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BOWC	Board of Water Commissioners
CIP	Capital Improvement Plan/Program/Project
	(depending on context)
CS	Consultant Services
DLBA	Detroit Land Bank Authority
DPS	Detroit Public Schools Community District
	Detroit Edison
DWRF	Drinking Water Revolving Fund
	Detroit Water and Sewerage Department
	Department of Water Supply
	Fiscal Year
	Grandmont Rosedale Development Corporation
	Great Lakes Water Authority
	Green Stormwater Infrastructure
	Improvement and Extension
	Master Bond Ordinance
	National Pollutant Discharge Elimination System
	Pavement Surface Evaluation and Rating
	Planning and Development Department
	Public Works
	State Revolving Fund
	Upper Rouge Tunnel
WS	Water System



## I. OVERVIEW

# SECTION 1 DETROIT WATER AND SEWERAGE DEPARTMENT

Detroit Water and Sewerage Department (DWSD) is one of the largest water and sewer utilities in the United States, serving more than 330,000 accounts that includes a residential population of nearly 700,000. DWSD's water network consists of more than 2,700 miles of water main and nearly 3,000 miles of sewer collection piping. DWSD has a rich history as a public utility dating back to 1836. Today, DWSD focuses on serving the residents, businesses, non-profits, faith-based organizations and other account holders that rely on water and sewer services within the city of Detroit

On January 1, 2016, the City of Detroit began leasing regional water and sewer infrastructure, as well as water and wastewater treatment facilities, to the Great Lakes Water Authority (GLWA). The regional system, built by DWSD, serves 126 municipalities in seven southeast Michigan counties. The agreement between DWSD and GLWA includes a \$50 million annual lease payment for 40 years to replace and rehabilitate DWSD's aging water and sewer system. DWSD continues to retain ownership of the regional assets.

The governance structure of the Authority gives suburban water and sewer customers a substantial collaborative role in the direction of one of the largest water and wastewater utilities in the nation. While GLWA manages and operates all regional water and wastewater wholesale services, DWSD and the other customers retain control of the local water and sewer services within their respective borders. DWSD also acts as an agent of GLWA with respect to setting, billing, collecting and enforcing local retail charges.

#### 1.1. Governance and Board Members

The seven members of the Board of Water Commissioners (BOWC) are appointed by and serve at the pleasure of the Mayor of the City. In addition to the qualifications established in the December 15, 2015 Court Order, the City's Charter: (i) prohibits any member of the Board from being a City official or employee, or a principal or employee of a contractor of the City, (ii) requires that a member of the Board be a citizen of the United States and a resident of the State of Michigan, and (iii) requires no fewer than four members be residents of the City. The members of the Board serve four-year terms which are staggered so that not more than two members' terms expire each year.

Four committees have been established: (i) Customer Service, (ii) Human Resources, (iii) Finance, and (iv) Capital Improvement.

The BOWC currently consists of:

- Michael Einheuser, Chairman
- Mary E. Blackmon, Vice Chairperson
- Lane Coleman, Commissioner
- John Henry Davis, Commissioner
- Linda D. Forte, Commissioner
- Jane C. Garcia, Commissioner
- Jonathan C. Kinloch, Commissioner

#### 1.2. Management Team

To meet the needs of Detroit's residents and businesses, DWSD is led by a Management Team consisting of:

- Gary A. Brown, Director
- Palencia Mobley, P.E., Deputy Director and Chief Engineer
- Robert Presnell, Chief Operating Officer



- Thomas Naughton, Chief Financial Officer
- Dan Rainey, Chief Information Officer
- Debra Pospiech, General Counsel

#### 1.3. Service Area and Customer Relationships

The service area of DWSD is primarily the city of Detroit. This includes more than 235,000 customers in a 139-square mile area. However, DWSD does have approximately 200 suburban retail customers. Suburban retail customer are those who lie outside the incorporated limits of the city but are served by the DWSD's local water or sewer infrastructure. DWSD is committed to serving all of its customers, both residential and non-residential, with superior service.

#### SECTION 2 CAPITAL IMPROVEMENT PLAN

The DWSD Capital Improvement Program (CIP) annually compiles, evaluates and guide future capital investment in programs and projects that will upgrade the Department's aging water distribution and wastewater collection system infrastructure, facility improvement and upgrades, as well as the various vehicle and equipment procurements that supports both systems over a five year timeframe. The CIP ensures mandated projects and rehabilitation of assets necessary to meet permit, funding sources and other regulatory requirements. Based upon the execution of programs and projects identified in the CIP, existing levels of service currently provided will be met or exceeded.

This CIP should be considered a planning document – the CIP is a dynamic and evolving plan that requires continual review and adjustments as needs become more defined throughout the year. The estimates indicated in the early years of the report are likely more precise than those in the later years. All of which help plan capital construction cash flow needs. The project descriptions and summaries represent a brief synopses of the entire project scope; these descriptions are generally more precise for ongoing active

projects than for planned new projects, where specific project activities may have yet to be determined.

DWSD has developed a capital improvement program ("CIP") for the next five years that is within the range of \$75 to \$100 million, annually, to accelerate the pace of infrastructure renewal. In fact, the CIP is a major component of the City's larger capital investment strategy designed to:

- Renew and rehabilitate Detroit infrastructure and neighborhoods.
- Reconfigure systems to reflect demographic trends and emerging urban plans.
- Re-landscape the urban environment to embrace the "greening of Detroit".

A centerpiece of the CIP is the awarding of a CIP program management organization (CIPMO) with responsibility to coordinate and execute capital project planning and implementation across multiple agencies responsible for infrastructure and community development.

Parallel work is underway as DWSD continues to implement water, sewer and green infrastructure projects. DWSD will make investments in equipment, facilities, and technology to improve the level of service to its customers and maximize the life of its assets.

#### 2.1. Calendar

The following are some important dates regarding the DWSD 2020-2024 CIP.

Date	Description								
February 6, 2019	Board of Water Commissioners CIP Committee Meeting- Presented FY2020- 2024 CIP Preliminary Draft								



February 1, 2019	Submitted FY2020-2024 CIP Preliminary Draft to GLWA
March 20, 2019	Board of Water Commissioners Meeting- Approval of FY2020-2024 CIP
June 24, 2019	Submit BOWC Approved FY2020-2024 CIP to GLWA, and City of Detroit
July 1, 2019	Effective Date of FY 2020-2024 CIP

#### 2.2. Funded Portion of the Programs

The source of funding are revenue financing or Improvement & Extension (I&E), bond debt obligation, loan, and grant opportunities.

This plan spans a 5-year period from 2020 through 2024. The CIP is used as a cash flow prediction and serves as the basis for timing the need for bond proceeds or low-interest loans from the State Revolving Fund for drinking water systems. Some construction projects are currently funded from prior bond sales settled at bifurcation with GLWA. The sale of bonds and loan applications are authorized jointly by BOWC and GLWA boards. The Series 2018A Sewage Disposal System Revenue Bonds were issued on September 18, 2018, by the Great Lakes Water Authority on the Detroit Water and Sewerage Department's behalf, in the amount of \$91 million dollars. DWSD will continue to explore new and creative ways of seeking additional funding.

The CIP review process also includes an extensive review of the total project, or "lifetime" budget, which reflects historical spending prior to, during, and beyond the current 5-year period. The goal of the Department's capital financing strategy is to align capital project financing sources with multiple goals including: (1) recovering the costs of capital investment over the useful lives of the capital assets; (b) minimizing the impact of the capital programs on water and sewage revenue requirements; and (c) protecting and enhancing the Department's financial position. (d) minimize financial impacts

through orderly phased implementation. The potential funding source identified for each project is subject to change based upon the systems need and financial resources available at the time.

#### 2.3. Internal Development Process

The CIP development process begins late August of each year. The Finance Department's Asset Management Group sends out CIP request packages and instructions to the Executive Management Team requesting submission of projects and updates to existing projects. The packages are due back late September then compiled for further internal reviews and financial analysis. Watermain and sewer replacement priorities are based on break history. Once developed the CIP is introduced to the BOWC Committees for further review and final approval.

#### 2.4. Project Status Description

A status is assigned to each project within the CIP to show the high level progress from planning to completion. Some projects are divided into multiple phases or categories based upon the contract type. As such, each phase of a multiple phase project will have its own status and contract number. Descriptions of each particular status are provided in Table I-1.



Table I-1. Project Status Descriptions

<b>Project Status</b>	Description
New	Project that has never been included in a previous CIP.
Not Yet Started	Project that has been included in the previous CIP, has never had expenditures charged to it and does not have an assigned Oracle Fusion Project Number. Pre-development planning or preliminary engineering
Under Procurement	Project that has an assigned Oracle Fusion Project Number and has not been issued a Notice to Start Work. Detailed design developed
Active	Project that has an assigned Oracle Fusion Project Number in the financial system, a Notice to Start Work has been issued, had expenditures in the last fiscal year and has projected expenditures of more than \$100,000 in the current fiscal year. Construction is active or implementation started.
On-Hold	Project that has been suspended, may or may not have an assigned Oracle Fusion Project Number, experienced expenditures or no expenditures in the previous fiscal year(s), and/or has no projected expenditures in the current fiscal year or future fiscal years.
Pending Close-out	Project that has an assigned Oracle Fusion Project Number, a Notice to Start Work has been issued, has projected expenditures for the current fiscal year equal to \$100,000 or less - with no future projected expenditures and has reached substantial completion.

### 2.5. Project Categories

Some construction projects are broken up into several phases related to how the particular project will be delivered and managed. Categories may be grouped to align with work to be performed within each individual phase. Individual categories are identified and named below, however, in reality several categories may exist for each phase. In this case, this implies the same vendor, under one contract, will be performing multiple categories of the overall project. The current project categories are identified below.

S	Study
D	Design
C	Construction
CA	Construction Assistance
DB	Design and Build
DBA	Design Build Assistance
CM	Construction Management
MOU	Memorandum of Understanding Agreements
(coordination	on with other City of Detroit departments, utilities
or other go	vernmental agencies)
PO	Purchase Order



### 2.6 CIP Types

Multiple CIP types are necessary to distinguish the differences in intent of how a particular CIP is to be used. This CIP contains three primary CIP types; Project, Program and Allowance. A typical project that has a specific scope and timeframe is considered a Project. Whereas Programs and Allowances do not have specifically developed scopes and typically extend over many years. Allowances are necessary for utility operations due to the unanticipated nature of pipeline and equipment failures that require immediate repair and rehabilitation to continuously meet level of service requirements. Table I-2 CIP Types defines each CIP Type.

Table I-2. CIP Types

CIP Type	Description
Project	A "Project" consists of the replacement and/or rehabilitation of specific capital assets within a finite timeframe and scope.
Program	A "Program" consists of the replacement and/or rehabilitation of specific capital assets on an ongoing or recurring basis. The program scope and/or projected expenses may vary from year-to-year depending on the needs identified within the program and as newly established programs develop consistent schedules, requirements and history over time. Although not typically identified in the CIP futures years projected expenses, these programs will typically be funded in perpetuity.
Allowance	An "Allowance" consists of unanticipated replacement and/or rehabilitation of currently unidentified capital assets. Engineering studies, evaluations, testing, construction assistance directly related to the unforeseen replacement or rehabilitation are also included in the projected expenses.



# II. CAPITAL IMPROVEMENT PLAN

#### SECTION 1 APPROVAL PROCESS

The CIP development and approval process begins with the approval of the previous year's CIP. The CIP process is a substantial level of effort that involves many people throughout the Department. Modifications, adjustments and improvements are being continuously considered and vetted internally and externally, in coordination with other City of Detroit agencies, utilities, or other system customers. Projects and programs that ultimately get funded within the CIP are typically identified based upon master planning or condition/need assessment efforts. Projects also are identified internally based upon the needs of engineers, operations or maintenance staff. An internal effort to coordinate and prioritize all identified projects that come from these various sources into one location is currently underway to assist in ensuring the appropriate projects and programs are being funded in a prioritized manner.

The process typically begins in June of each year where project managers reviews project needs through the completion of the Project Proposal Memorandum. Project Proposals are due to the Chief Engineer by the end of August. At this time, the Chief Engineer will make requests to Finance to issue CIP numbers for each project that can be added as new projects to the CIP. Preparation of a draft of the CIP and back-up documentation is reviewed internally with Management, and other city agencies as required. DWSD's CIP is submitted to the City of Detroit, Office of the Chief Financial Officer in November for presentation to the Detroit City Council for the City's five year CIP.

The CIP is presented to the Board at its December meeting. An approval version of the CIP is presented to the Board at its January meeting. Upon approval by the Board, the DWSD CIP is submitted to the GLWA Chief Planning Officer and Manager of Capital Programs on February 1. If necessary an updated version will be adopted by the

Board at its February meeting, and a final CIP document will be submitted to GLWA on March 1. At this point, it is expected that the CIP approval process coincides with the overall budget development process.

#### SECTION 2 FINANCIAL PLAN INTRODUCTION

The Fiscal Year 2020-2024 CIP was approved by the Board in March 20, 2019. The following table details the planned expenditures and the projected funding sources for the Fiscal Year 2020-2024 CIP. Expenditures are focused on replacement, installation and/or abandonment of existing water mains, replacement of inoperable fire hydrants, rehabilitation of sewer systems, management of storm water with green infrastructure, upgrades to information technology systems, replacing aging equipment and vehicles, as well as rehabilitation of facilities that support the operation of the utility. The Department will finance its ongoing CIP with proceeds of existing bonds, future bond issues by the Authority or the Department, federal and state grants and loans and revenues of the Water Supply and Sewer System.

The DWSD CIP financing plan balances a number of objectives to support the Departments' mission to efficiently deliver the best retail water and sewer services in partnership with our customers through excellence in service and collaboration. Those objectives include the following.

- ✓ Working with a cross-functional team, identify and fund prioritized capital improvements to ensure a sustainable system.
- Recover the costs of capital investment over the useful lives of the capital assets.



- ✓ Minimize the financial impact of the capital programs on system customers.
- ✓ Protect and enhance the Departments' financial position.

The DWSD works with the Authority to draw upon four sources of revenue for its capital improvement plan.

- Bond Proceeds: The Authority uses an incremental method of funding long-lived capital projects through a bond financing program rather than funding all projects in advance. The Authority issues revenue bonds pursuant to Michigan Public Act 94 of 1933 (the Revenue Bond Act). The Act provides a pledge of "net revenues" for the payment of the bond principal and interest. "Net revenues" means the revenues of the system remaining after deducting the reasonable expenses of administration, operation, and maintenance of the system.
- 2. Revenue Financed Capital: Based upon ongoing expense, capital, and revenue optimization efforts, the DWSD is able to build reserves to fund pay-as-you go capital for shorter-lived and lower-dollar capital expenditures.
- 3. Federal Loan Programs: The Authority's sources of funding includes lower cost financing programs including the State Revolving Fund (SRF) Loan program and the Drinking Water Revolving Fund (DWRF) Loan program. The lease agreement with the City of Detroit provides for use of SRF and DWRF for the benefit of the City of Detroit Local System. While the Authority is responsible for the debt service on bonds issued to finance capital improvements to the DWSD Local Water and Sewer System, the annual principal and interest requirements are included in the revenue requirements assigned to the City of Detroit retail customer class.
- 4. **Grants:** The DWSD utilizes public grants programs such as those available from the Environmental Protection Agency,

Housing and Urban Development, as well as nonprofit organizations who fund programs in partnership with DWSD through the Detroit Economic Growth Corporation. DWSD will continue to pursue opportunities which meet the mission of the organization provide safe drinking water, reliable customer service and environmental integrity.

To ensure proper accountability of funding sources and uses, the Department utilizes two funds for its capital program for each system: the Construction Bond Fund and the Improvement & Extension (I&E) Fund.

- ✓ Construction Bond Fund: This fund represents the proceeds
  of bond issuances for the purposes of financing capital
  improvements.
- ✓ Improvement & Extension Fund: I&E fund is defined by the Water and Sewer Service Agreements as the "fund used for improvements, enlargements, extensions or betterment" of the System. Cash receipts of the Department are transferred into the I&E Fund pursuant to a flow of funds after commitments are met for a monthly allocation of System operations and maintenance expense, debt service, pension, water residential assistance program, budget stabilization fund, and extraordinary repair and replacement fund as administered by a trustee.

It should be noted that the basis of accounting for the CIP is the accrual basis. Under this basis of accounting, revenues are recognized when earned and measurable regardless of when collected; and expenses are recorded, or accrued, on a matching basis when incurred. Accrued expenses are expected to be paid in a subsequent accounting period. For purposes of this CIP, expenses and expenditures are used interchangeably.



## SECTION 3 SUMMARY CIP FINANCIAL PLAN REVIEW & Analysis

The FY 2020 – FY 2024 capital improvement plan provides for \$217 million of water system improvements and \$149 million of sewer system improvements over the five year planning cycle.

Table II-1. Water CIP Categories

## **Total estimated cost in millions**

Category	FY 2019 - Current Year	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	2019-2023 CIP Total
Water							
Water Field Services	\$ 59,346	\$ 52,219	\$ 41,984	\$ 15,238	\$ 14,000	\$ 8,000	\$ 131,442
Metering	7,283	12,000	12,000	4,000	4,000	4,000	\$ 36,000
General Purpose	7,234	6,695	4,140	2,795	-	-	\$ 13,631
Water Total	73,862	70,915	58,124	22,033	18,000	12,000	181,072
Water Central Services	•		•		•	•	
Fleet	2,237	2,432	2,000	2,000	2,000	2,000	\$ 10,432
Facilities	8,011	4,602	2,000	2,000	2,000	2,000	\$ 12,602
Information Technology	6,158	5,316	3,287	1,788	1,618	1,500	\$ 13,507
Water Central Services Total	16,406	12,350	7,287	5,788	5,618	5,500	36,541
Grand Total	90,269	83,264	65,411	27,821	23,618	17,500	217,613



Table II-2. Sewer CIP Categories

#### Total estimated cost in Millions

Total estimated cost in willions							
Category	FY 2019 - Current Year	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	2020-2024 CIP Total
Sewer							
Field Services	\$ 23,665	\$ 35,063	\$ 25,363	\$ -	\$ -	\$ -	\$ 60,426
Green Infrastructure	14,820	10,195	12,880	10,373	3,933	1,120	\$ 38,500
Pump Stations	-	-	-	ı	-	1	\$ -
General Purpose	7,234	6,695	4,140	2,795	-	-	\$ 13,631
Sewer Total	45,719	51,953	42,383	13,167	3,933	1,120	112,557
Sewer Central Services							
Fleet	2,237	2,432	2,000	2,000	2,000	2,000	\$ 10,432
Facilities	8,011	4,602	2,000	2,000	2,000	2,000	\$ 12,602
Information Technology	6,158	5,316	3,287	1,788	1,618	1,500	\$ 13,507
Sewer Central Services Total	16,406	12,350	7,287	5,788	5,618	5,500	36,541
Grand Total	62,125	64,303	49,670	18,955	9,550	6,620	149,098



Table II-3. Centralized Services Categories (also appear broken out in Water and Sewer tables)

# Total estimated cost (1000's)

Category	FY 2019 - Current Year	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	2020-2024 CIP Total	
Fleet								
Water	\$ 2,237	\$ 2,432	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 10,432	
Sewer	2,237	2,432	2,000	2,000	2,000	2,000	10,432	
Fleet Total	4,475	4,863	4,000	4,000	4,000	4,000	20,863	
Facilities								
Water	8,011	4,602	2,000	2,000	2,000	2,000	12,602	
Sewer	8,011	4,602	2,000	2,000	2,000	2,000	12,602	
Facilities Total	16,022	9,205	4,000	4,000	4,000	4,000	25,205	
Information Technology								
Water	6,158	5,316	3,287	1,788	1,618	1,500	13,507	
Sewer	6,158	5,316	3,287	1,788	1,618	1,500	13,507	
Information Technology Total	12,316	10,631	6,573	3,575	3,235	3,000	27,014	
Grand Total	32,812	24,699	14,573	11,575	11,235	11,000	73,082	



#### SECTION 4 THE PROJECT PROCESS

#### 4.1. Project Identification

Currently, projects to be considered for inclusion in each year of the CIP are identified by the subject matter expert engineers, project managers or operations manager. These engineers and managers utilize available institutional knowledge, data, operations and maintenance reports, need and condition assessments and master plans to identify the project need. Many come from projects that are already in the planning process or have been designed but not yet constructed. Others were recommended by staff or chosen based on work being planned by the public works or planning departments in the City of Detroit. Some are driven by regulatory requirements. Some originated from several sources.

#### 4.2. Project Proposals

DWSD has a CIP project proposal template which is used to provide the background/history for the project, proposed and alternative solutions, along with the budget and schedule for a project. The process by which projects are submitted and evaluated for inclusion in the CIP will be revamped under CS-1812 CIPMO. This is anticipated for the 2020-2024 CIP.

In addition, the CIPMO in conjunction with the Field Services PMO will develop an asset management program for DWSD to use to select and prioritize projects for inclusion in the CIP.

#### 4.3. Project Prioritization

In the 2020-2024 CIP, Water CIP projects are prioritized using three metrics: frequency of main breaks, occupancy of the area, and PASER rating of the overlying road.

Water mains that have had more than 5 breaks per 1,000 feet of pipe are evaluated for replacement. Those mains with higher numbers of recent breaks were prioritized higher. Areas with higher occupancy were prioritized over areas with lower occupancy. Areas with poor road condition were prioritized over areas with better overlying road condition. Also, mains are evaluated based on the investments of other city departments such as Public Works and Planning and Development.

In the past two years, DWSD has only been able to invest in emergency repairs to the sewer system. This year a new contract is was issued which will provide for inspection, and rehabilitation of sewers and manholes. This program will prioritize project areas based on the number of basement backup claims and complaints received for an area. Those areas with a higher number of complaints will be investigated and rehabilitated first.

With respect to green infrastructure, a variety of factors are used to determine the priority of a project. This includes, reports of street flooding, basement backup claims data, community engagement/neighborhood participation, and site location. As of this CIP, projects in the Upper Rouge Tunnel have a higher priority than those in other areas of the city.

Inherent in the prioritization process is the ability to leverage dollars in an efficient way. Thus, when and where possible projects may be worked into the capital construction programs of DPW, DTE, or other agencies such as Wayne County and the State of Michigan Department of Transportation.



## III. CAPITAL IMPROVEMENT PROJECTS

The DWSD CIP is organized by three categories: water system, sewer system, and centralized services. Projects in the water category are primarily for water main replacements, residential metering and the fire hydrant replacement program. Projects in the sewer category include rehabilitation of the sewer infrastructure and green infrastructure for storm water management. Centralized services are allowances that facilitate improvements that benefit the support of both the water and sewer business with the purchase of fleet and heavy equipment, rehabilitation and improvements to facilities, and information technology upgrades to facilitate operations and implementation of the capital programs. The following pages provide an overview of the projects types in each category and individual project descriptions for most of the projects in this CIP. Water

#### 1.1. Water Field Services

On the following pages, there are maps which denote the water main replacement projects in this year's CIP. DWSD has 5 active construction contracts, four of which will be completed before FY20 begins. These projects at their completion will result in the reconstruction of nearly 29 miles of water main. There are 8 projects in the procurement and design phases which at their completion will result in the reconstruction of 48 miles of water main.

DWSD uses a consultant engineering firm, Contract CS-1673, to design water mains. Based on previous project sizes, DWSD anticipates the new water main replacement contracts identified in to begin in FY20 and beyond to replace 20 miles of water main annually.

Contract CS-1812 as discussed previously, is accelerating the renewal rate of water main replacement. The pilot areas that are being evaluated by the CIPMO are shown on the also shown in the following pages. Page XX

#### 1.2. Customer Meter Replacement Program

DWSD replaces customer meters annually. There are more than 200,000 meters in the DWSD service area. Meters range in size from 5/8" to 10" in diameter. Meters are replaced for a variety of reasons, including failure due to age or other malfunctions. Meters generally have a life expectancy of 10 to 20 years, but this varies based on the volume of water that passes through the meter, which increases the wear and tear on the mechanical components. Thus decreasing the accuracy of the meter, which in turn becomes non-revenue water. It is in DWSD's interest to proactively schedule planned replacement of meters and associated equipment to ensure accurate billing for water consumed. This also improve the accuracy of sewer billings as well.

DWSD will also investigate new metering technologies in Contract CS-1812. Newer technologies have capabilities such as remote shut off which has the ability to reduce operations and maintenance cost associated with locating the curb stop to terminate service. This would ultimately reduce surface restoration costs, when a curb stop has to be excavated to complete the shut.

#### 1.3. Fire Hydrant Replacement Program

In FY17 DWSD began the implementation of a robust fire hydrant inspection, repair and replacement program in a partnership with the Detroit Fire Department (DFD). This program has resulted in DWSD replacing approximately 150 hydrants each year that are found inoperable from DFD conducting inspections. This program allowed DWSD to test the integration of the Geographic Information System (GIS) with the Work Asset Management (WAM) system and institute a paperless repair and replacement process. With this program, less than 3% of the 30,000 hydrants within the city are in need of repair. This program is also one component of the city's project to improve the city's Insurance Services Office (ISO) score fire protection





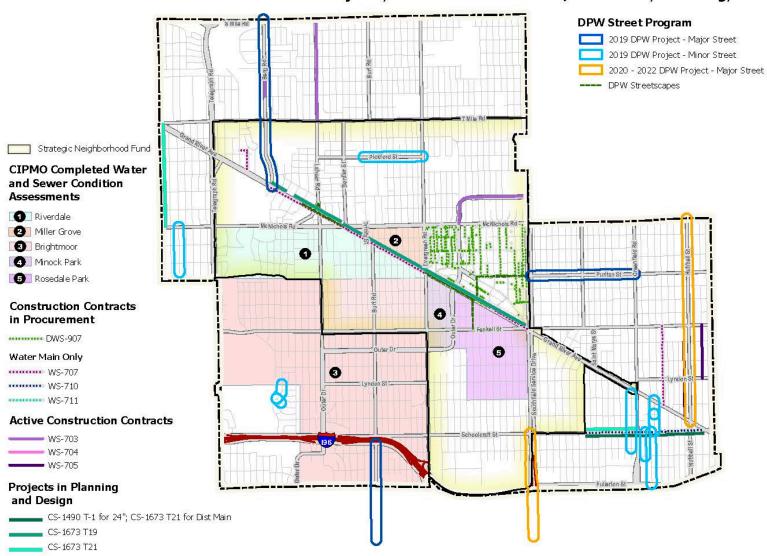


DWSD Field crews installing new fire hydrants

DRAFT 7/3/19 13 of 99

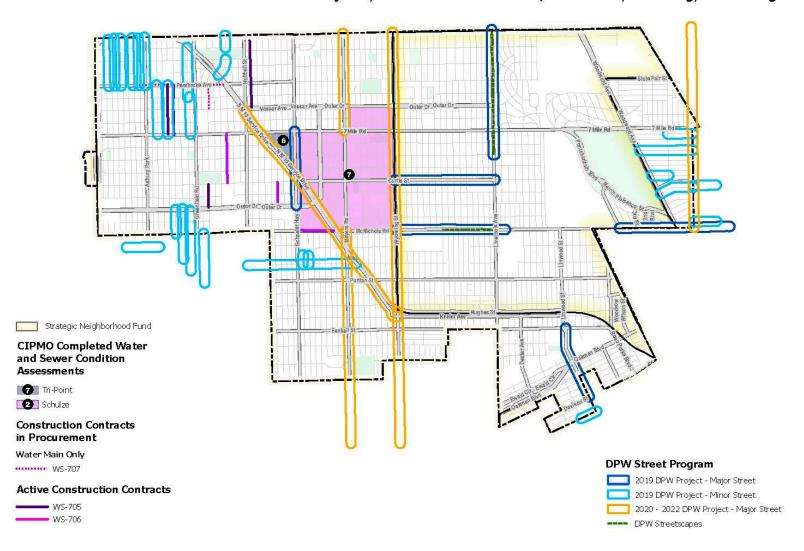


District 1 Active Projects, Condition Assessment/Evaluation, Planning, and Design



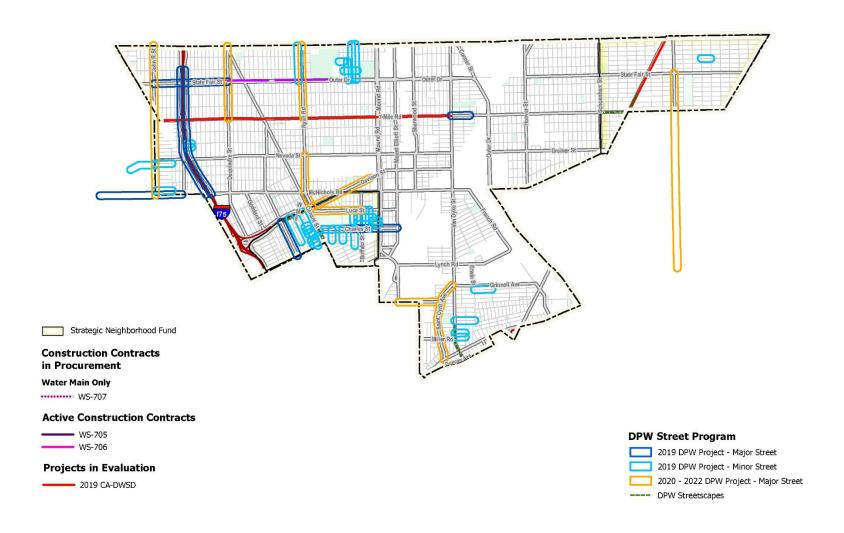


District 2 Active Projects, Condition Assessment/Evaluation, Planning, and Design



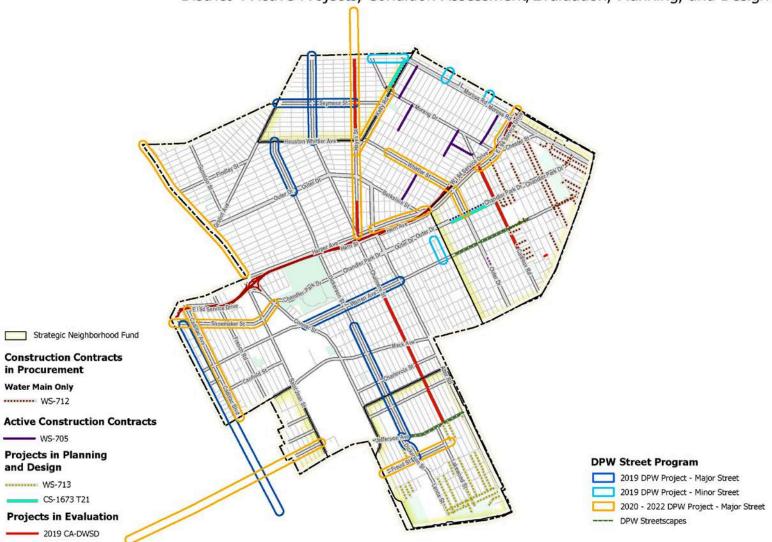


District 3 Active Projects, Condition Assessment/Evaluation, Planning, and Design

