

EIGHT AND ONE-HALF MILE RELIEF DRAIN
INTRA-COUNTY DRAINAGE BOARD
APRIL 13, 2026
10:15 A.M.
AGENDA

**NOTE: THIS MEETING WILL BE HELD IN PERSON WITH TELECONFERENCE
OPTION FOR PUBLIC**

**Teams Meeting ID: 263 685 587 959 9
Passcode: 2wU3rk2L**

**Call in Number: 1-917-933-5524
Passcode: 997 417 082#**

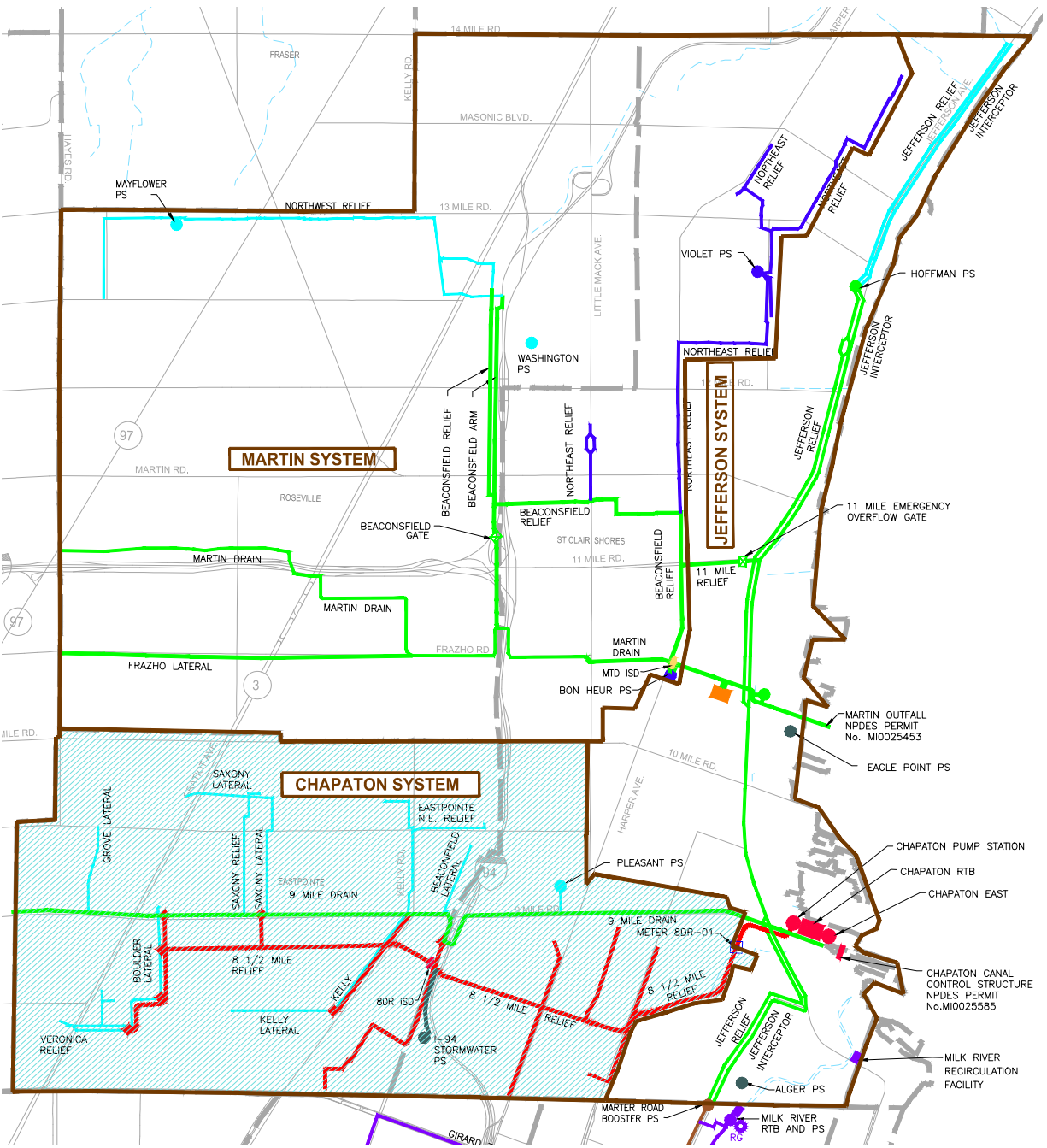
	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for April 13, 2026	
3. Approval of Minutes for March 9, 2026	3
4. Public Participation	
5. Project & Operational Updates – Vince Astorino	5
6. Consideration for approval of invoices (see attached)	30
7. Financial Report – Bruce Manning	31
8. Adjourn	

