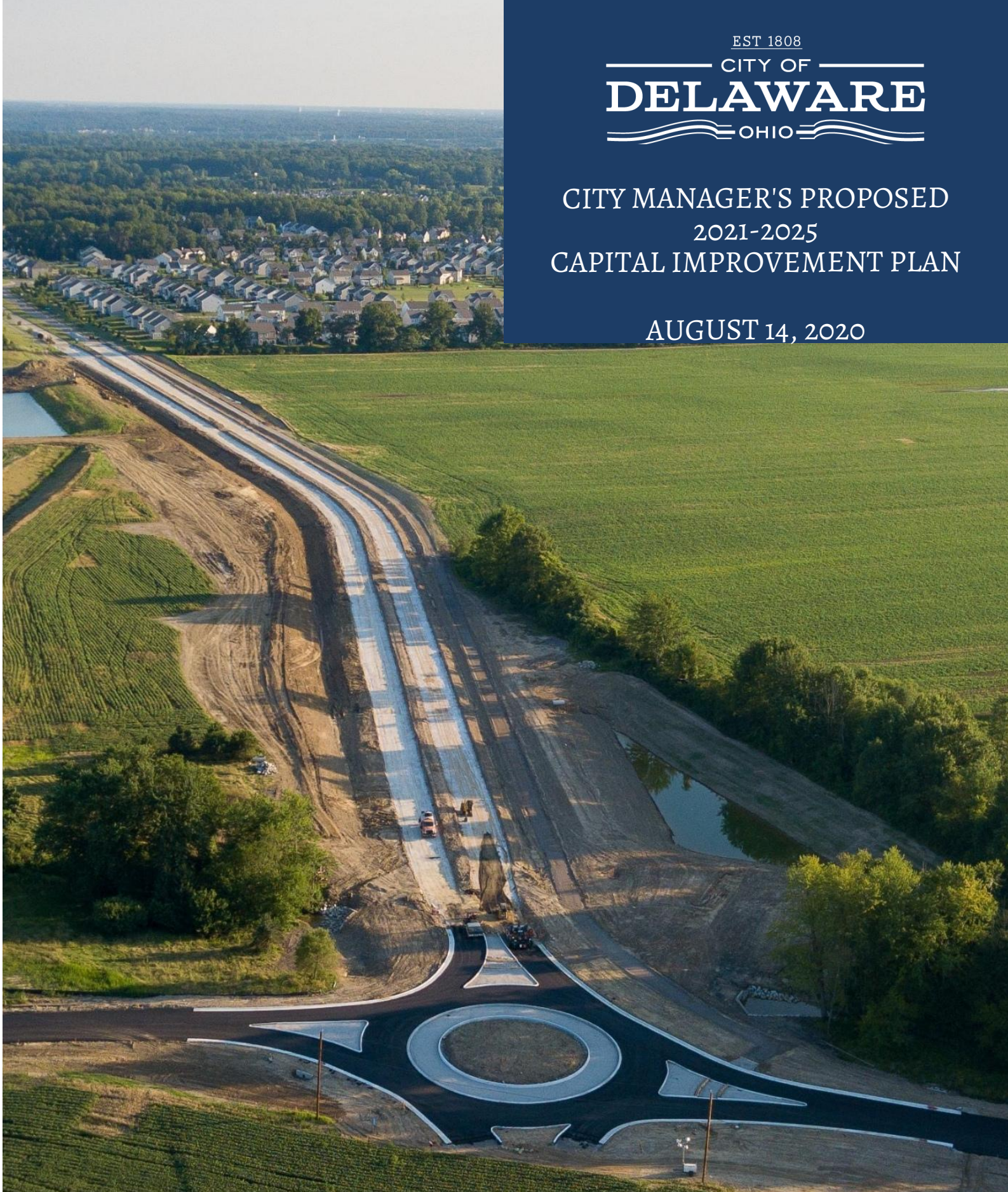
EST 1808
CITY OF
DELAWARE
OHIO

CITY MANAGER'S PROPOSED 2021-2025 CAPITAL IMPROVEMENT PLAN

AUGUST 14, 2020



Glenn Parkway-Berlin Station Rd. Roundabout

The new roundabout intersection connects Glenn Parkway with Berlin Station Road, and completes a 2.1 mile connection linking Delaware's southeast neighborhoods directly to US23. A final 1.4 mile section will extend Glenn Parkway from Berlin Station Road to Curve Road, completing the important southeast areterial connection around the city.

Photo Credit: Dale Oates, Communictions Specialist

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MEMORANDUM

TO: Mayor Riggle and Members of City Council
FROM: R. Thomas Homan, City Manager
DATE: 08/14/20
RE: 2021-2025 Capital Improvement Plan

Pursuant to section 79 of the City Charter, submitted herewith is my proposed 2021-2025 Capital Improvement Plan, adoption of which must occur by October 15. Please see table below for the proposed review and adoption schedule. A second Work Session can be added the week of 9/22 if necessary.

Event	Time	Place
First Reading	Monday, August 24, 2020	City Council Meeting
Second Reading	Monday, September 14, 2020	City Council Meeting
Third Reading	Monday, September 28, 2020	City Council Meeting
Work Session (if needed)	Monday, October 5, 2020	Work Session
Fourth Reading & Adoption	Monday, October 12, 2020	City Council Meeting

Much has changed in the world since the adoption of the 2020-2024 Capital Improvement Plan (CIP) in the fall of 2019. Many of the projects and equipment purchases slated for 2020 were delayed or suspended to allow for assessment of the pandemic's impact on City finances. These projects will be outlined in a later section of this message.

Several funding sources experienced reduced, or at the least, delayed revenues. Income taxes, the largest source of general fund income, had declined 2.4 percent as of July 2020 compared to the same period last year. The decline is attributed to the rise in unemployment and the shifted filing due date. Based on current collections, a decline of 3.0 percent or $488,750 of estimated revenue from this source is predicted in 2020. The proposed plan anticipates flat income tax collections in 2021 with moderate increases in the years 2022-2025.

Earnings on investments are projected to be more than 60 percent below 2020 budgeted revenues resulting in an estimated decline of $572,437. The new gasoline tax suffered a hit early in the year with the stay at home order. Since then, revenues have rebounded but are still anticipated to fall short of budget by approximately $145,000 or 7.6 percent. As a result of this, less funding was available for local street resurfacing.

Though the financial impacts of COVID-19 will continue to be a challenge into 2021, the proposed plan shows that the City remains dedicated to its investments in infrastructure and capital improvements with 14 percent of the estimated general fund income tax collections, representing $2,243,099. As Council will note, 2021 is balanced. However, years 2022-2025 are out of balance and will require cutbacks, additional funding sources or a combination of the two.

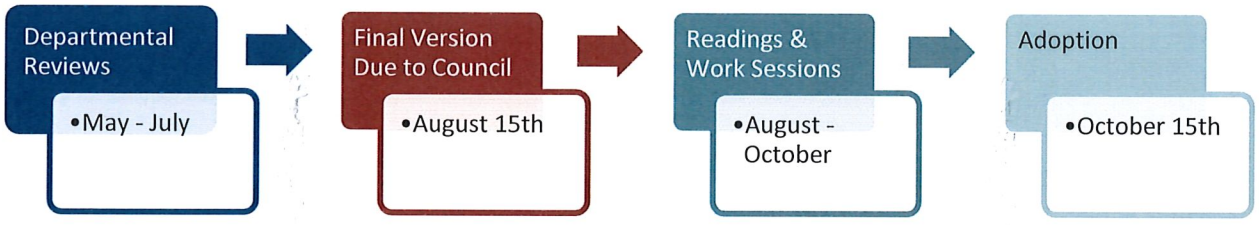
CIP: The Purpose

This capital improvement program (CIP) is a five-year strategic plan for the years 2021-2025. It is a budgetary tool enabling the City to financially plan for larger purchases and projects. The CIP itself is not an appropriation. Instead, it is a blueprint for future capital expenditures requiring ongoing reevaluation and adjustment. Formal annual CIP reviews are essential to allow for responsiveness to changing economic conditions and project prioritizations.

While this is not an exclusive list, typical projects included in the CIP achieve at least one of the following:

- Add to the value or capacity of the City's infrastructure
- Constitute permanent, physical or system improvements
- Require significant equipment purchases
- Are of a one time or limited duration nature

CIP: The Process



To begin the CIP process, the City Manager's Office and Finance Department meet with the City's department directors. They review existing project statuses discussing any amendments, changes or cancellations and anticipate new projects arising out of community concerns, changing priorities or necessity. Any potential or new funding sources are also discussed at this time.

After all departmental reviews are completed, the City Manager's Office and Finance Department work to compile a draft submission of all proposed projects. Funding sources are evaluated, and projects are prioritized with additional guidance from the department directors as needed. In accordance with the City's Charter, the City Manager is required to submit the finalized draft of the CIP to Council for review by August 15th.

2020-2024 CIP Review

As mentioned earlier, several projects scheduled for completion in 2020 were delayed, reduced or cancelled. The below table provides an update of the larger 2020 projects.

Department	Project	Status
Public Works	US 23/36 Exit Bin Wall Improvement	On Track
Public Works	Curtis and Firestone Turn Lane	Delayed
Public Works	Hills-Miller Sidewalk	On Track
Public Works	Downtown Sidewalk Repairs	Modified
Public Works	Downton Arch	Delayed
Public Works	E William St Widening	On Track
Public Works	OPWC - Belle Ave/US 36	On Track
Public Works	Local Resurfacing	On Track
Airport	Apron B Rehabilitation	Delayed
Parks	Willowbrook Park	On Track
Parks	Blue Limestone Park Playground Replacement	On Track
Parks	Mingo Park Playground Replacement	Completed
Parks	Smith Park Playground Replacement	On Track
Parks	Ross Street Park Improvement	On Track
Parks	Central Avenue Pedestrian Corridor	On Track
Water Capacity	Panhandle to US42 Water Main	On Track
Water	Water Tank Painting	Completed
Water	Lincoln Ave Waterline	On Track
Sewer Capacity	Spring Street Upsizing	Completed
Sewer	W William St CIPP Lining	Delayed
Storm	Montrose/Columbus/Toledo	Cancelled
Storm	US23 Storm Repair (ODOT)	Delayed

2021-2025 CIP Highlights

For the proposed CIP, capital investments have been modified from prior years to reflect the financial stress caused by the pandemic. With the declines within the major revenue sources sustaining the CIP, as well as declines in development-driven engineering fees and licenses and permits fees, City Administration placed a focus on investments of critical importance to the safety and welfare of the community and projects that include grant or outside funding sources. The purpose of this being to construct a CIP that allows the City to maintain adequate cash reserve balances to weather an extended period of economic decline. As a reminder, the budget gauge is currently at "Budget Restraint".

Funds that do not have sufficient revenue sources to support the costs of capital projects rely on transfers from the General Fund. Funding summaries for each departmental category of improvements are fully balanced in terms of revenues and expenditures with the term "CIP Allocation" pertaining to the General Fund contribution to the project schedule. This accounting of transfers with the CIP aligns with past practice in capital improvement funding as supported by the General Fund.

The proceeding sections summarize the new capital expenditures for 2021. In this context, new does not include debt service for existing projects. All revenue sources, not just local funds, are considered in the total amount for each of the categories described below.

Roads & Sidewalks

The completion of the East William Street widening in 2020 is the first of three crucial projects designed to improve the pedestrian safety and flow of traffic on the east side. The second major project, the Point, is scheduled to begin construction in 2022. This CIP further includes the design work of the third major project, East Central Avenue, with construction of the project outside of the scope of this plan tentatively scheduled for 2026. In total, these three projects represent an over $50 million investment in the infrastructure of the City.

It is these major improvements, coupled with our commitment to resurfacing local streets and improving safety and sidewalks throughout the community that plays the largest role in the imbalance of the CIP in later years. Without a dedicated funding source to support the City's transportation infrastructure, tough funding decisions will need to be made in the capital planning process for the outlying years.

Utilities

Available balances in the City's Water and Wastewater Capacity Funds allow for significant investments in utility infrastructure over the next five years. Included in the plan is $9.5 million in projects to support the growth of jobs in the City through extensions of the North Sawmill, US42 and Industrial Loop water and wastewater lines.

Equipment

The plan for 2021 for equipment replacement follows the strategy employed for previous capital plans. Going into next year, City staff plans to review the fleet maintenance strategy and shift to one guided by information, best practices and centralized around mechanical expertise.

Parks

Parks saw a higher than normal infusion of general fund monies in 2020 to complete the replacement of the large play structure at Mingo. Because of this and the current situation,

only the play structures deemed essential to replace for the safety of the community or funded by partial contributions from an HOA have been included in this plan.

Park impact fees will be utilized for several trail improvements throughout the City as well as a land acquisition for a South Community Park and a splash pad at Ross Street Park.

Police

The plan includes a request for body worn cameras. The department's current digital cruiser video recording system and body microphone system were purchased several years ago with the understanding that a body worn camera option could be added, as opposed to purchasing an entirely new system.

Parking remains a topic of concern, and 2022 reflects a $426,965 investment in parking meters. In this instance, the term parking meters is used loosely and encompasses the funding for a parking solution. The hope is to reconvene the project team and focus anew on the downtown parking strategy in 2021.

Fire/EMS

Funding for the feasibility and design of a fire training tower is shown in 2021. The estimated construction cost of this project is $1.25 million in 2022. This plan also reflects the potential need for a fifth fire station, Station 305, shown in 2025.

Airport

The proposed airport projects also follow the guidance of the rest of the CIP and show expenditures almost solely for the FAA grant improvements of T-Hangar resurfacing and Taxiways in the coming years.

Airport TIF revenues are proposed to be used for a corporate parking access drive in 2021. With some renewed interest in the airport, these funds may be redirected towards another project pending further staff review.

Debt Service

In the 2020-2024 CIP, the General Fund summary reflected three areas of debt service: 2012 Streetscape, 2019 City Hall/Annex, and 2019 Software. When the debt referenced on the 2019 borrowings was issued, it was listed under one bond offering of $4 million with a final maturity in 2034. As this was a single bond offering, the debt service has been combined to one item, 2019 City Hall/Software, in this plan. Based on the amortization schedule for the debt, principal payments on the debt through 2024 are accelerated and total $2,448,375 for the annual payments from 2020 through 2024. Commencing in 2025, the annual principal payment is

reduced to $187,000 which explains the lower debt service payment in the financial summary for this period.

Additionally, several debt service obligations are falling off in 2021-2025.

On the General Fund summary page, the debt service for the 2012 Streetscape project falls off after 2022, leaving an additional $260,000 for capital improvements moving forward.

Fire and EMS see the retirement of debt service after 2022 for Station 302, and after 2024 for EMS vehicles.

The Wastewater Capacity Fund will see the retirement of $300,000 in annual debt service for the land acquisition on Armstrong Road beginning in 2023.

Closing

Over the course of the next eight weeks, staff and I look forward to reviewing this document with Council. As always, we will be as responsive as possible to Council's questions and comments.

In closing, I want to thank and acknowledge all of our departments for their hard work on, even as we face the COVID-19 pandemic. Also, sincere thanks to Finance Director Justin Nahvi and Budget Management Analyst Alycia Ballone. Finally, my thanks to my Executive Assistant, Kim Gepper and City Council Clerk Elaine McCloskey for their support and assistance.

cc: Directors

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CITY OF DELAWARE
CAPITAL IMPROVEMENT PLAN
GENERAL FUND SUMMARY
2021-2025

	2021	2022	2023	2024	2025
BALANCE FORWARD	**698,338**	**333,325**	**(352,394)**	**(886,617)**	**(1,173,227)**
REVENUES:					
Income Tax (14% of 1% GF Collections)	2,243,099	2,287,961	2,333,720	2,380,395	2,428,002
City Hall Annex Rent	84,504	84,504	81,794	78,000	78,000
BALANCE PLUS REVENUE	**3,025,941**	**2,705,790**	**2,063,120**	**1,571,778**	**1,332,775**
EXPENDITURES:					
DEBT SERVICE					
2012 Streetscape ($2,542,516 through 2022)	261,067	263,538			
2019 City Hall/Software (through 2034)	446,701	527,189	547,350	548,400	214,000
TOTAL DEBT SERVICE	**707,768**	**790,727**	**547,350**	**548,400**	**214,000**
AMOUNT AVAILABLE FOR CAPITAL IMPROVEMENTS AFTER DEBT	***2,318,173***	***1,915,063***	***1,515,770***	***1,023,378***	***1,118,775***
OTHER EXPENDITURES					
Airport Improvements	176,001	-	124,756	-	-
Parks Improvements	48,000	268,000	65,000	195,000	55,000
Facilities Improvements	209,000	145,000	85,000	200,000	50,000
Streets Improvements	398,370	873,370	545,330	405,000	1,236,424
The Point	200,000	-	731,314	311,314	311,314
E Central	40,000	40,000	80,000	250,000	100,000
Police Department Improvements	260,000	16,000	64,474	96,474	331,474
Equipment Replacement	653,477	925,087	706,513	738,817	651,339
TOTAL OTHER EXPENDITURES	**1,984,848**	**2,267,457**	**2,402,387**	**2,196,605**	**2,735,551**
ENDING BALANCE	**333,325**	**(352,394)**	**(886,617)**	**(1,173,227)**	**(1,616,776)**

CAPITAL IMPROVEMENT PLAN
AIRPORT IMPROVEMENTS
2021-2025

	2021	2022	2023	2024	2025
REVENUES:					
FAA Entitlement	526,776		164,894	81,000	270,000
FAA Apportionment	21,754				
ODOT	30,474		9,161	4,500	15,000
TIF Revenue	192,000	27,000	27,000	4,500	15,000
CIP Allocation ***(pg.1)***	***176,001***	***-***	***124,756***	***-***	***-***
TOTAL REVENUES	**947,005**	**27,000**	**325,811**	**90,000**	**300,000**
EXPENDITURES:					
CITY NON-GRANT					
Maintenance Building Improvements	15,000	15,000			
GRANT IMPROVEMENTS					
T-Hangar A, B & C Resurfacing	741,313				
T-Hangar D, E & F Resurfacing			325,811		
T-Hangar G, H & I Resurfacing				90,000	300,000
TIF IMPROVEMENTS					
Corporate Parking Access Drive	190,692				
TOTAL EXPENDITURES	**947,005**	**15,000**	**325,811**	**90,000**	**300,000**

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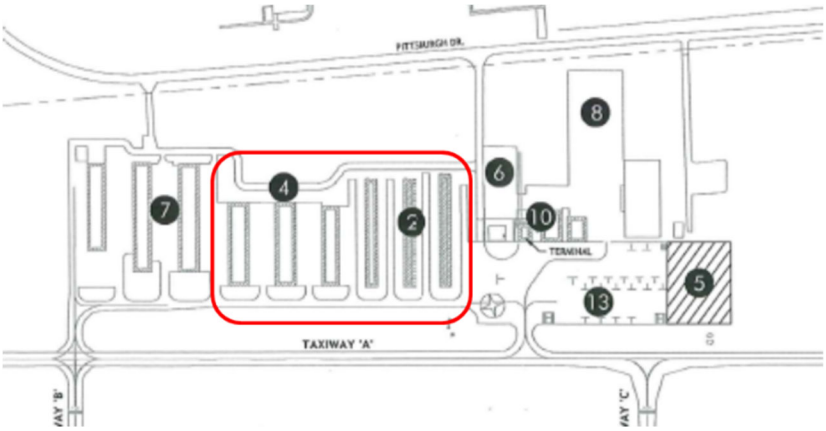
PUBLIC WORKS

T-HANGER PAVEMENT REHABILITATION

BACKGROUND

The latest pavement rating performed by ODOT Dept. of Aviation indicates the pavement between existing T-hangars is in poor condition. With the earliest sections constructed in 1987, the pavement is over 25 years old and in need of rehabilitation. The pavement composing the main taxi aisles is eligible to receive federal funding while the connections to the individual hangar doors from the taxi aisles are not and require local funds to complete. The FAA provides 'Entitlement' funds covering 90% of eligible project costs, with ODOT providing an additional 5%. The City is responsible for 5% of cost plus 100% of non-eligible items.



PROJECT TIMELINE

2021	Rehabilitation of T-hangar A, B & C pavement
2022	
2023	Rehabilitation of T-hangar D, E & F pavement
2024	Design of T-hangar G, H & I pavement
2025	Rehabilitation of T-hangar G, H & I pavement

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	741,313	Construction T-Hangars A, B & C (FAA 90%; State 5%; Local)
2022		
2023	325,811	Construction T-Hangars D, E & F (FAA 90%; State 5%; Local)
2024	90,000	Design T-Hangars G, H & I (FAA 90%; State 5%; Local)
2025	300,000	Construction T-Hangars G, H & I (FAA 90%; State 5%; Local)
TOTAL	**$1,457,124**	

PROJECT TEAM

CITY LEAD: Public Works – Engineering Division
DESIGN CONSULTANT: CHA
CONTRACTOR: In House

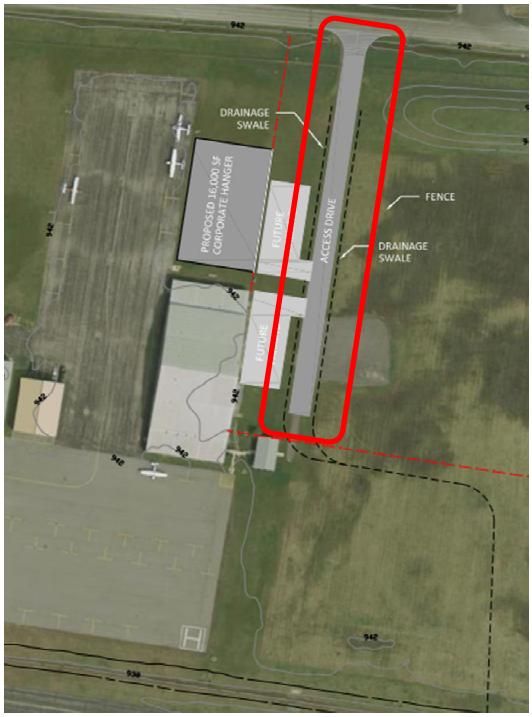
EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

CORPORATE PARKING ACCESS DRIVE

BACKGROUND

Delaware Municipal Airport Jim Moore Field is a leading Central Ohio general aviation facility. It is home to approximately 100 aircraft and handles an estimated 40,000 operations per year. To encourage additional growth opportunities, City is partnering to construct an access drive for a new corporate hanger facility proposed for construction north of the Jet Steam hanger. This corporate expansion is consistent with the City's 10-year Airport Capital Improvement Plan. The hanger owners will be responsible to construct desired parking areas off the new drive. There will be a ditch for drainage on either side of the proposed access drive that will drain to the south, and outlet into the existing runway ditch. This ditch will be sized to carry the runoff from both the roadway and new parking lots. The airport fence will need adjusted to separate the parking areas from the runway, ramp and apron areas.



