

MACOMB INTERCEPTOR DRAIN
INTRA-COUNTY DRAINAGE BOARD
JUNE 8, 2020
10:45 A.M.
AGENDA

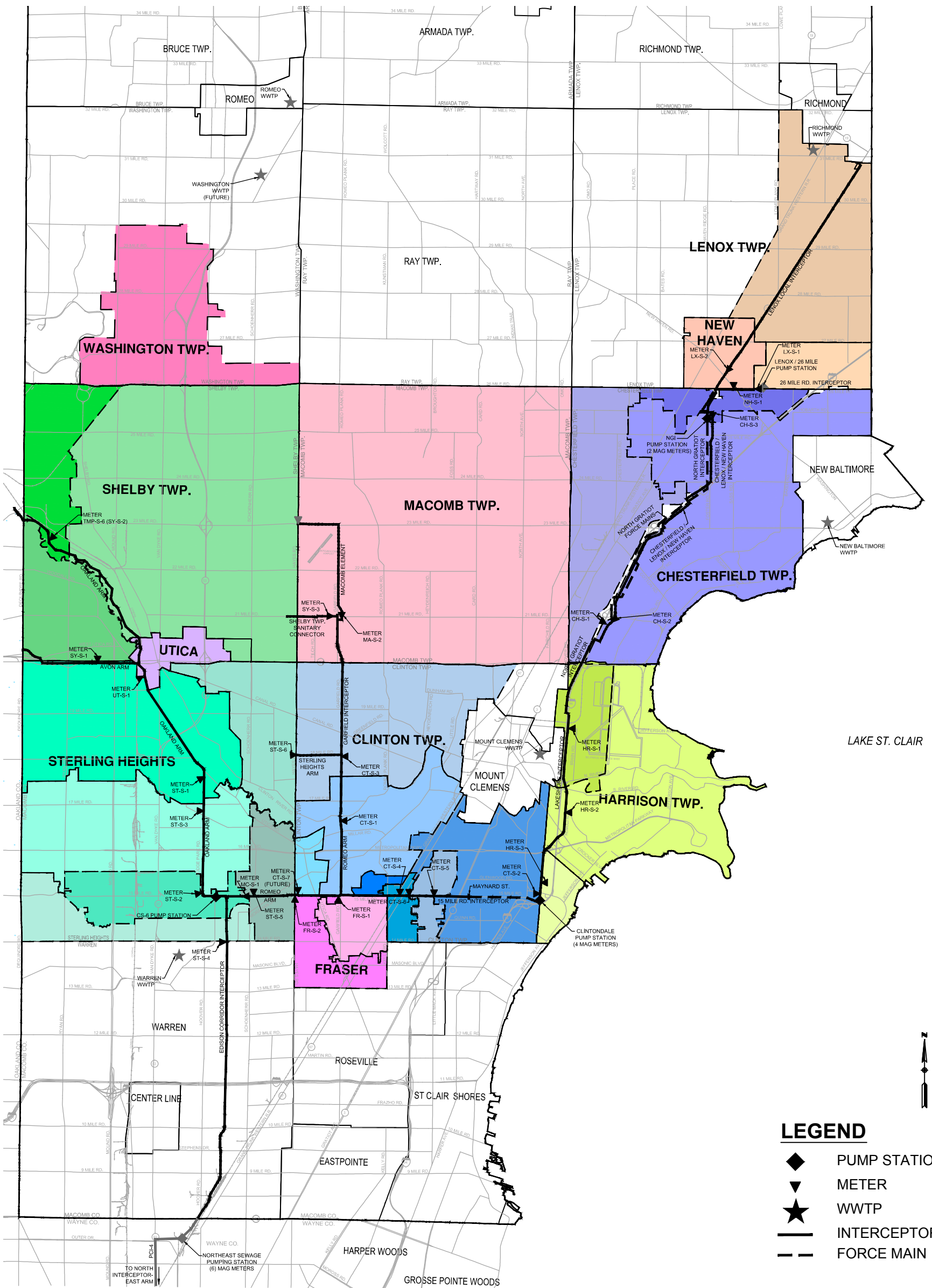
NOTE: THIS MEETING WILL BE HELD BY TELECONFERENCE

Call in Number: 1-408-418-9388
Access Code: 129 813 7303

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1. Call of meeting to order and roll call	
2. Approval of Agenda for June 8, 2020	
3. Approval of Minutes for May 11, 2020	4
4. Public Participation	
5. Project Updates – Stephen Downing/Vince Astorino	
6. MIDD Sewer Inspection Program – 8 Dropshaft Structures Engineering/Inspection Oversight Services – Vince Astorino	7
Motion: To approve a change order to the 2020 MIDD Sanitary Inspection contract with Fishbeck in a not to exceed amount of \$104,014 for engineering services for the inspection of eight dropshaft structures.	
7. Segment 5 Rehabilitation Project Bid Award – Stephen Downing	11
Motion: To award the bid for the Segment 5 lining and sediment removal project to Oscar Renda Contracting for \$28,807,500 (net MIDD cost \$28,245,500).	
8. SRF Construction Contract Award Resolution – Stephen Downing	19
Motion: To approve the State’s SRF Resolution regarding the Segment 5 Construction Contract	
9. Resolution Authorizing MIDD State Revolving Fund Bonds (Segment 5) - Brian Baker	23
Motion: To approve the resolution authorizing the issuance of State low interest financing bonds to fund the Segment 5 construction project.	

10. Consideration for approval of invoices (see attached)	35
11. Financial Report – Bruce Manning	37
12. 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 via telephone conference per the State of Michigan Executive Order due to the COVID-19 pandemic, on May 11, 2020, at 11:20 A.M.

PRESENT: Candice S. Miller, Chair
Robert Mijac, Member
Bryan Santo, Member

ALSO PRESENT: Brian Baker, Chief Deputy, Stephen Downing, Construction & Maintenance Manager, Bruce Manning, Financial Manager, Tom Stockel, Construction Engineer, Jeff Bednar P.E., Environmental Resources Manager, Vince Astorino, Operations & Flow Manager, Kellie Kource, Drain Account Specialist, Karen Czernel, Deputy, Danielle Devlin, Environmental Specialist, Macomb County Public Works, Joe Viviano, MIDD Attorney

The meeting was called to order by the Chair, Candice Miller. A motion was made by Mr. Mijac, supported by Mr. Santo to approve the agenda with the addendum of a closed session.

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of April 13, 2020 were presented. A motion was made by Mr. Santo, supported by Mr. Mijac 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.

Ms. Miller updated the board that we have been talking for a long time how much of a problem the flushable wipes are. Joe Viviano put together a piece of draft litigation on this issue. The litigation was filed the week of May 4, 2020. We have received a lot of interest from many groups and municipalities who are very interested in this issue. We are hopeful that the state and federal lawmakers would introduce legislation to change the packaging that states "flushable." They are technically flushable, but not biodegradable.

A motion was made by Mr. Santo, supported by Mr. Mijac to receive and file the flushable wipes litigation update.

Adopted: YEAS: 3
NAYS: 0

Mr. Downing updated the board that the Segment 5 grouting is down to the last 100 linear feet, but is paused due to other work occurring in the area. In addition, we identified a difference in our flow control lockout tagout procedures between how we are controlling those for the MIDD, versus how flow control for OMID is controlling it. We reached out to Water Resources in Oakland County to resolve and implement a procedure that is consistent, and works for both parties. We shifted Doetsch over to start the MIDD Phase 2 grouting in the Lakeshore Interceptor in the meantime. We have bids

due back May 28 for Segment 5 rehabilitation and will bring a recommendation to the board on June 8.

The dropshaft rehab project is delayed. Mr. Downing had a meeting with Inland Waters regarding the 2 month delay in working during COVID-19. They understand our concerns, and they explained they were directly impacted by staff who could not work during the pandemic. We have asked them to provide us with a recovery schedule to accompany a request for an extension of time contract. In the interim, they have continued to provide pre-construction submittals for our engineers to review.

A motion was made by Mr. Santo, supported by Ms. Miller to receive and file the project update by Mr. Downing.

Adopted: YEAS: 3
NAYS: 0

Mr. Baker updated the board that after we approved our budget, GLWA approved a 3 month pause in their scheduled sewer charge increase. That will save the MIDD \$262,000, so we are amending our MIDD budget to pass along the savings to the local communities. A secondary change we are recommending is a legal cost reimbursement that we will be budgeting for that will lower everyone's rate by 0.2%. These lower charges will go into effect July 1, 2020.

A motion was made by Mr. Mijac, supported by Mr. Santo to approve the revised 2020/21 Macomb Interceptor Drainage District (MIDD) budget and charges reflecting a 0.3% charge reduction from passing on GLWA savings and a 0.2% average charge reduction resulting from a budgeted legal cost reimbursement.

Adopted: YEAS: 3
NAYS: 0

The Chair presented the invoices totaling \$981,756.55 to the board for review and approval.

A motion was made by Mr. Santo, supported by Mr. Mijac 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. Mijac and supported by Mr. Santo.

Adopted: YEAS: 3
NAYS: 0

A motion was made by Mr. Mijac, supported by Mr. Santo, to enter into closed session at 11:39 a.m.

Adopted: YEAS: 3
NAYS: 0

Ms. Miller ended closed session and return the board to open session at 11:54 p.m.

A motion was made by Mr. Mijac, supported by Mr. Santo to approve Commissioner Miller to execute the Sterling Heights settlement agreement on the terms discussed in closed session.

Adopted: YEAS: 3
NAYS: 0

A motion was made by Mr. Mijac, supported by Mr. Santo to ratify the filing of the flushable wipes lawsuit.

