NON-UTILITY CAPITAL IMPROVEMENT PROGRAM
2022-2026
PROJECT DESCRIPTION
Last revised 09/08/21

I. PUBLIC SAFETY

1. Ambulance Replacement

The plan is to replace ambulances as necessary to maintain a fully operational fleet of eight (8) ambulances, minimizing breakdowns and expenses incurred from heavy usage and high mileage. The plan involves the on-going replacement from bond or other alternate funding sources. The mechanical bureau will determine which ambulance will need to be replaced regardless of age based on warranty information, mechanical maintenance records and visual inspections of the fleet at the time of replacement.

2. Fire Apparatus Replacement Plan – Engine/Ladder Replacement

Engine Replacement – By 2022 three of the fire department's engines will be 20 years or older. This purchase would be made to upgrade the pump for the northwest fire station on Catasauqua Rd. Ladder Truck – By 2024 the South Bethlehem Ladder Truck will be 16 years old. It takes 13 months for production. It would be estimated that is would go into service in 2025 making it 17 years old, 7 years past the N.F.P.A recommendation of 10 years for a front line fire vehicle. It is recommended that this replacement also contain pumping capacity, the current ladder does not have a pump, to take into consideration the size of the steel property redevelopment.

3. Vehicle Rescue Tool Replacement

The fire departments vehicle rescue tools were purchased in 2007. Each year we respond to numerous calls for persons trapped in vehicles due to accidents and other type of rescues. Passenger vehicle safety continues to improve each year with stronger metals and technology that eventually makes the older rescue tools obsolete. We have put in a grant request with Northampton County to fund the replacement of some of the rescue tool package we have on our apparatus. It is expected that we would have to match funds of one dollar for every two dollar award.

4. Lifepak 15 Cardiac Monitors

EMS is applying for funds from the Northampton County EMS Grant in the amount of $50,000, with matching funds from the City of Bethlehem in the amount of $25,000, for the replacement of (3) three aging Lifepak 15 Version 1 montiors. The electronic components of Version 1 models are no longer serviceable. The new monitors will be Version 4. Of the 10 Lifepak 15 monitors EMS uses, 7 are Version 1.

5. Camera Network

IT is applying for funds from the Northampton County Grow NORCO Grant in the amount of $50,000, with matching funds from the City of Bethlehem in the amount of $54,000, for the upgrade/replacement of the network infrastructure supporting the City's camera system as it is past end of life. Several critical components have failed completely.

II. PUBLIC WORKS

A. TRAFFIC

1. Isolated Intersections

Install new or upgrade existing signals at various locations. Each intersection costs between $230,000 to $250,000. Proposed potential new signal locations include East Boulevard & Linden Street, Butztown Road & Easton Avenue, Linden Street & Elmhurst Avenue, and Third Avenue & Union Boulevard. Needed upgrade locations include Linden & Goepp Streets, Goepp & Main Streets, New & Market Streets, North & Main Streets, Center & Church Streets, Center & Market Streets and Walnut & New Streets etc. Design work for the upgrading of the traffic signals at the intersections of Linden Street & Elizabeth Avenue and Broad and Linden Streets were completed in 2019 and construction was completed at Linden Street and Elizabeth Avenue in 2021. Design/permit is completed and construction at Linden and Broad Streets will occur in 2022. Design for the intersections of Linden & Goepp Streets and Goepp & Main Streets will be completed in 2022, with construction to follow in 2023 depending on funding.

2. Traffic Safety Improvements

Replacement of outdated traffic controllers and traffic signal cabinets at various locations for our 128 signalized intersections and flashers. Purchase of uninterrupted power supply units (UPS)**,** radio communication/interconnect equipment**,** and video detection cameras and equipment to replace damaged or broken in-roadway traffic loop detection is also budgeted under this item.

3. Decorative Street Lights LED Lamp Replacement

The City continues to undergo the complete transition from HPS street lighting to LED street lighting, including decorative style street lighting. This project is to replace approximately 2,650 existing high pressure sodium lamps with energy efficient LED lamps in the decorative street lights including the 412 corridor. The City will start recouping the annual savings of 60% on our energy bill, which will offset the cost of the upgrade over the next few years. The total cost is estimated at $215,000 for materials and labor.