PROJECT TIMELINE

2021	Preliminary & Final Design
2022	Construction
2022	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	$192,000	Airport TIF
2022		
2023		
2024		
2025		
TOTAL	**$192,000**	

$192,000 is the current project estimate. Any amount above the available TIF balance would be from local funds.

PROJECT TEAM

CITY LEAD: Public Works
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

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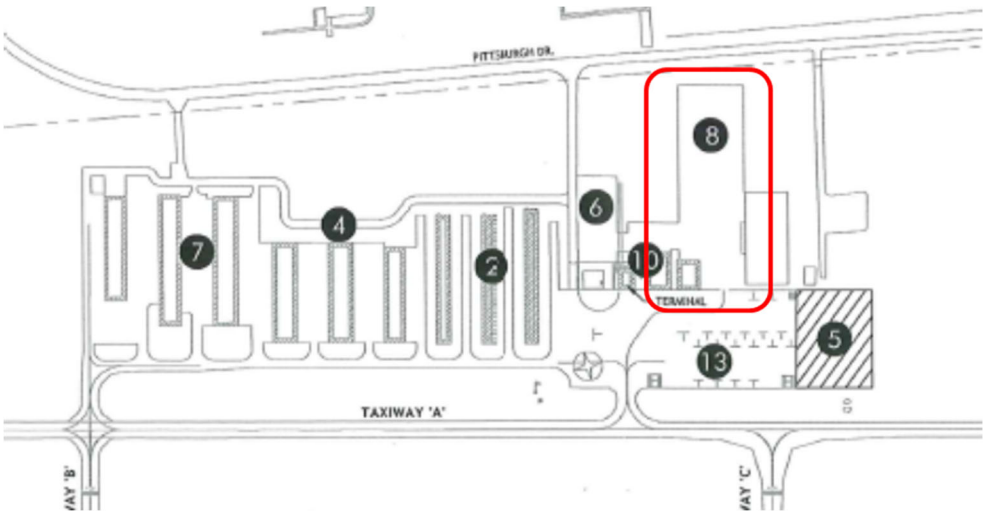
PUBLIC WORKS

AIRPORT APRON 'B' REHABILITATION

BACKGROUND

The latest pavement rating was completed in November 2016 and revealed that the pavement of Apron 'B' is in poor condition and in need of rehabilitation. Originally constructed in 1987, the pavement is over 25 years old and in need of significant restorative efforts including drainage improvements, subgrade repairs, and pavement replacement, collectively identified as rehabilitation. The utility of the apron is also in transition as a potential corporate hanger project may require the relocation or elimination of existing small aircraft tie-downs in order to provide ample maneuvering room for larger jet aircraft accessing the northeast quadrant of the apron. Work on the section of pavement is not eligible for federal FAA or ODOT funding, and therefore must be paid for locally.



PROJECT TIMELINE

TBD	Construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
TBD	$372,000	Local Funds. Not eligible for FAA or ODOT funds.
TOTAL	**$372,000**	

PROJECT TEAM

CITY LEAD: Public Works – Engineering Division
DESIGN CONSULTANT: CHA
CONTRACTOR: TBD

CAPITAL IMPROVEMENT PLAN
PARKS & NATURAL RESOURCES DEPARTMENT
2021-2025

	2021	2022	2023	2024	2025
REVENUES:					
Cheshire Crossing HOA	12,000				
CIP Allocation ***(pg.1)***	***48,000***	***268,000***	***65,000***	***195,000***	***55,000***
TOTAL REVENUES	**60,000**	**268,000**	**65,000**	**195,000**	**55,000**
EXPENDITURES:					
PARK IMPROVEMENTS					
Cheshire Basketball Court	25,000				
Carson Farms Court Resurfacing		60,000			
Mingo Park					
Rotary Shelter Roof			15,000		
Appliances		7,000			
Pool High Dive Platform		25,000			
PLAYGROUND REPLACEMENT					
Belle Avenue Park	35,000				
Carson Farms Park		55,000			
Cheshire Park		76,000			
Glenross Park					
Mingo Park		45,000			20,000
Nottingham Park					30,000
Smith Park			50,000		5,000
Sunnyview PPG Park				45,000	
Veterans Park				150,000	
TOTAL EXPENDITURES	**60,000**	**268,000**	**65,000**	**195,000**	**55,000**

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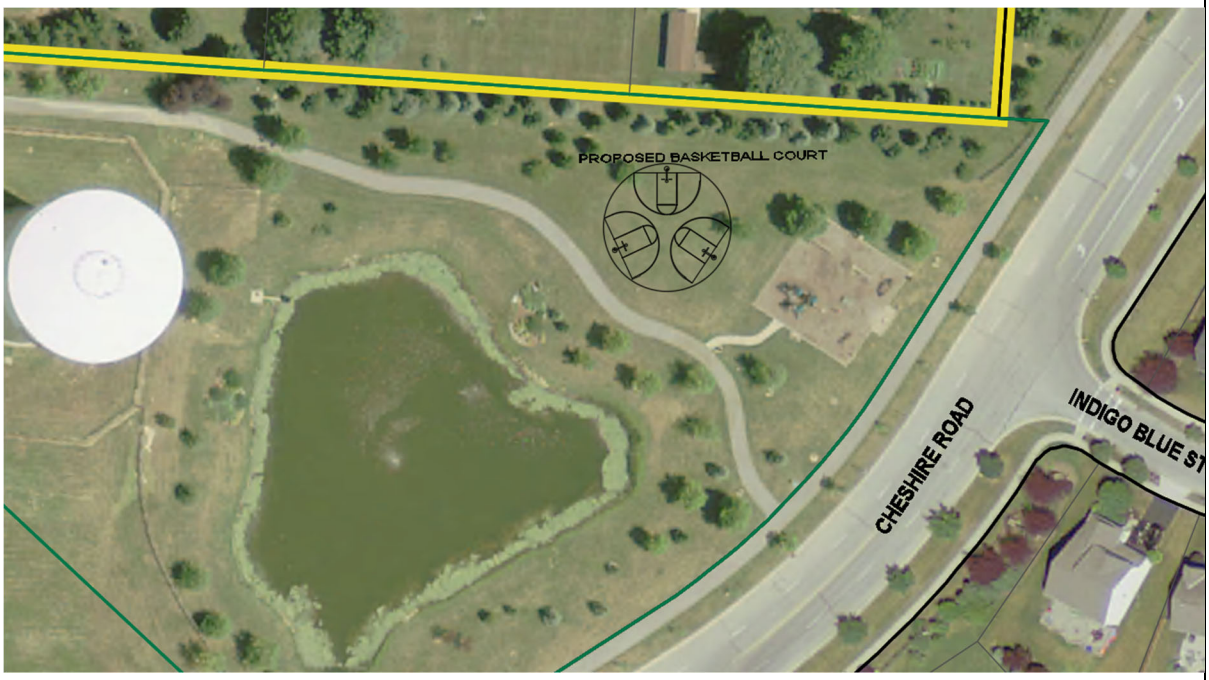
PARKS & NATURAL RESOURCES

CHESHIRE CROSSING PARK

BACKGROUND

The Cheshire HOA has requested the addition of a basketball court in the Cheshire Crossing Park. They have agreed to share in the cost of construction.



PROJECT TIMELINE

2021	Work with HOA on cost sharing agreement
2021	Bid and construct court

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	$25,000	$12,000 Cheshire HOA Contribution $13,000 Local Funds
TOTAL	**$25,000**	

PROJECT TEAM

CITY LEAD: Parks & Natural Resources
DESIGN CONSULTANT: In house
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PARKS & NATURAL RESOURCES

PLAYGROUND EQUIPMENT

BACKGROUND

The Parks and Natural Resources department is responsible for 24 parks throughout the City. Every year, as part of the Capital Improvement Plan, playground equipment is replaced to maintain safe and accessible community parks. The lifespan of playground equipment is typically 15 years but depending on use that can sometimes be extended by several years.

In 2021, the play structure at the Belle Avenue Park will be replaced. It was originally installed in 1998 and has exceeded its useful life.

In 2022, the play structures and swings at Carson Farms and Cheshire Parks will be placed. They were installed in 2004 and 2007 respectively. Additionally, the tot play toy, installed in 2000, at Mingo Park will be replaced.

In 2023, improvements to the exercise equipment will be made at Smith Park.

In 2024, the playground surface at Veterans Park and the swings and play structure at Sunnyview PPG Park will be replaced.

In 2025, the swings at Mingo Park, the playground structure at Smith Park and the play toy and tot play toy at Nottingham Park are scheduled for replacements.

PROJECT TIMELINE

2021	Belle Avenue Park Playground Improvements
2022	Carson Farms, Cheshire and Mingo Parks Playground Improvements
2023	Smith Park Playground Improvements
2024	Sunnyview PPG and Veterans Parks Playground Improvements
2025	Mingo, Nottingham and Smith Parks Playground Improvements

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	$60,000	General Fund CIP Allocation
2022	$176,000	
2023	$50,000	
2024	$195,000	
2025	$55,000	
TOTAL	**$536,000**	

PROJECT TEAM

CITY LEAD: Parks & Natural Resources
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

CAPITAL IMPROVEMENT PLAN
FACILITIES IMPROVEMENTS
2021-2026

	2021	2022	2023	2024	2025
REVENUES:					
CIP Allocation *(pg.1)*	***209,000***	***145,000***	***85,000***	***200,000***	***50,000***
TOTAL REVENUES	**209,000**	**145,000**	**85,000**	**200,000**	**50,000**
EXPENDITURES:					
CITY HALL					
Roof Repairs			35,000		
JUSTICE CENTER					
HVAC - Heat Pump Replacement	25,000	25,000	25,000	25,000	25,000
Carpet Replacement		25,000	25,000	25,000	25,000
Interior Painting		25,000			
Roof Repairs		70,000			
Elevator Pumps Replacement	50,000				
PUBLIC WORKS BUILDING					
Fire Suppression System - Lines Upgrade	134,000				
Paving Northside Fleet/Traffic Area				150,000	
TOTAL EXPENDITURES	**209,000**	**145,000**	**85,000**	**200,000**	**50,000**

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PUBLIC WORKS

FACILITY MAINTENANCE

BACKGROUND

The Public Works Facilities Division maintains the buildings and systems for several city facilities including Public Works, Justice Center, City Hall, and the 2nd floor of the Co-Hatch building at 10 E William Street. Improvements are necessary for the ongoing upkeep and maintenance of these facilities. Major maintenance items include HVAC units, roofing, flooring, interior/exterior paint, fire suppression systems, backup power systems, elevators and other building improvements. Most improvements are identified on a schedule for replacement at the end of their respective useful life.

PROJECT TIMELINE

2021	**Justice Center:** Heat pumps, elevator pumps **Public Works:** Fire suppression system
2022	**Justice Center:** Heat pumps, carpeting, interior painting, roof repairs
2023	**Justice Center:** Heat pumps, carpeting **City Hall:** Roof repairs
2024	**Justice Center:** Heat pumps, carpeting **Public Works:** North parking lot paving
2025	**Justice Center:** Heat pumps, carpeting

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	209,000	General Fund Revenues
2022	145,000	
2023	85,000	
2024	200,000	
2025	50,000	
TOTAL	**$689,000**	

PROJECT TEAM

CITY LEAD: Public Works – Facilities
CONSULTANT: N/A
CONTRACTOR: State Purchasing Contract

CAPITAL IMPROVEMENT PLAN
STREETS & TRAFFIC DIVISIONS
2021-2025

	2021	2022	2023	2024	2025
REVENUES:					
License Fees	440,000	440,000	440,000	440,000	440,000
Gas Taxes	800,000	800,000	800,000	800,000	800,000
CDBG Funding	150,000	150,000	150,000	150,000	150,000
Sidewalk Assessments	96,630	96,630	84,670	75,000	75,000
CITYWIDE SIGNALS					
MORPC Grant	2,500,000				
Fire Funds	385,000				
US23 & HULL DR INTERSECTION MODIFICATIONS					
ODOT Safety Grant		177,000			
PENICK AVE CONNECTOR					
Delaware City Schools Contribution	175,000				
Utility Funds	100,000				
CURTIS & FIRESTONE TURN LANE					
Developer Trust Funds				106,000	
Curtis Farms Infrastructure Fees		40,000			
PEDESTRIAN & ROADWAY SAFETY PROJECTS					
New Permissive License Fee	180,000	180,000	180,000	180,000	180,000
OPWC					
Grants - OPWC	450,000	450,000	450,000	450,000	450,000
Grants - County Match	150,000	150,000	150,000	150,000	150,000
JOHN STREET BRIDGE REHABILITATION					
Grants - OPWC	128,700				
Utility Funds	133,300				
HOUK RD BRIDGE REPLACEMENT					
Debt Proceeds					1,678,576
CIP Allocation ***(pg.1)***	***398,370***	***873,370***	***545,330***	***405,000***	***1,236,424***
TOTAL REVENUES	**6,087,000**	**3,357,000**	**2,800,000**	**2,756,000**	**5,160,000**
EXPENDITURES:					
Highway Improvements					
STREET LIGHTING HPS TO LED CONVERSION		-	-	-	-
CARSON FARMS SIGNAL		250,000			
CITYWIDE SIGNALS					
Upgrades Phase 1 - Construction	2,500,000				
Upgrades Phase 1 - Fire Pre-Emption	385,000				
US23 & HULL DR INTERSECTION MODIFICATIONS		207,000			
PENICK AVE CONNECTOR					
Construction	640,000				
CURTIS & FIRESTONE TURN LANE		40,000	40,000	146,000	

CAPITAL IMPROVEMENT PLAN
STREETS & TRAFFIC DIVISIONS
2021-2025

	2021	2022	2023	2024	2025
Highway Safety Program					
PEDESTRIAN & ROADWAY SAFETY PROJECTS	210,000	210,000	210,000	210,000	210,000
Resurfacing Program					
CDBG RESURFACING	120,000		120,000		120,000
RLF RESURFACING	30,000		30,000		30,000
LOCAL RESURFACING	240,000	550,000	550,000	550,000	550,000
OPWC	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000
CONSTRUCTION ENGINEERING & INSPECTION	50,000	50,000	50,000	50,000	50,000
ODOT URBAN RESURFACING	150,000	150,000	150,000	150,000	150,000
Bridge Maintenance Program					
ODOT US23 BRIDGE REPAIRS (LOCAL)		300,000			
JOHN STREET BRIDGE REHABILITATION	262,000				
HOUK RD BRIDGE REPLACEMENT				100,000	2,500,000
GLEASONKAMP BRIDGE IMPROVEMENT		50,000			
NORTH STREET BRIDGE			100,000		
SPRINGFIELD BRANCH BRIDGE MAINTENANCE					
Safe Walks Program					
SAFE WALKS SIDEWALK MAINTENANCE	100,000	150,000	150,000	150,000	150,000
TOTAL EXPENDITURES	**6,087,000**	**3,357,000**	**2,800,000**	**2,756,000**	**5,160,000**

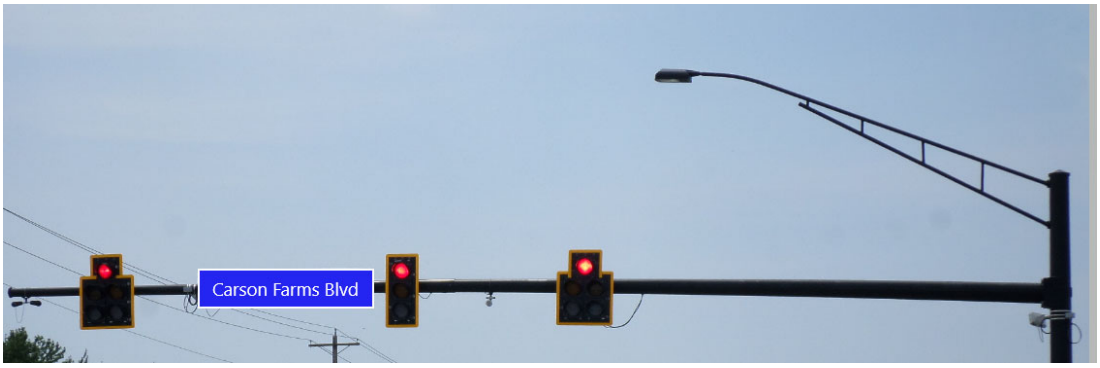
EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

CARSON FARMS SIGNAL

BACKGROUND

This project consists of installing a traffic signal at the intersection of US-36 & Carson Farms Boulevard/ Valleyside Drive. Based on existing traffic volumes, a signal warrant analysis was performed per OMUTCD requirements. It was found that two (2) of the eight (8) traffic signal warrants were met. The traffic signal will be a mast arm design configuration, include intersection lighting and pedestrian accessibility to connect the bike path across US-36 on the west side of Carson Farms Boulevard/Valleyside Drive. The preliminary and final design will be completed in 2020 and the construction is scheduled to commence in 2022.



PROJECT TIMELINE

2020	Preliminary and Final Design
2021	
2022	Construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021		At this time, no outside funding sources have been identified and all project funding is through general fund revenues. Preliminary and final design cost $24,400 and was funded in 2020.
2022	250,000	
2023		
2024		
2025		
TOTAL	**$250,000**	

PROJECT TEAM

CITY LEAD: Public Works – Engineering
DESIGN CONSULTANT: ms consultants
CONTRACTOR: TBD

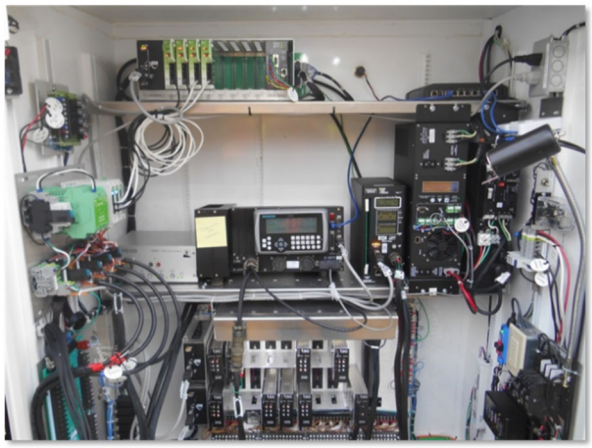
EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

CITY SIGNAL & SAFETY IMPROVEMENTS

BACKGROUND

The project consists of upgrading signal systems along US-36 (William St), SR-37 (Central Ave), Sandusky St and London Rd, which includes 37 signalized intersections. The project will improve safety and reduce emissions by improving average travel speed and reducing delay at each signalized intersection. The upgrades include optimizing traffic signal timing for each corridor and at each intersection, system level improvements including a central software system & CCTV IP-camera system, signal equipment upgrades including cabinets/controllers, communication (fiber or spread spectrum radios), vehicle detection, emergency vehicle preemption, uninterruptible power supply and insuring the equipment is expandable for peripherals & future technology (i.e. wireless pavement temperature sensors, cameras, DSRC, Connected Vehicles, etc.), and pedestrian upgrades such as curb ramps and pedestrian pedestal & pushbutton replacements to meet ADA standards. To date preliminary design and environmental has been completed and the final design and right-of-way acquisition will be completed in 2020.



PROJECT TIMELINE

2019-2020	Preliminary Design, Environmental, Final Design and Right-of-Way Acquisition
2021	Construction
2022	Construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	$2,885,000	The City has been awarded funding through MORPC for $2.5M to cover the construction costs. City Fire Department Levy funds will cover the cost to install emergency vehicle preemption equipment at each intersection, which is estimated at $385,000. By the end of 2020, the City has locally funded $350,272 of the project.
2022		
2023		
2024		
2025		
TOTAL	**$2,885,000**	

PROJECT TEAM

CITY LEAD: Public Works – Engineering
DESIGN CONSULTANT: HDR, Inc.
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

US23 & HULL INTERSECTION MODIFICATIONS

BACKGROUND

City staff has tracked recent accident history and traffic volumes at the US-23 and Hull Drive intersection, and based on this preliminary data collected, it was recommended that the intersection be further studied and evaluated to determine what intersection modifications should be implemented to improve the safety of the intersection. This intersection was also identified in the 2002 US-23 Access Management Plan as possibly being restricted, when needed, to improve safety and reduce the potential for accident occurrence. Based on the safety study findings, the recommended safety countermeasure is to convert the US-23 and Hull Drive intersection from a full-access intersection to a left-in/right-out (LIRO) intersection (see plan view to the right). With this modification, left and through movements from Hull Drive will be prohibited. In the eastbound direction, Hull Drive residential traffic can utilize Liberty Road to drive to various public streets such as Cottswold Drive, Hawthorn Boulevard or Belle Avenue in order to access US-12 northbound. Eastbound left turning and through vehicles from the shopping center would divert to the Delaware Plaza North signal to north on US-23. It is assumed that westbound traffic on Hull Drive would access US-23 southbound from Stratford Road to Meeker Way. The inbound access to any businesses will not be affected, as crash data indicated that left turns from US-23 onto Hull Drive are not presenting a safety issue. The proposed countermeasure will address the safety issue of left turns and through movements form Hull Drive with the least possible impacts to traffic flow and business access.