Hard copy is intended to be 8.5"x11" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

CHAPATON SYSTEM MAP

Macomb County, MI

Southeast Macomb Sanitary District Wastewater Master Plan



SYSTEM LEGEND
(AS OF DATE OF PUBLICATION)

- SYSTEM BOUNDARY

DISTRICT LEGEND
(AS OF DATE OF PUBLICATION)

- 8 1/2 MILE RELIEF DRAIN DRAINAGE DISTRICT
- SOUTHEAST MACOMB COUNTY WASTEWATER DISPOSAL SYSTEM
- MARTIN SANITARY DIVERSION DISTRICT
- SOUTHEAST MACOMB SANITARY DISTRICT
- NORTHEAST SEWAGE DISPOSAL SYSTEM
- MILK RIVER INTERCOUNTY DRAIN DRAINAGE DISTRICT
- LOCAL MUNICIPALITY
- OTHER

ASSET LEGEND

- PUMP STATION
- FLOW CONTROL STRUCTURE
- RTB
- GRAVITY INTERCEPTOR
- IN-SYSTEM STORAGE DEVICE
- OVERFLOW POINT
- LEVEL SENSOR
- RAIN GAUGE
- FLOW METER

PROJECT NO.

181053

3.6

An adjourned meeting of the Intra-County Drainage Board for the **EIGHT AND ONE-HALF MILE RELIEF DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham, Clinton Township, Michigan, on March 9, 2026, at 10:25 A.M.

PRESENT: Candice Miller, Chair
Bryan Santo, Member
Sarah Lucido, Member

ALSO PRESENT: Brian Baker, Chief Deputy; Jennifer Jozwiak, Administrative Coordinator; Vince Astorino, Operations & Flow Manager; Bruce Manning, Financial Manager; Don VanSyckel, Board of Commissioners; John Caron, Engineer; Don Brown, Deputy; Norb Franz, Communications Manager; Alex Aprile, Community Services Coordinator

PRESENT VIA TELECONFERENCE: Sterling Heights Department of Public Works; Hussan Hussein, Chesterfield Township DPW; Michael, Eastpointe;

The meeting was called to order by the Chair, Candice Miller. A motion was made by Ms. Lucido, supported by Mr. Santo to approve the agenda as presented.

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of February 9, 2026, were presented. A motion was made by Mr. Santo, supported by Ms. Lucido to approve the minutes as presented.

Adopted: YEAS: 3
NAYS: 0

The meeting was opened to public participation, then closed, there being no comments from the public.

Mr. Astorino stated there were no wet weather events. After receiving 2.11" of rainfall between March 5th and March 7th, Chapaton was the only basin in the region that did not spill. Chapaton took on 68.1 million gallons of water that was able to be stored and treated before being sent to GLWA.

Mr. Astorino updated on the Chapaton Electrical Upgrades. The contractor has been working inside running cables and wires and installing cable trays. Fiber has been hooked up from each of the panels to the SCADA system. The breakers for the outdoor gear have been connected and tested. Eaton, the manufacturer, has been on site testing the gears to ensure everything is working as it should. The next step would be to splice into the DTE cables and start the process to switch over the electric supply. However, we will hold off on taking the storm pumps off-line until later in the year as the weather is less risky then.

