

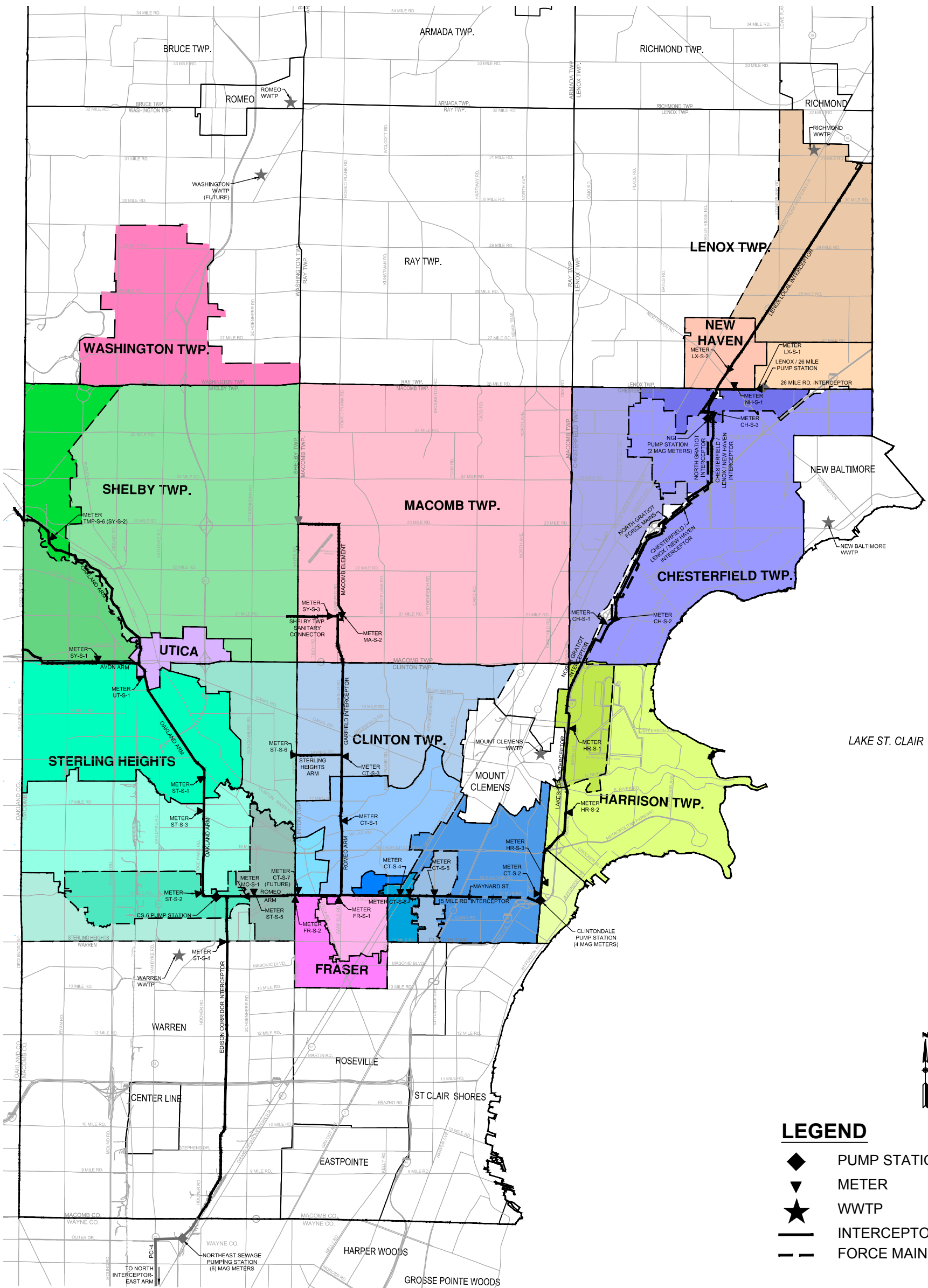
MACOMB INTERCEPTOR DRAIN
INTRA-COUNTY DRAINAGE BOARD
OCTOBER 16, 2023
10:45 A.M.
AGENDA

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

**Call in Number: 1-224-990-0182
Access Code: 927 405 823**

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for October 16, 2023	
3. Approval of Minutes for September 11, 2023	3
4. Public Participation	
5. Project Updates – Stephen Downing/Vince Astorino	6
6. Segment 5 – Oscar Renda Contracting Change Order # 5 – Steve Downing	31
To approve Change Order #5 with Oscar Renda Contracting for the Segment 5 project totaling \$3,731,037.45 (which includes OMID’s share of \$350,000) with no increase in contract days.	
7. Segment 5 – 9 Month OCIP Liability Insurance Extension \$98,762.86 – Steve Downing	39
To receive and file the memo regarding the 9-month extension of the OCIP Liability Insurance for the Segment 5 project.	
8. Consideration for approval of invoices (see attached)	42
9. Financial Report – Bruce Manning	44
10. Adjourn	

MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT



LEGEND

- ◆ PUMP STATION
- ▼ METER
- ★ WWTP
- INTERCEPTOR
- - - FORCE MAIN



Candice S. Miller

MACOMB COUNTY PUBLIC WORKS COMMISSIONER



UPDATED: FEBRUARY 2017

An adjourned meeting of the Intra-County Drainage Board for the **MACOMB INTERCEPTOR DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham Clinton Township, Michigan on September 11, 2023, at 11:03 A.M.

PRESENT: Candice S. Miller, Chair
Don VanSyckel, Member
Vince Viviano, Member

ALSO PRESENT: Vince Astorino, Operations & Flow Manager; Brian Baker, Chief Deputy; Stephen Downing, Construction and Maintenance Manager; Norb Franz, Communications Manager; Jennifer Jozwiak, Drain Account Specialist; Bruce Manning, Finance Manager; Pamela Sonnenberg, Administrative Assistant; Tom Stockel, Construction Supervisor

PRESENT VIA TELECONFERENCE: Bonnie Rau, City of Sterling Heights DPW

The meeting was called to order by the Chair, Candice S. Miller. A motion was made by Mr. VanSyckel, supported by Mr. Viviano to approve the agenda as presented.

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of August 14, 2023, were presented. A motion was made by Mr. VanSyckel, supported by Mr. Viviano 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. Downing updated on Segment 5. The contractor has been doing well with debris removal. As of September 1st, they have been able to remove 1,109 tons of material. The cleaning is going very well. He presented photos of the CS-12 pump station and all of the HOBAS pipe.

