



CITY ENGINEERING DIVISION

Monthly Projects Report October 2022

Honorable Mayor, Vice Mayor and Council,

The October report was completed by our Project Managers on October 31st and includes project updates for the month of October.

The attached map is a comprehensive view of the highlighted projects in our community that are assigned to 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.

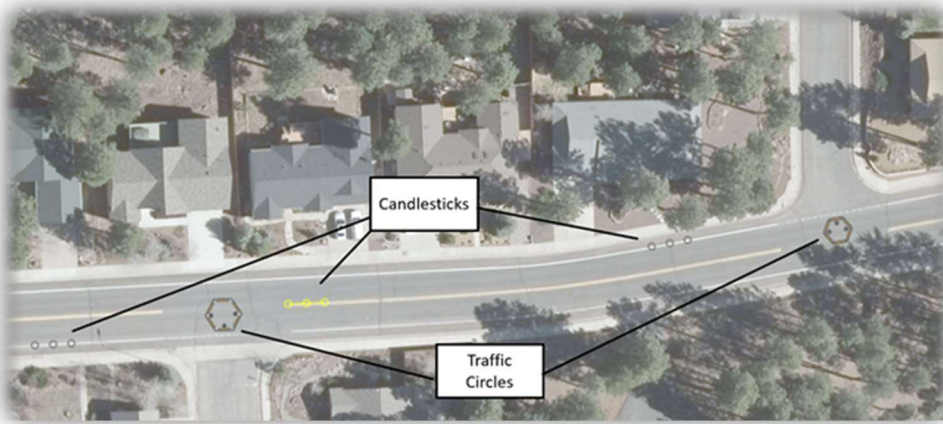
Boulder Point - Traffic Calming (DESIGN PHASE)

FUND: TRANSPORTATION TAX

Description – The Transportation Commission approved the traffic circle concept 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. The final design will 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. This project also includes raised pedestrian crosswalks at the two Woody Way intersections.

Project Update:

- A design consultant firm has been selected, Woodson Engineering / Ardurra.
- A final proposal for design services has been received.



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 draft cross section can be seen below. Citizens have recently requested a review of the striping proposal, that discussion will occur at the December 7th Transportation Commission meeting.



Fremont Blvd New Striping Configuration

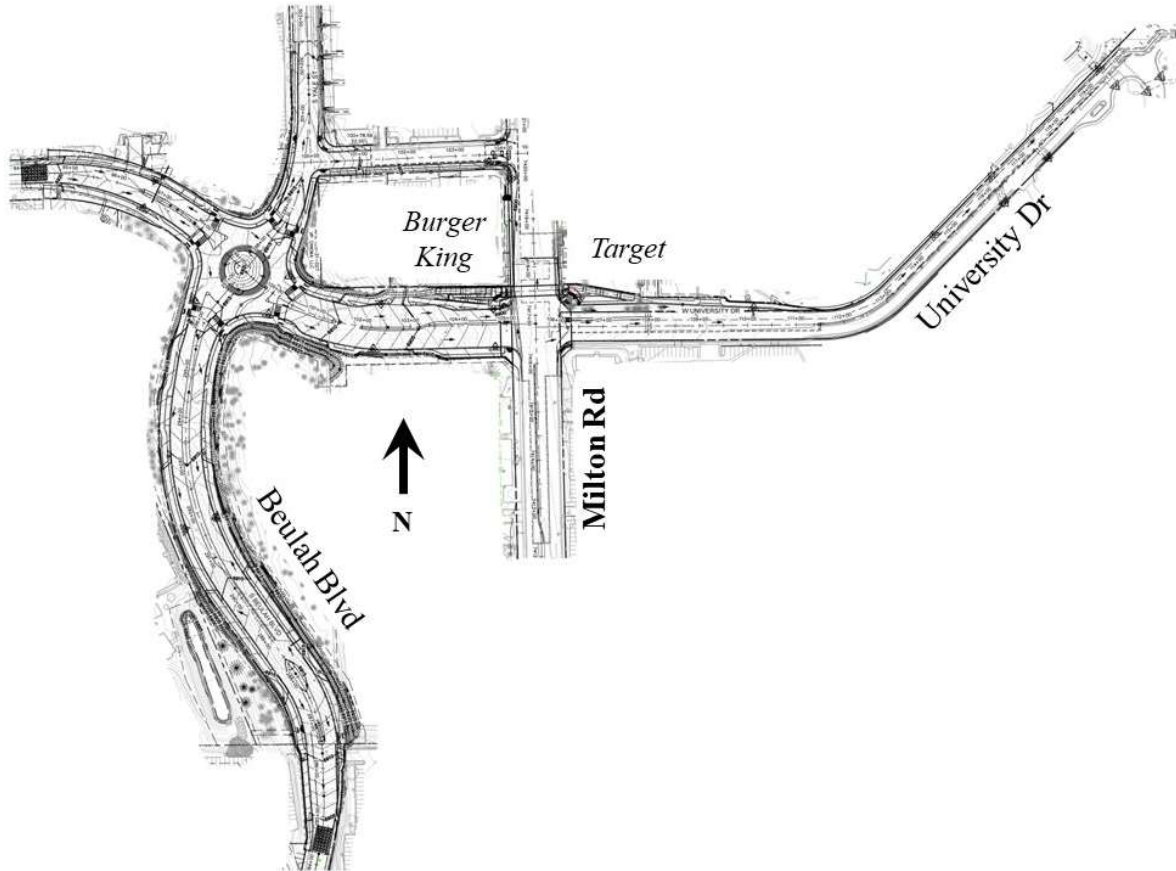
Beulah Boulevard Extension/University Drive Realignment (DESIGN PHASE)