Mr. Astorino reported on the Chapaton Basin Gate Rehabilitation. There continue to be delays with installing the gates. We have been pressing the manufacturer to deliver missing parts. Liquidated damage notices have been sent to the manufacturer to facilitate delivery of the necessary parts.

The MCPWO won three top state engineering project awards. The awards were for In-System Storage, Canal Rehabilitation, and for MIDD Odor and Corrosion facilities.

A motion was made by Ms. Lucido, supported by Mr. Santo to receive and file the project updates by Mr. Astorino.

Adopted: YEAS: 3
NAYS: 0

The Chair presented the invoices totaling \$1,029,353.61 to the board for review and approval.

A motion was made by Mr. Santo, supported by Ms. Lucido to approve the invoices as presented.

Adopted: YEAS: 3
NAYS: 0

A motion to receive and file the financial report given by Mr. Manning was made by Ms. Lucido and supported by Mr. Santo.

Adopted: YEAS: 3
NAYS: 0

There being no further business, it was moved by Mr. Santo, supported by Ms. Lucido, that the meeting of the Eight and One-Half Mile Relief Drain Board be adjourned.

Adopted: YEAS: 3
NAYS: 0

The meeting was adjourned at 10:39 a.m.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

STATE OF MICHIGAN
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taking by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on March 9, 2026 the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

DATED: 03/09/26



To: 8 ½ Mile Relief Drain Drainage District Board Members

CC: File

From: Vincent Astorino, Operations Director

Date: April 13, 2026

Subject: Construction Projects Status Updates for the April 2026 Board Meeting

The following provides a status update for construction work completed within the 8 ½ Mile Relief Drain Drainage District (8MRDDD) for the previous month.

Wet Weather Operations

No wet weather events for the past month.

Chapaton Electrical Upgrades

Contractor: Rotor Electric

Engineering Consultant: Tetra Tech

Project Description:

The project consists of installing new motor starters for each of the three stormwater pumps, new 15 kV switchgear, and a complete motor rebuild for storm pump 2. This project will increase the electrical resiliency of the Chapaton Pump Station.

Significant project tasks that have occurred over the past month:

- Submittals are being received and processed by the engineering team.
- Construction Activities per Update Period:
 - Continued processing and receiving stored equipment and material as needed.
 - Continued assembly and programming of new station switchgear, starters, and breakers as designed.
 - Saw cut existing parking lot concrete in preparation for new electrical duct bank to new generator’s located at proposed 9mile PS as required.
 - Continued installing new exciter and starter control conduits within Chapaton PS building planned.
 - Completed DTE Station shutdown to perform power line connection splice in DTE vault as designed.
 - Performed continuity and specification tests on recently installed cable and conductors as required.
 - Received delivery of (1 of 4) New 2MW Generator E-House and unloaded for storage at Fraser Biofilter site as planned.

1. Construction Look Ahead:

- Coordinate & exercise station DTE shutdowns for new splice connection
- Continue specification tests on recently installed new cable and conductors
- Continue programming and integration of new software and equipment
- Continue layout and verifying areas for new electrical equipment installation
- Remove existing solar panels and supporting equipment on basin deck

Construction Costs:

	Date (if applicable)	Amount
Original Contract Amount		\$14,650,000.00
Change Order 001	9/03/2025	\$(1,222,409.95)
Revised Contract Amount		\$13,427,590.05
Total Spent to Date	Through Pay App. #8	\$6,307,492.03
Remaining Budget		\$7,120,097.99

Figure 1 – Pulling Control Cable on Main Floor @ Chapaton PS



Figure 2 – Control Cable Pull from Main Floor Level thru Level B1 @ Chapaton PS



Figure 3 – Control Cable Pull from Level B1 to Level B2 Gear @ Chapaton PS



Figure 4 – Existing Gear Connection Check for DTE Splice @ Chapaton PS



Figure 5 – Preparing Cable to Buss Bar Connections in Outdoor E-House @ Chapaton PS