4. Decorative Street Lights Upgrade

The City continues to undergo the complete transition to smart LED street lighting, including decorative style street lighting. This project is to replace the existing 2,500 photo cell control on each decorative street light and converting it to a smart node. These smart nodes will connect to the existing city street lighting monitoring system that was installed in phase 1 of our LED conversion in 2013. The total cost is estimated at $300,000 for materials and labor.

III. STREETS

1. South New Street- Streetscape Improvements

The City received a grant for streetscape improvements to South New Street from 3rd Street to Farrington Square. The conceptual design and public input meetings took place in 2018. Design of the project was completed and bid but bids came in too high and for some trades we received no bids. The project will be re-bid in late 2021, with construction starting in 2022. The work will also include improvements required as part of the turnback of the section of road between 3rd and 4th Streets from PennDOT, as well as a unique bus shelter/gathering place located at the Greenway and New Street.

2. Public Works Engineering Costs for CDBG Eligible Street Projects

Design costs/fees for street reconstruction projects.

3. Linden and Center Streets Two Way Conversions

Dating back to when Bethlehem Steel was in operation, Center Street was made one-way north and Linden Street one-way south between approximately Elizabeth Avenue and the Fahy Bridge (New Street). This was to facilitate traffic to and from the Steel Company during peak hours. Since the closure of Bethlehem Steel, the roadways have been left in their one-way configurations and the City will explore the conversion back to two-way traffic with the driving forces being economic impact and traffic calming / accident reductions. A full traffic impact analysis will be conducted to analyze the proposed modifications and recommend timing changes to the signals and/or the installation of additional signals, etc. to support the conversion. Design costs will also incorporate the revisions to all signal permits. Construction costs are anticipated to be high due to the amount of signal work to be completed on both roadways to support two-way traffic. This project has been placed on the Long Range Transportation Plan with funding planned between 2031 and 2045. Penn DOT has programmed $7.2M for this project in the future. We believe the Linden Street portion of the work could be completed for far less and have estimated a 2023 cost of $1.2M. PennDOT is currently planning on re-surfacing Linden Street from Elizabeth Avenue to Route 22 in 2024.

4. Northside 2027 Pedestrian Safety Improvements

This project is for pedestrian safety improvements in the Northside 2027 area. Improvements may include ADA ramps, crosswalks, bump outs, and medians.

5. Street Overlay Program

Overlay various streets throughout the City in accordance with our road management program. Proper upkeep/maintenance of the City's 260 miles plus of roadway require well over $2,000,000 in annual expenditures and we are currently backlogged approximately $18 million in work. CDBG funding includes ADA curb ramps.

6. Mack Heavy Duty Medium Dump Truck

This is to replace Unit #161, a 2005 GMC dump truck, and the second listed for 2024 is to replace Unit #162, a 2010 International dump truck. All are used for plowing, pulling leaf loaders, clean up, and assist in the streets paving operation. All trucks are in poor condition and need to be replaced.

7. Caterpillar Model 930M Wheel Loader

This unit would replace Unit #715, a 2008 John Deere front end wheel loader that is used for loading salt into trucks during winter operations, to load fallen trees during storms, and for road construction during our paving operations. The frame on this unit is rusted and will not be able to be driven across the road during emergency operations.

8. Service Body Trucks

This is to purchase two new service body trucks to replace #159, a 2012 Jeep Cherokee and #150, a 2013 Jeep Cherokee. A service body truck instead of an SUV is being procured to allow for permanent organized storage of all the needed tools and supplies in secure cabinets on the trucks for transport by the supervisors and use by the workforce at job sites.

9. **Mack Heavy Duty Large Dump Trucks (Tandem Axle)**
This is to replace Unit # 170, a 2002 GMC Dump Truck in 2022 and Unit #165 in 2024, that are used for plowing, pulling leaf loaders, clean-up, and assist in the streets paving operation. These trucks are in poor condition and need to be replaced.

