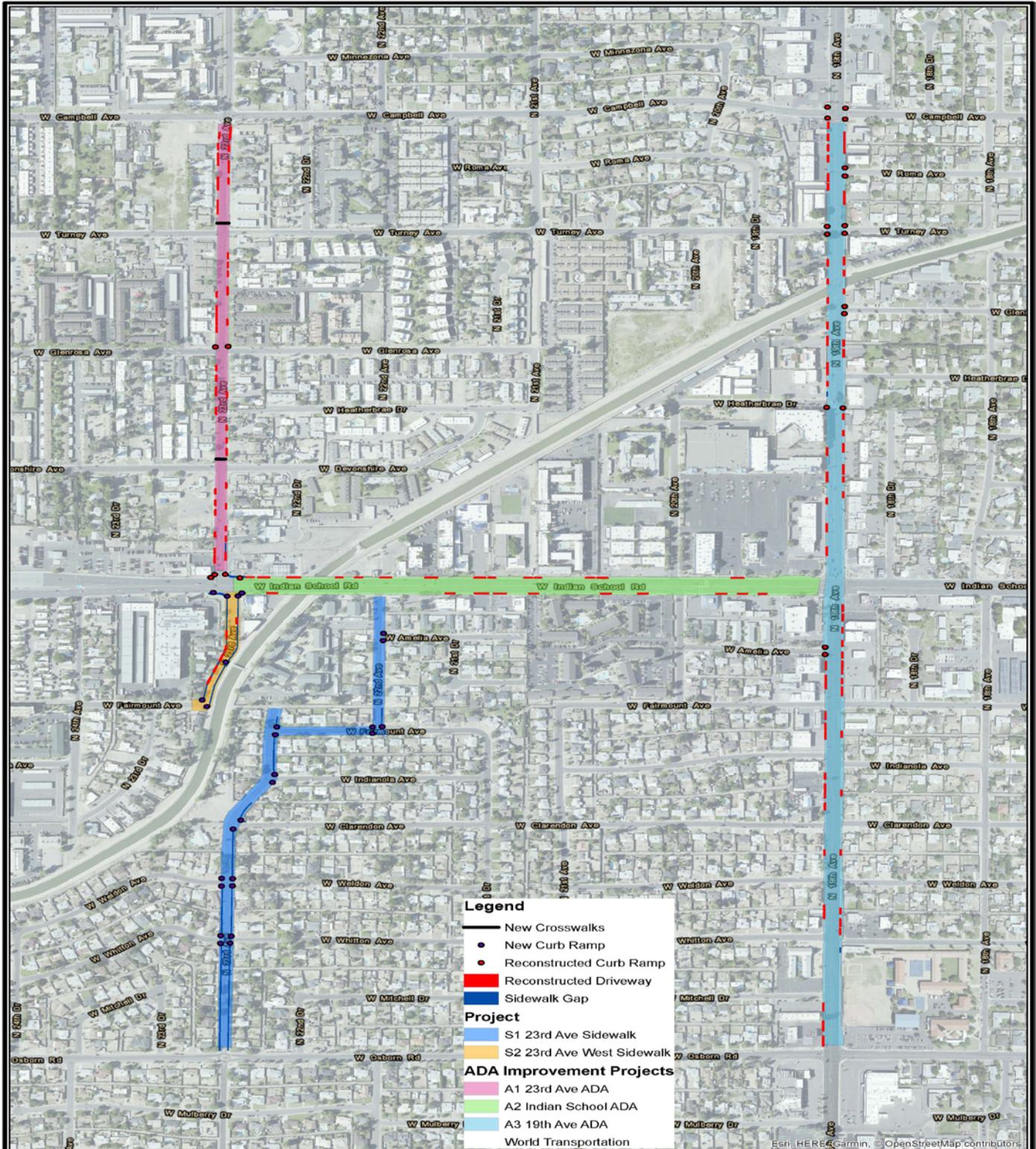
Table 6 – Intersection Improvements

Intersection Improvement Projects	
I1	Indian School Rd / 23 rd Avenue Intersection Improvements
I2	Indian School Rd /19 th Avenue Intersection Improvements

