



CITY ENGINEERING DIVISION
Capital Improvements Section

Monthly Capital Projects Report
August 2022

Honorable Mayor, Vice Mayor and Council,

The August report was completed by our Project Managers on September 2nd and includes project updates for the month of August.

The attached map is a comprehensive view of all active capital improvements projects in our community that are assigned to the Capital Improvements Section of the City Engineering Division, inclusive of projects that are in planning, design, and construction phases.

We have tried to reduce the extent of information provided and focused on only those projects that had substantive progress from previous months or have key milestones to share.

If you would like to receive more information on a specific project, please reach out and we'd be glad to share more detailed information.

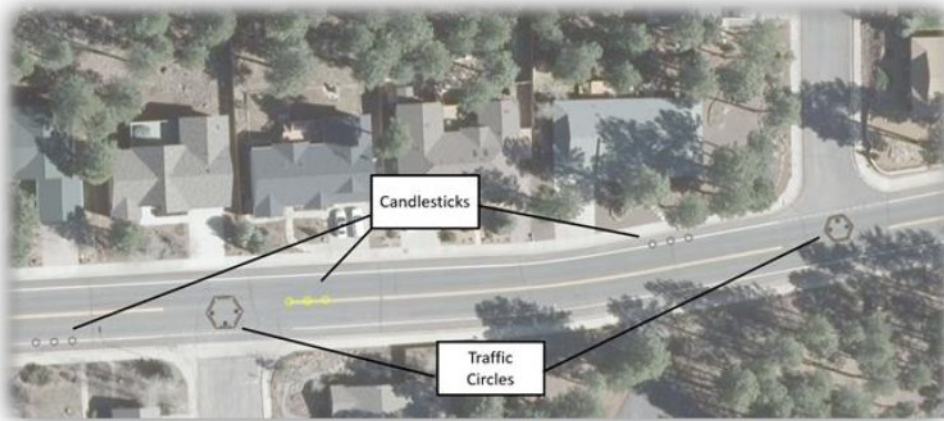
Boulder Point - University Ave Traffic Calming (DESIGN PHASE)

FUND: TRANSPORTATION TAX

Description – The Transportation Commission approved the traffic circle design at the intersections of University Ave/Majestic Rd and University Ave/Tombaugh Way on June 1st, 2022. This design, in temporary form, lowered the 85th percentile speed on University Ave to 27 mph, down from 31 mph. This brings the speeds down to a level that are below the threshold for traffic calming based on the worksheets in the Guidebook for Residential Traffic Management.

Project Update:

- The estimate for the permanent traffic calming in Boulder Pointe, which includes two traffic circles, bump outs, and raised crosswalks is \$387,600.
- A funding source has been identified, and the next step is to hire a designer to complete the final design. The final design must address concerns from citizens in the neighborhood regarding the traffic circle design, including vehicles traveling in the bicycle lane and sight distance issues for northbound vehicles on Majestic Rd.
- The design and construction of this project will be incorporated into the Woody Way improvements.



W University Ave Traffic Circles

Fremont Blvd Restriping (DESIGN PHASE)

FUND: TRANSPORTATION TAX

Description – The Transportation Commission approved investigating traffic calming measures on Fremont Blvd on February 2nd 2022. Staff determined that restriping the road from two lanes in each direction to one lane in each direction with additional parking and bike buffers was an appropriate solution. The new cross section can be seen below. Staff is currently working on finalizing the estimated cost of the restriping.



Fremont Blvd New Striping Configuration

Spruce Wash – Cedar to Dortha and Dortha Inlet (CONSTRUCTION PHASE)

FUND: STORMWATER

Description – Consists of improvements to the Spruce Wash Channel from Cedar Avenue to south of Dortha Avenue. This work is in response to the damage that occurred during the 2021 monsoon flooding from the Museum Fire burn scar.

Project Update:

- The project is substantially complete and Dortha Avenue is open to through traffic.
- Real estate acquisition for the drainage easement is proceeding.



Dortha Avenue - looking west

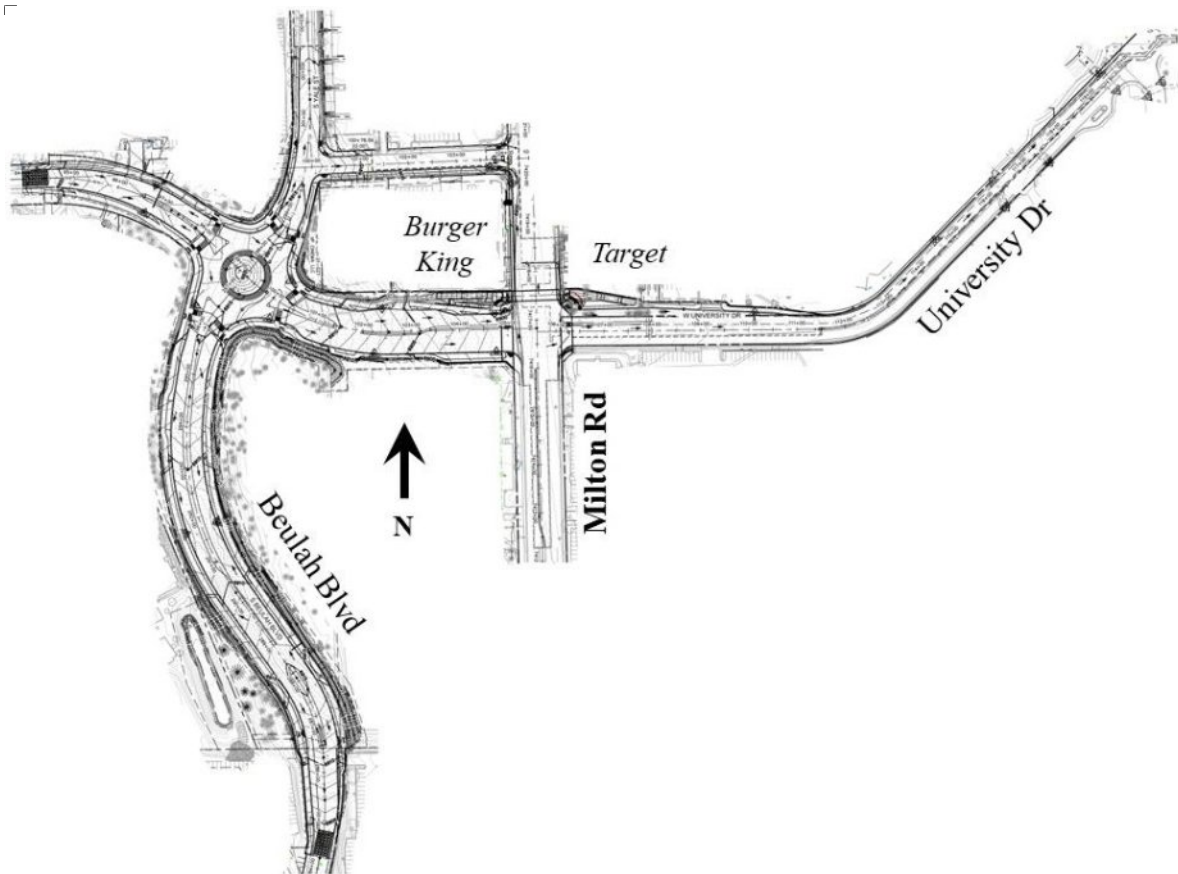
Beulah Boulevard Extension/University Drive Realignment (DESIGN PHASE)