10. **Landoll 440B-50CA Gooseneck trailer**
This is to replace Unit #738, an Eager Beaver 10-ton trailer used for small paver and rollers, and Unit #741 and #746, both 2006 Imperial trailers. This larger trailer will allow us to transport twice the cargo of one of the smaller trailers while utilizing only one truck and one driver.

11. **Ravo 5- iSeries Street Sweeper**
This is to replace Unit #708, a 2011 Pelican Sweeper.

12. **RAM Small Dump Truck**
This is to replace Unit #152, a 2004 GMC that is used for cleanup and plow operations.

13. **Spray Patch Truck**
The spray patch truck the City acquired for road maintenance (pothole repair) has proven to be a great asset and repairs made with this unit have been long lasting. One of the biggest advantages this unit affords is that it only requires 1 operator versus 4 with a traditional pothole repair crew. Given that we continue to struggle with not having adequate personnel to keep in-house paving going consistently, we propose to add another patch truck to our fleet.

14. **Plow Pick-up Truck**
This is to replace Unit #176 a 2011 Ford F-350 in 2023 and in 2024 to replace Unit #157 a 2013 Chevy K3500 HD.

IV. STORM SEWERS.

1. **East Boulevard – Boyd Street to Lansdale Avenue**
The storm sewer needs to be extended due to the flooding at the intersection of East Boulevard and Boyd Street. The work area is at the intersection of Lansdale and Boyd and continuing north on Boyd. Scope of work includes 3 catch basins intercepting storm water at the intersection and connecting it north through 3 manholes to the existing storm water system.

2. **Old Brick Sewer on Broadway - Jischke to 3rd Street**
This project is to rehabilitate or repair an old 8-foot diameter brick sewer on Broadway from Jischke Street to Third Street. The scope of work is yet to be fully determined and hence the estimated cost is very preliminary.

3. **Millside Drive & Traveler Avenue - Drainage Improvements**
This project is to replace an undersized and poorly sloped storm sewer and outfall from the intersection of Millside Drive and Traveler Avenue to the Saucon Creek. This area (grass and street) frequently backs up during heavy rains.

4. Stefko Drainage Swale

This project was originally designed to upgrade the existing drainage channel between Broad Street and Lehigh River to eliminate flooding at the former Bethlehem Steel Power Plant and to reclaim existing city owned property for future use. Due to changed conditions, this project has been reevaluated to principally include a possible culvert under Lehigh Canal and selected improvements along the swale to reduce erosion and sediment transport to the river. A Growing Greener grant was received in 2013 for design and was completed in 2016.. The Project will be completed in two phases in 2023 and 2024.

5. West Goepp Street – Masslich Street to New Street

Upgrade storm water system (inlets and/or main) to address flooding along West Goepp Street (south side curbline) during heavy rain (anything greater than a 6-month storm). Additional investigations and a detailed H&H analysis will be performed to identify causes of flooding in the existing system and better define the final scope of work. The estimate of $250,000 is very preliminary and will likely be revised once H&H work is complete & scope of work is more defined.

6. 5th Street Storm Sewer Replacement

This project is to replace the existing clay pipe along E. Fifth Street from Buchanan to Fillmore and along Fillmore from Fifth to Packer. The existing clay pipe was installed in the 1950s and video inspection shows the pipe is deteriorating and has holes in the invert. Considering the age of the pipe, continued deterioration is anticipated. The proposed replacement of the system will eliminate the exfiltration and prevent future damage to the road and adjacent utilities. The estimated cost is preliminary and will be better defined once preliminary engineering is completed.

7. Creek Road Culvert Replacement

The Creek Road Culvert project is to replace the existing deteriorated culvert along Creek Road north of Friedensville Road. The culvert has been damaged by repeated flooding and the roadway is often overtopped during storms. In addition, the existing culvert is narrow, allowing only a single lane to cross. The replacement culvert will be sized to allow two lanes of traffic and reduce flooding of the road. The guiderail also needs to be upgraded to meet current safety standards. The culvert replacement project was bid in 2015 but the bids came in significantly above the available funding. We completed repairs to address the most urgent issues, including guiderail and concrete deterioration in 2015/2016, and differed the full replacement of the culvert to a later year due to the interim improvements.