Adopted: YEAS: 3
NAYS: 0

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

Adopted: YEAS: 3
NAYS: 0

The meeting was adjourned at 11:59 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 May 11, 2020 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: 5/11/20



Candice S. Miller

Public Works Commissioner
Macomb County

From: Macomb County Public Works Office

To: Macomb Interceptor Drain Drainage District Drain Board

Copy: File

Date: May 26, 2020

RE: Sanitary Interceptor Inspection Program Change Order #1 Recommendation

In October 2019, the MCPWO went out for proposals to develop plans and oversee the 2020 sanitary interceptor inspection program. This program included inspections within the following drainage districts:

- Macomb Interceptor Drain Drainage District (MIDDD)
- North Gratiot Interceptor Drain Drainage District (NGIDDD)
- North Gratiot Interceptor – Lenox Local Drain Drainage District (NGILLDDD)
- Southeast Macomb County Wastewater Disposal System (SEMCWWDS)
- Martin Sanitary Diversion Drainage District (MSDDD)

Three proposals were received for this work and Fishbeck was awarded the work as they were the lowest cost. The MIDDD budgeted \$1,000,000 in fiscal year 19/20 and then another \$1,000,000 in 20/21 for a total of \$2,000,000 which will cover engineering and the actual inspection work. Fishbeck has been working on getting this project ready to bid and the current schedule has us going out to bid for the inspection work in September 2020.

Since that time, the MCPWO has identified 10 metering facility drop shaft structures that were rated a high priority in 2016 and are due for re-inspection. 2 of those facilities will be handled during the Segment 5 and Segment 6 projects but the other 8 are being recommended to be added to the 2020 inspection program. The MCPWO has reached out to Fishbeck for a cost to develop these plans and oversee the inspection and the attached proposal is their cost for that.

These will be costs directed only to the MIDDD under tasks 1A and 1B of the current contract. Their proposed increase in fees to handle this are as follows:

Task 1A	Contract Documents & Bidding	\$25,194
Task 2A	Inspection Oversight	\$78,820

Due to the complexity for the inspection of these structures, the costs provided to perform this work are fair and reasonable.

It is the recommendation of the MCPWO to approve change order #1 for Fishbeck in the total NTE amount of \$104,014.

April 15, 2020
Project No. 200147

Keith Lumma
Construction Engineer
Macomb County Public Works Office
21777 Dunham Road
Clinton Township, Michigan 48036-1005

2020 Sanitary Interceptor Inspection Program
Change Order No. 1 Request
Drop Structure Inspection
MCPWO Project No.: WWS-2019-021

Dear Mr. Lumma:

Fishbeck was awarded the contract to prepare bidding documents, assist during the bidding process, and provide construction inspection and oversight for the 2020 Sanitary Interceptor Inspection Program.

Background

The interceptors included in the program are:

- Task 1 – Macomb Interceptor Drain Drainage District (MIDDD) and North Gratiot Interceptor Drain Drainage District
 - Romeo Arm and Garfield Interceptor (upstream of CS-3)
 - Lakeshore Interceptor
 - Macomb Element
 - Shelby Sanitary Connector
 - Sterling Heights Arm
 - North Gratiot Interceptor Phases 1, 3, 4, and 5
- Task 2 – North Gratiot Interceptor – Lenox Local Drain Drainage District
 - Lenox Local Sewer
- Task 3 – Southeast Macomb County Wastewater Disposal System
 - Northeast Relief Sewer
- Task 4 – Martin Sanitary Diversion Drainage District
 - Martin Retention Treatment Basin (RTB) Influent and Effluent Boxes
 - Martin RTB Dewatering Line

Per conversations with your office, the Macomb County Public Works Office (MCPWO) is requesting that we add 8 Billing Meter Drop Structures to the program. The scope of inspection would include from the manhole upstream of the billing meter vault to the connection to the interceptor. The inspection would exclude the upstream manhole itself and the billing meter vault.

The drop structures included were those identified as “high” in the 2016 *Metering Facility Drop Shaft and Connecting Sewers Condition Assessment* report prepared by Giffels Webster.

- | | |
|-----------|-----------|
| 1. CT-S-1 | 5. ST-S-2 |
| 2. CT-S-3 | 6. SY-S-1 |
| 3. HR-S-3 | 7. SY-S-2 |
| 4. ST-S-1 | 8. SY-S-3 |

Drop Structures FR-S-1 and FR-S-2 are not included since they will be inspected as part of a separate contract.

Scope of Services

As part of our Scope of Services, we will add the 8 drop structures to the contract documents. Macomb County Geographic Information System information will be used to indicate the location of the structures and pipes as well as the road rights-of-way and easement locations. As-built information on the sewer depths will be used. No site surveys will be performed as part of this project.

Fishbeck will also provide construction administration and inspection assistance during the Inspection Phase.

We will require assistance from your office to verify the location of the permeant bypass pumping systems set up for the previous inspections.

Our scope assumes the Billing Meter Drop Structures will be included in the same bidding package as the sewers and thus be part of the same bidding process.

Professional Services Fees

Since all 8 Billing Meter Drop Structures are part of the MIDDD, the Change Order only applies to Task 1. Fishbeck proposes the following fee adjustment:

Task	Fee Structure	Original Fee	Requested Change Order #1	Revised Fee
Task 1A	Contract Documents & Bidding	Lump Sum	\$28,400	\$25,194
Task 1B	Inspection Oversight	T&M	\$112,000	\$78,820
Total - Task 1			\$140,400	\$104,014
Total Project			\$229,800	\$333,814

A detailed breakdown of the proposed fee is attached.

If you have any questions or require additional information, please contact me at 248.324.1228 or mesedki@fishbeck.com.

Sincerely,



Maria E. Sedki, PE

Vice President/Senior Civil Engineer

Attachment

By email

Copy: Vince Astorino – MCPWO
 Stephen Downing - MCPWO
 Joe Siwek – Fishbeck

Macomb County Public Works Office
 Change Order #1: Drop Structure Inspection
 MCPWO Project No.: WWS-2019-021
 Fishbeck Project No. 200147

Description of Work	Project Coordinator	Project Manager	Engineer	Staff Engineer	Inspector	Production Support	Expenses	Total Hours	Total Costs	Task Costs
	QA/QC									
FTCH MCPWO Rate	\$183.00	\$164.00	\$130.00	\$110.00	\$115.00	\$70.00				
Tasks										
1A Contract Documents										\$25,194.00
Prepare Dwgs	2	16	128					146	\$19,630.00	
Prepare Spec Book	4	20				2		26	\$4,152.00	
Site Visit		8					100	8	\$1,412.00	
1A Bidding										\$0.00
Prepare RFP								0	\$0.00	
Pre-Bid Mtg								0	\$0.00	
Questions and Addenda								0	\$0.00	
Bid Review and Recommendations								0	\$0.00	
1B MIDD Inspection (85,000 ft)										\$78,820.00
Pre-Con Meeting								0	\$0.00	
CCA, Pay Estimate Review, Progress Mtgs, Closeout	2	10				2		14	\$2,146.00	
Shop Drawing/MOT/Flow Control Reviews			16					16	\$2,080.00	
Inspection Oversight		128			320		\$ 6,000.00	448	\$63,792.00	
Review Videos and Logs		6		32				38	\$4,504.00	
Develop POF/COF/BRE Scores	2	6		32				40	\$4,870.00	
Incorporate Results into NEXGEN		2		10				12	\$1,428.00	
Hours	10	196	144	74	320	4	\$6,100.00	748		
Total								Total	\$104,014.00	\$104,014.00



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: June 4, 2020

Subject: Romeo Arm Segment 5 Rehabilitation Award Recommendation

The Macomb County Public Works Office (MCPWO) solicited bids on the Michigan Inter-governmental Trade Network (MITN) for the rehabilitation of the Romeo Arm Segment 5 reach of interceptor along 15 Mile Road between the ITC Corridor and Hayes Road. The rehabilitation work includes debris removal, slip-lining of the 11-foot diameter interceptor, spray-lining the 8-foot diameter interceptor and installation of a new access structure with dewatering pump station.

The MIDDD budgeted \$5,000,000 of exiting funds for the construction and engineering oversight for the rehabilitation of Segment 5. Additionally, the MIDDD has secured State Revolving Fund (SRF) for up to \$26,000,000.

The Request for Bid (RFB) was issued on MITN from 4-21-20 to 6-1-20 to 1528 Suppliers. A total of 135 suppliers downloaded the project documents. A total of six Addendums were issued during the open bid period. On 6-1-20 three bids were received, Quadex Lining Systems, Oscar Renda Contracting and L. D'Agostini. A summary of the bid results is shown in the table below. The design engineer, FK Engineering and their subconsultants, have reviewed each of the bids. The design team discussed the bid tabulation with the apparent low bidder, Oscar Renda Contracting to verify the full scope of services was considered in the bid. FK Engineering has confirmed the bid is reasonable for the scope of services described in the construction drawings and specifications. The most recent Engineer's opinion of probable cost is \$29,391,600.

In addition to the Base Bid, there are five allowance items and four bid alternates for this project. The allowance items were defined by the Engineer during design. The total of all allowances is \$465,000, which will be managed by the Engineer during the project. The allowances include chemical grouting, cementitious grouting, cement packer installation, replacement of the MC-S-1 flow meter and SCADA integration. The \$1,362,500 of alternates consist of two main items, the purchase of the by-pass pumps being installed at the new control structure, CS-12, for \$800,000 and the cleaning and lining of the OMID section of interceptor from the confluence of MID and OMID to Control Structure 4 for \$562,500. The cleaning and lining work in the OMID pipe will be a direct cost to the OMID. An intergovernmental agreement is being prepared to formalize the assignment of this work and cost allocation. The total cost of these allowance and alternate items is summarized in the attached memo.

