

**NON-UTILITY CAPITAL IMPROVEMENT PROGRAM**  
**2024-2028**  
**PROJECT DESCRIPTION**  
**Last revised 8/30/2023**

**I. PUBLIC SAFETY**

**1. Ambulance Replacement**

The recommended plan is to replace 1 ambulance each year to maintain a fully operational fleet of 8 ALS ambulances, minimizing breakdowns and expenses incurred from heavy usage and high mileage. 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. Ambulances will be outfitted with all equipment necessary to meet PA Department of Health guidelines for an ALS service.

**2. Fire Apparatus Replacement**

In 2024, Engine #1, a 2012 Pierce, would be identified for replacement and outfitted as a rescue engine for South Bethlehem. As the 1<sup>st</sup> due engine to I78, the vehicle would be outfitted to respond to rescues involving large vehicles that are typical to travel on I78, Rt. 378 and Rt 22. The current engine would be moved over to Lincoln Fire Station on Easton Avenue. The Engine\Ladder at Lincoln Fire Station (Engine #5) would be put into service as Ladder #1 at the Schweder Fire Station. In 2026, Ladder #2 at Memorial Fire Station would be earmarked for replacement. The current ladder truck was purchased in 2016. At present it is taking 3 to 4 years once a truck is ordered to be built and delivered. In 2028, an Engine will be identified for replacement in order to keep up the fleet. The recommended plan is to replace an apparatus every 2 years to maintain a fully operational fleet, minimizing breakdowns and expenses incurred from usage and mileage. The Fire administration works with the Mechanical Bureau to determine which apparatus would be replaced next regardless of age based on strategic use, warranty information, mechanical maintenance records and visual inspections of the fleet at the time of replacement.

**3. Police Vehicle Replacement**

The recommended plan is to replace 5-7 police vehicles each year to maintain a fully operational fleet, minimizing breakdowns and expenses incurred from heavy usage and high mileage. The Department replaced 2 motorcycles in 2022 and 1 in 2023. The plan will replace 1 motorcycle each year in 2024 and 2025. The Mechanical Bureau determines which vehicles are to be replaced regardless of age based on warranty information, mechanical maintenance records, and visual inspections of the fleet at the time of replacement.

**4. Public Safety Cameras**

The cameras and server/storage hardware for the City's camera system are aging. Some have now reached end of life and are no longer supported. This project will identify and replace inoperable or obsolete cameras and the obsolete server/storage hardware that runs the camera system and stores all of the video. IT applies for Grow NorCo grants from Northampton County, with matching funds from the City, for the replacements.

**5. First Responder Respirator Masks**

Replacement of Air Purifying Respirator Masks is needed for the Police and EMS Departments. Current masks were purchased for the Police Department over 15 years

ago and are at the end of their service life. These air purifying masks are designed to protect first responders from multiple airborne particles including chemical, biological, nuclear, radiological (CBRN) agents, toxic industrial chemicals (TICs), and toxic industrial materials (TIMs).

**6. Police Armored Rescue Vehicle Replacement**

This vehicle would replace Unit 498, a 2008 Lenco Bearcat, that is utilized for emergency response to barricaded suspects, active shooter scenarios, response and rescue, and high-risk warrants. This type of vehicle has proved to be an invaluable asset that has allowed officers to perform rescue actions that would not have been possible without such equipment which included rescuing citizens who were pinned down by a gunman who was actively firing on first responders.

**II. PUBLIC WORKS**

**A. TRAFFIC**

**1. Isolated Intersections**

Install new or upgrade existing signals at various locations. Each intersection costs between \$250,000 to \$275,000. Currently proposed potential new signal locations include East Boulevard & Linden Street, Butztown Road & Easton Avenue, Linden Street & Elmhurst Avenue, and Third Avenue & Union Boulevard. Currently needed upgrade locations include Linden & Goepp Streets, Club Ave & Union Blvd, New & Market Streets, North & Main Streets, Center & Church Streets, Center & Market Streets and Walnut & New Streets, Pennsylvania Avenue & Union Blvd, Pennsylvania Avenue & Eaton Avenue, and Eaton Avenue & Union Blvd etc. Construction at Linden & Goepp Streets started in 2023 and anticipating completion in Spring 2024. Construction for Club Ave & Union Blvd is anticipated in the Spring of 2024. Design for the intersections of Pennsylvania Avenue & Union Blvd and Pennsylvania Avenue & Eaton Avenue will be completed in 2024, with construction to follow in 2025.