8. Johnston Drive Swale Improvement

Improvement of an open swale south of Johnston Drive from East Boulevard, under Shakespeare Road, to the City of Bethlehem and Bethlehem Township border. The City has challenges maintaining this swale from property owners along the swale, which is often the subject of dumping of debris. Additional investigations and a detailed H&H analysis will be performed to identify potential issues with the existing system to define the final scope of work. Preliminary plans call for enclosure of this swale.

9. Easton Avenue to Stefko Boulevard Storm Sewer Upgrades - Various Locations (Phase 1 and 2)

This project is to replace and upgrade the storm sewer from Easton Avenue, down Barbara Street, Sycamore Street, Walters Street, Minsi Trail Street, and Wallace Street, to Stefko Boulevard and Pembroke Road. The flow then discharges into the Stefko Swale and ultimately into the Lehigh River. In heavy storms there have been drainage issues along this run. Phase I would be the addition of a second pipe in the lower end of the system from Washington Avenue to Stefko Boulevard. Phase II would be collection system improvements to the system from Easton Avenue to Washington Avenue. Estimated costs are very preliminary as they are not yet based on a detailed analysis and preliminary design.

10. Miscellaneous Drainage Structures

These funds are used to make repairs to catch basins, headwalls, culverts, pipes, etc. throughout the City's extensive storm sewer system.

11. North Street Storm Sewer Replacement

This project is for the replacement of the existing deteriorated terra cotta storm sewer along North Street between Main and Guetter Streets.

12. Broad and Guetter Streets Storm Sewer Replacement

This project is for the replacement of the existing deteriorated storm sewer at the intersection of Broad Street and Guetter Street. Work will also include sidewalk repair and road restoration. A portion of the repair of this area was done in 2018.

13. Stormwater Pollution and Flood Prevention Program

This is for the implementation of a stormwater pollution and flood prevention plan. Projects may include stormwater pollutant reduction Best Management Practices (BMPs), which could consist of detention basin restoration, retrofits of existing detention basins, installations of new basins, water quality improvements, stream bank restoration, and other BMP installations.

14. Ettwein Street Storm Sewer Replacement

Currently catch basins on the east side of Center at Ettwein collect stormwater and discharge at grade to the street on the west side of Center. The water then flows west on Ettwein Street to the catch basin at New Street. This project is to replace the existing catch basins, add new catch basins along Ettwein Street and connect the piping to the existing stormwater system at New Street. Additional investigations and a detailed H&H analysis will be performed to identify potential issues with the existing system to define the final scope of work.

15. Keim Street Storm Sewer Improvements

This project is to install a storm sewer system in Keim Street between Marion Street and Hilton Street to connect to the existing Storm Sewer system on Barbara Street. Currently no storm sewer exists in this section of Keim Street and water ponds significantly during storms. Additional investigations and a detailed H&H analysis will be performed to identify potential issues with the existing system to define the final scope of work.

16. **Greenway Drainage Swale**

This project must be completed during 2022 due to the current overflowing and erosion issues along a quarter mile segment of the Greenway Trail. Re-grading and stabilization of the bank is required to prevent flooding, minimizing erosion, and maintaining adequate stormwater discharges. Vegetation and debris needs to be removed and maintained to ensure there is a clear pathway for stormwater to flow from the swale to the Saucon Creek. Additional investigations and a detailed H&H analysis will be performed to identify potential issues with the existing system to define the final scope of work.

17. Cloverleaf Street Drainage Improvements

The current grading of the street is causing flooding in front of 1708 West Cloverleaf Street. The road needs a new profile to direct water away from the above stated property address and to prevent flooding in the area.

18. 378 Swale Improvements

The purpose of this project is to redesign the 378 swale to prevent flooding, minimize erosion, and maintain adequate stormwwater discharge. The existing concrete swale is deteriorating at various segments. The proposed improvements may include replacing sections of the concrete lined swale with vegetated sections, and reconstructing segments of the swale to improve drainage flow, prevent future damage to roads and adjacent utilities, and improve water quality and reduce sedimentations. An H&H evaluation and preliminary design will be completed to define the final scope, and the construction will be done in phases.