Mr. Downing then presented on Segment 6 Rehabilitation. They continue to install the foul air duct line beneath Garfield Road. He presented photos.

Mr. Astorino said that the Garfield Interceptor Lining project is now complete. We are working on project closeout. There was a road culvert damaged on the Northwest corner of 21 and Garfield, we are going to get that replaced.

Mr. Astorino updated on the 2023 Interceptor Inspection Program. Taplin started last week in the MIDDD and are working in the Lakeshore at nights to try to accommodate our construction schedules.

Mr. Downing stated that there is nothing new to report on Phase II Grouting.

Mr. Downing said that there is a lot of progress being made this month on Odor and Corrosion Facilities. We made a lot of progress at the Fraser site. We are continuing with the mechanical, plumbing, and electrical work at the NGI Pump Station site. They are in preparation for site paving.

The Clintondale Pump Station work is idle. At the 21 Mile and Garfield site, we encountered pressurized groundwater. Work has halted until additional geotechnical information is collected. He then presented some site photos.

A motion was made by Mr. VanSyckel, supported by Mr. Viviano to receive and file the project updates.

Adopted: YEAS: 3
NAYS: 0

Mr. Astorino presented on the Drop Shaft Rehabilitation project. We have seven high priority site locations, three of them that were elevated to critical priority status. The remaining four sites will require repairs and will be evaluated by the selected firm to provide their recommendation of the level of repairs required. We requested proposals from AEW, FKE, and NTH. There is a \$2,400,000 budget for this project. FKE was chosen based on cost. We are confident that they can perform the work for this project.

A motion was made by Mr. VanSyckel, supported by Mr. Viviano to award the design and construction contract administration proposal from FK Engineering for the 2024 MIDD Drop Shaft Rehabilitation project for a not to exceed amount of \$532,588.

Adopted: YEAS: 3
NAYS: 0

Mr. Astornio presented a change order for Metco. We need the funds for continued flow control support, but we have had some problems with Pump #4 at the Clintondale Pump Station. It was determined that a bearing failed within the shaft of the pump. In order to replace the bearing, the pump, motor, and piping will need to be pulled. We have some spare parts, so while we have everything pulled, we will replace the pump at the bottom.

A motion was made by Mr. VanSyckel, supported by Mr. Viviano to approve Change Order #1 for \$85,040 to the As Needed Engineering Services contract with Metco for flow control and pump #4 repair assistance.

Adopted: YEAS: 3
NAYS: 0

Mr. Downing presented a change order for the NGI Actuator Upgrades and Misc. items on the Odor and Corrosion contract.

A motion was made by Mr. VanSyckel, supported by Mr. Viviano to approve Change Order #1 for \$283,792.77 to the MIDD Odor and Corrosion Control contract with L. D'Agostini & Sons.

Adopted: YEAS: 3
NAYS: 0

The Chair presented the invoices totaling \$7,759,986.86 to the board for review and approval.

A motion was made by Mr. VanSyckel, supported by Mr. Viviano 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 Mr. VanSyckel and supported by Mr. Viviano.

Adopted: YEAS: 3
NAYS: 0

There being no further business, it was moved by Mr. VanSyckel, supported by Mr. Viviano that the meeting of the Macomb Interceptor Drain Board be adjourned.

Adopted: YEAS: 3
NAYS: 0

The meeting was adjourned at 11:37 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 taken by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on September 11, 2023, 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: 9/11/23



Candice S. Miller

Public Works Commissioner
Macomb County

To: Macomb Interceptor Drain Drainage District Board Members

CC: File

From: Stephen Downing, Construction & Maintenance Manager
Vincent Astorino, Operations Director

Date: October 16, 2023

Subject: Construction Projects Status Updates for October 2023 Board Meeting

The following provides a status update for construction work performed within the Macomb Interceptor Drain Drainage District for the previous month.

Segment 5 Rehabilitation

Contractor: Oscar Renda

Engineering Consultant: FK Engineering

Project Description:

The Segment 5 reach of the Romeo Arm Interceptor is approximately 8,300 linear feet; it runs along 15 Mile Road starting at the ITC Corridor and extends east to approximately Hayes Road. The first 7,000 linear feet is 11-foot diameter non-reinforced concrete pipe, and the next 1,300 linear feet is 8-foot diameter steel reinforced concrete pipe. The rehabilitation consists of debris removal, cleaning, and inspection of the pipe's invert. Next, HOBAS pipe will be used to slip line 7,000 linear feet of the 11-foot diameter sewer and the 1,300 linear feet section of 8-foot diameter pipe will be coated with a corrosion resistant geo-polymer spray applied coating. To facilitate this work, a new control structure and access shaft is under construction in the ITC Corridor. The new control structure will provide the contractor access to the sewer to facilitate the work and will also serve as a dewatering pump station to draw down the upstream water level in the sewer.

Significant project tasks that have occurred over the past month:

1. Continued development, review, and approval of the required construction submittals.
2. Ground dewatering well maintenance and monitoring.
 - o ORC has completely shut down the dewatering well pumps. We are monitoring the groundwater rebound, and for any observable infiltration in the structure of drop pipes.

The wells will remain available for installation of pumps until the completion of the project.

3. CS-12 Pump Station and Control structure progress, which includes:
 - o MCPWO personnel continue the operation of the pump station and make adjustments to maximize the efficiency of the pump station for the Contractor to perform their work.
 - o The Contractor is performing the regular pump station maintenance during construction.
4. Sediment and Debris Removal
 - o Continued debris/sediment removal with a skid-steer that has a modified bucket.
 - o The debris/sediment is a sandy material which is decanting very quickly – this allows the material to be hauled off site regularly.
 - o Approximately 2,000 tons of material has been removed
 - o Approximately 3,600 linear feet
5. Manhole Rehab & Spray-Lining
 - o Continued preparation for the rehabilitation of manholes along 15 Mile, including removal of the ladder rungs and concrete patch repair.
6. HOBAS Pipe
 - o HOBAS pipe delivery finished this month – a total of 387 pipe sections have been delivered and staged in the ITC corridor (within the approved area). This includes the pipe for OMID’s PCI-7.
7. Weather & Maintenance
 - o Work within the Interceptor was limited due to planned maintenance, and wet-weather.