OFFICE LOCATION: 21777 Dunham Road, Clinton Township, Michigan 48036 • Phone: 586-469-5325 • Fax: 586-469-5933

MAILING ADDRESS: P. O. Box 806, Mt. Clemens, Michigan 48046-0806

ENGINEERING • Phone: 586-469-5910 • Fax: 586-469-7693 ♦ **SOIL EROSION** • Phone: 586-469-5327 • Fax 586-307-8264

The total MID cost for this project, less the OMID direct cost, is \$28,245,500. There will be a change order to FK Engineering to cover the cost for Construction Contract Administration (CCA) services presented at the July Board meeting.

Description	Engineer's Estimate (Draft)¹	Quadex Lining Systems	L. D'Agostini & Sons	Oscar Renda Contracting
Bid Items 1 through 6 - Various	\$1,856,600 ¹	\$2,656,000	\$2,086,746.50	\$1,615,000
Bid Items 7 & 8 - CS-12 and Restoration	\$8,410,000	\$8,815,000	\$12,382,287	\$6,350,000
Bid Items 9 through 12 – Romeo Arm Cleaning & Rehab	\$17,160,000 ¹	\$26,169,000	\$19,096,100	\$18,765,000
Item 13 - Bypass Pumping	\$360,000 ¹	\$867,000	\$1,209,293.50	\$250,000
Contingency/Other Items	\$1,605,000	n/a	n/a	n/a
TOTAL	\$29,391,600	\$38,507,000	\$34,774,427	\$26,980,000

1 Some Items Not Included in Engineer's Estimate.

The recommendation is that the Macomb Interceptor Drain Drainage District Board accept the bid and enter an agreement with Oscar Renda Contracting to rehabilitate the Romeo Arm Segment 5 reach of interceptor for the Base Bid \$26,980,000, plus \$465,000 in Allowances and \$1,362,500 in Alternates for a Total of \$28,807,500.

The recommendation is that the Macomb Interceptor Drain Drainage District Board enter into an intergovernmental agreement with the Oakland-Macomb Interceptor Drain (OMID) to allocate the cost to rehab the OMID reach of interceptor for \$562,000. The total net MIDDD cost is \$28,245,500.

Attachments: FK Engineering Bid Comparison Memo

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Memorandum

TO: Stephen Downing, MCPWO **DATE:** June 3, 2020

FROM: N. Bassett, P.E., Z. Carr, P.E. **PROJECT NO.:** 19-134

CC: V. Astorino – MCPWO; F. Klingler, P.E. – FKE; K. Ridgway – ASI, and C. Frayer – AEW

SUBJECT: MCPWO Romeo Arm Lining Segment 5 – Contractor Bid Comparison

The following memorandum presents our comparison and assessment of the Contractor Bids received for Contract No. WWS-2020-007 on June 1, 2020 at 11:00am.

Bids were received from three Contractors:

- Quadex Lining Systems
- L. D’Agostini & Sons, Inc.
- Oscar Renda Contracting

The apparent low bidder is Oscar Renda Contracting at \$26,980,000. The attached table at the end of this memorandum provides the full bid tab for each Contractor along with our Draft Engineer’s Opinion of Probable Cost with commentary.

Bid Tab Breakdown

On the following page is a condensed table of the bid forms and Draft Engineer’s Opinion of Probable Cost with some items grouped together for comparison. The groupings for the table are as follows:

- Bid Items 1 through 6 – Various Items
 - Mobilization
 - permit allowance
 - utility relocation/coordination
 - additional educator wells
 - additional gravity wells
 - traffic control
- Bid Items 7 & 8 – CS-12 and Restoration
 - site civil work
 - shaft construction dewatering
 - TERS including temporary flume
 - permanent control structure
 - flow control gates
 - site restoration
- Bid Item 9 through 12 – Romeo Arm Cleaning and Rehab
 - Removal and disposal of sludge, debris, and sediments
 - Slip Lining with GFRPMP
 - interceptor spray lining,
 - manhole spray lining,



- Bid Item 13 - bypass pumping rental
- Contingency/other items (Engineer’s Estimate Only)

Description	Engineer’s Estimate (Draft) ¹	Quadex Lining Systems	L. D’Agostini & Sons	Oscar Renda Contracting
Bid Items 1 through 6 - Various	\$1,856,600 ¹	\$2,656,000	\$2,086,746.50	\$1,615,000
Bid Items 7 & 8 - CS-12 and Restoration	\$8,410,000	\$8,815,000	\$12,382,287	\$6,350,000
Bid Items 9 through 12 – Romeo Arm Cleaning & Rehab	\$17,160,000 ¹	\$26,169,000	\$19,096,100	\$18,765,000
Item 13 - Bypass Pumping	\$360,000 ¹	\$867,000	\$1,209,293.50	\$250,000
Contingency/Other Items	\$1,605,000	n/a	n/a	n/a
TOTAL	\$29,391,600	\$38,507,000	\$34,774,427	\$26,980,000

¹ Some Items Not Included in Engineer’s Estimate.

General Bid Comments

We offer the following general comments on the submitted Contractor bids:

Quadex Lining Systems (Quadex)

- Quadex had the highest bid at \$38,507,000
- Did not break up the costs for Bid Item 12 in a/b parts per Addendum #2
- Generally, appears to have provided all required paperwork for submittal with only some minor issues:
 - Missing subcontractor Schnabel’s Certificate of Insurance
- Spray Lining Cost is approximately two times as much per foot compared to the average of the other two bidders
- CS-12 construction costs were in line with Engineer’s Estimate

L. D’Agostini & Sons, Inc. (LDS)

- LDS had the second lowest bid at \$34,774,427
- Did not break up the costs for Bid Item 12 in a/b parts per Addendum #2
- Bid Item 10 Slip-lining with GFRPMP is \$4,000,000 lower than other bids
- Did not provide list of suppliers
- Did not provide evidence of authority to do business in Michigan (though they are a Michigan-based business)
- Did not provide address or percentage of contract cost in subcontractors form
- 00 45 13 Article 5 – financial information not provided

- 00 45 13 Article 9 – Cert. of Safety Performance / financial statements not provided
- Good Faith Efforts provided but did not complete the worksheets for each discipline
- No OCIP Form A and associated attachments for both themselves and subcontractors
- In litigation with Lapeer County Road Commission for previous work

Oscar Renda Contracting (ORC)

- ORC had the lowest bid at \$26,980,000
- Did not break up the costs for Bid Item 12 in a/b parts per Addendum #2
- Bid Item 7d – Permanent Control Structure is almost \$3,000,000 less than other bids
- Bid Item 7e - Flow Control Gates is bid at \$50,000 which is substantially lower than the Engineer's estimate and the other bidders.
- Bid Item 9 – Debris removal is \$5,500,000 lower than other bids
- Bid Item 13 – Bypass Pumping rental is \$600,000 and \$1,000,000 lower than other bids
- List of suppliers only have Hobas and Kennedy listed
- 00 45 13 Article 2 – left blank, but they did include evidence of State of Michigan Licensure documentation.
- 00 45 13 Article 7 – left blank.
- Evidence of Good Faith Efforts provided but needs to complete the worksheets for each discipline
- No OCIP Form A and attachments for both themselves and subcontractors
- In litigation with the City of Corpus Christi for previous work (no other info provided)

Tentative Award Recommendation

Based on a review of the bids provided, we have the following comments regarding the lowest bidder, Oscar Renda Contracting:

- In general, lower bid items compared to other bids and (draft) Engineer's Estimate. In particular:
 - Permanent Control Structure (Item 7d) is 8% higher than Engineer's estimate (though some components were added after the Engineer's estimate was generated) and 40% lower than the average of the two other bidders.
 - Flow Control Gates (Item 7e) is 85% less than Engineer's estimate and substantially lower than the other bidders.
 - Debris removal (Item 9) is 90% less than Engineer's estimate and substantially lower than the other bidders.
 - Bypass Pumping Rental (Item 13) appears low at 25% of the other bidder's average for this bid item. This bid item should also be separated per Addendum 2.
- Open litigation with the City of Corpus Christi.
- No OCIP Form A paperwork for themselves or subcontractors.

Pursuant to the noted items above, Mr. Carr called Mr. Joe Vera (ORC bid Project Manager) to discuss their submitted bid. Mr. Vera indicated that they are content with their submitted bid and are comfortable with the unit rates indicated. Mr. Carr indicated that their Bid Item 9 - Removal and Disposal of Sludge, Debris and Sediments unit rate was significantly lower than the Engineer's estimate. Mr. Vera stated that they understand that the debris is granular and that this was considered in their removal approach, where he indicated that they intend to use an innovative approach consisting of a winch/pulley-like system between manholes that utilizes a custom "scoop" made for PCI-12A. This scoop will bring the material to adjacent manhole locations to be removed. He understands the material is contaminated and will need to be manifested and properly disposed of. Mr. Vera also stated that this project is like the Southside Interceptor Rehabilitation project they are doing in Dallas, Texas. This project is detailed in their bid under Schedules A and B and involves sandy debris removal and slip-lining of a 10-ft diameter interceptor. He appears confident in their approach based on their current experience gained in Dallas.

Regarding the required OCIP forms and he indicated this information will be readily provided.

Regarding flow control, ORC will need to supply the cost breakdown per Addendum 2. The CS-12 pump supplier should also be identified, as we have specified Flygt or approved equal. In conversation with Mr. Vera, he is interested in learning more about the overall flow control system, specifically noting the test run discussed in the Contract documents. He asked about some flow rate specifics, so we will need to set up a meeting to review the system and various aspects of the flow control system that will be part of the project.