**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.

**B. STREETS**

**1. Public Works Engineering Costs for CDBG Eligible Street Projects**

Design costs/fees for street reconstruction projects.

**2. 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 was 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. 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. The Linden Street conversion work is estimated to cost approximately \$2M if completed in 2025. Preliminary engineering and permitting is expected to be completed in 2024 with final design and construction in 2025.

3. **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 \$2,500,000 in annual expenditures and we are currently backlogged approximately \$20 million in work.

4. **Heavy Duty Tandem Dump Truck**

This is to replace Unit #161, a 2005 GMC dump truck which is in poor condition and needs to be replaced. The truck was ordered in 2022, but has not been received due to supply chain issues which delayed the delivery till the end of 2025. Therefore, we had to switch vendor and upgrade the truck for more efficient use. Truck is anticipated to be delivered in the first quarter of 2024. This unit is used for plowing, pulling leaf loaders, clean up, and assist in the streets paving operation.

5. **John Deere 624P 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 suitable to be driven on the road. Price increase is due to purchasing a John Deere as oppose to a Caterpillar model, which match existing fleet and is more efficient to maintain. Funding from Bond 2013, Bond 2017, and Bond 2019 savings.

6. **Three (3) Heavy Duty Large Dump Trucks (Tri-axle)**

This is to replace Unit # 170, a 2002 GMC Dump Truck, and Unit #165, a 2003 Mack Tandem Dump Truck in 2024, and unit #162, a 2010 International Dump Truck in 2025. These trucks are in poor condition and need to be replaced. One truck was ordered in 2022, but has not been received due to supply chain issues which delayed the delivery till the end of 2025. Therefore, we had to switch vendor and upgrade the truck for more efficient use. Two trucks are anticipated to be delivered in the first quarter of 2024. These trucks are used for plowing, pulling leaf loaders, clean-up, and assist in the streets paving operation. The increase is anticipated to be covered from the Grounds Dump truck savings incurred in 2023.

7. **Tymco 500X Street Sweeper**

This is to replace Unit #708, a 2011 Pelican Sweeper in 2024, and to replace Unit #713, a 2013 Stewart-Amos in 2026. These sweepers will support complying with the MS4 requirements.

8. **Ford F550 Small Dump Truck**

This is to replace Unit #152, a 2004 GMC that is used for cleanup and plow operations.

9. **Plow Pick-up Truck**

This is to replace Unit #157 a 2013 Chevy K3500 HD in 2024, and Unit #082 a 2005

Chevrolet 3500 in 2027 which are primarily used for Plowing and Brine operations.

10. **Milling Machine**

This is to replace Unit #752, a 2012 Wirtgen Milling machine. The new Milling machine will allow for more precise and efficient road surface preparation. New technology improves efficiency in preparation and leveling of roadway surface. Our 2012 Milling machine will be used for a trade for the replacement unit in 2027.

11. **East Broad Street Active Transportation Plan**

This project is part of the 2021 Broad Street Active Transportation Plan. Specifically, this project will include further development of the median in the downtown core area by extending the median eastward to Penn Street and pedestrian safety upgrades to the intersections of Maple, Elm, and High Street at Broad St. The project will also include street trees and lighting along with complete ADA upgrade. Funding was secured in 2023, design started in 2023, and construction is anticipated to start in spring/summer 2024.