FUND: TRANSPORTATION TAX (STREETS)

Description – This roadway improvement project extends the northern terminus of Beulah Boulevard to connect with University Avenue. Furthermore, University Avenue (west of Milton) will be realigned to match up with University Drive (east of Milton). A new roundabout will be constructed where Beulah Boulevard and University Avenue will intersect. Additionally, this project will also be constructing a new pedestrian underpass beneath Milton Road, just south of Burger King across to Target. Construction is expected to begin in spring 2023 and conclude in late 2024.

Project Update:

- Shephard-Wesnitzer, Inc. (SWI) is the design engineer.
- Eagle Mountain Construction (EMC) is the CMAR (Construction Manager at Risk) contractor.
- SWI has completed the final design plans.
- Value Engineering workshop with SWI, EMC, and City Staff is scheduled for 8 September. This meeting is to discuss and implement ways to reduce construction costs.
- Appraisals for right-of-way and easements are currently underway.



Extent map of new Beulah and University Roadway Project – taken from final plans.

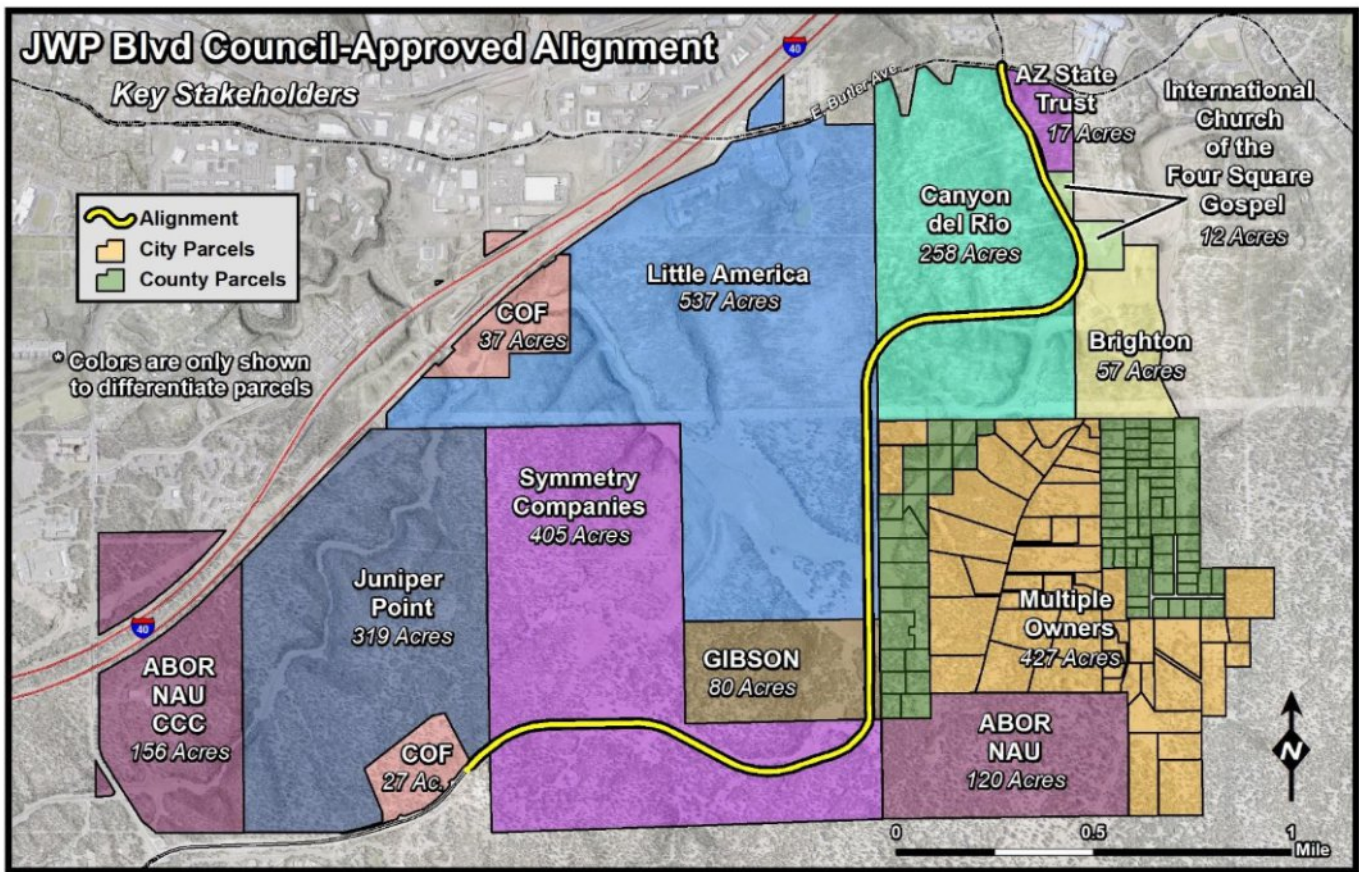
J.W. Powell Specific Plan Study (PLANNING PHASE)