19. Goepp St & 4th Ave

This project is to install 2 to 3 catch basins and 2 manholes to intercept stormwater from West Goepp Street and convey underground to an existing storm sewer on West Spruce Street. Additional investigations and a detailed H&H analysis will be performed to identify potential issues with the existing system to define the final scope of work.

V. PUBLIC WORKS - FACILITIES

1. Facilities Capital Improvements

Funding is to support improvements identified by the comprehensive facilities evaluation, other previously identified improvements, and unexpected major necessary capital improvements to all City facilities. Currently identified improvements include Ice House porch and steps replacement, HVAC replacement at the Ice House, and replacement of air handlers, heat exchangers, pumps, pneumatic controls, air filters, condensers and pumps at various facilities, exterior improvements, railings, new windows on ground floor for the Police Department, HVAC component replacements, replacement of pavers on the plaza, and upgrade of the City Center elevators (parts are no longer available for existing elevators). In addition, funding is included for improvements/renovations at the City's Fire Houses focusing on functional concerns of the facilities and energy efficiency improvements. Work includes replacing/upgrading heating/cooling/ventilation systems, paving, replacement of doors/windows, other facility interior/exterior improvements and renovations. Safety concerns and code issues identified by Public Works, Safety Committee, Fire Department, and Inspections will also be addressed. Projects may also include roof renovations/replacement, exhaust/air systems to improve air quality, emergency lighting, renovation/replacement of unsafe structures, purchase of special equipment as deemed necessary to handle safety/code requirements, and other unforeseen repairs/improvements to facilities/equipment to extend the life of capital assets. Funding this line item also includes evaluation and improvements to the Police Department space.

2. Rodgers Street Maintenance Facility Replacement

The City's Grounds Maintenance Bureau and Traffic Maintenance Bureau both work out of the facility at Rodgers and Lewis Streets. This is a former Naval Reserve Center built in 1950 and is in poor condition and not suitable or cost effective for the current use. The structure will be demolished and replaced with a new pole barn structure better suited to the City's operations and needs. Funding is to cover design, demolition, asbestos abatement and construction. Asbestos removal and demolition work was completed in 2021, and design & bidding for the new building was also completed in 2021. Funds in 2022 are to cover all construction payments in 2022, as the amount of construction anticipated to be completed and paid in 2021 is not fully defined at the time of preparing this plan.

3. City Emergency Services Facility

This project is the construction of a pole building which would be attached to BFD Company #5 on Easton Avenue. This building would be a storage area for Police, Fire, EMS, Emergency Management supplies, equipment and vehicles. The building would be an "emergency service facility" that would be utilized by all City Emergency Services. Currently, these vehicles are spread all over the City, indoor and outdoor at all times of the year. Having these vehicles in one central location, in a secure indoor facility is instrumental on the wear and tear of the technical equipment in them and also on the life duration of each unit. Attaching the pole building next to a fire station enables a 24 hour security presence. The building would also include an elevated area which would be a joint Fire, Police, EMS and EM training area. This would be a simple classroom style room with two small offices for Fire and Police Specialized Units, i.e.: ERT and EOD Units. With the construction of this building, the City's Emergency Services; Police, Fire, EMS and EM, would be able to consolidate, secure and protect the specialized equipment they utilize in the City. Several vehicles have to stay plugged into a power source when not in use.

4. City Hall Plaza Drainage Pipe Replacement

The drain pipes for the plaza run through the garage and are galvanized steel. The pipes are corroding, frequently clog, and gather calcium deposits which causes backups in the plaza drains and likely contributes to or causes the existing leaks in the facility. The piping is jetted annually, but the problems persist. The drain piping in the garage will be replaced with larger diameter PVC pipe which will not collect future calcium deposits as readily as the galvanized steel. In addition, some of the existing piping has asbestos insulation that will be abated.