OCR indicated a sound understanding of the project challenges during our phone conversation. In consideration of this, their conveyed confidence in the bid submitted, and provided the required OCIP paperwork and addendum required breakdown for the Bid Item 13 and related pump clarifications are provided, we recommend their selection as Contractor for the MCPWO Romeo Arm Lining Segment 5 project. This award is contingent upon successful approval through EGGLE regarding the SRF program requirements.

WWS-2020-007												Average Bid Amount
Unit Price Bids												
		Unit	Estimated Quantity	Engineer's Estimate	Notes	Quadex Lining Systems		L. D'Agostini & Sons, Inc.		Oscar Renda Contracting		
						Unit Bid Price	Bid Amount	Unit Bid Price	Bid Amount	Unit Bid Price	Bid Amount	
1	Mobilization / Demobilization (5%)	LS	1	\$1,399,600.00		\$1,900,000.00	\$1,900,000	\$1,587,420.00	\$1,587,420	\$1,250,000.00	\$1,250,000	\$1,579,140
2	Permit Allowance	LS	100000	\$100,000.00		N/A	\$100,000	N/A	\$100,000	N/A	\$100,000	\$100,000
3	Utility Relocation / Coordination	LS	1	\$60,000.00		\$1,000.00	\$1,000	\$201,483.00	\$201,483	\$25,000.00	\$25,000	\$75,828
4	Install Additional Eductor Wells both Inside and Outside of Temporary Earth Retention System (TERS) (as Directed by Engineer)	EA	6	N/A	These values were not calculated. Only the overall dewatering plan was.	\$54,000.00	\$324,000	\$8,644.50	\$51,867	\$15,000.00	\$90,000	\$155,289
5	Install Additional Gravity Wells (as Directed by Engineer)	EA	4	N/A		\$76,500.00	\$306,000	\$15,667.50	\$62,670	\$25,000.00	\$100,000	\$156,223
6	Traffic Control	LS	1	\$297,000.00	Value includes any traffic control for cleaning, grouting, or spray lining	\$25,000.00	\$25,000	\$83,306.50	\$83,306.50	\$50,000.00	\$50,000	\$52,769
7	Control Structure 12 (CS-12)											
7a	Site Civil Work	LS	1	\$650,000.00	Site civil work and restoration were calculated as one value	\$195,000.00	\$195,000	\$460,456.50	\$460,456.50	\$150,000.00	\$150,000	\$268,486
7b	Shaft Construction Dewatering	LS	1	\$1,200,000.00	Based on OMID C1,2,4 values and adjusted for size and inflation	\$1,000,000.00	\$1,000,000	\$765,100.00	\$765,100	\$600,000.00	\$600,000	\$788,367
7c	Temporary Earth Retention System including Temporary Flume	LS	1	\$4,360,000.00	Based on OMID C1,2,4 values and adjusted for size and inflation	\$1,890,000.00	\$1,890,000	\$3,791,420.00	\$3,791,420	\$3,500,000.00	\$3,500,000	\$3,060,473
7d	Permanent Control Structure	LS	1	\$1,850,000.00	Based on OMID C1,2,4 values and adjusted for size and inflation	\$4,990,000.00	\$4,990,000	\$4,856,474.50	\$4,856,474.50	\$2,000,000.00	\$2,000,000	\$3,948,825
7e	Flow Control Gates	LS	1	\$350,000.00	This value was for less gates than what ended up in the contract	\$600,000.00	\$600,000	\$2,171,230.00	\$2,171,230	\$50,000.00	\$50,000	\$940,410
8	Site Restoration	LS	1	N/A	Site civil work and restoration were calculated as one value	\$140,000.00	\$140,000	\$337,606.00	\$337,606	\$50,000.00	\$50,000	\$175,869
9	Removal and Disposal of Sludge, Debris, and Sediments	TON	6000	\$6,000,000.00	Based off of GLWA Master Plan that FKE worked on	\$1,120.00	\$6,720,000	\$1,008.00	\$6,048,000	\$100.00	\$600,000	\$4,456,000
10	Romeo Arm Slip-Lining with GFRPMP	LF	7000	\$9,450,000.00	Based on OMID, sinkhole, and research from jobs across the US (\$1350/ft)	\$2,200.00	\$15,400,000	\$1,612.50	\$11,287,500	\$2,200.00	\$15,400,000	\$14,029,167
11	Romeo Arm Interceptor Spray Lining	FT	1300	\$1,710,000.00	Based on Sinkhole and local jobs in the area (\$1315/ft)	\$2,980.00	\$3,874,000	\$862.00	\$1,120,600	\$1,800.00	\$2,340,000	\$2,444,867
12	Romeo Arm Manhole Spray Lining	SF	5000	N/A	This was added after our cost estimate was completed	\$35.00	\$175,000	\$128.00	\$640,000	\$85.00	\$425,000	\$413,333
13	Bypass Pumping Rental	LS	1	\$360,000.00	This was based on the original design of the pumps which had less capacity	\$867,000.00	\$867,000	\$1,209,293.50	\$1,209,293.50	\$250,000.00	\$250,000	\$775,431
	Contingency / other items			\$1,605,000.00	This value includes a 6% contingency, flow control, land acquisition							
	Subtotal (minus mobilization)			\$27,992,000.00			\$36,607,000		\$33,187,007		\$25,730,000	\$31,841,336
	Total			\$29,391,600.00			\$38,507,000		\$34,774,427		\$26,980,000	\$33,420,476

Allowance Items												Average Bid Amount
		Unit	Estimated Quantity	Engineer's Estimate		Quadex Lining Systems		L. D'Agostini & Sons, Inc.		Oscar Renda Contracting		
						Unit Bid Price	Bid Amount	Unit Bid Price	Bid Amount	Unit Bid Price	Bid Amount	
1	Chemical Grouting	GAL	1000	\$172,800.00	This value assumed 8 locations at 120 gal each	\$90.00	\$90,000.00	\$83.00	\$83,000.00	\$100.00	\$100,000.00	\$91,000
2	Cement Grouting	CFT	1000	N/A		\$155.00	\$155,000.00	\$146.00	\$146,000.00	\$200.00	\$200,000.00	\$167,000
3	Cement Packer Installation	EA	20	N/A		\$367.00	\$7,340.00	\$345.00	\$6,900.00	\$500.00	\$10,000.00	\$8,080
4	MC-S-1	LS	1	N/A		\$55,000.00	\$55,000.00	\$55,000.00	\$55,000.00	\$55,000.00	\$55,000.00	\$55,000
5	SCADA Integration	LS	1	N/A		\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000

Alternate Items												Average Bid Amount
		Unit	Estimated Quantity	Engineer's Estimate	Engineer's Notes	Quadex Lining Systems		L. D'Agostini & Sons, Inc.		Oscar Renda Contracting		
						Unit Bid Price	Bid Amount	Unit Bid Price	Bid Amount	Unit Bid Price	Bid Amount	
A1	Removal and Disposal of Sludge, Debris, and Sediments PCI-7 MH-111 to CS-4	TON	300	\$15,000.00	This value was based on estimate from sewer walk (15 ton) before RedZone	\$1,120.00	\$336,000.00	\$993.00	\$297,900.00	\$100.00	\$30,000.00	\$221,300
A2	Slip Lining PCI-7 MH-111 to CS-4 with GFRPMP	LF	220	\$264,000.00	about \$1645/ft	\$2,300.00	\$506,000.00	\$2,019.50	\$444,290.00	\$2,150.00	\$473,000.00	\$474,430
A3	Manhole PCI-7-MH-111 Spray Lining	SF	700	N/A	This was added after our cost estimate was completed	\$35.00	\$24,500.00	\$51.50	\$36,050.00	\$85.00	\$59,500.00	\$40,017
	PCI-7 Subtotal			\$430,000.00	If 300 ton value is used, then PCI-7 subtotal would be \$715,000		\$866,500.00		\$778,240.00		\$562,500.00	\$735,747
A4	Bypass Pumping Purchase	LS	1	N/A	This was not estimated. Item was added by addendum	\$867,000.00	\$867,000.00	\$1,311,472.00	\$1,311,472.00	\$800,000.00	\$800,000.00	\$992,824

**A RESOLUTION TO TENTATIVELY AWARD
A CONSTRUCTION CONTRACT
FOR WASTEWATER SYSTEM IMPROVEMENTS**

WHEREAS, the **Macomb Interceptor Drain Drainage District** wishes to construct improvements to its existing wastewater treatment and collection system; and

WHEREAS, the wastewater system improvements project formally adopted on **June 17, 2017** will be funded through Michigan's **SRF**; and

WHEREAS, the **Macomb Interceptor Drain Drainage District** has sought and received construction bids for the proposed improvements and has received a low bid in the amount of **\$28,807,500** from **Oscar Renda Contracting**; and

WHEREAS, the project engineer, **FK Engineering** has recommended awarding the contract to the low bidder.

NOW THEREFORE BE IT RESOLVED, that the **Macomb Interceptor Drain Drainage District** tentatively awards the contract for construction of the proposed wastewater system improvements project to **Oscar Renda Contracting** contingent upon successful financial arrangements with the **SRF**.

Yeas:

Nays:

Abstain:

Absent:

I certify that the above Resolution was adopted by _____ *(the governing body of the applicant)* on _____.

BY:

Name and Title *(please print or type)*

Signature

Date

Clean Water Revolving Funds (SRF & SWQIF) Loan Application

PART III - PROJECT INFORMATION

Questions about Part III should be directed to your DEQ project manager.