FUND: GENERAL GOVERNMENT & TRANSPORTATION TAX

Description – The purpose of the John Wesley Powell Specific Plan Study (Study) is to develop a specific plan to guide the future private development of public infrastructure, utilities, and facilities. Phase 1 of the project is the conceptual design of the future public infrastructure (roads), public utilities and facilities location analysis. The conceptual design is required to meet the full City infrastructure standards including street improvements, potable water, sanitary sewer mains, storm drain systems, street lighting and associated appurtenances. Phase 1 of the Study includes a sanitary sewer system master plan for the area. A water system master plan was previously developed for the area. Phase 2 of the Study is development of the planning elements necessary to gain City Council approval of a Specific Plan.

Project Update:

- City Staff is working with Peak Engineering and their subconsultant, Swaback, to scope Change Order 5. This Change Order will come to Council in mid-October and the scope of work will be the Specific Plan.
- City Council selected the alternative alignment (shown below) as the final alignment on 7 July 2022.



Council-Approved alignment of new J.W. Powell Boulevard and Fourth Street; denoted by yellow line

Coconino Estates Improvements Phase I (CONSTRUCTION PHASE)

FUND: ROAD REPAIR & STREET SAFETY

Description – This is a utility and roadway improvements project located in the Coconino Estates neighborhood on Beal Road from Rockridge to Fort Valley, Navajo Drive from Navajo Road to Murray, Whipple Road from Navajo Drive to McMillan, and Navajo Road from Navajo Drive to Fort Valley. Improvements on the streets generally consist of replacing existing infrastructure with new, including water and sewer mains, water and sewer services, fire hydrants, storm drains, streetlights, the entire asphalt roadway, and defective select edge improvements (curb & gutter, sidewalk, etc.), except for Whipple Road which will only receive a new water main. There will also be new infrastructure added consisting of underground electric lines for streetlighting and sidewalk on both sides of the street where it does not currently exist on Beal Road, Navajo Drive south of Beal, and on Navajo Road. For additional information visit the Project website at www.coconinoestates.com.

Contractor – Eagle Mountain Construction

Project Update:

A new way of communicating project information has been started with the installation of a new project sign and banner prototype that include a QR code for the public to scan and view more information on the Project website.

Navajo Road and Navajo Drive south of Beal (Construction Zones #1 and #2)

- Utility and roadway improvements are complete including landscape restorations.
- Navajo Road and Navajo Drive south of Beal are open to all traffic.

Beal Road east of Rio de Flag (Construction Zone #3)

- Utility and roadway improvements are complete including landscape restorations.
- Minor striping improvements will be corrected at a later date.
- Beal is currently closed from Aztec to Navajo for construction activities in Zone #5.

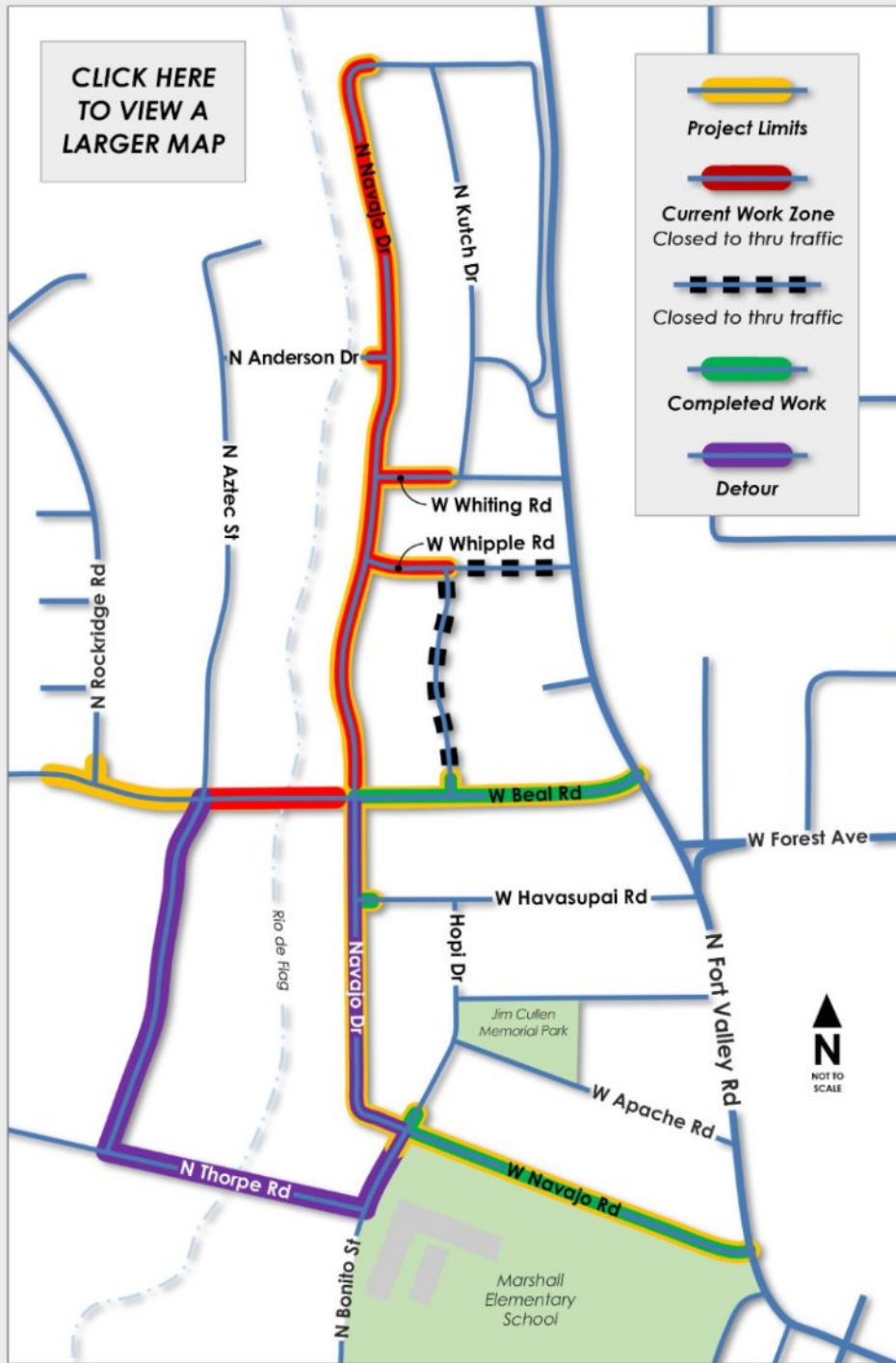
Navajo Drive north of Beal (Construction Zone #4)