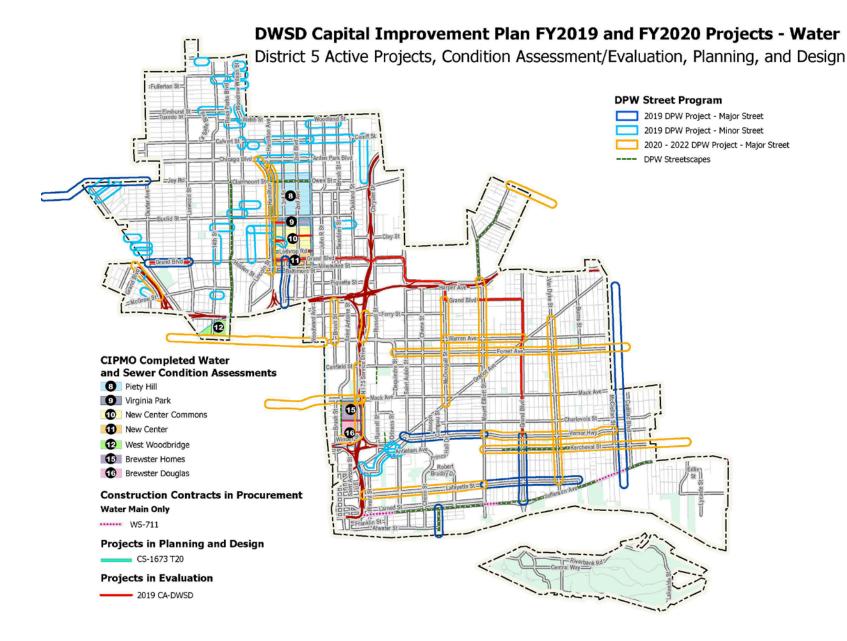




District 4 Active Projects, Condition Assessment/Evaluation, Planning, and Design







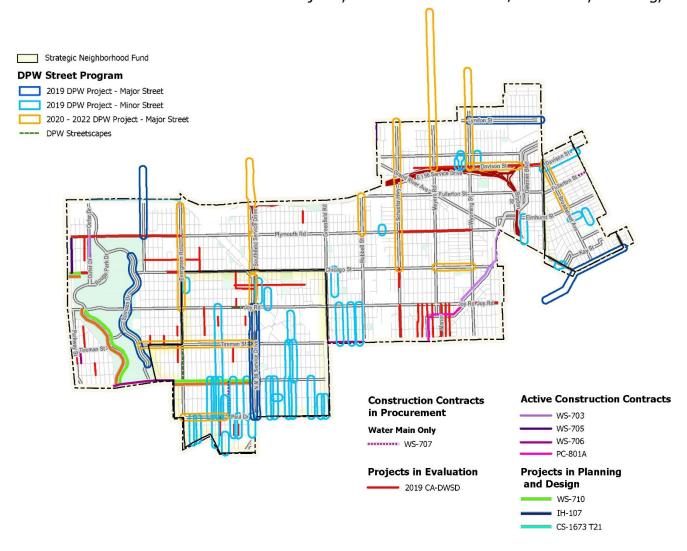


District 6 Active Projects, Condition Assessment/Evaluation, Planning, and Design





District 7 Active Projects, Condition Assessment/Evaluation, Planning, and Design



## Table III-1. Water CIP Projects

Total estimated cost (1000's)

#### Water Project List 2020-2024 CIP

CIP No.	Description	Status	Source of Funds	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2020-2024 CIP Total	Percent of CIP
463	WS-693A Joy Road Water Main Replacement Phase 2 (17,500LF)	С	(DWRF)	1,892	-	-	-	-	-	-	0.0%
463	WS-697 Water Main Replacement -Westside (19,136LF)	С	(DWRF)	10	-	-	-	-	-	-	0.0%
463	WS-698 Water Main Replacement -Westside (26,743LF)	С	(DWRF)	752	-	-	-	-	-	-	0.0%
1322	WS-703 Water Main Replacement (33,820 LF)	Α	I&E	6,350	1,000	-	-	-	-	1,000	0.5%
1322	WS-704 Water Main Replacement -along Outerdrive (20,500LF)	Α	Bond	4,801	548	-	-	-	-	548	0.3%
1322	WS-705 Water Main Replacement-2-sections Eastside and Westside (33,400LF)	Α	Bond	7,000	5,140	599	-	-	-	5,739	2.6%
1322	WS-706 Water Main Replacement Wayne Co. Roads (26,400)	Α	Bond	5,500	4,000	500	-	-	-	4,500	2.1%
1322	WS-707 Water Main Replacement- (20,000LF)	Р	(DWRF)	5,000	3,000	3,000	-	-	-	6,000	2.8%
1454	WS-709- Unplanned Lead Service Line Replacement	Α	Grant	-	-	-	-	-	-	-	0.0%
1322	(31,594LF)	N	(DWRF)	3,000	4,000	6,000	1,600	-	-	11,600	5.3%
1322	WS-711 Water Main Replacement- Incl Jefferson Streetscape(39,801LF)	N	Loan (DWRF)	-	3,000	6,000	5,200	-	-	14,200	6.5%
1349	WS-712 Water Main Replacement-Cornerstone Village (48,000LF)	N	I&E/Bond	1,345	9,287	10,000	538	-	-	19,825	9.1%
1349	WS-713 Water Main Replacement-Jefferson/Chalmers	N	I&E		-	-	5,000	5,000	-	10,000	4.6%
1322	WS-714 Water Main Replacement-MDOT Streetscape (25,100LF)	N	(DWRF)	-	3,500	3,500	-	-	-	7,000	3.2%
1349	WS-715 Pilot Areas-Riverdale, Minock, Miller & Rosedale	N	I&E		-	-	2,000	8,000	-	10,000	4.6%
1349	WS-716 High Priority Areas: Brewster Douglas, Viirginia Park, New Center Commons	N	I&E		-	-	-	1,000	8,000	9,000	4.1%
1349	DWS-907 Watermain & Sewer Rehab- North Rosedale Park	N	I&E/Bond		4,500	4,500	900	-	-	9,900	4.5%
463	MOU-4841 (PW-6974) Livernois to Ranspach Water Main Replacement (4,052LF)	С	I&E	-	-	-	-	-	-	-	0.0%
1449	WS-701 Repair of Water Mains	С	I&E	800	-	-	-	-	-	-	0.0%
1449	WS-702 Repair & Replacement of Water Mains	Α	I&E	8,000	3,889	-	-	-	-	3,889	1.8%
1449	WS-708 Repair of Water Mains	Α	I&E	2,400	2,400	-	-	-	-	2,400	1.1%
1449	DWS-902 Repair of Pavement (break repair)	Α	I&E	6,800	6,800	6,800	-	-	-	13,600	6.2%
1449	DWS-904 Repair of Lawns (break repair)	Α	I&E	765	765	765	-	-	-	1,530	0.7%
1449	Valve Exercising	-	I&E	2,000	-	-	-	-	-	-	0.0%
1449	Leak Detection	-	I&E	600	-	-	-	-	-	-	0.0%

<sup>\*\*</sup>C = Closed, A = Active, P = Procurement, N = New, H = On Hold

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## Table III 1. Water CIP Projects (Continued)

1308	CS-1673 Professional Engineering Services for Design of Water Main	А	I&E	888	-	-	-	-	-	-	0.0%
1349	CS-1909-Condition Assessments-High Priority Neighborhoods	N	I&E		390	320	-	-	-	710	0.3%
1349	CS-1812 Professional Engineering and Construction Services for CIPMO	А	I&E	7,234	6,695	4,140	2,795	-	-	13,631	6.3%
1349	CIPMO Pilot Program (N. Rosedale Park and Cornerstone Village)	-	I&E	943	-	-	-	-	-	-	0.0%
1349	Watermain Program Allowances	N	I&E	-	-	-	-	-	-	-	0.0%
1452	City Planning & Development Framework Allowance	N	I&E	500	-	-	-	-	-	-	0.0%
1304	Water Meter Replacement Program	Α	I&E	5,283	3,000	3,000	3,000	3,000	3,000	15,000	6.9%
1352	Fire Hydrant Replacement Program	Α	I&E	2,000	1,000	1,000	1,000	1,000	1,000	5,000	2.3%
1450	Itron Migration -MIU Replacement	N	I&E		8,000	8,000	-	-	-	16,000	7.4%
1328	Vehicle, Heavy Equipment, and Equipment Purchases	Α	I&E	2,237	2,432	2,000	2,000	2,000	2,000	10,432	4.8%
1262	Information Technology	Α	I&E	6,158	5,316	3,287	1,788	1,618	1,500	13,507	6.2%
1337	Facility Improvement Allowance	Α	I&E	8,011	4,602	2,000	2,000	2,000	2,000	12,602	5.8%
	TOTALS 90,269 83,264 65,411 27,821 23,618 17,500 217,613 100.0%										

<sup>\*\*</sup>C = Closed, A = Active, P = Procurement, N = New, H = On Hold

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#### SECTION 2 SEWER

#### 2.1. Sewer Field Services

DWSD has rehabilitated 15% of the 3,000 miles of sewer infrastructure through non-invasive method of lining. In two previous fiscal years, DWSD the rate of renewal of the sewer infrastructure decreased due to financial constraints. With the execution of the lease agreement with GLWA, DWSD is issuing a new contract valued at \$20 million annually to rehabilitate the sewer system. Tasks are selected for the contractor based on basement back up claims and complaint data, as well as reports of cave-ins and sinkholes. The contractor will inspect via physical or robotic means and provide photo or video evidence of the results. The contractor will also submit a report with recommendations for rehabilitation of the sewer and manholes. DWSD will review all results and reports and issue a notice to proceed with the work as approved by the project engineer.

#### 2.2. CSO Control

#### **Grey CSO Control**

GLWA operates all wet weather facilities and associated appurtenances which serve DWSD and other Authority customers. There are 6 retention treatment basins and 3 screening and disinfection facilities. Of these only one facility, the Belle Isle CSO, solely serves the City of Detroit. Any grey CSO control projects will be found in the GLWA CIP document. DWSD shared of the cost for projects is allocated in the annual charges assigned by GLWA to its customers. DWSD customers pay 83% of the cost for CSO facilities deemed to primarily serve the City of Detroit; with the exception of

the Belle Isle CSO facility of which the cost is borne 100% by Detroit ratepayers.

#### Green CSO Control

In 2008, DWSD was set to construct a tunnel to parallel the Rouge River to provide storage of combined sewage to eliminate untreated discharges. However due to financial constraints, the nearly \$1 billion tunnel project was replaced with a \$50 million GI program. The issuance of the March 2013 NPDES Permit resulted in a commitment by DWSD to implement green infrastructure in the Upper Rouge Tunnel area of Detroit. The permit requires a \$30 million investment by 2019 with the remaining \$20 million investment completed by 2029.

The permit also includes a goal to remove 2.8 million gallons of stormwater from the combined sewer system. To date, projects implemented by DWSD, designed to manage the 2-year, 24-hour event (i.e. 2.34" of rainfall), have removed about 1.5 million gallons of stormwater in the URT. City wide, removal of impervious cover via demolitions and construction of GI practices on private property in conjunction with DWSD projects is estimated to remove 3 billion gallons of stormwater from the system annually.

In previous years, the DWSD CS-1522 GI Program Manager has issued the construction contracts for projects; however, in an effort to meet the spending requirements of the permit, DWSD will bid and award the remaining projects. Descriptions of both active construction projects and those in the design phase which will be procured this fiscal year are provided on the pages that follow.



## 2.3. Pump Stations

There are four wastewater pump stations which service the City of Detroit only; (1) Belle Isle, (2) Bluehill, (3) Fischer, and (4) Woodmere. GLWA operates and maintains these pump stations via a shared service executed with DWSD. At this time, the need for capital investments in these facilities has not been identified. Upon receipt of the annual maintenance report from GLWA, DWSD will determine needs and program projects accordingly.



#### Total estimated cost (1000's)

#### Sewer Project List 2020-2024 CIP

CIP No.	Description	Status	Source of Funds	2019-20	2020-21	2021-22	2022-23	2022-24	2020-2024 CIP Total	Percent of CIP
448	DWS-900 Inspection and Rehab North Side (10,660LF)	С	I&E	-	-	-	-	-	-	0.0%
448	DWS-903 Inspection and Rehabilitation of Sewers City Wide	Α	I&E/ Bond	17,500	16,500	-	-	-	34,000	22.8%
1349	DWS-907 North Rosedale Park	N	I&E/ Bond	5,000	300	-	-	-	5,300	3.6%
1349	DWS-908 Cornerstone Village Sewer Rehab	N	I&E/ Bond	6,000	100	-	-	-	6,100	4.1%
1349	DWS-909 Sewer Condition assessments throughout City	N	I&E	3,000	4,400	-	-	-	7,400	5.0%
1349	DWS-910- Sewer Condition Assessments High Priority	N	I&E	2,000	2,500	-	-	-	4,500	3.0%
1452	Relocation of Sewer Syphon-West Parkway (MOU-DPW)	Р	I&E	228	228	-	-	-	456	0.3%
1349	Sewer Program Allowances	N	I&E	-	-	-	-	-	-	0.0%
1452	City Planning & Development Framework Allowance	N	I&E/ Bond	-	-	-	-	-	-	0.0%
1349	CS-1812 Professional Engineering and Construction Services for Capital Improvement Program Management Organization	А	I&E	6,695	4,140	2,795	-	-	13,631	9.1%
1449	DWS-902 Repair of Pavement (break repair)	Α	I&E	1,200	1,200	-	-	-	2,400	1.6%
1449	DWS-904 Repair of Lawns (break repair)	Α	I&E	135	135	-	-	-	270	0.2%
1353	S-1522 Green Infrastructure Program Management		I&E	700	50	-	-	-	750	0.5%
1353	Stoepel Park No. 1	Α	I&E	10	-	-	-	-	10	0.0%
1353	PC-799 Crowell Rec Center and EcoSite Modifications	Α	I&E	10	10	10	-	-	30	0.0%
1353	Tireman Phase II Bioswale	Р	I&E	10	10	-	-	-	20	0.0%
1353	West Warren (Constance at Rouge Park/Tireman Sawyer PH III)	N	I&E	750	6,400	4,830	10	10	12,000	8.0%
1353	PC-801A Oakman Blvd	Р	I&E	4,000	1,980	10	10	-	6,000	4.0%
1353	Liuzzo Park	N	I&E	10	-	-	-	-	10	0.0%
1353	PC-800 O'Shea Park	Р	I&E	10	10	10	-	-	30	0.0%
1353	PC-802 Joy Rd. Drainage Improvements	Р	I&E	-	-	-	-	-	-	0.0%
1353	Minock Park	N	I&E	-	1,500	3,000	1,400	100	6,000	4.0%
1353	Charles H. Wright Academy	N	I&E	2,000	400	10	10	10	2,430	1.6%
1353	Charles H. Wright Academy Expanded Area	N	I&E		-	-	-	-	-	0.0%
1353	North Rosedale (Edinborough) (CIPMO)	N	I&E	20	20	3	3	-	45	0.0%
1353	Capital Partnership Program-St. Paul Tabernacle	Р	I&E	175	-	-		-	175	0.1%
1353	CS-1884 Green Infrastructure Program Management	Р	I&E	2,500	2,500	2,500	2,500	1,000	11,000	7.4%
1328	Vehicle, Heavy Equipment, and Equipment Purchases	N	I&E	2,432	2,000	2,000	2,000	2,000	10,432	7.0%
1262	Information Technology	N	I&E	5,316	3,287	1,788	1,618	1,500	13,507	9.1%
1337	Facility Improvement Allowance	N	I&E	4,602	2,000	2,000	2,000	2,000	12,602	8.5%
			TOTALS	64,303	49,670	18,955	9,550	6,620	149,098	100.0%

<sup>\*</sup>BC = Being Closed, C = Closed, A = Active, P = Procurement, N = New, H = On Hold



## SECTION 3 CENTRAL SERVICES

#### Total estimated cost (1000's)

Total estilliated cost (1000 s)								
	FY 2019 -						2020-2024 CIP	
Category	Current Year	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total	
Fleet								
Water	\$ 2,237	\$ 2,432	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 10,432	
Sewer	2,237	2,432	2,000	2,000	2,000	2,000	10,432	
Fleet Total	4,475	4,863	4,000	4,000	4,000	4,000	20,863	
Facilities								
Water	8,011	4,602	2,000	2,000	2,000	2,000	12,602	
Sewer	8,011	4,602	2,000	2,000	2,000	2,000	12,602	
Facilities Total	16,022	9,205	4,000	4,000	4,000	4,000	25,205	
Information Technology								
Water	6,158	5,316	3,287	1,788	1,618	1,500	13,507	
Sewer	6,158	5,316	3,287	1,788	1,618	1,500	13,507	
Information Technology Total	12,316	10,631	6,573	3,575	3,235	3,000	27,014	
Grand Total	32,812	24,699	14,573	11,575	11,235	11,000	73,082	

Table III-2. Centralized Services Projects



## 3.1 Information Technology

The Chief Information Officer has identified the need for a variety of projects related primarily to the bifurcation of DWSD and GLWA over the next five years. Additional projects may be added based on the development of an asset management program and new construction management program that may use software not in use by DWSD today. These needs will be identified in the CS-1812 CIPMO work. Expenditures for information technology are allocated equally to the water and sewer systems.

Information Technology									
Descriptions	Туре		2019-20						
Security									
Access Control	Software	Addition	100,000						
Camera Replacements	Hardware/Equipment	Addition	100,000						
Video Security System Upgrades	Software	Addition	150,000						
	Customer Service								
City Insights Portal Phase II	Software	Software Maintenance	150,000						
EnQuesta Upgrade	Software	Software Maintenance	1,200,000						
Selectron IVR	Software	Other IT Implementation	180,000						
	Administrative								
Records Management Services	Software	New Software Implementatio	571,200						
	Operations								
Collaboration Software for Drainage &									
Records Management	Software	New Software Implementatio	250,000						
GPS for vehicles	Hardware/Equipment	New Hardware/Equipment In	210,000						
Misc. Equipment for AssetWorks	Hardware/Equipment	New Hardware/Equipment In	100,000						
Itron Replacement (staffing support)	Other IT Implementation	CIP IT STAFFING	1,000,000						
	Information Technology	1							
Desktops	Hardware/Equipment	Hardware	375,000						
Laptop Charging Stations	Hardware/Equipment	Hardware	25,000						
Laptops	Hardware/Equipment	Hardware	216,000						
Rugged Tablets/Laptops	Hardware/Equipment	Hardware	100,000						
Tablets	Hardware/Equipment	Hardware	154,000						
Vehicle Mounts	Hardware/Equipment	Hardware/Equipment	60,000						
Oracle Database Licenses	Software	Software	1,750,000						
Oracle DC Migration	Hardware/Equipment	New Other IT Implementation	500,000						
ITIL Based Service Desk w/City of Detroit	Software	New Software Implementatio	200,000						
Low Voltage Wiring DWS-885	Hardware/Equipment	New Hardware/Equipment In	500,000						
Network Infrastructure - CoD MERGER	Software	New Hardware/Equipment In	200,000						
Network Infrastructure-REPLACEMENT	Software	New Hardware/Equipment In	50,000						
Phone System Migration to Avaya	Hardware/Equipment	New Hardware/Equipment In	500,000						
Copiers/Printers	Hardware/Equipment	Hardware	-						
Printers	Hardware/Equipment	Hardware	510,000						
Radios	Hardware/Equipment	Hardware	230,000						
Executive Dashboard	Software	New Software Implementatio	300,000						
Cityworks/AssetWorks/Records Implement	nt Other IT Implementation	•	950,000						
Total	•	·							



#### 3.2 Fleet and Heavy Equipment

To improve the level of service for its customers, DWSD is required to continually update its fleet and heavy equipment. DWSD is evaluating the cost/benefit of leasing or purchasing rolling stock in a variety of categories. In addition, work completed by the Field Services Program Manager

Vehicle, H	eavy Equip	ment, and	l Equi	oment	
Descriptions	Туре	Addition/ Replacement	QTY	Unit Cost	2019-20
Revenue Recovery					
Assigned Vehicles	Vehicle	Addition	3	25,000	75,000
Passenger Vehicles	Van	addition	1	45,000	45,000
Meter Operations					
Utility Truck	Heavy Equipment	Replacement	2	130,000	260,000
Compact Excavator	Heavy Equipment	Addition	1	48,000	48,000
Drop Deck Trailer for Excavator	Heavy Equipment	Addition	1	20,000	20,000
Mini Hydro excavator	Heavy Equipment	Addition	1	70,000	70,000
Trailer for hydro-excavator	Heavy Equipment	Addition	1	16,000	16,000
Compressors	Equipment	Addition	1	25,000	25,000
Large Meter Test Bench	Equipment	Replacement	1	560,000	560,000
Backfill Tamper	Equipment	New	4	2,100	8,400
Air Digger	Equipment	New	6	1,800	10,800
<b>Field Services Operations</b>					
Camera Truck-CCTV	Specialty Truck	Addition	1	245,000	245,000
Brick Trucks	Specialty Truck	Replacement	2	175,000	350,000
F150	Truck	Replacement	5	45,000	225,000
14-Yard Dump Truck	Specialty Truck	Addition	1	220,000	220,000
5-Yard Dump Truck	Specialty Truck	Replacement	1	180,000	180,000
Boom Truck	Specialty Truck	Replacement	1	338,000	338,000
Fleet Operations					
Executive SUV	Vehicle	Replacement	1	32,000	32,000
Pool Vehicles	Vehicle	Replacement	15	35,000	525,000
F-350 Super Duty	Truck	Addition	2	45,000	90,000
F-450 Super Duty	Truck	Addition	1	115,000	115,000
Full Size Transit	Van	Replacement	2	40,000	80,000
Passenger Vehicles	Vehicle	Replacement	8	25,000	200,000
Heavy Equipment	Specialty Truck	Addition	5	225,000	1,125,000
Total				<u> </u>	\$ 4,863,200

under Contract No. 51130 may identify other types of equipment not currently used by DWSD that will be necessary to improve customer service. Expenditures for fleet and heavy equipment are allocated based on their use.



#### 3.3 Facilities

DWSD is responsible for operating and maintaining five facilities: (1) Central Services Facility, (2) Eastside Customer Service Center, (3) Westside Customer Service Center, (4) West Yard, and the (5) Water Board Building. All of these facilities are in need in of major capital improvements which range from elevator upgrades, roof replacement, or perimeter security enhancements. DWSD is in the process of executing an agreement with the Detroit Building Authority to develop the scope of work and execute the implementation of these improvements. In this approach, all facilities will be evaluated a list of projects with priority identified for programming in the CIP.

Facility Improvements									
Descriptions	Туре	QTY	Unit Cost	FY2019-2020					
Roofing									
CSF/West/MOB	Roof replacement	1	\$ 214,700	214,700					
Heating Units									
CSF	HVAC Units	10	150,000	1,500,000					
Garage Door Replacement									
CSF	CSF/West yard	10	25,000	250,000					
Furniture									
Northwest Activity Center	Furniture - Customer Service Cent	1	100,000	100,000					
Southwest Customer Service Center	Furniture	1	100,000	100,000					
Training Room Table & Chairs	CSF - 1st Fl & Garage	1	50,000	50,000					
Meter Shop	CSF	1	200,000	200,000					
Interior Improvements									
CSF - Meter Shop Build Out	Interior Space Improvements	1	300,000	300,000					
CSF - Yards - Build Out	Interior Space Improvements/Rea	5	200,000	1,000,000					
CSF - Exterior Signage	Exterior Signage	1	50,000	50,000					
Painting/Carpet	Improvements	1	15,000	15,000					
Elevators	Rehabilitation - MOB	1	1,000,000	1,000,000					
Flooring	Interior West Yard	10	100,000	1,000,000					
Flooring	Exterior West Yard	1	375,000	375,000					
1st Fl. Improvements	MOB	1	250,000	250,000					
Parking Lot Improvements									
Repavement	Customer Service-East & West	2	25,000	50,000					
LED Lights	West Yard/ East & West Payment	1	250,000	250,000					
Total				\$ 6,704,700					

Salt dome roof replacement

Exterior lighting replacement in employee parking at CSF

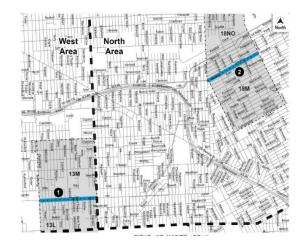
# WS-693A Joy Road Water Main Replacement Phase 2 (22,901 LF at completion)

Status: Closed

Significance: Replacement of old water mains

Location: Joy Road, Greenfield to Schaefer; Davison Avenue (M-8) Livernois to Lyndon

**Scope of Work:** This water main replacement contract is one of a continuing series of contracts that replace the old water mains in the City of Detroit having an extensive history of leaks and breaks. Contract No. WS-693A provides the Detroit Water and Sewerage Department (DWSD) with the ability to continue its program of replacing aged water mains. The new water mains and associated infrastructure improvements will



ensure quality service to its customers, reduce field maintenance and repair activities, and enhance the integrity of the DWSD Water System. This contract replaced existing 6-inch, 8-inch, 12-inch, 16-inch, and 24-inch water mains that had a history of leaks and breaks with approximately 15,961 linear feet of 8-inch, 1,691 linear feet of 12-inch, 200 linear feet of 16-inch Ductile Iron Water Main and 5,249 linear feet of 24-inch water main. All new water main is ductile iron enveloped in 8-mil Polyethylene wrap and the installation work is inclusive of all fittings, water main appurtenances, hydrants, and all related structures. The work also includes a jack and bore placement of the 24-inch water main at a railroad crossing at Joy Road west of Schaefer. The work is to be completed 730 calendar days after the Start Work Date.

The 24-inch watermain was funded by GLWA jointly from State Revolving Funds from MDEQ in the amount of \$3,390,974

#### **Project Cost**

System	Status	Туре	Start Date	Finish Date	Total Paid to Date
Water	Closed	С	9/6/2016	9/5/2018	\$ 8,940,891

# WS-697 Water Main Replacement – Westside (19,184LF at completion)

Status: Closed

Significance: Ongoing distribution piping system water main replacement

program

**Location:** Various

**Scope of Work:** DWSD Contract No. WS-697 is part of an ongoing distribution piping system water main replacement program. The work consisted of replacing eight inch and twelve inch diameter water mains in Detroit residential neighborhoods that have a history of frequent breaks and high maintenance cost. This contract furnished and installed 19,048 linear feet of 8-inch and 136 linear feet of 12-inch Ductile Iron Pipe and fittings.



The Contractor also furnished and installed 8-inch and 12-inch, Gate Valves, place 8-mil Polyethylene wrap around the new water main, and furnish/construct/install all water main appurtenances, connections and related structures.

Challenges: DWSD replaced 2,698 linear feet of lease service lines on the public side.

#### **Project Cost**

9	System	Status	Туре	Start Date	Finish Date	Total Paid to Date
V	Vater	Closed	С	8/1/2016	11/29/2018	\$ 4,184,635

# WS-698 Water Main Replacement – Westside (28,443LF at completion)

Status: Closed

**Significance:** To furnish and install ductile iron pipe and fittings.

**Location:** Various

Scope of Work: This contract replaced 23,434 linear feet of 8-inch and

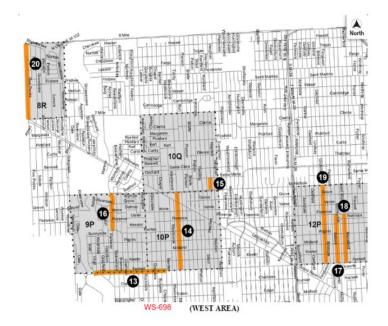
5,009 linear feet of 16-inch Ductile Iron Pipe and fittings.

Challenges: DWSD incorporated a total of 35 lead service line

replacements out of 63 initially estimated.

#### **Project Cost**

System	Status	Туре	Start Date	Finish Date	Tota	l Paid to Date
Water	Closed	С	6/26/2017	12/18/2018	\$	7,750,796



# **WS-703 Water Main Replacement**

Status: Active

**Significance:** Water main replacement

**Location:** Various

Preliminary Scope of Work: Water main replacement at various locations in Detroit's west side. The work includes Oakman Blvd from Grand River to West Chicago, a length of residential water main adjacent to the St. John Hospital at McNichols and Schaefer, water main along Outer Drive from Grandville eastward through Southfield Freeway, Greenfield, and ending at Schaefer (Wayne County jurisdiction), Lahser from Seven Mile to Eight mile (Wayne County jurisdiction), and the water main along Outer Drive South of Plymouth adjacent to Rouge Park (Wayne County jurisdiction). Duration: 730 Calendar Days.

#### **Project Cost Estimates**

					Total Estimated Cost	Projected Expenditures by Fiscal Year						
System	Status	Туре	Start Date	Finish Date		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
Water	Active	С	8/28/2017	8/18/2019	\$9,350,000	\$6,350,000	\$1,000,000					

# WS-704 Water Main Replacement – along Outerdrive

**Status:** Active

**Significance:** Water main replacement along Outer Drive

**Location:** Outer Drive W, Vassar to Livernois

**Preliminary Scope of Work:** Water main replacement along Outer Drive (Wayne County jurisdiction) from Vassar (north of Seven Mile and east of Schaefer) eastbound through Wyoming and ending at Livernois. Twenty thousand feet of mostly eight inch water main (and 500 hundred feet of twelve inch water main) replaced along both sides of Outer Drive. Duration: 730 Calendar Days.

#### **Project Cost Estimates**

					Total Estimated Cost	Projected Expenditures by Fiscal Year						
System	Status	Туре	Start Date	Finish Date		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
Water	Active	С	2/5/2018	2/5/2020	\$5,948,000	\$4,801,000	\$548,000					

# WS-705 Water Main Replacement – Eastside and Westside, Select Locations

Status: Active

Significance: Water main replacement at various locations in Detroit's East and West side.

**Location:** Multiple

**Preliminary Scope of Work:** Residential water main replacement at various locations in Detroit's east and west sides. On the west side, water main replacement work is targeted for multiple streets in the Hubbell-Lyndon Neighborhood and Whitcomb from the Winship neighborhood. On the east side, replacement water main will be installed at various location in the Outer Drive-Hayes neighborhood and also in Yorkshire Woods, Denby, and Moross-Morang. Duration: 730 Calendar Days.

