



CAPITAL IMPROVEMENT

FY2018 REVIEW

JULY 2017-JUNE 2018

November 7, 2018

CIP Budget to Actual last 2 years Recap



Category	2016 CIP Planned	2016 Actual	Variance	2017 CIP Planned	2017 Actual	Variance
Water Main Replacements	\$ 25,055,000	\$ 18,486,160	\$ 6,568,840	\$ 23,821,000	\$15,730,162	\$ 8,090,838
Sewer Lining/ Rehabilitation	6,265,000	9,721,806	(3,456,806)	8,452,000	12,357,555	(3,905,555)
Green Infrastructure	-	-	-	8,000,000	8,361,505	(361,505)
Central Services (Fleet, Facilities & IT)	5,000	10,501	(5,501)	4,204,000	938,858	3,265,142
General - CIPMO	1,250	-	1,250	-	-	-
Meters/Fire Hydrants	-	758,076	(758,076)	6,000,000	2,444,316	3,555,684
Uncommitted (incl. allowances)	<u>18,200,000</u>	<u>-</u>	<u>18,200,000</u>	<u>28,146,000</u>	<u>-</u>	<u>28,146,000</u>
Total	\$ 49,526,250 W-39M/ S-10.4M	\$ 28,976,543 W-19.2M/ S-9.7M	\$ 20,549,707	\$ 78,623,000 W-\$49M/S-\$26.9M	\$ 39,832,396 W-\$18.9M/S-\$20.8M	\$ 38,790,604

2016 Variance less allowance \$2,349,707

2017 Variance less allowance \$10,644,604

CIP Fiscal Year 2018 Summary by Quarter



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Category	2018 CIP Planned	1 st QTR	2 nd QTR	3 rd QTR	2018 Total Spend <small>(unaudited)</small>	Percent Spent	Unspent <small>(Planned vs. Actual)</small>
Water Main Replacements	\$44,700	\$2,407	8,202	\$11,222	\$15,209	34%	\$29,491
Sewer Lining/ Rehabilitation	20,000	1,399	2,991	4,487	11,533	58%	8,467
Green Infrastructure	12,225	611	1,216	1,216	3,026	25%	9,200
Central Services <small>(Fleet, Facilities & IT)</small>	10,750	5,570	5,687	6,280	9,224	86%	1,526
CIPMO – AECOM	15,696	453	1,046	2,889	9,245	59%	6,451
Meters/Fire Hydrants	6,000	-	801	801	1,757	29%	4,243
Uncommitted <small>(incl. allowances)</small>	<u>\$ 29,304</u>	=	=	=	=	0%	<u>29,304</u>
Total	\$138,675 <small>W-\$78M S-\$60M</small>	\$10,440 <small>W-\$8.2M S-\$2.2M</small>	\$19,943 <small>W-13.3M S-6.6M</small>	\$26,895 <small>W-\$17.6M S-\$9.2M</small>	\$49,994 <small>W-\$9.6M S-\$2M</small>	36%	\$88,681 <small>W-\$52.3M S-\$36.3M</small>

Water Projects



Water

Project Name	Budget Value	Paid to date as of 6/30/18 (Unaudited)	Paid in 2018	Completion Status
WS-693A Joy Road Water Main Replacement Phase II (23,000 LF)	\$ 9,480	8,940	\$2,792	94%
WS-697 Water Main Replacement (19,000 LF)	\$ 4,584	4,184	\$1,387	91%
WS-698 Water Main Replacement Northwestern areas of Detroit (27,000LF)	\$ 7,752	4,147	\$4,197	54%
WS-703 Water Main Replacement Various Locations within Detroit (33,820LF)	\$ 13,041	4,083	\$4,083	44%
WS-702 Repair & Replacement of Water Mains	\$11,889	561	\$561	5%
WS-704 Water Main Replacement -along Outerdrive (20,500LF)	\$5,948	1,024	\$1,024	17%
MOU-4841 (PW-6974) Livernois to Ranspach Water Main Replacement	\$1,092	806	\$218	74%
CS-1673 Professional Engineering Services for Design of Water Main	\$3,031	1,984	\$588	65%
Labor Charges associated with the various watermain projects			<u>\$356</u>	
Total spend in 2018			\$15,209	