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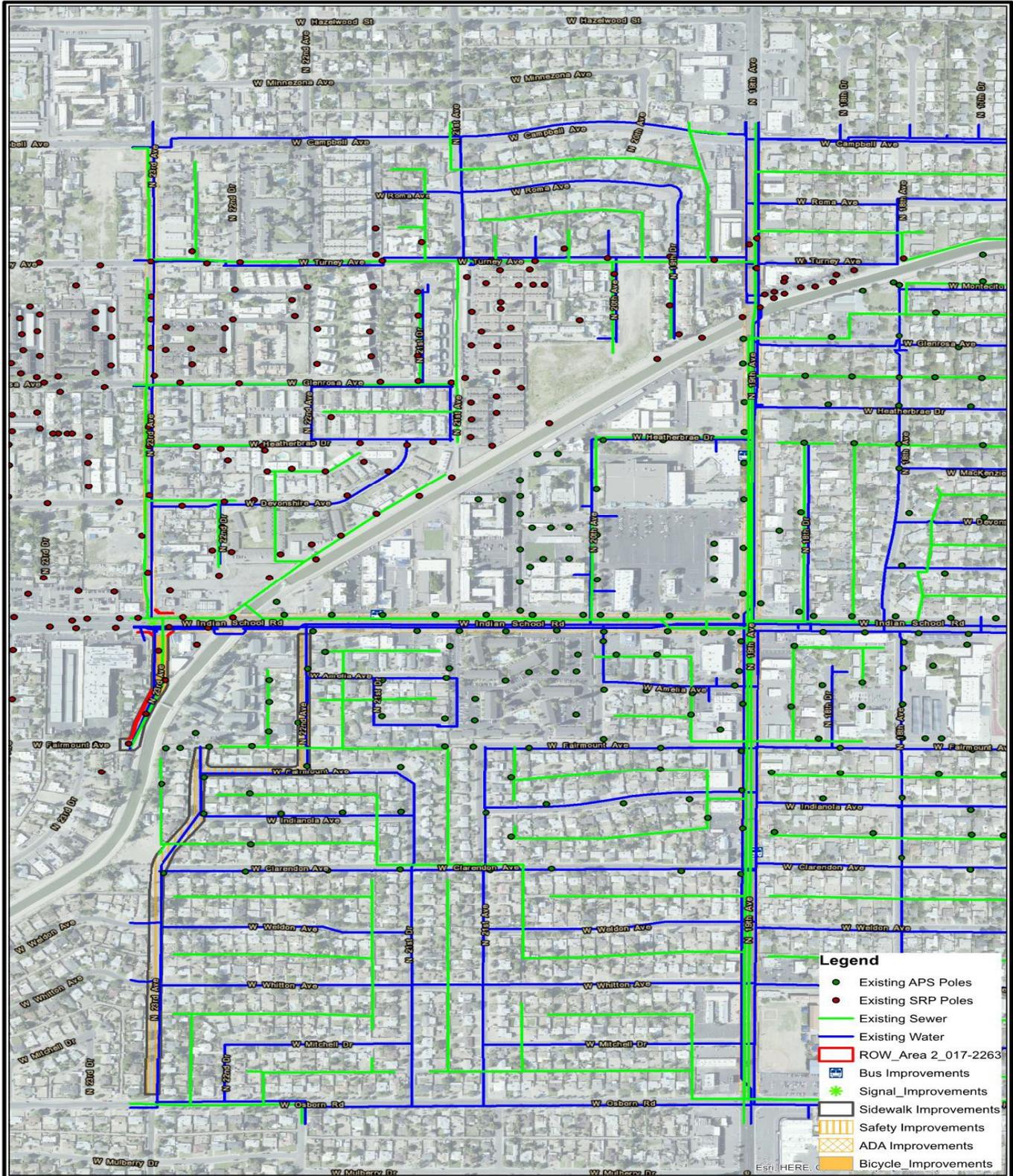