Project Name: **Romeo Arm Segment 5 Rehabilitation**

SRF Project Number: **5659-03** SWQIF Project Number: **N/A**

A. Part III Submittal Attachments

For a project that includes competitively-bid construction contracts, please attach the following items:

- Attached 1. A copy of each bid advertisement published for the project.
 N/A
- Attached 2. A copy of the bid tabulations for each construction contract.
 N/A
- Attached 3. A copy of the bid proposal of each successful bidder.
 N/A
- Attached 4. A copy of the applicant municipality's resolution of tentative award for each construction or trade contract that was competitively bid.
 N/A

A model resolution is attached at the end of Part III for your use.
- Attached 5. Where competitive bidding is not required (construction work valued at LESS than \$50,000), attach a copy of the proposal or quote received from each subcontractor selected. This applies to subcontractors directly procured by the applicant.
 N/A

For **all** projects, please attach the following items:

- Attached 6. A completed and signed debarment certification form ("Required Standard Contract Language: Clean Water State Revolving Fund and Drinking Water Revolving Fund") from the applicant municipality **and** from each contractor who has or will provide a service of \$25,000 or more for which the applicant will be requesting SRF or SWQIF reimbursement (e.g., each successful bidder, the consulting engineer, the financial advisor, the bond counsel, etc.).
- Attached 7. A completed Disadvantaged Business Enterprises (DBE) Good Faith Efforts Worksheet along with applicable attachments.

Consult the DBE FAQ document (Attachment 2 of the Design Phase Guidance) for further detail regarding the completion of this form which appears in "Required Standard Contract Language: Clean Water State Revolving Fund and Drinking Water Revolving Fund." Examples of items this package may include are fax confirmation sheets, copies of solicitation letters/e-mails, printouts of online solicitations, printouts of online search results and affidavits of publication in newspapers.

B. Application Completion Information

1. Have all bidding document addenda for the project(s) been approved by the DEQ?

YES NO N/A

Number of SRF Project Addenda Issued **6**

Number of SWQIF Project Addenda Issued _____

If NO, please enclose two copies of each addendum which has not been submitted for DEQ review and approval.

2. Have there been any bid protests? YES NO N/A

*If YES, please attach a separate sheet detailing the bid protest(s). If a bid protest arises **after** you submit this part of your SRF or SWQIF application, please alert your DEQ project manager immediately.*

3. Please identify the authorized bonding ceiling for the project(s):

SRF Project: \$26,000,000

SWQIF Project: \$ _____

4. Are funds being provided for the project(s) from a source other than Michigan's Clean Water Revolving Funds (SRF and/or SWQIF)?

YES NO

If YES, please identify below all sources of funding for project costs which will not be financed through SRF or SWQIF loan assistance. Project costs which have been or will be covered by another source of funding, either public or private, must be excluded from the costs for which you will be requesting reimbursement.

Source of Non-SRF Funding

Amount of Funding

The Owner has budgeted funds within the capital improvements budget to cover the cost of design engineering, engineering construction contract administration and non-SRF eligible costs. These funds are collected from the MIDDD communities in accordance with the approved budget.

Source of Non-SWQIF Funding

Amount of Funding

5. Has a final Alternative Justifiable Expenditure (AJE) been submitted for the project(s)?

YES NO N/A

If NO, please enclose the final AJE or immediately contact your DEQ project manager to arrange an acceptable submittal date.

6. Have all easements, land, and leasing arrangements necessary for SRF project construction been obtained?

YES NO N/A

The temporary construction easements have not been finalized, specifically with ITC. All temporary and/or permanent easements will be obtained within 60 days of the loan closing date, July 21, 2020.

7. Please provide your current project implementation schedule(s):

SRF Construction Start Target Date: **September 21, 2020**

SRF Initiation of Operation Target Date: **August 21, 2022**

Completion of SRF Construction Target Date: **September 21, 2022**

SWQIF Construction Start Target Date: **N/A**

SWQIF Initiation of Operation Target Date: **N/A**

Completion of SWQIF Construction Target Date: **N/A**

I certify that I am the authorized representative designated by the governmental unit that will issue the bond(s) for this project and that the Part III Project Information being submitted is complete and accurate to the best of my knowledge.

Name and Title of Authorized Representative (*Please Print or Type*)

Signature of Authorized Representative

Date

In accordance with the date in your executed milestone schedule, please return Part III with the specified attachments to your DEQ project manager via email or mail a hard copy to:

REVOLVING LOAN SECTION
OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

MAILING ADDRESS

PO BOX 30241
LANSING MI 48909-7741

DELIVERY ADDRESS

CONSTITUTION HALL 4th FLOOR SOUTH
525 W ALLEGAN ST, LANSING MI 48933



Candice S. Miller

Public Works Commissioner
Macomb County

June 8, 2020

To: Macomb Interceptor Drainage District Board

From: Brian Baker, MCPWO Chief Deputy

Subject: Segment 5 Bond Resolution

Attached please find the resolution prepared by the MIDD's Bond Counsel which authorizes the issuance of bonds in an amount not to exceed \$26 million to help fund the Segment 5 maintenance and relining project. The MIDD applied and was approved for low interest rate financing from the State for this project. The bonds will be sold to the Michigan Finance Authority through the State Clean Water Revolving Fund (CWRF) loan program which is scheduled to close on July 15, 2020. This State financing program offers low 2.0% interest rate financing. Unlike traditional bonds, borrowers only pay interest costs from the date the funds are actually drawn down.

The MIDD Board authorized the Segment 5 maintenance project and the coordination of financing arrangements on February 10, 2020. The construction bid award is also on today's agenda. In short, the Segment 5 project consists of removal of sediment and lining of the sanitary sewer interceptor along 15 Mile Road from the ITC Corridor to Hayes Road in Sterling Heights.

The MIDD will only finance up to \$26 million of the project costs, as the MIDD has already funded the remaining amounts of the construction and design costs from budgeted funds.

The bonds will be primarily secured by a full faith and credit pledge of the Drainage District. The bonds are being issued in anticipation of the collection of future assessments against the 11 MIDD communities. The first year debt service is included in the MIDD FY 2021 budget effective July 1, 2020. As secondary security, the bonds will contain a pledge of the County's limited tax full faith and credit which the County Board of Commissioners approved on March 26, 2020.

The resolution is prepared based upon State program requirements for these loans. The resolution authorizes the Public Works Commissioner, the Chief Deputy Public Works Commissioner, and the County Finance Director to take steps necessary to accomplish the sale, issuance and delivery of the bonds.

**Drainage Board of the Macomb Interceptor Drain Drainage District
County of Macomb, State of Michigan**

RESOLUTION AUTHORIZING
MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT
DRAINAGE DISTRICT BONDS, SERIES 2020
(LIMITED TAX GENERAL OBLIGATION)

Minutes of a meeting of the Drainage Board (the “Drainage Board”) of the Macomb Interceptor Drain Drainage District (the “District”) conducted electronically in conformity with Governor Whitmer’s Executive Order No. 2020-75 (COVID-19) on June 8, 2020 at 10:00 a.m., prevailing Eastern Time.

PRESENT: Members: _____

ABSENT: Members: _____

The following preamble and resolution were offered by Member _____ and supported by Member _____.

WHEREAS, the Macomb Interceptor Drain Drainage District (the “District”) has previously been established within the County of Macomb (the “County”) pursuant to the provisions of Chapter 20 of Act 40, Public Acts of Michigan, 1956, as amended (the “Drain Code”); and

WHEREAS, the Drainage District deems it advisable to perform certain maintenance of the Macomb Interceptor Drain, including without limitation, relining a segment of the Macomb Interceptor Drain (the “Project”): and

WHEREAS, the Project qualifies for the State of Michigan Clean Water State Revolving Fund loan program being administered by the Michigan Finance Authority (the “Authority”) and the Michigan Department of Environment, Great Lakes, and Energy (“EGLE”), whereby the bonds of the District would be sold to the Authority and bear interest at a fixed rate of two percent (2.00%) per annum; and

WHEREAS, to finance the costs of the Project, the Drainage District desires to issue bonds in the aggregate principal amount of not-to-exceed Twenty-Six Million Dollars (\$26,000,000) to the Authority pursuant to the Clean Water State Revolving Fund loan program; and

WHEREAS, principal and interest on the bonds shall be payable from assessments against the Cities of Fraser, Sterling Heights and Utica, the Charter Townships of Chesterfield, Clinton, Harrison and Shelby, the Townships of Lenox, Macomb and Washington, the Village of

New Haven, and any other persons assessed under the applicable provisions of the Drain Code (the “Assessments”); and

WHEREAS, as additional security for the Bonds, Macomb County (the “County”) has pledged its full faith and credit for the prompt payment of the principal of and interest on the bonds when due as authorized by Section 474 of the Drain Code; and

WHEREAS, the District also deems it advisable to authorize the County Public Works Commissioner, the County Chief Deputy Public Works Commissioner, and the Finance Director of the County or any one of those officers acting alone (each an “Authorized Officer”) to negotiate, approve and execute various documents and terms in connection with the sale, issuance and delivery of the bonds to the Authority.

THEREFORE, BE IT RESOLVED BY THE DRAINAGE BOARD FOR THE MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT, as follows:

1. Issuance of Bonds. Bonds of the District designated “Drainage District Bonds, Series 2020 (Limited Tax General Obligation)” (the “Bonds”) are hereby authorized to be issued in the aggregate principal sum of not to exceed Twenty-Six Million Dollars (\$26,000,000) as finally determined by order of EGLE for the purpose of paying the cost of the Project, including the costs incidental to the issuance, sale and delivery of the Bonds.