					Total		Projected E	xpenditure	es by Fisca	al Year	
System	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	Active	С	8/13/2018	8/12/2020	\$9,180,000	\$7,000,000	\$5,140,000	\$599,000			

# WS-706 Water Main Replacement Wayne Co. Roads

Status: New

Significance: Replace existing water main along roadway within Detroit.

**Location:** Various

**Preliminary Scope of Work:** Replacement of existing water main along mostly Wayne County roadway within Detroit and a few Detroit residential streets. The Wayne County streets are Tireman from Greenfield to Lodge (piping along the Detroit side of the Detroit/Dearborn municipal line), Warren Avenue from Parkland to Heyden (west side), Outer Drive from Dequindre to Mound (east side), and McNichols from Lodge to Schaefer (west side). The residential streets are a reach of Beaverland (north of Warren and west of Rouge Park), Stansbury (north of Outer Drive, west of Lodge), and Robson (south of Seven Mile and East of Greenfield). The overall work is replacement of 26,400 LF of mostly eight-inch and some twelve and sixteen inch water main. Duration: 730 Calendar Days.

					Total		Pro	jected Exper	nditures by	Fiscal Yea	ar
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	С	11/5/2018	11/4/2020	\$10,000,000	\$5,500,000	\$4,000,000	\$500,000			

# WS-707 Water Main Replacement – Select Streets Across Detroit

Status: New

**Significance:** Water main replacement in the MDOT jurisdiction

**Location:** Various

**Preliminary Scope of Work:** Work includes Outer Drive north of Mack (Wayne County jurisdiction, east side), a residential street in Warrendale, four locations in northwest Detroit, and a pair of streets in central Detroit. Up to 20,000 LF of mostly eight-inch DI water main including two lengths of twelve inch DI main are replacing the existing pipe. Duration: 730 Calendar Days.

					Total		Projecte	d Expenditu	res by Fiscal	Year	
System	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	С	4/1/19	3/31/21	\$15,982,000	\$5,000,000	\$3,000,000	\$3,000,000			

# **WS-709 Water Main Replacement**

Status: New

**Significance:** DWSD replaced full lead service lines through this Pilot Drinking Water Community Water Supply Grant funded by the State of Michigan, Michigan Department of Environmental Quality.

**Location:** Multiple

**Driver:** \$1,000,000 of this project was funded by a pilot grant from the State of Michigan. DWSD is replaced lead service lines it has encountered during previous maintenance work near residential properties. This unplanned program allows DWSD the funds to return to the properties to replace the lead service lines, with property owner/occupant approval, which is the pipe from the water main to the meter inside the house.

**Challenges:** DWSD owns and maintains service lines starting at the water main up to the customer's property boundary, most often at the curb stop or stop box. The property owner is responsible for the service lines from their property boundary to their home. If a resident is unreachable after three attempts, DWSD and its contractor will likely not replace the lead service line.

## **Project Cost**

System	Status	Туре	Start Date	Finish Date	Total Cost
Water	New	С	10/10/2018	1/15/2019	1,178,000

# **WS-710 Water Main Replacement**

Status: New

Significance:

Location: Schoolcraft, Five Points, West Chicago, Warren, Kelley and Chandler Park Drive

**Driver:** Due to the age of these pipes, water main breaks are a constant occurrence and they constitute a drain on the DWSD resources necessary to address these breaks, often times during inclement weather conditions. Water main breaks can also increase the potential public health risk from cross-connection contamination (bacteriological and/or chemical) resulting from reduced pressure or depressurized water mains during the repair.

**Preliminary Scope of Work:** Replacement and relining of 31,594 LF of 8" watermain along Schoolcraft, Five Points, West Chicago, Warren, Chandler Park, and Kelley. Includes lead service line replacements.

Challenges: In Design

					Total		Project	ed Expendit	ures by Fisca	l Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	D			\$11,600,000		\$4,000,000	\$6,000,000	\$1,600,000		

# **WS-711 Water Main Replacement**

Status: New

Significance

Location:

**Driver:** Due to the age of these pipes, water main breaks are a constant occurrence and they constitute a drain on the DWSD resources necessary to address these breaks, often times during inclement weather conditions. Water main breaks can also increase the potential public health risk from cross-connection contamination (bacteriological and/or chemical) resulting from reduced pressure or depressurized water mains during the repair.

**Preliminary Scope of Work:** Replacement and relining of 39,630 LF of 8" to 16" watermain at various locations on E.Jefferson, Greenfield Road, Greenview, West Parkway, and the Northbound Southfield Service Drive including lead service line replacements.

Challenges: In Design

					Total		Project	ed Expendit	ures by Fisca	l Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	D			\$14,200,000		\$3,000,000	\$6,000,000	\$5,200,000		

# WS-712 Cornerstone Village Water (46,000 LF)

Status:New

Significance: In-place rehabilitation/repair of existing watermains and associated assets

**Locations:** Cornerstone Village

Driver: Renew and rehabilitate Detroit infrastructure and neighborhoods based on CIPMO pilot study project

**Preliminary Scope of Work:** Replacement or lining of approximately 46,000 linear feet of existing six, eight, twelve and sixteen-inch water main including gate valves, hydrants and replacement approximately 605 lead service lines. The project has an expected duration of 442 calendar days.

Challenges: Minimizing disruption to neighborhoods

					Total		Projected Ex	penditures by I	Fiscal Year		
System	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	С			\$21,525,000	\$1,345,000	\$9,287,0000	\$10,000,000	\$538,000		

# **WS-713 Water Main Replacement - Jefferson Chalmers**

Status:New

**Significance:** Water main within Jefferson Chalmers

Locations:

**Driver:** 

**Preliminary Scope of Work:** Replacement or lining of approximately existing water main including gate valves, hydrants and replacement lead service lines. 121,000 LF of watermain was recently assessed. The project is in design with an estimated 35,000 LF to be rehabilitated.

## **Challenges:**

					Total		Pr	ojected Exper	nditures by Fis	cal Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	D			\$10,000,000				\$5,000,000	\$5,000,000	

# WS-714 Water Main Replacement - MDOT - Michigan Dept of Transportation (Grand River streetscape)

Status: New

**Significance:** Water main work along Grand River Avenue that is part of the MDOT streetscape work.

Locations: Grand River between Fenkell Ave to Lahser

**Preliminary Scope of Work:** A total of 25,100 LF of eight thru sixteen inch DIWM is replacing existing six through sixteen inch water main along both sides of Grand River from Fenkell Avenue to Marene Street just west of Lahser. The streetscape project is targeted to start no earlier than July 1, 2019.

Challenges: This project is coordinated with MDOT in conjunction with their streetcape project along Grand River.

					Total		Pro	jected Expend	itures by Fisca	al Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	D			\$7,000,000		\$3,500,000	\$3,500,000			

# WS-715 Watermain replacements West Side Neighborhoods - Riverdale, Minock Park, Miller Grove and Rosedale

Status:New

Significance:

Locations: Various locations within Riverdale, Minock Park, Miller Grove and Rosedale

**Driver:** 

**Preliminary Scope of Work:** Replacement or lining of approximately existing water main including gate valves, hydrants and replacement lead service lines. 591,000 LF of watermain are in condition assessment with an estimated 148,000 LF to be rehabilitated.

# **Challenges:**

					Total		Pr	ojected Exper	nditures by Fis	cal Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	D			\$10,000,000				\$2,000,000	\$8,000,000	

# WS-716 Watermain replacements High Priority Areas – Brewster Douglas, Virginia Park, New Center Commons

Status:New

Significance:

Locations: Various Locations within Brewster Douglas, Virginia Park and New Center Commons

**Driver:** 

**Preliminary Scope of Work:** Replacement or lining of approximately existing water main including gate valves, hydrants and replacement lead service lines. 57,000 LF of watermain are in condition assessment with an estimated 14,000 LF to be rehabilitated.

## **Challenges:**

					Total		Pr	ojected Exper	nditures by Fis	cal Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	D	4/1/20	11/23/21	\$9,000,000					\$1,000,000	\$8,000,000

# MOU-4841 (PW-6974) Livernois to Ranspach Water

Status: Closed

**Significance:** Inspection and in-place rehabilitation/repair of existing sewers.

**Location:** On Livernois along Ranspach

**Driver:** 

**Preliminary Scope of Work:** Inspection and in-place rehabilitation/repair of existing sewers, located in DWSD's west maintenance yard, by the open cut method and CIPP method using the construction process, procedures, methods and equipment of the trenchless pipeline rehabilitation techniques. Work to be performed on an as-needed basis.

**Challenges:** This project was coordinated with City of Detroit Department of Public Works in conjunction with planned resurfacing work.

## **Project Cost**

System	Status	Туре	Start Date	Finish Date	Tot	al Paid to Date
Water	Closed	С	5/1/2016	10/31/2017	\$	808,109

# **WS-701** Repair of Water Mains

Status: Closed

Significance:

**Location:** Various

**Driver:** During certain periods of the year, the DWSD experiences a significant increase in the number of water main breaks and leaks. This contract will assist the DWSD maintenance forces in repairs.

**Preliminary Scope of Work:** Includes requesting the location of other utilities through MISS DIG program, locating break or leak; removing mains from service including operating required valves, bracing, sheeting and dewatering each excavation as required.

**Challenges:** Carefully exposing the failed sections of watermain.

System	Status	Туре	Start Date	Finish Date	Total Paid to Date
Water	Closed	С	4/3/2017	9/25/2018	\$ 4,721,067

# WS-702 Repair & Replacement of Water Mains

**Status:** Active

**Significance:** This is a hybrid contract with both repair and replacement work. The repair work is intended for emergency watermain replacement without construction drawings.

**Location:** Various

**Driver:** During certain periods of the year, the DWSD experiences a significant increase in the number of water main breaks and leaks. This contract will supplement the DWSD maintenance forces in repair and replacements.

Preliminary Scope of Work: to provide for the repair and replacement of such various sized distribution water mains as needed

**Challenges:** Carefully exposing the failed sections of watermain.

					Total		Projected	Expenditur	es by Fisca	l Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	Active	С	2/1/2018	7/25/2019	\$11,889,000	\$8,000,000	\$3,889,000				

# **DWS-902 Repair of Pavement (break repair)**

Status: New

**Significance:** To repair pavement, sidewalks, driveways, and curb cuts in various streets throughout the City of Detroit.

**Location:** Various

**Driver:** Work is done as a resulting of DWSD emergency maintenance and repair work.

**Preliminary Scope of Work:** The work consist of trimming, removing, and replacing concrete sidewalks, driveways, and curbs. The object of the proposed contract consists of but is not limited to the removal of approximately 202,500 square yards of pavement cuts or patches; the replacement of 42,000 square yards of concrete, and 150,000 square yards of high early strength no slump concrete base. The removal and replacement of 360,000 square feet of sidewalk; 120,000 square feet of driveway, and 50,000 linear curb at various locations throughout the City of Detroit.

# **Challenges:**

					Total		Projecte	ed Expenditur	es by Fiscal Ye	ar	
System	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	С	8/8/2017	8/7/2020	\$24,000,000	\$6,800,000	\$6,800,000	\$6,800,000			
Sewer	New	С	8/8/17	8/7/2020	\$3,600,000	\$1,200,000	\$1,200,000	\$1,200,000			

# **DWS-904 Repair of Lawns (break repair)**

Status: New

**Significance:** To repair lawns, berms, and trees damaged due to maintenance of water system and green stormwater infrastructures vegetation management and irrigation services.

**Location:** Various

**Driver:** Work is done as a resulting of DWSD emergency maintenance and repair work, includes green infrastructure maintenance.

**Preliminary Scope of Work:** The work consists of removing undesirable debris in existing soil, grading/leveling soil and replacing seeding with straw or placing sods. DWSD is a co-permittee with Great Lakes Water Authority (GLWA) of NPDES permit. DWSD and GLWA are jointly responsible for developing and implementing the Alternative Rouge River Combined Sewer Overflow (CSO) Control Program.

This work will include excavating and grading the damaged areas. The work will also include maintenance of green stormwater infrastructure vegetation sites.

# **Challenges:**

					Total		Projecte	d Expendit	ures by Fis	cal Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	С	5/7/2018	5/6/2021	\$2,700,000	\$765,000	\$765,000	\$765,000			
Sewer	New	С	5/7/18	5/6/2021	\$405,000	\$135,000	\$135,000	\$135,000			

# **CS-1673 Professional Engineering Services for Design of Water Main**

**Status:** Active

Significance: To provided update of water main designs plans and design of new water main replacement work

Location: Various, As-Needed

**Driver:** 

**Preliminary Scope of Work:** To provide update of water main design plans, as needed construction phase engineering and inspection services, survey staking and layout services for the water main replacement work. Assignment by DWSD of new tasks for water main design that is to be moved to WS contracts.

**Challenges:** Several Wayne County (WC) and Michigan Department of Transportation (MDOT) requirements to obtain permits to perform the work for the water main replacement projects have changed since the time the construction drawings were originally completed. Under CS-1673 these drawings will be revised to reflect the new WC and MDOT requirements.

					Total		Projected	d Expendit	ures by Fis	scal Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	Active	D	10/13/2014	6/30/2019	\$3,031,000	\$888,000					

# **CS-1812 Professional Engineering and Construction Services for CIPMO**

Status: Active

Significance: Improve customer service and renew and rehabilitate Detroit's retail system infrastructure

**Location:** Various

**Driver:** 

**Preliminary Scope of Work:** The proposed contract is a major component of the City's larger capital investment strategy designed to:

Renew and rehabilitate Detroit infrastructure and neighborhoods;

• Reconfigure systems to reflect demographic trends and emerging urban plans;

• Re-landscape the urban environment to embrace the "greening of Detroit".

The initiation and execution of projects under this CIPMO will be prioritized to effectively and efficiently improve customer service and renew and rehabilitate Detroit's retail system infrastructure. A centerpiece of the CIP is the development of a CIP program management organization (CIPMO) with responsibility to coordinate and execute capital project planning and implementation across multiple agencies responsible for infrastructure and community development.

# **Challenges:**

					Total		Projecte	d Expenditu	res by Fiscal	Year	
System	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	Active	С	7/10/2017	7/9/2022	\$57,406,000	\$7,234,000	\$6,695,000	\$4,140,000	\$2,795,000		

# **Water Meter Replacement Program**

Status: Active

**Significance:** This program will provide assistance with meter operations of the exchange, removal and repair of meters

**Location:** Various

			Total		Projec	ted Expendi	tures by Fisc	al Year	
System	Status	Type	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	Active	С	\$15,000,000	5,283,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000

# **Fire Hydrant Replacement Program**

Status: Active

**Significance:** To improve the level of service and sustain the progress made with the City of Detroit Insurance Service Office (ISO) 2018 assessment rating

#### Location:

**Driver:** With nearly 10% inoperable hydrants within the City at the onset of this program in 2015 and a previous level 4 ISO rating, replacement of inoperable hydrants was given priority and funding to reach national standards of 1.5% hydrant inoperability.

**Preliminary Scope of Work:** With nearly 30,000 hydrants within that City that are annually inspected, DWSD needs sufficient supply of hydrants to replace and repair inoperable hydrants that are needed to maintain fire flow capability, accommodate the required wet demolition that is performed utilizing hydrant permits and prevent creating a backlog of replacing inoperable hydrants. With the efforts completed to date, DWSD and DFD can prioritize work by critical facility proximity, have institutionalized the hydrant inspection program and established a uniform database of hydrant assets.

#### **Challenges:**

			Total			Projected Ex	penditures b	y Fiscal Year	•
Syste	n Status	Туре	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Wate	Active		\$5,000,000	\$2,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000

# **Itron Migration – MIU Replacement**

Status: New

Significance: To modernize billing practices to improve meter reading, billing efficiency and accuracy to minimize/eliminate estimated bills.

**Location:** Various

**Driver:** 

**Preliminary Scope of Work:** DWSD installed MIU's on each of its customer's properties and collection towers across the city to interface with the MIU's. The MIU's collect and transmit meter reading to collection towers which then transmit the meter reading into the billing system. There are currently 210,000 customer accounts with installed MIUs. MIU's have a warrantied life of 20 years and are reaching obsolescence due to manufacturing difficulties. It is in DWSD's interest to proactively schedule replacement of its equipment to mitigate customer impact.

# **Challenges:**

					Total		F	Projected Exp	enditures b	y Fiscal Yea	r
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New				\$16,000,000		\$8,000,000	\$8,000,000	-	-	-

# **DWS-900 Inspection and Rehab North Side**

**Status:** Closeout

Significance: Inspection and In-Place Rehabilitation/Repair of Existing Sewers

**Location:** Various on the north side of Detroit

**Driver:** 

**Preliminary Scope of Work:** Most of the Detroit Water and Sewerage Department's (DWSD) existing sewers within the City limits are older than 80 years. Due to the age and deterioration of the sewer pipes, immediate repair is often required. DWSD Contract No. DWS-900 is necessary to continue the sewer rehabilitation program.

# **Challenges:**

System	Status	Туре	Start Date	Finish Date	Total	Paid to Date
Sewer(G)	Closed	С	5/11/2015	5/10/2018	\$	8,225,950

# **DWS-903 Inspection and Rehabilitation of Sewers City**

Status: Active

Significance: Provide as-needed inspection and in-place rehabilitation of selected sewers

Location: Various

**Driver:** 

**Preliminary Scope of Work:** Proposed Contract No. DWS-903 is a continuation of the scope of work being performed under the existing Contract Nos. DWS-889, DWS-890, DWS-900 and DWS-901. The purpose of this contract is to provide as-needed inspection and in-place rehabilitation of selected sewers primarily using the procedures, methods and equipment of the cured-in-place pipe lining process.

The existing Detroit Water and Sewerage Department (DWSD) sewer system within the City limits (approximately 3,000 miles of sewers ranging from 8" thru 168") is generally older than ninety-years. As a result of the sewers age, they are deteriorating at a faster rate. Some are near the point of collapsing, and immediate emergency action is often required. Sewer rehabilitation services are needed to repair plugged, damaged and collapsed sewers to avoid basement flooding, and maintain the flows within the wastewater collection system.

In the last rehabilitation/lining contracts, DWSD expended approximately \$9,000,000 per year. DWSD is planning to continue the rehabilitation of sewers and anticipates spending approximately \$20,000,000 per year to provide better service to the citizens of Detroit, and meet the needs of future City development. The rehabilitation/lining process will extend the life of a sewer by at least 50 years.

## **Challenges:**

					Total			Projected Exp	enditures by I	Fiscal Year	
System	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	Procurement	С	12/11/2017	12/10/2020	\$60,000,000	\$20,000,000	\$17,500,000	\$16,500,000		-	-

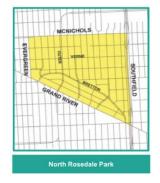
# DWS-907 Watermain and Sewer Rehabilitation & Replacement, North Rosedale Park

Status:New

**Significance:** In-place rehabilitation/repair of existing sewers and replacement of water mains

**Locations:** North Rosedale Park

Driver: Renew and rehabilitate Detroit infrastructure and neighborhoods based on CIPMO pilot study project



**Preliminary Scope of Work:** Replacement of approximately 17,000 LF of 8" watermain, replacement of 250 lead service lines and 31,000 LF of 8" to 33" replacement and lined Sewer and construction of 150 LF of Green Stormwater Infrastructure Bioretention

**Challenges:** Minimizing disruption to neighborhoods, includes improvements in backyard sewer easements. This work is to the sewer proper.

Syste					Total		Projected I	Expenditures k	y Fiscal Year		
m	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water	New	С	12/21/18	8/30/20	\$10,800,000	\$900,000	\$4,500,000	\$4,500,000	\$900,000		
Sewer	New	С	12/21/18	8/30/20	\$7,400,000	\$2,100,000	\$5,000,000	\$300,000			

# DWS-908 Sewer Rehabilitation & Replacement, Cornerstone Village

Status:New

**Significance:** In-place rehabilitation/repair of existing sewers

**Locations:** Cornerstone Village

**Driver:** Renew and rehabilitate Detroit infrastructure and neighborhoods based on CIPMO pilot study project

**Preliminary Scope of Work:** Rehabilitation and replacement of approximately 35,000 LF of 8" and 24" sewer, and construction of approximately 300 LF of Green Stormwater Infrastructure Bioretention areas

Challenges: Minimizing disruption to neighborhoods, includes improvements in backyard easements

			D-Design	Start	Finish	Total	Projected Expenditures by Fiscal Year						
Туре	Description	Status	C-Const.	Date	Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23		
Sewer	Rehab/Repl ace	New	С	12/21/18	8/30/20	\$9,100,000		\$6,000,000	\$100,000				



# DWS-910 Sewer Condition Assessment Services in Hubbard Farms, Hubbard Richard, West Side Industrial, Midtown, North Corktown, and Various Streets





#### Status:New

**Significance:** Inspection and cleaning of Existing Sewer Systems

Locations: Hubbard Farms, Hubbard Richard, West Side Industrial, Midtown, North Corktown, and Various Streets

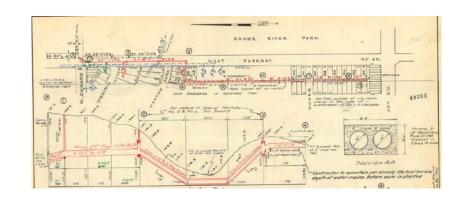
**Driver:** Assessment of Detroit infrastructure and neighborhoods

Preliminary Scope of Work: 281,448 LF of Sewer cleaning, 714,053 LF of inspection, 2,792 manhole inspections and 2,316 catch basins

Challenges: Minimizing disruption to neighborhoods, includes improvements in backyard easements

					Total		Projected	Expenditures	by Fiscal Year		
System	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer	New	D	12/21/18	11/5/19	\$11.9 M		\$2,000,000	\$2,500,000			

# MOU – Syphon Project with Detroit Public Works Department (DPW) Sewer (1,200 LF)



Status:New

Significance: Reconstruction of existing Twin 18 inch Sewer Siphons across the Ashcroft-Sherwood Drain in West Parkway

Locations: West Parkway between Meadow Park and Hazelton

**Driver:** Renew Detroit infrastructure

**Preliminary Scope of Work:** Replacement/reconstruction of approximately 1,200 linear feet of existing twin 18 inch siphons as part of culvert replacement by DPW under a Memorandum of Understanding (MOU) with DWSD. The project is expected to start in the spring of 2019 and be completed by the end of 2019 summer.

Challenges: The twin 18 inch siphons are to run below the culvert under the Ashcroft-Sherwood

					Total		Projecte	ed Expenditur	es by Fiscal	Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer	New	D					\$228,000	\$228,000			

# **CS-1812** Professional Engineering and Construction

Status: Active

Significance: Inspection and In-Place Rehabilitation/Repair of Existing Sewers

Location:

**Driver:** 

**Preliminary Scope of Work:** The proposed contract is a major component of the City's larger capital investment strategy designed to:

- Renew and rehabilitate Detroit infrastructure and neighborhoods;
- Reconfigure systems to reflect demographic trends and emerging urban plans;
- Re-landscape the urban environment to embrace the "greening of Detroit".

The initiation and execution of projects under this CIPMO will be prioritized to effectively and efficiently improve customer service and renew and rehabilitate Detroit's retail system infrastructure. A centerpiece of the CIP is the development of a CIP program management organization (CIPMO) with responsibility to coordinate and execute capital project planning and implementation across multiple agencies responsible for infrastructure and community development.

### **Challenges:**

					T-1-1 5-12		F	Projected Exper	nditures by Fis	cal Year	
System	Status	Type	Start Date	Finish Date	Total Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023 -24
Sewer(G)	Active	С	7/10/2017	7/9/2022	\$57,406,354	\$7,234,000	\$6,695,00	\$4,140,000	\$2,795,000		

# **CS-1522 Green Infrastructure Program Management**

Status: Active

**Significance:** To study, design and develop bid documents and provide construction oversight of green infrastructure techniques and implementation.

Location: Upper Rouge Tributary Area

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** To study, design and develop bid documents and provide construction oversight of green infrastructure implementation. Additionally, the consultant will be responsible for project administration, development of modeling, estimating, monitoring and tracking aspects of green infrastructure techniques.

**Challenges:** Program efforts include green infrastructure/stormwater management efforts that result in the reduction of CSO discharge from 17 outfalls in Upper Rouge Tributary Area.

					Projected Expenditures by Fiscal Year						
System	Status	Туре	Total Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24		
Sewer(G)	Active	S/D/CA/C	\$16,000,000	\$1,050,000	\$700,000	\$50,000					

#### CIP #1353

# **Stoepel Park No. 1 Green Infrastructure**

Status: Active/ Contract No. CS-1522/Maintenance Period

Significance: Reduce volume to URT (outfalls 059-69, 072-075, 077, 079)

Location: NE section of Brightmoor Neighborhood

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** Design and construct two pocket bioretention practices to manage runoff from areas along Westwood Street. Replaced paved parking lot with a permeable parking lot constructed of open-graded aggregate to reduce runoff.

Challenges: N/A



System	Status	Type	Start Date	Finish Date	Total Paid		Pro	ojected Exp	enditures	by Fiscal Y	ear
System Sta		,,,			to Date	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	Closed	С			\$300,000	\$15,000	\$10,000				

# PC-799 Crowell Rec Center and EcoSite Modifications

**Status:** Active

Significance: Reduce volume to URT (outfalls 059-69, 072-075, 077, 079)

**Location:** Riverdale neighborhood (Crowell) and Warrendale neighborhood

(EcoSites)

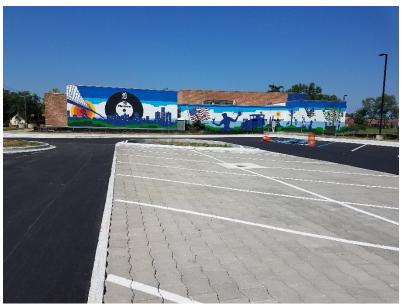
**Driver:** DWSD NPDES Permit No. MI0022802

Preliminary Scope of Work: Construct permeable block pavement in the center parking spaces and two bioretention islands to collect runoff within and tributary to the north parking lot and the south parking lot. For EcoSites, modify 2 of 4 initial designs to divert runoff from opposite side of the street into bioretention cells to double the tributary area at a reasonable cost.

**Challenges:** Coordination of paving and plantings with recreation center usage.



					Total		Pro	jected Exp	enditures l	oy Fiscal Y	ear
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	Active	С	11/20/2017	6/1/2019	\$925,000	\$600,000	\$10,000	\$10,000	\$10,000		



# **Constance Sewer (PW-6968)**

Status: Closed

Significance: Reduce volume to URT (outfalls 059-69, 072-075,

077, 079)

Location: Constance Street (from Beaverland Street to Parkland

Street)

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** Installed new storm pipes on to intercept storm water before it drains to the combined sewer, in coordination with DPW road resurfacing.

Challenges: N/A



Syste	m	Status	Туре	Start Date	Finish Date	Tota	l Paid to Date
Sewer (	G)	Closed	С			\$	2,031,742

# **Tireman Phase II Bioswale**

Status: Active/Contract No. CS-1522/Maintenance Period

Significance: Reduce volume to URT (outfalls 059-69, 072-

075, 077, 079)

**Location:** Tireman Avenue (Parkland to Outer Drive)

**Driver:** DWSD NPDES Permit No. MI0022802

Preliminary Scope of Work Tireman Phase II includes two separate linear bioswale in Rouge Park on the north and south sides of Tireman Avenue between Parkland Street and Outer Drive. This practice captures sheet flow runoff from the adjacent roadway as well as road runoff conveyed to the bioswales from catch basins capturing drainage from the intersection of Parkland Street and Tireman Avenue. The overflow for the bioswales in the park is currently connected back into the combined sewer



system at Parkland Street until the completion of West Warren (Constance at Rouge Park) GSI project.

Challenges: N/A

					Total		Projected Expenditures by Fiscal Year					
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
Sewer(G)	Active	С			\$140,000	\$40,000	\$10,000	\$10,000				

# **West Warren (Constance at Rouge Park)**

Status: Design

Significance: Reduce volume to URT (outfalls 059-69, 072-075, 077, 079)

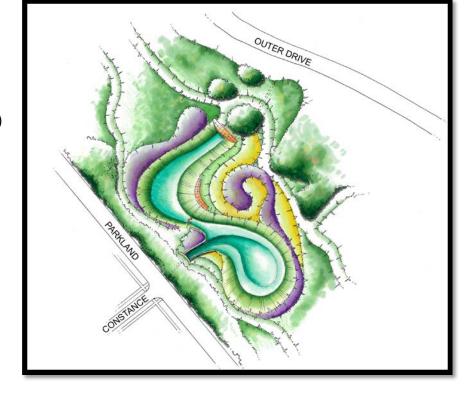
**Location:** Constance Street (west of the Rouge River from Parkland

Street to Outer Drive)

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** Provide the outlet for the Constance storm sewer constructed in Phase I as a large bioretention basin envisioned as both stormwater treatment and a park amenity constructed within the park to provide detention and water quality treatment. Project also includes a large bioretention in the southern part of Rouge Park for the partial sewer separation for the area tributary to the Warren Outfall.

**Challenges:** Coordination with Friends of the Rouge for an acceptable GSI design and MDEQ approvals.



					Total Estimated	Projected Expenditures by Fiscal Year						
System	Status	Туре	Start Date	Finish Date	Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
Sewer(G)	Design	С			\$12,000,000	\$600,000	\$750,000	\$6,400,000	\$4,830,000	\$10,000	\$10,000	

#### CIP#XX

# PC-801A Oakman Blvd Phase I

**Status:** Procurement

Significance: Reduce volume to URT (outfalls 059-69, 072-075, 077,

079)

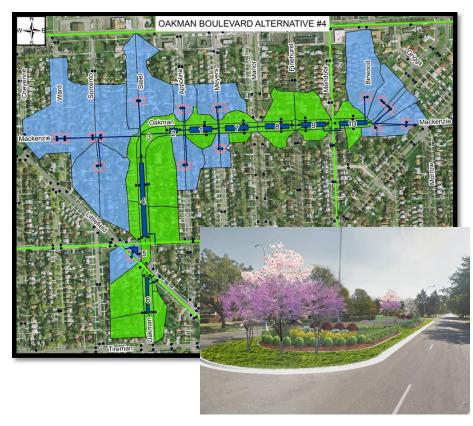
Location: Aviation neighborhood

**Driver:** DWSD NPDES Permit No. MI0022802; basement back-ups

**Preliminary Scope of Work:** Construct series of bioretention and underground storage practices within the median to manage runoff from 62.5 acres. The proposed work includes routing stormwater runoff from the tributary areas to either the surface practices within the median or to the sub-surface storage practices based on elevation of the influent.