5. Superior Boiler Replacement

City Hall was originally served by two Superior Boilers. A third boiler a Lochinvar Boiler was installed in 2013 (Boiler #3). Superior Boiler #2 no longer functions and Superior Boiler #1 is original to the building as well and has exceeded its useful life. If Boiler #1 breaks down, we would be functioning on Boiler #3 with no back up. The new boiler, to replace boiler #2, will be a new gas fired boiler similar to the Lochinvar.

6. Library Exterior Column Repair

The 38 steel columns around the perimeter of the Library are corroded at the bases. Several columns had repairs made in the recent past, but the repairs are beginning to corrode. The concrete slab will be removed below the columns down to the beam and new piers will be built to support the steel column base. This project will be completed in phases to address the repairs in order of condition. Some repairs (4-5 columns) should be done as soon as possible.

7. City Hall Garage Structural Concrete Beam Repair

The concrete beam in the garage below the front of the Library Entrance is spalling and rebar is exposed and corroding. This beam carries much of the load from the front façade of the Library. Temporary shoring will be necessary to support the beam while the deteriorated concrete is removed. Corroded reinforcing steel will be repaired and the repair material will be dowelled into the existing concrete. This item covers engineering costs for this work and other City Hall Complex projects as well as repairs to this beam estimated at approximately $60,000.

8. City Hall Garage Floor Repair

The floor in the City Hall Garage has deteriorated over the years due to deicing salts, studded tires and other impacts. This has caused significant spalling of the concrete for approximately 75% of the floor resulting in various degrees of roughness and tripping hazards. The scope will include removal of the entire floor and replacement with a bituminous section floor.

9. Domestic Water Tank Replacements

This project is for the replacement of two large domestic water tanks with hot water heat exchangers. These tanks are original to the City Hall Complex and are insulated with asbestos. The circulating pumps, controls, and heat exchangers are all beyond their expected life and in need of replacement. The asbestos will be abated and the tanks replaced with smaller, gas fired, condensing water heaters

10. Administration Building Second Floor Window Replacement

The fixed windows on the second floor are older and have deteriorated glazing putty and fogged panes. Minor corrosion is evident on both the interior and exterior of the frames. The majority of the windows in the building have been recently replaced.

11. Underground Storage Tank Closures

The Serenity Garden at the City Hall Complex contains two 10,000 gallon, single wall, heating oil tanks. The tanks provide oil to Superior Boiler #1, the diesel emergency generator and the diesel fire pump. The amount of fuel used is reduced since natural gas is now used as the primary heating fuel. The tanks are oversized and should be removed prior their developing leaks.

12. Floor Tile Replacement

Much of the flooring in the City Center is original 9"x9" resilient tile with a low-percentage asbestos mastic. The City has been remediating the ACM on an as-needed basis with renovations. The flooring in some of the Police areas is chipped and damaged and entire sections are missing, exposing the subfloor. Some finish flooring has already been replaced with VCT or is finished concrete. This funding is to complete the remaining areas.

13. Ceiling Tile Replacement

The ceiling tile in most of the City Center are from the original construction, predominantly not in good condition and are in need of replacement. In addition, the lighting fixtures are original and in need of upgrade and replacement.

14. City Hall Chiller Replacement

In 2020, one of the original chillers was replaced at City Hall with a new Smart Chiller that is high efficiency and uses 50% less electricity along with having redundant motors for increased reliability. This item is to replace another chiller at City Hall that is almost 25 years old. We will again use the high efficiency chiller.

VI. PUBLIC WORKS - GROUNDS

1. Grounds Capital Improvements

Funding in this item is to cover smaller capital project needs already identified such as improvements and renovations to athletic fields (grading, aerating, topsoil, and backstops), tennis court resurfacing, landscaping, tree removal/replacements, parking lot improvements, sidewalk replacements, pathway improvements, parks buildings, and equipment. Funds may also be used to cover our construction bids that come in high on other projects.

2. Greenway - Saucon Park Ball Fields Connection

This project provides for an extension of the Greenway to the ball fields at the north-end of Saucon Park off of Millside Drive, along with storm water improvements. Construction is anticipated to begin in the fall of 2021 and will be completed in 2022.