2. Bond Details. The Bonds shall be in the form of a single fully-registered, nonconvertible bond of the denomination of the full principal amount thereof, dated as of the date of delivery, payable in principal installments as finally determined at the time of sale of the Bonds and approved by the Authority and an Authorized Officer. Final determination of the principal amount of and interest on the Bonds and the payment dates and amounts of principal installments of the Bonds shall be evidenced by the execution of a purchase contract (the “Purchase Contract”) between the District and the Authority providing for sale of the Bonds and the Authorized Officer is authorized and directed to execute and deliver the Purchase Contract when it is in final form and to make the determinations set forth above; provided, however, that the first principal installment shall be due no earlier than October 1, 2021, the total number of annual principal installments shall not exceed twenty (20), and the total principal amount shall not exceed \$26,000,000. The estimated period of usefulness of the Project is determined to be not less than twenty (20) years.

The Bonds shall bear interest at an interest rate per annum on the par value thereof as evidenced by execution of the Purchase Contract, but in any event not to exceed two percent (2.00%) per annum and the Authorized Officers shall deliver the Bonds in accordance with the delivery instructions of the Authority. The principal amount of the Bonds is expected to be drawn down by the District periodically, and interest on the principal amount shall accrue from the date such principal amount is drawn down by the District.

The Bonds shall not be convertible or exchangeable into more than one fully-registered bond. Principal of and interest on the Bonds shall be payable as provided in the Bond form in this Resolution.

The Bonds or principal installments thereof shall be subject to prepayment prior to maturity by the District with the prior approval of the Authority.

The Authorized Officer of the County Treasurer shall record on the registration books payment by the District of each installment of principal or interest or both when made and the cancelled checks or other records evidencing such payments shall be returned to and retained by the Authorized Officer or the County Treasurer.

Upon payment by the District of all outstanding principal of and interest on the Bonds, the Authority shall deliver the Bonds to the District for cancellation.

3. Execution of Bonds. The Bonds shall be signed by the manual or facsimile signature of the Chairperson of the Drainage Board and countersigned by the manual or facsimile signature of any other member of the Drainage Board and shall be delivered in accordance with the delivery instructions of the Authority. The Bonds bearing the manual or facsimile signatures of the Chairperson and one member of the Drainage Board sold to the Authority shall require no further authentication.

4. Debt Retirement Fund; Defeasance. The County Treasurer shall open a special depository account for the Bonds with a bank to be designated as DRAINAGE DISTRICT BONDS, SERIES 2020 DEBT RETIREMENT FUND (the "Debt Retirement Fund"). All collections of the Assessments, including interest and investment income thereon, shall be set aside by the County Treasurer as collected and deposited into the Debt Retirement Fund, the moneys from time to time on deposit therein to be used solely and only for the payment of principal of and interest on the Bonds herein authorized as they mature.

In the event cash or direct obligations of the United States or obligations the principal of and interest on which are guaranteed by the United States, or a combination thereof, the principal of and interest on which, without reinvestment, come due at times and in amounts sufficient to pay at maturity or irrevocable call for earlier optional redemption, the principal of, premium, if any, and interest on the Bonds, shall be deposited in trust, the Bonds shall be defeased and the owners of the Bonds shall have no further rights under this order except to receive payment of the principal of, premium, if any, and interest on the Bonds from the cash or securities deposited in trust and the interest and gains thereon and to transfer and exchange Bonds as provided in this order.

5. Construction Fund. The County Treasurer shall open a special depository account for the Bonds with a bank to be designated as the DRAINAGE DISTRICT BONDS, SERIES 2020 CONSTRUCTION FUND (the "Construction Fund"). Proceeds of the Bonds shall be deposited into the Construction Fund and used to pay the costs of issuance of the Bonds and costs of the Project and any engineering, legal, bond insurance, financing or other expenses incidental thereto

6. Payment of Bonds; Limited Tax Pledge of the District. The full faith and credit of the District is hereby pledged for the payment of principal of and interest on the Bonds. The Bonds, being issued in anticipation of collections of the Assessments, together with interest and investment income thereon, are payable out of such Assessments. If for any reason the collections of the Assessments shall not be sufficient to pay the principal of and interest on the

Bonds, then the Drainage Board shall make such additional assessments therefor against the public corporations and the benefited lands as may be necessary, apportioned as in the first instance, as authorized by the provisions of the Drain Code.

7. Limited Tax Pledge of the County. Pursuant to a resolution adopted by the Board of Commissioners of the County on March 26, 2020, under the authorization provided in the Drain Code, the County will pledge its full faith and credit for the payment of principal of and interest on the Bonds herein authorized; and pursuant to such resolution and law, in the event of an insufficiency of funds in the Debt Retirement Fund to make such payments as they are due on the Bonds, the County will promptly advance from its general funds as a first budget obligation sufficient moneys to promptly pay said principal or interest or, if necessary levy taxes upon all taxable property in the County therefor, subject to applicable constitutional, statutory, and charter tax rate limitations.

8. Bond Form. The Bonds shall be in substantially the following form with such revisions, additions and deletions as may be advisable or necessary to comply with the final terms of the Bonds established upon sale thereof:

UNITED STATES OF AMERICA
STATE OF MICHIGAN
COUNTY OF MACOMB

MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT

DRAINAGE DISTRICT BOND, SERIES 2020
(LIMITED TAX GENERAL OBLIGATION)

REGISTERED OWNER: Michigan Finance Authority

PRINCIPAL AMOUNT: _____ Dollars (\$____,000)

DATE OF ORIGINAL ISSUE: _____, 2020

The MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT, County of Macomb, State of Michigan (the "Issuer"), for value received, hereby promises to pay to the Michigan Finance Authority (the "Authority"), or registered assigns, the Principal Amount shown above, or such portion thereof as shall have been advanced to the Issuer pursuant to a Purchase Contract between the Issuer and the Authority and a Supplemental Agreement by and among the Issuer, the Authority and the State of Michigan acting through the Department of Environmental Quality, in lawful money of the United States of America, unless prepaid or reduced prior thereto as hereinafter provided.

During the time funds are being drawn down by the Issuer under this Bond, the Authority will periodically provide the Issuer a statement showing the amount of principal that has been advanced and the date of each advance, which statement shall constitute prima facie evidence of

the reported information; provided that no failure on the part of the Authority to provide such a statement or to reflect a disbursement or the correct amount of a disbursement shall relieve the Issuer of its obligation to repay the outstanding principal amount actually advanced, all accrued interest thereon, and any other amount payable with respect thereto in accordance with the terms of this Bond.

The Principal Amount shall be payable on the dates and in the annual principal installment amounts set forth on the Schedule A attached hereto and made a part hereof, as such Schedule may be adjusted if less than \$ _____ is disbursed to the Issuer or if a portion of the Principal Amount is prepaid as provided below, with interest on said principal installments from the date each said installment is delivered to the holder hereof until paid at the rate of two percent (2.00%) per annum. Interest is first payable on April/October 1, 20__, and semiannually thereafter and principal is payable on the first day of October, commencing October 1, 20__ (as identified in the Purchase Contract) and annually thereafter.

Notwithstanding any other provision of this Bond, so long as the Authority is the owner of this Bond, (a) this Bond is payable as to principal, premium, if any, and interest at The Bank of New York Mellon Trust Company, N.A. or at such other place as shall be designated in writing to the Issuer by the Authority (the "Authority's Depository"); (b) the Issuer agrees that it will deposit with the Authority's Depository payments of the principal of, premium, if any, and interest on this Bond in immediately available funds by 12:00 noon at least five business days prior to the date on which any such payment is due whether by maturity, redemption or otherwise; in the event that the Authority's Depository has not received the Issuer's deposit by 12:00 noon on the scheduled day, the Issuer shall immediately pay to the Authority as invoiced by the Authority an amount to recover the Authority's administrative costs and lost investment earnings attributable to that late payment; and (c) written notice of any redemption of this Bond shall be given by the Issuer and received by the Authority's Depository at least 40 days prior to the date on which such redemption is to be made.

This bond is the single, fully registered, nonconvertible bond aggregating the principal sum of \$ _____ issued under and in full compliance with the Constitution and statutes of the State of Michigan, and particularly Act 40, Public Acts of Michigan, 1956, as amended ("Act 40"), for the purpose of refunding a prior bond issue of the Issuer.

The bonds of this issue are issued in anticipation of and payable out of the collection of assessments against the Cities of Fraser, Sterling Heights and Utica, the Charter Townships of Chesterfield, Clinton, Harrison and Shelby, the Townships of Lenox, Macomb and Washington, the Village of New Haven, and any other persons assessed under the applicable provisions of Act 40. The Issuer by resolution of its Drainage Board on June 8, 2020, has pledged the full faith and credit of the Issuer, including the lands embraced within the Issuer and the public corporations assessed at large in the proportion that they are assessed for the benefits received for the prompt payment of the principal of and interest on the bonds of this issue when due.

As additional security for the bonds of this issue, the County of Macomb, State of Michigan (the "County") by resolution of its Board of Commissioners adopted on March 26, 2020, has pledged its full faith and credit for the prompt payment of the principal of and interest on the bonds of this issue when due, and if the assessments are insufficient for such payment, then the County shall advance monies from its general fund for payment thereof, or, if necessary,

levy a tax on all taxable property in the County for such payment within applicable constitutional, statutory, and charter tax rate limitations.