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.
- Value Engineering workshop with SWI, EMC, and City Staff has been completed. The agreed cost-saving measures are being integrated into the final design plans.
- Appraisals for right-of-way and easements are currently underway.
- GMP for Construction Services with Eagle Mountain Construction will be before Council on 6 December.



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

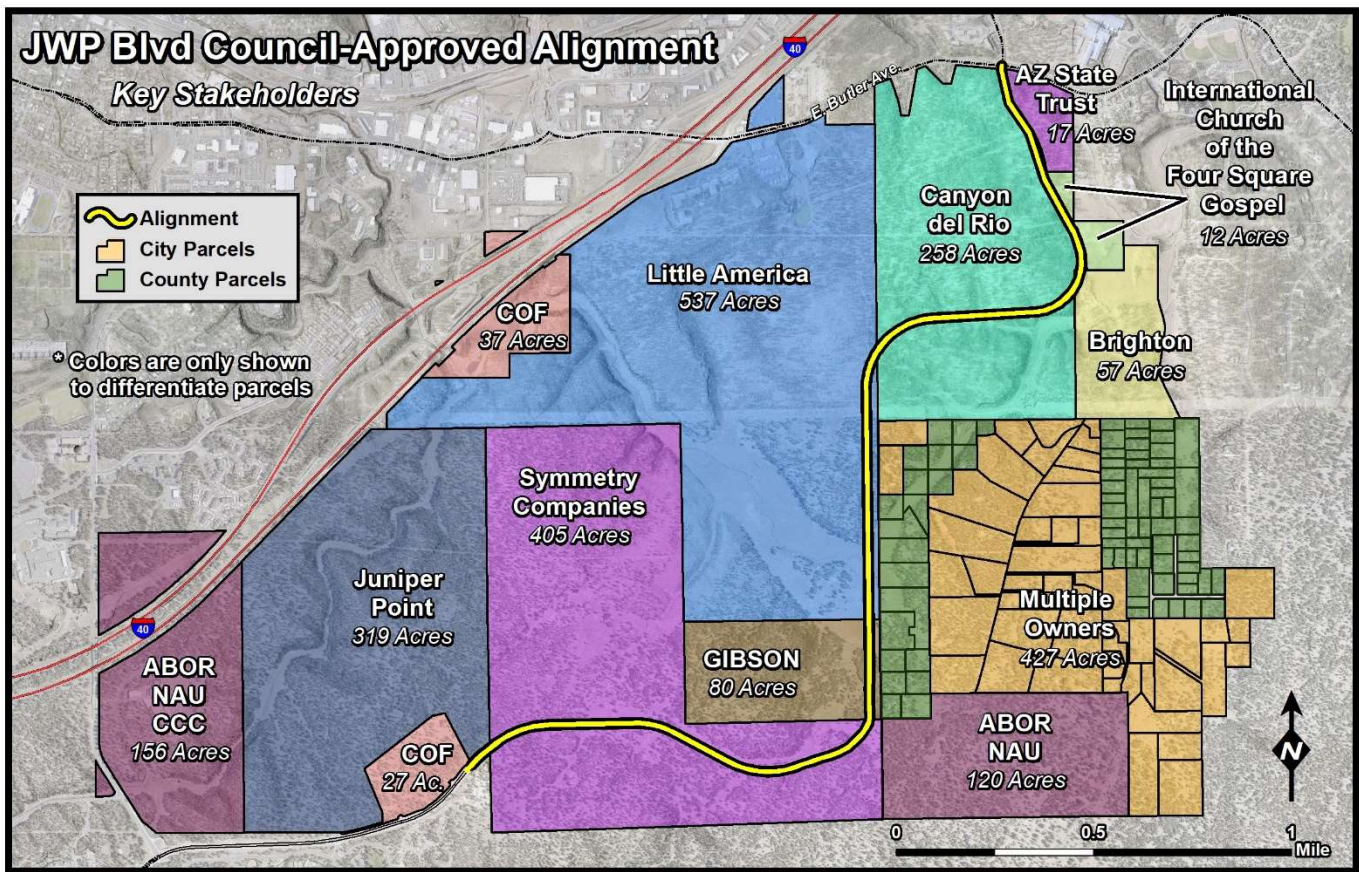
J.W. Powell Specific Plan Study (PLANNING PHASE)

