

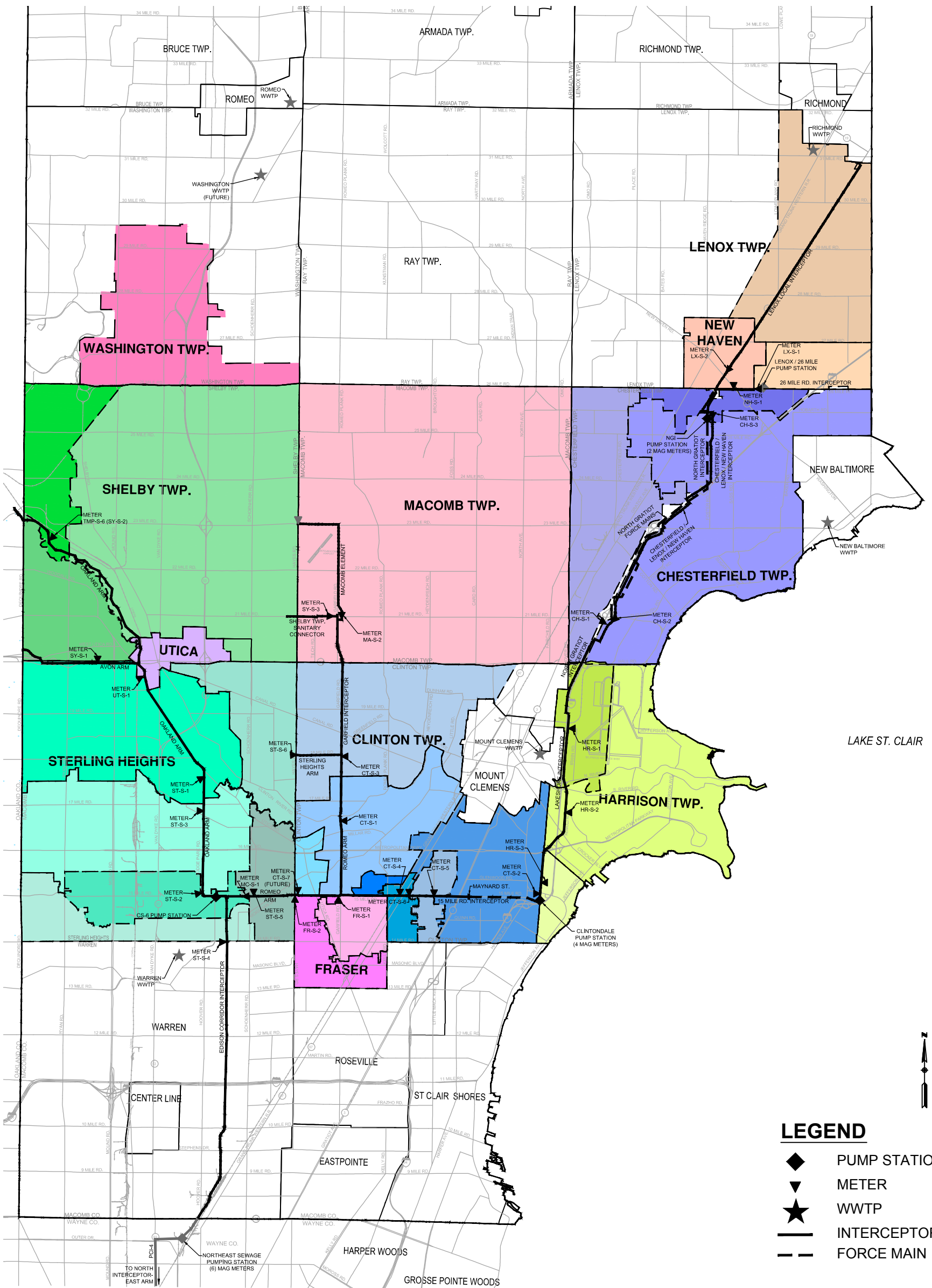
MACOMB INTERCEPTOR DRAIN
INTRA-COUNTY DRAINAGE BOARD
OCTOBER 24, 2022
11:00 A.M.
AGENDA

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

**Call in Number: 1-585-532-5353
Access Code: 826 512 143**

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for October 24, 2022	
3. Approval of Minutes for September 12, 2022	3
4. Public Participation	
5. Project Updates – Stephen Downing	7
6. Odor & Corrosion Construction Award – Stephen Downing	28
Motion: To award the bid for the Odor and Corrosion project to L.D'Agostini & Sons for \$11,799,678.78.	
7. Odor & Corrosion – Contract Administration – Stephen Downing	37
Motion: To approve the proposal from Tetra Tech for a not to exceed amount of \$973,590 to provide construction contract administration services for the Odor and Corrosion project.	
8. Metering Facility Rehabilitation Project – Construction Contract Close-Out – Stephen Downing	42
Motion: To approve the final Change Order No. 3 for a net decrease of \$77,406.87	
9. Consideration for approval of invoices (see attached)	46
10. Financial Report – Bruce Manning	48
11. Adjourn	

MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT



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 12, 2022, at 10:23 A.M.

PRESENT: Brian Baker, Acting Chair

 Don VanSyckel, Member

 Bryan Santo, Member

ALSO PRESENT: Vince Astorino, Operations & Flow Manager; Steve Downing, Construction & Maintenance Manager; Norb Franz, Communications Manager; Bruce Manning, Finance Manager; Pam Sonnenberg, Administrative Assistant; Tom Stockel, Construction Supervisor

PRESENT VIA TELECONFERENCE: Mary Shepard, Environmental and Safety Services Supervisor, City of Sterling Heights; Scott Isenberg, Macomb County Public Works Engineer

The meeting was called to order by the Acting Chair, Brian Baker. A motion was made by Mr. Santo supported by Mr. VanSyckel to approve the agenda as presented.

Adopted: YEAS: 3
 NAYS: 0

Minutes of the meeting of August 8, 2022 were presented. A motion was made by Mr. VanSyckel, supported by Mr. Santo 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 the Segment 5 Rehabilitation project that Oscar Renda is making good progress. There is no slippage in the schedule update for August. They continue construction of the CS-12 permanent structure and continue to spray line the 8 foot diameter interceptor. He then presented pictures of the progress and the daily dewatering of the pipe so they can install the carbon fiber mesh.

A resident from Villa Fontana subdivision said that there is not enough advance warning signage for the lane closure. The other complaint is an ongoing odor complaint in the subdivision. Mr. Lumma goes out each time we receive a complaint to investigate and he has not been able to detect anything. We do keep a log of all of the complaints within the project file for our records.

Next, Mr. Downing presented on Phase II Grouting. The crew has not been in the drain since late July 2022. We have completed grouting in all of the critically defined locations. Mr. Baker asked what the holdup is and Mr. Downing responded that the contractor is having trouble assembling a modified crew that can work afternoon or evening shifts. He stated that it is a resource issue. Mr. Santo asked if there was a contract timing issue and Mr. Downing said that we let the contract open ended because it will be an ongoing project.

The Meter Facility Rehabilitation project is wrapping up. There were two items identified for corrective action during the final punch list walkthrough in September. The Contractor is moving forward with the correction of these items with final project closeout in October 2022. There is still a remaining budget of \$92,877.21.

Mr. Downing updated on the Segment 6 Rehabilitation project saying that the Contractor continues to develop and submit the required submittals to the Engineer and Owner for review. This week they will be implementing the full lane closure all the way to 15 Mile and Garfield. He presented some photos of the thimble being loaded into the shaft. It was significant in that they had to stop flow for the day, plug it and remove the temporary flume so they could get this installed. They did it all very successfully and within one shift. It took a lot of group effort and coordination and we were pleased how it worked out. The Project team is working with the insurance carrier on the Builder's Risk Claim to determine if a claim exists for the damaged HOBAS pipe and installation of the remaining 240 feet of pipe. We are waiting for the report from the insurance carrier.