3. Garbage/Packer Truck

Purchase of a 16-cubic yard rear load garbage /packer truck to replace Unit #095, a 2011 garbage truck which is nearing 100,000 miles.

4. Mack Heavy Duty Medium Dump Truck (Single Axle)

This unit will be equipped with a plow package and salt spreader for snow operations, pulling leaf loaders, and hauling materials.

5. Friendship Park Improvements

This project will remove excess asphalt paving, eliminate vehicle parking areas in the park, and improve the landscaping.

6. Rose Garden Improvements Phase II

Various upgrades to the Rose Garden including flowers, walkways, benches, picnic tables, etc. Additional work will include the upgrade of the Rose plantings.

7. Monocacy & Saucon Creek Stone Wall Repairs

This project is to repair stone walls along the creek in Johnston Park and Saucon Park. Cost will be refined pursuant to future exclusions and preliminary design.

VII. PUBLIC WORKS - RECREATION

1. General Pool Improvements

Improvements/renovations to pools, bathhouses, filter systems and related buildings based on recommendations of the Park and Pool Study of 2017 and arising needs.

2. Skating Rink

Improvements/purchases of equipment as needed for operations and capital upgrades. Future plans also include purchase of a new Zamboni and renovation of restrooms.

3. Ice Rink Sanitary Sewer Installation

The Ice Rink on Illick's Mill Road is currently connected to an old septic system. This project is to run a new sanitary sewer line to Illick's Mill Road to service the Ice Rink. The old septic system will be abandoned.

VIII. PUBLIC WORKS - OTHER PROJECTS

1. Bridge Repairs

The project is for maintenance and repair of ten (10) bridges the City is responsible for maintaining. Funding has been carried over to cover some larger projects. Repairs to South Main Street over the Monocacy Creek are anticipated in early 2022. The City is currently working on completing "Priority 0 and 1" repairs on 8th Ave Bridge deck with anticipated completion date in September 2021. Several of the remaining bridges are in need of significant repairs. The City receives regular inspection reports through the National Bridge Inspection System (NBIS). These reports detail needed repairs including concrete repair, deck overlay, deck and bearing rehabilitation and painting. The Public Works Department annually completes repairs that are within our expertise utilizing in-house forces. Much of the more complex work requires specialized bridge contractors. In addition, the NBIS inspections sometimes result in "Priority 1" repairs which must be addressed within a few months. Failure to make these repairs may result in further deterioration and greater future costs, as well as possible closures in extreme instances.

2. Route 378 Lighting Replacement (Phase 1& 2)

The scope of this project has been significantly reduced based on a design to only light the on and off ramps per PennDOT standards. Tests have been conducted starting in late 2015 by turning off the lights that are not located at the ramps. The results were found to be acceptable. Further evaluation and design will be conducted to finalize the plan to remove the unnecessary poles, replace the ramp poles and the underground electrical in a phased approach at a reduced cost to both the city and the state. There are currently 218 light poles along Route 378 and the light poles and electrical system conduits were installed in the early 1960s and have outlasted their expected lifespan. This replacement will be done in two phases. Phase 1 is to replace damaged light poles and break-a-way bases and remove unnecessary light poles. 107 light poles are anticipated to remain in service upon completion. Some of the pole structures are rusted and the metal has deteriorated at the bases from years of weather and salt causing them to become structurally unsound. All of the underground electrical system in PA 378 from the Hill to Hill Bridge to the PA 22 interchange including all of the ramps and overpasses is failing. The City owns the light poles and equally shares the maintenance and replacement costs with the State. The City has begun removing some of the lights that are not needed and we are billing Penn DOT for 50% of the costs. The revised project cost estimate is very preliminary, including pole replacements and underground electrical system upgrades, and will be refined during final design. The City has requested Penn DOT place this project on the TIP. Penn DOT has placed this project on the Long Range Transportation Plan with funding in future years (2031-2045).