Figure 6 – Testing Cables Between DTE and Dist. Gear @ Chapaton PS



Figure 7 –Layout for Electrical Duct Bank from Gear to Generators @ Chapaton PS



Figure 8 – Transporting 2MW E-House @ Eastbound 15 Mile



Figure 9 – Transporting 2MW E-House @ 15 Mile Fraser Bio-Filter Site



Figure 10 – Unloading E-House @ 15 Mile Fraser Bio-Filter Site



Chapaton Basin Gates Rehabilitation

Contractor: Z Contractors

Engineering Consultant: AEW

Project Description:

The project consists of replacing ten sluice gates at the Chapaton facility, many of which are original to 1968 when the pump station was constructed. Additional improvements include new systems to operate the gates, removal of all obsolete equipment, and replacement of controls associated with the gates. This project will increase the reliability of these sluice gates that serve some of the most critical purposes within the overall southeast Macomb system.

Significant project tasks that have occurred over the past month:

1. Submittals are being received and processed by the engineering team.
2. Construction Activities per Update Period:
 - Resumed field work activities early March.
 - Continued layout & coordination plan to install new gates and control panels as required.
 - Placed concrete for new telemetry access hatch and REXA enclosure pad as designed.
 - Installed West REXA control cabinet, transformer, and 9-mile station actuator as planned.
 - Trenched for below grade conduit and installed cables and connectors as necessary for operational controls.
 - Placed temporary pipe plug to perform daily work activities in the Jefferson Diversion Chamber as required.
 - Removed Existing concrete pavements to access 9-mile station chamber as required.
 - Installed Stop Log Rail Guide Channels on opposite side of walls for existing 9-mile station gate and Jefferson Diversion gate removal.
 - Installed reinforced fiberglass access ladder inside Jefferson diversion chamber as designed.
3. Construction Look Ahead:
 - Continue layout & coordinate plan to install new actuator control panels for Chapaton PS gates
 - Sawcut existing concrete inside gate chambers to facilitate stop log operations.
 - Installation of temporary stop logs for Jefferson Diversion & 9-mile Station
 - Place new Jefferson Diversion & 9-mile Station Gates w/Operators

Construction Costs:

	Date (if applicable)	Amount
Original Contract Amount		\$4,005,000.00
Change Order 001	7/24/2024	\$0.00
Change Order 002	2/10/2025	\$71,633.84
Revised Contract Amount		\$4,076,633.84
Total Spent to Date	Through Pay App. #5	\$1,823,134.91
Remaining Budget		\$2,253,498.93

Figure 11 – Layout for New 9-mile Bypass Gate @ Chapaton PS



Figure 12 – Placing Concrete for Telemetry Access Hatch & Rexa Equipment Pad @ Chapaton



Figure 13 – Concrete for Telemetry Access Hatch & Rexa Equipment Pad @ Chapaton PS



