

DRAFT

CAPITAL IMPROVEMENT PLAN

AND 2022 CAPITAL BUDGET

DRAFT

2022-2026 CIP 5-YEAR PLAN

MONICA DANIELS, FINANCE ASSET MANAGER

April 7, 2021 CIP0 Committee Meeting

Summary of 5-Year CIP Draft Financial Plan and FY2021-2022 Capital Budget

The FY 2022 – FY 2026 capital improvement plan provides for \$216 million of water system improvements and \$210 million of sewer system improvements over the five year planning cycle. **Five Year Total \$426M** and **FY22 Capital Budget of \$153,744,568**

Category Summary	% of 5-Year Spend	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total 5-Year 2022-2026
Water Main	33%	42,985	50,680	40,000	21,750	15,750	10,750	138,930
Sewer Line Replacement	30%	28,367	46,918	32,525	21,025	14,000	14,000	128,468
CIPMO	1%	8,280	5,590	-	-	-	-	5,590
Green Infrastructure	12%	12,470	14,773	11,723	8,843	9,995	6,995	52,329
Central Services	10%	23,912	13,970	8,235	6,500	6,500	6,500	41,705
Meters/ Fire Hydrants	3%	8,767	8,701	1,000	1,000	1,000	1,000	12,701
Repair/Restoration	11%	20,973	13,113	11,000	12,800	8,720	1,000	46,633
	100%	145,754	153,745	104,483	71,918	55,965	40,245	426,356
Water	59.1%	86,080	80,661	54,918	37,800	27,720	15,000	216,099
Sewer	40.9%	59,674	73,083	49,566	34,118	28,245	25,245	210,257
	100.0%	145,754	153,745	104,483	71,918	55,965	40,245	426,356

Water Project List

Total estimated cost (1,000's)