- Utility improvements are complete from Beal to Murray and on Whipple from Navajo to McMillian.
- Underground power lines for streetlights are complete from Beal to Murray and new streetlight installations near completion.
- Concrete curb installations are complete from Beal to Murray.
- Concrete driveway installations continue from Beal to Murray.
- Significant roadway subgrade stabilization operation, currently at Whiting as of 9/1/2022, continues north prior to preparing the roadway for asphalt paving.
- The August 7th Pipeline Fire West Floodwaters brought a significant amount of flood waters, 6-8-inches above the newly installed top of curb, onto the project site resulting in cleanup and removal of flood debris, re-working ABC at curb locations, and potentially over saturating and further destabilizing the already unstable subgrade soils below the roadway area.
- Navajo from Beal to Murray is closed to thru traffic and closed to all traffic at the subgrade stabilization operation.
- Whiting from Navajo to Kutch is closed to thru traffic.
- Whipple from Navajo to HWY 180 is closed to thru traffic.
- McMillian from Beal to Whipple is closed to thru traffic.

Beal Road west of Rio de Flag (Construction Zone #5)

- Sewer main installations resumed the week of August 29th from the Rio de Flag working west.
- Beal is currently closed from Aztec to Navajo, with detours posted around the closure.

CLICK HERE
TO VIEW A
LARGER MAP



For general questions
and project
information, call the
**Project Hotline at
(928) 255-5153**
or email
news@coconinoestates.com



Residential access for mail, deliveries, trash, recycling, and emergency services will be maintained. No Mountain Line bus routes are affected during this time.

Project Map with current road closures and detours



N Navajo Dr. at Whiting Rd., looking north at streetlight installations.



N Navajo Dr. at Murray Rd., looking north at completed curb installations up to Murray.



N Navajo Dr. at Murray Rd., looking at water and sewer installations.



Navajo Dr. at Whiting Rd., looking north at the concrete curb and gutter installations

Coconino Estates Improvements Phase II (CONSTRUCTION PHASE)

FUND: ROAD REPAIR & STREET SAFETY & AGING WATER AND SEWER INFRASTRUCTURE REPLACEMENT PROGRAMS

Description This is a utility and roadway improvements project located on several streets in the Coconino Estates neighborhood as seen in the map below. Improvements on the streets generally consist of replacing all existing utility and roadway infrastructure. The utility improvements include replacing the existing water and sewer mains, water and sewer services, fire hydrants, and manholes. The roadway improvements include replacing the existing asphalt roadway, replacing rolled curb with vertical curb, constructing driveway ramps at driveway entrances, and replacing select sidewalk only where it currently exists on Crescent Drive. Sidewalk will **NOT** be installed where it does not currently exist. For additional information visit the Project website at www.coconinoestates.com

Contractor – Standard Construction Company

Project Update:

Crescent Drive and Meade Lane

- Utility improvements are complete.
- Concrete curb installations are complete.
- Significant roadway subgrade stabilization operation is complete.
- Concrete driveway ramp installations will occur after roadway paving.
- The original roadway paving date of July 27-29 was canceled and delayed through August due to rain and is currently anticipated for September 7-9, pending weather conditions.
- Roadway paving limits are from Meade north around to the Talkington/Louise intersection and up Louise to HWY 180.
- Once roadway paving is complete the traffic control and concrete barriers on HWY 180 at Louise will be removed.
- The July 29th and August 7th Pipeline Fire West Floodwaters did not impact Crescent.
- Crescent is closed to non-residential traffic from Meade to Talkington.