Figure 14 – Installing New Rexa Control Cabinet on Equipment Pad @ Chapaton PS



Figure 15 – Installing New Rexa Actuator on Equipment Pad @ Chapaton PS



Figure 16 – Installing New Transformer on Rexa Equipment Pad @ Chapaton PS



Figure 17 – Installing New Displays on Rexa Equipment Pad @ Chapaton PS



Figure 18 – Placing Temporary Pipe Plug into RTB Drain @ Chapaton PS



Figure 19 – Removing Concrete to Access Station Gate Vault @ Chapaton PS



Figure 20 – Removing Station Gate Vault Roof Panels @ Chapaton PS



Figure 21 – Installing New FRP Ladder in Diversion Chamber @ Chapaton PS



Figure 22 – Installing Stop Log Guide Rails in Station Gate Vault @ Chapaton PS



EIGHT AND ONE-HALF MILE RELIEF
03/17/26 - 04/07/26

<u>Funding Source</u>	<u>Apportionment</u>	<u>Manager</u>	<u>Vendor</u>	<u>Amount</u>	<u>Invoice Detail</u>	<u>Project Summary</u>	<u>Project Balance</u>
8 1/2 Mile Relief	Chapter 20 State of MI – 16.04% County of Macomb – 2.25% Dept. of Roads – 2.25% Eastpointe – 54.33% St. Clair Shores – 25.13%	Astorino	Aloia Law	\$ 769.50	Invoice #34118 - 12.01.25	9 Mile Pump Station Property - November 2025	
		Astorino	Aloia Law	\$ 1,999.75	Invoice #34331 - 01.02.26	9 Mile Pump Station Property - December 2025	
		Astorino	Anderson, Eckstein & Westrick	\$ 8,323.70	Invoice #164094 - 03.16.26	Chapaton Basin Gate Rehabilitation	\$ 345,561.85
		Astorino	Carleton Equipment	\$ 1,407.34	Invoice #05-761398 - 03.23.26	Tires for Bobcat	
		Astorino	Carleton Equipment	\$ 919.13	Invoice #05-752514 - 01.16.26	Bobcat Repair	
		Astorino	CDW Government	\$ 1,501.03	Invoice #AI6LL1K - 03.25.26	SCADA	
		Astorino	Colville Electric	\$ 1,050.00	Invoice #26057 - 02.11.26	Generator Connection	
		Astorino	Competitive Hoisting	\$ 1,500.00	Invoice #3203441 - 03.20.26	Crane Rental - Canal Cleaning	
		Astorino	Consumers Energy	\$ 2,761.63	Invoice #201098583973 - 03.20.26	Monthly Gas - 02.07.06 - 03.09.26	
		Astorino	Consumers Energy	\$ 1,418.99	Invoice #202967274363 - 03.20.26	Monthly Gas - 02.07.06 - 03.09.26	
		Astorino	DTE Energy	\$ 13,587.50	Invoice #26-182 - 03.16.26	Monthly Electric - 02.09.26 - 03.08.26	
		Astorino	DTE Energy	\$ 511.62	Invoice #26-194 - 03.24.26	Monthly Electric - 02.09.26 - 03.08.26	
		Astorino	Fishbeck	\$ 7,665.60	Invoice #462858 - 03.16.26	As Needed - 9 Mile PS/Fire Suppression/Jeff. Relief	\$ 139,576.60
		Astorino	Home Depot	\$ 638.40	Invoice #6373232 - 01.20.26	Hot Water Heater	
		Astorino	HP Inc.	\$ 2,250.86	Invoice #9046178164 - 12.02.25	Z-Book - Brent W.	
		Astorino	JCI Jones Chemicals	\$ 11,800.40	Invoice #991184 - 03.10.26	Sodium Hypochlorite	
		Astorino	JDC	\$ 630.45	Invoice #282000 - 03.16.26	Tripod - Confined Space	
		Astorino	MCET	\$ 29,950.00	Invoice #39937 - 03.20.26	Electrical Upgrades - SCADA - PLC Upgrade	
		Astorino	MCET	\$ 2,157.40	Invoice #97180 - 02.25.26	As Needed Electrical - SCADA	
		Astorino	Neu Homes Exteriors	\$ 5,550.00	Invoice #26-178 - 03.12.26	Roof - Reinstall Copper Panels	
Astorino	PVS Nolwood Chemicals	\$ 11,639.95	Invoice #23960234 - 02.28.26	Sodium Hypochlorite			
Astorino	Rotor Electric	\$ 365,685.54	Invoice #App 8 - 03.18.26	Chapaton Pump Station Electrical Upgrades	\$ 7,120,097.99		
Astorino	Russ Milne	\$ 3,217.38	Invoice #24517 - 3.10.26	Vehicle #18-481 Repairs - Pool			
Astorino	Tetra Tech	\$ 159,308.97	Invoice #52557927 - 03.05.26	9 Mile Pump Station Design through 02.28.26	\$ 343,852.95		
Astorino	Tetra Tech	\$ 15,865.49	Invoice #52557929 - 03.05.26	Chapaton Electrical CCA through 02.28.26	\$ 406,974.00		
Astorino	Weiss Construction	\$ 392,639.73	Invoice #App 26 - 04.07.26	In System Storage - Final			
Astorino	Z Contractors	\$ 380,602.11	Invoice #App 5 - 03.24.26	Chapaton Gate Rehabilitation through 03.31.26	\$ 2,253,498.93		
SRF DEBT		Manning	Michigan Finance Authority	\$ 12,125.00	Invoice #26-161 - 01.28.26	Debt - 5306-01	
		Manning	Michigan Finance Authority	\$ 4,607.24	Invoice #26-161 - 01.28.26	Debt - 5393-01	
		Manning	Michigan Finance Authority	\$ 26,879.31	Invoice #26-161 - 01.28.26	Debt - 5460-01	
		Manning	Michigan Finance Authority	\$ 2,604.58	Invoice #26-161 - 01.28.26	Debt - 5579-01	
Total				\$ 1,471,568.60			