Sewer and Green Infrastructure Projects

Sewer				
Project Name	Budget Value	Paid to Date	Paid in 2018	Completion Status
DWS-889 Inspection and Rehab East Side	\$4,226	\$4,226	33	100%
DWS-890 Inspection and Rehab Central	\$4,226	\$4,226	33	100%
DWS-900 Inspection and Rehab North Side	\$8,226	\$8,226	5,722	85%
DWS-901 Inspection and Rehab West Side	\$4,226	\$4,226	33	100%
DWS-903 Inspection & In-Place Rehab of Existing Sewers in the City of Detroit	\$60,000	\$5,632	<u>5,713</u>	9%
Total Spend in 2018			\$11,533	
Green Infrastructure				
CS-1522 Green Infrastructure Program Management	\$16,000	\$2,577	2,576	81%
PC-799 Crowell Rec Center and EcoSite Modifications	\$925	\$226	226	25%
PC-800 O'Shea Park	\$650	\$204	204	32%
PW-6968 Pervious Pavement Projects & Tireman Phase I	\$2,114	\$2,069	20	79%
Total Spend in 2018			\$3,025	

Central Services –Water & Sewer FY 2018 Summary



Central Services Total Spend \$9,224,427

Facility Improvements	\$1,385,712	Fleet, Heavy Equipment & Equipment	\$5,616,567
Condition Assessments Vendor: Detroit Building Authority-(DBA) (Consolidations, programming -does not include construction)	\$528,943	Vactor Trucks (8)	\$ 3,689,399
HVAC Units at CSF (3 of 75 replaced)	\$384,035	Utility (Leak) Trucks (8)	\$1,740,120
Furniture –Chairs Customer Service	\$32,218	Forklift	\$90,675
Storm Water Management Group - New offices	\$22,217	Sewer Inspection Camera	\$23,000
9 th Floor Buildout (Legal/Public Affairs)	\$418,299	Above Ground Vehicle Lift	\$73,373
		Information Technology	\$2,218,238
		Oracle Database	\$1,716,169
		Boardroom Equipment (split w/GLWA)	\$56,387
		Asset Works-Fleet Software	\$445,682

Project Descriptions - Water



Water Project Descriptions

WS-693A Joy Road Water Main Replacement Phase II **Contractor:** Lakeshore Global **Completion date:** 9/5/2018

This water main replacement contract is one of a continuing series of contracts that replace the old water mains in the City

The objective is to replace existing 6-inch, 8-inch, 12-inch, 16-inch, and 24-inch water mains that have a history of leaks and breaks with approximately 15,850 linear feet of 8-inch, 1,781 linear feet of 12-inch, 128 linear feet of 16-inch Ductile Iron Water Main and 5,300 linear feet of 24-inch water main. All new water main will be 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.

This is a State of Michigan Drinking Water Revolving Fund (DWRf) project

WS-697 Water Main Replacement **Contractor:** Imperial Construction Company **Completion date:** 11/29/2018

The objective is to furnish and install approximately 18,991 linear feet of 8-inch and 146 linear feet of 12-inch Ductile Iron Pipe and fittings. The Contractor will also furnish and install 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 covering the Southeast part of the city.

This is a State of Michigan Drinking Water Revolving Fund (DWRf) project

WS-698 Water Main Replacement Northwestern areas of Detroit **Contractor:** Major Cement **Completion date:** 12/18/2018

The objective is to furnish and install approximately 21,743 linear feet of 8-inch and 5,009 linear feet of 16-inch Ductile Iron Pipe and fittings. The Contractor will also furnish and install 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.

This is a State of Michigan Drinking Water Revolving Fund (DWRf) project

WS-703 Water Main Replacement Various Locations within Detroit **Contractor:** Major Cement **Completion date:** 09/30/2019

The objective is to furnish and install approximately 37,615 linear feet of 8-inch, 1,760 linear feet of 12-inch and 5,200 linear feet of 16-inch Ductile Iron Pipe and fittings. The Contractor will also furnish and install Gate valves, place 8-mil Polyethylene wrap around the new water main and furnish/construct/install all water main appurtenances, connections and related structures.