The next update is on the Interceptor Inspection Program. We met with Doetsch to go over the remaining areas that need to be inspected. Mr. Astorino added that Doetsch has until November 30th to complete. There are some areas that have increased sediment build-up and they were struggling to get through and we have asked for a cost to clean out the sediment. Once we have all of that information, we will bring it before the board. Mr. Baker asked if they had seen anything that is critical so far, besides the 21 and Garfield area. Mr. Downing confirmed by adding that Fishbeck has reviewed all of the data and that they see no other critical area based on the data they have. Mr. VanSyckel asked how much the sediment clean-out would cost. Mr. Astorino said that he doesn't know, but the heavier sediment will be more costly.

Mr. Downing concluded by sharing photos inside the pipe post spray lining. He noted how impressive it is for Oscar Renda to get the system as dry as it is, and what a great job they are doing.

Mr. Downing added that they had their bid meeting for MIDD Odor and Corrosion and are in the process of reviewing the bids. He will be coming to the board with a recommendation in October. Mr. VanSyckel asked if there was anything for the Utica and Dodge Park area and Mr. Downing said yes, it will be part of the OMID Odor and Corrosion design project. We are currently in the design phase and met with Sterling Heights, and there shouldn't be much disruption to the roadway.

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

Adopted: YEAS: 3
NAYS: 0

Mr. Downing presented the Segment 5 Insurance Extension and is recommending that the Board Chair execute the required documents to extend the insurance coverage for a 12-month period. Mr. Santo asked if it will be prorated to get a reimbursement, depending on actual completion date. Mr. Downing stated that he will inquire and report back.

A motion was made by Mr. VanSyckel, supported by Mr. Santo to approve and authorize the Board Chair to execute the required documents to extend the Segment 5 Project Liability Insurance coverage for a 12-month period for the total premium of \$157,454.35.

Adopted: YEAS: 3
NAYS: 0

Mr. Astorino updated on Phase 3 COVID Wastewater Monitoring, and said that this will run from October 1st through July 31, 2023. It is 100% State grant funded. He was also able to fund a replacement PH Sensor on our sampler that had gone bad. The proposal is for Aquasite to do the testing for \$693,505 and an additional \$34,675 built in to cover our administrative expenses.

A motion was made by Mr. Santo, supported by Mr. VanSyckel to award the proposal for Phase 3 Covid Wastewater Monitoring to Aquasite for \$693,505 and authorization for Vince Astorino to execute the State grant agreement totaling \$728,180.

Adopted: YEAS: 3
NAYS: 0

Mr. Astorino updated on the Annual Critical Area Inspection Program. MCPWO staff has initiated a comprehensive inspection program on three and six year intervals depending on the pipe material. The next phase of this program is in the design phase and is for the 2023 Interceptor Inspection Program. MCPWO will be working closely with FK Engineering Inc. to analyze the system wide planning approach for the rehabilitation for the MIDD interceptors. Today's recommendation is for an annual inspection of MIDD critical areas.

A motion was made by Mr. VanSyckel, supported by Mr. Santo to approve the proposal from FK Engineering for an amount not to exceed \$101,888 for annual inspection of the MIDD critical areas.

Adopted: YEAS: 3
NAYS: 0

The Chair presented the invoices totaling \$6,075,758.83 to the board for review and approval.

A motion was made by Mr. Santo, supported by Mr. VanSyckel 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. Santo.

Adopted: YEAS: 3
NAYS: 0

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

Adopted: YEAS: 3
NAYS: 0

The meeting was adjourned at 11:09 A.M.



Brian Baker, Acting Chair
Macomb County Public Works Chief Deputy

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 12, 2022 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.



Brian Baker, Acting Chair
Macomb County Public Works Chief Deputy

DATED: 09/12/22



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 & Flow Manager

Date: October 24, 2022

Subject: Construction Projects Status Updates for October 2022 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.
3. Continued spray-lining the 8-foot diameter interceptor (PCI-37).
4. Continued construction of the CS-12 permanent structure, which includes:
 - a. Rebar installation for the walls and gate columns

- b. Concrete formwork removal/installation
- c. Concrete placement for permanent structure walls

Construction Costs:

	Date	
Original Contract Amount	10/21/2020	\$28,807,500.00
Current Contract Amount	9/30/2022	\$31,702,534.88
Total Spent to Date	9/30/2022	\$14,111,877.93
Remaining Budget	9/30/2022	\$17,589,656.95



Figure 1 - Geo-Polymer Spray Lining in PCI-37



Figure 2 - CS-12 Rebar Installation



Figure 3 - CS-12 Wall Concrete Placement



Figure 4 - CS-12 Wall Formwork Installation



Figure 5 - CS-12 Wall Formwork Removal



Figure 6 - PCI-37 Completely Dewatered



Figure 7 - PCI-37 Dewatered Post Spray Lining

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 March 2023.

Significant project tasks that have occurred over the past month:

1. The Contractor continues to develop and submit the required submittals to the Engineer & Owner for review.
2. The Project team is working with the insurance carrier on a Builder's Risk Claim to determine if a claim condition exists for the damaged HOBAS pipe and installation of the remaining 240 feet of pipe.
 - a. The Insurance carrier's forensic Engineer submitted a Request for Information, the Project Team collected the requested information and submitted accordingly.
3. The construction of the permanent CS-13 Shaft continued with the concrete placement of wall final wall lift.
4. Implemented the complete traffic control setup along 15 Mile and Garfield to facilitate the start of excavation of the shaft at manhole #1.
5. Started excavation and construction of the TERS for the access shaft at manhole #1.
6. Formed the equipment pad for the CS-13 control cabinet.

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	9/30/2022	\$13,674,209.70
Total Spent to Date	9/30/2022	\$4,738,995.60
Remaining Budget	9/30/2022	\$8,935,258.10



Figure 8 - CS-13 Formwork Installation



Figure 9 - CS-13 Concrete Placement



Figure 10 - CS-13 Formwork Removal



Figure 11 - CS-13 Equipment Pad



Figure 12 - Manhole #1 TERS



Figure 13 - Manhole #1 TERS Placed in Excavation



Figure 14 - Manhole #1 TERS after backfill



Figure 15 - Manhole #1 TERS Shaft



Figure 16 - Manhole #1 Excavation

Garfield Interceptor Lining Project

Contractor: SAK Construction, LLC

Engineering Consultant: AEW

Project Description: MCPWO identified 755 feet of 7-foot diameter pipe within the Garfield Interceptor that has been aggressively attacked with Hydrogen Sulfide damage. This stretch of pipe was immediately labeled as an immediate repair and MCPWO underwent an analysis of options for repairs. The selected option was a Spiral Wound PVC liner which has been installed around the world but is the first time being installed within Michigan. This product has a guaranteed useful life of 50-years and is being treated as a pilot project within the MID system.

Significant project tasks that have occurred over the past month:

- The contract has been executed with SAK Construction.
- Submittals have been submitted and reviewed by MCPWO and AEW.
- Part 41 permit has been obtained.
- Work is anticipated to begin onsite starting the week of October 17th.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	8/25/2022	\$2,394,385.00
Total Spent to Date		\$0.00
Remaining Budget	10/12/2022	\$2,394,385.00

Interceptor Inspection Program

Contractor: Doetsch Environmental Services, Inc.