Construction Costs:

	Date	
Original Contract Amount	10/21/2020	\$28,807,500.00
Current Contract Amount	10/1/2023	\$32,052,534.88
Total Spent to Date	10/1/2023	\$24,426,607.40
Remaining Budget	10/1/2023	\$7,625,927.48



Figure 1 – CS-12 Pump Station, Construction Yard & HOBAS Storage



Figure 2 – Lowering Skid-steer into CS-12 for Cleaning Operations



Figure 3 – Skid-Steer Returning to CS-12 during Debris Removal Operation



Figure 4 – Debris Removal at MH-05



Figure 5 – Lowering in Skid-steer at MH-05



Figure 6 – Debris Removal at MH-05

Segment 6 Rehabilitation

Contractor: Ric-Man Construction

Engineering Consultant: FK Engineering

Project Description:

The Segment 6 Rehab project includes the rehabilitation of these main elements:

1. Cleaning and slip-lining (Hobas) of the 5-foot diameter 15 Mile Interceptor from MH-01 at Garfield Road and 15 Mile to MH-04 approximately 2200 feet east along 15 Mile.
2. Cleaning and slip-lining (Hobas) the 1400 linear feet 11-foot diameter Romeo Arm Interceptor sewer between CS-3 on 15 Mile Road and CS-2 on Garfield north of 15 Mile Road.
3. Rehabilitation of the Meter Facility FR-S-1 on Garfield south of 15 Mile Road.
4. Rehabilitation and spray-lining of the CS-2 and CS-3 control structure facilities. These concrete structures have been damaged by H2S damage over time and need repair.
5. Installation of an air-jumper to be incorporated into the existing Biofilter facility. This is being done to address the high level of odor issues that have resulted over the years from the intersection of 15 Mile and Garfield.
6. Installation of a new gate control structure on the 15 Mile Interceptor. This will allow for the rehabilitation of the MH-01 structure and provide future storage options within that interceptor.

The project started in September 2021 and is scheduled to be completed in May 2024.

Significant project tasks that have occurred over the past month:

1. The Contractor continues to develop and submit the required submittals to the Engineer.
2. Contractor completed the open-cut installation of the FAD line beneath Garfield Road.
3. The Contractor completed installation of the FAD via the open-cut method along the north side of 15 Mile in the greenbelt area. The restoration of the greenbelt and concrete drive approaches is completed as well.
4. Continued the debris/sediment removal between CS-2 and CS-3.
 - o Progress was slow this month due to several issues including:
 - Maintenance days
 - Weather days
 - o The cleaning resumed on 10-7-23 with significant progress made daily since
5. Restoration of MH-05 and concrete placement to prepare for a partial reopening of 15 Mile Road on 10-12-23.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	5/1/2021	\$13,541,545.00
Change Order No. 1	8/1/2021	\$132,664.70
Total Contract Amount	10/1/2023	\$13,674,209.70
Total Spent to Date	10/1/2023	\$9,792,100.33
Remaining Budget	10/1/2023	\$3,882,109.37



Figure 7 – FAD Installation Along 15 Mile



Figure 8 –FAD Installation along 15 Mile



Figure 9 – MH-05 Restoration



Figure 10 – RAI Curve Cleaning Assessment



Figure 11 – RAI Curve

2023 Interceptor Inspection Program

Contractor: Taplin

Engineering Consultant: NTH

Project Description:

The 2023 sewer inspection program was awarded to Taplin in March 2023. The inspection program includes inspection of approximately 24 miles of sanitary sewer ranging from 2-feet to 12-feet in diameter and 152 manholes across the MIDDD and 8.5 Mile Districts.

As part of the MIDDD inspection, sonar and laser scanning will be performed within the interceptors. This data will be used to not only correlate laser scan data to the 2017 inspection, but the sonar data will be used to develop design drawings to remove the sediment within the MIDDD interceptors.

The inspection interval for the entire system is based on a 3-year cycle, where non-reinforced concrete pipe is inspected every 3 years and reinforced concrete pipe is inspected every 6 years.

Significant project tasks that have occurred over the past month:

1. The Inspection work has commenced within the MID. No major updates at this time.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	4/10/23	\$591,319.40
Total Spent to Date		\$0.00
Remaining Budget		\$591,319.40

***This Table reflects the MIDDD costs only.**

Phase II Grouting

Contractor: Doetsch Environmental Services, Inc.

Engineering Consultant: AEW

Project Description:

The Phase II Grouting project was awarded to Doetsch Environmental during summer 2020. The work includes chemical grouting of the sewer and manholes where infiltration is present. The work is planned in all reaches of the system not included in the Segment 5 or portion of the Romeo Arm rehabilitated during the 2016 Interceptor Collapse. The main areas of work include the Romeo Arm along Garfield Road between 15 Mile and Clinton River Roads, the Garfield Interceptor between Clinton River and 21 Mile Roads, and the Lakeshore Interceptor between the Clintondale Pump Station at 15 Mile and Union Lake and Joy Boulevard in Harrison Township. The chemical grouting is aimed to stop all active infiltration within the system in advance of future rehabilitation and maintenance projects.

Significant project tasks that have occurred over the past month:

1. The crew has not worked since late July 2022.
2. The critical area grouting is complete, grouting operations will resume in non-critical areas when daily flow control operations allow.

Construction Costs:

	Date	
Original Contract Amount	6/24/2020	\$3,000,000.00
Change Order No. 1	3/14/2022	\$3,000,000.00
Current Contract Amount	10/1/2023	\$6,000,000.00
Total Spent to Date	10/1/2023	\$4,432,736.20
Remaining Budget	10/1/2023	\$1,567,263.80

Odor & Corrosion Control Facilities

Contractor: L. D'Agostini & Sons

Engineering Consultant: Tetra Tech

Project Description:

The Macomb Interceptor Drain completed a system-wide odor and corrosion study to evaluate the need for additional odor and corrosion control facilities to mitigate corrosion induced degradation of the interceptor and nuisance odors emitting from the interceptor near homes, businesses and public spaces. This effort is concentrated on extending the useful life of the interceptor and reducing nuisance odors emitting from the interceptor.

The study identified the need to construct three new odor and corrosion control facilities. Additionally, it was determined that the existing open-bed woodchip media type Fraser Bio-Filter would be more efficient and effective if converted to an enclosed bio-filter with an engineered media. The locations of the new facilities were determined through analysis and computer modeling using data that was collected in the field during the study phase. The facilities are intended to complement one another to reduce hydrogen sulfide induced corrosion.