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Project Scoring Summary

Unique ID	Project Name	Description/Scope	Evaluation Criteria Score	Project Costs
Map ID #		concise bullets or sentences	whole #	
B1	23 rd Avenue Bicycle Lane Improvements, 23 rd Avenue from Indian School Road south to the Pedestrian Bridge over the canal.	The project will include the installation of bike lanes and signage on 23 rd Avenue from Indian School Road south to the Pedestrian Bridge over the canal.	104	Construction Phase Right of Way \$95,840 \$0 Design & Construction Admin Fee (35%) \$33,350 Project Total \$129,390
SF1	22 nd Avenue Traffic Calming Improvements, 22 nd Avenue between Fairmount Avenue and Indian School Road	The project will include the installation of speed tables, asphalt pavement and signage on 22 nd Avenue between Fairmount Avenue and Indian School Road.	100	Construction Phase Right of Way \$33,600 \$0 Design & Construction Admin Fee (35%) \$11,760 Project Total \$45,360
I2	23 rd Avenue and Indian School Road Intersection Improvements	The project will include the relocation of pedestrian push buttons, reconstruction of curb ramps and high visibility crosswalks at all corners of the 23 rd Avenue and Indian School Road Intersection. The project will eliminate the existing business driveway exit at the northeast corner of the intersection. The improvements will include new pavement, curb and gutter, sidewalk and street lights.	98	Construction Phase Right of Way \$367,470 \$21,125 Design & Construction Admin Fee (35%) \$125,620 Project Total \$517,220
S1	22 nd and 23 rd Avenue Sidewalk Improvements, 23 rd Avenue between Osborn Road and Fairmount Avenue; 22 nd Avenue between Fairmount Avenue and Indian School Road.	The project will include the installation of new sidewalk, and curb ramps and trees in various locations along 23 rd Avenue between Osborn Road and Fairmount Avenue, and 22 nd Avenue between Fairmount Avenue and Indian School Road.	91	Construction Phase Right of Way \$221,600 \$25,000 Design & Construction Admin Fee (35%) \$77,560 Project Total \$324,160
A2	Indian School Road ADA Improvements, Indian School Road between 23 rd Avenue and 19 th Avenue	The project will include the reconstruction of curb ramps and driveways at various locations along Indian School Road between 23 rd Avenue and 19 th Avenue.	91	Construction Phase Right of Way \$150,250 \$60,000 Design & Construction Admin Fee (35%) \$52,590 Project Total \$262,840
I1	19 th Avenue and Indian School Road Intersection Improvements	The project will include the relocation of pedestrian push buttons, reconstruction of curb ramps and high-visibility crosswalks at all corners of the 19 th Avenue and Indian School Road Intersection.	91	Construction Phase Right of Way \$375,600 \$0 Design & Construction Admin Fee (35%) \$131,640 Project Total \$507,060
A3	19 th Avenue ADA Improvements, 19 th Avenue between Osborn Road and Campbell Avenue	The project will include the reconstruction of curb ramps and driveways at various locations along 19 th Avenue between Osborn Road and Campbell Avenue.	90	Construction Phase Right of Way \$359,970 \$162,500 Design & Construction Admin Fee (35%) \$129,990 Project Total \$648,460
S2	23 rd Avenue Sidewalk Improvements (West), 23 rd Avenue between Fairmount Avenue and Indian School Road	The project will include the installation of new sidewalk, curb ramps, and driveways in various locations along 23 rd Avenue between Fairmount Avenue and Indian School Road.	87	Alternate 1 Construction Phase Right of Way \$81,980 \$42,350 Design & Construction Admin Fee (35%) \$28,700 Project Total \$153,030
A1	23 rd Avenue ADA Improvements, 23 rd Avenue between Indian School Road and Campbell Avenue	The project will include the reconstruction of curb ramps and driveways at various locations along 23 rd Avenue, between Indian School Road and Campbell Avenue. The project will include high-visibility crosswalks across 23 rd Avenue at Devonshire Avenue and Turney Avenue.	87	Alternate 2 Construction Phase Right of Way \$204,200 \$60,000 Design & Construction Admin Fee (35%) \$71,470 Project Total \$335,670

Project Summary Sheet S1: 22nd and 23rd Avenue Sidewalk Improvements, 23rd Avenue between Osborn Road and Fairmount Avenue; 22nd Avenue between Fairmount Avenue and Indian School Road

Project Description

- The project will include the installation of new sidewalk, and curb ramps and trees
- in various locations along 23rd Avenue between Osborn Road and Fairmount Avenue, and 22nd Avenue between Fairmount Avenue and Indian School Road.