In the event of a default in the payment of principal or interest hereon when due, whether at maturity, by redemption or otherwise, the amount of such default shall bear interest (the "additional interest") at a rate equal to the rate of interest which is two percent above the Authority's cost of providing funds (as determined by the Authority) to make payment on the bonds of the Authority issued to provide funds to purchase this Bond but in no event in excess of the maximum rate of interest permitted by law. The additional interest shall continue to accrue until the Authority has been fully reimbursed for all costs incurred by the Authority (as determined by the Authority) as a consequence of the Issuer's default. Such additional interest shall be payable on the interest payment date following demand of the Authority. In the event that (for reasons other than the default in the payment of any municipal obligation purchased by the Authority) the investment of amounts in the reserve account established by the Authority for the bonds of the Authority issued to provide funds to purchase this Bond fails to provide sufficient available funds (together with any other funds which may be made available for such purpose) to pay the interest on outstanding bonds of the Authority issued to fund such account, the Issuer shall and hereby agrees to pay on demand only the Issuer's pro rata share (as determined by the Authority) of such deficiency as additional interest on this Bond.

The Bond may be subject to redemption prior to maturity by the Issuer only with the prior written consent of the Authority and on such terms as may be required by the Authority.

[In case less than the full amount of an outstanding bond is called for redemption, the Transfer Agent upon presentation of the bond called in part for redemption shall register, authenticate and deliver to the registered owner a new bond of the same maturity and in the principal amount of the portion of the original bond not called for redemption.]

[Notice of redemption shall be given by the Transfer Agent to each registered owner of bonds or portions thereof to be redeemed by mailing such notice not less than thirty (30) days prior to the date fixed for redemption to the registered owner at the address of the registered owner as shown on the registration books of the Issuer. Bonds shall be called for redemption in multiples of \$5,000, and bonds of denominations of more than \$5,000 shall be treated as representing the number of bonds obtained by dividing the denomination of the bonds by \$5,000, and such bonds may be redeemed in part. The notice of redemption for bonds redeemed in part shall state that, upon surrender of the bond to be redeemed, a new bond or bonds in the same aggregate principal amount equal to the unredeemed portion of the bonds surrendered shall be issued to the registered owner thereof with the same interest rate and maturity. No further interest on bonds or portions of bonds called for redemption shall accrue after the date fixed for redemption, whether the bonds have been presented for redemption or not, provided funds are on hand with the Transfer Agent to redeem the bonds or portion thereof.]

[Any bond may be transferred by the person in whose name it is registered, in person or by the registered owner's duly authorized attorney or legal representative, upon surrender of the bond to the Transfer Agent for cancellation, together with a duly executed written instrument of transfer in a form approved by the Transfer Agent. Whenever any bond is surrendered for transfer, the Transfer Agent shall authenticate and deliver a new bond or bonds, in like aggregate principal amount, interest rate and maturity. The Transfer Agent shall require the bondholder

requesting the transfer to pay any tax or other governmental charge required to be paid with respect to the transfer. The Transfer Agent shall not be required to issue, register the transfer of, or exchange any bond during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of bonds selected for redemption and ending at the close of business on the day of that mailing.]

It is hereby certified and recited that all acts, conditions and things required to be done, exist and happen, precedent to and in the issuance of this bond and the series of bonds of which this is one, in order to make them valid and binding obligations of the Issuer have been done, exist and have happened in regular and due form and time as provided by law.

This bond is not valid or obligatory for any purpose until the Transfer Agent's Certificate of Authentication on this bond has been executed by the Transfer Agent.

IN WITNESS WHEREOF, the Issuer has caused this bond to be signed in its name by [the facsimile signatures of] the Chairperson and one member of the Drainage Board, all as of the Date of Original Issue.

MACOMB INTERCEPTOR DRAIN DRAINAGE
DISTRICT

By [After sale definitive Bonds to be signed]
Chairperson, Drainage Board

(Seal)

Countersigned:

By [After sale definitive Bonds to be signed]
Member, Drainage Board

DEQ Project No.:
DEQ Approved Amt: \$

SCHEDULE A

Based on the schedule provided below unless revised as provided in this paragraph, repayment of principal of the Bond shall be made until the full amount advanced to the Issuer is repaid. In the event the Order of Approval issued by the Department of Environmental Quality (the "Order") approves a principal amount of assistance less than the amount of the Bond delivered to the Authority, the Authority shall only disburse principal up to the amount stated in the Order. In the event (1) that the payment schedule approved by the Issuer and described below provides for payment of a total principal amount greater than the amount of assistance approved by the Order, or (2) that less than the principal amount of assistance approved by the Order is disbursed to the Issuer by the Authority, the Authority shall prepare a new payment schedule which shall be effective upon receipt by the Issuer.

Principal Installment <u>Due on</u>	Amount of Principal <u>Installment</u>
April 1, 2023	
April 1, 2024	
April 1, 2025	
April 1, 2026	
April 1, 2027	
April 1, 2028	
April 1, 2029	
April 1, 2030	
April 1, 2031	
April 1, 2032	
April 1, 2033	
April 1, 2034	
April 1, 2035	
April 1, 2036	
April 1, 2037	
April 1, 2038	
April 1, 2039	
April 1, 2040	
April 1, 2041	
April 1, 2042	

Interest on the bond shall accrue on principal disbursed by the Authority to the Issuer from the date such portion is disbursed, until paid, at the rate of 2.00% per annum, payable April/October 1, 20__, and semi-annually hereafter.

The Issuer agrees that it will deposit with the Authority's Depository, or such other place as shall be designated in writing to the Issuer by the Authority payments of the principal of, premium, if any, and interest on this bond in immediately available funds by 12:00 noon at least five business days prior to the date on which any such payment is due whether by maturity, redemption or otherwise. In the event that the Authority's Depository has not received the Issuer's deposit by 12:00 noon on the scheduled day, the Issuer shall immediately pay to the Authority as invoiced by the Authority an amount to recover the Authority's administrative costs and lost investment earnings attributable to that late payment.

[End of Bond Form]

9. Negotiated Sale. The District has considered the option of selling the Bonds through a competitive sale and a negotiated sale and, based on the advice of its Municipal Advisor (as defined below), has determined that a negotiated sale of the Bonds to the Authority

provides the District with greater flexibility in structuring bond maturities and the timing of the sale of the Bonds, is the most efficient and expeditious process, and will enable the District to better market the Bonds to obtain the lowest interest costs for the District.

10. Approval of Purchase Contract and Other Documents. The actions taken by the Authorized Officers with respect to the Bonds prior to the adoption of this Resolution are hereby ratified and confirmed. The Authorized Officers are authorized to execute and deliver the Purchase Contract, Supplemental Agreement and District's Certificate to the Authority. Prior to the delivery of the Bonds to the Authority, any Authorized Officer is hereby authorized to make such changes to the form of Bond contained in Section 8 of this Resolution as may be necessary to conform to the requirements of Act 227, Public Acts of Michigan, 1985, as amended ("Act 227"), including, but not limited to changes in the principal maturity and interest payment dates and references to additional security required by Act 227.

11. Tax Covenant. The District shall not invest, reinvest or accumulate any moneys deemed to be proceeds of the Bonds pursuant to the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), and the applicable regulations thereunder, in such a manner as to cause the Bonds to be "arbitrage bonds" within the meaning of the Internal Revenue Code and such applicable regulations; the District hereby covenants that, to the extent permitted by law, it will take all actions within its control and that it shall not fail to take any action as may be necessary to maintain the exemption of interest on the Bonds from gross income for federal income tax purposes, including but not limited to, actions relating to the rebate of arbitrage earnings, if applicable, and the expenditure and investment of Bond proceeds and moneys deemed to be proceeds of the Bonds.

12. Further Actions. The officers, administrators, agents and attorneys of the District are authorized and directed to execute and deliver all other agreements, documents and certificates and to take all other actions necessary to complete the issuance and delivery of the Bonds in accordance with this Resolution. The officers, administrators, agents and attorneys of the District are authorized and directed to pay costs of issuance including Bond Counsel fees, Municipal Advisor fees, rating agency fees, Transfer Agent fees, and any other costs necessary to accomplish sale and delivery of the Bonds.

13. Municipal Advisor. Bendzinski & Co., Municipal Finance Advisors, is retained to serve the District as its registered municipal advisor for the Bonds (the "Municipal Advisor").

14. Bond Counsel. Miller, Canfield, Paddock and Stone, P.L.C. is hereby retained to serve as bond counsel for the Bonds, notwithstanding the periodic representation by Miller, Canfield, Paddock and Stone, P.L.C., in unrelated matters of the Authority.

15. Severability. If any section, paragraph, clause or provision of this order shall be held invalid, the invalidity of such paragraph, section, clause or provision shall not affect any of the other provisions of this order. Section headings are inserted for convenience of reference only and shall not be considered to be a part of this order.

16. Rescission. All resolutions and orders and parts of resolutions and orders insofar as they conflict with the provisions of this order are hereby rescinded.

[Remainder of Page Intentionally Left Blank]

17. Effective Date. This resolution shall become effective immediately.

RESOLUTION DECLARED ADOPTED

Candice S. Miller, Chairperson
Drainage Board

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Drainage Board for Macomb Interceptor Drain Drainage District, County of Macomb, Michigan, at a meeting held on June 8, 2020, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976, as amended, and as temporarily modified by Governor Whitmer's Executive Order No. 2020-75 (COVID-19) and that the minutes of said meeting were kept and will be or have been made available as required by said Act.