The facilities are summarized in the Table below:

Facility	Location	Filter Type	Media Type
Fraser	15 Mile & Garfield	Bio-Filter	Engineered
Macomb Township	21 Mile & Garfield	Bio-Filter	Engineered
Clintondale PS	Union Lake & Sorrentino	Carbon Filter	Carbon
NGI Pump Station	Gratiot & Concordia	Chemical Injection	Calcium Nitrate

The construction contract was awarded to L. D'Agostini & Sons in October of 2022 and the contractual Notice to Proceed was issued with an effective date of December 2, 2022. The number of days to achieve substantial completion is 630 days, resulting in a contractually required substantial completion date of August 23, 2024.

The construction work commenced in January of 2023 and is estimated to be completed by the fall of 2024. The estimated schedule for each site is summarized in the table below:

Facility	Location	Start Date	Finish Date
Fraser	15 Mile & Garfield	March – 2023	March – 2024
Macomb Township	21 Mile & Garfield	April – 2023	May – 2024
Clintondale Pump Station	Union Lake & Sorrentino	September – 2023	May – 2024
NGI Pump Station	Gratiot & Concordia	January – 2023	November – 2023

*The dates are based on the Construction schedule dated October 10, 2023

Significant project tasks that have occurred over the past month:

1. The Contractor is developing and submitting the required submittals to the Engineer & Owner for review.
2. NGI PS Site:
 - a. Mechanical, Plumbing and Electrical work is completed
 - b. The site paving is completed – asphalt and concrete approach
3. Clintondale PS Site:
 - a. Utility marking and soft-dig to locate all utilities along the FAD alignment
4. 21 Mile & Garfield Site
 - a. Dewatered the excavation with a 3-inch pump.
 - b. Submitted, reviewed and approved a dewatering plan.
 - c. Dewatering Contractor to mobilize the week of 10-9-23
5. Fraser Site
 - a. Continued Installation of rebar for structure walls and columns
 - b. Continued concrete formwork and concrete placement for walls and foundations

Construction Costs:

	Date	
Original Contract Amount	12/2/2022	\$11,799,678.78
Change Order No. 1	9/9/2023	\$283,792.72
Current Contract Amount	10/1/2023	\$12,083,471.50
Total Spent to Date	10/1/2023	\$4,313,826.17
Remaining Budget	10/1/2023	\$7,769,645.33



Figure 12 – Fraser Biofilter Concrete Placement



Figure 13 – Fraser Bio-Filter



Figure 14 – Aerial View of Fraser Site



Figure 15 – NGI Chemical Injection Building



Figure 16 – NGI Site Paving



Figure 17 – NGI Aerial View



Figure 18 – NGI Aerial View



Candice S. Miller

Public Works Commissioner
Macomb County

To: Macomb Interceptor Drain Drainage District Board Members

CC: FILE

From: Stephen Downing, Construction & Maintenance Manager

Date: October 16, 2023

Subject: Segment 5 Rehabilitation– Change Order No. 5 ORC Change Requests

The Segment 5 Rehabilitation project has been impacted by several factors, including material escalation, labor shortages and unanticipated schedule impacts. Oscar Renda has submitted several Contract Modification Requests (CMRs) over the course of the last year and a half, several of which have been revised based on review and discussion with the Owner and Engineer. The table below summarizes all of the CMR or escalation requests received to date.

Escalation and CMR Summary			
Escalation or Contractor Modification Request (CMR)	Version Number	Submitted Date	Additional Cost Requested
Hobas Escalation	1		\$906,534.26
#1 - NESPS Delays	1	10/29/2021	\$107,529.43
#3 - WCD 1 & 5 Additional Time	3	9/28/2023	\$3,474,894.92
#4 - Flow Control Geopolymer Delays	2	10/4/2023	\$4,052,928.00
#5 - Additional Concrete and Formwork Changes	1	5/17/2023	\$198,622.31
#6 - Infiltration Void Delays at CS-12	1	5/17/2023	\$515,530.91
#7 - Flap Gate Revisions	2	9/29/2023	\$68,699.11
#8 - Temporary Generator	1	9/29/2023	\$109,440.84
#9 - Lockout / Tagout	1	10/4/2023	\$53,245.84
#10 - Flow Control Heavy Cleaning	1	10/4/2023	\$608,141.95
Totals			\$10,095,567.57

As a result of the schedule and cost impacts to the project a meeting was held on October 10, 2023 to discuss the current project schedule and the above summarized CMRs. During this meeting we were able to agree on resolving several CMRs which are summarized in the Table below.

Escalation and Contract Modification Request (CMR) Summary		
Escalation or CMR	ORC Requested Amount	10/10/2023 Meeting Agreed Amount
Hobas Escalation	\$906,534.26	\$906,534.26
#3 - WCD 1 & 5 Additional Time	\$3,474,894.92	\$1,737,447.46
#5 - Additional Concrete and Formwork Changes	\$198,622.31	\$99,311.16
#7 - Flap Gate Revisions	\$68,699.11	\$68,699.11
#8 - Temporary Generator	\$109,440.84	\$109,440.84
#9 - Lockout / Tagout	\$53,245.84	\$53,245.84
#10 - Flow Control Heavy Cleaning	\$608,141.95	\$351,000.00
	Total	\$3,325,678.67

In addition, this change order includes two other contract adjustments that were previously agreed to but not discussed during the meeting on October 10, 2023, which are for RFI No. 41 Primary Power conduit encasement and Field Order No. 6 Additional chemical grouting allowance for OMID PCI-7. The additional total add for these two items is \$405,358.79.

Item	Amount	Allocation
RFI No. 41 – Concrete Encasement	\$55,358.79	MID
Field Order No. 6 – PCI-7 Chemical Grouting	\$350,000	OMID
Total	\$405,358.79	

This change order does not address the contract time aspect of the contract, which will be negotiated at a later date. There are currently two other change requests submitted by Oscar Renda Contracting that are being evaluated, which include CMR 4 and CMR 6.

The current budget has allocated \$2,650,000 towards contingency for active construction projects, the additional cost will be funded from the reserves.

The recommendation is that the Macomb Interceptor Drain Drainage District Board approve Oscar Renda Contracting Change Order No. 5 for the net increase of \$3,731,037.45.