Project Benefits

- The proposed improvements will improve pedestrian mobility by eliminating gaps in the existing sidewalk system along 23rd Avenue between Osborn Road and Fairmount Avenue and 22nd Avenue between Fairmount Avenue and Indian School Road. The project will provide shade through trees.

Key Destinations

- Indian School Road Bus Stops
- Grand Canal Multi-Use Path
- Indian School Road and 19th Avenue Businesses
- Encanto/Clarendon Elementary School, St Gregory Catholic School, Montebello School

Current Conditions

- Currently, there are gaps in the sidewalk system and missing curb ramps along 22nd and 23rd Avenues.

*Photo 5 - 23rd Ave, Clarendon Ave,
Looking North*



Proposed Conditions Report

- Stakeholders have indicated that several children use these routes to walk and bike to school.

Project Exhibit

- Map 2 shows the locations of the proposed improvements.

Project Delivery Constraints

- The proposed improvements may require temporary construction easements.
- The proposed improvements will require utility coordination.

Project Costs

Project Name	Cost	Schedule (Months)
Construction Phase	\$221,600	4
Right-of-Way Acquisition	\$25,000	8
Design and Construction Admin Fee (35%)	\$77,560	8
<i>Project Total</i>	<i>\$324,160</i>	<i>20</i>

Project Summary Sheet S2: 23rd Avenue Sidewalk Improvements (West), 23rd Avenue between Fairmount Avenue and Indian School Road

Project Description

- The project will include the installation of new sidewalk, curb ramps, and driveways in various locations along 23rd Avenue between Fairmount Avenue and Indian School Road.

Project Benefits

- The proposed improvements will enhance pedestrian mobility by eliminating gaps in the existing sidewalk system and add curb ramps and driveways to current standards.

Key Destinations

- Indian School Road Bus Stops
- Grand Canal Multi-Use Path
- Indian School Road and 19th Avenue Businesses
- Encanto/Clarendon Elementary School, St Gregory Catholic School, Montebello School

Current Conditions

- Currently, there are gaps in the sidewalk system along 23rd Avenue between Fairmount Avenue and Indian School Road.
- Stakeholders have indicated that traffic is heavy on the street and several children use this route to walk and bike to school.

Project Exhibit

- Map 2 shows the locations of the proposed improvements.

*Photo 6 - 23rd Ave, Fairmount Ave,
Looking North*



Project Delivery Constraints

- The proposed improvements may require the acquisition of right of way and temporary construction easements.
- The proposed improvements will require utility coordination.

Project Costs

Project Name	Cost	Schedule (Months)
Construction Phase	\$81,980	4
Right-of-Way Acquisition	\$42,350	4
Design and Construction Admin Fee (35%)	\$28,700	4
Project Total	\$153,030	12

Project Summary Sheet A1: 23rd Avenue ADA Improvements, 23rd Avenue between Indian School Road and Campbell Avenue

Project Description

- The project will include the reconstruction of curb ramps and driveways at various locations along 23rd Avenue, between Indian School Road and Campbell Avenue.
- The project will include high-visibility crosswalks across 23rd Avenue at Devonshire Avenue and Turney Avenue.

Project Benefits

- The proposed improvements will enhance mobility and safety by reconstructing the curb ramps and driveways to meet current standards.

Key Destinations

- Schools
- Indian School Road Businesses
- Indian School Road Bus Stops
- Grand Canal Multi-Use Path

Current Conditions

- Currently, many of the curb ramps and driveway along 23rd Avenue between Indian School Road and Campbell Avenue do not meet current standards.
- Stakeholders have indicated that several children use this route to walk and bike to school.

Project Exhibit

- Map 2 shows the locations of the proposed improvements.

Photo 7 - 23rd Ave, North of Indian School Rd, Looking North



Project Delivery Constraints

- The proposed improvements may require temporary construction easements.
- The proposed improvements will require utility coordination.