Navajo Drive and Elizabeth Road

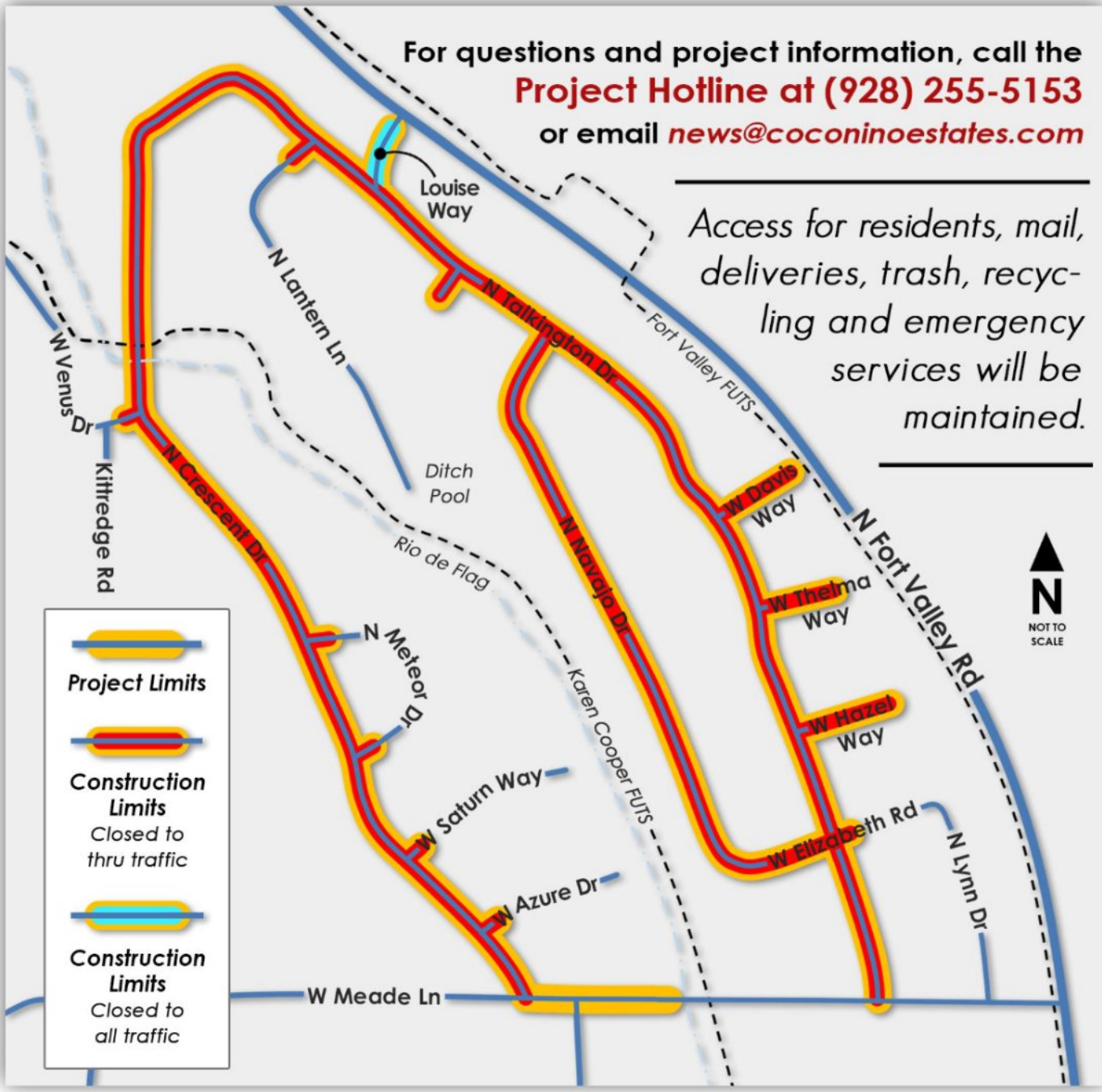
- Utility improvements are complete.
- Concrete curb installations are complete from Louis to Hazel continuing south to Meade.
- Concrete driveway ramp installations are anticipated to occur after roadway paving.
- The August 7th Pipeline Fire West Floodwaters made it down the west side of Navajo resulting in cleanup and removal of flood debris, re-working ABC at curb locations, and potentially over saturating and further destabilizing the already unstable subgrade soils below the roadway area. The July 29th Pipeline Fire West Floodwaters did not impact Navajo.
- Navajo is closed to non-residential traffic.

Talkington Drive and Side Streets

- Utility improvements are complete.
- Concrete curb installations are complete to approximately Hazel including side streets off Talkington.
- Concrete driveway ramp installations are anticipated to occur after roadway paving.
- The July 29th and August 7th August 7th Pipeline Fire West Floodwaters significantly impacting the Talkington and side streets portion of the project resulting in cleanup and removal of flood debris, removing and replacing compromised muddy ABC in roadway and curb trenches, resetting traffic control, checking and resetting survey stakes, removing and replacing compromised eroded curb, and potentially over saturating and further destabilizing the already unstable subgrade soils below the roadway area.
- Talkington Drive is closed to non-residential traffic from Meade to Crescent.

For questions and project information, call the
Project Hotline at (928) 255-5153
 or email news@coconinoestates.com

Access for residents, mail,
 deliveries, trash, recyc-
 ling and emergency
 services will be
 maintained.



Coconino Estates Improvements Phase II Project Map



Crescent/Azure intersection, looking north at final roadway grading prior to roadway paving on September 7-9



Talkington/Elizabeth intersection, looking south at concrete curb installations



Davis Way east of Talkington, looking west at August 7th floodwaters on Davis and Talkington.



Talkington at Thelma, looking north at August 7th floodwaters on Talkington

Flagstaff Downtown Mile Safety and Connectivity Improvement Project (PLANNING AND DESIGN PHASE)

FUND: TRANSPORTATION, STORMWATER, AGING INFRASTRUCTURE, BNSF RAILWAY, METROPLAN, GRANTS

Description – The Downtown Mile Project consists of a group of City and local agency projects located in Downtown Flagstaff and surrounding the BNSF Railway corridor. They include:

- The Rio de Flag Flood Control Project
- The Rio de Flag Pedestrian Tunnel
- The Lone Tree Overpass
- The Florence to Walnut Pedestrian Underpass
- The Milton Bridge Reconstruction
- The Mountain Line Downtown Connection Center (DCC)



The city has partnered with ADOT, BNSF Railway, Mountain Line, Amtrak, and the Army Corps of Engineers for the overall Downtown Mile Project to coordinate existing funding, plan construction efficiencies surrounding the BNSF corridor, investigate multimodal connectivity, and to seek grant funding for unfunded BNSF mitigation measures to deliver these projects for the Flagstaff community.

In May 2022, the City applied for a Multimodal Program Discretionary Grant through the USDOT INFRA/Rural program for the Downtown Mile Safety and Connectivity Improvement Project to fund construction of the suite of projects, including a BNSF Railway corridor realignment and expansion. This grant will also facilitate completion of our Rio de Flag flood Control Project and integrate pedestrian and rail improvements with the Lone Tree Overpass Project and the future Mountain Line Downtown Connection Center.