Attachments: Oscar Renda Change Order No. 5 with FKE and ORC Memos

CHANGE ORDER NO.: 5

Owner:	Macomb Interceptor Drain	Owner's Project No.:	WWS-2020-007
Engineer:	Drainage District	Engineer's Project No.:	19-134/20-152
Contractor:	FK Engineering Associates	Contractor's Project No.:	WO19024
Project:	Oscar Renda Contracting		
Contract Name:	Romeo Arm Lining – Segment 5		
Date Issued:	Romeo Arm Lining – Segment 5	Effective Date of Change Order:	October 11, 2023
	October 11, 2023		

The Contract is modified as follows upon execution of this Change Order:

CO Item Number	Name & Description	Change in Contract Price (\$)	Change in Contract Times (Days)	Attachments
005-1	Hobas Escalation Description: Increase in cost due to material costs	\$906,534.26	0	ORC Hobas Escalation Memo
005-2	CMR 3 Description: WCD 1 & 5 Additional Time	\$1,737,447.46	0	ORC CMR #3 Letter
005-3	CMR 5 Description: Additional Concrete and Formwork Changes	\$99,311.15	0	ORC CMR #5 Letter
005-4	CMR 7 Description: Flap Gate Changes and Protection Plate	\$68,699.11	0	ORC CMR #7 Letter
005-5	CMR 8 Description: Temporary Generator and Connection Box Costs	\$109,440.84	0	ORC CMR #8 Letter
005-6	CMR 9 Description: Additional Lockout / Tagout Costs	\$53,245.84	0	ORC CMR #9 Letter
005-7	CMR 10 Description: Special Maintenance Days During Cleaning	\$351,000.00	0	ORC CMR #10 Letter
005-8	RFI # 41 Primary Power Conduit Encasement Description: Additional concrete encasement and trenching	\$ 55,358.79	0	RFI #41
005-9	FO #6 Additional Chemical Grouting Description: PCI -7 & CS-4 – OMID Costs	\$350,000		FO #6
005	TOTAL THIS CHANGE ORDER:	\$ 3,731,037.45	0	

Change in Contract Price	Change in Contract Times
Original Contract Price: \$ 28,807,500.00	Original Contract Times: Substantial Completion: September 21, 2022 Ready for final payment: October 21, 2022
Increase from previously approved Change Orders \$ 2,895,034.78	Increase from previously approved Change Orders Substantial Completion: 169 days Ready for final payment: 169 days
Contract Price prior to this Change Order: \$ 31,702,534.78	Contract Times prior to this Change Order: Substantial Completion: March 9, 2023 Ready for final payment: April 8, 2023
Increase this Change Order: \$ 3,731,037.45	Increase this Change Order: Substantial Completion: 0 days Ready for final payment: 0 days
Contract Price incorporating this Change Order: \$ 35,433,572.20	Contract Times with all approved Change Orders: Substantial Completion: March 9, 2023 Ready for final payment: April 8, 2023

Recommended by Engineer	Authorized by Contractor
By (signature): _____	_____
Name & Title: Vice President	_____
Date: October 11 2023	_____
Authorized by Owner	Approved by Funding Agency
By (signature): _____	_____
Name & Title: _____	_____
Date: _____	_____

PROJECT MEMORANDUM

To: S. Downing, K. Lumma – MCPWO

October 11, 2023

From: N. Bassett, P.E., Z. Carr, P.E. – FKE

FKE Project No. 20-152

RE: Change Order #5
Romeo Arm Interceptor Segment 5 Lining
Macomb County, MI

In accordance with our discussions, FK Engineering Associates (FKE) has prepared this memorandum providing our review of the various escalation and change requests made by the Contractor, Oscar Renda Contracting, Inc. (ORC) in the form of Contract Modification Requests (CMRs), to the Owner, Macomb County Public Works Office (MCPWO) for the Segment 5 Lining project.

BACKGROUND

The Segment 5 Lining project consists of the rehabilitation of the Romeo Arm Interceptor (RAI) from its convergence with the Oakland-Macomb Interceptor Drain (OMID) system at 15 Mile Road and ITC Corridor to approximately the intersection of 15 Mile Road and Hayes Road to the east. The rehabilitation generally includes debris removal and then slip or spray lining portions of the RAI. This includes the portion of the RAI that was constructed as an 11-foot diameter unreinforced concrete pipe under Detroit Water and Sewage Department Contract PCI-12A, which is the subject reach under this Change Order request.

SUMMARY OF ORC REQUESTS

ORC provided seven letters asking for a written request for compensation on a variety of project construction aspects. An overall summary is provided below:

- Hobas Escalation – Compensation due to unforeseen material cost escalation in the FRP industry
- CMR #3 WCD 1 & 5 Additional Time – Compensation for additional work due to Work Change Directives 1 & 5
- CMR #5 Additional Concrete and Formwork Changes – Compensation for changes due to diameter change and raising finished structure 1 foot
- CMR #7 Flap Gate Revisions – Compensation for changes to the stainless-steel flap gate and steel protection plate
- CMR #8 Temporary Generator – Compensation for temporary generator on site and generator connection box

- CMR #9 Lockout / Tagout – Compensation for additional personnel and equipment for lockout/tagout operations
- CMR #10 Flow Control Heavy Cleaning – Compensation for special maintenance days as determined by MCPWO that have occurred to date during debris removal operations

10/10/2023 MEETING AND RECOMMENDATIONS

On October 10, 2023, a meeting was held at the MCPWO Building between the Owner, Engineer, and Contractor. At this meeting, all parties agreed to the costs associated with HOBAS escalation and the noted CMRs as indicated in the following table:

Escalation and CMR Summary		
Escalation or CMR	ORC Requested Amount	10/10/2023 Meeting Agreed Amount
Hobas Escalation	\$906,534.26	\$906,534.26
#3 - WCD 1 & 5 Additional Time	\$3,474,894.92	\$1,737,447.46
#5 - Additional Concrete and Formwork Changes	\$198,622.31	\$99,311.16
#7 - Flap Gate Revisions	\$68,699.11	\$68,699.11
#8 - Temporary Generator	\$109,440.84	\$109,440.84
#9 - Lockout / Tagout*	\$53,245.84	\$53,245.84
#10 - Flow Control Heavy Cleaning**	\$608,141.95	\$351,000.00
	Total	\$3,325,678.67

*CMR#9 includes all additional LO/TO efforts (additional LO/TO personnel) to date and also extrapolates these additional LO/TO efforts through Final Completion of the Segment 5 Contract.