Project Costs

Project Name	Cost	Schedule (Months)
Construction Phase	\$204,200	4
Right-of-Way Acquisition	\$60,000	4
Design and Construction Admin Fee (35%)	\$71,470	4
<i>Project Total</i>	<i>\$335,670</i>	<i>12</i>

Project Summary Sheet A2: Indian School Road ADA Improvements, Indian School Road between 23rd Avenue and 19th Avenue

Project Description

- The project will include the reconstruction of curb ramps and driveways at various locations along Indian School Road between 23rd Avenue and 19th Avenue.

Project Benefits

- The proposed improvements will enhance mobility and safety by reconstructing the curb ramps and driveways to meet current standards.

Key Destinations

- Indian School Road and 19th Avenue Businesses
- Indian School Road and 19th Avenue Stops
- Grand Canal Multi-Use Path

Current Conditions

- Currently, many of the curb ramps and driveway along Indian School Road between 23rd Avenue and 19th Avenue do not meet current standards.
- Stakeholders have indicated that several children use this route to walk and bike to school.

Project Exhibit

- Map 2 shows the locations of the proposed improvements.

Project Delivery Constraints

- The proposed improvements may require temporary construction easements.
- The proposed improvements will require utility coordination.

*Photo 8 - Indian School Rd, West of
19th Ave, Looking East*



Project Costs

Project Name	Cost	Schedule (Months)
Construction Phase	\$150,250	4
Right-of-Way Acquisition	\$60,000	4
Design and Construction Admin Fee (35%)	\$52,590	4
<i>Project Total</i>	<i>\$262,840</i>	<i>12</i>

Project Summary Sheet A3: 19th Avenue ADA Improvements, 19th Avenue between Osborn Road and Campbell Avenue

Project Description

- The project will include the reconstruction of curb ramps and driveways at various locations along 19th Avenue between Osborn Road and Campbell Avenue.

Project Benefits

- The proposed improvements will enhance mobility and safety by reconstructing the curb ramps and driveways to meet current standards.

Key Destinations

- Phoenix Christian High School and Montebello School
- 19th Avenue Businesses
- 19th Avenue Bus Stops

Current Conditions

- Currently, many of the curb ramps and driveway along 19th Avenue do not meet current standards.
- Stakeholders have indicated that several children use this route to walk and bike to school.

Project Exhibit

- Map 2 shows the locations of the proposed improvements.

Project Delivery Constraints

- The proposed improvements may require temporary construction easements.
- The proposed improvements will require utility coordination.

*Photo 9 - 19th Ave, Indianola Ave,
Looking North*



Project Costs

Project Name	Cost	Schedule (Months)
Construction Phase	\$359,970	4
Right-of-Way Acquisition	\$162,500	4
Design and Construction Admin Fee (35%)	\$129,990	4
Project Total	\$648,460	12

Project Summary Sheet B1: 23rd Avenue Bicycle Lane Improvements, 23rd Avenue from Indian School Road south to the Pedestrian Bridge over the canal.

Project Description

- The project will include the installation of bike lanes and signage on 23rd Avenue from Indian School Road south to the Pedestrian Bridge over the canal.

Project Benefits

- The proposed improvements will fill in the missing bike lanes on 23rd Avenue providing a continuous bike lane network.

Key Destinations

- Grand Canal
- Indian School Road Bus Stops

Current Conditions

- Currently, there are gaps in the bike lane network on 23rd Avenue, between Indian School Road and the pedestrian bridge over the canal. Recently the bridge has been closed off at 23rd Avenue, however it is an important part of the mobility network and should be reopened for use.

Project Exhibit

- Map 1 shows the location of the proposed improvements.

Project Delivery Constraints

- No constraints have been identified.

Photo 10 - 23rd Ave, South of Indian School Rd, Looking North



Project Costs

Project Name	Cost	Schedule (Months)
Construction Phase	\$95,840	1
Right-of-Way Acquisition	\$0	0
Design and Construction Admin Fee (35%)	\$33,350	2
<i>Project Total</i>	\$129,390	3

Project Summary Sheet I1: 19th Avenue and Indian School Road Intersection Improvements

Project Description

- The project will include the relocation of pedestrian push buttons, reconstruction of curb ramps and high-visibility crosswalks at all corners of the 19th Avenue and Indian School Road Intersection.