PROJECT TIMELINE

2020	Safety Study, Safety Application and Preliminary & Final Design
2021	Construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	ODOT safety funds are being pursued to cover 90% of the costs for design and construction. Local funding will fund the remaining project cost. $207,000 in funding has been approved allowing design to begin in 2020. Construction will commence in 2022.
2022	207,000	
TOTAL	**$207,000**	

PROJECT TEAM

CITY LEAD: Public Works – Engineering
DESIGN CONSULTANT: ms consultants
CONTRACTOR: TBD

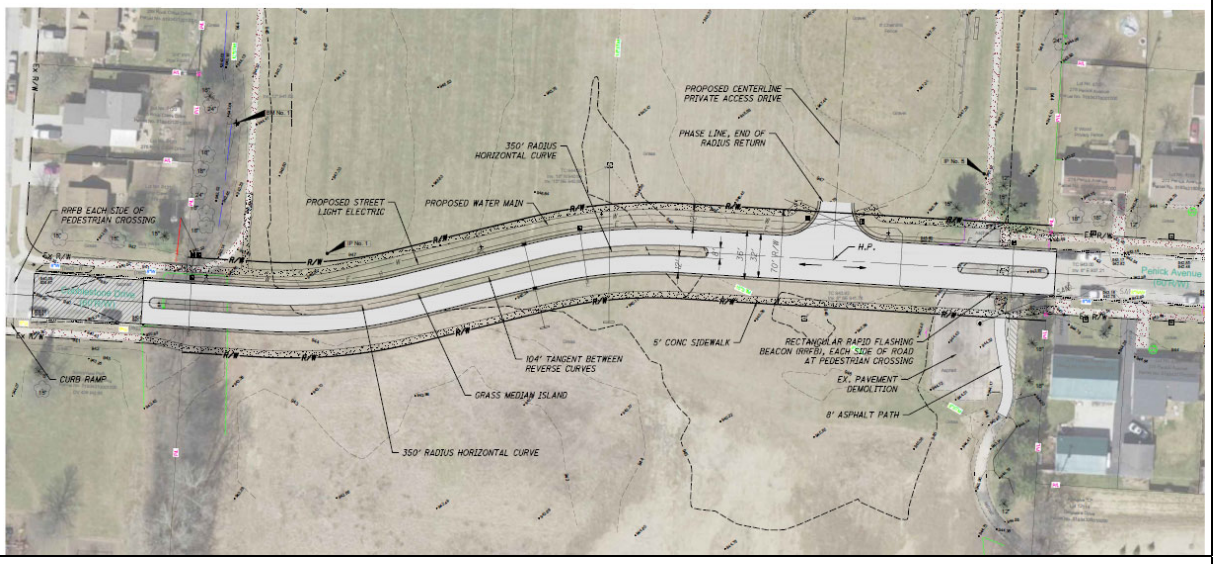
EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS
PENICK AVENUE CONNECTOR

BACKGROUND

This project will extend Penick Avenue from its current ending point westward across the Schultz Elementary site to the current end of Cobblestone Drive at Rock Creek Road. The project will be performed in partnership with the Delaware City School District (DCS) as part of their Shultz Elementary expansion project. The DCS project will include a new school bus drive that will be accessed from the new portion of Penick Avenue. The project scope will include one lane of traffic in each direction separated by a raised median island for traffic calming purposes. Included with the roadway will be a water main extension to complete a loop, street lighting, multi-use path, and rapid flashing beacons at pedestrian crossings.

The required DCS participation has been recognized since a 1994 Final Development Plan for a previous project at the school. The project is also identified as a priority roadway improvement on the City's Transportation Thoroughfare Plan.



PROJECT TIMELINE

2020	Engineering Design DCS Shultz Elementary building expansion and site work construction
2021	Roadway Construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)	
2021	$640,000	DCS Participation	$175,000
		General Fund Contribution	$365,000
		Water Fund	$55,000
		Sanitary Sewer Fund	$15,000
		Storm Sewer Fund	$30,000
TOTAL	**$640,000**		**$640,000**

PROJECT TEAM

CITY LEAD: Public Works – Traffic & Engineering Services
DESIGN CONSULTANT: In House Engineering Design
CONTRACTOR: To Be Determined with Competitive Bidding

EST 1808 CITY OF DELAWARE OHIO

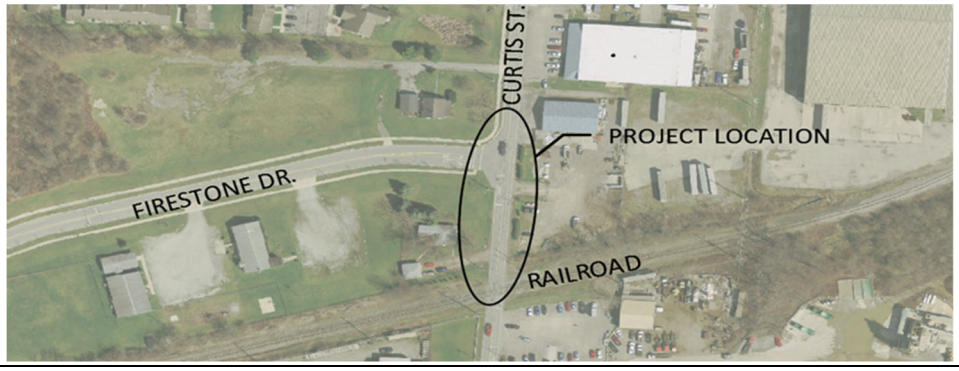
PUBLIC WORKS

CURTIS & FIRESTONE DRIVE INTERSECTION

BACKGROUND

This project will add a left turn lane for northbound traffic on Curtis Street turning left onto Firestone Drive. Currently, during periods of heavy traffic, there is a need to separate turning vehicles from vehicles continuing to travel northbound. Curtis Street and Firestone Drives are both Collector Streets that provide routes for high volumes of traffic. The project will also include improvements to the existing railroad grade crossing. These improvements will fulfill a portion of the Curtis Street Realignment Project identified in the City's 2016 Priority Roadway Improvements and Expansion Projects document.

The project is anticipated to cost approximately $226,000. The City's Transportation Trust Fund/Assessments will cover $199,000 anticipating the Del-Mor project proposed for the northwest corner of the intersection advances. The amount includes the anticipation final collection of $119,000 through property assessment contributions in the Curtis Farms subdivision.



PROJECT TIMELINE

2021	
2022	Design
2023	Right of Way Acquisition
2024	Construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021		
2022	40,000	Curtis Farms Infrastructure Fees
2023	40,000	Local Funds
2024	146,000	Developer Trust Fund
TOTAL	**226,000**	

PROJECT TEAM

CITY LEAD: Public Works – Administration
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

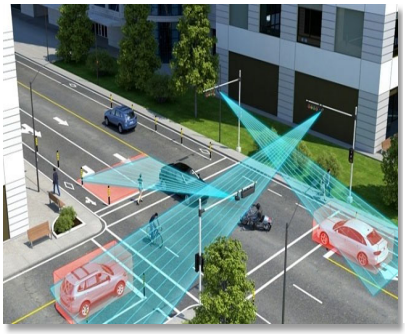
EST 1808 CITY OF DELAWARE OHIO

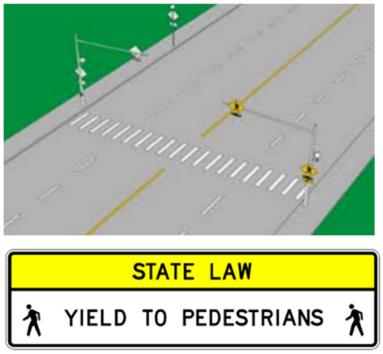
PUBLIC WORKS

HIGHWAY SAFETY IMPROVEMENTS

BACKGROUND

Significant improvements to the City's traffic signal system infrastructure are becoming more frequent as the system ages and technology improvements demand modifications to equipment. The timing of these improvements is generally associated to the timeframe of area capital project initiatives such as local and state resurfacing projects and other capital transportation projects. Signal head backplates are included with these improvements when deemed feasible utilizing existing signal supports that have the structural capacity & necessary clearance heights. Advances in technology also enable the City to more effectively address pedestrian safety though use of equipment such as Rectangular Rapid Flashing Beacons (RRFB's). These devices are becoming more prevalent as research shows that they improve motorist awareness by as much as 70% of the presence of a hazard and reduction of speed. Additional Safety improvements identified are new guardrail installations at locations meeting installation warrants along and traffic calming measures deemed necessary per the Traffic Calming Guide adopted in 2019 and approved by City Council in an attempt to slow vehicular speeds in residential neighborhoods. Such improvements include Dynamic Speed Feedback Signs (DSFS), Pavement Markings, etc..





PROJECT TIMELINE

Pedestrian Safety Enhancements	RRFB's for Springfield Branch Trail/Liberty St (2022), Springfield Branch Trail/S. Henry St (2022), N. Liberty St/W. Winter St (2022), Pennsylvania Ave at Euclid Ave (2024); W. William St/King Ave Pedestrian Crossing Enhancements for E. Central Ave/US-23 Ramp Ped Crossing (2021), W. Central Ave/Chatham Ln; W. Central Ave/Lexington Blvd
Signal Safety Improvements & Refurbishments	London Rd/Liberty Rd (2021); London Rd/Liberty St (2021), W. William St/Elizabeth St (2023), W. Central Ave/Elizabeth St (2023) & S. Sandusky St/Spring St intersections (2023), Troy Rd/Pennsylvania Ave (2024). W. William St/Franklin St (2025), E. William St/Union St intersections (2025), W. William St/Washington (2026), W. Central Ave/N. Franklin St (2026)
New Guardrail Installations	Liberty Rd (4 locations), William St (4 locations), US-42/London Rd, Peachblow Rd/Crownover Way
Traffic Calming Improvements	Installation of traffic calming measures on residential neighborhoods streets as deemed necessary per the Traffic Calming Guidelines Policy and approved by City Council

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	$210,000	Funding for this initiative was established with the recent approval of the $5 Permissive License Fee increase enacted by the City in early 2020. The funding is to be dedicated toward completing safety improvements that enhance pedestrian safety and mitigate traffic calming issues.
2022	$210,000	
2023	$210,000	
2024	$210,000	
2025	$210,000	
TOTAL	**$1,050,000**	

PROJECT TEAM

CITY LEAD: Public Works – Traffic Division
DESIGN CONSULTANT: In House & Contractor
CONTRACTOR: In House & Contractor

EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

RESURFACING PROGRAM

BACKGROUND

This is an annual program to maintain the current street network with the City. Currently Delaware is made up of 174 miles of Arterial, Collector and Local roadway. State and Federal funds are heavily relied upon to fund repairs to the collectors and local arterials as well as State and Federal routes. Local routes are selected based on the most recent pavement condition rating identifying Good, Fair and Poor streets. Roads with 'Poor' rating are prioritized above other streets with work funded through General Fund and Gas Tax revenues. Roads with higher ADT's (Average Daily Traffic) can be eligible for OPWC (Ohio Public Works Commission) funds. State and Federal routes are eligible for 80% funding through ODOT's Urban Resurfacing Program with the local 20% from License and Gas Tax Fee that must be spend on the State Highway system. Based on the condition of the city street network, a sustainable pavement maintenance program requires an estimated $3.5-$4.7 million in annual funding. However, the city does not have that level funding for a sustainable pavement maintenance program and will continue to focus primarily on Arterial, and Collector Roadways, and paving a limited number of local streets as funding permits.

PROJECT TIMELINE

2021	CDBG, RLF, OPWC, Urban resurfacing (US42), Local Streets
2022	OPWC, Local Streets
2023	CDBG, RLF, OPWC, Local Streets
2024	OPWC, Local Streets, Urban Resurfacing (US36)
2025	CDBG, RLF, OPWC, Local Streets, Urban Resurfacing (SR37)

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	$1,990,000	CDBG Resurfacing $120,000 every other year (LMI Local Streets) RLF Resurfacing $30,000 every other year (LMI Local Streets) OPWC Funds $450,000 (Collector & Arterial Streets) License Fees $440,000 (OPWC match funds) Delaware County Grant Match $150,000 (Collector & Arterials) Gas Tax $800,000 Local Funds
2022	$2,150,000	
2023	$2,300,000	
2024	$2,150,000	
2025	$2,300,000	
TOTAL	**$10,890,000**	

PROJECT TEAM

CITY LEAD: Public Works – Engineering
DESIGN CONSULTANT: In House Engineering Design
CONTRACTOR: To be determined through competitive bidding

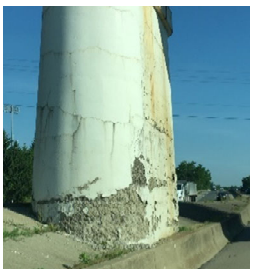
EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS
BRIDGE IMPROVEMENTS

BACKGROUND

The City is responsible for the inspection and maintenance of (16) vehicular bridges and (6) pedestrian bridges throughout the community. They range in age from the new Springfield Branch Trail steel truss pedestrian bridge over E William Street to the 113-year-old concrete slab bridge carrying Houk Road over the Delaware Run. Annual inspections reveal deficiencies that require attention and establishes a bridge condition rating (0-9) that is an indicator of the severity of deficiencies. Federal Highway Administration (FHWA) requires us to do load ratings of all the structures of length greater than 20 feet to be in compliance with National Bridge Inspection Standards (NBIS). Structures with ratings of 4 or below are considered poor or critical.

The City has three bridges of concern with the currently closed John Street bridge as the top priority for replacement. The old abandoned mine car bridge under North Street is rated as a 4 and needs to be removed or otherwise modified to mitigate safety concerns. The bridge pier supporting the Springfield Branch Pedestrian Trail bridge over US23 shows signs of significant deterioration requiring immediate repair. Lastly, the Houk Road Bridge over the Delaware Run remains active though is approaching the end of its useful service life and plans for its eventually replacement now underway.



PROJECT TIMELINE

2021	John Street Bridge Rehabilitation
2022	Springfield Branch Trail Bridge – Pier Rehabilitation; Gleasonkamp Bridge Improvement
2023	North Street Bridge Abandonment
2024	Houk Road Bridge Design
2025	Houk Road Bridge Replacement

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	262,000	OPWC Emergency Funds, Storm Water Fund
2022	350,000	Local Funds, Storm Water Fund
2023	100,000	Local Funds
2024	100,000	Local Funds
2025	2,500,000	Municipal Bridge Program, Local Funds
TOTAL	**3,312,000**	

PROJECT TEAM

CITY LEAD: Public Works – Engineering Division
DESIGN CONSULTANT: To Be Determined
CONTRACTOR: To Be Determined

EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

SAFE WALKS PROGRAM

BACKGROUND

Sidewalks free of trip hazards and other deficiencies are essential to pedestrian safety. The Safe Walks Program makes repairs to defective sidewalks by identifying deficiencies on an ongoing basis and making repairs each year. The vast majority of deficiencies are associated with uneven sidewalk lifted by street tree roots and as such, the City's responsibility. Permanent repairs involve removal of concrete slabs, digging out roots below the walk, and pouring new concrete sections. This process is time consuming and expensive at an estimated $300 per section of walk, exceeding both financial and staffing resources to complete all identified deficiencies. Where a deficiency is not related to street tree damage, the property owner is notified of their responsibility to make repairs.

With the quantity of tripping hazards on the rise, the City will implement more 'temporary repairs' including surface grinding sections to reduce uneven joints. Where grinding is not possible, section may be removed and replaced with temporary asphalt for a few years until permanent repairs can be completed. Though not ideal, the goal of addressing dangerous tripping hazards can be met in a more expeditious manner until such time as adequate funding becomes available for permanent repairs.




PROJECT TIMELINE

2021	Temporary and permanent sidewalk repairs community-wide.
2022	Temporary and permanent sidewalk repairs community-wide.
2023	Temporary and permanent sidewalk repairs community-wide.
2024	Temporary and permanent sidewalk repairs community-wide.
2025	Temporary and permanent sidewalk repairs community-wide.

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	100,000	General Fund Revenues
2022	150,000	
2023	150,000	
2024	150,000	
2025	150,000	
TOTAL	**$700,000**	

PROJECT TEAM

CITY LEAD: Public Works – Streets/Engineering Division
DESIGN CONSULTANT: N/A
CONTRACTOR: TBD

CAPITAL IMPROVEMENT PLAN
THE POINT
2021-2025

	2021	2022	2023	2024	2025	2026	2027
BALANCE FORWARD	984,573	634,573	-	-	-		-
REVENUES:							
MORPC Grant			14,000,000				
Safety Grant	300,000						
TRAC Grant	1,500,000	8,000,000					
JEDD Receipts		2,000,000					
Urban Paving Allowance		378,985					
Storm Fund		535,000					
Project Trust		340,207					
SIB Loan		15,511,235					
Debt Proceeds							
General Fund Transfer	200,000	-	731,314	311,314	311,314	311,315	311,316
TOTAL REVENUES	**2,984,573**	**27,400,000**	**14,731,314**	**311,314**	**311,314**	**311,315**	**311,316**
EXPENDITURES:							
DEBT SERVICE							
SIB Loan Less MORPC Grant ($1,511,235, 3%, 5 yrs)			14,731,314	311,314	311,314	311,314	311,314
CAPITAL PROJECTS							
Engineering Services	300,000						
ROW (75% TRAC/25% Local)	2,000,000						
Private Utility Relocations	50,000						
RR Force Account (80% MORPC/20% Local)		2,925,000					
Construction		22,725,000					
Construction Admin		1,750,000					
TOTAL EXPENDITURES	**2,350,000**	**27,400,000**	**14,731,314**	**311,314**	**311,314**	**311,314**	**311,314**

CITY OF DELAWARE OHIO

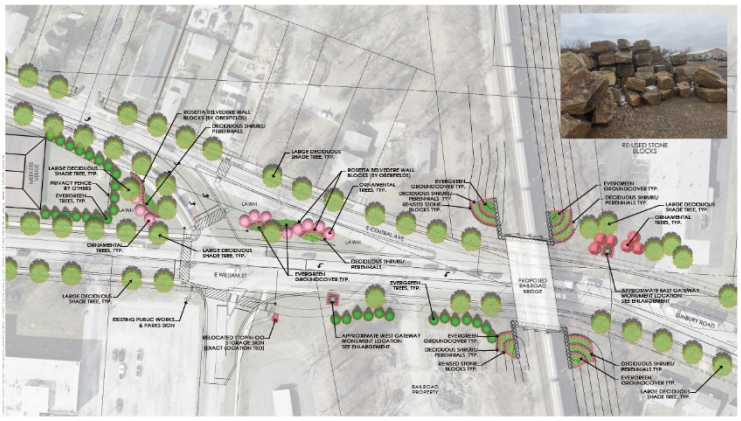
PUBLIC WORKS

THE POINT IMPROVEMENTS

BACKGROUND

"The Point" intersection is located at the location where US 36 and SR 37 converge on the east side of City, immediately west of the Norfolk Southern railroad overpass. The skewed alignment of the two roads, compounded by the narrow two-lane passage below the rail bridge restricting traffic to a single lane in each direction, limit the overall intersection capacity to manage current and anticipated future traffic loading. On average, 25,000 vehicles a day pass below the bridge, with traffic models projecting that number to increase to almost 40,000 vehicles a day by 2040. Traffic congestion and lengthy backups are routine during morning and afternoon peak-hour traffic conditions. In 2009 the City reconfigured the intersection slightly, relocating the signal further west on US 36 and realigning SR 37 to the new location. The improvement provided immediate relief to westbound traffic congestion and delay; however, modelling predicated that increasing eastbound traffic congestion was anticipated within seven to ten years as traffic volumes continued to increase in the area.

This project will relieve congestion and increase safety along US 36 and SR 37 by increasing the number of vehicular lanes beneath the Norfolk Southern Railroad bridge allowing for two lanes of travel in each direction beneath the railroad. The widened bridge will eliminate the notorious westbound merge on US 36 as vehicles approach the bridge. Eastbound traffic flow will benefit immediately from this improvement as dual through-lanes are established on both SR 37 and US 36 approaching the intersection adding significantly improved intersection capacity. Shared use paths connecting the east side of the community to the Glenwood Commons commercial center are also included as part of the overall improvement. Additional improvements at the US 36 with SR 521 intersection are included to address intersection safety and congestion issues there.



PROJECT TIMELINE

2021	Final Design, Right of Way Acquisition and Utility Relocates
2022	Right of Way Acquisition, Utility Relocates, and Railroad Permitting
2023	Construction of Temporary Rail Bridge and Roadway Improvements
2024	Construction of Permanent Rail Bridge and Roadway Improvements
2025	Construction Complete

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	2,984,573	Combination of grants, JEDD receipts, developer contributions, utility funds, SIB Loans and local funds.
2022	27,400,000	
2023	731,314	
2024-2027	311,314	SIB Loan debt service is $311,314 annually from 2024-2027.
TOTAL	**$32,361,143**	Project cost reflects only interest for the year 2023.

PROJECT TEAM

CITY LEAD: Public Works – Traffic Division
DESIGN CONSULTANT: In House & Contractor
CONTRACTOR: In House

CAPITAL IMPROVEMENT PLAN
EAST CENTRAL
2021-2025

	2021	2022	2023	2024	2025	2026	2027
BALANCE FORWARD			-	-	-	-	-
REVENUES:							
Safety Grant	360,000	360,000	720,000	1,500,000		2,000,000	
MORPC Grant						4,500,000	
Sewer Funds					500,000		
Water Funds					500,000		
Storm Funds						1,000,000	
Debt Proceeds						2,912,017	
General Fund Transfer	40,000	40,000	80,000	250,000	100,000	587,983	299,938
TOTAL REVENUES	**400,000**	**400,000**	**800,000**	**1,750,000**	**1,100,000**	**11,000,000**	**299,938**
EXPENDITURES:							
DEBT SERVICE							
E Central Debt ($2,912,017, 10 yrs, 3.0%, 2036)							299,938
Prelim & Env Engineering (90% Safety/10% Local)	400,000	400,000					
Final Engineering (90% Safety/10% Local)			800,000				
ROW				1,750,000			
Sanitary Rehab					500,000		
Water Rehab					500,000		
Private Utility Reimbursements					100,000		
Construction						10,000,000	
Construction Admin						1,000,000	
TOTAL EXPENDITURES	**400,000**	**400,000**	**800,000**	**1,750,000**	**1,100,000**	**11,000,000**	**299,938**

EST 1808 CITY OF DELAWARE OHIO

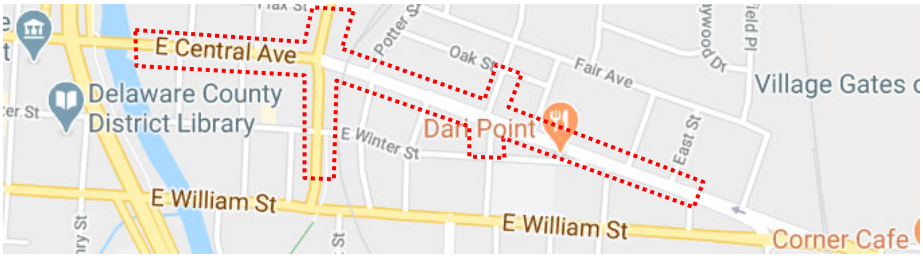
PUBLIC WORKS

EAST CENTRAL AVENUE IMPROVEMENTS

BACKGROUND

The East Central Avenue Improvements project will improve safety and reduce delay along this vital local traffic and freight movement corridor. The road itself has surpassed its useful service life and requires significant repair throughout the year. Though it will be resurfaced in 2020, the benefit of new pavement will likely be short lived before repairs are again required. It is the intent that the road be reconstructed before the next time resurfacing is required.