Engineering Consultant: Fishbeck

Project Description:

The 2020 sewer inspection program was awarded to Doetsch Environmental Services in November 2020. The inspection program includes inspection of approximately 26 miles of sanitary sewer, 360 manholes and other aspects of the sanitary sewage infrastructure across multiple drainage districts, including the MIDDD.

The MIDDD portion of the inspection program includes 101,335 linear feet (19.25 miles) of pipe ranging in diameter from 24" to 132" and 145 manhole structures. Additionally, inspection of 8 junction chambers and 8 Drop Shaft/Connecting sewers will be performed.

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. The 2020 inspection program is the largest ever performed by the Macomb County Public Works Office. The project started in May 2021 and is expected to be completed in November of 2022.

Significant project tasks that have occurred over the past month:

1. The Consultant is reviewing the data and preparing inspection reports.
2. The Owner's Representatives, Engineering Consultant and Contractor are coordinating completion of the remaining areas to be inspected, which included:
 - a. 4 Drop Shaft and Connecting Sewers
 - b. Lenox Local missing segments. Waiting on pricing from Doetsch to inspect and clean those segments due to heavy sediment buildup.
3. Review of the data has not revealed any additional areas of concern.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	1/19/2021	\$280,034.00
Total Spent to Date	9/30/2022	\$184,971.35
Remaining Budget	9/30/2022	\$95,062.65

***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. AEW, Doetsch and MCPWO personnel have evaluated where the crew will move to next which is dependent upon the flow control needs and coordination with other projects. This coordination will require grouting to occur on afternoons or nights based on where in the system whether they are working in the Garfield or Lakeshore Interceptors.

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	9/30/2022	\$6,000,000.00
Total Spent to Date	9/30/2022	\$4,432,736.20
Remaining Budget	9/30/2022	\$1,567,263.80

Meter Facility Rehabilitation

Contractor: Weiss Construction

Engineering Consultant: HRC

Project Description:

The project includes the rehabilitation of three sewerage meter facilities; work includes removal and application of concrete surface repairs and protective coatings, televising, cleaning, and spray-lining the existing influent and effluent connecting sewers; rehabilitation existing adjacent sanitary manholes; improving access and safety features for maintenance personnel; and replacing existing electrical systems.

The sites, SY-S-1 and SY-S-2 are in Shelby Township and WA-S-1 is in Washington Township. The meter facilities are the point of transition of sewerage flow from the local systems into the MIDDD Interceptors. Each of the metering facilities provides the critical flow data required to allocate the billing apportionment for each of the MIDDD member communities.

The Shelby Township meter facilities, originally constructed by DWSD, have reached the end of their useful life and are need of rehabilitation. The MCPWO previously rehabilitated several of the older metering facilities in the system, which were also constructed by DWSD.

The Washington Township meter facility is currently owned by Washington Township, which is a unique situation in the MIDDD system. Typically, the MIDDD assumes ownership of the billing meter facilities, which includes operation and maintenance activity. As such, the MCPWO negotiated a transfer agreement with Washington Township to transfer ownership of this asset to the MIDDD. The two entities agreed to equitable cost sharing terms within the agreement.

The project was designed by Hubbell, Roth and Clark and the construction contract was awarded to Weiss Construction. The total construction cost for the project is \$857,159.00. The work started in April 2021.

Significant project tasks that have occurred over the past month:

1. The Contractor is finalizing the closeout documents.
2. The final balancing change order will be presented to the Board on October 17, 2022.
3. The remaining punch list items were completed in September 2022.
4. This project is closed out and will be removed from future reports.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	12/3/2020	\$857,159.00
Current Contract Amount	3/30/2022	\$863,168.85
Total Spent to Date	3/30/2022	\$770,291.64
Remaining Budget	3/30/2022	\$92,877.21



Candice S. Miller

Public Works Commissioner
Macomb County

To: Macomb Interceptor Drain District Board Members

From: Stephen Downing, Construction & Maintenance Manager

Date: October 24, 2022

Subject: Odor & Corrosion Contractor Award Recommendation

The Macomb County Public Works Office managed the design of three new odor and corrosion control facilities and the rehabilitation of the existing Fraser Bio-Filter. The need for these facilities stems from the odor and corrosion study that was performed by Jacobs under the management MCPWO Engineering Staff. The design of these new facilities and rehabilitation of the existing Fraser Bio-Filter was performed by Tetra Tech. The overall objective of this project is to reduce hydrogen sulfide induced corrosion of the concrete sewer pipe and to control the odors emitting from the sewer. The locations of the odor and corrosion control facilities were identified during the study phase and confirmed during the design phase. The locations were selected based on analysis of sewer samples collected, odor and pressure data collected and computer modeling. The facilities are intended to complement one another to mitigate odor and corrosion throughout the MID system. This in combination with frequent inspections, grouting, spot repairs and application of non-structural protective coatings will extend the useful life of the sewer and is a cost effective solution that eliminates the need to perform full structural rehabilitation throughout the system.

The MID budget includes an allocation of \$10,290,000 toward the construction and CCA costs for three of the facilities; Fraser Bio-Filter (existing), Macomb Township Bio-Filter and the Clintondale Pump Station Bio-Filter. The new NGI facility construction and CCA costs will be funded with residual NGI bond money in the amount of \$1,750,000.

The Macomb County Public Works Office re-solicited bids for the construction of Odor and Corrosion Control Facilities from July 8, 2022 through September 8, 2022. There were 5 bids submitted which are summarized in the table below. A more detailed breakdown of the bids is shown in the attached Tetra Tech memo. The apparent low bid, from L. D'Agostini & Sons was for the lump sum amount of \$12,241,358.78. The Engineer's Opinion of Probable Cost is \$11,155,000, which includes a 15% contingency. It should be noted that the re-bidding of this project resulted in an initial savings of \$1,176,564.

Bidder	Lump Sum Bid Amount
L. D'Agostini & Sons	\$12,241,358.78
Heaney General Contracting, Inc.	\$13,800,000.00
LaSalle Construction Services	\$13,910,000.00
Christman Constructors, Inc.	\$14,867,000.00
Sorensen Gross Company, LLC.	\$15,602,000.00

The Macomb County Public Works Office staff and Tetra Tech performed a review of the bids received and determined that the apparent low bid represents a fair price for the work to be performed. In addition, a post-bid meeting with L. D'Agostini & Sons was held to confirm that they are comfortable with their bid.

There were several bid alternates for various components on this project, one of which included air ionization equipment at the Clintondale Pump Station. Due to unfavorable reviews of this technology and lack of experience with the manufacturer MCPWO and Tetra Tech elected to remove these alternates from the project. The removal of the alternates associated with air ionization reduces the Lump Sum Contract amount to \$11,799,678.78.

Upon approval, the Board Chair will execute the attached Notice of Award and Tetra Tech will assemble the contract books for execution by both parties. The construction is expected to start in November 2022 and take approximately 21-months to complete. The Tetra Tech CCA Change Order will be presented in a separate memo.

The action is that the Board accept the bid received from L. D'Agostini & Sons for the Lump Sum amount of \$11,799,678.78.

Attachments: Tetra Tech Memo
Notice of Award
Site Maps



TETRA TECH

September 20, 2022

Mr. Stephen Downing, PE
Construction and Maintenance Manager
21777 Dunham Road
Clinton Township, MI 48036

**RE: Macomb Interceptor Drain Drainage District (MIDDD)
Odor & Corrosion Improvements Project**

Dear Mr. Downing:

The above project will provide improvements to address odor and corrosion concerns within the MIDDD sewer system. Specifically, it includes construction or reconstruction of facilities at four different locations within the MIDDD.

On September 8, 2022, bids were received for the above projects. Five (5) bids were received and are tabulated on the attachment. The lowest bid was received from L. D'Agostini & Sons, Inc. of Macomb Township.