**Challenges:** Coordination with combining GSI and watermain into one project.

			Start	Finish	Total		Projecte	d Expenditur	es by Fisca	al Year	
System	Status	Type	Date	Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer (G)	Procurement	С			\$6,000,000	\$3,000,000	\$4,000,000	\$1,980,000	\$10,000	\$10,000	



# **Liuzzo Park**

Status: Active/Contract No. CS-1522/Maintenance Period

Significance: Reduce volume to URT (outfalls 059-69, 072-075, 077, 079)

**Location:** Winthrop and Trojan

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** Construction of three separate surface bioretention practices to manage diverted runoff from the existing roads on the north and

east sides of the park, as well as within the park.

Challenges: N/A



					Total	Projected Expenditures by Fiscal Year						
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
Sewer (G)	Active	С			\$50,000	\$15,000	\$10,000					

# PC-800 O'Shea Park

Status: Active/ Maintenance Period

Significance: Reduce volume to URT (outfalls 059-69, 072-075, 077, 079)

Location: Greenfield Road and I-96

Driver: DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** Construction of approximately 14,000 square feet of bioretention basins; will capture runoff from within the park and the majority of the flow along Capitol Street and Rutherford Street.

**Challenges:** Coordination with GSD for simultaneously occurring park renovation project.



					Total		Projecte	d Expenditu	res by Fisca	l Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer (G)	Active	С	4/16/2018	11/21/2018	\$650,000	\$200,000	\$10,000	\$10,000	\$10,000		

# **Joy Road Drainage Improvements**

**Status:** Procurement

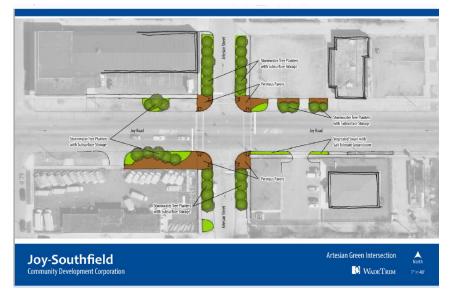
**Significance:** The stormwater management practices at the intersections will contribute to runoff reduction and permit

expenditures.

Location: Joy Road

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** The project will consist of the removal of sidewalk and excess pavement from behind the curb at the intersections of Joy Road and Artesian Street, Westwood Street, and Faust Street. The sidewalk will be replaced with a combination of



typical concrete sidewalk or pervious pavers with a subsurface aggregate storage layer. In locations that are 5 feet wide or greater from the back of curb to sidewalk a bioswale will be constructed with roadway curbcuts at each end. The entire project will be restored with low level plantings along Joy Road and low level plantings and small trees on the side roads. The green practices shall provide the removal of 67,354 gallons of stormwater runoff based on a 2-year 24-hour design storm from the CSO. In addition to the above, the project will also provide bioretention stormwater cells to treat stormwater before it enters the sewer system.

**Challenges:** Coordination of intergovernmental agreements for GSI portion of work funded by DWSD and constructed under Wayne County contract.

					Total		Projecte	d Expendi	tures by Fis	scal Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	Procurement	С			\$225,000		\$225,000				

# **Minock Park**

Status: New

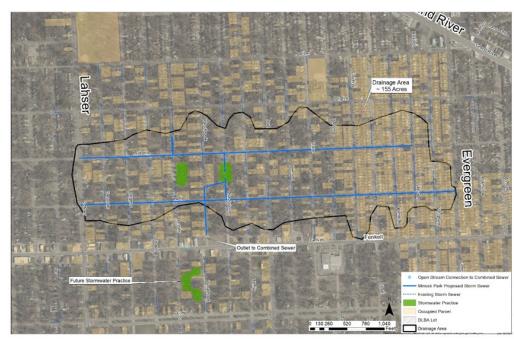
Significance: Reduce volume to URT (outfalls 059-69,

072-075, 077, 079)

**Location:** Minock Park

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** The project provides opportunities for a large scale stormwater management practice and nature area in a highly vacant location along Blackstone Street. The site could be used to manage stormwater from the adjacent Minock Park subdivision.



Challenges: Coordination for opportunity to decommission unused roadway and work with other City departments.

					Total		P	Projected Expe	nditures by Fisc	cal Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	New	С			\$6,000,000			\$1,500,000	\$3,000,000	\$1,400,000	\$100,000

# **Charles H Wright Academy**

Status: Design

 $\textbf{Significance:} \ \textbf{Installation of large GSI that collect and}$ 

manage stormwater.

**Location:** Charles Wright and Ludington Schools

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** Construct large scale GSI practices that collect and manage stormwater from Charles Wright. Overflow from the GSI practices is conveyed to the Upper Rouge River through sheet flow.

**Challenges:** Coordination with Detroit Public Schools for agreements and construction.



					Total Estimated		Projected	Expenditur	es by Fisca	l Year	
System	Status	Туре	Start Date	Finish Date	Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	Design	С			\$2,430,000	\$1,400,000	\$2,000,000	\$400,000	\$10,000	\$10,000	\$10,000

# North Rosedale Park (Edinborough St)

**Status:** Procurement

Significance: Installation of turf grass bioretention in the berm along

Edinborough.

Location: North Rosedale Park (URT)

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** Construct GSI in the berm of

Edinborough with watermain/sewer interventions through CS-1812

CIPMO coordination.

shormwater tree
bioretention cell
curb inlet

**Proposed Street View** 

Challenges: N/A

					Total		Projecte	ed Expendit	tures by Fis	scal Year	
System	Status	Type	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	Procurement	С			\$45,000		\$20,000	\$20,000	\$2,500	\$2,500	

# Capital Partnership Program (CPP) – St Paul Tabernacle

Status: Active

**Significance:** Reduce CSO events

Location: City of Detroit

**Driver:** To help customer reduce the drainage charges and aid in reduction of stormwater flows to the sewer system.

Preliminary Scope of Work: To comply with regulatory requirements and promote environmental sustainability, DWSD has initiated the Capital Partnership Program (CPP) that will leverage public resources to help customers finance implementation of stormwater management measures at their sites. The CPP provides for DWSD's payments through reimbursements of customer (non-residential) expenses of up to 50% of the cost of approved Green Stormwater Infrastructure (GSI) measures up to a maximum payment of \$50,000, subject to DWSD's CPP policy and administrative procedures. CPP provides up to \$5.0 million per year to fund installation of approved GSI projects

Challenges: N/A

			Total		Proje	cted Expend	litures by Fis	cal Year	
System	Status	Type	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	Active	С	\$175,000		\$175,000				

# CS-1884A Green Infrastructure Program Management

**Status:** Procurement

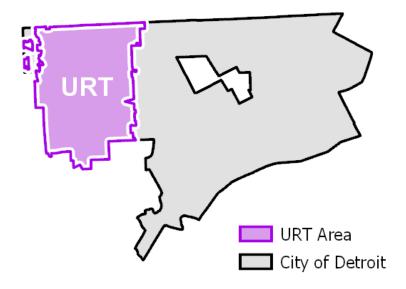
Significance: To comply with the DWSD NPDES Permit No. MI0022802

and reduce CSO events.

Location: Upper Rouge Tributary Area

Driver: DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** To study, design and develop bid documentation and provide construction oversight of green infrastructure implementation. Additionally, the consultant will be responsible for project administration, development of modeling, estimating, monitoring and tracking aspects of green infrastructure techniques.



**Challenges:** To locate and install green infrastructure/stormwater management practices that result in the reduction of CSO discharge from 17 outfalls in Upper Rouge Tributary Area.

					Total		Pro	jected Expendit	ures by Fiscal	Year	
System	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	Procurement	S/D/CA			\$12,000,000	\$3,000,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$1,000,000

# **CS-1884A Green Infrastructure Program Management**

Status: Procurement

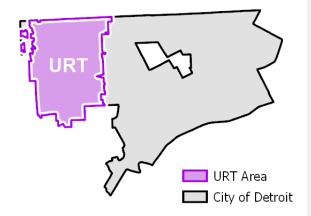
 $\textbf{Significance:} \ \textbf{To comply with the DWSD NPDES Permit No. MI0022802 and reduce}$ 

CSO events.

**Location:** Upper Rouge Tributary Area

**Driver:** DWSD NPDES Permit No. MI0022802

**Preliminary Scope of Work:** To study, design and develop bid documentation and provide construction oversight of green infrastructure implementation. Additionally, the consultant will be responsible for project administration, development of modeling, estimating, monitoring and tracking aspects of green infrastructure techniques.



**Challenges:** To locate and install green infrastructure/stormwater management practices that result in the reduction of CSO discharge from 17 outfalls in Upper Rouge Tributary Area.

					Total		Pro	jected Expendit	ures by Fiscal	Year	
System	Status	Туре	Start Date	Finish Date	Estimated Cost	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sewer(G)	Procurement	S/D/CA			\$12,000,000	\$3,000,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$1,000,000



# IV. APPENDIXES

STREET TABLE - TABLE OF TO/FROM FOR CONSTRUCTION PROJECTS APPENDIX



# CAPITAL IMPROVEMENT PLAN 2020-2024 CIP 5-YEAR PLAN STREET TABLE

Line	Туре	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
413	Water	Evaluation		24th St. Jefferson W. to C & O Rail Road	16	358	5	24th St.	Jefferson W.	C & O Rail Road
	Water	Evaluation	2022 CA-CIPN		Watermains	293,568	3,4,5	Airport Sub		
106	Water	Design	WS-713	Alfred Brush Ford Park Lenox to Newport, park boundary	8	1,354	4	Alfred Brush Ford Parl	Lenox	Newport
147	Water	Construction	WS-703	Algonac Lappin to Manning	8	1,340	3	Algonac	Lappin	Manning
93	Water	Design	WS-713	Algonquin Essex to Avondale	9	708	4	Algonquin	Essex	Avondale
795	Sewer	Procurement	DWS-908	Alley N. Warren Guilford to Cadieux	12	50	4	Alley N. Warren	Guilford	Cadieux
796	Sewer	Procurement	DWS-908	Alley S. Warren Guilford to Cadieux	12	50	4	Alley S. Warren	Guilford	Cadieux
761	Sewer	Procurement	DWS-908	Alley W of Warren Guilford to Woodhall	12	10	4	Alley W of Warren	Guilford	Woodhall
2	Water	Procurement	WS-712	Alstead St from Moross Rd northeast to Kingsville St	8	500	4	Alstead S	Moross Rd northeast	Kingsville St
87	Water	Design	WS-713	Alter Essex to Klenk	8	3,261	4	Alter	Essex	Klenk
	Water	Procurement	WS-712	Anatole St. between Canyon St. and Mack Ave	8	963	4	Anat	Canyon St.	Mack Ave
52	Water	Procurement	WS-712	Anatole St between Canyon St and Mack Ave	8	90	4	Anatole	Canyon St	Mack Ave
477	Sewer	Procurement	DSW-907	Annchester Rd Santa Maria St to McNichols Rd	24	48	1	Annchester Rd	Santa Maria St	McNichols Rd
358	Water	Evaluation		Appoline Joy to Tireman	8	2,280	7	Appoline	Jov	Tireman
167	Water	Construction	WS-705	Ardmore Lyndon to Intervale	8	1,281	1,7	Ardmore	Lyndon	Intervale
328	Water	Evaluation	2019 CA-DWS	Artesian Kirkwood to Paul	8	1,300	7	Artesian	Kirkwood	Paul
325	Water	Evaluation		Artesian Van Buren to Constance	6	650	7	Artesian	Van Buren	Constance
90	Water	Design	WS-713	Ashland Jefferson to south of Fox River	6	528	4	Ashland	Jefferson	Fox River
342	Water	Evaluation	2019 CA-DWS	Ashton W. Davison to Dead End	6	450	1	Ashton	W. Davison	Dead End
347	Water	Evaluation		Ashton Curtis to Seven Mile	6	2,600	1	Ashton	Curtis	Seven Mile
600	Sewer	Procurement	DSW-907	Ashton Ave Florence St to Verne Ave	8	10	1	Ashton Ave	Florence St	Verne Ave
601	Sewer	Procurement	DSW-907	Ashton Ave Florence St to Verne Ave	8	10	1	Ashton Ave	Florence St	Verne Ave
604	Sewer		DSW-907	Ashton Ave Florence St to Puritan Ave	8	641	1	Ashton Ave	Florence St	Puritan Ave
77	Water	Procurement	DWS-907	Ashton Ave from Puritan Ave north to McNichols Rd	8	2627	1	Ashton Ave	Puritan Ave north	McNichols Rd
608	Sewer	Procurement	DSW-907	Ashton Rd Puritan Ave to Pilgrim St	8	543	1	Ashton Rd	Puritan Ave	Pilgrim St
632	Sewer	Procurement	DSW-907	Ashton Rd Midland St to Keeler St	12	10	1	Ashton Rd	Midland St	Keeler St
633	Sewer	Procurement	DSW-907	Ashton Rd Midland St to Keeler St	12	13	1	Ashton Rd	Midland St	Keeler St
634	Sewer	Procurement	DSW-907	Ashton Rd Midland St to Keeler St	12	10	1	Ashton Rd	Midland St	Keeler St
370	Water	Evaluation		Auburn Fenkell to Midland	0:00	1,200	7	Auburn	Fenkell	Midland
	Water	Evaluation	2020 CA-CIPN		Watermains	293,568	3,4,5	Aviation Sub		
345	Water	Evaluation		Avon Outer Drive to Seven Mile	6	3,860	1	Avon	Outer Drive	Seven Mile
627	Sewer	Procurement	DSW-907	Avon Rd Gainsborough Rd to Grand River Ave	8	562	1	Avon Rd	Gainsborough Rd	Grand River Ave
285	Water	Evaluation	2023 CA-CIPN		WaterMains	290,400	2	Bagley	8	
13	Water	Procurement	WS-712	Balduck Memorial Park (south) northwest of Warren Ave	8	90	4	Balduck Memorial Parl	Watten Ave	
263	Water	Evaluation	2022 CA-CIPN	Barton-McFarland	Watermains	194,304	6,7	Barton-McFarland		
177	Water	Construction	WS-706	Beaverland Ave. Sawyer Ave. to Tireman	8	914	1	Beaverland Ave.	Sawyer Ave.	Tireman
217	Water	Evaluation		Bentler-Pickford	Watermains		3,4,5	Bentler-Pickford	•	
	Sewer	Procurement	DWS-908	Berden Lodewyck to Berden	12	10	4	Berden	Lodewyck	Berden
5	Water	Procurement	WS-712	Berden St from Canyon St northeast to Moross Rd	8	378	4	Berden St	Canyon St northeast	Moross Rd
148	Water	Construction	WS-703	Berg Vassar to Leewin	12	1,846	1	Berg	Vassar	Leewin
	Water	Construction	WS-698	Biltmore Fenkell to McNichols	8	5,426	1	Biltmore	Fenkell	McNichols
705	Sewer	Procurement	DWS-908	Bluehill Harper to Berden	12	64	4	Bluehill	Harper	Berden
714	Sewer	Procurement	DWS-908	Bluehill Linville to Southampton	12	924	4	Bluehill	Linville	Southampton
	Sewer		DWS-908	Bluehill Minneapolis to Mack	12	630	4	Bluehill	Minneapolis	Mack
790	Sewer	Procurement	DWS-908	Bluehill Harper to Berden	12	50	4	Bluehill	Harper	Berden
39	Water	Procurement	WS-712	Bluehill St from Chandler Park Dr southeast to Southampton St	8	707	4	Bluehill S	Chandler Park Dr sout	Southampton St
241	Water	Evaluation	2020 CA-CIPN	Boston Edison	Watermains		3,4,5	Boston Edison		· ·
218	Water	Evaluation	2020 CA-CIPN		Watermains		3,4,5	Boynton		
	Water	Evaluation	2021 CA-CIPN		Watermains	402,864	6	Boynton		
322	Water	Evaluation		Brammel Tireman to Constance	6	1,680	1	Brammel	Tireman	Constance
536	Sewer	Procurement	DSW-907	Bretton Dr Westmoreland Rd to Edinborough Rd.	18	10	1	Bretton Dr	Westmoreland Rd	Edinborough Rd.
	Sewer	Procurement	DSW-907	Bretton Dr Keeler St to Keeler St	8	10	1	Bretton Dr	Keeler St	Keeler St

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
629	Sewer	Procurement	DSW-907	Bretton Dr Lancashire St to Grand River Ave	8	10	1	Bretton Dr	Lancashire St	Grand River Ave
631	Sewer		DSW-907	Bretton Dr Keeler St to Keeler St	10	20	1	Bretton Dr	Keeler St	Keeler St
637	Sewer		DSW-907	Bretton Dr Glastonbury Ave to Avon Rd	12	38	1	Bretton Dr	Glastonbury Ave	Avon Rd
537	Sewer		DSW-907	Bretton Dr Westmoreland Rd to Edinborough Rd	18	13	1	Bretton Dr	Westmoreland Rd	Edinborough Rd
542	Sewer		DSW-907	Bretton Dr Outer Dr to Huntington Rd	15	10	1	Bretton Dr	Outer Dr	Huntington Rd
543	Sewer		DSW-907	Bretton Dr Outer Dr to Huntington Rd	15	10	1	Bretton Dr	Outer Dr	Huntington Rd
558	Sewer	Procurement	DSW-907	Bretton Dr Huntington Rd to Huntington Rd	15	14	1	Bretton Dr	Huntington Rd	Huntington Rd
-	Sewer	Procurement	DSW-907	Bretton Dr Outer Dr to Shaftsbury Ave	8	10	1	Bretton Dr	Outer Dr	Shaftsbury Ave
571	Sewer		DSW-907	Bretton Dr Outer Dr to Shaftsbury Ave	8	10	1	Bretton Dr	Outer Dr	Shaftsbury Ave
-	Sewer		DSW-907	Bretton Dr Warwick St to Avon Rd	8	10	1	Bretton Dr	Warwick St	Avon Rd
575	Sewer	Procurement	DSW-907	Bretton Dr Warwick St to Avon Rd	8	10	1	Bretton Dr	Warwick St	Avon Rd
579	Sewer		DSW-907	Bretton Dr Outer Dr to Huntington Rd	10	10	1	Bretton Dr		Huntington Rd
587	Sewer	Procurement	DSW-907	Bretton Dr Outer Dr to Huntington Rd	15	10	1	Bretton Dr	Outer Dr	Huntington Rd
591	Sewer	Procurement	DSW-907	Bretton Dr Shaftsbury Ave to Warwick St	12	10	1	Bretton Dr	Shaftsbury Ave	Warwick St
592	Sewer	Procurement	DSW-907	Bretton Dr Shaftsbury Ave to Warwick St	12	10	1	Bretton Dr	Shaftsbury Ave	Warwick St
593	Sewer	Procurement	DSW-907	Bretton Dr Shaftsbury Ave to Warwick St	12	10	1	Bretton Dr	Shaftsbury Ave	Warwick St
641	Sewer	Procurement	DSW-907	Bretton Dr Lancashire St to Grand River Ave	12	220	1	Bretton Dr	Lancashire St	Grand River Ave
219	Water	Evaluation	2020 CA-CIPN	Brewster Homes	Watermains		3,4,5	Brewster Homes		
158	Water	Construction	WS-705	Britain St. McKinney to Cadieux	8	1,529	4	Britain St.	McKinney	Cadieux
244	Water	Evaluation	2021 CA-CIPN	·	Watermains	•	6	Buffalo	,	
340	Water	Evaluation	2019 CA-DWS	Burt Road Seven Mile to Vassar	8	1,275	1	Burt Road	Seven Mile	Vassar
220	Water	Evaluation	2020 CA-CIPN	Butler	Watermains	•	3,4,5	Butler		
56	Water	Procurement	WS-712	Cadieux Rd between Warren Ave and New York St	12	12	4	Cadieux Rd	Warren Ave	New York St
65	Water	Procurement	WS-712	Cadieux Rd. between Warren Ave. and New York St	12	372	4	Cadieux Rd.	Warren Ave.	New York St
317	Water		2019 CA-DWS	Cadieux Road Harper Avenue to Munich Avenue	6	-	4	Cadieux Road	Harper Avenue	Munich Avenue
265	Water			Cadillac Heights	Watermains		3,4,5	Cadillac Heights		
286	Water		-	Campau/Banglatown	WaterMains		2	Campau/Banglatown		
649	Sewer		DWS-908	Canvon Chester to Moon	15	337	4	Canyon	Chester	Moon
743	Sewer	Procurement	DWS-908	Canyon Chester to Moon	18	27	4	Canyon	Chester	Moon
	Water	Procurement	WS-712	Canyon St from Edsel Ford Service Dr southeast to Rockcastle	8	455	4	Canyon St	Edsel Ford Service Dr	Rockcastle Dr
	Water		WS-712	Canyon St from Mallina St southeast to Berden St	8	378	4	Canyon St		Berden St
	Water		WS-712	Canyon St northeast of Badluck Memorial Park (north)	8	56	4	Canyon St	Badluck Memorial Par	
	Water	Procurement	WS-712	Canyon St from Opal St south to Warren Ave	8	551	4	Canyon St	Opal St south	Warren Ave
-	Water		WS-712	Canyon St from Warren Ave south to Mack Ave	8	500	4	Canyon St	Warren Ave south	Mack Ave
	Water		2020 CA-CIPN	,	Watermains		3,4,5	Castle Rouge		
-	Water			Cathedral Grandville to Southfield Freeway	6	2,820	7	Cathedral	Grandville	Southfield Freeway
	Water		WS-712	the intersection of Cadieux Rd and Chandler Park Dr	12	165	4	Chadieux Rd	Chandler Park Dr	,
	Water			Chadsey Condon	Watermains	277,200	6	Chadsey Condon		
	Water		WS-713	Chalmers Essex to Scripps	8	2,607	4	Chalmers	Essex	Scripps
88	Water	J	WS-713	Chalmers between Freud and Jefferson	6	1,155	4	Chalmers	Freud	Jefferson
385	Water	0		Chalmers Ave. Warren Avenue to Mack Avenue	8	2,300	4	Chalmers Ave.	Warren Avenue	Mack Avenue
	Water			Chalmers Ave. Mack Avenue to Jefferson Avenue	8	1,420	4	Chalmers Ave.	Mack Avenue	Jefferson Avenue
	Water		WS-712	Chandler Park Dr from Lannoo St northeast to Moross Rd	8	565	4	Chandler Par	Lannoo St northeast	Moross Rd
	Water		WS-712	Chandler Park Dr from Lodewyck St northeast to Radnor St	8	524	4	Chandler Par	Lodewyck St northeast	
	Water		2022 CA-CIPN	·	Watermains		3,4,5	Chandler Park	, =====================================	
	Water		WS-712	Chandler Park Dr from Gateshead St to Lannoo St	8	624	4	Chandler Park Dr	Gateshead St	Lannoo St
	Water		WS-712	Chandler Park Dr from Cadieux Rd northeast to Bluehill St	8	501	4	Chandler Park Dr		Bluehill St
	Water		WS-710	Chandler Park Drive, Three Mile to Cadieux 7,644 LF	8	7,644	7	Chandler Park Drive	Three Mile	Cadieux
	Water	U		Chandler Park Drive Cadieux to East Outer Dr.	8	3,750	4	Chandler Park Drive	Cadieux	East Outer Dr.
	Water			Chatham Orangelawn to Plymouth	6	1,760	1	Chatham	Orangelawn	Plymouth
745	Sewer		DWS-908	Chester Marseillees to University	12	10	4	Chester	Marseillees	Univeristy
-	Water		WS-712	Chester St and Marseilles St intersection	8	31	4	Chester St	Maseilles	CIII VOLIDLY
∠1	11 atti	1 10curciliciil	11 13- / 12	Chester of and Marsenies of Intersection	υ	31	+	Chesici bi	17143011103	