Improvements will include new pavement, curbs, drainage, sidewalk, and lighting. Both the Channing Street and Lake Street intersections will be realigned and widened to accommodate current and future anticipated traffic volumes. Public involvement meetings are anticipated in 2021 where design alternatives will be presented for public comment and feedback. Preliminary estimates indicate the project cost could between $12 - $15 million for all the improvements required. The City will be applying for State Highway Safety Funds in 2020 as well as Federal Attributable funds through MORPC. Additional grant funding will be sought one a final design is selected.



PROJECT TIMELINE

2021	Preliminary Engineering & Environmental
2022	Preliminary Engineering & Environmental
2023	Final Engineering
2024	Right of Way Acquisition
2025	Right of Way Acquisition & Utility Relocates
2026	Construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	400,000	State Safety/Local
2022	400,000	State Safety/Local
2023	800,000	State Safety/Local
2024	1,750,000	State Safety/Local
2025	1,000,000	State Safety/Local
2026	11,000,000	MORPC Attributable/Local
TOTAL	**15,450,000**	

PROJECT TEAM

CITY LEAD: Public Works – Engineering
DESIGN CONSULTANT: ms consultants
CONTRACTOR: Competitive Bidding TBD

CAPITAL IMPROVEMENT PLAN
PARK IMPACT FEES
2021-2025

	2021	2022	2023	2024	2025
BALANCE FORWARD	1,829,279	1,724,279	1,039,279	539,279	89,279
REVENUES:					
Park Impact Fees	350,000	350,000	350,000	350,000	350,000
TOTAL REVENUES	**2,179,279**	**2,074,279**	**1,389,279**	**889,279**	**439,279**
EXPENDITURES:					
Central Avenue Trail	150,000				
South Community Park Land Acquisition			500,000	500,000	
Stratford Olentangy Trail		350,000			
Olentangy River Walk - Mingo	25,000				
Olentangy River Trail			300,000		
Delaware Run Greenway	250,000	35,000		300,000	
Lexington Glen Park		175,000			
Mingo Facility Improvements					150,000
Ross Street Improvements	30,000	475,000	50,000		
TOTAL EXPENDITURES	**455,000**	**1,035,000**	**850,000**	**800,000**	**150,000**

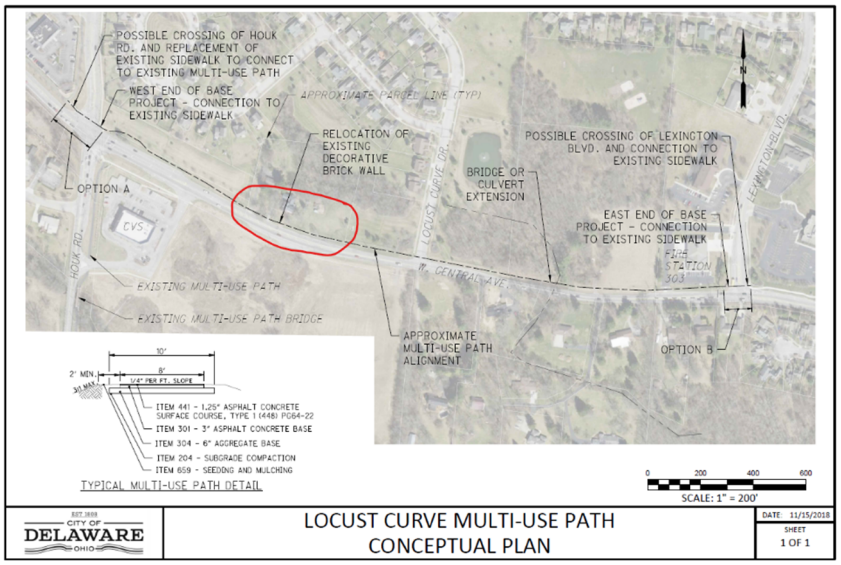
EST 1808 CITY OF DELAWARE OHIO

PARKS & NATURAL RESOURCES

CENTRAL AVENUE TRAIL

BACKGROUND

The completion of the Central Avenue trail began planning in 2018 and will be the final link for an east west pedestrian connection along Central Avenue. The remaining segment between Houk Road and Lexington Avenue will be partially built in 2020 with final segment remaining for construction in 2021. The last segment resulted in negotiation with property owner to agree on final design.



PROJECT TIMELINE

2019	Design of trail from Houk Road to Lexington Avenue
2020	Easement acquisition
2020	Project bid and construction
2021	Remaining segment bid and construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2020	490,000	City Park Impact Fees
2021	150,000	
2022		
2023		
2023		
TOTAL	**$640,000**	

PROJECT TEAM

CITY LEAD: P & NR and Public Utilities
DESIGN CONSULTANT: MS Consultants
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

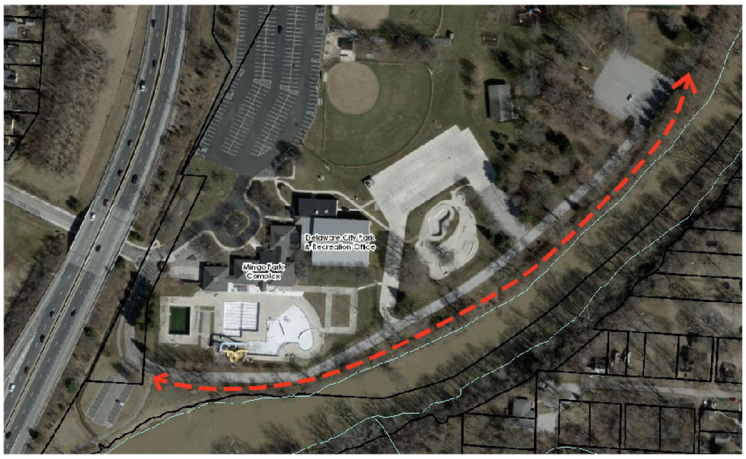
PARKS & NATURAL RESOURCES

OLENTANGY RIVER WALK- MINGO

BACKGROUND

The river walk project at Mingo is a design project that would separate pedestrian traffic from vehicular traffic, remove invasive species along the river and allow access to the Olentangy River. The initial effort of this project would lead the way in emphasizing the value of the river as a prized natural resource.

The design would focus on the segment in Mingo Park where pedestrian and vehicular traffic share a common roadway.



PROJECT TIMELINE

2021	Design trail segment
2022	Trail construction
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	25,000	City Park Impact Fees
2022		
2023		
2024		
2025		
TOTAL	$25,000	

PROJECT TEAM

CITY LEAD: P & NR and Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

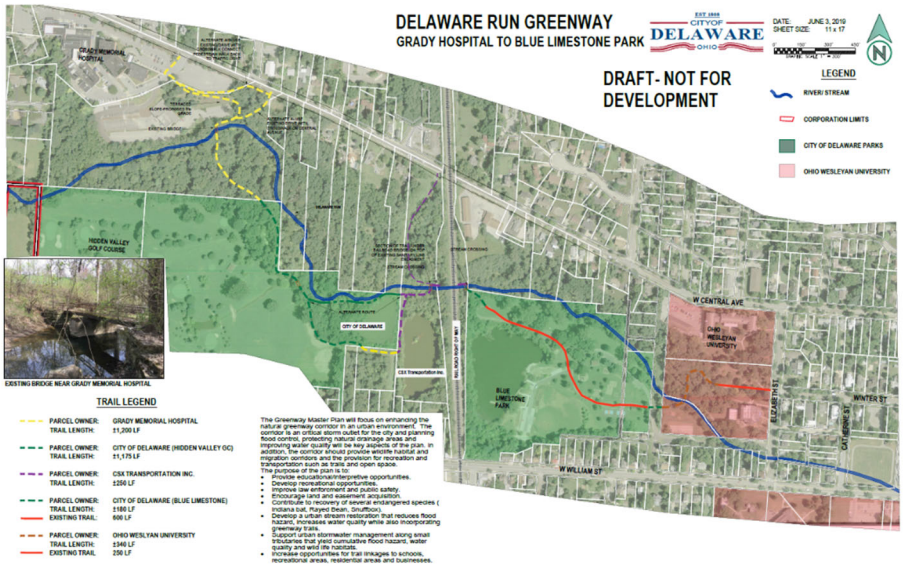
EST 1808 CITY OF DELAWARE OHIO

PARKS & NATURAL RESOURCES

DELAWARE RUN GREENWAY

BACKGROUND

The Delaware Run Greenway is an east-west pedestrian corridor that parallels Delaware Run and offers opportunities for forest preservation, flood protection, recreation and educational benefits. The proposed segment would stretch from Hidden Valley Golf Course to Blue Limestone Park, with potential to reach Grady Memorial Hospital and downtown Delaware. The proposed section would be a combination of gravel and unimproved trail approximately 1 mile in length.



PROJECT TIMELINE

2020	Feasibility study and CSX review
2021	Preliminary alignment design and begin construction of ½ segment
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	250,000	At this time, no outside funding sources have been identified and all project funding is through Parks Impact Fees
TOTAL	$250,000	

PROJECT TEAM

CITY LEAD: Parks & Natural Resources
DESIGN CONSULTANT: Patrick Engineering
CONTRACTOR: TBD

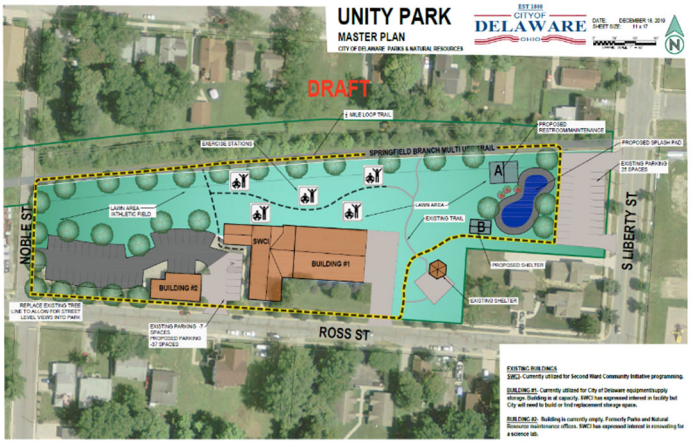
EST 1808 CITY OF DELAWARE OHIO

PARKS & NATURAL RESOURCES

ROSS STREET PARK IMPROVEMENTS

BACKGROUND

The proposed Ross Street park improvements evolved from several community surveys and meetings to include elements that would serve the surrounding community. The residents wanted to see a park that would promote healthy activities and provide a gathering space for community events in a safe and open environment.



Improvements began in 2020 with the removal of the existing maintenance facility along with design of an additional parking lot at the west end of the park.

Future improvements include additional parking, athletic field space, community gathering field space, exercise stations, pathways, splash pad, restroom, landscaping and pathways. Lighting and an open park plan will also be incorporated to promote a safe park setting.

PROJECT TIMELINE

2021	Landscaping and parking lot construction. Design for restroom and splash pad facility
2022	Construction of restroom and splash pad
2023	Landscaping, exercise equipment, pathways

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	30,000	City Park Impact Fees
2022	475,000	
2023	50,000	
TOTAL	**$555,000**	

PROJECT TEAM

CITY LEAD: Parks & Natural Resources
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

CAPITAL IMPROVEMENT PLAN
POLICE DEPARTMENT
2021-2025

	2021	2022	2023	2024	2025
REVENUES:					
Debt Proceeds		***625,965***			
CIP Allocation *(pg.1)*	***260,000***	***16,000***	***64,474***	***96,474***	***331,474***
TOTAL REVENUES	**260,000**	**641,965**	**64,474**	**96,474**	**331,474**
EXPENDITURES:					
DEBT SERVICE					
Meters/Building ($625,965, 10 yrs, 3.0%, 2032)			64,474	64,474	64,474
Body Cameras	260,000				95,000
Parking Meter Replacement		425,965			
Evidence Storage Building		200,000			
Police Sub-Station					
Cruiser Video Replacement					172,000
Police K9 Replacement				32,000	
Tornado Siren Replacement					
Intoxilyzer		16,000			
TOTAL EXPENDITURES	**260,000**	**641,965**	**64,474**	**96,474**	**331,474**

POLICE DEPARTMENT

BODY WORN CAMERA / CRUSIER VIDEO SYSTEM

BACKGROUND

The department has had a cruiser video system for many years. Our current product, purchased from WatchGuard, was originally purchased with the knowledge that the WatchGuard body worn camera product could be added to the system, thereby saving the cost of adding an entirely new server and storage system. Previous roadblocks to adding body worn cameras to the system have included cost, storage costs, lack of staffing required to manage data, and privacy concerns.

Several cruiser video systems need to be replaced due to the expiration of their warranty period.

Due to recent calls for police reform, the police department began researching and now submit this request for body worn cameras. The overall project cost will include replacement cruiser systems, body worn cameras, and additional storage.

PROJECT TIMELINE

2021	Upgrade of out of warranty cruiser video cameras ($92,000), addition of body worn cameras ($108,000) and storage ($60,000).
2022	
2023	
2024	
2025	Replacement of cruiser equipment – 5-year warranty.

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	260,000	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022		
2023		
2024		
2025	95,000	
TOTAL	**$325,000**	

PROJECT TEAM

CITY LEAD: Police Department
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

EST 1808 CITY OF DELAWARE OHIO

POLICE DEPARTMENT

PARKING METER REPLACEMENT

BACKGROUND

While the parking situation in downtown Delaware is still under review and being developed, it is necessary to consider potential cost of new meters should the decision be made to modernize our current system. This quote will provide for smart meters throughout downtown. The numbers provided here are based on approximately 500 new meters, but the final number and quote will have to be refined in the year leading up to whenever the project is decided and scheduled.

PROJECT TIMELINE

2021	Timeline of replacement is TBD.
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021		At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022		
2023		
2024		
2025		
TOTAL	$425,965	

PROJECT TEAM

CITY LEAD: Police Department
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

EST 1808 CITY OF DELAWARE OHIO

POLICE DEPARTMENT

EVIDENCE STORAGE BUILDING

BACKGROUND

The police department currently uses a secure evidence security room at the Justice Center that has been expanded in recent years. This area houses our current caseload of evidence. Additional evidence that must be stored is maintained off site in a facility is nearing its maximum capacity and without environmental control. In order to securely store and maintain our growing catalogue of evidence, we need to expand our capacity with a facility that provides for technology, utilities, environmental control and security.

This proposal would allow for the construction of a similarly sized pole barn on the site of our current property storage building on Curve Rd. The new building would include the specifications needed to insure safe long-term storage of all evidence that we are mandated to maintain.

PROJECT TIMELINE

2021	
2022	Construction on currently owned city property.
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021		At this time, no outside funding sources have been identified and all project funding is through general fund revenues. Cost is estimated based on average costs for size and specifications.
2022	200,000	
2023		
2024		
2025		
TOTAL	**$200,000**	

PROJECT TEAM

CITY LEAD: Police Department
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

EST 1808 CITY OF DELAWARE OHIO

POLICE DEPARTMENT

POLICE K9 REPLACEMENT

BACKGROUND

The Delaware Police Department currently has 2 Police K9 teams that specialize in drug and article searches. The K9 working lifespan depends on many variables, but this proposal anticipates the need to retire K9 Ollie in or around 2024 which would constitute a typical working lifespan. This is subject to change based on the health of the K9.

PROJECT TIMELINE

2021	
2022	
2023	
2024	K9 replacement
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021		At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022		
2023		
2024	32,000	
2025		
TOTAL	**$32,000**	

PROJECT TEAM

CITY LEAD: Police Department
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

CAPITAL IMPROVEMENT PLAN
FIRE/EMS DEPARTMENT
2021-2025

	2021	2022	2023	2024	2025
BALANCE FORWARD					
REVENUES:					
Fire/EMS Income Tax	891,389	2,094,819	2,459,375	1,622,310	417,072
Fire Impact Fee Funds	100,000	100,000	100,000	100,000	100,000
Debt Proceeds					12,500,000
TOTAL REVENUES	**991,389**	**2,194,819**	**2,559,375**	**1,722,310**	**13,017,072**
EXPENDITURES:					
DEBT SERVICE					
Station 302 ($573,416, 10 yrs, 1.52%, 2022)	60,872	60,872			
Station 303 ($2,755,000, 2.94%, 2032)	174,569	174,569	174,569	174,569	174,569
Station 304 ($3,500,000, 15 yrs, 2031)	285,550	284,850	284,000	281,000	282,800
EMS Vehicles (3) - (800,000, 10 yrs. 2024)	94,150	94,150	94,150	94,150	
Station 305 ($12,500,000, 15 yrs. 2040)					
CAPITAL PROJECTS					
Fire Training Tower	250,000	1,250,000			
Station Alerting		160,000			
Computers (Station)		6,470		37,709	
Cardiac Monitors			355,186		
Vehicle MDTs			97,279		
Copiers			4,204		
City AED Replacement - 10 Years				65,450	
Fire Station 305			500,000		12,500,000
Fire Station Updates (301 & 302)					
EQUIPMENT REPLACEMENTS					
Engine Replacement			926,745		
Medic Replacement				895,540	
Rescue Replacement					
Car Replacement	106,090	163,908	56,275	115,928	59,703
New Car - Risk Reduction				57,964	
Polaris Replacement					
Pick-up Replacement			56,275		
Boat Replacement					
Mower Replacement	20,158		10,692		
TOTAL EXPENDITURES	**991,389**	**2,194,819**	**2,559,375**	**1,722,310**	**13,017,072**

PUBLIC WORKS LED PROJECTS

Citywide Signals - Fire Pre-Emption	385,000				

FIRE DEPARTMENT

TRAINING TOWER

BACKGROUND

A training facility and resources are necessary for firefighters to maintain and learn new skills. The facility would be capable of providing live fire extinguishment training, search and rescue operations, ladder drills, ventilation trainings and hose advancement drills. Many Fire Departments in Delaware County came together to create the fire training facility located on the Delaware Area Career Center property on SR 521. Since then the Career Center has relocated their Center to US 23 and has sold the property to Delaware County for additional office space. In 2020, the Fire Chiefs have decided that they are not financially able to take the necessary steps to restore the grounds. The Department has been in discussion with DACC about partnering and building the necessary facilities to train new firefighters and maintain the skills of existing firefighters.

This is an example of a combination commercial and residential multi story training tower with live fire capabilities.

PROJECT TIMELINE

2021	Complete plan and confirm location of the training tower.
2022	Fire training tower purchased. Fire training tower constructed and operational.
2023	No Action
2024	No Action
2025	No Action

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	250,000	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	1,250,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$1,500,000**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: Fire Department and DACC
CONTRACTOR: Vendor to be determined later

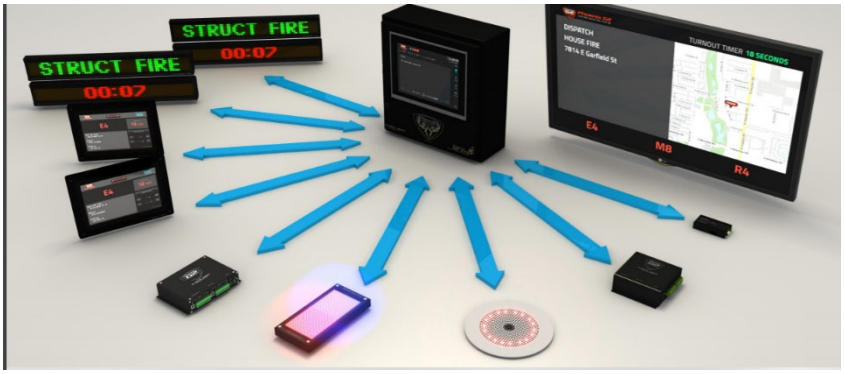
EST 1808 CITY OF DELAWARE OHIO

FIRE DEPARTMENT

STATION ALERTING SYSTEM

BACKGROUND

In 2021, Delaware County Communication System will be installing a new Computer Aided Dispatch (CAD) System. Included with this CAD will be an automated voice dispatching system from US Digital Designs, known as the Phoenix G2. The system will allow the calls to be dispatched by a computer voice announcement permitting rapid processing of the announcement and allowing the dispatcher to remain in contact with the caller to obtain additional information. With a separate purchase by the city of additional equipment, the system will improve notification throughout the stations and will provide the dispatch center with a monitored line ensuring the Fire Stations receive the alarms. This will also assist with our Insurance Service Office communication rating.



PROJECT TIMELINE

2021	CAD System installation and interface developed. Design of the station alerting system.
2021 2022	Construction – Installation at the 4 fire stations of the station alerting system.

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	160,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$160,000**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: Fire Department/US Digital Design
CONTRACTOR: US Digital Design

EST 1808 CITY OF DELAWARE OHIO

FIRE DEPARTMENT

TECHNOLOGY REPLACEMENT

BACKGROUND

In 2022, the Department will begin replacing aging technology. The Fire Department uses technology that includes station computers, printer/copiers and mobile data computers. Mobile data computers provide access to dispatch information, access to information in existing databases, researching hazardous materials and the uploading of medical reports to the hospital. Mobile data computers are replaced every 5-years. The replacement of the computers, mobile data terminals, mobile wireless ports are anticipated to cost roughly $145,662 over the next 5 years. This project will be funded utilizing the Fire Fund. The Fire Department will be looking for alternative funding sources for this equipment.