The total project cost is estimated at \$56M and the amount of federal funding requested is \$32.5M (60%). The non-federal match (40%) is being provided from the City of Flagstaff in the amount of \$12.8M, which is funded through Proposition 419 partnership funding and allocated Transportation and Stormwater funding, and BNSF Railway is contributing \$11M in private funds. BNSF also provided expert consultant services in order to make this grant application possible. This contribution from BNSF demonstrates unprecedented support and partnership for our community.

Project Update:

- The Design Phase Services Contract scope and fee is under review with City staff, MetroPlan, and BNSF Railway.
- This item is tentatively scheduled for Council consideration on October 4.
- Legal and Grants Management staff coordinated development of the IGA with MetroPlan to execute receipt of a \$490,000 funding contribution that was approved for the project planning and design effort.
- On August 12, BNSF, City of Flagstaff, and the Army Corps held their regular coordination meeting for the Lone Tree Overpass, the Rio de Flag, and the overall Downtown Mile Project improvements.
- Award notifications of the Multimodal Program Discretionary Grant is anticipated before October 1.

The current updates for the projects included in the Downtown Mile are as follows:

Rio de Flag Flood Control Project (Design Phase)

FUND: STORMWATER & AGING INFRASTRUCTURE

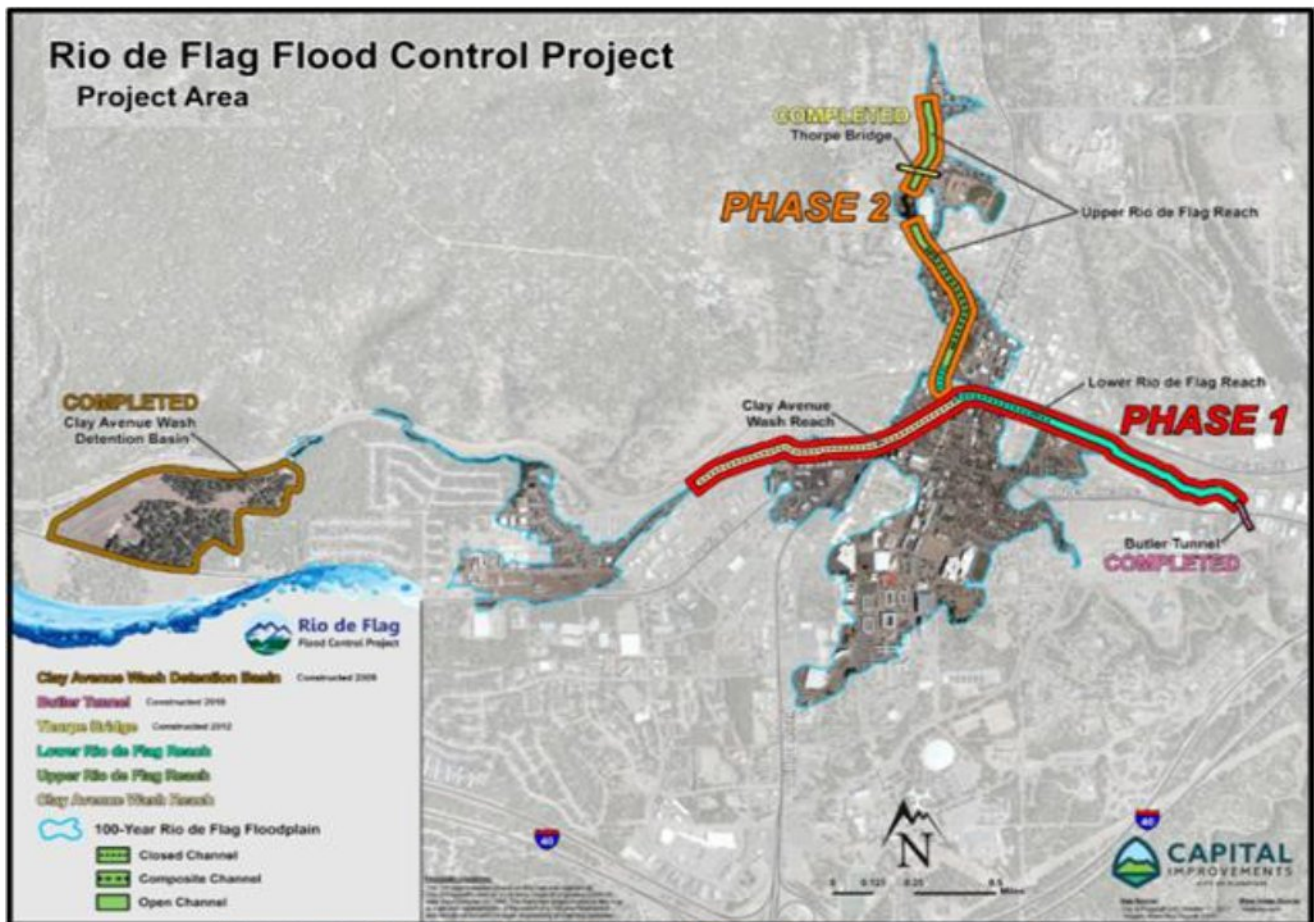
Description – Design consists of channel improvements along both the Rio de Flag and Clay Avenue Wash channels through central Flagstaff and includes a combination of underground concrete box culverts, open channel, and composite channel. The composite channel section has both an underground culvert to carry large volumes of water and a smaller open channel on top, which will provide an aesthetic element of flowing surface water during rainfall events. Total project length is approximately 15,000 feet.

The purpose of the Rio de Flag Flood Control Project is to remove the hazards associated with the hundred-year storm event, which include property damage, life safety concerns, and community economic impacts. From research conducted by the Army Corps, it was determined that a significant flood would damage approximately 1,500 structures valued at over \$916M and cause \$93M in economic damages, for a total impact of over \$1B.