222   Water   Evaluation   2022 CA-CIPN Calytown   Watermains   3.4,5   Calytown   Calvernois	eet I to Dead En
28   Water   Procurement   WS-712   Chester's at Neff Ave intersection   8   125   4   Chester's   Neff Ave	l to Dead En
44   Water   Procurement   WS-712   Cincinnati St from Cadieux Rd northeast to end of street   8   640   4   Cincinnati   Cadieux Rd northeast end of street   8   360   4   Cincinnati   Cadieux Rd northeast end of street   8   360   4   Cincinnati   Cadieux Rd northeast end of street   8   360   4   Cincinnati   Cadieux Rd northeast end of street   8   34,5   College Park   Water   Status   Sta	l to Dead En
132   Sewer	l to Dead En
1318 Water	
222   Water	
190   Water   Evaluation   2019 CA-CIP  Connet Essex to Gate Valve at Park   6   839   4   Conner   Essex   Park   268   Water   Design   WS-713   Continental between Freud and Jefferson   8   1,568   4   Continental   Freud   Jefferson   2019 CA-CIP  Conner   Creek   Watermains   3,4,5   Conner Creek   Jefferson   2019 CA-CIP  Conner   Creek   Watermains   3,4,5   Conner Creek   Watermains   3,4,5   Conner Creek   Watermains   2019 CA-CIP  Conner   Creek   Jefferson   2019 CA-CIP  Conner   Creek   Watermains   8   660   1   Cooley   Pembroke St. Marti   Cooley   Pembroke   Connwall   Guilford   Cadicux   12   342   4   Comwall   Guilford   Cadicux   Cadic	
190   Water   Evaluation   2019 CA-CIP  Connet Gardens   Watermains   6   Connet Gardens   Park   268   Water   Design   WS-713   Conner Essex to Gate Valve at Park   6   839   4   Conner   Essex   Park   268   Water   Design   WS-713   Continental between Freud and Jefferson   8   1,568   4   Continental   Freud   Jefferson   2019 CA-CIP  Conner Creek   Watermains   2019 CA-OPW  Cooley   Pembroke to St. Martis   8   660   1   Cooley   Pembroke   St. Martis   St. Mar	
268   Water   Evaluation   2022 CA-CIP  Conner Creek   Watermains   3,4,5   Conner Creek   Watermains   3,4,5   Conner Creek   Watermains   3,8   Water   Design   WS-713   Continental between Freud and Jefferson   8   1,568   4   Continental   Freud   Jefferson   338   Water   Evaluation   2019 CA-DW  Cooley Pembroke   St. Martins   8   650   1   Cooley   Pembroke   St. Martins   765   Sewer   Procurement   DWS-908   Cornwall Guilford   Cadieux   12   342   4   Cornwall   Guilford   Cadieux   Guilford   Ca	
78 Water   Design   WS-713   Continental between Freud and Jefferson   8   1,568   4   Continental   Freud   Jefferson   338 Water   Evaluation   2019 CA-DWS Cooley Pembroke   St. Martins   8   650   1   Cooley   Pembroke   St. Martins   RS   Cornwall   Cadieux   Guilford   Cadieux   Guilford   Cadieux   Construction   Construction   Cooley   Cadeux   Construction   Cooley   Cadeux   Construction   Cooley   Cadeux	
338 Water   Evaluation   2019 CA-DW\$ Cooley Pembroke to St. Martins   8   650   1   Cooley   Pembroke   St. Martins   727   Sewer   Procurement   DWS-908   Cornwall Galiety to Galiety   12   10   4   Cornwall   Caliety   Galiety   Gal	g
Procurement   DWS-908   Cornwall Guilford to Cadieux   12   342   4   Cornwall   Guilford   Cadieux   Guilford   12   10   4   Cornwall   Cadieux   Guilford   12   10   4   Cornwall   Cadieux   Guilford   Cadieux   Guilford   12   10   4   Cornwall   Cadieux   Guilford   Cadieux	C.
Procurement   DWS-908   Comwall Cadieux to Guilford   12   10   4   Comwall   Cadieux   Guilford   19   Water   Evaluation   2019 CA-CIPN Crary/St Marys   Watermains   6   Crary/St Marys   Watermains   6   Crary/St Marys   Construction   WS-693A   Davison   Davison   Davison   Evernois   Evaluation   2019 CA-CIPN Davison   Davison   Livernois   Linwood   8   10,647   7   Davison   Davison   Livernois   Linwood   28   Davison   Livernois   Linwood   Livernois   Livernois   Linwood   Livernois   Linwo	.5
191   Water   Evaluation   2019 CA-CIPN Crary/St Marys   Watermains   6   Crary/St Marys   Crary/St Marys   138   Water   Construction   WS-693A   Davison Livernois to Linwood   8   10,647   7   Davison   Livernois   Linwood   380   Water   Evaluation   2019 CA-DW Davison Avenue Cheyenne to Wyoming   8   134   7   Davison Avenue Cheyenne   Wyoming   Salu Water   Evaluation   2019 CA-DW Davison Avenue Wyoming to Livernois   8   355   7   Davison Avenue Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue Wyoming to Livernois   8   355   7   Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue Wyoming to Livernois   8   355   7   Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue   Wyoming   Livernois   Salu Water   Evaluation   2019 CA-DW Davison Avenue   Woodward   6   893   5   Delaware St. 2nd Street   Woodward   Salu Water   Salu Water   Salu Water   Salu Water   Salu Water   Salu Water	-
192   Water   Evaluation   2019 CA-CIPN Davison   Watermains   6 Davison   Davison   Davison   Davison   Davison   Livernois   Linwood   Sevaluation   Livernois   Linwood   Sevaluation   2019 CA-DW Davison Avenue Cheyenne   Cheye	
138   Water   Construction   WS-693A   Davison Livernois to Linwood   8   10,647   7   Davison   Livernois   Linwood   380   Water   Evaluation   2019 CA-DW Davison Avenue Cheyenne to Wyoming   8   134   7   Davison Avenue Cheyenne   Wyoming   381   Water   Evaluation   2019 CA-DW Davison Avenue Wyoming to Livernois   8   355   7   Davison Avenue   Wyoming   Livernois   382   Water   Evaluation   2019 CA-DW Davison Avenue Wyoming to Livernois   8   355   7   Davison Avenue   Wyoming   Livernois   2019 CA-DW Davison Avenue   Wooman   2019 CA-CIPN Deventer   2010 CA-DW Davison Avenue   Watermains   2020 CA-CIPN Deventer   2010 CA-DW Davison   2010 CA-CIPN Deventer   2010 CA-CIPN Deve	
380 Water   Evaluation   2019 CA-DW Davison Avenue Cheyenne to Wyoming   8   134   7   Davison Avenue Cheyenne   Wyoming   381 Water   Evaluation   2019 CA-DW Davison Avenue Wyoming to Livernois   8   355   7   Davison Avenue Wyoming   Livernois   382 Water   Evaluation   2019 CA-DW Davison Avenue McNichols to Syracuse   6   305   7   Davison Avenue McNichols   Syracuse   415 Water   Evaluation   2019 CA-DW Davison Avenue McNichols to Syracuse   6   893   5   Delaware St.   2nd Street   Woodward   212 Water   Evaluation   2020 CA-CIPN Denby   Watermains   144,672   4   Denby   Denby   Denby   Denby   Description   2020 CA-CIPN Description	-
381 Water   Evaluation   2019 CA-DW Davison Avenue Wyoming to Livernois   8   355   7   Davison Avenue   Wyoming   Livernois   382 Water   Evaluation   2019 CA-DW Davison Avenue McNichols to Syracuse   6   305   7   Davison Avenue   McNichols   Syracuse   415 Water   Evaluation   2019 CA-DW Delaware St. 2nd Street to Woodward   6   893   5   Delaware St. 2nd Street   Woodward   212 Water   Evaluation   2020 CA-CIP) Denby   Watermains   144,672   4   Denby   Deby   Cadieux   Cadie	
382 Water   Evaluation   2019 CA-DW  Davison Avenue McNichols to Syracuse   6   305   7   Davison Avenue McNichols   Syracuse   415 Water   Evaluation   2019 CA-DW  Delaware St. 2nd Street to Woodward   6   893   5   Delaware St. 2nd Street   Woodward   212 Water   Evaluation   2020 CA-CIPN Denby   Watermains   144,672   4   Denby	
415 Water   Evaluation   2019 CA-DW Delaware St. 2nd Street to Woodward   6   893   5   Delaware St.   2nd Street   Woodward   212 Water   Evaluation   2020 CA-CIPN Denby   Watermains   144,672   4   Denby	
212 Water   Evaluation   2020 CA-CIPN Denby   Watermains   144,672   4 Denby   Denby   T72 Sewer   Procurement   DWS-908   Detroit Cadieux to Guilford   12   33   4 Detroit   Cadieux   Guilford   Guilford   Cadieux   Cadi	
212 Water   Evaluation   2020 CA-CIPN Denby	d
Procurement   DWS-908   Detroit Cadieux to Guilford   12   33   4   Detroit   Cadieux   Guilford   Type   Sewer   Procurement   DWS-908   Detroit Guilford to Cadieux   12   50   4   Detroit   Guilford   Cadieux   Guil	
Procurement   DWS-908   Detroit Guilford to Cadieux   12   50   4   Detroit   Guilford   Cadieux Rd northeast   Guilford   Cadeux Rd northeast   Guilford   Cadeux Rd northeast   Guilford   Cadeux Rd northeast	
46 WaterProcurementWS-712Detroit St from Cadieux Rd northeast to Guilford St86514DetroitCadieux Rd northeast Guilford St223 WaterEvaluation2020 CA-CIP) Dexter-FenkellWatermains3,4,5Dexter-Fenkell193 WaterEvaluation2019 CA-CIP) Dexter-LinwoodWatermains6Dexter-Linwood269 WaterEvaluation2022 CA-CIP) DowntownWatermains3,4,5Downtown99 WaterDesignWS-713Drexel Averhill (added new valve) to Avondale South side83584DrexelAverhillAvondal80 WaterDesignWS-713Drexel/Riverside Dr Averhill to dead-end south of Scripps82,3534Drexel/Riverside Dr AverhillScripps176 WaterConstructionWS-706E. Outer Drive Dequindre to Mitchell84,5954E. Outer DriveDequindreMitchell640 SewerProcurementDWS-908Easement N. of Moross to S. of Kingsville152994Easement N. of MorossS. of Kingsville640 SewerProcurementDSW-907Easement E. of Bretton Dr Keeler St to Grand River Ave81521Easement E. of Bretton Keeler StGrand R	
223 WaterEvaluation2020 CA-CIP) Dexter-FenkellWatermains3,4,5Dexter-Fenkell193 WaterEvaluation2019 CA-CIP) Dexter-LinwoodWatermains6Dexter-Linwood269 WaterEvaluation2022 CA-CIP) DowntownWatermains3,4,5Downtown99 WaterDesignWS-713Drexel Averhill (added new valve) to Avondale South side83584DrexelAverhillAvondal80 WaterDesignWS-713Drexel/Riverside Dr Averhill to dead-end south of Scripps82,3534Drexel/Riverside Dr AverhillScripps176 WaterConstructionWS-706E. Outer Drive Dequindre to Mitchell84,5954E. Outer DriveDequindreMitchell640 SewerProcurementDWS-908Easement N. of Moross to S. of Kingsville152994Easement N. of MorossS. of Kingsville640 SewerProcurementDSW-907Easement E. of Bretton Dr Keeler St to Grand River Ave81521Easement E. of Bretton Keeler StGrand R	St
Evaluation   2022 CA-CIPN   Downtown   Watermains   3,4,5   Downtown   Downtown   Power   Design   WS-713   Drexel Averhill (added new valve) to Avondale South side   8   358   4   Drexel   Averhill   Avondal   Avondal   South   Water   Design   WS-713   Drexel/Riverside Dr Averhill to dead-end south of Scripps   8   2,353   4   Drexel/Riverside Dr Averhill   Scripps   Sc	
Evaluation   2022 CA-CIP  Downtown   Watermains   3,4,5   Downtown   Power   Design   WS-713   Drexel Averhill (added new valve) to Avondale South side   8   358   4   Drexel   Averhill   Avondal   80   Water   Design   WS-713   Drexel/Riverside Dr Averhill to dead-end south of Scripps   8   2,353   4   Drexel/Riverside Dr Averhill   Scripps   176   Water   Construction   WS-706   E. Outer Drive   Dequindre to Mitchell   8   4,595   4   E. Outer Drive   Dequindre   Mitchell   643   Sewer   Procurement   DWS-908   Easement N. of Moross to S. of Kingsville   15   299   4   Easement   N. of Moross   S. of Kingsville   Sewer   Procurement   DSW-907   Easement E. of Bretton Dr Keeler St to Grand River Ave   S   152   1   Easement E. of Bretton Keeler St   Grand River Ave   S   Sometime   Supplies   Supplie	
99 Water Design WS-713 Drexel Averhill (added new valve) to Avondale South side 8 358 4 Drexel Averhill Avondal 80 Water Design WS-713 Drexel/Riverside Dr Averhill to dead-end south of Scripps 8 2,353 4 Drexel/Riverside Dr Averhill Scripps 176 Water Construction WS-706 E. Outer Drive Dequindre to Mitchell 8 4,595 4 E. Outer Drive Dequindre Mitchell 643 Sewer Procurement DWS-908 Easement N. of Moross to S. of Kingsville 15 299 4 Easement N. of Moross S. of Kingsville 15 1 Easement E. of Bretton Dr Keeler St to Grand River Ave 8 152 1 Easement E. of Bretton Keeler St Grand R	
80 WaterDesignWS-713Drexel/Riverside Dr Averhill to dead-end south of Scripps82,3534Drexel/Riverside Dr AverhillScripps176 WaterConstructionWS-706E. Outer Drive Dequindre to Mitchell84,5954E. Outer DriveDequindreMitchell643 SewerProcurementDWS-908Easement N. of Moross to S. of Kingsville152994EasementN. of MorossS. of Kingsville640 SewerProcurementDSW-907Easement E. of Bretton Dr Keeler St to Grand River Ave81521Easement E. of Bretton Keeler StGrand R	
176 WaterConstructionWS-706E. Outer Drive Dequindre to Mitchell84,5954E. Outer DriveDequindreMitchell643 SewerProcurementDWS-908Easement N. of Moross to S. of Kingsville152994EasementN. of MorossS. of Kingsville640 SewerProcurementDSW-907Easement E. of Bretton Dr Keeler St to Grand River Ave81521Easement E. of Bretton Keeler StGrand R	
643 Sewer Procurement DWS-908 Easement N. of Moross to S. of Kingsville 15 299 4 Easement N. of Moross S. of Kingsville 640 Sewer Procurement DSW-907 Easement E. of Bretton Dr Keeler St to Grand River Ave 8 152 1 Easement E. of Bretton Keeler St Grand R	
640 Sewer Procurement DSW-907 Easement E. of Bretton Dr Keeler St to Grand River Ave 8 152 1 Easement E. of Bretton Keeler St Grand R	sville
	er Ave
730 Sewer Procurement DWS-908 Easement E. of Cadieux Sioux to Detroit 15 104 4 Easement E. of Cadieux Sioux Detroit	
427 Sewer Procurement DSW-907 Easement E. of Edinborough Rd Florence St to Verne Ave 10 582 1 Easement E. of Edinbo Florence St Verne A	e
438 Sewer Procurement DSW-907 Easement E. of Edinborough Rd McNichols Rd to Grove St 8 490 1 Easement E. of Edinborough Rd McNichols Rd Grove St	
495 Sewer Procurement DSW-907 Easement E. of Edinborough Rd Verne Ave to Florence St 10 58 1 Easement E. of Edinbo Verne Ave Florence	St
478 Sewer Procurement DSW-907 Easement E. of Evergreen Ave Grove St to Verne Ave 10 682 1 Easement E. of Evergreen Grove St Verne A	e
456 Sewer Procurement DSW-907 Easement E. of Evergreen Rd Verne Ave to Florence St 12 34 1 Easement E. of Evergreen Rd Verne Ave Florence	St
457 Sewer Procurement DSW-907 Easement E. of Evergreen Rd Verne Ave to Florence St 12 10 1 Easement E. of Evergreen Rd Verne Ave Florence	St
459 Sewer Procurement DSW-907 Easement E. of Evergreen Rd McNichols Rd to Grove St 8 10 1 Easement E. of Evergr McNichols Rd Grove St	
460 Sewer Procurement DSW-907 Easement E. of Evergreen Rd McNichols Rd to Grove St 8 10 1 Easement E. of Evergreen McNichols Rd Grove St	
461 Sewer Procurement DSW-907 Easement E. of Evergreen Rd McNichols Rd to Grove St 8 10 1 Easement E. of Evergr McNichols Rd Grove St	
636 Sewer Procurement DSW-907 Easement E. of Glastonbury Ave Lancashire St to Grand Rive 12 10 1 Easement E. of Glaston Lancashire St Grand R	e Alley
522 Sewer Procurement DSW-907 Easement E. of Glastonbury Rd Verne Ave to Florence St 10 10 1 Easement E. of Glastot Verne Ave Florence	
525 Sewer Procurement DSW-907 Easement E. of Glastonbury Rd Grove St to Verne Ave 10 10 1 Easement E. of Glaston Grove St Verne A	e
530 Sewer Procurement DSW-907 Easement E. of Glastonbury Rd McNichols Rd to Grove St 8 10 1 Easement E. of Glaston McNichols Rd Grove St	
531 Sewer Procurement DSW-907 Easement E. of Glastonbury Rd Grove St to Verne Ave 10 10 1 Easement E. of Glaston Grove St Verne A	
609 Sewer Procurement DSW-907 Easement E. of Glastonbury Rd Puritan St to Pilgrim St 8 10 1 Easement E. of Glaston Puritan St Pilgrim St	е
610 Sewer Procurement DSW-907 Easement E. of Glastonbury Rd Puritan St to Pilgrim St 8 10 1 Easement E. of Glaston Puritan St Pilgrim St	
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Line Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
466 Sewer	Procurement	DSW-907	Easement E. of Huntington McNichols Rd to Grove St	10	490	1	Easement E. of Huntin	McNichols Rd	Grove St
491 Sewer	Procurement	DSW-907	Easement E. of Huntington Rd Grove St to Verne Ave	10	62	1	Easement E. of Huntin	Grove St	Verne Ave
505 Sewer	Procurement	DSW-907	Easement E. of Outer Dr Verne Ave to Florence St	12	10	1	Easement E. of Outer I	Verne Ave	Florence St
506 Sewer	Procurement	DSW-907	Easement E. of Outer Dr Verne Ave to Florence St	12	10	1	Easement E. of Outer I	Verne Ave	Florence St
576 Sewer		DSW-907	Easement E. of Outer Dr Verne Ave to Florence St	15	10	1	Easement E. of Outer I	Verne Ave	Florence St
577 Sewer	Procurement	DSW-907	Easement E. of Outer Dr Verne Ave to Florence St	15	10	1	Easement E. of Outer I	Verne Ave	Florence St
578 Sewer	Procurement	DSW-907	Easement E. of Outer Dr Verne Ave to Florence St	15	21	1	Easement E. of Outer I	Verne Ave	Florence St
586 Sewer	Procurement	DSW-907	Easement E. of Outer Dr Verne Ave to Florence St	12	23	1	Easement E. of Outer I	Verne Ave	Florence St
431 Sewer	Procurement	DSW-907	Easement E. of Plainview Ave Verne Ave to Florence St	10	457	1	Easement E. of Plainvi	Verne Ave	Florence St
476 Sewer	Procurement	DSW-907	Easement E. of Plainview Ave McNichols Rd to Grove St	8	492	1	Easement E. of Plainvi	McNichols Rd	Grove St
479 Sewer	Procurement	DSW-907	Easement E. of Plainview Ave Grove St to Verne Ave	8	681	1	Easement E. of Plainvi	Grove St	Verne Ave
599 Sewer		DSW-907	Easement E. of Rosemont Ave Florence St to Puritan Ave	8	631	1	Easement E. of Roseme	Florence St	Puritan Ave
614 Sewer	Procurement	DSW-907	Easement E. of Rosemont Ave Pilgrim St to Midland St	8	637	1	Easement E. of Rosem		Midland St
500 Sewer	Procurement	DSW-907	Easement E. of Shaftsbury Ave Verne Ave to Florence St	10	44	1	Easement E. of Shaftsb	Verne Ave	Florence St
507 Sewer	Procurement	DSW-907	Easement E. of Shaftsbury Ave Verne Ave to Florence St	8	605	1	Easement E. of Shaftsb		Florence St
513 Sewer	Procurement	DSW-907	Easement E. of Shaftsbury Ave Grove St to Verne Ave	10	684	1	Easement E. of Shaftsb		Verne Ave
598 Sewer		DSW-907	Easement E. of Shaftsbury Ave Florence St to Bretton Dr	8	65	1	Easement E. of Shaftsb		Bretton Dr
512 Sewer		DSW-907	Easement E. of Stahelin Ave Grove St to Verne Ave	12	316	1	Easement E. of Stahelii		Verne Ave
504 Sewer	Procurement	DSW-907	Easement E. of Warwick St McNichols Rd to Grove St	10	10	1	Easement E. of Warwig		Grove St
515 Sewer	Procurement	DSW-907	Easement E. of Warwick St Grove St to Verne Ave	10	375	1	Easement E. of Warwig		Verne Ave
430 Sewer		DSW-907	Easement E. of Westmoreland Rd Grove St to Verne Ave	10	685	1	Easement E. of Westm		Verne Ave
450 Sewer		DSW-907	Easement E. of Westmoreland Rd McNichols Rd to Grove St	8	487	1	Easement E. of Westm		Grove St
541 Sewer		DSW-907	Easement E. of Westmoreland Rd Verne Ave to Florence St	15	10	1	Easement E. of Westm		Florence St
776 Sewer	Procurement		Easement N. Canyon Rockcastle to Edgefield	12	50	4		Rockcastle	Edgefield
768 Sewer	Procurement		Easement N. of Cadieux munich to Cincinnati	10	10	4	Easement N. of Cadieu		Cincinnati
769 Sewer		DWS-908	Easement N. of Cadieux Waveney to Detroit	12	262	4	Easement N. of Cadieu		Detroit
737 Sewer		DWS-908	Easement N. of Mack Woodhall to Guilford	8	520	4		Woodhall	Guilford
774 Sewer		DWS-908	Easement N. of Moross Edgefield to Tyrone	12	50	4	Easement N. of Moross		Tyrone
759 Sewer	Procurement		Easement N. of Warren Cadieux to Bluehill	12	20	4	Easement N. of Warrer		Bluehill
751 Sewer		DWS-908	Easement S. of Berden Lodewyck to Marseilles	12	10	4	Easement S. of Berden		Marseilles
597 Sewer		DSW-907	Easement S. of Bretton Dr Outer Dr to Warwick St	10	258	1	Easement S. of Bretton	•	Warwick St
733 Sewer		DWS-908	Easement S. of Cincinnati Guilford to Cadieux	24	183	4	Easement S. of Cincing		Cadieux
534 Sewer		DSW-907	Easement S. of Florence St Evergreen Rd to Westmoreland Rd	10	10	1	Easement S. of Florence		Westmoreland Rd
535 Sewer	Procurement		Easement S. of Florence St Evergreen Rd to Westmoreland Rd	10	14	1	Easement S. of Florence		Westmoreland Rd
581 Sewer	Procurement		Easement S. of Florence St Shaftsbury Ave to Warwick St	8	10	1	Easement S. of Florence	-	Warwick St
582 Sewer	Procurement		Easement S. of Florence St Shaftsbury Ave to Warwick St	8	10	1	Easement S. of Florence		Warwick St
626 Sewer		DSW-907	Easement S. of Gainsborough Rd Warwick St to Avon Rd	8	580	1	Easement S. of Gainsb		Avon Rd
429 Sewer		DSW-907	Easement S. of McNichols Rd Edinborough Rd to Huntington R	10	206	1	Easement S. of McNicl		Huntington Rd
440 Sewer	Procurement	DSW-907	Easement S. of McNichols Rd Edinborough Rd to Huntington R	10	150	1	Easement S. of McNicl		Huntington Rd
444 Sewer	Procurement		Easement S. of McNichols Rd Westmoreland Rd to Edinboroug	8	10	1	Easement S. of McNicl		Edinborough Rd
445 Sewer		DSW-907	Easement S. of McNichols Rd Westmoreland Rd to Edinboroug	8	10	1	Easement S. of McNicl		Edinborough Rd
449 Sewer		DSW-907	Easement S. of McNichols Rd Evergreen Rd to Plainview Ave	12	155	1	Easement S. of McNicl		Plainview Ave
452 Sewer		DSW-907	Easement S. of McNichols Rd Huntington Rd to Outer Dr	8	116	1	Easement S. of McNicl		Outer Dr
462 Sewer	Procurement		Easement S. of McNichols Rd Plainview Ave to Westmoreland	12	188	1	Easement S. of McNicl		Westmoreland Rd
472 Sewer	Procurement		Easement S. of McNichols Rd Plainview Ave to Westmoreland	8	10	1	Easement S. of McNicl		Westmoreland Rd
473 Sewer		DSW-907	Easement S. of McNichols Rd Plainview Ave to Westmoreland	8	10	1	Easement S. of McNicl		Westmoreland Rd
487 Sewer		DSW-907	Easement S. of McNichols Rd Huntington Rd to Outer Dr	8	111	1	Easement S. of McNicl		Outer Dr
514 Sewer		DSW-907	Easement S. of McNichols Rd Warwick St to Sunderland Rd	8	10	1	Easement S. of McNicl		Sunderland Rd
521 Sewer	Procurement		Easement S. of McNichols Rd Warwick St to Sunderland Rd	12	34	1	Easement S. of McNicl		Sunderland Rd
734 Sewer	Procurement		Easement S. of Waveney Guilford to Cadieux	10	279	4	Easement S. of Waven		Cadieux
707 Sewer	Procurement		Easement W. of Bluehill Harper to Berden	18	159	4	Easement W. of Bluehi		Berden
/ U / BCWCI	1 10curcincill	D W 5-700	Lasement W. Of Diacinii Harpel to Delucii	10	139		Lasement W. Of Bluell	11411101	Berdell

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
549	Sewer	Procurement	DSW-907	Easement W. of Edinborough Rd Verne Ave to Florence St	18	318	1	Easement W. of Edinbe	Verne Ave	Florence St
654	Sewer	Procurement	DWS-908	Easement W. of Farmbrook Minvera to Berden	12	324	4	Easement W. of Farmb	Minvera	Berden
658	Sewer	Procurement	DWS-908	Easement W. of Farmbrook Southampton to Frankfort	15	300	4	Easement W. of Farmb	Southampton	Frankfort
665	Sewer	Procurement	DWS-908	Easement W. of Farmbrook Cornwall to Munich	15	350	4	Easement W. of Farmb	Cornwall	Munich
777	Sewer	Procurement	DWS-908	Easement W. of Farmbrook Chester to Linville	12	50	4	Easement W. of Farmb	Chester	Linville
779	Sewer	Procurement	DWS-908	Easement W. of Farmbrook Warren to Munich	12	50	4	Easement W. of Farmb	Warren	Munich
672	Sewer	Procurement	DWS-908	Easement W. of Hereford Chester to Minvera	12	187	4	Easement W. of Herefo	Chester	Minvera
680	Sewer	Procurement	DWS-908	Easement W. of Hereford Berden to Southampton	12	608	4	Easement W. of Herefo	Berden	Southampton
693	Sewer	Procurement	DWS-908	Easement W. of Hereford Southampton to Warren	12	302	4	Easement W. of Herefo	Southampton	Warren
699	Sewer	Procurement	DWS-908	Easement W. of Hereford Munich to Mack	12	301	4	Easement W. of Herefo	Munich	Mack
781	Sewer	Procurement	DWS-908	Easement W. of Hereford Chester to Minvera	12	50	4	Easement W. of Herefo	Chester	Minvera
655	Sewer	Procurement	DWS-908	Easement W. of Lodewyck Berden to Linville	15	201	4	Easement W. of Lodew	Berden	Linville
660	Sewer	Procurement	DWS-908	Easement W. of Lodewyck Southampton to Frankfort	12	316	4	Easement W. of Lodew	Southampton	Frankfort
666	Sewer	Procurement	DWS-908	Easement W. of Lodewyck Warren to Cornwall	12	121	4	Easement W. of Lodew	Warren	Cornwall
778	Sewer	Procurement	DWS-908	Easement W. of Lodewyck Chandler Park to Frankfort	12	50	4	Easement W. of Lodew	Chandler Park	Frankfort
670	Sewer	Procurement	DWS-908	Easement W. of Marseille Edsel Ford Hwy to Chester	15	278	4	Easement W. of Marse	Edsel Ford Hwy	Chester
671	Sewer	Procurement	DWS-908	Easement W. of Marseille Chester to Minvera	12	458	4	Easement W. of Marse	Chester	Minvera
675	Sewer	Procurement	DWS-908	Easement W. of Marseille Berden to Frankfort	12	927	4	Easement W. of Marse	Berden	Frankfort
686	Sewer	Procurement	DWS-908	Easement W. of Marseille Southampton to Munich	12	620	4	Easement W. of Marse	Southampton	Munich
698	Sewer	Procurement	DWS-908	Easement W. of Marseille Munich to Mack	18	306	4	Easement W. of Marse	Munich	Mack
782	Sewer	Procurement	DWS-908	Easement W. of Marseilles Berden to Chandler Park	12	50	4	Easement W. of Marse	Berden	Chandler Park
784	Sewer	Procurement	DWS-908	Easement W. of Marseilles Frankfort to Warren	12	50	4	Easement W. of Marse	Frankfort	Warren
708	Sewer	Procurement	DWS-908	Easement W. of Oldtown Harper to Bern	15	478	4	Easement W. of Oldtov	Harper	Bern
719	Sewer	Procurement	DWS-908	Easement W. of Oldtown Chandler Park to Southampton	12	325	4	Easement W. of Oldtov	Chandler Park	Southampton
652	Sewer	Procurement	DWS-908	Easement W. of Radnor Chester to Linville	15	927	4	Easement W. of Radno	Chester	Linville
664	Sewer	Procurement	DWS-908	Easement W. of Radnor Cornwall to Munich	15	300	4	Easement W. of Radno	Cornwall	Munich
678	Sewer	Procurement	DWS-908	Easement W. of University Linville to Chandler Park	18	301	4	Easement W. of Univer	Linville	Chandler Park
690	Sewer	Procurement	DWS-908	Easement W. of University Frankfort to Munich	12	455	4	Easement W. of Univer	Frankfort	Munich
763	Sewer	Procurement	DWS-908	Easement W. of University Frankfort to Hereford	12	157	4	Easement W. of Univer	Frankfort	Hereford
786	Sewer	Procurement	DWS-908	Easement w. Of University Warren to Munich	12	50	4	Easement w. Of Univer	Warren	Munich
715	Sewer	Procurement	DWS-908	Easement. W. of Bluehill Linville to Southampton	12	209	4	Easement. W. of Blueh	Linville	Southampton
402	Water	Evaluation	2019 CA-DWS	East Grand Blvd Lodge Frwy to Oakland Ave.	6	-	5	East Grand Blvd	Lodge Frwy	Oakland Ave.
403	Water	Evaluation	2019 CA-DWS	East Grand Blvd Oakland Ave. to Trombly	8	-	5	East Grand Blvd	Oakland Ave.	Trombly
404	Water	Evaluation	2019 CA-DWS	East Grand Blvd Trombly to McDougall	6	-	5	East Grand Blvd	Trombly	McDougall
405	Water	Evaluation	2019 CA-DWS	East Grand Blvd McDougall to Helen	6	-	5	East Grand Blvd	McDougall	Helen
406	Water	Evaluation		East Grand Blvd Helen to Forest	6		5	East Grand Blvd	Helen	Forest
407	Water	Evaluation		East Grand Blvd Forest to Vernor	6	-	5	East Grand Blvd	Forest	Vernor
408	Water	Evaluation		East Grand Blvd Vernor to E. Jefferson Ave.	6	-	5	East Grand Blvd	Vernor	E. Jefferson Ave.
	Water	Evaluation	2019 CA-CIPN		Watermains		6	East Village		
94	Water	Design	WS-713	Eastlawn dead end to Scripps (added new valve)	8	397	4	Eastlawn	Scripps	
66	Water	Procurement	DWS-907	Edinborough Rd from Bretton Dr north to McNichols Rd	8	2110	1	Edinboroug	Bretton Dr North	McNichols Rd
439	Sewer	Procurement	DSW-907	Edinborough Rd McNichols Rd to Grove St	21	109	1	Edinborough Rd	McNichols Rd	Grove St
480	Sewer	Procurement	DSW-907	Edinborough Rd Grove St to Verne Ave	10	622	1	Edinborough Rd	Grove St	Verne Ave
489	Sewer	Procurement	DSW-907	Edinborough Rd Grove St to Grove St	18	41	1	Edinborough Rd	Grove St	Grove St
496	Sewer	Procurement	DSW-907	Edinborough Rd McNichols Rd to Grove St	10	481	1	Edinborough Rd	McNichols Rd	Grove St
668	Sewer	Procurement	DWS-908	Edsel Ford Hwy Farmbrook to Hereford	15	559	4	Edsel Ford Hwy	Farmbrook	Hereford
702	Sewer	Procurement	DWS-908	Edsel Ford Hwy Morang to Cadieux	15	56	4	Edsel Ford Hwy	Morang	Cadieux
773	Sewer	Procurement	DWS-908	Edsel Ford Hwy Moross to Canyon	12	50	4	Edsel Ford Hwy	Moross	Canyon
	Water	Evaluation	2021 CA-CIPN		Watermains		6	Eliza Howell		
	Water	Evaluation	2023 CA-CIPN	Elmwood Park	WaterMains		2	Elmwood Park		
367	Water	Evaluation	2019 CA-DWS	Evergreen Elmira to Chicago	16	3,540	7	Evergreen	Elmira	Chicago

Line Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
288 Water	Evaluation	2023 CA-CIPN	Evergreen Lahser 7/8	WaterMains	.,	2	Evergreen Lahser 7/8		
437 Sewer	Procurement	DSW-907	Evergreen Rd Verne Ave to Verne Ave	18	10	1	Evergreen Rd	Verne Ave	Verne Ave
195 Water	Evaluation		Evergreen-Outer Drive	Watermains	10	6	Evergreen-Outer Drive		
289 Water	Evaluation		Far West Detroit	WaterMains		2	Far West Detroit		
19 Water	Procurement	WS-712	Farmbrook St from Edsel Ford Service Dr to Chandler Park Dr	8	3380	4	Farmbrook	Edsel Ford Service Dr	Chandler Park Dr
24 Water	Procurement	WS-712	Farmbrook St from Chandler Park Dr southeast to Cornwall St	8	2675	4	Farmbrook St	Chandler Park Dr south	
290 Water	Evaluation	2023 CA-CIPN		WaterMains		2	Farwell		
323 Water	Evaluation	2019 CA-DWS	Faust W. Chicago to Cathedral	6	1,330	1	Faust	W. Chicago	Cathedral
373 Water	Evaluation		Faust Dover to Joy	6	600	1	Faust	Dover	Joy
336 Water	Evaluation		Faust Kirkwood to Dayton	8	730	1	Faust	Kirkwood	Dayton
144 Water	Construction	WS-698	Fenkell Bentler to Virgil	8	6,253	1	Fenkell	Bentler	Virgil
372 Water	Evaluation		Fielding Tireman to Belton	6	650	1	Fielding	Tireman	Belton
213 Water	Evaluation	2020 CA-CIPN		Watermains		4	Fiskhorn		
145 Water	Construction		Five Points Seven Mile Rd. to Eight Mile Rd.	16	5,060	1	Five Points	Seven Mile Rd.	Eight Mile Rd.
129 Water	Design	WS-710	Five Points, Seven Mile to McNichols 5,250 LF	8	5,250	7	Five Points	Seven Mile	McNichols
114 Water	Design	CS-1673 T21	Five Points Seven Mile to McNichols	8	5,250	1	Five Points	Seven Mile	McNichols
538 Sewer	Procurement	DSW-907	Florence St Plainview Ave to Westmoreland Rd	12	10	1	Florence St	Plainview Ave	Westmoreland Rd
551 Sewer	Procurement	DSW-907	Florence St Westmoreland Rd to Huntington Rd	8	10	1	Florence St	Westmoreland Rd	Huntington Rd
564 Sewer	Procurement	DSW-907	Florence St Edinborough Rd to Huntington Rd	8	24	1	Florence St		Huntington Rd
566 Sewer	Procurement	DSW-907	Florence St Huntington Rd to Shaftsbury Ave	8	383	1	Florence St	Huntington Rd	Shaftsbury Ave
539 Sewer	Procurement	DSW-907	Florence St. Huntington Rd. to Outer Dr	8	10	1	Florence St	Huntington Rd	Outer Dr
540 Sewer	Procurement	DSW-907	Florence St. Huntington Rd. to Outer Dr	8	17	1	Florence St	Huntington Rd	Outer Dr
550 Sewer	Procurement	DSW-907	Florence St Westmoreland Rd to Huntington Rd	8	10	1	Florence St	Westmoreland Rd	Huntington Rd
553 Sewer		DSW-907	Florence St Westmoreland Rd to Huntington Rd	8	10	1		Westmoreland Rd	Huntington Rd
554 Sewer	Procurement	DSW-907	Florence St Westmoreland Rd to Florence St between Westmor	8	11	1	Florence St	Westmoreland Rd	Florence St between W
560 Sewer	Procurement	DSW-907	Florence St Evergreen Rd to Plainview Ave	8	10	1	Florence St	Evergreen Rd	Plainview Ave
565 Sewer	Procurement	DSW-907	Florence St Westmoreland Rd to Edinborough Rd	8	25	1		Westmoreland Rd	Edinborough Rd
572 Sewer	Procurement	DSW-907	Florence St Warwick St to Outer Dr	8	329	1	Florence St	Warwick St	Outer Dr
584 Sewer	Procurement	DSW-907	Florence St. Outer Dr. to Shaftsbury Ave	24	10	1	Florence St	Outer Dr	Shaftsbury Ave
585 Sewer	Procurement	DSW-907	Florence St. Outer Dr. to Shaftsbury Ave	24	25	1	Florence St	Outer Dr	Shaftsbury Ave
291 Water	Evaluation	2023 CA-CIPN	·	WaterMains	23	2	Forest Park	Outer Di	Shartsbury 11ve
375 Water	Evaluation		Fort Street (M-85) Oakwood/Rouge River to Springwells	12	9,410	6	Fort Street (M-85)	Oakwood/Rouge River	Springwells
316 Water	Evaluation		Fourth Street Selden to Calumet	6	1.185	5	Fourth Street	Selden	Calumet
246 Water	Evaluation	2021 CA-CIPN		Watermains	1,103	6	Fox Creek	Seiden	Caramet
313 Water	Evaluation	2023 CA-CIPN		WaterMains		2	Foxtown		
292 Water	Evaluation	2023 CA-CIPN		WaterMains		2	Franklin		
224 Water	Evaluation	2020 CA-CIPN		Watermains		3,4,5	Franklin Park		
580 Sewer	Procurement	DSW-907	Gainsborough Rd Warwick St to Avon Ave	12	316	1	Gainsborough Rd	Warwick St	Avon Ave
583 Sewer	Procurement	DSW-907	Gainsborough Rd Outer Dr to Warwick St	8	10	1	Gainsborough Rd	Outer Dr	Warwick St
621 Sewer	Procurement	DSW-907	Gainsborough Rd Avon Rd to Warwick St	12	321	1	Gainsborough Rd	Avon Rd	Warwick St
625 Sewer	Procurement	DSW-907	Gainsborough Rd Warwick St to Avon Ave	10	122	1	Gainsborough Rd	Warwick St	Avon Ave
589 Sewer	Procurement	DSW-907	Gainsborough Rd Warwick St to Outer Dr	12	357	1	Gainsborough Rd	Warwick St	Outer Dr
529 Sewer	Procurement	DSW-907	Glastonbury Rd Grove St to Verne Ave	8	669	1	Glastonbury Rd	Grove St	Verne Ave
526 Sewer	Procurement	DSW-907	Glastonbury Rd Glove St to Venie Ave  Glastonbury Rd McNichols Rd to Grove St	8	500	1	Glastonbury Rd	McNichols Rd	Grove St
612 Sewer	Procurement		Glastonbury Rd Puritan Ave to Florence St	12	300	1	Glastonbury Rd	Puritan Ave	Florence St
532 Sewer	Procurement	DSW-907	Grand River Alley Bretton Dr to Outer Dr	10	324	1	Grand River Alley	Bretton Dr	Outer Dr
533 Sewer	Procurement	DSW-907 DSW-907	Grand River Alley Bretton Dr to Outer Dr  Grand River Alley Bretton Dr to Outer Dr	10	375	1	Grand River Alley	Bretton Dr	Outer Dr
544 Sewer	Procurement	DSW-907 DSW-907	Grand River Alley Outer Dr to Bretton Dr	10	10	1	Grand River Alley	Outer Dr	Bretton Dr
546 Sewer		DSW-907 DSW-907	Grand River Alley Bretton Dr to Outer Dr	10	10	1	Grand River Alley	Bretton Dr	Outer Dr
547 Sewer	Procurement		Grand River Alley Bretton Dr to Outer Dr	10	10	1	Grand River Alley	Bretton Dr	Outer Dr
619 Sewer	Procurement		Grand River Alley Avon Rd to Glastonbury Ave	10	10	1		Avon Rd	Glastonbury Ave
017 Sewel	riocurement	D9 M-30/	Grand River Ariey Avon Ru to Grasionoury Ave	12	10	1	Grand River Alley	Avon Ku	Giasionoury Ave