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-December 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 includes 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, valley gutter, and driveway installations are complete from Beal to Murray.
- Roadway asphalt paving is complete.
- Work continues on roadway utility adjustments and landscape restorations, which are anticipated to be complete in the coming weeks.
- Navajo from Beal to Murray is closed to thru traffic.
- 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)

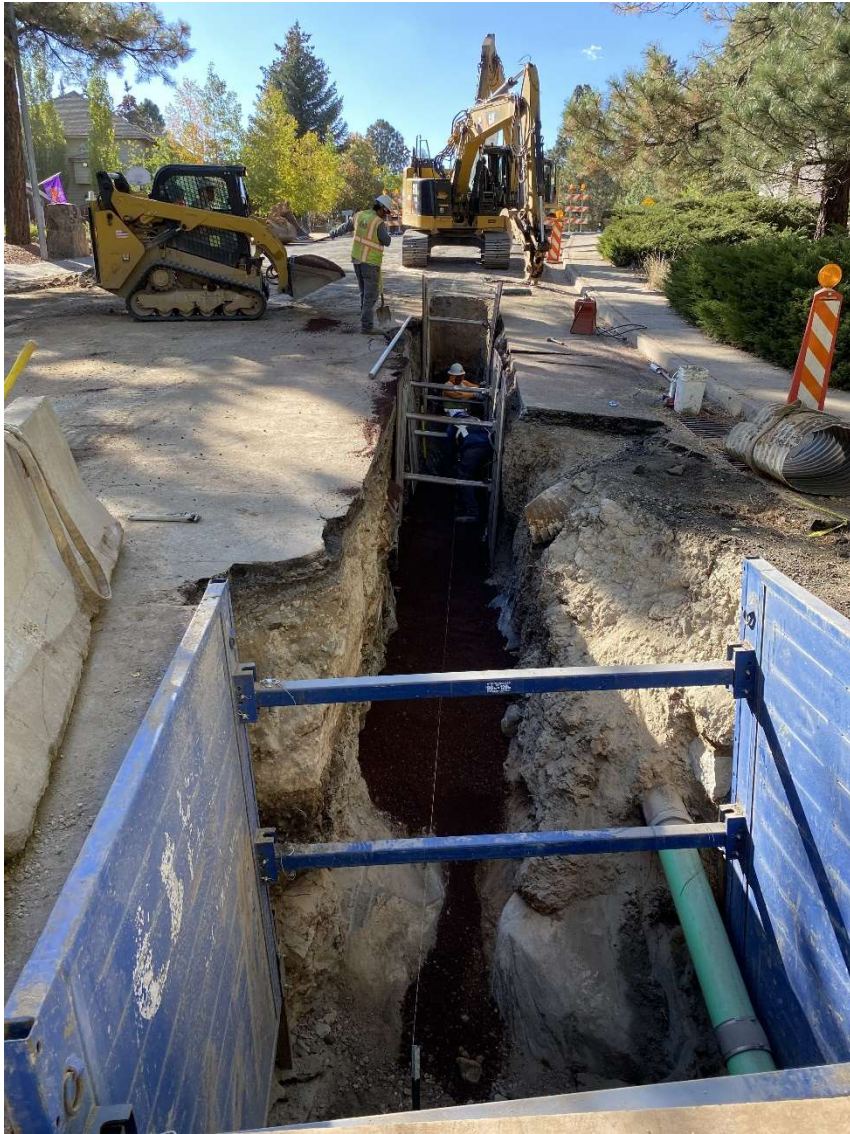
- Sewer main and sewer service installations continue from the Rio de Flag working west.
- Beal from Rockridge to Aztec to Navajo is closed to all traffic, with detours posted around the closure. All attempts will be made to allow local traffic during non-working hours and weekends in areas closed to all traffic during working hours. Due to rock excavation and franchise utility conflicts, this closure will be extended from the originally communicated October 31 to at least until November 18. This extension has been communicated to the neighborhood.
- Beal from Aztec to Navajo, is closed to thru traffic with access for residents only. Access to Aztec and Anderson properties on the north side of the Beal and Aztec intersection will be maintained through the Beal and Aztec intersection, as well as through the Navajo Drive closure to Anderson.



Project Map with current road closures and detours



Navajo Dr. north of Anderson Rd., looking north at roadway asphalt paving.



Beal Rd west of Aztec St., looking west at sewer main construction.

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.
- Concrete driveway ramp installations will occur during the month of November.
- Roadway asphalt paving is complete on Crescent north around to the Talkington/Louise intersection and up Louise to HWY 180, with roadway utility adjustments and landscape restorations remaining.
- The traffic control and concrete barriers on HWY 180 at Louise have been removed.
- The north side Meade curb installations are complete with trench patch paving rescheduled from October 25-27 to November 7-9.
- Crescent is closed to non-residential traffic from Meade to Talkington.
- Meade is open to all traffic with the northern portion of Meade closed to non-residential traffic from Crescent to the Rio de Flag.