Project Update:

- Work continued this month on refinement of the design plans and the real estate documents.
- The draft BNSF Construction and Maintenance Agreement is under review with City and Army Corps legal staff.
- On August 9, BNSF Director of Real Estate met with City staff to discuss the project property acquisition.

- On August 15, City and Army Corps staff met with local franchise utilities to review the utility relocation plan.
- On August 12, BNSF, City of Flagstaff, and the Army Corps held their bi-weekly coordination meeting for the Lone Tree Overpass, the Rio de Flag, and the overall Downtown Mile Project improvements.
- On August 24 and 25, the City held an all-agency workshop in Flagstaff to review the final project design and discuss coordination of the Lone Tree Overpass and the Rio de Flag.
- On August 31, Michael Connor, Assistant Secretary of the Army for Civil Works, visited Flagstaff with the LA District's Colonel Julie Balten. Councilmember Jim McCarthy and staff from Senator Mark Kelly's office were also in attendance. The City presented the Environmental Infrastructure Section 595 Projects and the Rio de Flag Flood Control Project to the group.



Assistant Secretary to the Army, Civil Works, Michael Connor with Flagstaff Councilmember Jim McCarthy

Lone Tree Overpass Project (DESIGN PHASE)

FUND: TRANSPORTATION

Description – The Lone Tree Overpass Project will provide a grade-separated crossing over the future Rio de Flag drainage and the BNSF Railway corridor from Butler Avenue to Route 66. Funding for this project is provided through voter approved bonds as designated in the 2018 Proposition 420. The project will also include improvements from Butler south to Sawmill Road, which will be funded by Proposition 419. The project will be delivered via the Design-Build process and the team includes Ames as the contractor and WSP as the prime design consultant.

Project Update:

- Work continued this month on project design in anticipation of the 60% design submittal scheduled for September 26.
- On August 9, BNSF Director of Real Estate met with City staff to discuss the project property acquisition.
- On August 9, Capital staff, Legal staff, and City Transportation Engineer Associate David Lemke participated in an Arizona Corporation Commission hearing with BNSF Railway to execute closure and removal of an unused rail spur on Cottage Avenue in the Southside neighborhood. Mr. Lemke provided testimony to support the closure and removal, which will facilitate future property acquisition of the roadway, development opportunity, and City transportation improvements. BNSF will be covering cost to remove the spur and reconstruct the asphalt.
- On August 24 and 25, the City held an all-agency workshop in Flagstaff to review project design and discuss coordination of the Lone Tree Overpass and the Rio de Flag.
- Additional information is posted on the project website. [Lone Tree Overpass Project](#)



Mountain Line Downtown Connection Center (Design Phase)

FUND: GRANT

Description – The Downtown Connection Center is included in the Downtown Mile project report due to the City’s partnership with Mountain Line for developing the site and the opportunity to plan the facility with multimodal connections with the rest of the Downtown Mile projects. There are also current discussions for future co-location of the Amtrak Station.

Project Update:

- The city is facilitating coordination of the DCC site improvements with the future Rio de Flag construction.
- Mountain Line continues its effort to the NEPA work as required by the Federal Transit Authority.
- Staff has begun to prepare an IGA that will be negotiated with Mountain Line following the completion of the NEPA. Mountain Line hopes to have the IGA before the City Council in May 2022 for approval.
- Mountain Line plans to begin construction of its building in Phase I this Summer (2022).

East Route 66 and El Paso Flagstaff Waterline Extension (CONSTRUCTION PHASE)

FUND: AGING INFRASTRUCTURE

Description – A utility improvements project that extends the 12” ductile iron waterline approximately 2,500 linear feet from approximately the intersection of Test Dr. and Rt. 66 to the intersection of El Paso Flagstaff Rd. The waterline extension continues north, up El Paso Flagstaff Road towards the Wildcat Hill Wastewater Treatment plant, with approximately 1,600 linear feet of new 8” ductile iron waterline. The project also calls for a repaving of El Paso Flagstaff Road for the extents of the waterline extension.

Contractor Scholz Contracting, LLC

Project Update:

- The Project was determined to be substantially complete on August 14th.
- Staff is working to schedule a walkthrough with the Contractor in the next couple of weeks to develop a final project punch list.



E. Rt. 66, Installation of fiber conduit bank for IT's Fiber Masterplan

Library Entrance (CONSTRUCTION PHASE)

FUND: BBB - BEAUTIFICATION

Description – Project to bring Library Entrance into ADA compliance with new handicap ramp and new overall vision for the entrance. Public art will be incorporated into project and an artist is being brought onto the design team. Project includes upgrades to landscaping, handicap-accessible parking, parking lot, and hardscape.

Project Update:

- City Council awarded the construction contract to Scholz Contracting at the July 5th City Council meeting.
- The project is currently underway and working to establish a temporary alternate Library Entrance that will be utilized throughout construction. Closure of the main Library entrance is expected after Labor Day.
- ADA parking spaces and additional parking spaces will be signed in the City Hall parking lot and a pedestrian route to the alternate Library entrance will be established.



Library Entrance Project-Rendering of selected concept plan

LMWTP Flocculation and Sediment Basin Rehabilitation (DESIGN PHASE)

FUND: DRINKING WATER

Description – The flocculation and sedimentation basin structures and equipment that have been in operation for approximately 60 years are in deteriorated condition and require replacement and rehabilitation. The project consists of constructing a new static mixer installation, rehabilitation of the flocculation/sedimentation basin structures, replacement of electrical systems, and replacement of miscellaneous valves and piping.