Budget to Actual
8.5 Mile Relief
As of March 31, 2026 = 50%

DESCRIPTION	2026 BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
Interest Earned	425,000		153,073	271,927	36.0%
Other Revenue	5,000		386	4,614	7.7%
Bond Proceeds	20,000,000			20,000,000	0.0%
Grants	49,842,290		2,148,293	47,693,997	4.3%
8.5 O&M/Charge Required Revenue	5,830,450		5,830,450	-	100.0%
PY Revenue-Fund Balance	8,116,170			8,116,170	0.0%
<i>Total Revenue Accounts</i>	84,218,910	-	8,132,202	76,086,708	9.7%
EXPENSE ACCOUNTS					
Application/Permit Fee	6,000		6,000	-	100.0%
Dues, Training, Conf, Subs.	38,400			38,400	0.0%
Engineering					
Jefferson Interceptor	2,170,000			2,170,000	0.0%
Gates Rehab Replacement	2,770,880		347,490	2,423,390	12.5%
Flushing	5,036,880			5,036,880	0.0%
General Construction/Engineering Contingency-All Projects	938,720			938,720	0.0%
As Needed Engineering	139,510		63,607	75,903	45.6%
Electrical Rehab (State and County ARPA Funds)	10,170,740		2,148,293	8,022,447	21.1%
Canal Rehab (Carryover)			346,824	(346,824)	100.0%
PS Main Floor Ventilation (Carryover)			3,834	(3,834)	100.0%
9 Mile PS (Match)			2,584,875	(2,584,875)	100.0%
9 Mile PS (USACE Grant)	60,000,000			60,000,000	0.0%
9 Mile Pump Station (Short Term Interest)	300,000			300,000	0.0%
New Equipment	3,000		2,531	469	84.4%
Office Supplies	600			600	0.0%
Operating Supplies	132,500		28,765	103,735	21.7%
Other Professional Svcs	77,000		6,111	70,889	7.9%
Personnel Services	1,404,230		381,327	1,022,903	27.2%
Repair & Maintenance	297,730		155,709	142,021	52.3%
Contribution to Reserve	288,240			288,240	0.0%
Scada System (Reserve)			94,275	(94,275)	100.0%
Scada System	102,340		95,031	7,309	92.9%
Utilities	342,140		134,725	207,415	39.4%
<i>Total Expense Accounts</i>	84,218,910	-	6,399,397	77,819,513	7.6%

	O&M Balance 9/30/2025	O&M	Total 3/31/2026
Cash - Operating	15,150,561	1,732,805	16,883,366
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		8,132,202	8,132,202
Expenditures		6,399,397	6,399,397
			0
Equity*	15,150,561		16,883,366

Detail of 2025 Equity*

General Construction/Engineering Contingency-All Projects	138,142	Capital Reserve	716,066
Painting	95,726	SCADA Reserve	137,056
As needed Engineering	64,970	PS Main Floor Ventilation	12,077
Gates Replacement	3,323,468	SRF Replacement Reserve	3,369,770
Flushing	3,495,416	Canal Rehab	300,816
9 Mile Emergency Bypass Structural Rehab	998,604	Electrical	328,450
Jefferson Interceptor	2,170,000		

ARPA Funds	Remaining
County	
Electrical	9,500,000
State	
Electrical	1,962,420