12. **West Broad Street Corridor Improvements**

This project is part of the 2021 Broad Street Active Transportation Plan and consists of preliminary design, final design, permitting, and implementation/construction of safe streets improvements for the W. Broad Street corridor from Main Street to the city line (Hanover Avenue). The improvements will include but are not limited to bump-outs at intersections, bike lanes, introduction of turning lanes, decorative and line painted crosswalks, traffic signal upgrades, pedestrian refuge islands, ADA improvements, stormwater management, special signage, and other related streetscapes improvements. The majority of the funding for this project is anticipated to be federal funding, specifically Safe Streets and Roads for All (SS4A). Depending on the timeline of funding, the project will be implemented in phases.

C. **STORM SEWERS**

1. **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 2025 and 2026.

2. **5th Street Storm Sewer Replacement – Buchanan to Fillmore Street**

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 project will be awarded end of 2023 and construction is anticipated to start Spring 2024.

3. **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 deferred the full replacement of the culvert to a later year due to the interim improvements.

4. **East Boulevard Detention Basin**

Improvements to two detention basins on East Boulevard in the City of Bethlehem leading into Bethlehem Township's storm sewer system. The City is partnering with Bethlehem Township to investigate and complete a detailed H&H analysis to identify potential issues with the existing system, and to define the final scope of work of necessary improvements. Construction for the improvements of this basin is projected to start in 2024.

5. **Johnston Drive Swale Restoration/Improvements**

Improvement of an open swale south of Johnston Drive from East Boulevard, under Shakespeare Road, to the City of Bethlehem and Bethlehem Township border. This project has been removed from the above project for future improvements due to cost and safety.

6. **Easton Avenue to Stefko Boulevard Storm Sewer System Upgrades - Various Locations (Phase I and II)**

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.

7. **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.

8. **Stormwater Pollution and Flood Prevention Program**

This is for small scale pollution reduction projects/improvements identified during the course of each year. Projects may include stormwater pollutant reduction which consists of detention basin restoration and water quality improvement as well as stream bank restoration and other BMP installations. Also includes cost for updating the PRP reports.

9. **378 Swale Improvements (Phase I)**

The purpose of this project is to redesign the 378 swale to prevent flooding, minimize erosion, and maintain adequate stormwater 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.

**10. Bridal Path**

This project is to regrade the swale and alter the outfall on Bridal Path to eliminate erosion and ponding that occurs. Design started in the fall of 2023. This project is anticipated to be bid for construction and be completed in 2024.

**11. Fire Lane Stormwater**

This project is to install a stormwater system on Fire Lane and College Drive and connect it to the Saucon Creek. Currently no storm sewer exists in this section of Fire Lane and water ponds significantly during storms. Design was completed and bid at the end of 2023. Construction is to begin Spring of 2024.

**12. Monocacy Street Drainage**

This project is to address the erosion and hillside washout near the outfall on Monocacy Street. The City is working with the Monocacy Creek Watershed Association in gathering information to identify/scope a solution. Additional investigations and a detailed H&H analysis will be performed to identify potential issues of the existing condition to define the final scope of work.

**13. East Market Street Drainage**

This project is to design and install a stormwater system on East Market Street between Jennings Street and the City boundary to prevent erosion and flooding in the area. 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.

**14. West Broad Street Storm Pipe Replacement**

This project is to replace a deteriorated storm water pipe running along W. Broad Street between Terrace Ave and Conestoga Street.

**15. Yellis Tract Drainage**

This project is a continuous improvement of the stormwater system on Johnston Drive between Barrymore Ave and Red Fern Lane. There is a swale that continues to Yellis Tract and discharges into the Monocacy. This swale needs to be regraded and rehabilitated to better improve flooding in the area. Additional investigations and a detailed H&H analysis will be performed to identify potential issues with the existing swale to define the final scope of work.

**16. Parkridge Storm Sewer**

This project is to replace all the catch basins located on Hillcrest Ave. This project must be completed as the severity of deterioration of the catch basins creates a safety issue.

**17. 512 Storm Sewer**

This project is to replace 6 catch basin hoods located on 512. This project must be completed as the severity of deterioration of the catch basins creates a safety issue.

**D. FACILITIES**

**1. Facilities Capital Improvements**

Funding is to support small capital improvements identified by the comprehensive facilities evaluation, other previously identified improvements, and unexpected

necessary capital improvements to all City facilities. Currently identified improvements include 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 Hall 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, pool improvements, and 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. 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.