Tetra Tech has reviewed the bids and believes the \$12,241,358.78 bid price represents a fair price for the work to be performed. We have spoken with the company three times and feel they have captured the contracted work in their bid. Tetra Tech has called references and learned that L. D'Agostini & Sons, while not without typical construction contractor concerns, has successfully delivered projects of this complexity and magnitude. Therefore, Tetra Tech concludes that L. D'Agostini & Sons is the lowest responsible and responsive bidder and recommends that the MIDDD award the contract to L. D'Agostini & Sons, Inc..

The bid contains several alternates. Alternates 9 and 10 pertain to an air ionization system at the Clintondale Pump Station. Due to a lack of experience with the current manufacturer of these systems, Tetra Tech and Macomb Public Works staff feel that Alternates 9 and 10 should be accepted (i.e. deducted from the bid and not performed). Thus, the contract amount to be awarded becomes \$11,799,678.78.

Tetra Tech would be happy to attend a future drainage district meeting to discuss the bids and looks forward to a successful construction phase.

Sincerely;

Brian M. Rubel, PE
Vice President

Tetra Tech, Inc.
710 Avis Drive, Suite 100, Ann Arbor, MI 48108
Tel 734.665.6000 www.tetrattech.com

Bid Tab Lump Sum

Client Name: **Macomb County**

Contract Title: **Macomb Interceptor Drain Drainage District - Odor & Corrosion Improvements Project**

Contract Number: **200-16347-21001**

Bid Date: **9/8/2022**

Time of Bid Opening: **2pm**

BIDDER	L. D'Agostini & Sons	Heaney General Contracting, Inc.	LaSalle Construction Services	Christman Constructors, Inc.	Sorensen Gross Company LLC
	5801 23 Mile Road Macomb Twp., MI 48042	7560 Carpenter Rd Ypsilanti, MI 48197	30375 Northwestern Hwy. Farmington Hills, MI 48334	324 E. South Street Lansing, MI 48910	111 E. Court Street Suite 1-S Flint, MI 48502
Phone	586-781-5800	734-434-9330	734-394-0650	734-245-0136	810-767-4821
ITEM					
Lump Sum Bid Price	\$12,241,358.78	\$13,800,000.00	\$13,910,000.00	\$14,867,000.00	\$15,602,000.00
Breakdown					
<i>North Gratiot Interceptor</i>	<i>\$1,525,644.63</i>	<i>\$2,071,324.00</i>	<i>\$2,702,000.00</i>	<i>\$2,596,002.00</i>	<i>\$2,147,000.00</i>
<i>Macomb Twp. Biofilter</i>	<i>\$5,054,184.18</i>	<i>\$4,833,089.00</i>	<i>\$5,094,000.00</i>	<i>\$5,926,441.00</i>	<i>\$6,355,000.00</i>
<i>Clintondale PS</i>	<i>\$1,949,999.34</i>	<i>\$2,485,589.00</i>	<i>\$2,344,000.00</i>	<i>\$2,022,676.00</i>	<i>\$2,286,000.00</i>
<i>Fraser Biofilter</i>	<i>\$3,711,530.63</i>	<i>\$4,398,824.00</i>	<i>\$3,770,000.00</i>	<i>\$4,321,881.00</i>	<i>\$4,664,000.00</i>
Alternate No. 1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Alternate No. 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Alternate No. 3	\$0.00	\$0.00	+\$295,103.00	+\$275,000.00	+\$290,000.00
Alternate No. 4	\$0.00	\$0.00	+\$289,578.00	+\$270,000.00	+\$285,000.00
Alternate No. 5	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Alternate No. 6	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Alternate No. 7	Not Used	Not Used	Not Used	Not Used	Not Used
Alternate No. 8	-\$83,000.00	-\$160,000.00	-\$570,000.00	-\$570,000.00	-\$83,000.00
Alternate No. 9	-\$362,000.00	-\$450,000.00	-\$285,300.00	-\$285,000.00	-\$330,000.00
Alternate No. 10	-\$79,680.00	-\$100,000.00	-\$82,860.00	-\$102,000.00	-\$123,000.00
Addendum Acknowledge	yes	yes	yes	yes	yes
Bid Bond	yes	yes	yes	yes	yes

NOTICE OF AWARD

Date of Issuance: October 24, 2022
Owner: Macomb Interceptor Drain Drainage Dist. Project No. WWS 2022-001
Engineer: Tetra Tech of Michigan, PC Engineer’s Project No.: 12789-21001
Project: Odor & Corrosion Improvements
Contract Name: MIDDD Odor & Corrosion Improvements Project
Bidder: L. D’Agostini & Sons, Inc.
Bidder’s Address: 15801 23 Mile Road, Macomb, MI 48042

You are notified that Owner has accepted your Bid dated **September 8, 2022** for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

MIDDD Odor & Corrosion Improvements Project (deduct alternates 9 and 10)

The Contract Price of the awarded Contract is **\$11,799,678.78**. Contract Price is subject to adjustment based on the provisions of the Contract, including but not limited to those governing changes, Unit Price Work, and Work performed on a cost-plus-fee basis, as applicable.

Four unexecuted counterparts of the Agreement and associated Contract Documents accompany this Notice of Award.

Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

- 1. Deliver to Owner **Four (4)** counterparts of the Agreement and associated Contract Documents, signed by Bidder (as Contractor).
- 2. Deliver with the signed Agreement(s) and associated Contract Documents **Four (4)** of the Contract security (such as required performance and payment bonds) and insurance documentation, as specified in the Instructions to Bidders, the General Conditions, Articles 2 and 6 and Supplementary Conditions, Article 6.

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within 10 days after you comply with the above conditions, Owner will return to you one fully signed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.03 of the General Conditions.