Water Project List 2022-2026 CIP

Description	Status	Source of Funds	2021-22	2022-23	2023-24	2024-25	2025-26	2022-2026 CIP Total	Percent of CIP
WS-703 Water Main Replacement (33,820 LF)	C	I&E	-	-	-	-	-	-	0.0%
WS-704 Water Main Replacement -along Outerdrive	C	Bond	-	-	-	-	-	-	0.0%
WS-705 Water Main Replacement-2-sections	C	Bond	-	-	-	-	-	-	0.0%
WS-706 Water Main Replacement Wayne Co. Roads	C	Bond	-	-	-	-	-	-	0.0%
WS-707 Water Main Replacement- (20,000LF)	C	Loan (DWRf)	-	-	-	-	-	-	0.0%
WS-710 Water Main Replacement-Incl Wayne Co Roads	A	Loan (DWRf)	1,000	100	-	-	-	1,100	0.5%
WS-711 Water Main Replacement- Incl Jefferson Streetscape	A	Loan (DWRf)	4,200	1,000	-	-	-	5,200	2.4%
WS-712 Water Main Replacement-Cornerstone Village	A	I&E/Bond	7,630	3,500	-	-	-	11,130	5.2%
WS-713 Water Main Replacement-Jefferson/Chalmers	N	DWRf	7,500	7,500	-	-	-	15,000	6.9%
WS-714 Water Main Replacement-MDOT Streetscape	C	DWRf	-	-	-	-	-	-	0.0%
WS-715 Pilot Areas-Riverdale, Minock, Miller & Rosedale	N	DWRf/I&E	6,900	7,000	3,000	-	-	16,900	7.8%
WS-718 WM New Center Commons & Virginia Park	N	DWRf/I&E	2,300	-	-	-	-	2,300	1.1%
DWS-907 Watermain & Sewer Rehab- North Rosedale Park	A	I&E/Bond	5,000	-	-	-	-	5,000	2.3%
WS-720 Watermain Replacement-Various Streets	N	I&E/Bond	3,100	6,000	3,000	-	-	12,100	5.6%
WS-721 Lead Service Line Replacement	N	I&E/Bond	6,000	5,000	-	-	-	11,000	5.1%
WS-723 Lead Service Line Replacement for Settlements	N	Grant/Legal Settlements	800	200	-	-	-	1,000	0.5%
WS-725 Watermain Replacement-Medical Ctr, Cultural Ctr & Midtown 30,000LF	N	DWRf/Bond	-	4,000	5,000	5,000	-	14,000	6.5%
WS-702 Repair & Replacement of Water Mains	A	I&E	-	-	-	-	-	-	0.0%
WS-708 Repair of Water Mains	A	I&E	-	-	-	-	-	-	0.0%
WS-717 Repair & Replacement of Water Mains (WS-702B)	N	I&E	4,000	3,000	3,000	3,000	-	13,000	6.0%
WS-719 Repair of Water Mains (WS-708/WS-702A)	N	I&E	-	-	2,000	2,000	-	4,000	1.9%
DWS-902 Repair of Pavement (break repair)	A	I&E	1,920	-	-	-	-	1,920	0.9%
DWS-904 Repair of Lawns (break repair)	A	I&E	1,500	-	-	-	-	1,500	0.7%
DWS-919 (replace DWS-902)	N	I&E	4,080	6,800	6,800	2,720	-	20,400	9.4%
PC-808 West Warren (Constance at Rouge Park/Trieman Sawyer PH III)	P	I&E	4,000	3,700	-	-	-	7,700	3.6%
CS-1909A-Condition Assessments-High Priority Neighborhoods	N	I&E	250	-	-	-	-	250	0.1%
CS-1921 Watermain/Sewer Design	N	I&E	1,000	1,000	1,000	-	-	3,000	1.4%
CS-1923 Third Party Inspection (Water & Sewer)	N	I&E	750	750	750	-	-	2,250	1.0%
CS-1947 Condition Assessment Sherwood Forest,	N	I&E	250	250	-	-	-	500	0.2%
CS-1812 Professional Engineering and Construction Services for CIPMO	A	I&E/Bond	2,795	-	-	-	-	2,795	1.3%
Construction Program Management Allowances	N	I&E	-	-	1,000	750	750	2,500	1.2%
Watermain Program Allowances	N	I&E	-	-	8,000	10,000	10,000	28,000	13.0%
PC-803B Meter Installation	A	I&E	-	-	-	-	-	-	0.0%
Water Meter Replacement Program	A	I&E	451	750	750	750	750	3,451	1.6%
Fire Hydrant Replacement Program	A	I&E	250	250	250	250	250	1,250	0.6%
CS-1925 Itron Migration -MIU Replacement	A	I&E	5,931	-	-	-	-	5,931	2.7%
CS-1926 Itron Migration Project Management	A	I&E	2,069	-	-	-	-	2,069	1.0%
Vehicle, Heavy Equipment, and Equipment Purchases	A	I&E	1,335	1,500	1,500	1,500	1,500	7,335	3.4%
Information Technology	A	I&E	1,890	1,618	750	750	750	5,757	2.7%
Facility Improvement Allowance	A	I&E	3,761	1,000	1,000	1,000	1,000	7,761	3.6%
TOTALS			80,661	54,918	37,800	27,720	15,000	216,099	100.0%

Sewer Project List

Total estimated cost (1000's)