Navajo Drive and Elizabeth Road

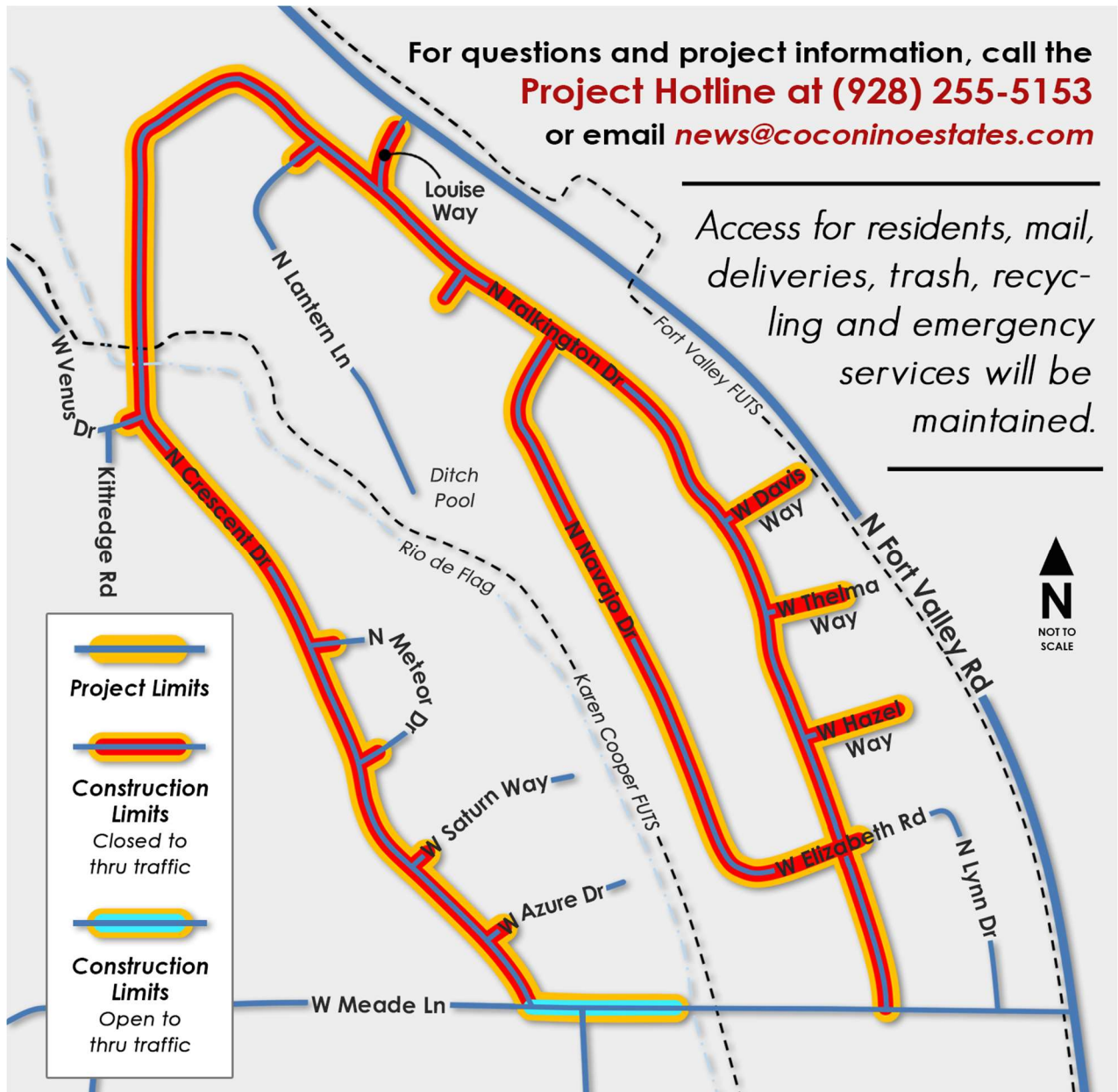
- Utility improvements are complete.
- Concrete curb, driveway ramp, and valley gutter installations are complete.
- Significant subgrade stabilization is complete.
- Roadway asphalt paving was rescheduled from October 25-27 to November 7-9.
- Navajo is closed to non-residential traffic.

Talkington Drive and Side Streets

- Utility improvements are complete.
- Concrete curb, driveway ramp, and valley gutter installations are complete.
- Significant subgrade stabilization is complete.
- Roadway asphalt paving was rescheduled from October 25-27 to November 7-9.
- 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, recycling
 and emergency
 services will be
 maintained.



Coconino Estates Improvements Phase II Project Map



Talkington/Louise intersection, looking north at roadway asphalt paving



Talkington/Elizabeth intersection, looking south at subgrade stabilization



Talkington/Louise intersection, looking north at subgrade stabilization



Navajo, looking north at roadway prepared for roadway asphalt paving

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 design and construct roadway, bridge, bike/pedestrian, and railroad improvements 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.