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
622	Sewer	Procurement	DSW-907	Grand River Alley Outer Dr to Warwick St	10	333	1	Grand River Alley	Outer Dr	Warwick St
638	Sewer	Procurement	DSW-907	Grand River Alley Glastonbury Ave to Kentford St	12	365	1	Grand River Alley	Glastonbury Ave	Kentford St
639	Sewer	Procurement	DSW-907	Grand River Alley Kentford St to Bretton Dr	12	139	1	Grand River Alley	Kentford St	Bretton Dr
545	Sewer	Procurement	DSW-907	Grand River Alley Outer Dr to Bretton Dr	10	10	1	Grand River Alley	Outer Dr	Bretton Dr
557	Sewer	Procurement	DSW-907	Grand River Alley Outer Dr to Warwick St	10	415	1	Grand River Alley	Outer Dr	Warwick St
624	Sewer	Procurement	DSW-907	Grand River Ave Warwick St to Avon Rd	18	707	1	Grand River Ave	Warwick St	Avon Rd
108	Water	Design	CS-1673 T19	Grand River Avenue Fenkell to McNichols	8	14,580	1	Grand River Avenue	Fenkell	McNichols
109	Water	Design	CS-1673 T19	Grand River Avenue Chapel to Greydale	8	850	1	Grand River Avenue	Chapel	Greydale
110	Water	Design	CS-1673 T19	Grand River Avenue Greydale to Northrop	8	1,850	1	Grand River Avenue	Greydale	Northrop
111	Water	Design	CS-1673 T19	Grand River Avenue MacIntyre to Marene	8	860	1	Grand River Avenue	MacIntyre	Marene
225	Water	Evaluation	2020 CA-CIPN	Grandmont	Watermains		3,4,5	Grandmont		
207	Water	Evaluation	2019 CA-CIPN	Grandmont #1	Watermains		6	Grandmont #1		
335	Water	Evaluation	2019 CA-DWS	Grandville Joy Road to Belton	8	1,950	1	Grandville	Joy Road	Belton
374	Water	Evaluation	2019 CA-DWS	Gratiot (M-3) Seven Mile to Eight Mile	8	7,500	3	Gratiot (M-3)	Seven Mile	Eight Mile
226	Water	Evaluation	2020 CA-CIPN	Gratiot Town/Ketterring	Watermains		3,4,5	Gratiot Town/Ketterrin	ng	
247	Water	Evaluation	2021 CA-CIPN	Gratiot Town/Ketterring	Watermains		6	Gratiot Town/Ketterrin	ng	
248	Water	Evaluation	2021 CA-CIPN	Gratiot Woods	Watermains		6	Gratiot Woods		
249	Water	Evaluation	2021 CA-CIPN	Gratiot-Findlay	Watermains		6	Gratiot-Findlay		
293	Water	Evaluation	2023 CA-CIPN	Gratiot-Grand	WaterMains		2	Gratiot-Grand		
799	Sewer	Procurement	DWS-908	Gravier Bluehill to Cadieux	12	50	4	Gravier	Bluehill	Cadieux
281	Water	Evaluation	2022 CA-CIPN	Greektown	Watermains		3,4,5	Greektown		
196	Water	Evaluation	2019 CA-CIPN	Greenfield	Watermains		6	Greenfield		
294	Water	Evaluation	2023 CA-CIPN	Greenfield Park	WaterMains		2	Greenfield Park		
295	Water	Evaluation	2023 CA-CIPN	Greenfield-Grand River	WaterMains		2	Greenfield-Grand Rive	er	
331	Water	Evaluation	2019 CA-DWS	Greenview Sawyer to Tireman	6	1,275	7	Greenview	Sawyer	Tireman
343	Water	Evaluation	2019 CA-DWS	Greenview Chalfonte to Fenkell	6	875	7	Greenview	Chalfonte	Fenkell
337	Water	Evaluation	2019 CA-DWS	Greenview Kirkwood to Dayton	6	730	7	Greenview	Kirkwood	Dayton
70	Water	Procurement	DWS-907	Greenview Ave from Puritan Ave north to McNichols Rd	8	2588	1	Greenview	Puritan Ave north	McNichols Rd
618	Sewer	Procurement	DSW-907	Greenview Ave Florence St to Puritan Ave	12	33	1	Greenview Ave	Florence St	Puritan Ave
209	Water	Evaluation	2019 CA-CIPN		Watermains		6	Greenwich		
446	Sewer	Procurement	DSW-907	Grove St Evergreen Rd to Plainview Ave	12	10	1	Grove St	Evergreen Rd	Plainview Ave
447	Sewer	Procurement	DSW-907	Grove St Evergreen Rd to Plainview Ave	12	10	1	Grove St	Evergreen Rd	Plainview Ave
453	Sewer	Procurement	DSW-907	Grove St Westmoreland Rd to Plainview Ave	15	163	1	Grove St	Westmoreland Rd	Plainview Ave
454	Sewer		DSW-907	Grove St Edinborough Rd to Huntington Rd	15	153	1	Grove St	Edinborough Rd	Huntington Rd
455	Sewer		DSW-907	Grove St Westmoreland Rd to Edinborough Rd	18	177	1	Grove St	Westmoreland Rd	Edinborough Rd
465	Sewer		DSW-907	Grove St Westmoreland Rd to Plainview Ave	12	184	1	Grove St	Westmoreland Rd	Plainview Ave
471	Sewer	Procurement	DSW-907	Grove St Outer Dr to Huntington Rd	12	191	1	Grove St	Outer Dr	Huntington Rd
484	Sewer	Procurement	DSW-907	Grove St Evergreen Rd to Plainview Ave	8	10	1	Grove St	Evergreen Rd	Plainview Ave
488	Sewer		DSW-907	Grove St Westmoreland Rd to Edinborough Rd	15	215	1	Grove St	Westmoreland Rd	Edinborough Rd
490	Sewer		DSW-907	Grove St Edinborough Rd to Huntington Rd	12	140	1	Grove St	Edinborough Rd	Huntington Rd
36	Water	Procurement	WS-712	Guilford St from Harper St southeast to Chandler Park Dr	8	2974	4	Guildford St	Harper St southeast	Chandler Park Dr
704	Sewer	Procurement	DWS-908	Guilford Minvera to Berden	15	302	4	Guilford	Minvera	Berden
711	Sewer	Procurement	DWS-908	Guilford Linville to School Lot	12	47	4	Guilford	Linville	School Lot
722	Sewer	Procurement	DWS-908	Guilford Warren to Munich	15	299	4	Guilford	Warren	Munich
738	Sewer	Procurement	DWS-908	Guilford Windsor to Mack	10	424	4	Guilford	Windsor	Mack
	Sewer		DWS-908	Guilford Minvera to Linville	12	20	4	Guilford	Minvera	Linville
	Sewer	Procurement	DWS-908	Guilford Berden to Linville	12	30	4	Guilford	Berden	Linville
754	Sewer	Procurement	DWS-908	Guilford Chandler Park to Southampton	15	10	4	Guilford	Chandler Park	Southampton
	Sewer	Procurement	DWS-908	Guilford Windsor to Mack	10	10	4	Guilford	Windsor	Mack
	Sewer	Procurement	DWS-908	Guilford Harper to Linville	12	50	4	Guilford	Harper	Linville
793	Sewer	Procurement	DWS-908	Guilford Linville to Chandler Park	12	50	4	Guilford	Linville	Chandler Park

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
32	Water	Procurement	WS-712	Guilford St from alley southeast to Warren Ave	8	131	4	Guilford St	alley southeast	Warren Ave
312	Water	Evaluation	2023 CA-CIPN	Happy Homes	WaterMains		2	Happy Homes	•	
83	Water	Design	WS-713	Harbor Island between Lakewood and dead end (before Alter)	6	1,704	4	Harbor Island	Lakewood	
351	Water	Evaluation	2019 CA-DWS	Harlow Puritan to Verne	8	1,260	1	Harlow	Puritan	Verne
791	Sewer	Procurement	DWS-908	Harper Woodhall to Oldtown	12	50	4	Harper	Woodhall	Oldtown
30	Water	Procurement	WS-712	Harper Ave intersection at Chester St	16	126	4	Harper Ave	Chester St	
29	Water	Procurement	WS-712	Harper Ave intersection at Chester St	12	24	4	Harper Ave intersection	Chester St	
395	Water	Evaluation	2019 CA-DWS	Hayes Seven Mile to Houston-Whitier	12	10,133	4	Hayes	Seven Mile	Houston-Whitier
396	Water	Evaluation	2019 CA-DWS	Hayes Elmdale to Harper Avenue	12	2,030	4	Hayes	Elmdale	Harper Avenue
25	Water	Procurement	WS-712	Hereford St from Minerva St southeast to Chandler Park Dr	8	1548	4	Hereford St	Minerva St southeast	Chandler Park Dr
197	Water	Evaluation	2019 CA-CIPN	Herman Kiefer	Watermains		6	Herman Kiefer		
250	Water	Evaluation	2021 CA-CIPN	Herman Kiefer	Watermains		6	Herman Kiefer		
140	Water	Construction	WS-698	Heyden McNichols to Santa Maria	8	838	1	Heyden	McNichols	Santa Maria
6	Water	Procurement	WS-712	Hillcrest St from Rolandale St southeast to Mack Ave	8	2790	4	Hillcrest St	Rolandale St southeast	Mack Ave
251	Water	Evaluation	2021 CA-CIPN	Historic Atkinson	Watermains		6	Historic Atkinson		
296	Water	Evaluation	2023 CA-CIPN	Hubbell-Lyndon	WaterMains		2	Hubbell-Lyndon		
227	Water	Evaluation	2020 CA-CIPN	Hubbell-Puritan	Watermains		3,4,5	Hubbell-Puritan		
198	Water	Evaluation	2019 CA-CIPN	Hunt	Watermains		6	Hunt		
252	Water	Evaluation	2021 CA-CIPN	Hunt	Watermains		6	Hunt		
72	Water	Procurement	DWS-907	Huntington Rd from Bretton Dr north to Verne Ave	8	883	1	Huntington	Bretton Dr North	Verne Ave
486	Sewer	Procurement	DSW-907	Huntington Rd Grove St to Grove St	10	28	1	Huntington Rd	Grove St	Grove St
548	Sewer	Procurement	DSW-907	Huntington Rd Bretton Dr to Bretton Dr	10	46	1	Huntington Rd	Bretton Dr	Bretton Dr
552	Sewer	Procurement	DSW-907	Huntington Rd Bretton Dr to Bretton Dr	8	36	1	Huntington Rd	Bretton Dr	Bretton Dr
561	Sewer	Procurement	DSW-907	Huntington Rd Florence St to Bretton Dr	10	206	1	Huntington Rd	Florence St	Bretton Dr
567	Sewer	Procurement	DSW-907	Huntington Rd Bretton Dr to Bretton Dr	8	64	1	Huntington Rd	Bretton Dr	Bretton Dr
428	Sewer	Procurement	DSW-907	Huntington St Grove St to Verne Ave	8	682	1	Huntington St	Grove St	Verne Ave
228	Water	Evaluation	2020 CA-CIPN	Indian Village	Watermains		3,4,5	Indian Village		
199	Water	Evaluation	2019 CA-CIPN	Islandview	Watermains		6	Islandview		
229	Water	Evaluation	2020 CA-CIPN	Jamison	Watermains		3,4,5	Jamison		
119	Water	Design	CS-1673 T20	Jefferson Ave (Both Sides) Mt. Elliott to Beafauit	8	1,815	5	Jefferson Ave (Both Si	Mt. Elliott	Beafauit
118	Water	Design	CS-1673 T20	Jefferson Ave (N Side) I-375 Svc Dr to Orleans	8	1,450	5	Jefferson Ave (N Side)	I-375 Svc Dr	Orleans
120	Water	Design	CS-1673 T20	Jefferson Ave (N. Side) Crane Avenue to Pennsylvania	8	2,150	5	Jefferson Ave (N. Side	Crane Avenue	Pennsylvania
121	Water	Design	CS-1673 T20	Jefferson Ave (S. Side) Marina Dr. to Lodge Drive	8	775	5	Jefferson Ave (S. Side)	Marina Dr.	Lodge Drive
122	Water	Design	CS-1673 T20	Jefferson Ave (S. Side) Corey to E. of Conner Stn.	8	850	5	Jefferson Ave (S. Side)	Corey	E. of Conner Stn.
123	Water	Design	CS-1673 T20	Jefferson Ave (S. Side) 400 ft west of conner to GV Btwn Algo	8	1,190	5	Jefferson Ave (S. Side)	400 ft west of conner	GV Btwn Algonquin a
409	Water	Evaluation		Jefferson Ave. W. 15th St. to Vermont St.	8	1,095	5	Jefferson Ave. W.	15th St.	Vermont St.
	Water	Evaluation		Jefferson Ave. W. Vermont St. to Rosa Park Blvd.	8	518	5	Jefferson Ave. W.	Vermont St.	Rosa Park Blvd.
411	Water	Evaluation		Jefferson Ave. W. (N) Shelby St. to Woodward	16	703	5	Jefferson Ave. W. (N)	,	Woodward
	Water	Evaluation		Jefferson Ave. W. (S) Civic Center Dr. to Woodward Ave.	16	685	5	Jefferson Ave. W. (S)	Civic Center Dr.	Woodward Ave.
230	Water	Evaluation	2020 CA-CIPN		Watermains		3,4,5	Jeffries		
	Water	Evaluation		Joseph Berry Sub	Watermains		6	Joseph Berry Sub		
253	Water	Evaluation		Joy Community	Watermains		6	Joy Community		
297	Water	Evaluation		Joy Community	WaterMains		2	Joy Community		
383	Water	Evaluation		Joy Road Wyoming to Livernois	16	5,310	7	Joy Road	Wyoming	Livernois
	Water	Construction	WS-693A	Joy Road. DWSD Greenfield to Schaefer	8	7,424	7	Joy Road. DWSD	Greenfield	Schaefer
	Water	Construction	WS-693A	Joy Road. GLWA Greenfield to Schaefer	24	5,300	7	Joy Road. GLWA	Greenfield	Schaefer
	Water	Evaluation	2022 CA-CIPN		Watermains		, ,	Joy-Schaefer		
135	Water	Design	WS-710	Kelly, Glenwood to Eastwood 1,360 LF	8	1,360	7	Kelly	Glenwood	Eastwood
116	Water	Design	CS-1673 T21 (	Kelly Morang to Moross	8	4,538	4	Kelly	Morang	Moross
642	Sewer	Procurement	DWS-908	Kingsville Edgefield to Tyrone	12	343	4	Kingsville	Edgefield	Tyrone
97	Water	Design	WS-713	Klenk St. Alter to dead end	8	655	4	Klenk St.	Alter	

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
105	Water	Design	WS-713	Klenk St. Dead end across channel to Riverside Blvd	8	374	4	Klenk St.	Riverside Blvd	
231	Water	Evaluation	2020 CA-CIPN	Krainz Woods	Watermains		3,4,5	Krainz Woods		
214	Water	Evaluation	2020 CA-CIPN	Lafayette Park	Watermains		4	Lafayette Park		
51	Water	Procurement	WS-712	Lafontaine St between Canyon St and Mack Ave	8	71	4	Lafontaine	Canyon St	Mack Ave
59	Water	Procurement	WS-712	Lafontaine St. between Canyon St. and Mack Ave.	8	1333	4	Lafontaine	Canyon St.	Mack Ave.
150	Water	Construction	WS-703	Lahser Seven Mile to Eight Mile	16	5,200	1	Lahser	Seven Mile	Eight Mile
101	Water	Design	WS-713	Lakewood Riverside Blvd to Scripps	8	473	4	Lakewood	Riverside Blvd	Scripps
102	Water	Design	WS-713	Lakewood Scripps to Avondale	8	1,705	4	Lakewood	Scripps	Avondale
103	Water	Design	WS-713	Lakewood Essex to Avondale	8	826	4	Lakewood	Essex	Avondale
319	Water	Evaluation	2019 CA-DWS	Lamphere Sawyer to Majestic	6	875	7	Lamphere	Sawyer	Majestic
168	Water	Construction	WS-705	Lanark Ave. Morang to Moross	8	2,149	4	Lanark Ave.	Morang	Moross
568	Sewer	Procurement	DSW-907	Lancashire St Outer Dr to Warwick St	12	10	1	Lancashire St	Outer Dr	Warwick St
620	Sewer	Procurement	DSW-907	Lancashire St Warwick St to Avon Rd	8	216	1	Lancashire St	Warwick St	Avon Rd
555	Sewer	Procurement	DSW-907	Lancashire St Outer Dr to Gainsborough Rd	10	407	1	Lancashire St	Outer Dr	Gainsborough Rd
569	Sewer	Procurement	DSW-907	Lancashire St Outer Dr to Warwick St	12	10	1	Lancashire St	Outer Dr	Warwick St
596	Sewer	Procurement	DSW-907	Lancashire St Outer Dr to Bretton Dr	12	10	1	Lancashire St	Outer Dr	Bretton Dr
623	Sewer	Procurement	DSW-907	Lancashire St Avon Rd to Glastonbury Ave	10	10	1	Lancashire St	Avon Rd	Glastonbury Ave
10	Water	Procurement	WS-712	Lannoo St from Canyon Ave to Linville St	8	596	4	Lannoo St	Canyon Ave	Linville St
11	Water	Procurement	WS-712	Lannoo St from Linville St to Chandler Park Dr	8	665	4	Lannoo St	Linville St	Chandler Park Dr
271	Water	Evaluation	2022 CA-CIPN	LaSalle College Park	Watermains		3,4,5	LaSalle College Park		
200	Water	Evaluation	2019 CA-CIPN	LaSalle Gardens	Watermains		6	LaSalle Gardens		
79	Water	Design	WS-713	Lenox between Korte and dead-end south of Scripps	6	1,630	4	Lenox	Korte	Scripps
355	Water	Evaluation	2019 CA-DWS	Lindsay Curtis to Clarita	6	1,965	1	Lindsay	Curtis	Clarita
58	Water	Procurement	WS-712	Linville between Moross Rd. and Kingsville St.	8	491	4	Linville	Moross Rd.	Kingsville St.
	Water	Procurement	WS-712	Linville St at Moross Rd and Kingsville intersections	8	52	4	Linville St	Moross Rd	Kingsville intersection
659	Sewer	Procurement	DWS-908	Lodewyck Chandler Park to Southampton	12	271	4	Lodewyck	Chandler Park	Southampton
417	Water	Evaluation	2019 CA-DWS	Lothrop Rd. 3rd Street to 2nd Street	12	822	5	Lothrop Rd.	3rd Street	2nd Street
	Water	Evaluation		Lothrop Rd. 2nd Street to Woodward	12	922	5	Lothrop Rd.	2nd Street	Woodward
663	Sewer	Procurement	DWS-908	Mack Farmbrook to Radnor	12	216	4	Mack	Farmbrook	Radnor
26	Water	Procurement	WS-712	Mack Ave northeast of Neff Ave	6	4	4	Mack Ave	Neff Ave	
27	Water	Procurement	WS-712	Mack Ave from Neff Ave northeast towards Hereford St	8	599	4	Mack Ave	Neff Ave northeast	Hereford St
	Water	Procurement	WS-712	Mack Ave from Moross Rd to Allard Ave	16	640	4	Mack Ave	Moross Rd	Allard Ave
48	Water	Procurement	WS-712	Mack Ave from Moross Rd to Allard Ave	12	4	4	Mack Ave	Moross Rd	Allard Ave
	Water	Design	WS-713	Manistique Essex to Scripps	8	2,585	4	Manistique	Essex	Scripps
	Water	Evaluation		Manor Joy to Tireman	8	4,830	7	Manor	Joy	Tireman
143	Water	Construction	WS-698	Mansfield Fenkell to Florence	8	3,492	1	Mansfield	Fenkell	Florence
365	Water	Evaluation		Mansfield Capital to Wadsworth	6	1,630	1	Mansfield	Capital	Wadsworth
	Water	Evaluation		Mansfield Thatcher to Curtis	8	675	1	Mansfield	Thatcher	Curtis
	Water	Evaluation	2019 CA-CIPN	1 0	Watermains		6	Mapleridge		
	Water	Evaluation	2021 CA-CIPN	1 0	Watermains		6	Mapleridge	- · · ·	
	Water	Construction	WS-705	Mark Twain Fenkell to Lyndon	8	2,683	1	Mark Twain	Fenkell	Lyndon
	Water	Design	WS-713	Marlborough between Freud and Jefferson	8	1,182	4	Marlborough	Freud	Jefferson
	Water	Construction	WS-705	Marlowe Chalfonte to Grand River	8	3,686	1	Marlowe	Chalfonte	Grand River
756	Sewer	Procurement	DWS-908	Marseilles Chandler Park to souh	18	10	4	Marseilles	Chandler Park	souh
	Water	Evaluation	2023 CA-CIPN	υ	WaterMains		2	McDougall	~ "	
	Water	Evaluation		McGraw Cecil to Warren W.	12	4,670	7	McGraw	Cecil	Warren W.
	Water	Construction	WS-705	McKinney Ave Grayton to Morang	8	2,024	4	McKinney Ave	Grayton	Morang
175	Water	Construction	WS-706	McNichols Schaefer to James Couzens	12	4,100	2	McNichols	Schaefer	James Couzens
	Water	Evaluation		McNichols Hoover to Schoenherr	8	5,840	4	McNichols	Hoover	Schoenherr
	Water	Evaluation	-	Medbury Park	Watermains		3,4,5	Medbury Park		
255	Water	Evaluation	2021 CA-CIPN	Michigan-Martin	Watermains		6	Michigan-Martin		

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
630	Sewer	Procurement	DSW-907	Midland Rd Rosemont Ave to Ashton Rd	8	23	1	Midland Rd	Rosemont Ave	Ashton Rd
	Water		DWS-907	Midland St from Bretton Dr east to Southfield Fwy	8	730	1	Midland St f	Bretton Dr East	Southfield Fwy
283	Water	Evaluation	2023 CA-CIPN	Midtown Tech Town	WaterMains	139,920	5,6	Midtown Tech Town		,
	Water			Milwaukee Junction	Watermains		3,4,5	Milwaukee Junction		
-	Sewer		DWS-908	Minneapolis Guilford to Cadieux	12	332	4	Minneapolis	Guilford	Cadieux
350	Water	Evaluation	2019 CA-DWS	Montrose Schoolcraft to Grand River	8	2,300	7	Montrose	Schoolcraft	Grand River
256	Water	Evaluation	2021 CA-CIPN	Morningside	Watermains		6	Morningside		
644	Sewer	Procurement	DWS-908	Moross Cheshire to Mallina	20	133	4	Moross	Cheshire	Mallina
647	Sewer	Procurement	DWS-908	Moross Edsel Ford Hwy to Edgefield	20	277	4	Moross	Edsel Ford Hwy	Edgefield
775	Sewer	Procurement	DWS-908	Moross Harper to Edgefield	12	50	4	Moross	Harper	Edgefield
1	Water	Procurement	WS-712	Moross Rd from Edsel Ford Service Dr southeast to Alstead St	8	145	4	Moross Rd	Edsel Ford Service Dr	Alstead St
202	Water	Evaluation	2019 CA-CIPN	Moross-Morang	Watermains		6	Moross-Morang		
257	Water	Evaluation	2021 CA-CIPN	Mount Olivet	Watermains		6	Mount Olivet		
139	Water	Construction	WS-698	Murray Hill Fenkell to Florence	8	3,401	1	Murray Hill	Fenkell	Florence
273	Water	Evaluation	2022 CA-CIPN	Nardin Park	Watermains		3,4,5	Nardin Park		
92	Water	Design	WS-713	Navahoe Essex to Avondale	8	835	4	Navahoe	Essex	Avondale
674	Sewer	Procurement	DWS-908	Neff Minvera to Berden	12	521	4	Neff	Minvera	Berden
684	Sewer	Procurement	DWS-908	Neff Berden to Chandler Park	12	796	4	Neff	Berden	Chandler Park
696	Sewer	Procurement	DWS-908	Neff Warren to Munich	12	643	4	Neff	Warren	Munich
762	Sewer	Procurement	DWS-908	Neff Southampton to Warren	12	250	4	Neff	Southampton	Warren
783	Sewer	Procurement	DWS-908	Neff Chandler Park to Southampton	12	50	4	Neff	Chandler Park	Southampton
785	Sewer	Procurement	DWS-908	Neff Warren to Munich	12	50	4	Neff	Warren	Munich
787	Sewer	Procurement	DWS-908	Neff Munich to Waveney	12	50	4	Neff	Munich	Waveney
185	Water	Evaluation	CS-1909	New Center	Watermains	178,992	5	New Center		
42	Water	Procurement	WS-712	New York St from Cadieux Rd northeast to Guilford St	8	825	4	New York	Cadieux Rd northeast	Guilford St
726	Sewer	Procurement	DWS-908	New York Guilford to Cadieux	12	695	4	New York	Guilford	Cadieux
764	Sewer	Procurement	DWS-908	New York Cadieux to Guilford	12	20	4	New York	Cadieux	Guilford
82	Water	Design	WS-713	Newport dead end to Scripps (added new valve)	8	430	4	Newport	Scripps	
95	Water	Design	WS-713	Newport between Avondale and Essex	8	929	4	Newport	Avondale	Essex
104	Water	Design	WS-713	Newport dead end to Park	6	455	4	Newport	Park	
299	Water	Evaluation	2023 CA-CIPN	Nolan	WaterMains		2	Nolan		
233	Water	Evaluation	2020 CA-CIPN	North Corktown	Watermains		3,4,5	North Corktown		
300	Water	Evaluation	2023 CA-CIPN	North End	WaterMains		2	North End		
203	Water	Evaluation	2019 CA-CIPN	Northwest Community	Watermains		6	Northwest Community		
301	Water	Evaluation	2023 CA-CIPN	Nortown	WaterMains		2	Nortown		
165	Water		WS-705	Nottingham Ave. Berkshire to Whittier	8	2,200	4	Nottingham Ave.	Berkshire	Whittier
352	Water			Oakfield Puritan to Verne	6	1,260	1	Oakfield	Puritan	Verne
182	Water		PC-801A	Oakman Joy to Tireman	8	5,880	7	Oakman	Joy	Tireman
	Water		WS-703	Oakman Blvd. Joy to Grand River	8	9,800	7	Oakman Blvd.	Joy	Grand River
302	Water			Oakwood Heights	WaterMains		2	Oakwood Heights		
274	Water		2022 CA-CIPN		Watermains		3,4,5	O'Hair Park		
	Water	Evaluation	2023 CA-CIPN		WaterMains		2	Old Redford		
718	Sewer		DWS-908	Oldtown Linville to Southampton	15	626	4	Oldtown	Linville	Southampton
746	Sewer			Oldtown Linville to Harper	20	10	4	Oldtown	Linville	Harper
752	Sewer			Oldtown Chandler Park to Southampton	18	10	4	Oldtown	Chandler Park	Southampton
			WS-712	Oldtown St from Chandler Park Dr southeast to Southampton S	8	635	4	Oldtown St	Chandler Park Dr sout	
728	Sewer		DWS-908	Ontario Guilford to Cadieux	12	253	4	Ontario	Guilford	Cadieux
771	Sewer		DWS-908	Ontario Cadieux to Guilford	12	20	4	Ontario	Cadieux	Guilford
	Water		WS-712	Opal between Canyon St. and Mack Ave	8	559	4	Opal	Canyon St.	Mack Ave
53	Water		WS-712	Opal St between Canyon St and Mack Ave	8	67	4	Opal St	Canyon St	Mack Ave
366	Water	Evaluation	2019 CA-DWS	Orangelawn Burt to Westwood	12	2,600	7	Orangelawn	Burt	Westwood