Project Update:

- Staff is working with Brown and Caldwell to finalize 100% Construction Documents and bid package.
- The project will be advertised for bids in Fall of 2022 with construction spanning two years and starting in the Spring of 2023



Staff and Brown and Caldwell taking a tour of the LMWTP basins

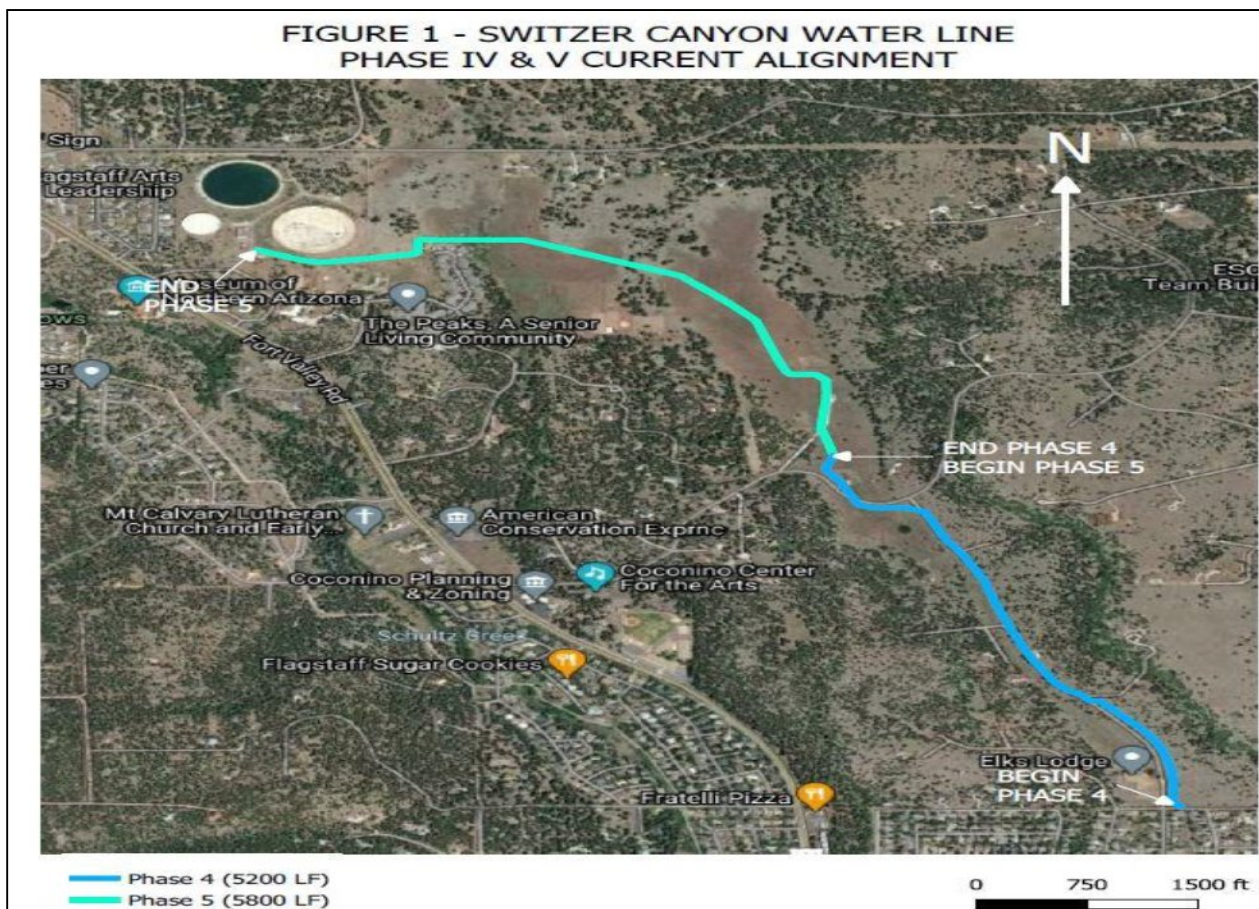
Switzer Canyon Transmission Main Phase IV & V (Design Phase)

FUND: AGING INFRASTRUCTURE

Description – The Project consists of installing two new water transmission mains, 24” and 16”, that will complete the distribution system, zone A and B, from the Downtown area to the City Reservoirs near Elden Lookout Road. The length of Phase IV and V is approximately 11,000 feet. The project area extends outside City limits. Included in the project will be the two water mains with appurtenances and fire hydrants.

Project Update:

- Decision made in December of 2021 to not exchange water service for property rights.
- Proposal requested for remaining Engineering services needed for completion of project in preparation for Contract Change Order.
- On September 6, 2022, approval will be sought for resolution to file condemnation proceedings for Phase IV property rights.
- Osprey nest will impact construction during breeding season (April through July) for 1,400 feet of Phase IV.
- Construction of Phase IV is currently planned for Spring of 2023 through Winter of 2023.
- Phase V is in the planning phase to define the final alignment.
- Construction of Phase V is anticipated for 2024.



Protected Intersections at Butler/Beaver and Butler/San Francisco (Design Phase)

FUND: UNKNOWN

Description – The Project consists of feasibility designs of protected intersections at two locations on Butler Avenue, Beaver Street and San Francisco. Protected intersections separate bicycle traffic from vehicular traffic.

Project Update:

- WSP Global, Inc. was chosen as Engineering firm for 15% designs protected intersections.
- WSP submitted proposal for design services.
- Final deliverables consist of Technical Memorandum and 15% level conceptual plans
- Expected completion is two months from Notice to Proceed.



Beaver Street and Butler Avenue



San Francisco Street and Butler Avenue

Wildcat Hill Wastewater Treatment Plant (WHWWTP) Digester Complex (DESIGN PHASE)

FUND: WATER SERVICES-SEWER

Description – Project includes the design and construction of one 60-ft concrete anaerobic digesters with a digester control building and gas handling system. The digester control building would include new boilers, heat exchangers, digested sludge pumps, and other appurtenances to support the increased capacity of the new digester facilities. The Wildcat Hill WRP treats residual solids from both the Rio De Flag and Wildcat facilities. These new digesters will increase solids treatment train capacity to accommodate the solids produced from the treatment at both facilities.

Project Update:

- A design contract with Carollo Engineers is up for consideration of approval on the September 20th Council meeting.
- Design is scheduled for 12 months with Construction starting in the Spring of 2024, and completion anticipated in the Fall of 2025.



Existing Wildcat Plant, red circles represent possible locations of the new digester