**For CMR #10, since cleaning of the interceptor has not been completed yet, MCPWO has elected to create an allowance of “special” maintenance days similar to the Northeast Sewage Pumping Station (NESPS) delays that occurred in 2021 of the Project (and were granted as part of Change Order #3). This allowance will be for 13 days and ORC will be paid \$27,000 per day for a total of \$351,000 for this allowance. To date, there have been 13 of these “special” maintenance days resulting in a payment of \$351,000 included as part of this change order.

The agreement stands to close the noted escalation and CMRs fully. Associated (potential) additional Contract schedule days will be discussed at a later date. We recommend that MCPWO proceed with this Change Order Request as defined herein.



October 11, 2023

Stephen Downing
 Macomb County Public Works
 21777 Dunham Road
 Clinton Township, MI 48036

Ref: Romeo Arm Interceptor Segment 5 Lining – Project Number WWS-2020-007

Sub: Escalation, CMR, and RFI 41 Summary

Mr. Downing,

Oscar Renda Contracting agrees with the approval of the following change order costs.

Escalation, CMR, and RFI 41 Summary	
Item	Additional Cost Requested
Hobas Escalation	\$906,534.26
#3 - WCD 1 & 5 Additional Time	\$1,737,447.46
#5 - Additional Concrete and Formwork Changes	\$99,311.16
#7 - Flap Gate Revisions	\$68,699.11
#8 - Temporary Generator	\$109,440.84
#9 - Lockout / Tagout	\$53,245.84
#10 - Flow Control Heavy Cleaning	\$351,000.00
RFI 41 - Primary Power Conduit Encasement	\$55,358.79
Total	\$3,381,037.46

We reserve the right to request a time extension for the impacts related to these changes.

Thank you,

1100 Kubota Dr | Grapevine Texas 76051





Marco Bartolomei

Area Manager

Southland Holdings, LLC. | Oscar Renda Contracting, Inc.

847.877.0839 m

817.293.4263 p

817.293.5065 f

1100 Kubota Dr | Grapevine Texas 76051

SOUTHLAND
H O L D I N G S



Candice S. Miller

Public Works Commissioner
Macomb County

To: Macomb Interceptor Drain Drainage District Board Members

From: Stephen Downing, Construction & Maintenance Manager

Date: October 16, 2023

Subject: Segment 5 OCIP Liability Extension No. 2 Premium

The Macomb Interceptor Drain Drainage District authorized the Board Chair to bind liability insurance coverage for the less than or equal to the estimates provided by Meadowbrook Insurance Agency (MIA) at the August 10, 2020 Drain Board meeting. The Board was provided an update of the actual liability premium costs at the following month's meeting on September 10, 2020. The original premium amounts are shown in the Table 1.

The original construction duration for the Segment 5 Rehabilitation was 24-months which is the basis for the original 24-month policy term. As the Board is aware, the project duration has been extended for several reasons, which include:

- Additional work added to the project by the Owner/Engineer
- The Collapse of the CS-12 Shaft in December of 2020
- Delays due to limited pumping capacity at the NESPS in June and August of 2021
- Delays due to the Contractor efficiency and coordination with their sub-contractors

The Contractor was issued formal Notice to Proceed with an effective date of September 21, 2020 with a required substantial completion date of September 21, 2022 and final completion date of October 21, 2022. The contract has been extended a total of 169 days as a result of Change Orders #1-4 related to added work to the project, delays due to the NESPS pumping capacity issues and the CS-12 shaft collapse Builder's Risk claim settlement. The current contractually required substantial completion date is March 9, 2023 and final completion date is April 9, 2023.

The Contractor is currently tracking toward a substantial completion date of January 31, 2024 and a final completion of June 28, 2024. This includes more additional work issued through Work Change Directives to the Contractor that they are developing proposals for Owner/Engineer review and to be included on a future change order recommendation.

As a result of the extended Project schedule another extension of the existing liability coverage within the OCIP Program is required. The OCIP Administrator, MIA, has recommended a 9-month extension of the current liability coverage. The recommendation is based on the Contractor's current construction schedule and the potential for additional work added to the Project by the Owner/Engineer pending review of the proposals received in response to issued Work Change Directives.

MIA has negotiated an extension of the current Liability coverage for a total of \$98,762.86. A summary of these costs is shown in Table 1. It should also be noted that the total Project value has increased since the original liability coverage was bound. These policies were bound on September 4, 2023 to avoid a lapse in liability coverage.

Table 1 - Segment 5 Liability Extension Premium Summary

Segment 5 Liability Extension Premium Summary			
	Bound	Extension No. 1	Extension No. 2
Term	24 Months	Adding 12 Months	Adding 9 Months
Construction Value	\$25,400,000	\$31,702,534	\$31,702,534
General Liability	\$ 124,222.45	\$ 30,523.48	\$13,837.50
5M Excess	\$ 84,145.05	\$ 20,450.80	\$9,271.13
5M x 5M	\$ 49,092.38	\$ 12,812.50	\$5,432.50
10M x 10M	\$ 70,216.88	\$ 34,561.98	\$25,992.98
15M x 20M	\$ 67,957.50	\$ 33,583.10	\$25,010.00
15M x 35M	\$ 51,500.00	\$ 25,522.50	\$19,218.75
Total	\$ 447,134.26	\$ 157,454.35	\$98,762.86

The action is that the Macomb Interceptor Drain Drainage District Board receive and file this memo to extend the Liability Coverage for a 9-month period for the total premium of \$98,762.86.

Attachments: Meadowbrook Insurance Agency Memo



September 13, 2023

Macomb County Public Works
 ATTN: Stephen Downing
 21777 Dunham Road
 Clinton Township, MI 48036

RE: Segment 5 Liability Insurance Extension

Dear Mr. Downing,

Please find summary below for the liability insurance extension on the owner-controlled insurance program (OCIP) for the Macomb Interceptor Drain Drainage District – Romeo Arm Lining Segment 5 Project. The summary below includes adding an additional 9 months of coverage to the current 36-month liability policy adjusting the policy expiration from 09/04/2023 to 06/04/2024. The total additional premium for this extension is \$98,762.86.