Line	Type	Phase Pr	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
434	Sewer			Outer Dr McNichols Rd to Grove St	18	10	1	Outer Dr	McNichols Rd	Grove St
_	Sewer			Outer Dr McNichols Rd to Grove St	20	134	1	Outer Dr	McNichols Rd	Grove St
519	Sewer	Procurement DSV	W-907	Outer Dr Verne Ave to Verne Ave	12	50	1	Outer Dr	Verne Ave	Verne Ave
595	Sewer	Procurement DSV	W-907	Outer Dr Gainsborough Rd to Lancashire St	10	10	1	Outer Dr	Gainsborough Rd	Lancashire St
433	Sewer		W-907	Outer Dr McNichols Rd to Grove St	18	10	1	Outer Dr	McNichols Rd	Grove St
435	Sewer	Procurement DSV	W-907	Outer Dr McNichols Rd to Grove St	18	10	1	Outer Dr	McNichols Rd	Grove St
508	Sewer	Procurement DSV	W-907	Outer Dr Verne Ave to Grove St	8	145	1	Outer Dr	Verne Ave	Grove St
509	Sewer	Procurement DSV	W-907	Outer Dr Grove St to Verne Ave	12	11	1	Outer Dr	Grove St	Verne Ave
510	Sewer	Procurement DSV	W-907	Outer Dr Grove St to Verne Ave	12	10	1	Outer Dr	Grove St	Verne Ave
559	Sewer	Procurement DSV	W-907	Outer Dr Grand River Ave to Lancashier St	24	10	1	Outer Dr	Grand River Ave	Lancashier St
590	Sewer	Procurement DSV	W-907	Outer Dr Bretton Dr to Gainsborough Rd	10	10	1	Outer Dr	Bretton Dr	Gainsborough Rd
180	Water	Construction WS-	5-704	Outer Drive W Livernois to Wyoming	6	10,650	2	Outer Drive W	Livernois	Wyoming
181	Water	Construction WS-	S-704	Outer Drive W Wyoming to W. 7 Mile	6	10,050	2	Outer Drive W	Wyoming	W. 7 Mile
275	Water	Evaluation 2022	22 CA-CIPN	Outer Drive-Hayes	Watermains		3,4,5	Outer Drive-Hayes		
379	Water	Evaluation 2019	9 CA-DWS	Pallister Lodge Service Dr. to 3rd	8	600	5	Pallister	Lodge Service Dr.	3rd
416	Water	Evaluation 2019	9 CA-DWS	Pallister St. John C Lodge to 3rd Street	6	588	5	Pallister St.	John C Lodge	3rd Street
282	Water	Evaluation 2022	22 CA-CIPN	Palmer Park	Watermains		3,4,5	Palmer Park		
258	Water	Evaluation 202	21 CA-CIPN	Palmer Woods	Watermains		6	Palmer Woods		
166	Water	Construction WS	S-705	Parkgrove Ave. Morang Ave to Kelly	8	324	4	Parkgrove Ave.	Morang Ave	Kelly
330	Water	Evaluation 2019	9 CA-DWS	Paul Evergreen to Southfield Freeway	8	5,300	6	Paul	Evergreen	Southfield Freeway
242	Water	Evaluation 2020	20 CA-CIPN	Paveway	Watermains		3,4,5	Paveway		
184	Water	Construction WS	S-705	Pearl Woodmere to Pitt	8	1,070	6	Pearl	Woodmere	Pitt
204	Water	Evaluation 2019	19 CA-CIPN	Pembroke	Watermains		6	Pembroke		
344	Water	Evaluation 2019	19 CA-DWS	Penrod Eaton to Lyndon	6	800	7	Penrod	Eaton	Lyndon
276	Water	Evaluation 2022	22 CA-CIPN	Penrose	Watermains		3,4,5	Penrose		
303	Water	Evaluation 202	23 CA-CIPN	Pershing	WaterMains		2	Pershing		
85	Water	Design WS	3-713	Philip Essex to Scripps	8	2,556	4	Philip	Essex	Scripps
329	Water	Evaluation 2019	9 CA-DWS	Piedmont Warren to Whitlock	6	1,350	6	Piedmont	Warren	Whitlock
324	Water			Pierson Belton to Tireman	6	650	1	Pierson	Belton	Tireman
	Water			Pierson Santa Clara to McNichols	8	1,440	1	Pierson	Santa Clara	McNichols
234	Water		20 CA-CIPN	ý .	Watermains			Piety Hill		
603	Sewer			Pilgrim St Ashton Rd to Rosemont Ave	8	10	1	Pilgrim St	Ashton Rd	Rosemont Ave
360	Water			Pinehurst Joy to Tireman	6	2,260	7	Pinehurst	Joy	Tireman
	Water			Pingree Park	Watermains		6	Pingree Park		
81	Water	Ų		Piper Scripps to Averhill (to new valve)	8	1,894	4	Piper	Scripps	Averhill
100	Water	J		Piper dead end to Scripps (added new valve)	8	409	4	Piper	Scripps	
441	Sewer			Plainview Ave Grove St to Verne Ave	10	631	1	Plainview Ave	Grove St	Verne Ave
442	Sewer			Plainview Ave Verne Ave to Florence St	12	15	1	Plainview Ave	Verne Ave	Florence St
481	Sewer			Plainview Ave McNichols Rd to McNichols Rd	8	10	1	Plainview Ave	McNichols Rd	McNichols Rd
482	Sewer			Plainview Ave McNichols Rd to McNichols Rd	8	10	1	Plainview Ave	McNichols Rd	McNichols Rd
483	Sewer			Plainview Ave McNichols Rd to McNichols Rd	8	10	1	Plainview Ave	McNichols Rd	McNichols Rd
485	Sewer			Plainview Ave Grove St to Grove St	8	29	1	Plainview Ave	Grove St	Grove St
492	Sewer			Plainview Ave Verne Ave to Verne Ave	12	38	1	Plainview Ave	Verne Ave	Verne Ave
562	Sewer			Plainview Ave Florence St to Florence St	8	33	1	Plainview Ave	Florence St	Florence St
563	Sewer			Plainview Ave Verne Ave to Florence St	8	269	1	Plainview Ave	Verne Ave	Florence St
443	Sewer			Plainview Ave Verne Ave to Florence St	12	10	1	Plainview Ave	Verne Ave	Florence St
494	Sewer			Planview Ave Florence St to Verne St	8	267	1	Planview Ave	Florence St	Verne St
387	Water			Plymouth Redford City Limit to Evergreen	2	11,280	7	Plymouth	Redford City Limit	Evergreen
388	Water			Plymouth Schaefer to Wyoming	12	6,070	7	Plymouth	Schaefer	Wyoming
277	Water			Plymouth-Hubbell	Watermains		- / /-	Plymouth-Hubbell		
304	Water	Evaluation 2022	23 CA-CIPN	Poletown EastPride Area Community	WaterMains		2	Poletown EastPride Ar	rea Community	

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
354	Water	Evaluation		Prevost Midland to Pilgrim	8	540	1	Prevost	Midland	Pilgrim
	Water	Construction	WS-705	Prevost Pembroke to W. Seven Mile	8	2,629	2	Prevost	Pembroke	W. Seven Mile
235	Water	Evaluation	2020 CA-CIPN	PulaskiRivertown	Watermains			PulaskiRivertown		
617	Sewer	Procurement	DSW-907	Puritan Ave Rosemont Ave to Ashton Rd	12	168	1	Puritan Ave	Rosemont Ave	Ashton Rd
73	Water	Procurement	DWS-907	Puritan Ave from Warwick St east to Avon Ave	8	906	1	Puritan Ave	Warwick St east	Avon Ave
74	Water	Procurement	DWS-907	Puritan Ave from Glastonbury Ave east to Rosemont Ave	8	629	1	Puritan Ave	Glastonbury Ave East	Rosemont Ave
606	Sewer	Procurement	DSW-907	Puritan Ave Glastonbury Ave to Rosemont Ave	8	10	1	Puritan Ave	Glastonbury Ave	Rosemont Ave
607	Sewer	Procurement	DSW-907	Puritan Ave Glastonbury Ave to Rosemont Ave	8	10	1	Puritan Ave	Glastonbury Ave	Rosemont Ave
75	Water	Procurement	DWS-907	Puritan Ave from Ashton Ave east to Southfield Service Drive	8	261	1	Puritan Ave	Ashton Ave East	Southfield Service Driv
20	Water	Procurement	WS-712	Radnor St from Chester St southeast to Chandler Park Dr	8	2557	4	Radnor	Chester St southeast	Chandler Park Dr
62	Water	Procurement	WS-712	Radnor between Chandler Park Dr. and Frankfort St.	8	1137	4	Radnor	Chandler Park Dr	Frankfort St.
650	Sewer	Procurement	DWS-908	Radnor Chester to Berden	15	214	4	Radnor	Chester	Berden
657	Sewer	Procurement	DWS-908	Radnor Southampton to Warren	12	702	4	Radnor	Southampton	Warren
662	Sewer	Procurement	DWS-908	Radnor Warren to Mack	12	982	4	Radnor	Warren	Mack
16	Water	Procurement	WS-712	Radnor St from Frankfort St southeast to Mack Ave	8	2520	4	Radnor St	Frankfort St southeast	Mack Ave
	Water	Procurement	WS-712	Radnor St between Chandler Park Dr and Southampton St	8	67	4	Radnor St	Chandler Park Dr and	St
305	Water	Evaluation	2023 CA-CIPN		WaterMains		2	Ravendale		
278	Water	Evaluation	2022 CA-CIPN	- C	Watermains		3,4,5	Regent Park		
161	Water	Construction	WS-705	Riad Rd. Morang to Moross	8	2,137	4	Riad Rd.	Morang	Moross
260	Water	Evaluation	2021 CA-CIPN	Rivertown	Watermains		6	Rivertown		
171	Water	Construction	WS-705	Robson Ave. Chalfonte to Grand River	8	3,301	1	Robson Ave.	Chalfonte	Grand River
	Water	Construction	WS-706	Robson Ave. Curtis Ave. to W. Seven Mile	8	2,645	1	Robson Ave.	Curtis Ave.	W. Seven Mile
	Water	Procurement	WS-712	Rolandale St. between Moross Rd. and Kingsville St.	8	465	4	Rolandal	Moross Rd.	Kingsville St.
9	Water	Procurement	WS-712	Rolandale St between Canyon St and Moross Rd	8	500	4	Rolandale	Canyon St	Moross Rd
	Water	Procurement	WS-712	Rolandale St and Kingsville intersection	8	60	4	Rolandale St	Kingsville	
327	Water	Evaluation		Rosemont Van Buren to Constance	8	650	1	Rosemont	Van Buren	Constance
341	Water	Evaluation		Rosemont Schoolcraft to Dead End	8	1,300	1	Rosemont	Schoolcraft	Dead End
346	Water	Evaluation		Rosemont Curtis to Margareta	6	1,550	1	Rosemont	Curtis	Margareta
348	Water	Evaluation		Rosemont Fargo to Hessel	8	1,300	1	Rosemont	Fargo	Hessel
528	Sewer	Procurement	DSW-907	Rosemont Ave Verne Ave to Florence St	8	652	1	Rosemont Ave	Verne Ave	Florence St
602	Sewer	Procurement	DSW-907	Rosemont Ave Pilgrim St to Puritan Ave	10	227	1	Rosemont Ave	Pilgrim St	Puritan Ave
635	Sewer	Procurement	DSW-907	Rosemont Ave Midland St to Bretton Dr	12	10	1	Rosemont Ave	Midland St	Bretton Dr
613	Sewer	Procurement	DSW-907	Rosemont Ave Florence St to Puritan Ave	10	645	1	Rosemont Ave	Florence St	Puritan Ave
68	Water	Procurement	DWS-907	Rosemont Ave from Midland St north to Puritan Ave	8	1312	1	Rosemont Ave	Midland St north	Puritan Ave
236	Water	Evaluation		Russell Industrial	Watermains		3,4,5	Russell Industrial	Y7 1	<b>n</b> •
353	Water	Evaluation		Rutherford Keeler to Puritan	8	1,970	1	Rutherford	Keeler	Puritan
162	Water	Construction	WS-705	Rutherford Pembroke to W. Seven Mile	8	2,569	2	Rutherford	Pembroke	W. Seven Mile
605	Sewer	Procurement	DSW-907	Scardale St Glastonbury Ave to Glastonbury Ave	12	13	1	Scardale St	Glastonbury Ave	Glastonbury Ave
615	Sewer	Procurement	DSW-907	Scarsdale St Avon Rd to Glastonbury Ave	12	424	1	Scarsdale St	Avon Rd	Glastonbury Ave
183 384	Water	Construction	WS-698 Prov 2	Schaefer Chicago to Joy Rd	8 12	1,720	1	Schaefer	Chicago	Joy Rd
	Water Water	Evaluation		Schaefer Joy Road to Tireman		5,200	1 2 4 5	Schaefer	Joy Road	Tireman
237		Evaluation	2020 CA-CIPN	Schaefer 7/8 Lodge	Watermains		3,4,5	Schaefer 7/8 Lodge	W. Cl.	920 C 4 4 CTV
357	Water	Evaluation	2019 CA-DWS	Schaefer NB/SB W. Chicago to 830 feet south of Westfield	6		1	Schaefer NB/SB	W. Chicago	830 feet south of West
757	Sewer	Procurement	DWS-908	School Lot Frankfort to Cadieux  School lot (Tonnic courts) Guilford to Access Road	10 12	20	4	School Lot	Frankfort	Cadieux
760 127	Sewer	Procurement	DWS-908 WS-710	School lot (Tennis courts) Guilford to Access Road Schoolcraft, Asbury Park to Greenfield 2,900 LF		246	7	School lot (Tennis cour		Access Road
	Water	Design		,	8	2,900	7	Schoolcraft Schoolcraft	Asbury Park	Greenfield
128 371	Water	Design	WS-710	Schoolcraft, Greenfield to Grand River 3,675 LF	8	3,675	1	Schoolcraft Schoolcraft	Greenfield	Grand River
	Water	Evaluation Design		Schoolcraft Asbury Park to Mettetal	6	370		Schoolcraft Schoolcraft	Asbury Park	Mettetal Grand River
	Water	Design		Schoolcraft Greenfield to Grand River	8	7,350	1	Schoolcraft	Greenfield	
	Water	Design	CS-1673 T21	Schoolcraft Asbury Park to Greenfield	8	1 279	1	Schoolcraft	Asbury Park	Greenfield
96	Water	Design	WS-713	Scripps between Ashland and Lakewood	8	1,378	4	Scripps	Ashland	Lakewood

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
98	Water	Design	WS-713	Scripps between Lakewood and Lenox	8	1,686	4	Scripps	Lakewood	Lenox
389	Water	Evaluation	2019 CA-DWS	Seven Mile John R. to Dequindre	12	13,970	2	Seven Mile	John R.	Dequindre
390	Water	Evaluation	2019 CA-DWS	Seven Mile Dequindre to Ryan	6	5,300	3	Seven Mile	Dequindre	Ryan
391	Water	Evaluation		Seven Mile Ryan to Mound	8	5,300	3	Seven Mile	Ryan	Mound
392	Water	Evaluation	2019 CA-DWS	Seven Mile Mound to Van Dyke	8	5,300	3	Seven Mile	Mound	Van Dyke
498	Sewer	Procurement	DSW-907	Shaftsbury Ave Grove St to Verne Ave	8	10	1	Shaftsbury Ave	Grove St	Verne Ave
516	Sewer	Procurement	DSW-907	Shaftsbury Ave McNichols Rd to Grove St	8	521	1	Shaftsbury Ave	McNichols Rd	Grove St
497	Sewer	Procurement	DSW-907	Shaftsbury Ave Grove St to Verne Ave	8	10	1	Shaftsbury Ave	Grove St	Verne Ave
	Water	Evaluation		Sherwood Forest	Watermains		6	Sherwood Forest		
_	Water	Evaluation		Sherwood Forest	Watermains		6	Sherwood Forest		
187	Water	Evaluation	CS-1909	Shulze	Watermains		5	Shulze		
		Procurement	DWS-908	sioux Guilford to Cadieux	12	71	4	sioux	Guilford	Cadieux
		Procurement	WS-712	Sioux St from Cadieux Rd northeast to Guilford St	8	868	4	Sioux St from		Guilford St
		Evaluation		Sorrento Joy to Tireman	6	740	2	Sorrento	Joy	Tireman
	Water	Evaluation	2019 CA-CIPN	,	Watermains	,	6	South of Six		1110111411
		Procurement	WS-712	Southampton St from Oldtown St northeast to Bluehill St	8	288	4	Southampton	Oldtown St NorthEast	Bluehill St
_		Procurement	DSW-907	Southfield FWY Verne Ave to Florence St	10	639	1	Southfield FWY	Verne Ave	Florence St
		Procurement	DSW-907	Southfield FWY McNichols Rd to Grove St	8	10	1	Southfield FWY	McNichols Rd	Grove St
		Procurement	DSW-907	Southfield FWY Puritan Ave to Pilgrim St	8	577	1	Southfield FWY	Puritan Ave	Pilgrim St
		Procurement	DSW-907	Southfield FWY Florence St to Florence St	12	12	1	Southfield FWY	Florence St	Florence St
	Water	Evaluation		Southfield Svc Drive North Fenkell to Puritan	6	2,560	7	Southfield Svc Drive N		Puritan
	Water	Evaluation		Southfield Svc Drive North Schoolcraft to Grand River	12	5,120	1	Southfield Svc Drive N		Grand River
	Water	Evaluation		Springwells	WaterMains	3,120	2	Springwells	Schoolcraft	Grand River
		Procurement	DSW-907	Stahelin Ave Verne Ave to McNichols Rd	12	320	1	Stahelin Ave	Verne Ave	McNichols Rd
_	Water	Procurement	DWS-907	Stahelin Ave from Puritan Ave north to Florence St	8	642	1	Stahelin Ave	Puritan Ave north	Florence St
	Water	Construction	WS-703	Stansbury McNichols to Ardmore	8	969	2	Stansbury	McNichols	Ardmore
		Construction	WS-706	Stansbury Ave. Outer Drive to Curtis	8	1,213	1	Stansbury Ave.	Outer Drive	Curtis
_		Evaluation		Steel Joy to Mackenzie	6	710	7	Steel Steel	Jov	Mackenzie
		Construction	WS-705	Strathmoor W. Eight Mile to Vassar	8	2,534	2	Strathmoor	W. Eight Mile	Vassar
	Water	Procurement	DWS-907	Sunderland Rd from Puritan Ave north to McNichols Rd	8	2620	1	Sunderland Rd	Puritan Ave north	McNichols Rd
		Procurement	DSW-907	Sunderland Rd Florence St to Puritan Ave	10	10	1	Sunderland Rd	Florence St	Puritan Ave
	Water	Evaluation		Sylvan McKinley to Vinewood	6	450	4	Sylvan	McKinley	Vinewood
	Water	Evaluation	2023 CA-CIPN	, ,	WaterMains	730	5	Tech Town	Wickinicy	v inewood
		Evaluation	2023 CA-CIPN		WaterMains		2	The Eye		
		Evaluation		Theisen Mendota Joy to Tireman	6	2,260	7	Theisen Mendota	Joy	Tireman
		Construction	WS-706	Tireman Greenfield to Hubbell	16	2,705	7	Tireman	Greenfield	Hubbell
	Water	Evaluation	CS-1909	Tri Point	Watermains	2,703	5	Tri Point	Greenneid	Hubben
		Construction	WS-698	Trinity McNichols to Puritan	8	5,153	1	Trinity	McNichols	Puritan
		Procurement	WS-712	University Place between Munich Ave and Mack Ave	8	45	4	University	Munich Ave	Mack Ave
	Sewer	Procurement	DWS-908	University Chandler Park to Southampton	24	199	4	University	Chandler Park	Southampton
		Procurement	DWS-908	University Chandler Park to Southampton	12	199	4	University	Chandler Park	Southampton
	Sewer	Procurement	DWS-908	University Edsel Ford to Minvera	12	50	4	University	Edsel Ford	Minvera
	Water	Procurement	WS-712	University Place between Munich Ave. and Mack Ave.	8	1336	4	University	Munich Ave.	Mack Ave.
		Evaluation		University DistrictWoodbridge	Watermains	1330	6	University DistrictWoo		IVIAUN AVC.
		Evaluation		Vac. Division St. Antoine to Chrysler Svc Drive	8	630	5	Vac. Division	St. Antoine	Chrysler Svc Drive
		Construction	WS-704	Vassar Ward to Littlefield	8	600	2	Vassar	Ward	Littlefield
	Water	Evaluation		Vaughan Belton to Constance	8	700	1	Vassar Vaughan	Belton	Constance
-		Evaluation		Vaughn Sawyer to Tireman	8	1,275	1			Tireman
			DSW-907	٠	8 12		1	Vaughn	Sawyer	Outer Dr
		Procurement		Verne Ave Huntington Rd to Outer Dr		10	1	Verne Ave	Huntington Rd	
		Procurement	DSW-907	Verne Ave Plainview Ave to Westmoreland Rd	12	190	1	Verne Ave	Plainview Ave	Westmoreland Rd
448	Sewer	Procurement	D2M-A0\	Verne Ave Plainview Ave to Westmoreland Rd	12	182	I	Verne Ave	Plainview Ave	Westmoreland Rd

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
458	Sewer	Procurement	DSW-907	Verne Ave Westmoreland Rd to Edinborough Rd	12	192	1	Verne Ave	Westmoreland Rd	Edinborough Rd
475	Sewer	Procurement	DSW-907	Verne Ave Westmoreland Rd to Huntington Rd	12	334	1	Verne Ave	Westmoreland Rd	Huntington Rd
501	Sewer	Procurement	DSW-907	Verne Ave Shaftsbury Ave to Sunderland Rd	10	379	1	Verne Ave	Shaftsbury Ave	Sunderland Rd
502	Sewer	Procurement	DSW-907	Verne Ave Outer Rd to Warwick St	10	322	1	Verne Ave	Outer Rd	Warwick St
527	Sewer	Procurement	DSW-907	Verne Ave Glastonbury Rd to Glastonbury Rd	12	33	1	Verne Ave	Glastonbury Rd	Glastonbury Rd
423	Sewer	Procurement	DWS-907	Verne Ave Huntington Rd to Outer Dr	12	10	1	Verne Ave	Huntington Rd	Outer Dr
463	Sewer	Procurement	DSW-907	Verne Ave Evergreen Rd to Plainview Ave	12	10	1	Verne Ave	Evergreen Rd	Plainview Ave
464	Sewer	Procurement	DSW-907	Verne Ave Evergreen Rd to Plainview Ave	12	10	1	Verne Ave	Evergreen Rd	Plainview Ave
468	Sewer	Procurement	DSW-907	Verne Ave Outer Dr to Huntington Rd	12	10	1	Verne Ave	Outer Dr	Huntington Rd
469	Sewer	Procurement	DSW-907	Verne Ave Outer Dr to Huntington Rd	12	10	1	Verne Ave	Outer Dr	Huntington Rd
470	Sewer	Procurement	DSW-907	Verne Ave Outer Dr to Huntington Rd	12	14	1	Verne Ave	Outer Dr	Huntington Rd
511	Sewer	Procurement	DSW-907	Verne Ave Outer Dr to Shaftsbury Ave	8	15	1	Verne Ave	Outer Dr	Shaftsbury Ave
518	Sewer	Procurement	DSW-907	Verne Ave Outer Dr to Shaftsbury Ave	12	197	1	Verne Ave	Outer Dr	Shaftsbury Ave
414	Water	Evaluation	2019 CA-DWS	Virginia Park St.(S) John C Lodge to 3rd Street	8	593	5	Virginia Park St.(S)	John C Lodge	3rd Street
112	Water	Design	CS-1673 T21	W. Chicago City Limits to Brammell	8	750	7	W. Chicago	City Limits	Brammell
321	Water	Evaluation	2019 CA-DWS	W. Chicago Stout to Evergreen	12	1,000	7	W. Chicago	Stout	Evergreen
151	Water	Construction	WS-703	W. Outer Drive Plymouth to W. Chicago	8	2,550	7	W. Outer Drive	Plymouth	W. Chicago
152	Water	Construction	WS-703	W. Outer Drive McNichols to Southfield Fwy.	8	3,600	1	W. Outer Drive	McNichols	Southfield Fwy.
153	Water	Construction	WS-703	W. Outer Drive Whitcomb to Schaefer	8	3,850	2	W. Outer Drive	Whitcomb	Schaefer
154	Water	Construction	WS-703	W. Outer Drive Greenfield Rd. to Whitcomb	8	641	2	W. Outer Drive	Greenfield Rd.	Whitcomb
155	Water	Construction	WS-703	W. Outer Drive Southfield to Ferguson	8	2,160	2	W. Outer Drive	Southfield	Ferguson
173	Water	Construction	WS-703	W. Outer Drive Rutherford to Winthrop	8	650	2	W. Outer Drive	Rutherford	Winthrop
320	Water	Evaluation	2019 CA-DWS	W. Parkway Tireman to Sawyer	8	1,900	1	W. Parkway	Tireman	Sawyer
238	Water	Evaluation	2020 CA-CIPN	Wade	Watermains		3,4,5	Wade		
364	Water	Evaluation	2019 CA-DWS	Ward Joy to Tireman	6	2,650	2	Ward	Joy	Tireman
132	Water	Design	WS-710	Warren, Heyden to Evergreen 635 LF	8	635	7	Warren	Heyden	Evergreen
133	Water	Design	WS-710	Warren, Evergreen to Southfield 2,300 LF	8	2,300	7	Warren	Evergreen	Southfield
178	Water	Construction	WS-706	Warren Parkland to Heyden	12	4,515	7	Warren	Parkland	Heyden
724	Sewer	Procurement	DWS-908	Warren Guilford to Cadieux	18	200	4	Warren	Guilford	Cadieux
	Water	Evaluation		Warren Ave Heyden to Southfield Freeway	8	7,540	6	Warren Ave	Heyden	Southfield Freeway
31	Water	Procurement	WS-712	Warren Ave from Cadieux Ave to Guilford St	12	770	4	Warren Ave	Cadieux Ave	Guilford St
35	Water	Procurement	WS-712	Warren Ave (north) from Guilford St northeast to Woodhall St	12	17	4	Warren Ave	Guilford St northeast	Woodhall St
	Water	Procurement		Warren Ave (north) from Farmbrook St northeast to Canyon St	8	1325	4	Warren Ave (north)	Farmbrook St northeas	Canyon St
	Water	Procurement	WS-712	Warren Ave (north) from Guilford St northeast to Woodhall St	8	681	4	Warren Ave (north)	Guilford St northeast	Woodhall St
	Water	Procurement	WS-712	Warren Ave (south) from Farmbrook St northeast to Canyon St	12	1375	4	Warren Ave (south)	Farmbrook St northeas	Canyon St
-	Water	Evaluation		Warren Ave Community	WaterMains		2	Warren Ave Communi	,	
	Water	Procurement	WS-712	Warren Ave. between Cadieux Rd. and Guilford St.	8	735	4	Warren Ave.	Cadieux Rd.	Guilford St.
	Water	Design		Warren Avenue Heyden to Evergreen	8	-	1	Warren Avenue	Heyden	Evergreen
-	Water	Design		Warren Avenue Evergreen to Southfield Frwy	8	-	1	Warren Avenue	Evergreen	Southfield Frwy
	Water	Evaluation	2020 CA-CIPN		Watermains		3,4,5	Warrendale		
	Sewer	Procurement		Warwick St Grove St to Grove St	10	38	1	Warwick St	Grove St	Grove St
	Sewer	Procurement	DSW-907	Warwick St Puritan Ave to Bretton Dr	12	10	1	Warwick St	Puritan Ave	Bretton Dr
	Sewer	Procurement		Warwick St McNichols Rd to Grove St	8	554	1	Warwick St	McNichols Rd	Grove St
	Sewer	Procurement		Warwick St Grove St to Verne Ave	10	617	1	Warwick St	Grove St	Verne Ave
	Sewer	Procurement		Warwick St Bretton Dr to Gainsborough Rd	12	405	1	Warwick St	Bretton Dr	Gainsborough Rd
-	Water	Procurement		Warwick St from Florence St north to McNichols Rd	8	1939	1	Warwick St fr	Florence St north	McNichols Rd
	Water		WS-712	Waveney St from Cadieux Rd northeast to Guilford St	8	641	4	Waveney St	Cadieux Rd northeast	Guilford St
	Water	Evaluation	2022 CA-CIPN	ý	Watermains		3,4,5	Wayne State		
	Water	Evaluation		We Care Community	Watermains		3,4,5	We Care Community		
	Water	Evaluation	2022 CA-CIPN	·	Watermains		3,4,5	Weatherby		
130	Water	Design	WS-710	West Chicago, City Limits to Brammel 630 LF	8	630	7	West Chicago	City Limits	Brammel