Project Descriptions – Sewer & Green Infrastructure



SEWER PROJECT DESCRIPTIONS

DWS-900 Inspection & Rehab -West Side

Contractor: Inland Waters Pollution Control

Completion date: 5/10/2018

The purpose of this contract is to provide the means of as-needed inspection and open cut repair of failed sewers and in-place rehabilitation of selected sewers using the procedures, methods and equipment of the cured-in-place pipe lining process.

The cured-in-place pipe lining process has been utilized by DWSD on previous contracts, at an average cost savings of approximately 34% to the Department and the City of Detroit as compared to the other, more expensive rehabilitation methods. Additionally, this process minimizes traffic disruptions that often antagonize residents.

To achieve this goal, four contracts were developed, to service the four DWSD Maintenance Yards, East Yard, Central Yard, North Yard and West Yard in the City of Detroit. This contract is for work at the North Yard. The rehabilitation/lining process will extend the life of a sewer by at least 50 years.

DWS-903 Inspection & In-Place Rehab of Existing Sewers in the City of Detroit

Contractor: TBD **Completion:** 1095 calendar days

Inspection and in-place rehabilitation of existing sewers in the City of Detroit using the construction process, procedures, methods and equipment of the trenchless pipeline rehabilitation techniques. Work to be performed on an as-needed basis.

CS-1522 Green Infrastructure Program Management

Contractor: Tetra Tech of Michigan

Completion date: 12/13/2021

The purpose of this contract is to implement projects and activities that will reduce CSO discharge from 17 outfalls in Upper Rouge Tributary areas. Also provided assistance for preparation of drainage charges and credits (this portion is complete and not considered capital).

Central Services Purchases Review



Central Services Details

Vector Trucks (8) -Vendor: Jack Doheny -jet rodder trucks for the Catch Basin Cleaning Program.

Leak Trucks (8) -Vendor: Tri-/County International Trucks -These units are custom built with underbody compressors and hydraulic tools, utilized to support mechanical repairs, maintenance operations, to transport personnel and equipment to water distribution repair sites throughout the City of Detroit.

Forklift – CSF Warehouse- Needed additional capacity to lift and transport.

Sewer Inspection Camera – Cameras to be used to inspect sewer lines from inside the home to the main sewers.

Above Ground Vehicle Lift - Needed for maintenance and repair of our new vector fleet, which are bigger and heavier than before .

Condition Assessments - Central Services Facility (CSF) Consolidation, Renovations & Improvements.

Contractor: Detroit Building Authority.

The purpose of this contract is to complete an assessment of CSF and space programming after which the determination of space available for lease to the City's General Service Dept. This will also be used for condition assessments and to facilitate capital improvement activities for all the DWSD owned facilities.

HVAC Units at CSF - 3 units were replaced at CSF out of the 75 Roof Top Units. The replaced units had out-lived their life expectancy and no longer working.

9th Floor Buildout - renovations to establish office space for the Legal Dept. and Public Affairs post-bifurcation.

Storm Water Management Group - Newly developed group, includes buildout of offices and furniture.

Furniture - Chairs for Customer Service Call Center and Payment Centers.

Oracle Database - Year 2 of our three-year license payout. In FY2018 DWSD needed to address a licensing issue with Oracle and was able to spread the payments out over three years. After year three (FY2020) DWSD will only need to account for ongoing maintenance.

Boardroom Equipment - DWSD's share of the boardroom technology upgrade. The upgrade provided new audio-visual technology including microphones, speakers and video. This cost was split 50-50 with the GLWA.

Asset Works-Fleet Software - Software packages and services to manage the life cycle of DWSD's fleet of vehicles and related equipment and to upgrade the technology and services around managing the fueling of vehicles at CSF and West Yard. AssetWorks Fleet focus is the fleet management system and AssetWorks FuelFocus is the fuel management software.