Sewer Project List 2022-2026 CIP

Description	Status	Source of Funds	2021-22	2022-23	2023-24	2024-25	2025-26	2022-2026 CIP Total	Percent of CIP
DWS-903 Inspection and Rehabilitation of Sewers City Wide	A	I&E/ Bond	7,000	-	-	-	-	7,000	3.3%
DWS-907 North Rosedale Park	A	I&E/ Bond	3,000	-	-	-	-	3,000	1.4%
DWS-908 Cornerstone Village Sewer Rehab	A	I&E/ Bond	2,693	-	-	-	-	2,693	1.3%
DWS-909 Sewer Condition assessments throughout City	C	I&E	-	-	-	-	-	-	0.0%
DWS-910- Sewer Condition Assessments High Priority	C	I&E	-	-	-	-	-	-	0.0%
DWS-916 Sewer Improvements in High Priority Neighborhoods	A	SRF/ Bond	2,600	-	-	-	-	2,600	1.2%
DWS-917 Sewer Improvement in Riverdale	N	SRF/ Bond	5,000	4,800	300	-	-	10,100	4.8%
DWS-918 Sewer Improvements in Rosedale	N	SRF/ Bond	4,450	450	-	-	-	4,900	2.3%
DWS-920 Inspection and Rehabilitation of Sewers City Wide (Replace DWS-903)	N	I&E	3,000	8,000	4,000	-	-	15,000	7.1%
DWS-921 Electrical Monitoring Upgrades at Belle Isle, Woodmere, Fischer Sewage Pump Stations	P	I&E	200	200	200	-	-	600	0.3%
DWS-926 Sewer Condition Assessments - West Village, Southwest Detroit, Michigan-Martin	P	I&E	-	2,500	2,500	-	-	5,000	2.4%
DWS-931 Roofing Upgrades at Sewage PumpStations	P	I&E	325	325	275	-	-	925	0.4%
DWS-932 Large Sewer Improvements- Riverdale & Rosedale	P	I&E/ Bond	4,400	400	-	-	-	4,800	2.3%
DWS-933 Corktown Sewer	C	I&E	-	-	-	-	-	-	0.0%
DWS-937 Sewer Replacement	N	DWRF/I&E	8,000	7,600	-	-	-	15,600	7.4%
DWS-938 Sewer Condition assessments throughout City (DWS-909)	N	DWRF/I&E	2,250	2,250	-	-	-	4,500	2.1%
DWS-939 Sewer Condition Assessments High Priority	N	DWRF/I&E	2,250	2,250	-	-	-	4,500	2.1%
Sewer Program Allowances	N	I&E	-	2,000	12,000	14,000	14,000	42,000	20.0%
CS-1812 Professional Engineering and Construction Services for Capital Improvement Program Management Organization	A	I&E/ Bond	2,795	-	-	-	-	2,795	1.3%
DWS-902 Repair of Pavement (break repair)	A	I&E	75	-	-	-	-	75	0.0%
DWS-904 Repair of Lawns (break repair)	A	I&E	338	-	-	-	-	338	0.2%
DWS-919 (replace DWS-902)	N	I&E	1,200	1,200	-	-	-	2,400	1.1%
Repair and Maintenance Allowance	N	I&E	-	-	1,000	1,000	1,000	3,000	1.4%
CS-1921 Watermain/Sewer Design	N	I&E	1,000	1,000	1,000	-	-	3,000	1.4%
CS-1923 Third Party Inspection (Water & Sewer)	N	I&E	750	750	750	-	-	2,250	1.1%
CS-1522 Green Infrastructure Program Management	C	I&E	-	-	-	-	-	-	0.0%
PC-799 Crowell Rec Center and EcoSite Modifications	C	I&E	3	-	-	-	-	3	0.0%
PC-808 West Warren (Constance at Rouge Park/Tireman Sawyer PH III)	N	I&E	10,040	7,650	6,280	3,995	995	28,960	13.8%
PC-808 Sewer Rehabilitation (Non GSI)	N	I&E	1,500	1,500	-	-	-	3,000	1.4%
PC-801A Oakman Blvd	A	I&E/ Bond	20	20	20	-	-	60	0.0%
PC-800 O'Shea Park	C	I&E	10	-	-	-	-	10	0.0%
PC-806 Charles H. Wright Academy	N	I&E	687	45	38	-	-	770	0.4%
North Rosedale (Edinborough)	N	I&E	3	3	-	-	-	6	0.0%
Capital Partnership Program	P	I&E	5	-	-	-	-	5	0.0%
Chandler Park Drive (CIPMP)	N	I&E	5	5	5	-	-	15	0.0%
Green Stormwater Infrastructure Construction Allowance	N	I&E	-	-	-	5,000	5,000	10,000	4.8%
CS-1884 Green Infrastructure Program Management	P	I&E	2,500	2,500	2,500	1,000	1,000	9,500	4.5%
Vehicle, Heavy Equipment, and Equipment Purchases	N	I&E	1,335	1,500	1,500	1,500	1,500	7,335	3.5%
Information Technology	N	I&E	1,890	1,618	750	750	750	5,757	2.7%
Facility Improvement Allowance	N	I&E	3,761	1,000	1,000	1,000	1,000	7,761	3.7%
TOTALS			73,083	49,566	34,118	28,245	25,245	210,257	100.0%