- 2022 - Replacement of station computers
- 2023 - Mobile data computers located in all the medical apparatus and two copiers and the Mobile Data Computers located in all fire and EMS apparatus.
- 2024 – Replacement of remaining station computers

Mobile Data Terminal (MDT)

PROJECT TIMELINE

2021	No Action
2022	Computers specified, purchased and operations
2023	MDTs and copiers specified, purchased and operations
2024	Computers specified, purchased and operations
2025	No Action

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	6,470	
2023	101,483	
2024	37,709	
2025	0	
TOTAL	**$145,662**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: Fire Department and IT Department
CONTRACTOR: Vendor to be determined later

EST 1808 CITY OF DELAWARE OHIO

FIRE DEPARTMENT

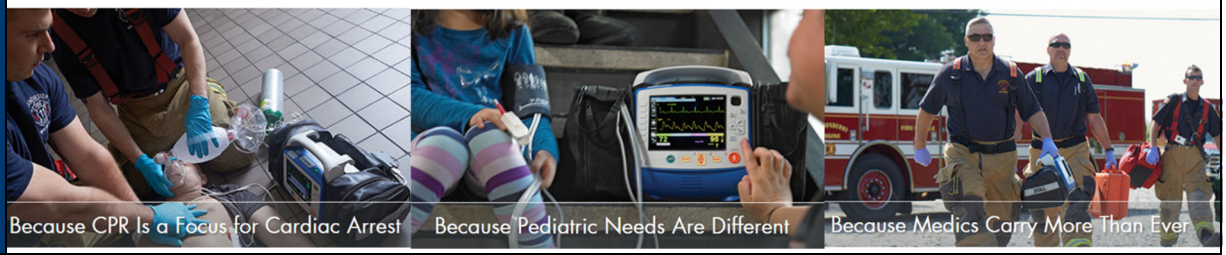
CARDIAC MONITORS/DEFIBRILLATORS

BACKGROUND

The Department's 12-Lead cardiac monitor/defibrillator and automated external defibrillators (AEDs) are aging and will be reaching their life expectancy. This is one of the primary pieces of equipment that is used on all medical calls. The 12-Lead cardiac monitor/defibrillator also includes the capability of monitoring blood pressure, oxygen saturation, breathing wave forms, CPR feedback, and is an external cardiac pacemaker. These devices are located on all paramedic ambulances, the EMS quick response/community paramedic vehicle and one spare unit. The life expectancy of the 12-Lead Monitor/Defibrillator is 5-years. The Department also has placed AEDs in all other fire department vehicles, police cruisers and all city facilities. The life expectancy of the AEDs units are 10-years.

2023 – Replacement of (6) 12-Lead cardiac monitor/defibrillator and (22) AEDs

2024 – Replacement of (35) AEDs for City Facilities and Police Department Vehicles



PROJECT TIMELINE

2021	No Action
2022	No Action
2023	12-Lead cardiac monitor/defibrillator and AEDs ordered and placed in-service
2024	AEDs ordered and placed in-service
2025	No Action

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	0	
2023	355,186	
2024	65,450	
2025	0	
TOTAL	**$420,636**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: Fire Department
CONTRACTOR: Outside contractor to be determined later

EST 1808 CITY OF DELAWARE OHIO

FIRE DEPARTMENT

FIRE STATION EAST SIDE COVERAGE

BACKGROUND

Fire Station 301 was built in 1972. The Station was located on Liberty St. because of its central location in the City. This was the only Fire Station at the time. Since that time the city has grown considerably in all directions from this central location. Fire and EMS coverage on the eastside of the city in many cases is in excess of the desired 6-minute total response time. For several years we have had discussion about the relocation of Fire Station 301 or the addition of a fire station to the City's east side including the Fire Department Headquarters. This preliminary and conceptual idea will be more explored in 2021-2022. Consideration and research will include the related costs, impact of services provided and the impact to the community due to the relocation. With the projected growth on Glenn Parkway, consideration will also be given to a separate Station in this area. In 2026 we are planning the update of fire station 301 and 203.

PROJECT TIMELINE

2021	Research cost, impact of services provided and impact to the community
2022	Finalize cost estimates and impact
2023	Finalize Location and purchase property
2024	Construction plan development and bid
2025	Construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	0	
2023	500,000	
2024	0	
2025	12,500,000	
TOTAL	**$13,000,000**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: Fire Department and architect to be determined later
CONTRACTOR: Outside contractor to be determined later

EST 1808 CITY OF DELAWARE OHIO

FIRE DEPARTMENT

SELF CONTAINED BREATHING APPARATUS

BACKGROUND

Self-Contained Breathing Apparatus is a device worn by firefighters to provide breathable air in an immediately dangerous to life or health atmosphere (IDLH). This equipment is used during fire operations, as well as hazardous material and technical rescue operations. In 2025, this essential equipment will be 10-years old and nearing the end of its expected life.

Self-Contained Breathing Apparatus (SCBA)

Rapid Intervention Pack (RIT Pak)

PROJECT TIMELINE

2021	No Action
2022	No Action
2023	No Action
2024	No Action
2025	Research and specification development
2026	SCBAs purchased and placed in operations

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	$0	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	$0	
2023	$0	
2024	$0	
2025	$0	
2026	560,000	
TOTAL	**$560,000**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: Fire Department
CONTRACTOR: Outside vendor to be determined later

EST 1808 CITY OF DELAWARE OHIO

FIRE DEPARTMENT

FIRE APPARATUS

BACKGROUND

The Fire Department capital improvement plan projects the replacement of all existing and new vehicles. Fire apparatus are replaced based on age and typically replaced on a 25-year basis. Steps are taken to extend the life expectancy of the apparatus through the rotation of the vehicles to other fire stations, when possible, and through a designated period serving as a reserve/back-up apparatus. As part of the 2010 Fire Levy, many apparatuses have been replaced; however, due to the prior age of the existing apparatus, some vehicles have extended past the replacement schedule. In 2021, the 1989 engine will be replaced with a new engine that is currently under construction and funded as part of the 2021 budget. It takes approximately 1-year for a new truck to be built. In 2023, the 1997 engine is scheduled to be replaced.

1989 E-One Engine (replaced in 2021)

1997 Pierce Engine (replaced in 2023)

PROJECT TIMELINE

2021	2021 engine and equipment will be received and placed in-service
2022	Specification for new 2023 engine will be developed
2023	2023 engine and equipment ordered
2024	
2025	No action

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	0	
2023	926,745	
2024	0	
2025	0	
TOTAL	**$926,745**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: In House & Contractor
CONTRACTOR: Outside contractor to be determined later

FIRE DEPARTMENT

PARAMEDIC APPARATUS

BACKGROUND

The Fire Department capital improvement plan projects the replacement of all existing and new paramedic vehicles. Paramedic apparatus are replaced based on age and typically replaced on a 12-year basis. Steps are taken to extend the life expectancy of the apparatus through the rotation of the vehicles to other fire stations. As part of the 2010 Fire Levy, all EMS vehicles have been replaced. The paramedic units are the workhorse of the fire department operations, as 80% of responses are for medical calls. In 2024, the 2012 Braun Ambulance will be replaced, and a sister vehicle will also be purchased bringing the fleet to 5 paramedic units. Currently the Department does not have a reserve ambulance. This means if a paramedic unit is down for maintenance, one of the stations (typically St 302) operates without a paramedic unit. It takes approximately 9 months for a new paramedic unit to be built.

2012 Braun Ambulance (replaced in 2024)

PROJECT TIMELINE

2021	No action
2022	No action
2023	Specification for the new 2024 paramedic units will be developed
2024	2024 paramedic unit ordered and placed in-service
2025	No action

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	0	
2023	0	
2024	895,540	
2025	0	
TOTAL	**$895,540**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: In House & Contractor
CONTRACTOR: Outside contractor to be determined later

EST 1808 CITY OF DELAWARE OHIO

FIRE DEPARTMENT

STAFF VEHICLES

BACKGROUND

The Fire Department capital improvement plan projects the replacement of all existing and new staff vehicles. Staff vehicles are used in the fleet for a multitude of purposes including the incident command, EMS quick response vehicle/community paramedicine, fire inspections and Station cars. Staff vehicles are replaced based on age and typically replaced on a 10-year basis. Prior to 2017, the Fire Department was receiving 1 used police car annually. These cars were needed for other City Departments, which has resulted in the Fire Department now purchasing new vehicles. Steps are taken to extend the life expectancy of the apparatus through the rotation of the vehicles from an emergency response use to being used by the fire inspectors and as Station cars.

2021 – Replacement of 2 (2011) staff vehicles originally used by the Police Department

2022 – Replacement of 2 (2006) and 1 (2011) staff vehicles (staff vehicle and pick-up truck)

2023 – Replacement of 1 (2011) staff vehicle and 1 (2006) pick-up/utility truck

2024 – Replacement of 2 (2014) staff vehicles and 1 new vehicle for proposed public educator

2025 – Replacement of 1 (2014) staff vehicle

PROJECT TIMELINE

2021	Staff vehicles ordered and placed in-service
2022	Staff vehicles ordered and placed in-service
2023	Staff vehicles ordered and placed in-service
2024	Staff vehicles ordered and placed in-service
2025	Staff vehicles ordered and placed in-service

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	106,090	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	163,908	
2023	112,550	
2024	173,892	
2025	59,703	
TOTAL	**$616,143**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: In House & Contractor
CONTRACTOR: Outside contractor to be determined later

EST 1808 CITY OF DELAWARE OHIO

FIRE DEPARTMENT

STATION MOWERS

BACKGROUND

The Fire Department capital improvement plan projects the replacement of all existing station mowers. Station mowers are designed to mow the 2.5 acres or more of property at each fire station. Station mowers are replaced on a 10-year basis.

2021 – Replacement of 2 (2009) Station mowers (St 301 and 304)

2022 – None

2023 – Replacement of 1 (2013) Station mowers (St 303)

2024 – None

2025 – None

PROJECT TIMELINE

2021	Station mowers ordered and placed in-service
2022	No Action
2023	Station mowers ordered and placed in-service
2024	No Action
2025	No Action

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	20,158	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	0	
2023	10,692	
2024	0	
2025	0	
TOTAL	**$30,850**	

PROJECT TEAM

CITY LEAD: Fire Department
DESIGN CONSULTANT: In House & Parks and Natural Resources Department
CONTRACTOR: Outside contractor to be determined later

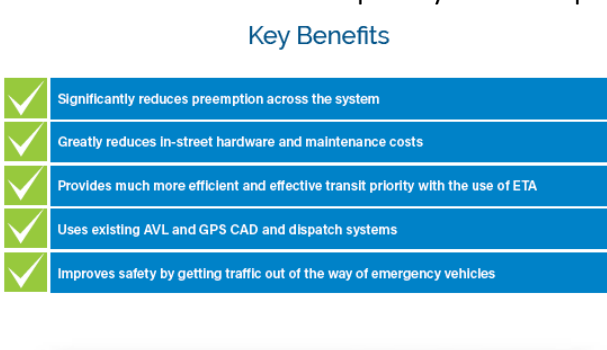
EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

EMERGENCY VEHICLE PRE-EMPTION

BACKGROUND

Emergency vehicle pre-emption is an important piece of technology deployed at signalized intersections where normal traffic operations impede emergency vehicles and where traffic conditions create a potential for conflicts between emergency and non-emergency vehicles. Emergency vehicle pre-emption can reduce emergency vehicle response times and is especially useful along corridors that emergency vehicles use to travel longer distances. It also can provide both a safety and operational benefit on roadways where emergency vehicles need to enter the intersection from the minor road. The new technology being deployed with this project leverages GPS and existing CAD AVL systems to successfully calculate the vehicle ETA at signalized intersections. This in turn enables the traffic controllers to render tailored priority to first responder vehicles and return to normal operation in a more efficient time frame to reduce delays to non-emergency vehicles. This new system has the ability to be utilized throughout the City and Delaware County by all First Responders. Using this type of technology requires less hardware to be installed in vehicles and at each signalized intersection, which will reduce upfront hardware costs and routine maintenance required by Technicians. The first part of this project began in 2019 and consists of integrating the new emergency vehicle pre-emption software with the Delaware County Emergency Management dispatch system and installing Emergency Vehicle Pre-emption equipment at 32 of the 62 signalized intersections. This work is planned to be completed in 2020. The remaining 30 signalized intersections will be equipped with emergency vehicle pre-emption as part of the Citywide Signal Upgrade Phase 1 Project planned for construction in 2021-2022.



PROJECT TIMELINE

2020	Construction – Installation at 32 signalized intersections and CADD software integration complete
2021	Construction – Installation at 30 signalized intersection with Citywide Signals Upgrade Phase 1 project
2022	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	385,000	The total project is anticipated to cost roughly $565,000, which will be covered 100% utilizing the Fire Fund. The cost of the first part of the project set to be completed by the end of 2020 will cost $385,000.
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$385,000**	

PROJECT TEAM

CITY LEAD: Public Works – Traffic Division
DESIGN CONSULTANT: In House/HDR
CONTRACTOR: Path Master/TBD

CAPITAL IMPROVEMENT PLAN
STORM CAPITAL PROJECTS
2021-2025

	2021	2022	2023	2024	2025
REVENUES:					
Storm Water Fees	732,805	360,000	705,000	425,000	625,000
TOTAL REVENUES	**732,805**	**360,000**	**705,000**	**425,000**	**625,000**
EXPENDITURES:					
CAPITAL PROJECTS					
Storm Water Repair	125,000	125,000	125,000	125,000	125,000
Storm Water I&I Remediation		100,000		100,000	
Bernard Avenue (Sandusky to Liberty)	400,000				
US23 Storm Culvert Inspection/Design	207,805				
US23 Storm Culvert Construction			210,000		
Vernon Avenue		135,000			
Chamberlain/Channing St			350,000		
Pittsburgh Drive				200,000	
Cemetery Storm Pipe Replacement					500,000
EQUIPMENT					
One-ton Dump Truck			20,000		
Mini Excavator					
TOTAL EXPENDITURES	**732,805**	**360,000**	**705,000**	**425,000**	**625,000**

PUBLIC WORKS LED PROJECTS

Penick Ave Connector	30,000				
John Street Bridget	133,300				
The Point		535,000			
E Central Avenue					

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

STORM WATER REPAIR

BACKGROUND

As storm water lines age, deteriorate, and begin to fail, they must be replaced. A failed storm water line can lose its ability to properly convey storm flows, potentially causing flooding to Delaware neighborhoods. As storm water lines are found to be in a failed condition via camera inspections, they will be scheduled for replacement by City staff.

PROJECT TIMELINE

2021	Storm water line repairs
2022	Storm water line repairs
2023	Storm water line repairs
2024	Storm water line repairs
2025	Storm water line repairs

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	125,000	Project will be funded from the storm water fund
2022	125,000	
2023	125,000	
2024	125,000	
2025	125,000	
TOTAL	**$625,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

STORM WATER INFLOW-INFILTRATION

BACKGROUND

As storm water lines age, they begin to allow ground water infiltration into the storm flows. During rain events, these areas of infiltration can cause storm water lines to become full sooner, leading to possible storm drain backups and localized flooding. As areas in need of repair are found via camera inspection, they will be scheduled for repair.

PROJECT TIMELINE

2021	
2022	Storm water I&I remediation
2023	
2024	Storm water I&I remediation
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the storm water fund
2022	100,000	
2023	0	
2024	100,000	
2025	0	
TOTAL	**$200,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

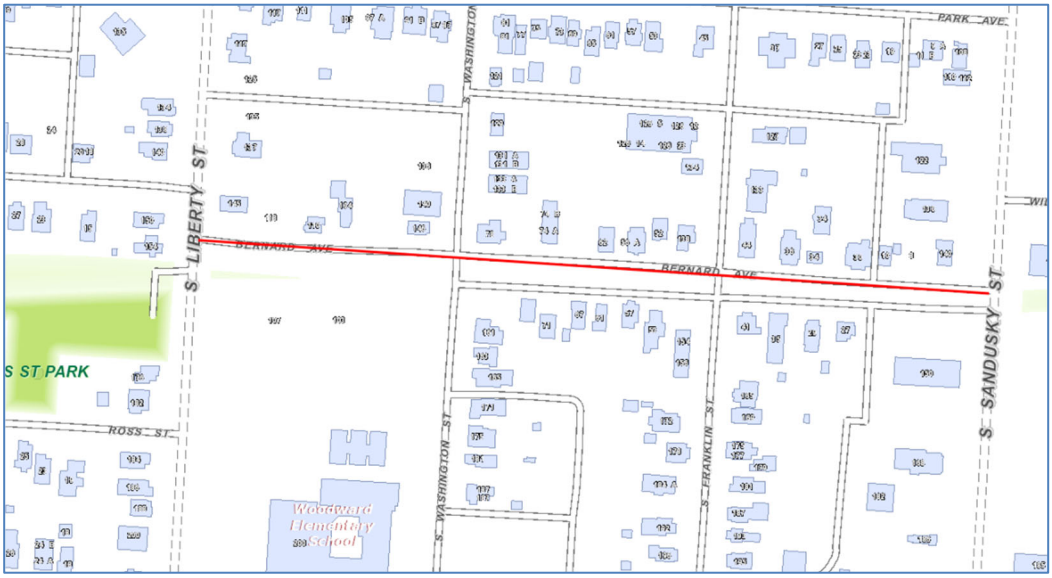
EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

BERNARD AVE STORM SEWER REPLACEMENT

BACKGROUND

Bernard Avenue's storm sewer has been found to be in failed condition, unable to properly convey storm flows from the area and causing localized flooding. The existing storm sewer will be removed and replaced with good condition storm sewer lines. Work is currently scheduled to be performed by City of Delaware utilities staff.



PROJECT TIMELINE

2021	Storm sewer replacement by City staff
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	400,000	Project will be funded from the storm water fund
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$400,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

US 23 STORM CULVERT REPAIRS

BACKGROUND

ODOT District 6 has initiated a project to inspect/design/repair the storm culvert structures along the US-23 corridor. Per Ohio Revised Code the City is responsible to comply with their project by funding the portions of work that fall within City boundaries. Project cost estimates were provided by ODOT. Public Utilities staff have worked with ODOT and elected to self-preform portions of the project to reduce the City's financial obligation.

PROJECT TIMELINE

2021	Inspection and Design of repairs by ODOT's consultant
2022	
2023	Repair of deficiencies found in 2021
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	207,805	Project will be funded from the storm water fund
2022	0	
2023	210,000	
2024	0	
2025	0	
TOTAL	**$417,805**	

PROJECT TEAM

CITY LEAD: Engineering
DESIGN CONSULTANT:
CONTRACTOR:

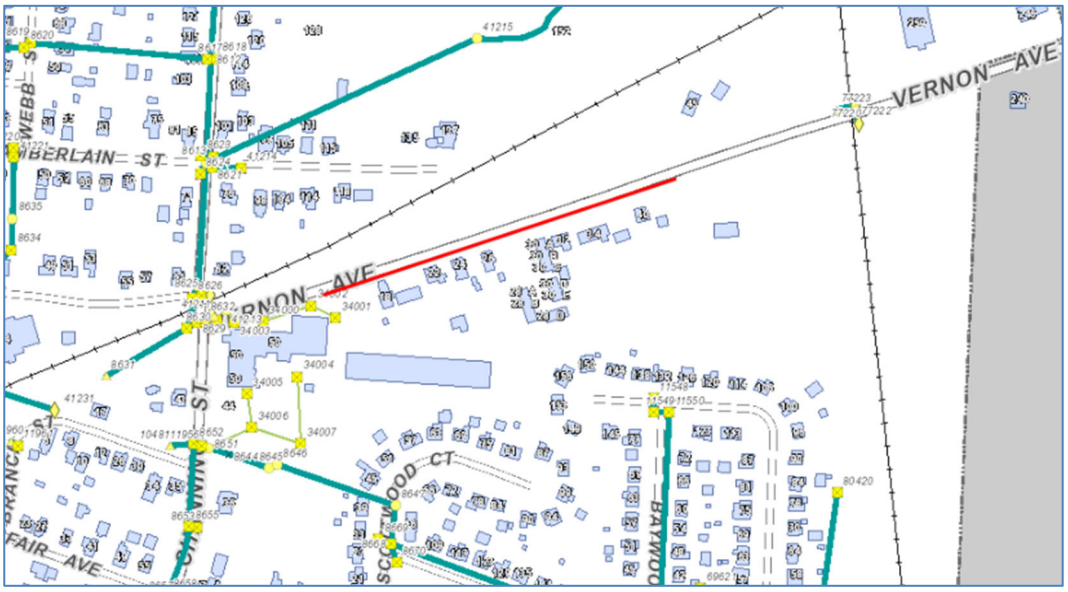
EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

VERNON AVE DITCH CLEANING

BACKGROUND

The Vernon Avenue ditch ways are no longer able to convey the required storm flows from the area. This is due to buildup of sediment from years of storm water conveyance. Ditches are as integral a part of storm water removal as storm sewers are and must also be maintained to ensure needed levels of flow.



PROJECT TIMELINE

2021	
2022	Planned repairs scheduled to be performed by City staff
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the storm water fund
2022	135,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$135,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: Public Utilities

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

CHAMBERLAIN/CHANNING STORM REPAIRS

BACKGROUND

The area of Chamberlain Street and Channing Street is experiencing storm sewer failure shown by area flooding during rain events. This project is intended to open up flow in the area to reduce the likelihood of flooding events.

PROJECT TIMELINE

2021	
2022	
2023	Planned repairs scheduled to be performed by City staff
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the storm water fund
2022	0	
2023	350,000	
2024	0	
2025	0	
TOTAL	**$350,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: Public Utilities

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

PITTSBURGH DR DITCH CLEANING

BACKGROUND

The Pittsburgh Drive ditch ways are no longer able to convey the required storm flows from the area. This is due to buildup of sediment from years of storm water conveyance. Ditches are as integral a part of storm water removal as storm sewers are and must also be maintained to ensure needed levels of flow.

PROJECT TIMELINE

2021	
2022	
2023	
2024	Planned repairs scheduled to be performed by City staff
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the storm water fund
2022	0	
2023	0	
2024	200,000	
2025	0	
TOTAL	$200,000	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: Public Utilities

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

CEMETERY STORM PIPE REPLACEMENT

BACKGROUND

Below sections of the City's cemetery are large stormwater conveyance pipes. These pipes see substantial flows during storm events due to the large size of the land tributary to this drainage way. The storm sewer is built up brick and has begun failing and falling apart in areas. The City recently completed a cemetery master plan, which also called out the repair of the storm lines. This work will require the utmost care as much of it lies below existing burial sites.

PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	Planned repairs scheduled to be performed by City staff

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the storm water fund
2022	0	
2023	0	
2024	0	
2025	500,000	
TOTAL	**$500,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: Public Utilities

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

STORM DIVISION VEHICLE REPLACEMENTS

BACKGROUND

The Public Utilities Department uses a variety of equipment for the operations and maintenance of its infrastructure. Vehicles and equipment are replaced based on hours of operation, mileage, equipment maintenance cost and whether it is a primary or secondary piece.