Project Update:

- The City was notified on September 28 that we were awarded the USDOT INFRA grant.
- The Design Phase Services Contract was approved by City Council on October 18.
- On October 7, Congressmen Tom O’Halloran and Ruben Gallego, Dr. Coral Evans from Senator Mark Kelly’s office, and representatives from Mountain Line and MetroPlan met with Mayor Paul Deasy, Councilmembers Khara House and Adam Shimoni and City staff to discuss the award of the INFRA grant and celebrate this event for the Flagstaff community.
- 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. This IGA was approved by City Council on October 18.
- On October 27, City staff met with BNSF and AMTRAK for development of a CRISI grant application between the City and BNSF to fund additional rail and AMTRAK improvements for the Flagstaff Station.

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

Rio de Flag Flood Control Project (Design Phase)

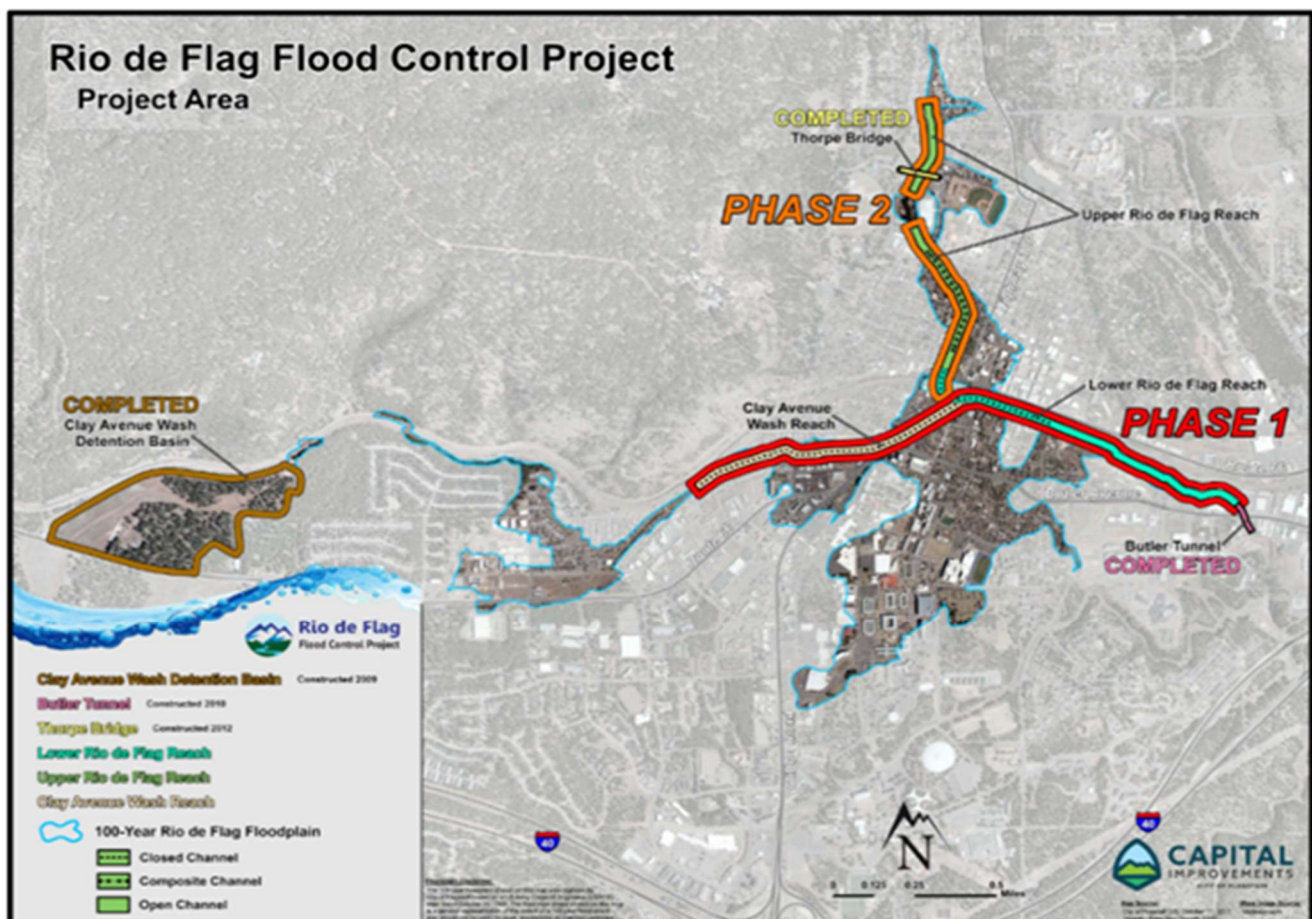
FUND: STORMWATER & AGING INFRASTRUCTURE

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.
- Property appraisals are being conducted to prepare for offers.
- The draft BNSF Construction and Maintenance Agreement is under review with City and Army Corps legal staff.
- On October 28, Jason Gay, Deputy District Engineer of the US Army Corps of Engineers LA District, visited Flagstaff with the LA District's Colonel Julie Balten. Mayor Paul Deasy, Councilmember Jim McCarthy, and Councilmember Regina Salas and additional staff from the Army Corps were also in attendance. The City presented the Rio de Flag Flood Control Project to the group and discussed upcoming milestones for the project.