Candice S. Miller, Chairperson
Drainage Board

35933664.1\054935-00023

MACOMB INTERCEPTOR DRAIN 5/19/20 - 6/2/20

<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 – 7.1724% Clinton – 21.1566% Fraser – 4.0713% Harrison – 6.2117% Lenox – .9496% Macomb – 14.1023% New Haven – .8184% Shelby – 9.9387% Sterling Heights – 31.1032% Utica – 1.6497% Washington – 2.8262%						
<u>Administration</u>		Astorino	Anderson, Eckstein & Westrick	\$ 2,374.00	Invoice #126438 - 5.19.20	Engineering Oversight - Phase 2 Grouting	\$ 424,167.55
		Astorino	City of Mt. Clemens	\$ 20,032.81	Invoice #28001318 - 5.13.20	Sewage Flow - April 2020	
		Astorino	Doetsch	\$ 98,030.30	Invoice #71223 - 5.31.20	Segment 5 Grouting	
		Astorino	Doetsch	\$ 170,225.60	Invoice #71224 - 5.26.20	Phase 2 Grouting	
		Astorino	Fishbeck	\$ 2,925.00	Invoice #392018 - 5.26.20	GLWA Assistance	
		Astorino	Fishbeck	\$ 1,741.50	Invoice #392019 - 5.26.20	As-needed Contract	\$ 87,565.88
		Astorino	Fishbeck	\$ 12,487.50	Invoice #392021 - 5.26.20	Wastewater Master Plan	
		Astorino	Fishbeck	\$ 2,946.00	Invoice #392020 - 5.26.20	2020 Inspection Program	\$ 206,309.00
		Astorino	FK Engineering Associates	\$ 27,772.60	Invoice #17-134-023 - 5.14.20	Engineering Oversight - Segment 5 Grouting	
		Downing	FK Engineering Associates	\$ 30,694.60	Invoice #19-134-006 - 5.21.20	Segment 5 Engineering Design	\$ 73,156.19
		Astorino	FK Engineering Associates	\$ 28,000.00	Invoice #20-042-001 - 5.14.20	Sewer Rehab Analysis - Segments 3, 4, 7-10	\$ 56,000.00
		Astorino	FK Engineering Associates	\$ 5,134.28	Invoice #20-058-001 - 5.14.20	Segment 6 Rehab	\$ 389,353.72
		Baker	KHVPF, PLC	\$ 9,663.75	Invoice #44492 - 5.1.20	General Matters - April 2020	
		Baker	KHVPF, PLC	\$ 10,170.00	Invoice #44488 - 5.1.20	Flushable Wipes Litigation	
		Astorino	Metco Consulting Services	\$ 19,395.38	Invoice #1717-15 - 5.5.20	Flow Control Services - Segment 5	\$ 3,899.00
		Downing	NTH Consultants, Ltd.	\$ 3,712.50	Invoice #622437 - 5.15.20	Meter & Drop Shaft Rehab	\$ 168,752.49
		Manning	The ASU Group	\$ 1,500.00	Invoice #MD 00146880 - 5.6.20	Annual Administrative Fee - Insurance TPA	
		Astorino	Verizon Wireless	\$ 1,087.76	Invoice #9853200764 - 4.23.20	Monthly Cell - 3.24.20 - 4.23.20	
		Astorino	Verizon Wireless	\$ 675.63	Invoice #9853200764 - 4.23.20	Monthly Cell - 3.24.20 - 4.23.20	

MACOMB INTERCEPTOR DRAIN 5/19/20 - 6/2/20

<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>
<u>Clintondale P.S.</u>		Astorino	Clinton Township Treasurer	\$ 2,820.21	Invoice #20-234 - 4.30.20	Water & Sewer - 3.23.20 - 4.27.20	
		Astorino	DTE Energy	\$ 21,578.72	Invoice #20-221 - 4.1.20	Monthly Electric - 3.4.20 - 4.1.20	
		Astorino	DTE Energy	\$ 21,463.12	Invoice #20-246 - 5.3.20	Monthly Electric - 4.2.20 - 5.3.20	
		Astorino	Great Lakes Pest Control	\$ 500.00	Invoice #55493 - 5.7.20	Exterior Power Spray	
<u>15 Mile Sinkhole</u>		Baker	Aloia & Associates, P.C.	\$ 4,180.00	Invoice #19896 - 5.1.20	MIDDD vs. 3 Contractors	
		Baker	KHVPF, PLC	\$ 136,470.67	Invoice #44491 - 5.1.20	Water Hammer Lawsuit - Experts	
		Baker	N1 Discovery, LLC	\$ 4,595.00	Invoice #N1D4853 - 4.30.20	Water Hammer Lawsuit - Data Hosting Fee	
		Baker	N1 Discovery, LLC	\$ 5,280.00	Invoice #N1D4874 - 4.30.20	Water Hammer Lawsuit - Data Processing	
		Downing	Oakland County	\$ 4,585,548.67	Invoice #SDS0007097 - 5.1.20	Sewage Disposal - April 2020	
<u>Meters</u>		Astorino	ADS Environmental Services	\$ 1,807.50	Invoice #35414-0420B - 4.25.20	Meter Maintenance - As Needed	\$ 46,917.50
		Astorino	ADS Environmental Services	\$ 8,500.00	Invoice #35414-0420A - 4.25.20	Meter Maintenance	\$ 457,430.00
<u>NGI</u>		Keskeny	Aloia & Associates, P.C.	\$ 1,258.75	Invoice #19892 - 5.1.20	Cabelas/ Bass Pro LTU	
		Astorino	DTE Energy	\$1,348.67	Invoice #20-242 - 5.1.20	Monthly Electric - 3.31.20 - 4.30.20	
		Astorino	Hamlett Environmental Technologies	\$8,471.00	Invoice #202091 - 3.31.20	VFD Equipment Replacement	
<u>SEMSD</u>		Astorino	Fishbeck	\$ 5,930.35	Invoice #392027	Wastewater Master Plan	\$ 95,583.95
Total				\$ 5,258,321.87			

Budget to Actual
MIDD
As of May 31, 2020 = 92%

DESCRIPTION	2020 FINAL BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
GLWA-OMID	46,904,696		43,028,993	3,875,703	91.7%
OMID O&M	8,121,888		7,445,075	676,813	91.7%
Settlement	-		522,116	(522,116)	100.0%
Reimbursements	200,000		278,229	(78,229)	139.1%
PY Revenue-Fund Balance	9,610,000			9,610,000	0.0%
Washington Twp Meter Project	250,000			250,000	0.0%
Reimb-Local Communities	10,927,799		10,017,139	910,660	91.7%
Interest	300,000		248,182	51,818	82.7%
Total Revenue Accounts	76,314,383	-	61,539,733	14,774,650	80.6%
EXPENSE ACCOUNTS					
GLWA-OMID	46,904,696		43,028,993	3,875,703	91.7%
OMID O&M	8,121,888		7,445,075	676,813	91.7%
Public Works Wastewater Disposal Division	1,721,123		799,874	921,249	46.5%
Office Operations/Insurance	322,800		203,302	119,498	63.0%
SCADA*	196,634		230,881	(34,247)	117.4%
Engineering					
GLWA Assistance	20,000		22,694	(2,694)	113.5%
Washington Township meter	500,000			500,000	0.0%
Data Review-Aquasight	240,000		200,000	40,000	83.3%
Contribution to Segment 5 Construction/Repairs	3,850,000			3,850,000	0.0%
15 Mile Interceptor Design East of Garfield (Seg 6)	1,000,000		3,220	996,780	0.3%
Seg 5 Engineering Design	1,000,000		523,616	476,384	52.4%
Drop Shaft Repairs(MA-S-2),CT-S-2, HR-S-2, ST-S-5,UT-S-1)	5,750,000		32,824	5,717,176	0.6%
System wide odor and corrosion study	350,000		234,867	115,133	67.1%
SY-S-1 & SY-S-2 Meter Rehab	1,200,000		33,035	1,166,966	2.8%
Meter Dye Dilution Testing/As needed	100,000		16,100	83,900	16.1%
Saw Grant	-		25,561	(25,561)	100.0%
McMARS Operations	50,000		5,760	44,240	11.5%
Aquasight Operations	50,000		50,000	-	100.0%
As Needed FTCH	50,000		8,411	41,589	16.8%
As Needed CH2M	70,000		20,394	49,606	29.1%
As needed FK Engineering	55,000		270,666	(215,666)	492.1%
As Needed Wade Trim	45,000		15,104	29,896	33.6%
As Needed Metco	70,000		146,101	(76,101)	208.7%
As Needed Applied Science	70,000			70,000	0.0%
Emergency Grouting	-		2,334,888	(2,334,888)	100.0%
Wastewater Master Plan/Contract Capacity	500,000		192,919	307,081	38.6%
Legal Services	500,000		398,526	101,474	79.7%
Clintondale PS O&M	345,000		364,269	(19,269)	105.6%
NGI O&M	330,000		66,911	263,089	20.3%
Meters O&M	415,000		267,857	147,143	64.5%
CS-3 O&M	226,000		6,553	219,447	2.9%
Biofilter O&M	277,500		117,885	159,615	42.5%
Contribution Life Cycle Reserve	171,700		171,700	-	100.0%
Interceptor O&M	1,000,000		16,321	983,679	1.6%
Stormwater Pump Stations	65,800		60,317	5,483	91.7%
Sewage Disposal Charges - Mt. Clemens	200,000		155,266	44,734	77.6%
Debt Service - Revenue Bonds	546,242		500,722	45,520	91.7%
Total Expense Accounts	76,314,383	-	57,970,610	18,343,773	76.0%

	O&M Balance 6/30/2019	O&M	Total 5/31/2020
Cash - Operating	25,896,373	3,569,123	29,465,496
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		61,539,733	61,539,733
Expenditures		57,970,610	57,970,610
			0
Equity*	25,896,373		29,465,496

Detail of 2019 Equity*

Projected reserve at 6/30/2019(No Land Sale)	12,180,673
Projected Engineering Reserve	9,610,000
Projected Sinkhole Surplus	3,400,000
Life Cycle Reserve*	705,700
Use of life cycle reserve to purchase SCV3020 storage	