PROJECT TIMELINE

2021	
2022	
2023	Replacement of 1-ton dump – Collections (#554)
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Purchases will be funded from the storm water fund
2022	0	
2023	20,000	
2024	0	
2025	0	
TOTAL	**$20,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

CAPITAL IMPROVEMENT PLAN
WATER FUND MAINTENANCE PROJECTS
2021-2025

	2021	2022	2023	2024	2025
BALANCE FORWARD	1,532,970	1,299,621	824,319	1,061,526	1,067,212
REVENUES:					
Transfer from Water Fund	800,000	800,000	800,000	800,000	800,000
Water Debt Meter Fee Allocation	1,152,379	1,175,427	1,198,935	1,222,914	1,247,372
TOTAL REVENUES	**3,485,349**	**3,275,047**	**2,823,254**	**3,084,440**	**3,114,584**
EXPENDITURES:					
DEBT SERVICE					
Treatment Plant ($22,400,000 - 25 yrs, 3.23%, 2039)	1,285,728	1,285,728	1,285,728	1,285,728	1,285,728
WATER PLANT MAINTENANCE					
Plant Maintenance	100,000	100,000	100,000	100,000	100,000
SCADA Hardware Replacement	25,000				
West Lagoon Valving Changes	60,000				
Well Cleaning			31,000	45,500	
UF/NF Membrane Replacement		675,000		276,000	
NF Feed Pump Motor Replacement					134,000
PLC & HMI Replacement					169,000
WATER DISTRIBUTION PROJECTS					
Water Tank Painting					750,000
Large Meter Replacement		25,000		25,000	
Water Line Improvements:					
Small Main/Service Replacement	50,000	50,000	50,000	50,000	50,000
Fire Flow Improvement	75,000	75,000	75,000	75,000	75,000
S. Washington St. Waterline		90,000			
Pennsylvania Ave. Waterline	525,000				
S. Franklin St. Waterline			190,000		
N. Franklin St. Waterline				160,000	
Fountain Ave. Waterline					100,000
EQUIPMENT REPLACEMENT					
One-ton Dump Truck	65,000				
Utility Truck		150,000			
Pickup Truck			30,000		
Two-ton Dump Truck					130,000
Pickup Truck					
TOTAL EXPENDITURES	**2,185,728**	**2,450,728**	**1,761,728**	**2,017,228**	**2,793,728**

PUBLIC WORKS LED PROJECTS

E Central Water Rehab					500,000

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2021 PLANT SCADA REPLACEMENT

BACKGROUND

Replacement of the (2) plant supervisory control and data acquisition (SCADA) computers may be necessary for the optimum operation of plant processes. This also includes; new software, new server, (2) computers, (8) monitors, and any integration assistance.

In 2021 these (2) plant SCADA computers will be 6 years old. The City's IT Dept. has suggested that we have this money allocated to be proactive instead of reactive, so that chances of hardware failure are minimized. The SCADA is necessary for the operation of the complex plant processes.

PROJECT TIMELINE

2021	SCADA Hardware Replacement
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	25,000	Water fund
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$25,000**	

PROJECT TEAM

CITY LEAD: Water Treatment
CONSULTANT: IT / SOS Integration
CONTRACTOR: IT / SOS Integration

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2021 WEST LAGOON VALVING

BACKGROUND

The project will enable the City to utilize the West lagoon for daily filter backwash waters and sediment from the settling basins along with daily maintenance CEB membrane cleaning waste and quarterly membrane cleaning waste streams. Currently the valving only allows these waste flows to enter the East lagoon. This new valving will give the City the ability to put these waste streams in the West lagoon. This will allow the City more time before these lagoons are full and need to be cleaned. When these lagoons were cleaned in the past, the waste sludge in these lagoons was beneficial to farmers fields from the lime that was used in the treatment processes. Being able to locally land apply this waste helped keep the sludge removal cost lower. The wastes mentioned above from the new treatment process have no benefit to farmland and will be a landfill application which will require considerably more capital cost from the past when this sludge is removed in the future.

PROJECT TIMELINE

2021	Valve Installation
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	60,000	Water Fund
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$60,000**	

PROJECT TEAM

CITY LEAD: Water Treatment
CONSULTANT: Prime AE /Rawdon Myers
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2022 NF MEMBRANE REPLACEMENT

BACKGROUND

The NF membrane flows deteriorate over time which steadily increases operating pressure to the point where the NF feed pumps cannot push water thru the membranes. The conservative estimates for life of these NF membranes are 5-7 years. The plant started in December 2014. Current projections (5/2020) show that the NF membranes should go another 2-3 years. In saying this in 2022 would be a conservative estimate for replacement. At the end of the NF life the high-pressure conditions can begin to increase rapidly so having the funds available to replace these NF membranes will be essential.

We currently clean these NF Membranes every 3 months when operating pressures increase to the point of losing design flow thru the membranes. At the end of the life of the NF membranes the cleaning frequency increases substantially. Having this funding available when necessary will ensure the ability to provide the necessary volume of water for the daily needs of our customers.

PROJECT TIMELINE

2021	
2022	NF Membrane replacement
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Water Fund
2022	675,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$675,000**	

PROJECT TEAM

CITY LEAD: Water Treatment
CONSULTANT: H2O Innovation
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2023 RIVERVIEW WELL CLEANING

BACKGROUND

The project will help maintain proper flows to each of the (2) raw groundwater wells at the Riverview well field. Over time the well flows gradually start deteriorating. This is mostly due to iron and other minerals getting hard and plugging the caverns and voids in the limestone which block groundwater flow to the well pumps. If this iron and other mineral are not cleaned every five years or so the well flow will not ever be restored to original well flow and the necessary volume of groundwater.

This is good a preventative maintenance plan to ensure that the wells maintain their original flows so we can produce enough finished water for our customers.

PROJECT TIMELINE

2021	
2022	
2023	Riverview Well Cleaning
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Water Fund
2022	0	
2023	31,000	
2024	0	
2025	0	
TOTAL	**$31,000**	

PROJECT TEAM

CITY LEAD: Water Treatment
CONSULTANT:
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2024 PENRY WELL CLEANING

BACKGROUND

The project will help maintain proper flows to each of the (3) raw groundwater wells at the Penry road well field. Over time the well flows gradually start deteriorating. This is mostly due to iron and other minerals getting hard and plugging the caverns and voids in the limestone which block groundwater flow to the well pumps. If this iron and other mineral are not cleaned every five years, the well flow cannot ever be restored to original flow rates and the necessary volume of groundwater.

This is good a preventative maintenance plan to ensure that the wells maintain their original flows so we can produce enough finished water for our customers.

PROJECT TIMELINE

2021	
2022	
2023	
2024	Penry Well cleaning
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Water Fund
2022	0	
2023	0	
2024	45,500	
2025	0	
TOTAL	**$45,500**	

PROJECT TEAM

CITY LEAD: Water Treatment
CONSULTANT:
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2024 UF MEMBRANE REPLACEMENT

BACKGROUND

The ultra-filtration (UF) membrane permeability, or waters overall ability to flow thru the membranes, will deteriorate over time. As the permeability decreases so does production ability, creating the need for membrane replacement to provide the daily water demand for our customers. Manufacturer estimated life span for these membranes are 7-10 years. In December 2024 these UF membranes will be 10 years old, requiring replacement.

We currently clean these UF Membranes every 3 months when permeability decreases to the point of losing design flow. At the end of the life of the UF membranes the cleaning frequency will substantially increase. Having this funding available when necessary will ensure the ability to provide the necessary volume of water for the daily needs of our customers.

PROJECT TIMELINE

2021	
2022	
2023	
2024	UF Membrane Replacement
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Water Fund
2022	0	
2023	0	
2024	276,000	
2025	0	
TOTAL	**$276,000**	

PROJECT TEAM

CITY LEAD: Water Treatment
CONSULTANT: H2O Innovation
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2025 NF FEED PUMP MOTOR REPLACEMENT

BACKGROUND

Replacement of the motors for the (5) plant process Nano filtration (NF) feed pumps. (3) of the motors are for surface water (SW) NF membrane skids and (2) are for ground water (GW) NF membrane skids.

We currently operate these motors continually to power the SW & GW NF feed pumps. The life expectancy of these motors is normally 15 – 20 years of continuous operation. Due to the need to run these motors at the top of their operating parameters, as designed during plant construction, effective life span is effectively shortened from 15-20 years to around 10 years. In 2025 these motors will be 10 years old. Having this funding available when necessary will be crucial to maintain the ability to produce the necessary volume of water for the daily demands of our customers.

PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	NF Feed Pump Motor Replacement

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Water Fund
2022	0	
2023	0	
2024	0	
2025	134,000	
TOTAL	**$134,000**	

PROJECT TEAM

CITY LEAD: Water Treatment
CONSULTANT: Ohio Electric Motor Service LLC
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2025 PLC & HMI REPLACEMENT

BACKGROUND

Replacement of the programmable logic controllers and human-machine interfaces for each for the; ultra-filtration, nano-filtration & pressure filters. This includes potential Ethernet upgrades, IO wiring, and site testing.

The PLC's have regular firmware updates, but eventually they become outdated, this causes need for replacement for security and performance updates. These PLC / HMI are essential for the proper and efficient function of each of the processes in the water treatment process. Conservatively these needs replaced every 10 years. In 2025, these will be 10 years old.

PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	Replacement

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Water Fund
2022	0	
2023	0	
2024	0	
2025	169,000	
TOTAL	**$169,000**	

PROJECT TEAM

CITY LEAD: Water Treatment & IT
CONSULTANT: H2O Innovation /SOS Integration
CONTRACTOR: H2O Innovation / SOS Integration

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2025 WATER TANK PAINTING

BACKGROUND

The project will maintain the structural integrity of the SE water tank. Water tank paint normally lasts 15- 20 years. When performed the exterior and interior surfaces may need sandblasted prior to being painted. The City will use an engineering firm to help with the bidding of the project and to inspect the work being done on-site. This also helps the utility department provide the highest quality of finished water to the citizens of the City of Delaware.

In the fall of 2005 this water tank was designed, built, and painted prior to be placed into service. In 2025 the SE 2MG water tank surfaces will be 20 years old and will need resurfacing to protect the City's investment.

PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	SE Water Tank Painting

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Water Fund
2022	0	
2023	0	
2024	0	
2025	750,000	
TOTAL	**$750,000**	

PROJECT TEAM

CITY LEAD: Water Treatment
CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

LARGE METER REPLACEMENT

BACKGROUND

With normal use a water meter loses accuracy during the span of its life expectancy, the loss of flow reading ability is most pronounced in large-diameter meters. This rotating fund is aimed at replacing the large-diameter meters used by the high flow business users of the City. This ensures proper water use tracking within the system.

PROJECT TIMELINE

2021	Replacement of aged large meters by City crews
2022	Replacement of aged large meters by City crews
2023	Replacement of aged large meters by City crews
2024	Replacement of aged large meters by City crews
2025	Replacement of aged large meters by City crews

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	25,000	Funding will alternate yearly between the water maintenance fund and the sewer maintenance fund. Sewer in odd years and Water in even years.
2022	25,000	
2023	25,000	
2024	25,000	
2025	25,000	
TOTAL	**$125,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: In House
CONTRACTOR: In House

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

SMALL MAIN/SERVICE/FIRE FLOW

BACKGROUND

The small main and service replacement program is primarily focused on the removal of old style lead lines still within the system. Lead service lines were the primary style of service lines used for many years. While the locations of all lead lines are not known, we find several every year, and this fund is used for the replacement to current water safety standards.

Additionally, current City fire flow standards require 8" water mains be installed in order to meet the demands of fire department needs when battling fires. Many existing lines within the City are smaller than 8", and with the help of system flow testing, the areas of the City with the most flow restriction are scheduled for replacement.

PROJECT TIMELINE

2021	Replacement of lines as found or identified
2022	Replacement of lines as found or identified
2023	Replacement of lines as found or identified
2024	Replacement of lines as found or identified
2025	Replacement of lines as found or identified

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	125,000	Funding will come from the water maintenance fund.
2022	125,000	
2023	125,000	
2024	125,000	
2025	125,000	
TOTAL	**$625,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: In House
CONTRACTOR: In House

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2022 S WASHINGTON WATERLINE

BACKGROUND

This project will remove 1,175 linear ft. of 4" water main along South Washington St., from Park Ave. to West Harrison St., and replace with an 8" main. The size of the water main along S. Washington St. has become a constriction to the water distribution system, and also does not meet current fire flow requirements.

PROJECT TIMELINE

2021	
2022	Replacement of line by City crews
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water maintenance fund.
2022	90,000	
2023	0	
2024	0	
2025	0	
TOTAL	$90,000	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: In House
CONTRACTOR: In House

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2021 PENNSYLVANIA AVE WATERLINE

BACKGROUND

The project will replace the 6” water main along Pennsylvania Ave. from N. Sandusky St. to Euclid Ave. Waterlines are in “failed” condition when they have experienced three or more breaks. At such time, they are planned and scheduled for replacement, as is the case for this waterline. In addition, the current main size is deficient for todays required fire flows and will be replaced with an 8” line.

PROJECT TIMELINE

2021	Replacement of line by City crews
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	525,000	At this time, no outside funding sources have been identified and all project funding is through the water maintenance fund.
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$525,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: In House
CONTRACTOR: In House

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

SOUTH FRANKLIN WATERLINE

BACKGROUND

This project will replace the 6” water main along S. Franklin St. from W. William St. to Spring St. Waterlines are in “failed” condition when they have experienced three or more breaks. At such time they are planned and scheduled for replacement, as is the case for this waterline. In addition, the current main size is deficient for today’s required fire flows, new line will be 8”.

PROJECT TIMELINE

2021	
2022	
2023	Replacement of line by City crews
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water maintenance fund.
2022	0	
2023	$190,000	
2024	0	
2025	0	
TOTAL	**$190,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: In House
CONTRACTOR: In House

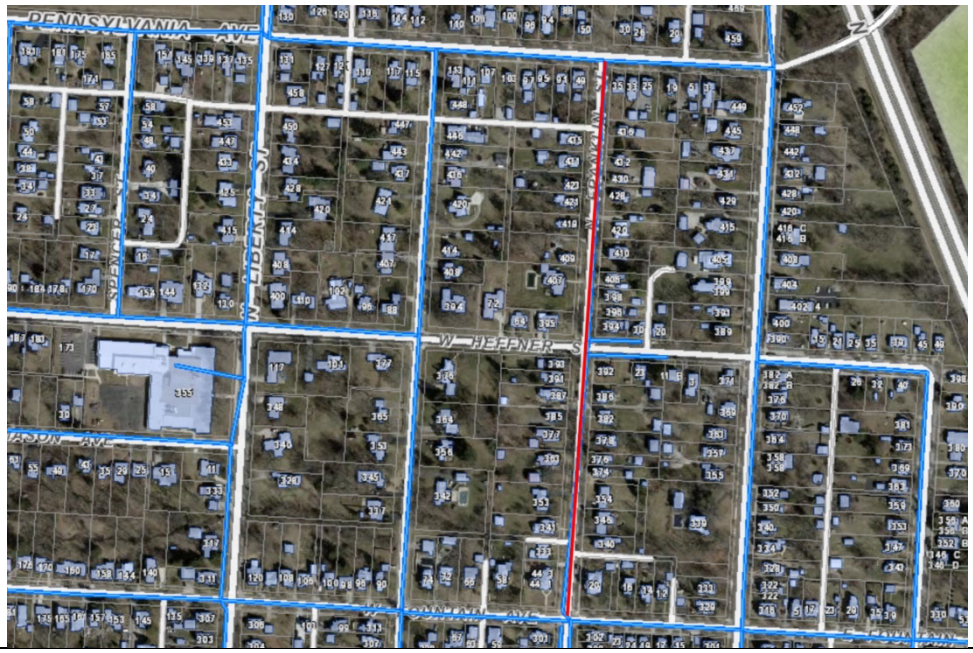
EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2024 N FRANKLIN WATERLINE

BACKGROUND

This project will remove 1,600 linear ft. of 6” water main along North Franklin St., from West Fountain Ave to Pennsylvania Avenue, and replace with an 8” main. The size of the water main along N. Franklin St. has become a constriction to the water distribution system, and also does not meet current fire flow requirements.



PROJECT TIMELINE

2021	
2022	
2023	
2024	Replacement of line by City crews
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water maintenance fund.
2022	0	
2023	0	
2024	160,000	
2025	0	
TOTAL	**$160,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: In House
CONTRACTOR: In House

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2025 FOUNTAIN AVE WATERLINE

BACKGROUND

This project will replace 1,700 linear ft. of 8” water main along Fountain Ave., from Euclid Ave to North Liberty St. When a section of watermain has experience 3 or more breaks it is considered to be in failed condition, requiring replacement. This section of waterline is currently in failed condition due to its break history and has been scheduled for this replacement.

PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	Replacement of line by City crews

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water maintenance fund.
2022	0	
2023	0	
2024	0	
2025	100,000	
TOTAL	**$100,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: In House
CONTRACTOR: In House

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WATER DIVISION VEHICLE REPLACEMENTS

BACKGROUND

The Public Utilities Department uses a variety of equipment for the operations and maintenance of its infrastructure. Vehicles and equipment are replaced based on hours of operation, mileage, equipment maintenance cost and whether it is a primary or secondary piece.

PROJECT TIMELINE

2021	Replacement of 1-ton dump – Distribution (#459)
2022	Replacement of utility truck – Distribution (#453)
2023	Replacement of pick-up truck – Distribution (#423)
2024	
2025	Replacement of 2-ton dump – Distribution (#574)

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	65,000	Purchases will be funded from the water maintenance fund
2022	150,000	
2023	30,000	
2024	0	
2025	130,000	
TOTAL	**$375,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

CAPITAL IMPROVEMENT PLAN
WATER CAPACITY FUND PROJECTS
2021-2025

	2021	2022	2023	2024	2025
BALANCE FORWARD	10,640,541	10,133,561	8,091,581	7,229,601	5,067,621
REVENUES:					
Water Capacity Fees	1,500,000	1,200,000	1,200,000	1,200,000	1,200,000
Debt Proceeds					
TOTAL REVENUES	**12,140,541**	**11,333,561**	**9,291,581**	**8,429,601**	**6,267,621**
EXPENDITURES:					
DEBT SERVICE					
Westside Trans Line ($2,225,051, 25 yrs, 3.67%, 2036)	136,750	136,750	136,750	136,750	136,750
Penry Rd. Waterline ($1,000,000, 25 yrs, 3.55%, 2037)	62,976	62,976	62,976	62,976	62,976
Kingman Hill Tower ($3,545,000, 25 yrs, 4.51%, 2031)	211,228	211,228	211,228	211,228	211,228
Plant Expansion ($9,600,000, 25yrs, 3.23%, 2039)	551,026	551,026	551,026	551,026	551,026
CAPITAL PROJECTS					
Water Master Plan Update	100,000				
Gleasonkamp Dam Breach	25,000	250,000			
New Line Oversizing/Extension	250,000	200,000	200,000	200,000	200,000
Panhandle to US 42 Water Main	570,000	570,000			
Braumiller Rd 16" Water Main		160,000	800,000	800,000	
North Sawmill Watermain Extension	100,000	1,100,000			
US42 Watermain Extension			100,000	1,200,000	
South Industrial Loop Watermain				200,000	2,100,000
Troy Rd Loop (Hills-Miller to Buttermilk Hill)					200,000
TOTAL EXPENDITURES	**2,006,980**	**3,241,980**	**2,061,980**	**3,361,980**	**3,461,980**

PUBLIC WORKS LED PROJECTS

Penick Ave Connector	55,000				
Gleasonkamp Bridge Improvement		50,000			

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

2021 WATER MASTER PLAN UPDATE

BACKGROUND

The City of Delaware's current water master plan will be 12 years old in the year 2021. This plan update is meant to reanalyze the water distribution system, and adjust planned needs based on actual City development. This will allow the utilities department to better plan projects going forward, to best meet the needs of such a rapidly growing customer base.

PROJECT TIMELINE

2021	RFQ and Award of project, completion in late 2021
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	100,000	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$100,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: N/A

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

GLEASONKAMP DAM BREACH

BACKGROUND

The City of Delaware is currently the owner and maintainer of a watershed dam that was pre-existing on a property purchased for future Utility uses. The most recent inspection performed by the Ohio Department of Natural Resources on the dam showed it to be in need of rehabilitation. However, the inspection report also noted that the dam was no longer needed and that removal would remove maintenance requirements of the dam that would continue in perpetuity if it remained. It was decided that removal of the dam, and thus removal of the City's required lifetime maintenance was the best option given from the report.

PROJECT TIMELINE

2021	Design of dam removal by an engineering/environmental consultant
2022	Bid/Award/Performance of dam removal project
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	25,000	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund. This project was purchased as a site for a future above ground reservoir to increase total system allowable capacity, as such this project falls under the capacity fund.
2022	250,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$275,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WATER OVERSIZING/EXTENSION

BACKGROUND

The City of Delaware continues to experience rapid growth, with several new developments beginning each year. Each new development is expected to install all the needed connections needed for their utilities needs, including taking those services to the edge of their property for the next development to continue. When the City requires a developer to put in larger service lines than their development requires, this fund is used to pay the City's portion of the oversizing.

PROJECT TIMELINE

2021	Oversizing and extension as needed
2022	Oversizing and extension as needed
2023	Oversizing and extension as needed
2024	Oversizing and extension as needed
2025	Oversizing and extension as needed

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	250,000	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	200,000	
2023	200,000	
2024	200,000	
2025	200,000	
TOTAL	**$1,250,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

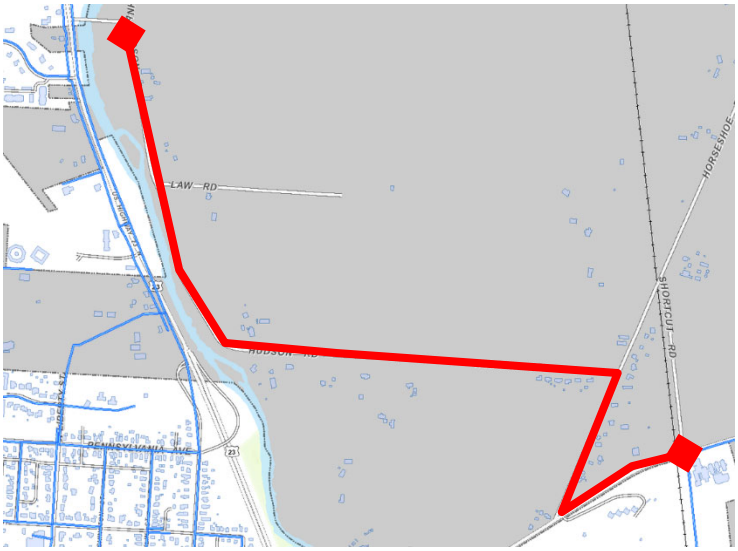
EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

PANHANDLE TO US 42 WATERMAIN

BACKGROUND

Currently, the areas of the City that are east of the Olentangy Rivers main source of supply is the 1960 - 16" water main from the water plant, then through the 16" East/West Connector which runs along Central Avenue. If the water supply from the plant treatment to the East/West Connector is interrupted the distribution system has issues with suppling water to the Eastside tower. This project will give the City an addition larger main feed to the Eastside water tank and provide the areas citizens with the proper level of service which should be provided.