MCPW Segment 5 Liability Tower Extension Summary			
Carrier	Policy	Bound Policies	Extension
		36 Month Term	Adding 9 Months
Everest Indemnity Ins. Co.	General Liability	\$ 154,745.93	\$ 13,837.50
Everest Indemnity Ins. Co.	5M Excess	\$ 104,595.85	\$ 9,271.13
Navigators Specialty Ins. Co.	5M x 5M	\$ 61,904.88	\$ 5,432.50
Capitol Specialty Ins. Corp.	10M x 10M	\$ 104,778.86	\$ 25,992.98
Endurance American Specialty	15M x 20M	\$ 101,540.60	\$ 25,010.00
Liberty Mutual Ins. Co.	15M x 35M	\$ 77,022.50	\$ 19,218.75
	Total	\$ 604,588.62	\$ 98,762.86

Invoices are due upon receipt from our office and additional premium is made payable to Meadowbrook Insurance Agency.

Please let me know if you have any questions.

Thank you,

Patrick Kennedy

Patrick Kennedy
 Account Executive
 Meadowbrook Insurance Agency

MACOMB INTERCEPTOR DRAINAGE DISTRICT
09/18/2023 - 10/10/2023

<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>	
Macomb Interceptor Drain	Chapter 20 Chesterfield – 7.4416% Clinton – 20.9117% Fraser – 4.2007% Harrison – 6.2625% Lenox – 1.1700% Macomb – 14.1489% New Haven – 0.8391% Shelby – 9.7883% Sterling Heights – 30.8805% Utica – 1.6392% Washington – 2.7176%							
		Astorino	DTE Energy	\$ 1,462.07	Invoice #23-524 - 08.31.23	Monthly Electric - 08.02.23 - 08.30.23		
		Downing	Meadowbrook	\$ 1,000.48	Invoice #12874 - 09.13.23	Segment 5 OCIP Policy Extension - 09.01.23 - 09.30.23		
		Downing	Meadowbrook	\$ 8,270.65	Invoice #12874 - 09.13.23	Segment 5 OCIP Policy Extension - 10.01.23 - 06.04.24		
		Downing	Meadowbrook	\$ 586.24	Invoice #12868 - 09.13.23	Segment 5 OCIP Policy Extension - 09.01.23 - 09.30.23		
		Downing	Meadowbrook	\$ 4,846.26	Invoice #12868 - 09.13.23	Segment 5 OCIP Policy Extension - 10.01.23 - 06.04.24		
		Downing	Meadowbrook	\$ 1,493.25	Invoice #12873 - 09.13.23	Segment 5 OCIP Policy Extension - 09.01.23 - 09.30.23		
		Downing	Meadowbrook	\$ 12,344.25	Invoice #12873 - 09.13.23	Segment 5 OCIP Policy Extension - 10.01.23 - 06.04.24		
		Downing	Meadowbrook	\$ 2,698.92	Invoice #12872 - 09.13.23	Segment 5 OCIP Policy Extension - 09.01.23 - 09.30.23		
		Downing	Meadowbrook	\$ 22,311.08	Invoice #12872 - 09.13.23	Segment 5 OCIP Policy Extension - 10.01.23 - 06.04.24		
		Downing	Meadowbrook	\$ 2,804.99	Invoice #12870 - 09.13.23	Segment 5 OCIP Policy Extension - 09.01.23 - 09.30.23		
		Downing	Meadowbrook	\$ 23,187.99	Invoice #12870 - 09.13.23	Segment 5 OCIP Policy Extension - 10.01.23 - 06.04.24		
		Downing	Meadowbrook	\$ 1,934.77	Invoice #12867 - 09.13.23	Segment 5 OCIP Policy Extension - 09.01.23 - 09.30.23		
		Downing	Meadowbrook	\$ 17,283.98	Invoice #12867 - 09.13.23	Segment 5 OCIP Policy Extension - 10.01.23 - 06.04.24		
		Astorino	Metco	\$ 8,257.21	Invoice #2206A-08 - 09.06.23	Flow Control Services through 09.03.23	\$ 10,722.34	
		Astorino	Metco	\$ 1,070.24	Invoice #2206A-09 - 10.03.23	As Needed General Engineering	\$ 92,980.12	
		Astorino	NTH Consultants	\$ 1,536.00	Invoice #633743 - 09.01.23	2023 Interceptor Inspection Program	\$ 56,223.00	
		Downing	Oscar Renda Contracting	\$ 675,703.56	Invoice #WO19024 - 09.28.23	Romeo Arm Segment 5 Lining	\$ 7,625,927.48	
		Astorino	Rescue Training Services	\$ 1,425.00	Invoice #09012023 - 09.01.23	Confined Space Rescue Training		
		Downing	Ric-Man	\$ 883,577.54	Invoice #WWS-2021-002 - 09.21.23	Segment 6 Rehaulitation through 09.20.23	\$ 3,882,109.37	
		Tanghe	Russ Milne	\$ 2,864.71	Invoice #C99260 - 09.21.23	Vehicle #15-66 - Maintance		
		Astorino	SAK Construction	\$ 468,291.98	Invoice #WWS-2022-006 - 09.21.23	Garfield Interceptor Lining Pilot Project - Final		
		Downing	Tetra Tech	\$ 22,042.03	Invoice #52124556 - 09.11.23	Odor and Corrosion	\$ 676,405.16	
		Astorino	Verizon	\$ 1,565.26	Invoice #9942755270 - 08.23.23	Monthly Cellular - 07.24.23 - 08.23.23 (Eq. Fund)		
Astorino	Verizon	\$ 745.60	Invoice #9942755270 - 08.23.23	Monthly Cellular - 07.24.23 - 08.23.23				
<u>CS-3</u>		Astorino	DTE Energy	\$ 1,184.42	Invoice #23-543 - 08.08.23	Monthly Electric - 08.08.22 - 07.26.23		
<u>CPS</u>		Astorino	Clinton Township Treasurer	\$ 3,213.95	Invoice #23-529 - 09.06.23	Monthly Water - August 2023		
		Astorino	DTE Energy	\$ 23,036.91	Invoice #23-530 - 09.07.23	Monthly Electric - 08.02.23 - 09.04.23		
		Astorino	De-Cal	\$ 514.20	Invoice #WO9232087 - 09.26.23	Backflow Testing		
		Astorino	Galco	\$ 1,903.20	Invoice 34256379 - 09.08.23	Replacement Filters		
		Astorino	Metco	\$ 1,711.98	Invoice #2206B-08	Electrical Room AC through 09.03.23	\$ 9,010.36	
		Astorino	Oscar W. Larson	\$ 10,052.32	Invoice #PB45685 - 09.25.23	Generator - Diesel Tank Monitor Installation		
<u>CS-12</u>		Astorino	DTE Energy	\$ 1,457.25	Invoice #23-534 - 09.01.23	Monthly Electric - 08.03.23 - 08.31.23		
<u>METERS</u>		Astorino	Hesco	\$ 11,395.00	Invoice #231793 - 09.14.23	Meter Maintenance	\$ 407,005.00	