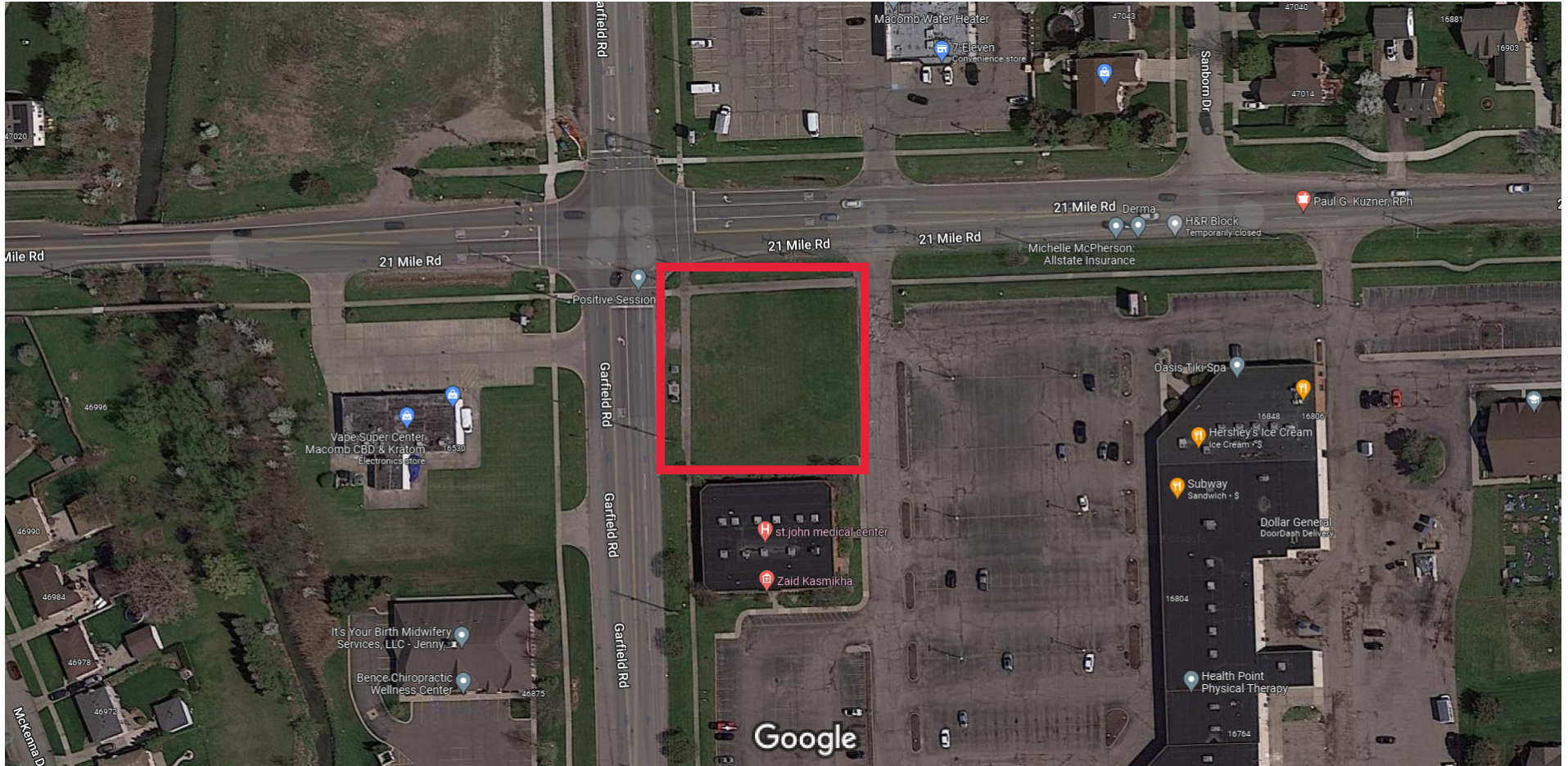
Owner: **Macomb Interceptor Drain Drainage District**