**3. 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. This project started in the Fall of 2023 and is anticipated to be completed in the Spring of 2024.

**4. 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.

5. **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. This project started in the Fall of 2023 and is anticipated to be completed in the Spring of 2024.

6. **Administration Building 2nd Floor Window Replacement**

The fixed windows on the 2nd 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.

7. **Underground Storage Tank Closures**

The Serenity Garden at the City Hall Complex contains two 10,000-gallon, single wall, heating oil tanks. The tanks previously provided oil to Superior Boiler #1 and currently provide overflow oil to the diesel emergency generator. Superior boiler #1 is sourced with gas and a new tank is planned in the vicinity of the dog kennel to supply diesel for the emergency generator. The tanks are oversized and should be removed or abandoned in place prior to developing any leaks.

8. **Floor Tile Replacement**

Much of the flooring in City Hall 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. Work in 2023 was started on various damaged areas on each floor of Building A and will be followed by work on the 4<sup>th</sup> Floor of Building B. All tile replacement work is anticipated to be completed by end of 2024.

9. **Ceiling Tile Replacement**

The ceiling tile in most of City Hall 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.

10. **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 the other chiller (backup) at City Hall that is almost 25 years old. We will again use the high efficiency chiller.

11. **Mechanical Room Water Pump Replacements**

The main mechanical room contains pumps which serve the hot water, chilled water and dual temperature systems throughout the City Hall and Library complex. Condenser water pumps are also located there. Most of the original pumps have already been replaced, although six have not. Four of the original pumps serve as spares, but the perimeter pumps are older. Provide new piping trim, starters, disconnect switches and controls. Reuse the existing concrete pads, piping rough-ins to mains and electrical feeders.

E. **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, pool improvements, and equipment. Funds may also be used to cover our construction bids that come in high on other projects.

2. **Garbage/Packer Truck**

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

3. **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. This unit was ordered in 2022 but has not been received due to supply chain issues which delayed the delivery till the end of 2025. Therefore, we had to switch vendor which led to cost savings of approximately \$30,000. Truck is anticipated to be delivered in 2024.

4. **Friendship Park Improvements**

This project is to renovate and upgrade Friendship Park by among other work removing excess asphalt paving, eliminating vehicle parking areas in the park, adding a splash park, shade area, and improving the landscaping. The current preliminary estimate for the improvements is approximately \$1,500,000 with \$200,000 currently funded and the remaining funds are being pursued via grants. Design started in 2023 and construction is anticipated to be completed at the end of 2024.

5. **Rose Garden Improvements**

Phase I improvements were completed in 2021, and various other upgrades to the Rose Garden including light replacement, additional walkways, benches, picnic tables, etc. will be completed in 2024.

6. **John Deere 5105M Utility Tractor**

This unit is an add-on to our fleet and will be equipped with a Mow Master TT-17R Boom/deck. It will improve the efficiency in maintaining 3 miles of D&L trail tow path, 5 detention ponds, hasting swales, and all City trails.

7. **Ford F550 Small Dump Truck**

This is to replace Unit #79, a 2009 Dodge RAM dump Truck, which is used for cleanup, plowing, and salt operations.

8. **Plow Pick-up Truck**

This is for one regular Plow Pick-up Truck to replace Unit #89 a 2009 GMC Sierra in 2024, and a Quad Cab Plow pick-up truck to replace Unit #102 in 2027, which are used for plowing and daily grounds operations.

F. **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. **Ice 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.

4. **Ice Rink Locker Room**

The Ice Rink does not have adequate space for the volume of patrons attending the Ice Rink. This project is to expand the existing locker room to accommodate larger number of groups at one time.