MACOMB INTERCEPTOR DRAINAGE DISTRICT
09/18/2023 - 10/10/2023

<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>
NGI		Astorino	DTE Energy	\$ 1,273.90	Invoice #23-628 - 08.31.23	Monthly Electric 08.31.23 - 09.29.23	
		Astorino	ETNA	\$ 3,446.26	Invoice #S104506663.001	Valve Parts	
		Astorino	Fishbeck	\$ 2,725.00	Invoice #427325 - 09.06.23	2020 Inspection Program	\$ 15,171.13
		Astorino	Fishbeck	\$ 4,178.50	Invoice #428377 - 10.04.23	2020 Inspection Program	\$ 10,992.63
		Astorino	Kennedy Industries	\$ 6,984.00	Invoice #638312 - 08.31.23	Field Service - Flygt Repair	
		Astorino	National Industrial Maintenance	\$ 1,815.00	Invoice #46137 - 09.26.23	Jet Vac	
OMID		Downing	Oakland County Treasurer	\$ 4,337,038.83	Invoice #CI026357 - August 2023	Sewer Disposal August 2023	
		Downing	Oakland County Treasurer	\$ 4,471,317.83	Invoice #CI026577 - 09.29..23	Sewer Disposal September 2023	
SCADA		Astorino	Verizon	\$ 1,037.67	Invoice #9942755270 - 08.23.23	Monthly Cellular - 07.24.23 - 08.23.23	
Total				\$ 11,051,590.28			

Budget to Actual
MIDDD
As of Aug 31, 2023 = 25%

DESCRIPTION	2024 FINAL BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
GLWA-OMID	49,276,790		12,320,803	36,955,987	25.0%
OMID O&M	4,379,020		1,094,755	3,284,265	25.0%
Settlement	100,000			100,000	0.0%
Reimbursements	150,000		71,725	78,275	47.8%
PY Revenue-Fund Balance	20,907,890			20,907,890	0.0%
Reimb-Local Communities	17,717,200		4,429,300	13,287,900	25.0%
State Grant-ARPA Seg 5 & 6	-		6,902,903	-	0.0%
COVID Grant	345,630		213,286	132,344	0.0%
Interest	400,000			400,000	0.0%
Total Revenue Accounts	93,276,530	-	25,032,772	75,146,661	26.8%
EXPENSE ACCOUNTS					
GLWA-OMID	49,276,790		12,320,803	36,955,987	25.0%
OMID O&M	4,379,020		1,094,755	3,284,265	25.0%
Public Works Wastewater Disposal Division	1,984,020		5,774	1,978,246	0.3%
Office Operations/Insurance	406,450		7,057	399,393	1.7%
SCADA	117,260		9,555	107,705	8.1%
Engineering					
Replenish reserve from CPS refunding	618,680			618,680	0.0%
As Needed Engineering	200,000		5,880	194,120	2.9%
Annual Meter Dye Testing	50,000			50,000	0.0%
Data Review-Aquasight	100,000			100,000	0.0%
Odor and Corrosion Construction/CCA	811,040		600,708	210,332	74.1%
Covid Testing 2023-Grant Funded	340,630			340,630	0.0%
General Construction/Engineering Contingency-All projects	2,650,000			2,650,000	0.0%
SY-S-1, SY-S-2, & WA-S-1 Meter Const Admin/Rehab	75,000			75,000	0.0%
Level Sensors/Pressure/H2S-Meters	261,200			261,200	0.0%
2023 Drop Shaft Rehab Design, Construction, & CCA	2,400,000			2,400,000	0.0%
Odor and Control-Construction	8,333,780		678,065	7,655,715	8.1%
Segment 6 Construction Administration (ARPA)			77,720	(77,720)	
Segment 6 Construction/CCA (ARPA)			542,999	(542,999)	
Segment 5 Construction Admin (ARPA)			150,530	(150,530)	
Segment 5 Construction (ARPA)			7,156,564	(7,156,564)	
COVID Grant			213,286		
Legal Services	75,000		1,510	73,490	2.0%
Clintondale PS O&M	786,890		188,298	598,592	23.9%
NGI O&M	88,500		11,455	77,045	12.9%
Meters O&M	189,400		57,783	131,617	30.5%
Control Structures and Pump Station O&M	178,930		700	178,230	0.4%
Biofilter O&M	19,800		406	19,394	2.1%
Contribution Life Cycle Reserve	184,300			184,300	0.0%
Interceptor O&M	18,614,210		480	18,613,730	0.0%
Stormwater Pump Stations	50,000		12,500	37,500	25.0%
Sewage Disposal Charges - Mt. Clemens	410,000		46,639	363,361	11.4%
Debt Service - Revenue Bonds	675,630		168,908	506,723	25.0%
Total Expense Accounts	93,276,530	-	23,352,375	70,137,441	25.0%

	O&M Balance 6/30/2023	O&M	Total 9/30/2023
Cash - Operating	59,727,429	1,680,398	61,407,827
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		25,032,772	25,032,772
Expenditures		23,352,375	23,352,375
			0
Equity*	59,727,429		61,407,827

Detail of 2023 Equity*

Reserve at 6/30/2023	20,862,516	PLC Equipment Replacement	100,000
Life Cycle Reserve	1,237,460	Improvement to Hydraulic Cylinder	120,333
General Construction/Engineering Contingency-All projects	450,000	Grouting	3,926,770
SY-S-1, SY-S-2, & WA-S-1 Meter Const Admin/Rehab	75,000	Interceptor Inspections	1,714,481
Level Sensors/Pressure/H2S-Meters	256,230	Intercept Clean/Sediment Removal	3,550,000
Drop Shaft Rehab Design	2,400,000	Segment 5	14,064,063
Odor and Corrosion Construction/CCA	7,803,213	Segment 6	3,003,560
CPS Electrical Room AC	63,803	Drain Valve For Force Main	100,000