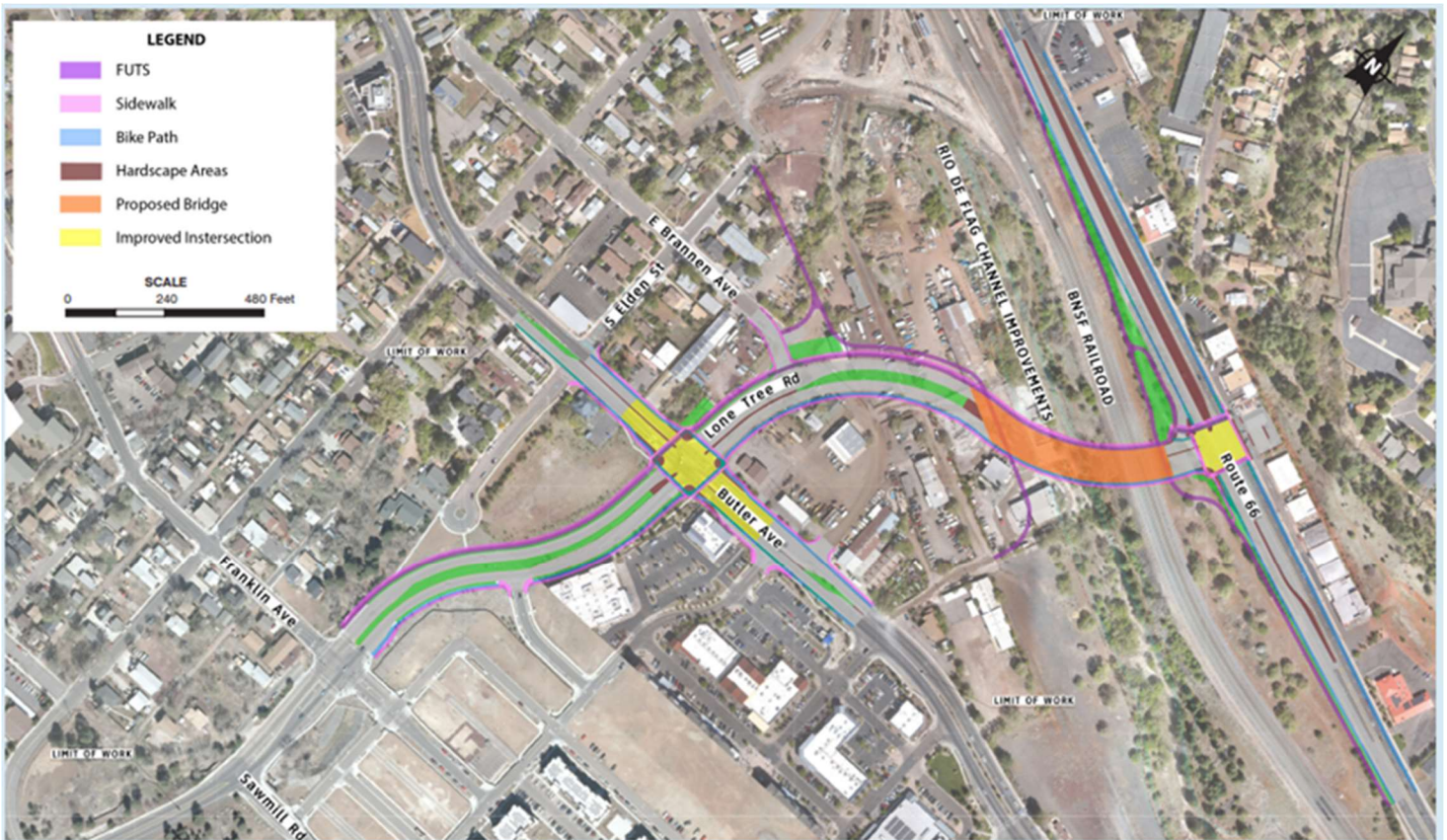
Lone Tree Overpass Project (DESIGN PHASE)

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:

- The 60% preliminary design plans were submitted to the City, ADOT, Mountain Line, and US Army Corps of Engineers for review.
- Work continued between BPAC and the Public Art Focus Group on development of the aesthetic and public art components for the bridge improvements.
- Additional information is posted on the project website. [Lone Tree Overpass Project](#)



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 has established a temporary alternate Library Entrance that will be utilized throughout construction. The main Library entrance remains closed.
- ADA parking spaces and additional parking spaces are signed in the City Hall parking lot and a pedestrian route to the alternate Library entrance has been established.



Library Entrance Project-Rendering of selected concept plan

LMWTP Flocculation and Sediment Basin Rehabilitation (CONSTRUCTION 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 :

- The project will be advertised for construction bids for November and December
- Due to long material lead times, the first year of the contract will used for procurement needs and construction will commence for the two following years, 2024 and 2025.