By (signature): _____

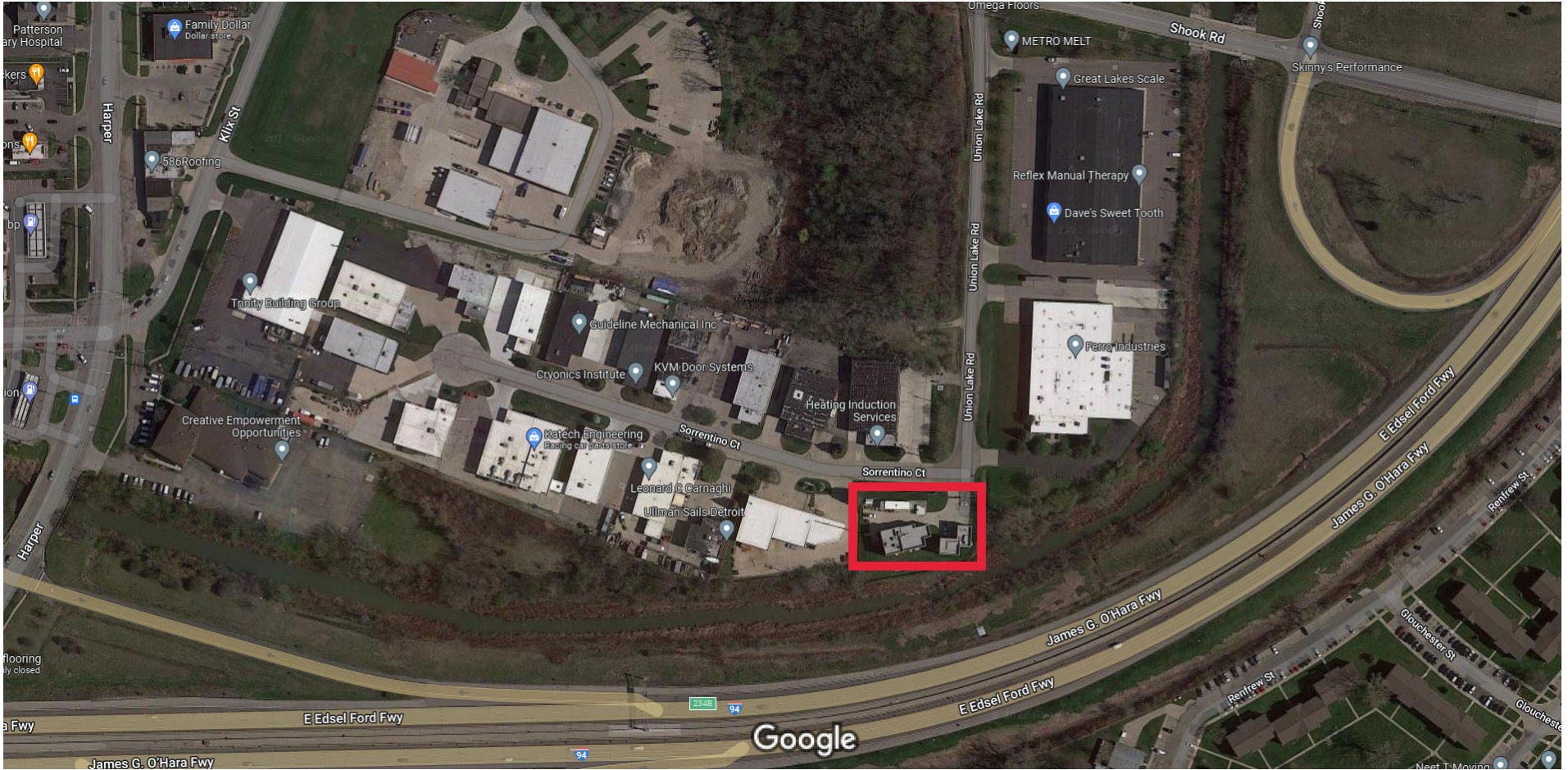
Name (printed): _____

Title: _____

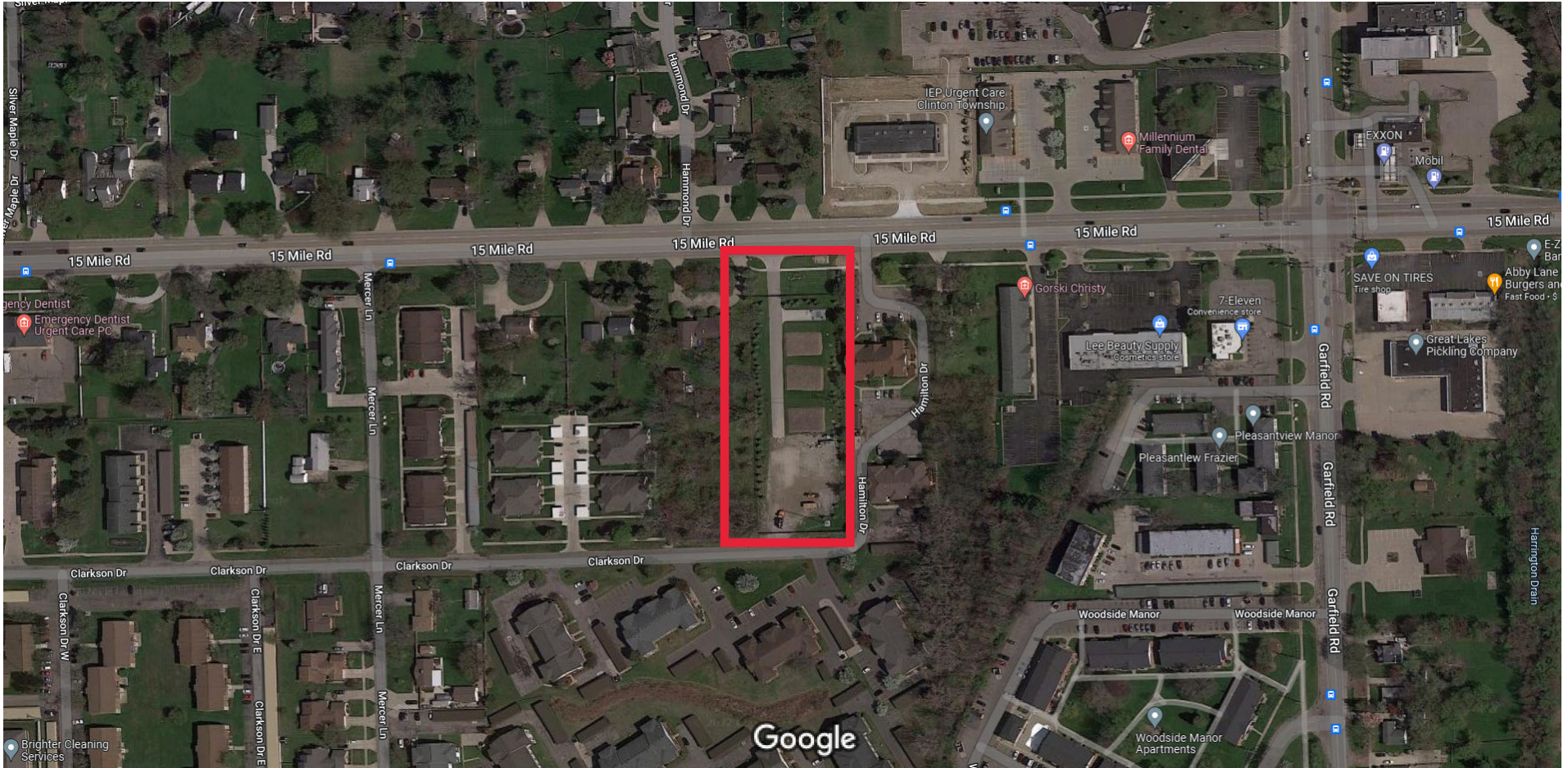
Copy: Engineer



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Candice S. Miller

Public Works Commissioner
Macomb County

To: Macomb Interceptor Drain Drainage District Board Members

From: Stephen Downing, Construction & Maintenance Manager

Date: October 24, 2022

Subject: Odor & Corrosion – Consultant CCA Recommendation

The Macomb County Public Works Office (MCPWO) solicited bids on the Michigan Inter-governmental Trade Network (MITN) for the construction of the Macomb Interceptor Drain Drainage District (MIDDD) Odor and Corrosion Improvements Project. The project proposes improvements at several locations throughout the MIDDD system and targets preventing and/or treating Hydrogen Sulfide (H₂S) gas present in the interceptors.

Under separate cover, MCPWO staff has recommended the award of the construction contract to the low-bidder, L. D'Agostini & Sons, for a base lump sum amount of \$11,799,678.78.

Tetra Tech, the designer of the project, has prepared a proposal for construction contract administration (CCA) services to perform oversight and administer the project from start to finish. MCPWO staff is confident that Tetra Tech will be able to perform the work for the proposed fee (as was the case during the design phase of the project). Additionally, the proposed CCA fee is consistent with typical percent-of-construction fees. As is true of the design contract and the construction contract, the fees have been separated by Task corresponding to each component of the project.

The action is that the Board approve the proposal from Tetra Tech for the total not-to-exceed amount of \$973,590.00 to provide construction contract administration services as outlined in their proposal.

Upon approval, MCPWO staff will prepare a change order to the current design contract with Tetra Tech dated 02/19/2021 for final execution by the Board Chair.

Attachments: Tetra Tech CCA Proposal & Matrix



October 7, 2022

Mr. Stephen Downing, PE
Macomb County Public Works Office
21777 Dunham Road
Clinton Township, MI 48036

**Re: MIDDD Odor & Corrosion Improvements
Construction Engineering Services**

Dear Mr. Downing:

Tetra Tech has appreciated the opportunity to complete design and bidding services for MIDDD Odor & Corrosion Project. Bids were recently received and an award recommendation has been made. Professional engineering services will be required throughout the construction process. Tetra Tech has prepared this proposal to assist with construction services including administering the contract and performing field observation. Tetra Tech will continue to utilize its subconsultants, Webster Environmental Associates, NTH and Wade-Trim, through this phase.

SCOPE OF SERVICES

We propose the following scope of services described by individual components:

Construction Administration

1. Attend preconstruction and progress meetings. We have assumed that during some portions of the projects, progress meetings may be bimonthly and that in the early portions of the project no meetings will be needed. We have assumed approximately 35 meetings.
2. Review contractor submittals required by the contract.
3. Review contractor pay applications, Requests for Information, and contract change requests.
4. Provide a Resident Project Representative (RPR) to observe the work during the 21-month schedule. This will be performed on a nearly full-time basis starting in Spring 2023 and running through early 2024 and part-time at other portions. We have assumed 3,100 in-field hours for this task. Daily observations will be documented in written reports and photographs.
5. Complete record drawings from records provided by Contractor.
6. Witness odor control performance tests.
7. Update the NexGen database at the end of the project to document the new assets constructed.
8. Subcontract with Wade-Trim Associates for construction survey layout (general benchmark setting).

Tetra Tech, Inc.
710 Avis Drive, Suite 100, Ann Arbor, MI 48108
Tel 734.665.6000 www.tetrattech.com



Quality Control

1. Contract with NTH to perform materials testing (density and concrete) required in the contract. This level of effort will be somewhat dependent on the efficiency and workmanship of the Contractor. We propose working from an allowance of \$118,000 for this task.

ASSUMPTIONS

1. Tetra Tech’s proposal is based on the contractor adhering to the 21-month schedule working typical 8-hour days for substantial completion. Should the contractor not complete the work in this duration or be approved for extended work times, additional budget may be required.
2. Tetra Tech may need to utilize the balance of the design services budget (we are presently under budget).
3. The O&M documents will be compilations of vendor-provided materials. Tetra Tech can prepare a comprehensive (overall) manual for additional budget.
4. Should local building authorities require inspections beyond observations provided by the RPR, additional subconsultants may need to be retained which are not in this proposal.
5. We can transfer asset data in a public domain format and not need to acquire a license for NEXGEN.
6. Only services described in the letter will be provided.

COMPENSATION

Compensation will be based on our standard hourly rates. We propose a budget of \$973,590 for the work described in this proposal.

We suggest the following budgets for each site which are the same ratios used for the construction contract:

North Gratiot	13%	\$126,600
Macomb Twp.	41%	\$399,200
Clintondale	16%	\$155,800
Fraser	30%	\$291,990

Tetra Tech is pleased that we are under budget for the design and will strive to achieve the same result for our construction authorization.



EXECUTION

We assume that the Macomb Interceptor Drain Drainage District will issue an amendment to our existing contract for these services.

Once again, thank you for the opportunity to serve the District. We look forward to a successful construction project.

Sincerely;

A handwritten signature in black ink that reads 'Brian M. Rubel'.