Information Technology

Descriptions	Type		2021-22
Security			
DWS-912 Video Security System Upgrades	Software	Addition	\$ 240,000
Customer Service			
CS-1917 EnQuesta Upgrade	Software	Software Maintenance	\$ 200,000
Operations			
Collaboration Software for Drainage & Records Management	Software	New Software Implementation	\$ 190,000
DWS-928 GPS for vehicles	Hardware/Equipment	New Hardware/Equipment Implementation	\$ 564,000
Misc. Equipment for AssetWorks	Hardware/Equipment	New Hardware/Equipment Implementation	\$ 50,000
Itron Replacement (staffing support)	Other IT Implementation	CIP IT STAFFING	\$ 600,000
CS-1952 Oracle Supply chain Management	Other IT Implementation	New Other IT Implementation Implementation	\$ 800,000
Information Technology			
Desktops	Hardware/Equipment	Hardware	\$ 50,000
Laptop Charging Stations	Hardware/Equipment	Hardware	\$ 5,000
Laptops	Hardware/Equipment	Hardware	\$ 10,000
Rugged Tablets/Laptops	Hardware/Equipment	Hardware	\$ 20,000
Tablets	Hardware/Equipment	Hardware	\$ 50,000
Low Voltage Wiring	Hardware/Equipment	New Hardware/Equipment Implementation	\$ 200,000
Phone System Migration to Avaya	Hardware/Equipment	New Hardware/Equipment Implementation	\$ 20,000
Printers	Hardware/Equipment	Hardware	\$ 30,000
Cityworks/AssetWorks/Records Implementat	Other IT Implementation	New Other IT Implementation Implementation	\$ 400,000
GIS Update As-Built Drawing Upgrades	Other IT Implementation	New Other IT Implementation Implementation	\$ 350,000
Total			\$ 3,779,000



Vehicle, Heavy Equipment, and Equipment

Descriptions	Type	QTY	Estimated Unit Cost	2021-22
Meter Operations			45,000	
F-350 Super Duty	Truck	1	45,000	45,000
Field Services Operations			1,935,000	
F150	Truck	6	45,000	270,000
F-450 Super Duty	Utility Truck	3	125,000	375,000
F-550 Super Duty	Utility Truck	5	130,000	650,000
5-Yard Dump-Salt Truck	Dump Truck	1	250,000	250,000
Mini-Excavator	Backhoe	2	150,000	300,000
Trailers for Mini Excavator	Trailer	2	30,000	60,000
Golf Cart	Vehicle	2	15,000	30,000
Fleet Operations			690,000	
SUV	Vehicle	5	32,000	160,000
Pool Vehicles	Vehicle	5	35,000	175,000
Golf Cart	Vehicle	2	15,000	30,000
F150	Truck	5	45,000	225,000
Passenger Vehicles	Vehicle	2	25,000	50,000
Confined Space Tripod	Equipment	2	12,500	25,000
Tampers/Compactors	Equipment	2	5,000	10,000
Underground Locators	Equipment	2	7,500	15,000
Total				2,670,000

FY 2022 Facility Improvements

Descriptions	Type	QTY	Unit Cost	2021-22
Roofing				
CSF/West/MOB	Roof replacement			3,000,000
Heating Units				
CSF	HVAC Units	10	150,000	500,000
West Payment	HVAC Rooftop Unit Replacement	2	15,000	30,000
MOB	Steam Improvements			15,000
MOB	Heat Improvement - Car Elevator area			36,000
Misc. HVAC Improvements	Auto Garage - Extra large Fans	6	20,000	120,000
Garage Door Replacement				
DWS-926 Overhead Dooes CSF/ West Yard	Fabric Door Replacement	10	25,000	200,000
Interior Improvements				
Build Out	Interior Space Improvements			300,000
DWS-914 Flooring	Interior West Yard	10	100,000	250,000
Flooring	Exterior West Yard			150,000
2nd Floor Admin-Buildout	Design/Feasibility			50,000
DWS-927 Bathroom Improvements (Covid)	Design/Feasibility			150,000
Parking Lot Improvements				
LED Lights	Yards/Garage			200,000
Gate Operator	CSF & West Yard			20,000
Detroit Building Authority (DBA)	Consolidation, Renovations & Improvements			2,500,000
Total				\$ 7,521,000

Next Steps

- Complete internal reviews with projection through June 2021
- Finalize 2022-2026 Five-year CIP and submit to BOWC for final approval May 2021
- Finalize CIP Book by June 2021
- Submit final BOWC approved CIP to Detroit City Council, for review only

Thank You



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District Maps

Watermain Projects by District

District Maps

Sewer/Green Infrastructure Projects by District

2021 CIP Street Table

Upcoming Capital Construction Projects by City of Detroit Streets