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

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

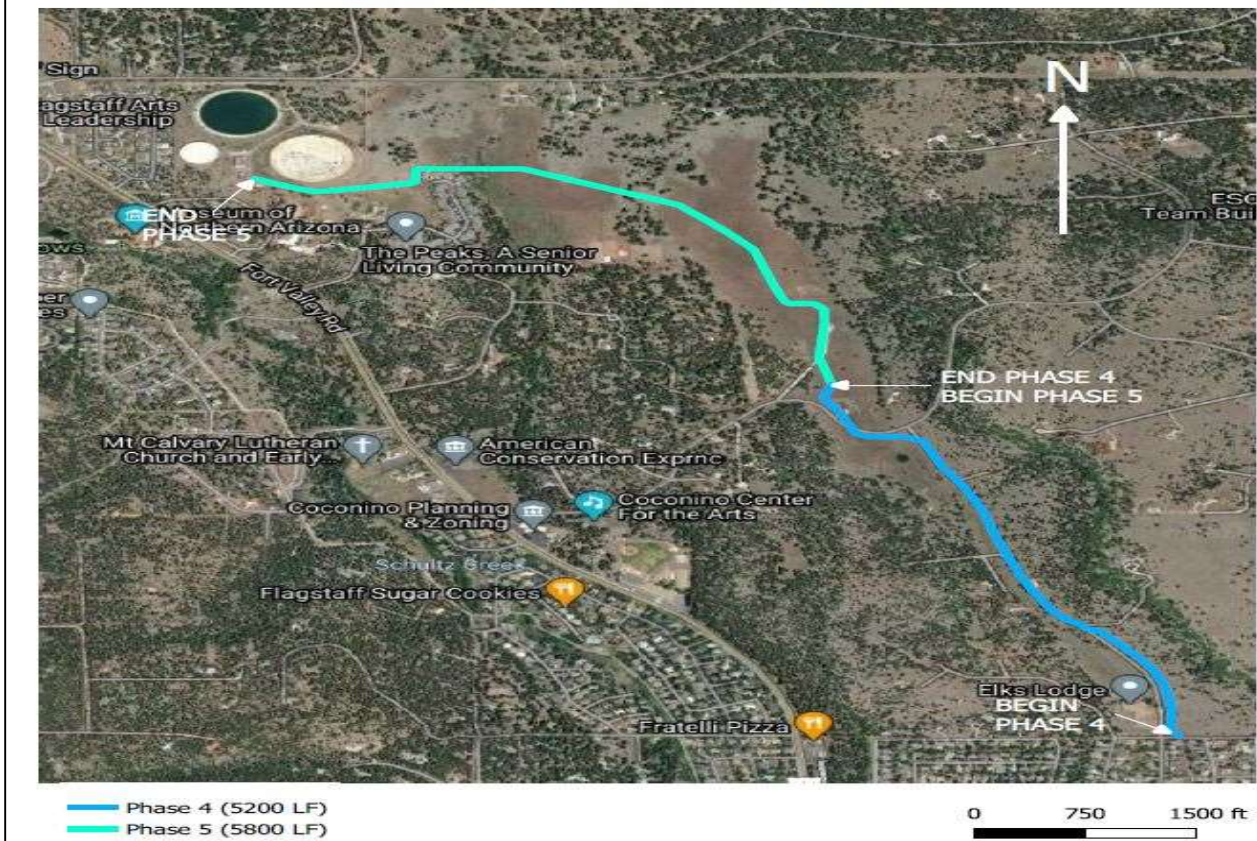
FUND: AGING INFRASTRUCTURE

- **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. Water service to county residents will not be provided in exchange for property rights. Construction of Phase IV is currently planned for Spring of 2023 to Fall of 2023. Construction of Phase V is anticipated for 2024.

Project Update:

- Completed design documents for Phase IV are expected November 2022.
- On September 6, 2022, approval was obtained to file condemnation proceedings for Phase IV property rights.
- Osprey nest will impact construction during breeding season (April 15 through July 31) for 1,400 feet of Phase IV.

**FIGURE 1 - SWITZER CANYON WATER LINE
PHASE IV & V CURRENT ALIGNMENT**



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

FUND: TRANSPORTATION TAX

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. WSP Global, Inc. was selected as Engineering firm for 15% designs of protected intersections.

Project Update:

- WSP USA, Inc. has started work on 15% designs
- Final deliverables consist of Technical Memorandum and 15% level conceptual plans
- Expected delivery is December 2022