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
376	Water	Evaluation	2019 CA-DWS	West Chicago West Outer Drive to Hazelton/City Limits	8	1,200	7	West Chicago	West Outer Drive	Hazelton/City Limits
397	Water	Evaluation	2019 CA-DWS	West Grand Blvd W. Jefferson Ave. to Vernor	6	-	6	West Grand Blvd	W. Jefferson Ave.	Vernor
398	Water	Evaluation	2019 CA-DWS	West Grand Blvd Vernor to Magnolia	6	-	6	West Grand Blvd	Vernor	Magnolia
399	Water	Evaluation	2019 CA-DWS	West Grand Blvd Magnolia to McGraw	6	-	5	West Grand Blvd	Magnolia	McGraw
400	Water	Evaluation	2019 CA-DWS	West Grand Blvd McGraw to Linwood	8	-	5	West Grand Blvd	McGraw	Linwood
401	Water	Evaluation		West Grand Blvd Linwood to Lodge Frwy	6	-	6	West Grand Blvd	Linwood	Lodge Frwy
117	Water	Design	CS-1673 T21	West Outer Dr. Joy Road to Warren	8	7,200	1	West Outer Dr.	Joy Road	Warren
377	Water	Evaluation	2019 CA-DWS	West Outer Dr. Fenkell to Evergreen	8	2,700	1	West Outer Dr.	Fenkell	Evergreen
131	Water	Design	WS-710	West Outer Drive, Joy Road to Warren 7,200 LF	8	7,200	7	West Outer Drive	Joy Road	Warren
215	Water	Evaluation	2020 CA-CIPN	West Outer Drive	Watermains		4	West Outer Drive		
107	Water	Design	IH-107	West Parkway Plymouth to W. Chicago (West Side)	8	2,550	7	West Parkway	Plymouth	W. Chicago (West Side
309	Water	Evaluation	2023 CA-CIPN	West Side Industrial	WaterMains		2	West Side Industrial		
188	Water	Evaluation	CS-1909	West Woodbridge	Watermains		5	West Woodbridge		
493	Sewer	Procurement	DSW-907	Westmoreland Rd Verne Ave to Verne Ave	24	49	1	Westmoreland Rd	Verne Ave	Verne Ave
432	Sewer	Procurement	DSW-907	Westmoreland Rd Grove St to Verne Ave	10	627	1	Westmoreland Rd	Grove St	Verne Ave
451	Sewer	Procurement	DSW-907	Westmoreland Rd Grove St to Grove St	10	29	1	Westmoreland Rd	Grove St	Grove St
467	Sewer	Procurement	DSW-907	Westmoreland Rd Verne Ave to Verne Ave	12	14	1	Westmoreland Rd	Verne Ave	Verne Ave
556	Sewer	Procurement	DSW-907	Westmoreland Rd Florence St to Florence St	24	10	1	Westmoreland Rd	Florence St	Florence St
425	Sewer	Procurement	DSW-907	Westmoreland Rd Grove St to McNichols Rd	12	320	1	Westmoreland Rd	Grove St	McNichols Rd
368	Water	Evaluation	2019 CA-DWS	Westwood Elmira to Chicago	6	1,770	7	Westwood	Elmira	Chicago
208	Water	Evaluation	2019 CA-CIPN	Westwood ParkHawthorne Park	Watermains		6	Westwood ParkHawth	orne Park	
157	Water	Construction	WS-705	Whitcomb Curtis to W. Outer Drive	8	1,199	2	Whitcomb	Curtis	W. Outer Drive
169	Water	Construction	WS-705	Whitehill Rd. Grayton to Morang	8	1,789	4	Whitehill Rd.	Grayton	Morang
419	Water	Evaluation	2019 CA-DWS	Wilkins Beaubien to St. Antoine	8	520	5	Wilkins	Beaubien	St. Antoine
420	Water	Evaluation	2019 CA-DWS	Wilkins St. Antoine to Chrysler Drive	8	585	5	Wilkins	St. Antoine	Chrysler Drive
421	Water	Evaluation	2019 CA-DWS	Winder Beaubien to Chrysler Svc Drive	8	500	5	Winder	Beaubien	Chrysler Svc Drive
211	Water	Evaluation	2019 CA-CIPN	Winship	Watermains		6	Winship		-
310	Water	Evaluation	2023 CA-CIPN	Woodbridge	WaterMains		2	Woodbridge		
701	Sewer	Procurement	DWS-908	Woodhall Harper to Minvera	12	286	4	Woodhall	Harper	Minvera
709	Sewer	Procurement	DWS-908	Woodhall Linville to School Lot	12	99	4	Woodhall	Linville	School Lot
721	Sewer	Procurement	DWS-908	Woodhall Munich to Waveney	18	302	4	Woodhall	Munich	Waveney
735	Sewer	Procurement	DWS-908	Woodhall Bremen to Mack	15	206	4	Woodhall	Bremen	Mack
747	Sewer	Procurement	DWS-908	Woodhall Berden to Linville	12	43	4	Woodhall	Berden	Linville
748	Sewer	Procurement	DWS-908	Woodhall Minvera to Berden	12	30	4	Woodhall	Minvera	Berden
753	Sewer	Procurement	DWS-908	Woodhall Chandler Park to Southampton	12	30	4	Woodhall	Chandler Park	Southampton
766	Sewer	Procurement	DWS-908	Woodhall Cornwall to Munich	12	20	4	Woodhall	Cornwall	Munich
767	Sewer	Procurement	DWS-908	Woodhall Warren to Waveney	15	20	4	Woodhall	Warren	Waveney
788	Sewer	Procurement	DWS-908	Woodhall Minvera to Linville	12	50	4	Woodhall	Minvera	Linville
792	Sewer	Procurement	DWS-908	Woodhall Chandler Park to Southampton	12	50	4	Woodhall	Chandler Park	Southampton
	Sewer	Procurement	DWS-908	Woodhall Warren to Cornwall	12	50	4	Woodhall	Warren	Cornwall
797	Sewer	Procurement	DWS-908	Woodhall Bremen to Mack	12	50	4	Woodhall	Bremen	Mack
33	Water	Procurement	WS-712	Woodhall St from Chandler Park Dr southeast to Southampton	8	729	4	Woodhall St	Chandler Park Dr soutl	Southampton St
349	Water	Evaluation	2019 CA-DWS	Woodmont Fullerton to Schoolcraft	6	2,350	7	Woodmont	Fullerton	Schoolcraft
800	Sewer	Evaluation	DWSD-910	Hubbard Farms	Sewerage	697,488	6			
801	Sewer	Evaluation	DWSD-910	Hubbard Richard	Sewerage		6			
802	Sewer	Evaluation	DWSD-910	Midtown	Sewerage		6			
803	Sewer	Evaluation	DWSD-910	North Corktown	Sewerage		6			
804	Sewer	Evaluation	DWSD-910	West Side Industrial	Sewerage		6			_
805	Sewer	Evaluation	2019 CA	Aviation Sub	Sewerage	355,344	3,4,5			
806	Sewer	Evaluation	2019 CA	Belle Isle	Sewerage		5			
000				Belmont	Sewerage		1			

Signature   Evaluation   2019 CA   Blackstone Park   Sewerage   2	Street To
SIO   Sewer   Evaluation   2019 CA   Cadillac Community   Sewerage   1	
SI   Sewer   Evaluation   2019 C.A   Carbon Works   Sewerage   4,5	
Size   Sewer   Evaluation   2019 C.A   Conner Creek Industrial   Sewerage   4,5	
1813   Sewer   Evaluation   2019 C.A   Cary/St.Marys   Sewerage   1   1	
\$14   Sewer	
SIS   Sewer   Evaluation   2019 CA   Five Points   Sewerage   1	
Select	
Sewer   Evaluation   2019 C.A   Garden View   Sewerage   7	
SIN   Sewer   Evaluation   2019 CA   Grand River-St Marys   Sewerage   1	
\$19   Sewer	
\$20   Sewer   Evaluation   2019 CA   Grandmont #1   Sewerage   1	
S21   Sewer	
Sewer   Evaluation   2019 CA   Hubbell-Lyndom   Sewerage   1	
Sewer   Evaluation   2019 CA   Hubbell-Puritan   Sewerage   1   Sewerage   5,6   Sewerage   7,7   Sewerage   5,8   Sewerage   7,9   Sewerage	
Sewer   Evaluation   2019 CA   JeffriesJoseph Berry Sub   Sewerage   5.6	
S25   Sewer	
Sewer	
Sewer   Evaluation   2019 CA   Plymouth-196   Sewerage   7	
828 Sewer         Evaluation         2019 CA         Schoolcraft-196         Sewerage         1           829 Sewer         Evaluation         2019 CA         Southfield Plymouth         Sewerage         7           830 Sewer         Evaluation         2019 CA         State Fair         Sewerage         2           831 Sewer         Evaluation         2019 CA         Warren Ave Community         Sewerage         7           832 Sewer         Evaluation         2019 CA         Warrendale         Sewerage         7           833 Sewer         Evaluation         2019 CA         Waternows Park         Sewerage         7           834 Sewer         Evaluation         2019 CA         West Core Community         Sewerage         7           834 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         7           835 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         7           837 Sewer         Evaluation         2019 CA         Winship         Sewerage         1           838 Sewer         Evaluation         2019 CA         Winship         Sewerage         419,760         6           839 Sewer         Evaluation         2020 CA<	
Sewer	
830 Sewer         Evaluation         2019 CA         State Fair         Sewerage         2           831 Sewer         Evaluation         2019 CA         Warren Ave Community         Sewerage         7           832 Sewer         Evaluation         2019 CA         Waterworks Park         Sewerage         7           833 Sewer         Evaluation         2019 CA         Waterworks Park         Sewerage         5           834 Sewer         Evaluation         2019 CA         West Community         Sewerage         7           835 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         7           836 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         1           837 Sewer         Evaluation         2019 CA         Westwood Park         Sewerage         1           838 Sewer         Evaluation         2019 CA         Winship         Sewerage         2           838 Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         419,760         6           840 Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         419,760         6           840 Sewer         Evalua	
831 Sewer         Evaluation         2019 CA         WarrenAve Community         Sewerage         7           832 Sewer         Evaluation         2019 CA         Warrendale         Sewerage         7           833 Sewer         Evaluation         2019 CA         Waterworks Park         Sewerage         5           834 Sewer         Evaluation         2019 CA         Wet Care Community         Sewerage         7           835 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         7           836 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         1           837 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         2           838 Sewer         Evaluation         2019 CA         Westwood Park         Sewerage         2           838 Sewer         Evaluation         2020 CA         Corktown         Sewerage         419,760         6           839 Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         6         8           840 Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         1         1           841 Sewer	
832 Sewer         Evaluation         2019 CA         Warrendale         Sewerage         7           833 Sewer         Evaluation         2019 CA         Waterworks Park         Sewerage         5           834 Sewer         Evaluation         2019 CA         We Care Community         Sewerage         7           835 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         7           836 Sewer         Evaluation         2019 CA         West Wood Park         Sewerage         1           837 Sewer         Evaluation         2019 CA         Winship         Sewerage         2           838 Sewer         Evaluation         2020 CA         Corktown         Sewerage         419,760         6           839 Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         6           840 Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         360,624         1           841 Sewer         Evaluation         2020 CA         Claytown         Sewerage         6           843 Sewer         Evaluation         2020 CA         Claytown         Sewerage         2           844 Sewer         Evaluation         2	
833         Sewer         Evaluation         2019 CA         Waterworks Park         Sewerage         5           834         Sewer         Evaluation         2019 CA         We Care Community         Sewerage         7           835         Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         7           836         Sewer         Evaluation         2019 CA         Westwood Park         Sewerage         1           837         Sewer         Evaluation         2019 CA         Winship         Sewerage         2           838         Sewer         Evaluation         2020 CA         Corktown         Sewerage         419,760         6           839         Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         6           840         Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         360,624         1           841         Sewer         Evaluation         2020 CA         Berg-Lahser         Sewerage         6         8           842         Sewer         Evaluation         2020 CA         Claytown         Sewerage         6         8           843         <	
834 Sewer         Evaluation         2019 CA         We Care Community         Sewerage         7           835 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         7           836 Sewer         Evaluation         2019 CA         Westwood Park         Sewerage         1           837 Sewer         Evaluation         2019 CA         Winship         Sewerage         2           838 Sewer         Evaluation         2020 CA         Corktown         Sewerage         419,760         6           839 Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         6         8           840 Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         360,624         1           841 Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         360,624         1           842 Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         6         9           842 Sewer         Evaluation         2020 CA         Claytown         Sewerage         6         9           842 Sewer         Evaluation         2020 CA         College Park         Sewerage         7<	
835 Sewer         Evaluation         2019 CA         West Outer Drive         Sewerage         7           836 Sewer         Evaluation         2019 CA         Westwood Park         Sewerage         1           837 Sewer         Evaluation         2019 CA         Winship         Sewerage         2           838 Sewer         Evaluation         2020 CA         Corktown         Sewerage         419,760         6           839 Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         6           840 Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         360,624         1           841 Sewer         Evaluation         2020 CA         Berg-Lahser         Sewerage         1         1           842 Sewer         Evaluation         2020 CA         Claytown         Sewerage         6         1         1           843 Sewer         Evaluation         2020 CA         College Park         Sewerage         2         2           844 Sewer         Evaluation         2020 CA         Fiskhorn         Sewerage         3         3           845 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5	
Sewer   Evaluation   2019 CA   Westwood Park   Sewerage   1	
837 Sewer         Evaluation         2019 CA         Winship         Sewerage         2           838 Sewer         Evaluation         2020 CA         Corktown         Sewerage         419,760         6           839 Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         6           840 Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         360,624         1           841 Sewer         Evaluation         2020 CA         Berg-Lahser         Sewerage         1           842 Sewer         Evaluation         2020 CA         Claytown         Sewerage         6           843 Sewer         Evaluation         2020 CA         College Park         Sewerage         2           844 Sewer         Evaluation         2020 CA         Fishborn         Sewerage         7           845 Sewer         Evaluation         2020 CA         Fishborn         Sewerage         3           846 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           847 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           848 Sewer         Evaluation         2020 CA	
838         Sewer         Evaluation         2020 CA         Corktown         Sewerage         419,760         6           839         Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         6           840         Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         360,624         1           841         Sewer         Evaluation         2020 CA         Berg-Lahser         Sewerage         1           842         Sewer         Evaluation         2020 CA         Claytown         Sewerage         6           842         Sewer         Evaluation         2020 CA         Claytown         Sewerage         6           842         Sewer         Evaluation         2020 CA         Clolege Park         Sewerage         2           843         Sewer         Evaluation         2020 CA         Fiskhorn         Sewerage         7           844         Sewer         Evaluation         2020 CA         Franklin         Sewerage         3           845         Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           846         Sewer         Evaluation         2020 C	+
839 Sewer         Evaluation         2020 CA         Southwest Detroi         Sewerage         6           840 Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         360,624         1           841 Sewer         Evaluation         2020 CA         Berg-Lahser         Sewerage         1           842 Sewer         Evaluation         2020 CA         Claytown         Sewerage         6           843 Sewer         Evaluation         2020 CA         College Park         Sewerage         2           844 Sewer         Evaluation         2020 CA         Fiskhom         Sewerage         7           845 Sewer         Evaluation         2020 CA         Franklin         Sewerage         3           846 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           847 Sewer         Evaluation         2020 CA         Islandview         Sewerage         5           848 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         5           850 Sewer         Evaluation         2020 CA         Martin Park	+
840 Sewer         Evaluation         2020 CA         Bentler-Pickford         Sewerage         360,624         1           841 Sewer         Evaluation         2020 CA         Berg-Lahser         Sewerage         1           842 Sewer         Evaluation         2020 CA         Claytown         Sewerage         6           843 Sewer         Evaluation         2020 CA         College Park         Sewerage         2           844 Sewer         Evaluation         2020 CA         Fiskhorn         Sewerage         7           845 Sewer         Evaluation         2020 CA         Franklin         Sewerage         3           846 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           847 Sewer         Evaluation         2020 CA         Islandview         Sewerage         5           848 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         5           851 Sewer         Evaluation         2020 CA         Melvern Hill	+
841 Sewer         Evaluation         2020 CA         Berg-Lahser         Sewerage         1           842 Sewer         Evaluation         2020 CA         Claytown         Sewerage         6           843 Sewer         Evaluation         2020 CA         College Park         Sewerage         2           844 Sewer         Evaluation         2020 CA         Fiskhorn         Sewerage         7           845 Sewer         Evaluation         2020 CA         Franklin         Sewerage         3           846 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           847 Sewer         Evaluation         2020 CA         Islandview         Sewerage         5           848 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Marina District         Sewerage         5           851 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         2           852 Sewer         Evaluation         2020 CA         Melvern Hill         Sewerage	
842 Sewer         Evaluation         2020 CA         Claytown         Sewerage         6           843 Sewer         Evaluation         2020 CA         College Park         Sewerage         2           844 Sewer         Evaluation         2020 CA         Fiskhorn         Sewerage         7           845 Sewer         Evaluation         2020 CA         Franklin         Sewerage         3           846 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           847 Sewer         Evaluation         2020 CA         Islandview         Sewerage         5           848 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Marina District         Sewerage         5           851 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         2           852 Sewer         Evaluation         2020 CA         Melvern Hill         Sewerage         1	
843 Sewer         Evaluation         2020 CA         College Park         Sewerage         2           844 Sewer         Evaluation         2020 CA         Fiskhorn         Sewerage         7           845 Sewer         Evaluation         2020 CA         Franklin         Sewerage         3           846 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           847 Sewer         Evaluation         2020 CA         Islandview         Sewerage         5           848 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Marina District         Sewerage         5           851 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         2           852 Sewer         Evaluation         2020 CA         Melvern Hill         Sewerage         1	+
844 Sewer         Evaluation         2020 CA         Fiskhorn         Sewerage         7           845 Sewer         Evaluation         2020 CA         Franklin         Sewerage         3           846 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           847 Sewer         Evaluation         2020 CA         Islandview         Sewerage         5           848 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Marina District         Sewerage         5           851 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         2           852 Sewer         Evaluation         2020 CA         Melvern Hill         Sewerage         1	+
845 Sewer         Evaluation         2020 CA         Franklin         Sewerage         3           846 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           847 Sewer         Evaluation         2020 CA         Islandview         Sewerage         5           848 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Marina District         Sewerage         5           851 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         2           852 Sewer         Evaluation         2020 CA         Melvern Hill         Sewerage         1	+
846 Sewer         Evaluation         2020 CA         Gold Coast         Sewerage         5           847 Sewer         Evaluation         2020 CA         Islandview         Sewerage         5           848 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Marina District         Sewerage         5           851 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         2           852 Sewer         Evaluation         2020 CA         Melvern Hill         Sewerage         1	+
847 Sewer         Evaluation         2020 CA         Islandview         Sewerage         5           848 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Marina District         Sewerage         5           851 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         2           852 Sewer         Evaluation         2020 CA         Melvern Hill         Sewerage         1	+
848 Sewer         Evaluation         2020 CA         Jamison         Sewerage         5           849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Marina District         Sewerage         5           851 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         2           852 Sewer         Evaluation         2020 CA         Melvern Hill         Sewerage         1	+
849 Sewer         Evaluation         2020 CA         Mack Avenue         Sewerage         4,5           850 Sewer         Evaluation         2020 CA         Marina District         Sewerage         5           851 Sewer         Evaluation         2020 CA         Martin Park         Sewerage         2           852 Sewer         Evaluation         2020 CA         Melvern Hill         Sewerage         1	
850 Sewer     Evaluation     2020 CA     Marina District     Sewerage     5       851 Sewer     Evaluation     2020 CA     Martin Park     Sewerage     2       852 Sewer     Evaluation     2020 CA     Melvern Hill     Sewerage     1	
851 Sewer     Evaluation     2020 CA     Martin Park     Sewerage     2       852 Sewer     Evaluation     2020 CA     Melvern Hill     Sewerage     1	1
852 Sewer Evaluation 2020 CA Melvern Hill Sewerage 1	1
853 Sewer Evaluation 2020 CA Pulaski Sewerage 3	
854 Sewer Evaluation 2020 CA Sherwood Sewerage 3	
855 Sewer Evaluation 2020 CA Springwells Sewerage 6	
856 Sewer Evaluation 2020 CA Weatherby Sewerage 7	
857 Sewer         Evaluation         2021 CA         Delray         Sewerage         388,080         6	
858 Sewer Evaluation 2021 CA Downtown Sewerage 5,6	

Line	Туре	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
859	Sewer	Evaluation	2021 CA	Medical Center Rouge Park	Sewerage	96,096	5			
	Sewer	Evaluation	2021 CA	Rouge Park	Sewerage	***	7			
861	Sewer	Evaluation	2021 CA	Berg-Lahser	Sewerage	290,400	1			
862	Sewer	Evaluation	2021 CA	Buffalo	Sewerage		3			
863	Sewer	Evaluation	2021 CA	Corktown	Sewerage		6			
864	Sewer	Evaluation	2021 CA	Davison-Schoolcraft	Sewerage		7			
865	Sewer	Evaluation	2021 CA	Eastern Market	Sewerage		5			
866	Sewer	Evaluation	2021 CA	Eden Gardens	Sewerage		4			
867	Sewer	Evaluation	2021 CA	Fitzgerald	Sewerage		2			
868	Sewer	Evaluation	2021 CA	Fox Creek	Sewerage		4			
869	Sewer	Evaluation	2021 CA	Grant	Sewerage		3			
	Sewer	Evaluation	2021 CA	Gratiot Woods	Sewerage		4,5			
871	Sewer	Evaluation	2021 CA	Harmony Village	Sewerage		2,7			
872	Sewer	Evaluation	2021 CA	Mexicantown	Sewerage		6			
873	Sewer	Evaluation	2021 CA	Michigan-Martin	Sewerage		6			
	Sewer	Evaluation	2021 CA	Mohican Regent	Sewerage		3			
875	Sewer	Evaluation	2021 CA	Mount Olivet	Sewerage		3			
876	Sewer	Evaluation	2021 CA	North Campau	Sewerage		3			
877	Sewer	Evaluation	2021 CA	North End Neighborhood	Sewerage		5			
878	Sewer	Evaluation	2021 CA	Northeast Central District	Sewerage		3			
879	Sewer	Evaluation	2021 CA	Schoolcraft-196	Sewerage		1			
880	Sewer	Evaluation	2021 CA	Southwest DetroitUniversity District	Sewerage		6			
881	Sewer	Evaluation	2021 CA	Von Steuben	Sewerage		3			
882	Sewer	Evaluation	2021 CA	West Village	Sewerage		5			
883	Sewer	Evaluation	2021 CA	Yorkshire Woods	Sewerage		4			
884	Sewer	Evaluation	2021 CA	Marina District	Sewerage		5			
885	Sewer	Evaluation	2022 CA	Chadsey Condon Poletown East	Sewerage	392,832	6			
886	Sewer	Evaluation	2022 CA	Condon	Sewerage		6			
887	Sewer	Evaluation	2022 CA	Poletown East	Sewerage	252 222	5			
888 889	Sewer	Evaluation	2022 CA	Barton-McFarland Butler	Sewerage	353,232	6,7			
890	Sewer	Evaluation	2022 CA	Campau/Banglatown	Sewerage		3			
891	Sewer	Evaluation	2022 CA	Chandler Park-Chalmers	Sewerage		4			
891	Sewer Sewer	Evaluation Evaluation	2022 CA 2022 CA	Conner Creek	Sewerage Sewerage		3			
893	Sewer	Evaluation	2022 CA 2022 CA	East Village	Sewerage		5			
894	Sewer	Evaluation	2022 CA 2022 CA	Eastern Market	Sewerage		5			
895	Sewer	Evaluation	2022 CA 2022 CA	Elijah McCoy	Sewerage		5			
896	Sewer	Evaluation	2022 CA 2022 CA	Elmwood Park	Sewerage		5			
897	Sewer	Evaluation	2022 CA 2022 CA	Evergreen Lahser 7/8	Sewerage		1			
898	Sewer	Evaluation	2022 CA 2022 CA	Fitzgerald Fitzgerald	Sewerage		2			
899	Sewer	Evaluation	2022 CA	Forest Park	Sewerage		5			
900	Sewer	Evaluation	2022 CA	Grand River-196	Sewerage		7			
901	Sewer	Evaluation	2022 CA	Grant Grant	Sewerage		3			
902	Sewer	Evaluation	2022 CA	Joy-Schaefer	Sewerage		7			
903	Sewer	Evaluation	2022 CA	Moross-Morang	Sewerage		4			
904	Sewer	Evaluation	2022 CA	North End Neighborhood	Sewerage		5			
905	Sewer	Evaluation	2022 CA	Oak Grove	Sewerage		1			
906	Sewer	Evaluation	2022 CA	Outer Drive-Hayes	Sewerage		4			
907	Sewer	Evaluation	2022 CA	Pilgrim VillageRegent Park	Sewerage		2			
908	Sewer	Evaluation	2022 CA	Rouge Park	Sewerage		7			
	Sewer	Evaluation	2022 CA	Schulze	Sewerage		2			
					8-					

Line	Туре	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
910	Sewer	Evaluation	2022 CA	South of Six	Sewerage		1			
911	Sewer	Evaluation	2023 CA	Core City McDougall Mexicantown New Center	Sewerage	324,192	5,6			
912	Sewer	Evaluation	2023 CA	McDougal	Sewerage	- ,	5			
913	Sewer	Evaluation	2023 CA	MexicanTown	Sewerage		6			
914	Sewer	Evaluation	2023 CA	New Center	Sewerage		5			
915	Sewer	Evaluation	2023 CA	Airport Sub	Sewerage	343,728	3,4,5			
916	Sewer	Evaluation	2023 CA	Bagley	Sewerage		2			
917	Sewer	Evaluation	2023 CA	Castle Rouge	Sewerage		1			
918	Sewer	Evaluation	2023 CA	Conant Gardens	Sewerage		3			
919	Sewer	Evaluation	2023 CA	Davison	Sewerage		3			
	Sewer	Evaluation	2023 CA	Davison-Schoolcraft	Sewerage		7			
921	Sewer	Evaluation	2023 CA	Denby	Sewerage		4			
922	Sewer	Evaluation	2023 CA	Dexter-Linwood	Sewerage		2,5,7			
923	Sewer	Evaluation	2023 CA	East English Village	Sewerage		4			
924	Sewer	Evaluation	2023 CA	Eden Gardens	Sewerage		4			
925	Sewer	Evaluation	2023 CA	Gateway Community	Sewerage		5			
926	Sewer	Evaluation	2023 CA	Grixdale Farms	Sewerage		2			
927	Sewer	Evaluation	2023 CA	Harmony Village	Sewerage		2,7			
928	Sewer	Evaluation	2023 CA	Henry Ford	Sewerage		5			
	Sewer	Evaluation	2023 CA	Milwaukee Junction	Sewerage		5			
	Sewer	Evaluation	2023 CA	Nardin Park	Sewerage		5,7			
931	Sewer	Evaluation	2023 CA	Nolan	Sewerage		3			
932	Sewer	Evaluation	2023 CA	NW Goldberg	Sewerage		5			
933	Sewer	Evaluation	2023 CA	Oakman Blvd Community	Sewerage		2,5,7			
934	Sewer	Evaluation	2023 CA	Palmer ParkPenrose	Sewerage		5			
935 936	Sewer	Evaluation Evaluation	2023 CA 2023 CA	Petoskey-Otsego Pride Area Community	Sewerage		7			
936	Sewer Sewer	Evaluation Evaluation	2023 CA 2023 CA	Ravendale	Sewerage Sewerage		4			
937	Sewer	Evaluation	2023 CA 2023 CA	Seven Mile-Rouge	Sewerage		1			
_	Sewer	Evaluation	2023 CA 2023 CA	West Virginia Park	Sewerage		5			
940	Sewer	Evaluation	2023 CA 2023 CA	Wildemere Park	Sewerage		5			
941	Sewer	Evaluation	2023 CA 2023 CA	Yorkshire Woods	Sewerage		4			
645	Sewer	Procurement	DWS-908	Moross Cheshire to Mallina	15	227	4			
646	Sewer	Procurement	DWS-908	Moross Cheshire to Mallina	12	176	4			
648	Sewer	Procurement	DWS-908	Moross Edsel Ford Hwy to Edgefield	15	513	4			
651	Sewer	Procurement	DWS-908	Radnor Chester to Berden	12	947	4			
653	Sewer	Procurement	DWS-908	Easement W. of Radnor Chester to Linville	12	308	4			
656	Sewer	Procurement	DWS-908	Easement W. of Lodewyck Berden to Linville	18	337	4			
661	Sewer	Procurement	DWS-908	Easement W. of Lodewyck Southampton to Frankfort	15	304	4			
667	Sewer	Procurement	DWS-908	Easement W. of Lodewyck Warren to Cornwall	18	310	4			
669	Sewer	Procurement	DWS-908	Edsel Ford Hwy Farmbrook to Hereford	12	409	4			
673	Sewer	Procurement	DWS-908	Easement W. of Hereford Chester to Minvera	15	201	4			
676	Sewer	Procurement	DWS-908	Easement W. of Marseille Berden to Frankfort	15	486	4			
679	Sewer	Procurement	DWS-908	Easement W. of University Linville to Chandler Park	20	294	4			
681	Sewer	Procurement	DWS-908	Easement W. of Hereford Berden to Southampton	15	239	4			
682	Sewer	Procurement	DWS-908	Easement W. of Hereford Berden to Southampton	18	302	4			
683	Sewer	Procurement	DWS-908	Easement W. of Hereford Berden to Southampton	20	608	4			
685	Sewer	Procurement	DWS-908	Neff Berden to Chandler Park	15	273	4			
687	Sewer	Procurement	DWS-908	Easement W. of Marseille Southampton to Munich	15	603	4			
688	Sewer	Procurement	DWS-908	Easement W. of Marseille Southampton to Munich	18	419	4			
689	Sewer	Procurement	DWS-908	Easement W. of Marseille Southampton to Munich	10	305	4			

Line	Type	Phase	Project ID	Location (combined)	Diameter (in)	Length (LF)	District	Street	Street From	Street To
691	Sewer	Procurement	DWS-908	Easement W. of University Frankfort to Munich	15	608	4			
692	Sewer	Procurement	DWS-908	Easement W. of University Frankfort to Munich	18	813	4			
694			DWS-908	Easement W. of Hereford Southampton to Warren	15	301	4			
695	Sewer	Procurement	DWS-908	Easement W. of Hereford Southampton to Warren	18	535	4			
697	Sewer	Procurement	DWS-908	Neff Warren to Munich	15	447	4			
700	Sewer	Procurement	DWS-908	Easement W. of Hereford Munich to Mack	18	325	4			
703	Sewer	Procurement	DWS-908	Edsel Ford Hwy Morang to Cadieux	20	502	4			
706	Sewer	Procurement	DWS-908	Bluehill Harper to Berden	15	133	4			
710	Sewer	Procurement	DWS-908	Woodhall Linville to School Lot	18	611	4			
712	Sewer	Procurement	DWS-908	Guilford Linville to School Lot	15	86	4			
713	Sewer	Procurement	DWS-908	Guilford Linville to School Lot	18	657	4			
716	Sewer	Procurement	DWS-908	Easement. W. of Bluehill Linville to Southampton	15	322	4			
717	Sewer	Procurement	DWS-908	Easement. W. of Bluehill Linville to Southampton	18	264	4			
720	Sewer	Procurement	DWS-908	Easement W. of Oldtown Chandler Park to Southampton	15	305	4			
723	Sewer	Procurement	DWS-908	Guilford Warren to Munich	18	299	4			
725	Sewer	Procurement	DWS-908	Warren Guilford to Cadieux	24	284	4			
731	Sewer	Procurement	DWS-908	Easement E. of Cadieux Sioux to Detroit	18	1,027	4			
736	Sewer	Procurement	DWS-908	Woodhall Bremen to Mack	21	137	4			
741			DWS-908	Bluehill Minneapolis to Mack	15	549	4			
742	Sewer	Procurement	DWS-908	Bluehill Minneapolis to Mack	18	126	4			
758	Sewer	Procurement	DWS-908	School Lot Frankfort to Cadieux	12	10	4			