PROJECT TIMELINE

2021	Bid and Award of project. Begin construction
2022	Completion of project started in 2021
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	570,000	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	570,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$1,140,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

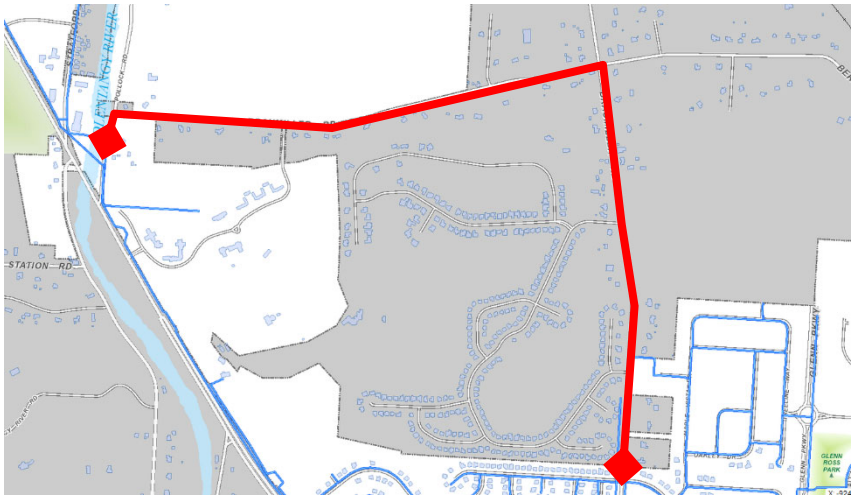
EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

BRAUMILLER RD WATERMAIN

BACKGROUND

Currently, the areas of the City that are South of Pollock Road only have 1 main source of water feeding from the distribution network. Should a shutdown or break occur between the S.E. Water Tank and the primary distribution network, we have no reliable way to keep pace with long term water demand of the area. This project will give the City an additional supply to our S.E. water tank, and provide the area citizens with the proper level of service which should be provided.



PROJECT TIMELINE

2021	
2022	RFQ and award of project design services to an engineering consultant
2023	Bid and award construction of project, begin construction
2024	Completion of construction begun in 2023
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	160,000	
2023	800,000	
2024	800,000	
2025	0	
TOTAL	**$1,760,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

NORTH SAWMILL WATERMAIN

BACKGROUND

Through ongoing discussion between Public Utilities, Planning, and Economic Development, as well as initial input from the new in-development comprehensive plan, it is agreed that the South-West industrial corridor of the City is of vital importance to our future growth and health. By creating utility ready land for industrial, commercial and mixed-use, developers will be more likely to choose the City of Delaware as their new home.

This project will extend the existing 16" watermain along Sawmill Parkway and then bring it down to connect with watermain that will have been extended down U.S. 42. This will both serve new development land, as well as provide critical watermain looping to both Sawmill and U.S. 42 watermains.

PROJECT TIMELINE

2021	Plan and bid package development
2022	Project bid, award, and construction
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	100,000	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	1,100,000	
2023	$0	
2024	$0	
2025	$0	
TOTAL	**$1,200,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

US 42 16” WATERMAIN EXTENSION

BACKGROUND

Through ongoing discussion between Public Utilities, Planning, and Economic Development, as well as initial input from the new in-development comprehensive plan, it is agreed that the South-West industrial corridor of the City is of vital importance to our future growth and health. By creating utility ready land for industrial, commercial and mixed-use, developers will be more likely to choose the City of Delaware as their new home.

This project will extend the existing 16” watermain along U.S. 42, giving the City the ability to serve a large portion of the undeveloped land present.

PROJECT TIMELINE

2021	
2022	
2023	Plan and bid package development
2024	Project bid, award, and construction
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	0	
2023	100,000	
2024	1,200,000	
2025	0	
TOTAL	**$1,300,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

SOUTH INDUSTRIAL WATERMAIN

BACKGROUND

Through ongoing discussion between Public Utilities, Planning, and Economic Development, as well as initial input from the new in-development comprehensive plan, it is agreed that the South-West industrial corridor of the City is of vital importance to our future growth and health. By creating utility ready land for industrial, commercial and mixed-use, developers will be more likely to choose the City of Delaware as their new home.

This project will create a large-scale loop of the industrial area while also creating greater water availability for the region. This project is also the first step in allowing watermain extension down Sawmill Parkway South from U.S. 42.

PROJECT TIMELINE

2021	
2022	
2023	
2024	Plan and bid package development
2025	Project bid, award, and construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	0	
2023	0	
2024	200,000	
2025	2,100,000	
TOTAL	**$2,300,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

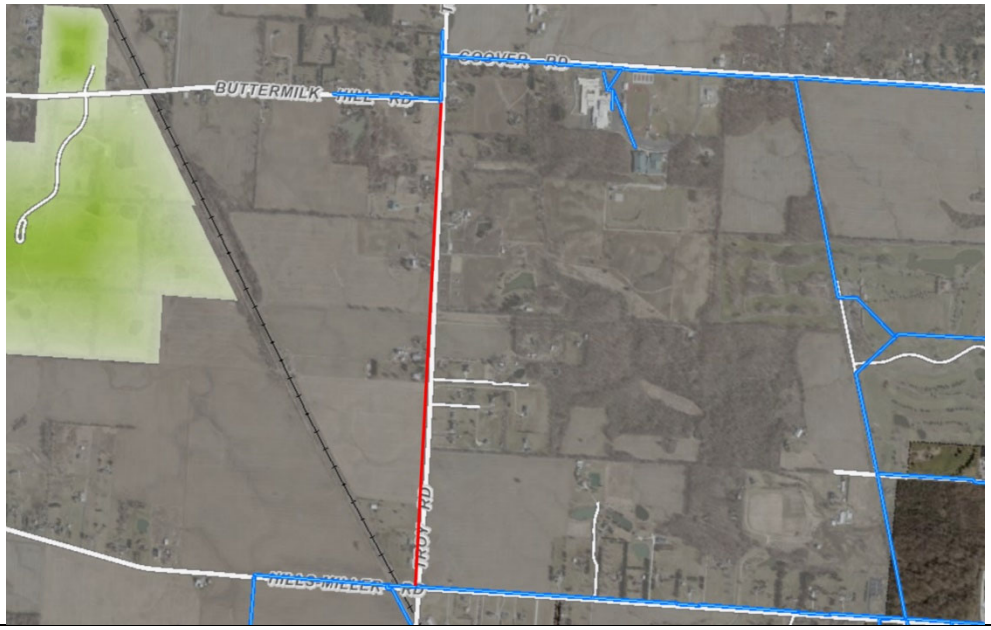
EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

TROY RD WATERLINE

BACKGROUND

Currently, the waterlines extending out Coover Rd. and a portion of Buttermilk Hill Rd are dead-end lines. Water industry best practices include the looping of waterlines when possible for both water quality, as it prevents water stagnation, as well as service redundancy. This project will open this dead-end, as well as provide rural level service along this section of Troy Rd.



PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	Project is projected for completion in 2025

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	0	
2023	0	
2024	0	
2025	200,000	
TOTAL	**$200,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

CAPITAL IMPROVEMENT PLAN
WASTEWATER FUND MAINTENANCE PROJECTS
2021-2025

	2021	2022	2023	2024	2025
BALANCE FORWARD	2,847,445	2,060,270	2,078,220	1,101,897	1,546,916
REVENUES:					
Transfer from Wastewater Fund	1,506,239	1,536,364	1,567,091	1,598,433	1,630,402
TOTAL REVENUES	**4,353,684**	**3,596,634**	**3,645,311**	**2,700,330**	**3,177,317**
EXPENDITURES:					
DEBT SERVICE					
Plant Rehabilitation ($2,230,000 20 yrs. 3.59%, 2026)	153,414	153,414	153,414	153,414	153,414
WASTEWATER TREATMENT PROJECTS					
Aeration Tank Diffuser Replacement	50,000				
Plant Arc Flash Study	50,000				
Belt Filter Press Replacement	750,000				
Plant Maintenance	125,000	125,000	150,000	150,000	150,000
Influent Pump Replacement		150,000			
Settling Tank Rehabilitation	325,000	325,000			
EQ Basin Repairs		300,000			
Electrical Transformer Testing/Repair	15,000	15,000	15,000		
Site Concrete Repairs	50,000	50,000	50,000	50,000	50,000
Influent Bar Screen Replacemet					250,000
Influent VFD Upgrade	50,000	50,000			
PLC Upgrades	50,000	50,000	50,000	100,000	
Building Improvement	100,000				
Odor Control Unit Replacement				400,000	
UV Disinfection Replacement			1,500,000		
Gravity Belt Thickener Replacement					
WASTEWATER COLLECTION PROJECTS					
Large Meter Replacement	25,000		25,000		25,000
Inflow/Infiltration Remediation	175,000	175,000	175,000	175,000	175,000
Sanitary Sewer Replacement	75,000	100,000	100,000	100,000	100,000
Weslyan Woods Sewer Rehab	150,000				
Pump Station Repair/Upgrade		25,000		25,000	
West William St CIPP lining	150,000				
East William (Lake St. to Point)					300,000
Shelbourne Forest CIPP Lining			280,000		
EQUIPMENT REPLACEMENT					
One-ton Truck			45,000		
Pickup Truck					
Mini Excavator					
TOTAL EXPENDITURES	**2,293,414**	**1,518,414**	**2,543,414**	**1,153,414**	**1,203,414**

PUBLIC WORKS LED PROJECTS

E Central Wastewater Rehab					500,000

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP AERATION TANK DIFFUSER REPLACEMENT

BACKGROUND

The project will replace out of date diffusers in the aeration system. These diffusers have exceeded their life expectancy and should be replaced to increase the efficiency of the new high-speed turbo blowers that were installed in 2017. In turn this should allow for the blowers to sustain a lower working stress level.

PROJECT TIMELINE

2021	Purchase and installation of diffusers by plant maintenance personnel
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	50,000	Project will be funded from the sewer maintenance fund
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$50,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP ARC FLASH STUDY

BACKGROUND

The Utilities Department is committed to a high degree of safety in the workplace. Many of our safety practices are governed by the Occupational Safety and Health Administration (OSHA), which has established workplace safety standards. Working around electrical equipment requires Personal Protective Equipment (PPE) as specified under OSHA 29CFR 1910.335. The standards for meeting this requirement have been developed by the National Fire Protection Association (NFPA) and is referred to as NFPA 70E, Standard for Electrical Safety in the Workplace.

NFPA 70E includes provisions related to safe work practices and provides guidance related to arc flash. An arc flash hazard is an uncontrolled flow of electrical current through the air that can result in an explosive discharge of high temperature gas or molten metal from the electrical cabinet that can result in substantial damage to equipment and serious human injury or death within the arc flash boundary. An arc flash can occur when a person accidentally comes in contact with energized electrical equipment or improperly maintained or malfunctioning equipment. Conducting an arc flash hazard analysis utilizes procedures developed under NFPA 70E. The arc flash analysis will introduce safety precautions and training to protect workers near electrical hazards.

PROJECT TIMELINE

2021	Completion of study to be performed by Power Solutions Group
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	50,000	Project will be funded from the sewer maintenance fund
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$50,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: Power Solutions Group
CONTRACTOR: Power Solutions Group

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP BELT FILTER PRESS REPLACEMENT

BACKGROUND

The project will replace the belt filter press which has exceeded its life expectancy. Replacement parts are becoming obsolete and very difficult to find. The Plant's belt filter press has been refurbished at least once in the past to prolong its lifespan, but that is no longer an option as current generation parts are no longer compatible with the existing unit.

PROJECT TIMELINE

2021	Replacement of BFP with help from an engineering consultant
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	750,000	Project will be funded from the sewer maintenance fund
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$750,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

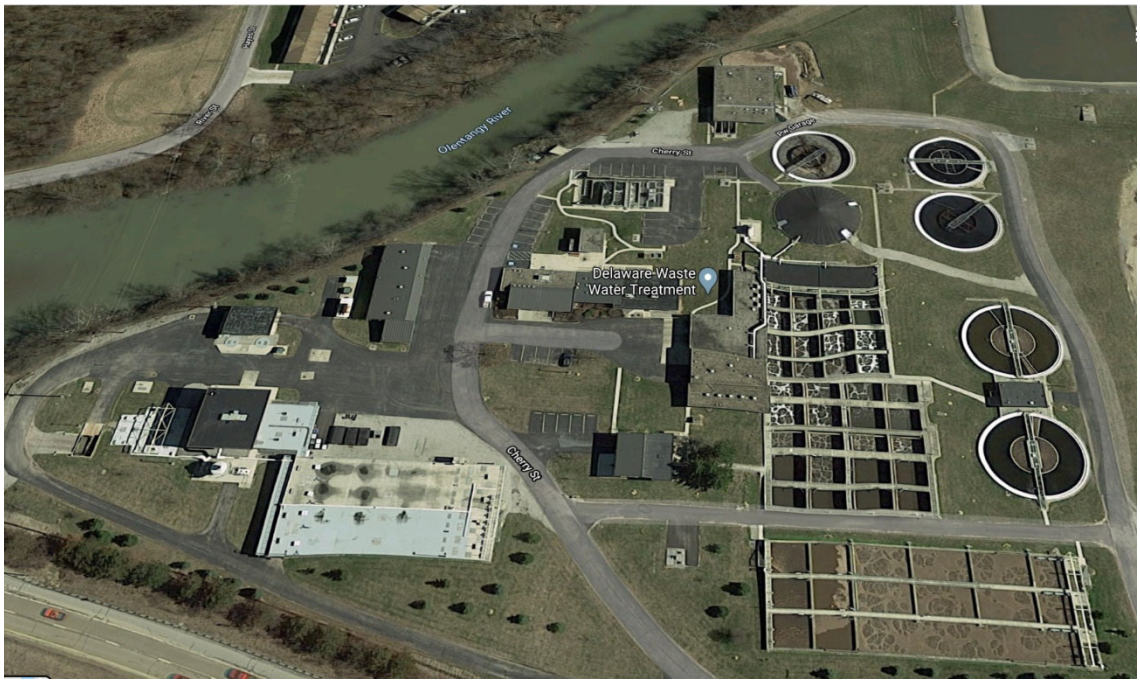
EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WASTEWATER PLANT MAINTENANCE

BACKGROUND

While the department does its best to pre-identify all plant maintenance needs, unforeseen equipment or plant structural failures do occur. In order to react to these unforeseen circumstances, this item provides unallocated funds for emergencies.



PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	125,000	Project will be funded from the sewer maintenance fund
2022	125,000	
2023	150,000	
2024	150,000	
2025	150,000	
TOTAL	**$700,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP INFLUENT PUMP REPLACEMENT

BACKGROUND

This project will replace an influent pump at each of the budgeted times. The pumps were installed during the 2007 plant expansion and have begun to require semi-regular major repairs. Each pump has been repaired at least once during its life span, some multiple times. A typical repair ranges from $25,000 to $35,000 and repairs are becoming more expensive and difficult to get rebuilt as they continue to age. The WWTP has 6 influent pumps, by cycling the replacement of oldest or most problematic pumps the risk of having to replace multiple at a time or experiencing process failure are minimized.

PROJECT TIMELINE

2021	
2022	Purchase and installation of 1 new pump
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the sewer maintenance fund
2022	150,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$150,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP SETTLING TANK REHABILITATION

BACKGROUND

The project is aimed to replace the internal assembly and rotating mechanism within two settling tanks. These tanks are nearing 50 years in operation, the structures are starting to crumble and become unsafe for employees. Additionally, the treatment technology of these tanks is out of date and inefficient, this work will allow for better wastewater treatment.

PROJECT TIMELINE

2021	Complete removal and replacement of a single tank
2022	Complete removal and replacement of a single tank
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	325,000	Project will be funded from the sewer maintenance fund
2022	325,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$650,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

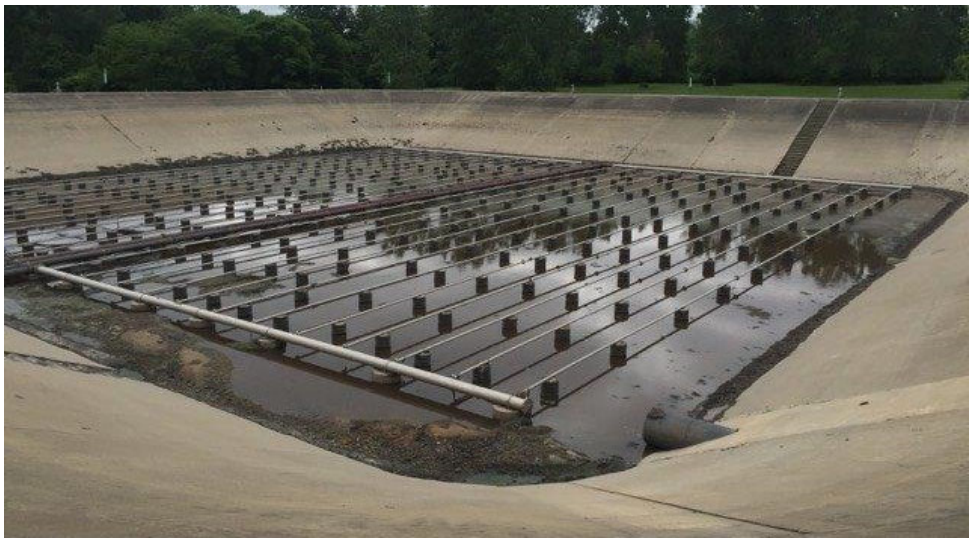
EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP EQUALIZATION BASIN REPAIRS

BACKGROUND

This project will repair the concrete structure called the equalization basin. The basin was modified during the 2007 plant expansion, and the concrete has since settled and needs major rehab work. The concrete ballasts supporting the airlines in the tank are in disrepair.



PROJECT TIMELINE

2021	
2022	Repair of floor pad and airline supports
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the sewer maintenance fund
2022	300,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$300,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: Odle

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP ELECTRICAL TRANSFORMER PM

BACKGROUND

Through best practices learned, WWTP personnel have begun the regular testing, with resulting repairs, of plant electrical system transformers. Electrical system professionals are brought in to perform the very specialized work required. Full plant shut-down is required during this testing/repair procedure.

PROJECT TIMELINE

2021	Testing to be performed
2022	Testing to be performed
2023	Testing to be performed
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	15,000	Project will be funded from the sewer maintenance fund
2022	15,000	
2023	15,000	
2024	0	
2025	0	
TOTAL	**$45,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: Power Solutions Group

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP SITE CONCRETE REPAIRS

BACKGROUND

This project will repair concrete tanks and structure around the facility. With portions of the plant going on 50 years old areas of concrete are starting to crumble and are becoming unsafe for the employees to walk on or around.

PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	50,000	Project will be funded from the sewer maintenance fund
2022	50,000	
2023	50,000	
2024	50,000	
2025	50,000	
TOTAL	**$250,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: Odle

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP BAR SCREEN RELACEMENT

BACKGROUND

The project will replace the aged influent bar screens, which have been in operation since 2005. With age the screens have begun to break down, lowering their effectiveness to remove debris from the waste stream flow. Catching as much of this debris as possible is important to the health of the equipment that is downstream of the bar screens.

PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	Purchase with manufacturer install of new influent bar screens

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the sewer maintenance fund
2022	0	
2023	0	
2024	0	
2025	250,000	
TOTAL	**$250,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP INFLUENT VFD REPLACEMENT

BACKGROUND

The project will replace the variable frequency drives (VFD) for the influent pumps at the wastewater plant. The VFD's were installed during the 2007 plant expansion and are nearing the end of their life expectancy according to the manufacturer. The current VFD's are obsolete and have become increasingly difficult to repair and maintain.

PROJECT TIMELINE

2021	Replacement of half of the existing VFDs
2022	Replacement of the remaining VFDs
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	50,000	Project will be funded from the sewer maintenance fund
2022	50,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$100,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP PLC UPGRADES

BACKGROUND

This project will begin the process of upgrading the Plant's influent pump programmable logic controllers (PLC) at the wastewater plant. The PLC's were installed during the 2007 plant expansion and are nearing the end of their life expectancy, according to the manufacturer. Plant PLC and communications with the SCADA system is in need of major retrofitting in the near future, as we are currently using software that will soon be obsolete and no longer supported.

PROJECT TIMELINE

2021	Phase 1 of PLC replacements
2022	Phase 2 of PLC replacements
2023	Phase 3 of PLC replacements
2024	Phase 4 of PLC replacements
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	50,000	Project will be funded from the sewer maintenance fund
2022	50,000	
2023	50,000	
2024	100,000	
2025	0	
TOTAL	**$250,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP BUILDING IMPROVEMENTS

BACKGROUND

This project is the next in continuing the slow and phased upgrade of Utility personnel's working spaces. This step will be a refresh and improvement to the working space of Public Utility Administration employees. Goals of the refreshed space include the ability to conduct semi-private conversations by using ceiling height modular office walls, replacing the current cubical structures. The PU department is currently looking to expand, this project will also make space for soon to filled positions within, as well as removing employees who are currently overflow working within our conference room.

PROJECT TIMELINE

2021	Repaint wall surfaces, purchase/installation of new office structures and surfaces
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	100,000	Project will be funded from the sewer maintenance fund
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$100,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP ODOR CONTROL UNIT

BACKGROUND

The project will replace the aged and undersized odor control unit which is not meeting the needs required of it by plant staff. The stresses placed on the equipment from sizing result in regular equipment and piping failures within the system. The replacement of this system will both lower the maintenance costs that have been required and result in less down time of the plants odor control measures, something all the plants neighbors can appreciate.