Beaver Street and Butler Avenue



San Francisco Street and Butler Avenue

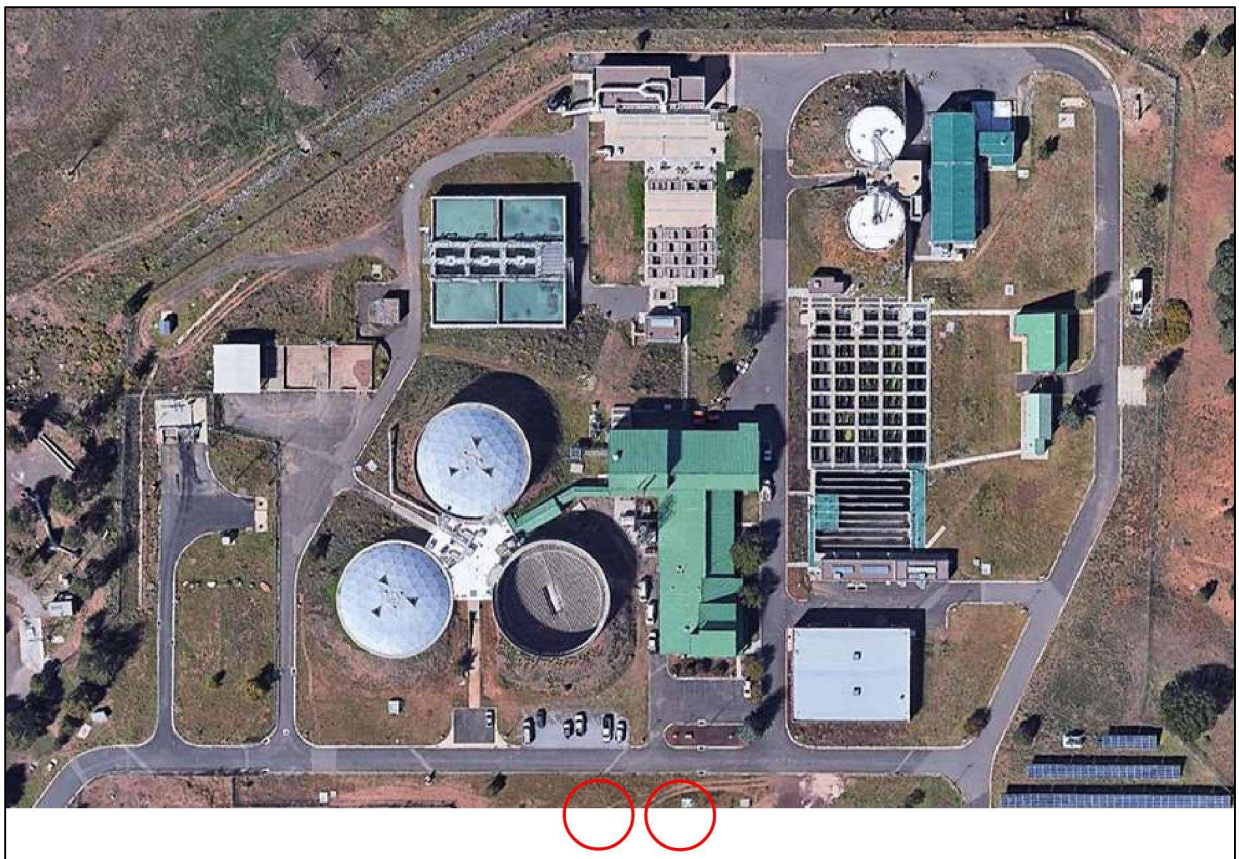
Wildcat Hill Wastewater Treatment Plant (WHWWTP) Digester Complex (DESIGN PHASE)

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 was awarded at the October 4th 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

Solier Ave. Transmission Main (DESIGN PHASE)

FUND: DRINKING WATER & DEVELOPER CONTRIBUTIONS

- **Description** – The Project consists of installing approximately 5,200 linear feet of 12” PVC water transmission main, that will complete the distribution system along Soliere Ave from Elk Run St. to 4th St. The new transmission main will supply the needed secondary water source for developments along Butler Ave.

Project Update:

- Completed design documents are expected in November of 2022.
- Construction is anticipated to start in the Spring of 2023 and completed in the Fall of 2023.



Vicinity Map for new Soliere Ave. Transmission main, depicted with blue line

Private Development Projects

DEVELOPMENT ENGINEERING SECTION

The Development Engineering Section continues to review IDS projects for adherence to City of Flagstaff Engineering Standards for both Subdivisions and projects requiring Site Plan or other Zoning Code entitlements. There continue to be significant projects under review in both the residential subdivision and commercial Site Plan categories. Major projects with significant Engineering involvement include the NAH new campus, additional phases of work in the Timber Sky subdivision and surrounding area, Canyon Del Rio Subdivision, Juniper Point Subdivision and the JWP corridor.

Projects In Civil Plan Review –

- Four Subdivision Engineering Plan Reviews
- Ten Site Plan Engineering Plan Reviews

Projects In Construction or Permitting –

- Ten Subdivisions in Construction or awaiting permits
- Thirty-one Site Plan Projects in Construction or awaiting permits

Highlighted Project – Juniper Point Phase 1

The public infrastructure for the first phase of Juniper Point is nearing completion with most of the roadway and utilities in this phase nearing completion. The last major work item to be completed is the realignment of the existing 27" water transmission main which is needed in order to connect the subdivision sewer into existing City Infrastructure. The balance of this work is scheduled for completion by the end of November. This phase represents 38 new single family lots for which building permits are anticipated to be approved in November. The next phase of the Juniper Point subdivision is currently working through the IDS review process.