Brian M. Rubel, PE
Vice President

Tt Price Proposal

Labor Plan

13 Resource

Odor Control Construction

Bill Rate >

250.00	190.00	210.00	100.00	120.00	185.00	125.00	110.00	120.00	225.00	160.00	160.00	135.00
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Task Pricing Totals 973,590

Specify Add'l Fees on Setup 0

Technology Use Fee

Macomb In-System Construction

Proj Area >

973,590

Submitted to: Macomb Odor Control Construction

Contract Type: T&M

Total Labor Hrs	5,047
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B Rubel (B Rubel)	T Ard (T Ard)	R Kaliman (R Kaliman)	C Weston (C Weston)	D Weiss (D Weiss)	M Sissoko (M Sissoko)	Jeff Johnston (Jeff Johnston)	M Nolita (M Nolita)	T Lortz (T Lortz)	B Paison (B Paison)	Marcella Staniek (Marcella Staniek)	D. Warren (D. Warren)	D. Albert (D. Albert)
269	824	418	108	3,100	68	32	-	48	92	48	-	40

Labor	Subs	Travel	Mat'ls & Equip	Task Pricing Totals
750,510	201,080	12,000	10,000	973,590

Project Phases / Tasks

Construction Admin	5,031
Conforming drawings	19
Kickoff meeting	16
Progress meetings (35)	460
Pay Apps (20)	180
RFIs	224
Submittals	564
RPR	1,650
RPR	1,550
Performance Tests	-
Record drawings	68
Change order evaluation	72
O&M Review	28
General close-out	152
NexGen	44
Layout Staking	4
Quality Control	16
Material testing	16

261	824	418	108	3,100	60	32	-	48	92	48	-	40
1		2	8					8				
4	8	4										
140	280	40										
20	160											
100		100				8			8	8		
40	40	200	100		60	24			60	40		
	50			1,600								
	50			1,500								
4	16	8						40				
16	40	16										
4	4	24										
24	80	24							24			
4	4											40
8					8							
8					8							

747,030	83,380	12,000	10,000	-	852,410
2,430					2,430
3,360					3,360
96,600	9,680	2,000			108,280
35,400					35,400
44,080	11,880				55,960
103,600	16,060		10,000		129,660
201,500	7,150	5,000			213,650
189,500	12,540	5,000			207,040
	12,540				12,540
10,520	2,860				13,380
14,960					14,960
6,040	4,510				10,550
31,640					31,640
6,400					6,400
1,000	6,160				7,160
3,480	117,700				121,180
3,480	117,700				121,180

Totals

5,047	269	824	418	108	3,100	68	32	-	48	92	48	-	40
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750,510	201,080	12,000	10,000	-	973,590
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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 24, 2022

Subject: Metering Facility Rehabilitation Project - Construction Contract Close-out

In October 2020 the Board accepted the Weiss Construction bid in the amount of \$857,159.00 to rehabilitate the 3 metering facilities indicated in the table below:

Name	Location
SY-S-1	M-59, W. of Mound
SY-S-2	23 Mile Rd, W. of Ryan
WA-S-1	23 Mile & Hayes

In September 2022, Weiss Construction completed all construction work associated with this project which can now be closed out pending approval of the final balancing change order that has been included with this memo.

The attached Change Order No. 3 represents the final balancing change order for this project. The change order is a net decrease of \$77,406.87 which is a result of the zeroing out of unused allowances and quantities of unit price work. The total construction cost for the rehabilitation for the three meter facilities is \$785,761.98.

A total of \$1,450,000 was budgeted for the Design, Construction and CCA services for these three meter facilities. The total project cost is \$1,058,901.98 which is \$391,098.02 under budget.

The motion is for the Board to authorize the execution of Change Order No. 3 for the net decrease in the amount of \$77,406.87.

Attachments: Weiss Construction Change Order No. 3

**MACOMB COUNTY PUBLIC WORKS OFFICE
METERING FACILITY REHABILITATION PROJECT (SY-S-1, SY-S-2 & WA-S-1)
MCPWO PROJECT NO. WWS-2020-003
CHANGE ORDER NO. 3 - FINAL**

Date: 7-Oct-22
HRC Job No. 20180441

ENGINEER:

Hubbell, Roth & Clark, Inc.
555 Hulet Drive
Bloomfield Hills, MI 48303

OWNER:

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

CONTRACTOR:

Weiss Construction Co. LLC
41001 Grand River Avenue
Novi, MI 48375

The Contractor is directed to make the following changes in the Contract Documents.

CHANGE ORDER ITEM 1:

Description:

WCD 03 Riser Section Joint Seal

Reason for Change: Contractor was directed to perform corrective action to fix the continued joint leaking between riser sections and the riser section and the roof of the vault in the SY-S-1 Metering Facility.

PROPOSAL ITEM NO.	ITEM OF WORK	UNIT	INCREASE \ (DECREASE) QUANTITY	UNIT BID PRICE	AMOUNT INCREASE	AMOUNT DECREASE
104	Riser Section Joint Seal, SY-S-1, LSUM	LSUM	1	\$7,400.00	\$7,400.00	\$0.00
SUBTOTAL CHANGE ORDER NO. 3, ITEM NO. 1					\$7,400.00	\$0.00
NET DIFFERENCE CHANGE ORDER NO. 3, ITEM NO. 1					\$7,400.00	\$0.00

CHANGE ORDER ITEM 2:

Description:

WCD 04 Concrete Anchor Removal & Grating Clip Installation

Reason for Change: Contractor was directed to remove the previously installed concrete anchors for the grating in the Metering Facilities SY-S-1 and WA-S-1 and instead install swivel grating clips.

PROPOSAL ITEM NO.	ITEM OF WORK	UNIT	INCREASE \ (DECREASE) QUANTITY	UNIT BID PRICE	AMOUNT INCREASE	AMOUNT DECREASE
105	Concrete Anchor Removal & Grating Clip Installation	LSUM	1	\$2,669.13	\$2,669.13	\$0.00
SUBTOTAL CHANGE ORDER NO. 3, ITEM NO. 2					\$2,669.13	\$0.00
NET DIFFERENCE CHANGE ORDER NO. 3, ITEM NO. 2					\$2,669.13	\$0.00

CHANGE ORDER ITEM 3:

Description:

Observation Crew Days

Reason for Change: Observation Crew Days monies are paid directly to the engineering firm performing the construction inspection, not the contractor. These crew days costs are being removed from the total project amount owed to the contractor so that the project totals shown on the final pay application are accounted for.

PROPOSAL ITEM NO.	ITEM OF WORK	UNIT	INCREASE \ (DECREASE) QUANTITY	UNIT BID PRICE	AMOUNT INCREASE	AMOUNT DECREASE
44	Observation Crew Days - Base Contract Allowance	DAYS	(15)	\$700.00	\$0.00	(\$10,500.00)
45	Observation Crew Days - Excess of Base Contract	DAYS	(11)	\$700.00	\$0.00	(\$7,700.00)
63	Observation Crew Days - Base Contract Allowance	DAYS	(10)	\$700.00	\$0.00	(\$7,000.00)
64	Observation Crew Days - Excess of Base Contract	DAYS	(8)	\$700.00	\$0.00	(\$5,600.00)
100	Observation Crew Days - Base Contract Allowance	DAYS	(25)	\$700.00	\$0.00	(\$17,500.00)
101	Observation Crew Days - Excess of Base Contract	DAYS	(10)	\$700.00	\$0.00	(\$7,000.00)
SUBTOTAL CHANGE ORDER NO. 3, ITEM NO. 3					\$0.00	(\$55,300.00)
NET DIFFERENCE CHANGE ORDER NO. 3, ITEM NO. 3					\$0.00	(\$55,300.00)

MACOMB COUNTY PUBLIC WORKS OFFICE
METERING FACILITY REHABILITATION PROJECT (SY-S-1, SY-S-2 & WA-S-1)
MCPWO PROJECT NO. WWS-2020-003
CHANGE ORDER NO. 3 - FINAL