PROJECT TIMELINE

2021	
2022	
2023	
2024	Purchase with manufacturer install of new odor control equipment
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the sewer maintenance fund
2022	0	
2023	0	
2024	400,000	
2025	0	
TOTAL	$400,000	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WWTP UV EQUIPMENT REPLACEMENT

BACKGROUND

The project will replace the aged influent ultra-violet treatment equipment, which has been in place since 2005. Replacement parts for the existing system are becoming harder to source as well has having become much more expensive due to their scarcity. By bringing the UV system up to current technology standards a more efficient E Coli treatment should be expected, allowing the WWTP to continue meeting ever increasing OEPA regulations going forward.

PROJECT TIMELINE

2021	
2022	
2023	Purchase with manufacturer install of new UV equipment
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the sewer maintenance fund
2022	0	
2023	1,500,000	
2024	0	
2025	0	
TOTAL	**$1,500,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

LARGE METER REPLACEMENT

BACKGROUND

With normal use a water meter loses accuracy during the span of its life expectancy, the loss of flow reading ability is most pronounced in large-diameter meters. This rotating fund is aimed at replacing the large-diameter meters used by the high flow business users of the City. This ensures proper water use tracking within the system.

PROJECT TIMELINE

2021	Replacement of aged large meters by City crews
2022	Replacement of aged large meters by City crews
2023	Replacement of aged large meters by City crews
2024	Replacement of aged large meters by City crews
2025	Replacement of aged large meters by City crews

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	25,000	Funding will alternate yearly between the water maintenance fund and the sewer maintenance fund. Sewer funds odd years and Water funds even years.
2022	25,000	
2023	25,000	
2024	25,000	
2025	25,000	
TOTAL	**$125,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: In House
CONTRACTOR: In House

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

SEWER INFLOW/INFILTRATION REMEDIATION

BACKGROUND

As sewer lines age, they begin to allow ground water infiltration into the sewers. During rain events these areas of I&I allow large amounts of water into the system, which disrupts wastewater treatment plant operations. Once introduced, the City must also absorb the cost of treating this otherwise clean water. As areas in need of repair are found via camera inspection, they will be scheduled for repair.

PROJECT TIMELINE

2021	Reactive repair of deficiencies found during camera inspections
2022	Reactive repair of deficiencies found during camera inspections
2023	Reactive repair of deficiencies found during camera inspections
2024	Reactive repair of deficiencies found during camera inspections
2025	Reactive repair of deficiencies found during camera inspections

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	175,000	Project will be funded from the sewer maintenance fund
2022	175,000	
2023	175,000	
2024	175,000	
2025	175,000	
TOTAL	**$875,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

SANITARY SEWER REPLACEMENT

BACKGROUND

As sewer lines age, deteriorate, and begin to fail, they must be replaced. A failed sewer line can allow wastewater to discharge into the surrounding soil, potentially poisoning natural soils and waterways. This is also a required maintenance item, as knowingly allowing the exfiltration of sewers into the environment would be a violation of the City's OEPA permits. As sewer lines are found to be in a failed condition via camera inspections, they will be scheduled for replacement by City staff.

PROJECT TIMELINE

2021	Reactive repair of deficiencies found during camera inspections
2022	Reactive repair of deficiencies found during camera inspections
2023	Reactive repair of deficiencies found during camera inspections
2024	Reactive repair of deficiencies found during camera inspections
2025	Reactive repair of deficiencies found during camera inspections

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	75,000	Project will be funded from the sewer maintenance fund
2022	100,000	
2023	100,000	
2024	100,000	
2025	100,000	
TOTAL	**$475,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WESLYAN WOODS SEWER REHAB

BACKGROUND

Through sewer system camera inspections, areas of the Wesleyan Woods subdivision have been found to be a high source of system inflow & infiltration (I&I). The size and scope of repairs needed within the subdivision exclude it from fitting within the revolving I&I remediation line item. The remediation efforts entail grout injection into cracks, from within, to seal off these sources of infiltration.

PROJECT TIMELINE

2021	Rehabilitation of sewers throughout the development
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	150,000	Project will be funded from the sewer maintenance fund
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$150,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

PUMP STATION REPAIRS

BACKGROUND

This allocation is for the routine maintenance required with keeping the City's 12 pump stations in good operating order. As items require replacement or repair, this fund will allow for the work to happen.

PROJECT TIMELINE

2021	
2022	Pump station repairs
2023	
2024	Pump station repairs
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the sewer maintenance fund
2022	25,000	
2023	0	
2024	25,000	
2025	0	
TOTAL	**$50,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WEST WILLIAM SEWER CIPP LINING

BACKGROUND

Cast in-place pipe (CIPP) is a form of sewer repair that can be used in lieu of digging up and replacement. The W. William St. sewer has been found to be in failed condition, in need of replacement, and CIPP lining will work in this location to correct failures. Approximately 2,344 linear foot of 8" to 12" diameter pipe will be lined. This will also reduce the areas inflow & infiltration rates during rain events.

PROJECT TIMELINE

2021	Rehabilitation of indicated sewer mains
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	150,000	Project will be funded from the sewer maintenance fund
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	$150,000	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

EAST WILLIAM SEWER LINING

BACKGROUND

Through sewer system camera inspections, areas of the E. Williams St. sewer have been found to be a high source of system inflow & infiltration (I&I). The size and scope of repairs needed in the area exclude it from fitting within the revolving I&I remediation line item. The remediation efforts entail lining of approximately 2700 linear foot of 8" sewer main.

PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	Rehabilitation of sewer main along E. William

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the sewer maintenance fund
2022	0	
2023	0	
2024	0	
2025	300,000	
TOTAL	**$300,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

SHELBOUNRE FOREST SEWER CIPP LINING

BACKGROUND

This allocation is for the CIPP lining of sanitary sewers within the Shelbourne Forest area that require more than routine maintenance to keep the collection system in good operating order. This type of rehabilitation work will extend the collection systems life cycle.

PROJECT TIMELINE

2021	
2022	
2023	CIPP Lining
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Project will be funded from the sewer construction fund
2022	0	
2023	280,000	
2024	0	
2025	0	
TOTAL	**$280,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

WASTEWATER DIVISION VEHICLE REPLACEMENTS

BACKGROUND

The Public Utilities Department uses a variety of equipment for the operations and maintenance of its infrastructure. Vehicles and equipment are replaced based on hours of operation, mileage, equipment maintenance cost and whether it is a primary or secondary piece.

PROJECT TIMELINE

2021	
2022	
2023	Replacement of 1-ton dump – Collections (#554)
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Purchases will be funded from the sewer maintenance fund
2022	0	
2023	45,000	
2024	0	
2025	0	
TOTAL	**$45,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A

CAPITAL IMPROVEMENT PLAN
WASTEWATER CAPACITY FUND PROJECTS
2021-2025

	2021	2022	2023	2024	2025
BALANCE FORWARD	7,814,375	8,283,633	7,678,740	6,379,954	4,865,689
REVENUES:					
Water Capacity Fees	1,500,000	1,150,000	1,150,000	1,150,000	1,150,000
SE Highland Sewer ERU Fees	366,000	256,200	179,340	125,538	87,877
Riverby Sewer Reimbursement	250,000				
Sewer Fees Transfer - 2007,2008,2009	1,730,851	1,765,468	1,800,778	1,836,793	1,873,529
TOTAL REVENUES	**11,661,226**	**11,455,302**	**10,808,857**	**9,492,285**	**7,977,095**
EXPENDITURES:					
DEBT SERVICE					
Land Armstrong Rd. ($2,915,000 10 yrs. 1.49%, 2022)	301,700	300,900			
23 North Sewer ($1,000,000, 25 yrs, 4.51%, 2031)	59,115	59,684	59,325	58,518	59,430
SE Highland Sewer ($15,000,000, 25 yrs, 4.49%, 2037)	825,400	824,600	828,200	826,700	824,200
SE Highland Sewer ($2,750,000, 20 yrs, 3.59%, 2026)	189,305	189,305	189,305	189,305	189,305
Plant Expansion ($20,882,000, 20 yrs, 3.59%, 2026)	1,437,073	1,437,073	1,437,073	1,437,073	1,437,073
COLLECTION CAPACITY PROJECTS					
Sewer Oversizing/Extension	200,000	200,000	200,000	200,000	200,000
Riverby Sewer Extension	250,000				
US 42 Sewer Extension			150,000	1,500,000	
North Sawmill Sewer Extension	50,000	500,000			
Industrial Loop South Sewer				200,000	2,300,000
Slack Rd Force Main Rerouting			1,500,000		
Belle Ave Sewer Capacity Improvements				150,000	
London Rd Sewer Capacity Improvements					200,000
Greenlawn Dr Sewer Extension		200,000			
Reimbursement - 245 Cherry St	65,000	65,000	65,000	65,000	65,000
TOTAL EXPENDITURES	**3,377,593**	**3,776,562**	**4,428,903**	**4,626,596**	**5,275,008**

PUBLIC WORKS LED PROJECTS

Penick Ave Connector	15,000				

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

RIVERBY SEWER EXTENSION

BACKGROUND

The Riverby subdivision, located on Pollock Rd, has been ordered by the Ohio EPA to abandon their private wastewater treatment plant, and tie into a public sewer system. The City of Delaware has the closest existing sewer system and has agreed to Riverby's integration into the City's system.

PROJECT TIMELINE

2021	Project to be bid and completed
2022	
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	250,000	Project expenses will be reimbursed to the City through an intergovernmental agreement with Delaware County Commissioners, assessed to the properties of residents of Riverby.
2022	0	
2023	0	
2024	0	
2025	0	
TOTAL	**$250,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: City Engineering Dept
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

US 42 SEWER EXTENSION

BACKGROUND

Through ongoing discussion between Public Utilities, Planning, and Economic Development, as well as initial input from the new in-development comprehensive plan, it is agreed that the South-West industrial corridor of the City is of vital importance to our future growth and health. By creating utility ready land for industrial, commercial and mixed-use, developers will be more likely to choose the City of Delaware as their new home.

This project will extend sewer service from the Slack Rd area and travel along US 42, giving the City the ability to serve a large portion of the undeveloped land present.

PROJECT TIMELINE

2021	
2022	
2023	Plan and bid package development
2024	Project bid, award, and construction
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	0	
2023	150,000	
2024	1,500,000	
2025	0	
TOTAL	**$1,650,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

NORTH SAWMILL SEWER EXTENSION

BACKGROUND

Through ongoing discussion between Public Utilities, Planning, and Economic Development, as well as initial input from the new in-development comprehensive plan, it is agreed that the South-West industrial corridor of the City is of vital importance to our future growth and health. By creating utility ready land for industrial, commercial and mixed-use, developers will be more likely to choose the City of Delaware as their new home.

This project will extend sewer service from its current dead end near Innovation Court, to the mid-point of the Wilgus family owned properties. This East half of the Wilgus' land is expected to be the first area of build out as Sawmill extends.

PROJECT TIMELINE

2021	Plan and bid package development
2022	Project bid, award, and construction
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	50,000	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	500,000	
2023	0	
2024	0	
2025	0	
TOTAL	**$550,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

INDUSTRIAL LOOP SOUTH SEWER

BACKGROUND

Through ongoing discussion between Public Utilities, Planning, and Economic Development, as well as initial input from the new in-development comprehensive plan, it is agreed that the South-West industrial corridor of the City is of vital importance to our future growth and health. By creating utility ready land for industrial, commercial and mixed-use, developers will be more likely to choose the City of Delaware as their new home.

This project will provide sewer South from Slack Road, crossing under Sawmill Parkway, and turning to follow the rear of the properties along Bunty Station Rd. This will provide service to many potential development properties along Sawmill, Slack, and Bunty Station.

PROJECT TIMELINE

2021	
2022	
2023	
2024	Plan and bid package development
2025	Project bid, award, and construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	At this time, no outside funding sources have been identified and all project funding is through the water capacity fund.
2022	0	
2023	0	
2024	200,000	
2025	2,300,000	
TOTAL	**$2,500,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

SLACK RD FORCE MAIN REROUTING

BACKGROUND

The South-West industrial quarter has been flagged as an area of high criticality in the growth and financial stability of the City. Current sewer capacities of the area are not ready for any sizable growth. This project removes the bottleneck of the area by relocating where the Slack Rd. lift station pumps into.

PROJECT TIMELINE

2021	
2022	
2023	Project Design and construction
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Outside funding is not expected, project will be funded from the sewer capacity fund.
2022	0	
2023	1,500,000	
2024	0	
2025	0	
	$1,500,000	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

BELLE AVE CAPACITY IMPROVEMENTS

BACKGROUND

Belle Ave. is currently a bottleneck in the sewer system of its area, creating flow restriction to sections of the City upstream from it. Through investigation, the best method of capacity improvement will be determined, but could include pipe upsizing or internal cast in place pipe installation.

PROJECT TIMELINE

2021	
2022	
2023	
2024	Project Design and construction
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Outside funding is not expected, project will be funded from the sewer capacity fund.
2022	0	
2023	0	
2024	150,000	
2025	0	
TOTAL	**$150,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

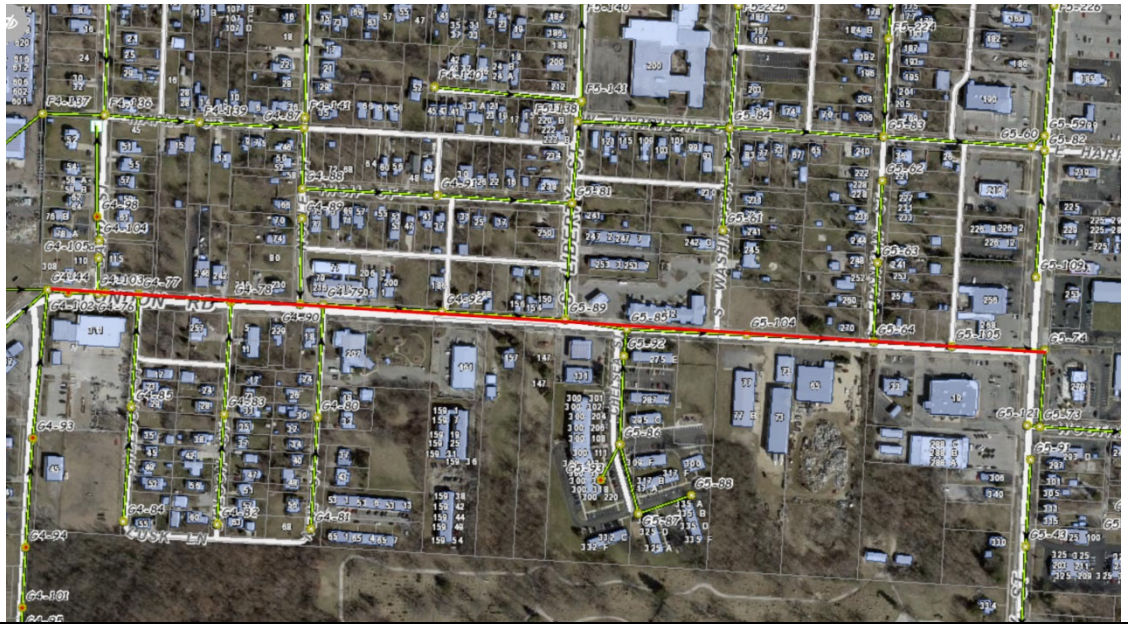
EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

LONDON RD CAPACITY IMPROVEMENTS

BACKGROUND

London Rd. is currently a bottleneck in the sewer system of its tributary area, creating flow restriction to sections of the City upstream from it. Through investigation, the best method of capacity improvement will be determined, but could include pipe upsizing or internal cast in place pipe installation.



PROJECT TIMELINE

2021	
2022	
2023	
2024	
2025	Project Design and construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Outside funding is not expected, project will be funded from the sewer capacity fund.
2022	0	
2023	0	
2024	0	
2025	200,000	
TOTAL	**$200,000**	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC UTILITIES

GREENLAWN DR SEWER EXTENSION

BACKGROUND

Throughout the City of Delaware there are pockets of unincorporated land. Council and staff have expressed interest in filling these 'holes', as such this sewer extension through an unincorporated section of the City will facilitate the slow annexation of properties as they become connected to City sewer.

PROJECT TIMELINE

2021	
2022	Project Design and construction
2023	
2024	
2025	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	0	Outside funding is not expected, project will be funded from the sewer capacity fund.
2022	200,000	
2023	0	
2024	0	
2025	0	
TOTAL	$200,000	

PROJECT TEAM

CITY LEAD: Public Utilities
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

CAPITAL IMPROVEMENT PLAN
REFUSE EQUIPMENT
2021-2025

	2021	2022	2023	2024	2025
REVENUES:					
Refuse Fees	795,000	780,000	606,000	373,000	545,000
TOTAL REVENUES	**795,000**	**780,000**	**606,000**	**373,000**	**545,000**
EXPENDITURES:					
Automated Side-Load Refuse Truck	305,000	314,000	323,000	333,000	343,000
Side-Load Recycling Truck	305,000	275,000	283,000		
Rear Load 20 CY Commercial Packer	185,000	191,000			202,000
Pickup Truck 2WD				40,000	
TOTAL EXPENDITURES	**795,000**	**780,000**	**606,000**	**373,000**	**545,000**

EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

SOLID WASTE COLLECTION

BACKGROUND

Residential waste and recycling collection operations require nine mainline and two backup sideload trucks. Commercial and yard waste collection each utilize two rear load trucks. The City introduced semi-automated tipcart collection through the sideload fleet in 2020 with good success. Two additional semi-automated vehicles will be added to the fleet in 2021. To maintain an adequate level of service, it is anticipated that two additional trucks will be required as the number of refuse stops increase with the expansion of the community. The expected useful life of a frontline sideload service vehicle is seven (7) years. After seven years the vehicles are replaced, and the old vehicle downgraded to backup service status.

PROJECT TIMELINE

2021	(2) Side Load Trucks, 20CY Rear Load
2022	(2) Side Load Trucks, 20CY Rear Load
2023	(2) Side Load Truck
2024	Side Load Truck, Pickup Truck
2025	Side Load Trucks, 20CY Rear Load

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	757,000	Refuse Fund
2022	780,000	
2023	606,000	
2024	373,000	
2025	545,000	
TOTAL	**3,895,000**	

PROJECT TEAM

CITY LEAD: Public Works – Solid Waste
DESIGN CONSULTANT: N/A
CONTRACTOR: State Purchasing Contract

CAPITAL IMPROVEMENT PLAN
EQUIPMENT
2021-2025

	2021	2022	2023	2024	2025
REVENUES:					
CIP Allocation *(pg.1)*	***653,477***	***925,087***	***706,513***	***738,817***	***651,339***
TOTAL REVENUES	**653,477**	**925,087**	**706,513**	**738,817**	**651,339**
EXPENDITURES:					
PARKS					
7- Zero Turn Mowers	31,747	32,699	33,750	34,763	35,806
3/4 Ton Pick -up Truck		40,888	42,115		
Skid Steer			48,095		
55 HP Tractor				37,079	
HIDDEN VALLEY GOLF COURSE					
Boom Sprayer	7,000				
Truckster Utility Vehicle				25,000	
Zero Turn Mower		12,000			
OAK GROVE CEMETERY					
2- Zero Turn Mowers	15,730		17,303		19,033
POLICE DEPARTMENT					
Cruiser Replacement	240,000	245,000	250,000	255,000	260,000
Unmarked Vehicle Replacement		42,000	45,000	47,000	49,000
STREETS					
Pickup Trucks (4WD w/plow)		39,500	40,750	41,975	42,500
Tandem Axle Dump Truck w/plow	198,000				
Single Axle Dump Truck w/plow		185,000	190,000	200,000	210,000
Backhoe		100,000			
Skidsteer	65,000				
Asphalt Paver		190,000			
One-Ton Dump Truck	65,000				
TRAFFIC					
Pickup Trucks 2WD				31,000	35,000
ENGINEERING					
Pickup Trucks	31,000	38,000	39,500	32,000	
FACILITIES					
Utility Van				35,000	
TOTAL EXPENDITURES	**653,477**	**925,087**	**706,513**	**738,817**	**651,339**

EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

PUBLIC WORKS EQUIPMENT

BACKGROUND

The Seven divisions within the Public Works Department operates over 70 different types of equipment and trucks during different times of the year ranging from dump trucks, pickup trucks, backhoes, skid steers, rollers, trailers, and plate compactors. All have a useful life expectancy and are replaced at the final determination of the fleet supervisor in consideration of general condition, maintenance costs and safety. Useful life of various equipment is as follows: Dump Trucks (10 Years); 4X4 Plow Trucks (10 Years); Service Pickup Trucks & Utility Van (20 Years); Backhoe/Skid Steer (15-20 Years); Paver (25 years).







PROJECT TIMELINE

2021	Tandem Dump Truck, Backhoe, Skid Steer, Pickup (Eng)
2022	Single Axle Dump, 4X4 Pickup, Paver, Pickup (Eng)
2023	Single Axle Dump, 4X4 Pickup, Pickup (Eng)
2024	Single Axle Dump, 4X4 Pickup, Pickup (Eng & Traffic), Utility Van (Facilities)
2025	Single Axle Dump, 4X4 Pickup, Pickup (Traffic)

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	394,000	Gas Tax & General Fund Revenues
2022	452,500	
2023	270,250	
2024	339,975	
2025	287,500	
TOTAL	**1,744,225**	

PROJECT TEAM

CITY LEAD: Public Works – Administration
DESIGN CONSULTANT: N/A
CONTRACTOR: State Purchasing Contract

EST 1808 CITY OF DELAWARE OHIO

POLICE DEPARTMENT

EQUIPMENT REPLACEMENT

BACKGROUND

The Police Department currently runs a front-line fleet of 11 cruisers, plus two K9 cruisers, and two school resource officer cruisers. Normal wear and tear require replacement of cruisers, which are typically over 100,000 miles when they are replaced. By replacing 4 cruisers every year, we can maintain a 3-year rotation which allows us to keep overall fleet mileage down, which keeps cruisers safely on the road as opposed to being down for repair. Cruisers that are decommissioned are often re-purposed within the PD or elsewhere in the city fleet.

PROJECT TIMELINE

2021	Normal fleet replacement
2022	Normal fleet replacement
2023	Normal fleet replacement
2024	Normal fleet replacement
2025	Normal fleet replacement

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021	240,000	At this time, no outside funding sources have been identified and all project funding is through general fund revenues.
2022	287,000	
2023	295,000	
2024	302,000	
2025	309,000	
TOTAL	**$ 1,433,000**	

PROJECT TEAM

CITY LEAD: Police Department
DESIGN CONSULTANT: N/A
CONTRACTOR: N/A