Project Benefits

- The proposed improvements will establish the location of pedestrian push buttons to meet current standards in relation to curb ramps and reconstruct curb ramps to current standards. New high-visibility crosswalks will improve safety for all users at the intersection.

Key Destinations

- 19th Avenue Bus Stops
- Indian School Road Bus Stops
- Businesses located near the intersection

Current Conditions

- The existing pedestrian push buttons and curb ramps at the intersection corners do not meet current standards.

Project Exhibit

- Map 1 shows the location of the proposed improvements.

Project Delivery Constraints

- The proposed improvements will require utility coordination.
- The proposed improvements may require temporary construction easements to construct the improvements.

Photo 11 - 19th Ave, Indian School Rd,
Looking West



Project Costs

Project Name	Cost	Schedule (Months)
Construction Phase	\$375,600	4
Right-of-Way Acquisition	\$0	0
Design and Construction Admin Fee (35%)	\$131,640	4
Project Total	\$507,060	8

Project Summary Sheet I2: 23rd Avenue and Indian School Road Intersection Improvements

Project Description

- The project will include the relocation of pedestrian push buttons, reconstruction of curb ramps and high visibility crosswalks at all corners of the 23rd Avenue and Indian School Rod Intersection.
- The project will eliminate the existing business driveway exit at the northeast corner of the intersection. The improvements will include new pavement, curb and gutter, sidewalk and street lights.

Project Benefits

- The proposed improvements will bring pedestrian push buttons, and curb ramps to current standards. High-visibility crosswalks will enhance safety for all users at the intersection.
- The removing the business driveway will eliminate conflicts between exiting vehicles and pedestrians crossing at the intersection.

Key Destinations

- Grand Canal Multi-Use Path
- Indian School Road Bus Stops
- Businesses located near the intersection

Current Conditions

- The existing pedestrian push buttons and curb ramps at the intersection corners do not meet current standards.
- The location of the business driveway exit adjacent to the intersection creates conflicts with vehicles exiting the business and pedestrians crossing Indian School Road.

*Photo 12 - Indian School Rd, 23rd Ave,
Looking East*



Project Exhibit

- Map 1 shows the location of the proposed improvements.

Project Delivery Constraints

- The proposed improvements will require utility coordination.
- The proposed improvements may require right of way acquisition.
- The proposed improvements may require temporary construction easements to construct the improvements.

Project Costs

Project Name	Cost	Schedule (Months)
Construction Phase	\$367,470	4
Right-of-Way Acquisition	\$21,125	4
Design and Construction Admin Fee (35%)	\$128,620	4
<i>Project Total</i>	<i>\$517,220</i>	<i>12</i>

Project Summary Sheet SF1: 22nd Avenue Traffic Calming Improvements, 22nd Avenue between Fairmount Avenue and Indian School Road

Project Description

- The project will include the installation of speed tables on 22nd Avenue between Fairmount Avenue and Indian School Road.
- The project will include asphalt pavement improvements and new signage.

Project Benefits

- The proposed traffic calming improvements will slow traffic speeds thorough the area to enhance safety for the pedestrians and bicyclists.
- Enhance signage at the Fairmount Avenue and 22nd Avenue intersection to eliminate motorists running the stop signs.

Key Destinations

- Montebello School
- Indian School Road

Current Conditions

- Currently, speed tables are located on 23rd Avenue south of Fairmount Avenue.
- Stakeholders have indicated that travel speeds are high through the area. In addition, motorists are using 23rd Avenue as a cut through to I-17.
- Stakeholders indicated that motorists are ignoring the stop signs at Fairmount southbound and 22nd Avenue westbound.

Project Exhibit

- Map 1 shows the locations of the proposed improvements.

*Photo 13 - 23rd Ave, Clarendon Ave,
Looking South*



Project Delivery Constraints

- The proposed improvements will require utility coordination.

Project Costs

Project Name	Cost	Schedule (Months)
Construction Phase	\$33,600	4
Right-of-Way Acquisition	\$0	0
Design and Construction Admin Fee (35%)	\$11,760	4
Project Total	\$45,360	8