5. **Tennis/Pickleball Courts at Sand Island.**

There are currently 8 Har Tru tennis courts at the Sand Island Recreational Complex. The season preparation and daily maintenance of the courts is labor intensive and requires an attendant to be on site at all times of operation. Attendance has been low and the 8 courts have rarely been utilized at capacity, whereas the requests for Pickleball courts have increased over the past few years due to the popularity of the sport worldwide. This project would transform the existing court surfaces to a hard surface, similar to all other courts in the city which require much less maintenance. In addition, the new use will include both tennis and Pickleball courts to provide versatility and meet current demands. Unlike the current situation, these courts would not need an attendant. We will continue to operate the courts as is in the meantime until it become unviable and/or funding becomes available.

G. **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. 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. Rehabilitation of the South Main Street bridge over the Monocacy Creek were completed in June 2023.

2. **Main St Ramp Improvement**

This project is to rehabilitate the Main St. Ramp, a City owned structure, connecting Route 378 to Main St. This project will be done in conjunction with the Hill to Hill Bridge rehabilitation project being done by the State, with construction anticipated to start in 2025. The project includes rehabilitation of the bridge parapets, major improvements to the superstructure and substructure of the bridge, and other ancillary work. Construction improvements on the ramp is anticipated to start towards the end of 2025. The City will be pursuing State/Federal (TASA, TIP, etc.) funding for this project.

3. **Spring St Ramp Improvement**

This project is to rehabilitate the Spring St. Ramp, a City owned structure, connecting(sidewalks) Route 378 to 2<sup>nd</sup> Avenue. This project will be done in conjunction with the Hill to Hill Bridge rehabilitation project being done by the State,

with construction anticipated to start in 2025. The project includes rehabilitation of the bridge parapets, major improvements to the superstructure and substructure of the bridge, and other ancillary work. Construction improvements on the ramp is anticipated to start towards the end of 2025. The City will be pursuing State/Federal (TASA, TIP, etc.) funding for this project.

4. **Route 378 Lighting Replacement (Phase I & II)**

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. These 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 I is to replace these light poles and break-a-way bases on the ramps and remove unnecessary light poles on the main lines. 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. Phase II is to replace all of the failing underground electrical system in Route 378 from the Hill to Hill Bridge to Route 22 interchange including all of the ramps and overpasses. 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. PennDOT allocated funding for the lighting upgrades specifically at the on and off ramps per their standards and the project is currently under design with construction anticipated in 2024.

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. **Monocacy Way Trail Phase II (Final)**

This project is to upgrade and extend the Monocacy Way trail from Schoenersville Road south to the D& L Trail at Sand Island. The project will include improvement of the trail from Schoenersville Rd. to Union Blvd., 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 City secured a grant from DCNR in the amount of \$441,000 which requires a 50% cost share. Design started end of 2023, and construction work is anticipated to start fall 2024.

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. Land acquisition cost as reported by planning are anticipated to be \$7.6 million and construction is anticipated at approximately \$1 million.

8. **West Third Street - Streetscape Improvements**

The City applied for funding for streetscape improvements on West Third Street from Northampton Street to Broadhead Ave. The funding will be of bike, pedestrian, and vehicular improvements designed to enhance the corridor and upgrade the crosswalks. These improvements will be done in conjunction with the redesigned ArtsQuest Community Cultural Center. The total project costs is estimated to be \$2.7 million and the grant request was for the full amount. The City/ArtQuest applied for a \$2 million grant and ArtsQuest is expected to fund any difference between the award and the project costs.

9. **Sun Inn Courtyard Renovations**

Several years ago, the City went through a public engagement process to rehabilitate the Sun Inn Courtyard. As a result of insufficient funds, the project was never pursued to construction. The Sun Inn Courtyard, owned by the Sun Inn Preservation Association, the City of Bethlehem and the Bethlehem Redevelopment Authority, continues to deteriorate. With the possibility of World Heritage Designation and the upcoming America 250 Celebrations, the time is right to upgrade the park. The City applied for funding through the Pennsylvania 250 program.

### **III. COMMUNITY & ECONOMIC DEVELOPMENT**

1. **Blighted Property Acquisition**

The City, in cooperation with the Redevelopment Authority, is moving forward with the acquisition process for targeted properties. It is anticipated three blighted properties will be acquired eminent domain in 2024. Those acquisition could exhaust the remaining funds.