3. Citywide Wayfinding Signage

A comprehensive effort to install a network of wayfinding signage is underway in both downtown areas and at several gateway entrances to the City. This project brands Bethlehem and provides improved wayfinding for tourists and visitors. Phase I was completed in 2018 and Phase 2 in 2021, design for Phase 3 is currently under way. Additional funds have been acquired from grants and donations to complete the final phases. Operating costs will be affected long term, but the signs are designed with durability and efficient maintenance in mind.

4. Service Truck Mechanical Bureau

The Mechanical Bureau is requesting a replacement service truck. Currently the truck that is being utilized as a "service truck" is a 2000 Chevy pick-up truck with a fuel tank in the bed. It has no air compressor and there are no provisions for tools. Equipment items transported must be placed on the seat or behind the seat and must be transferred in and out as needed. This is time consuming and inefficient, especially for emergency call-outs. The Mechanical Bureau must perform maintenance and repair work on vehicles and equipment at various facilities and locations around the city as well as emergency repairs and refueling on the road. Ideally, to perform these tasks in an efficient, timely manner a service truck, designed and equipped with the proper tools and materials, is needed. This truck would be on a heavy-duty pick-up chassis with a mechanic service body. This body will incorporate cabinets and drawers for gas cans, jacks, tools, fluids, consumable aerosols and other items needed for on-site repairs. It would be equipped with an auxiliary fuel tank and pump for refueling pavers and heavy equipment at construction sites and fire apparatus at fire scenes and refilling several small refueling sites at bureaus around the city. It would also be equipped with a heavy-duty air compressor for repairing tires on the road and for running multiple air tools including impact guns to remove lugs on large rims. It includes a lift gate to help transport large tires, oil drums and other heavy parts and is four-wheel drive for all weather use.

5. Flood Control System

The City inherited the responsibility for maintaining the Flood Control dike, buildings, the electrical system, pumps and motors at the Flood Control Station on the South Side on the Lehigh River from Bethlehem Steel. This account is to provide for capital expenditures for maintenance of this system. As a result of mounting needs (replacement of transformers and possibly pumps) and historical use of the pump house component of the station, the City re-evaluated the need for this component and recommended de-commissioning to the Corp of Engineers. In 2009 the Corp of Engineers and FEMA agreed that the pump component is not providing additional flood protection. Nevertheless, a re-delineation of the 100-year floodplain since abandoning the pumps is a change to the Flood Control System. The re-delineation results in minor additional shallow flooding areas, all within the former Bethlehem Steel plant, due primarily to storm sewer system capacity limitation, which exists regardless of the status of the pump stations. Although we are confident the pumping component of the Flood Control Station is no longer needed, this line item budgets for upgraded design and replacement in the event the City desires to restore the pump component of the system and restore the system to acceptable status under USACE regulations. Funds may be used for repairs to the remaining system and, in the event the pumps are permanently abandoned, funds may be used to abandon parts of the system.

6. Southern End of the Monocacy Way Trail

This project includes the upgrade and extension of the Monocacy Way trail from Schoenersville Road south to the D& L Trail at Sand Island. The project will include grade crossing enhancements at Schoenersville Road, at the intersection of Old York Road and Union Boulevard, at Spring Street and also at West Lehigh Street. The project will include trail signage as necessary. The funds amount is from planning and should be considered very preliminary.

7. South Bethlehem Greenway Phase VII/Saucon Rail Trail Connection

This project includes the acquisition of the remaining Norfolk Southern rail line necessary to close the trail gap between the existing South Bethlehem Greenway and the existing Saucon Rail Trail. This is an approximate .9 mile trail gap that will allow for the connection of these two regional trails and connection from Bethlehem's south side downtown to Quakertown and beyond. This trail gap is listed as one of the top 10 trail gaps in the Lehigh Valley. The funds amount is from planning and should be considered very preliminary.

IX. COMMUNITY & ECONOMIC DEVELOPMENT

1. Blighted Property Acquisition

There are currently 29 properties certified as blighted within the City of Bethlehem. In the past year, the city, in cooperation with the Redevelopment Authority, has moved forward with the acquisition process for targeted properties. It is anticipated two blighted properties will be acquired through eminent domain in 2021. The remaining funds will be used toward the acquisition of four additional properties in 2022 and 2023.