Date: 7-Oct-22
HRC Job No. 20180441

ENGINEER:

Hubbell, Roth & Clark, Inc.
555 Hulet Drive
Bloomfield Hills, MI 48303

OWNER:

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

CONTRACTOR:

Weiss Construction Co. LLC
41001 Grand River Avenue
Novi, MI 48375

CHANGE ORDER ITEM 4:

Description:

Balancing Quantities

Reason for Change: The following items' final quantities were different than the original contract quantities and required balancing prior to finalizing the project

PROPOSAL ITEM NO.	ITEM OF WORK	UNIT	INCREASE \ (DECREASE) QUANTITY	UNIT BID PRICE	AMOUNT INCREASE	AMOUNT DECREASE
6	FENCE, REM	LFT	(14)	\$100.00	\$0.00	(\$1,400.00)
7	FENCE GATE, 6 FOOT, FOR 72 INCH CHAIN LINK FENCE	EA	(1)	\$1,150.00	\$0.00	(\$1,150.00)
8	CHAIN LINK FENCE, REINSTALL	LFT	18.21	\$140.00	\$2,550.00	\$0.00
11	SANITARY STRUCTURE, ADJUST, ADD DEPTH (AS NEEDED)	VFT	(4)	\$350.00	\$0.00	(\$1,400.00)
15	"A3" - JOINT REPAIR & SEAL	LFT	(3)	\$150.00	\$0.00	(\$450.00)
16	"A4" - CRACKS REPAIR & SEAL	LFT	(10)	\$200.00	\$0.00	(\$2,000.00)
17	"A5" - CONCRETE SURFACE REPAIR	SFT	(5)	\$550.00	\$0.00	(\$2,750.00)
18	"A6" - REMOVE EXISTING SURFACE CONCRETE COATINGS	SFT	(100)	\$30.00	\$0.00	(\$3,000.00)
20	"A8" - SURFACE PREP & INSTALL PROTECTIVE CONCRETE COATING	SFT	63	\$45.00	\$2,835.00	\$0.00
24	"F3" - CRACKS REPAIR & SEAL	LFT	2	\$200.00	\$400.00	\$0.00
25	"F4" - CONCRETE SURFACE REPAIR	SFT	(9)	\$500.00	\$0.00	(\$4,500.00)
26	"F5" - REMOVE EXISTING SURFACE CONCRETE COATINGS	SFT	(310)	\$11.00	\$0.00	(\$3,410.00)
27	"F6" - SURFACE PREP & INSTALL PROTECTIVE CONCRETE COATING	SFT	(4)	\$33.00	\$0.00	(\$132.00)
30	"S2" - ABOVE GROUND SITE PAINTING	LSUM	(1)	\$600.00	\$0.00	(\$600.00)
39	DTE ALLOWANCE	LSUM	(1)	\$500.00	\$0.00	(\$500.00)
49	NON HAZ CONT MAT HANDLING, DISPOSAL (AS NEEDED)	TON	(20)	\$100.00	\$0.00	(\$2,000.00)
61	DTE ALLOWANCE	LSUM	(1)	\$6,000.00	\$0.00	(\$6,000.00)
69	PROPERTY PROTECTION FENCE (AS NEEDED)	LFT	87	\$9.00	\$783.00	\$0.00
71	NORMAL CLEANING, 36-INCH DIAMETER SEWER	LFT	(9.5)	\$12.00	\$0.00	(\$114.00)
72	INTERNAL VIDEO INSPECTION, 36-INCH DIAMETER SEWER	LFT	(19)	\$10.00	\$0.00	(\$190.00)
73	SEWER LINING, CIPP, 36-INCH DIAMETER SEWER	LFT	(9)	\$370.00	\$0.00	(\$3,330.00)
80	"F3" - CRACKS REPAIR & SEAL	LFT	(36)	\$125.00	\$0.00	(\$4,500.00)
81	"F4" - CONCRETE SURFACE REPAIR	SFT	16	\$520.00	\$8,320.00	\$0.00
82	"F6" - SURFACE PREP & INSTALL PROTECTIVE CONCRETE COATING	SFT	29	\$33.00	\$957.00	\$0.00
85	"S2" - ABOVE GROUND SITE PAINTING	LSUM	(1)	\$600.00	\$0.00	(\$600.00)
93	DTE ALLOWANCE	LSUM	(1)	\$1,000.00	\$0.00	(\$1,000.00)
99	PERMITS (ALLOWANCE)	LSUM	(0.83)	\$10,775.00	\$0.00	(\$8,995.00)

SUBTOTAL CHANGE ORDER NO. 3, ITEM NO. 4 \$15,845.00 (\$48,021.00)

NET DIFFERENCE CHANGE ORDER NO. 3, ITEM NO. 4 \$0.00 (\$32,176.00)

TOTAL NET CHANGE FOR CHANGE ORDER NO. 3 (\$77,406.87)

MACOMB COUNTY PUBLIC WORKS OFFICE
 METERING FACILITY REHABILITATION PROJECT (SY-S-1, SY-S-2 & WA-S-1)
 MCPWO PROJECT NO. WWS-2020-003
 CHANGE ORDER NO. 3 - FINAL

Date: 7-Oct-22
 HRC Job No. 20180441

ENGINEER:

Hubbell, Roth & Clark, Inc.
 555 Hulet Drive
 Bloomfield Hills, MI 48303

OWNER:

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

CONTRACTOR:

Weiss Construction Co. LLC
 41001 Grand River Avenue
 Novi, MI 48375

Original Contract Price	\$857,159.00
Total of previous Change Orders to date	\$6,009.85
Current Contract Price adjusted by the previous Change Orders	\$863,168.85


The Contract Price due to this Change Order will be DECREASED BY **(\$77,406.87)**

The revised Contract Price including this Change Order \$785,761.98

Contract Agreement Date: January 7, 2021

Original Contract Completion Date: June 6, 2021
 Actual Contract Completion Date: October 7, 2022

ITEMS

Authorized By:	<u>Stephen Downing</u> Construction & Maintenance Manager, MCPWO 	Date: _____
Recommended By:	<u>Bradley Shepler, P.E., CCCA</u> Associate, Hubbell, Roth & Clark, Inc.	Date: <u>10/7/2022</u>
Accepted By:	<u>Josh Wittenbach</u> Project Manager, Weiss Construction Co. LLC	Date: _____

<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 – 7.4212%							
	Clinton – 21.2122%							
	Fraser – 4.1667%							
	Harrison – 6.3461%							
	Lenox – 1.1179%							
	Macomb – 14.0617%							
	New Haven – 0.8255%							
	Shelby – 9.7911%							
	Sterling Heights – 30.6812%							
	Utica – 1.6170%							
	Washington – 2.7596%							
		Astorino		Access Interactive LLC	\$ 7,145.74	Invoice #INV000109874 - 07.07.22	SCADA Server Upgrade	
		Astorino		Access Interactive LLC	\$ 17,372.00	Invoice #INV000110277 - 09.07.22	SCADA Server	
		Astorino		Aquasight	\$ 83,675.00	Invoice #000726 - 09.05.22	Covid-19 Monitoring - Grant	\$ 69,638.00
		Astorino		Aquasight	\$ 69,639.00	Invoice #000728 - 09.28.22	Covid-19 Monitoring - Grant	\$ 696,505.00
		Astorino		City of Mt. Clemens	\$ 19,192.62	Invoice #28004954 - 09.07.22	Monthly Utilities - July 2022	
		Astorino		DTE Energy	\$ 1,032.61	Account #9100 335 6116 8 - 08.01.22	Monthly Electric 06.30.22 - 07.29.22	
		Astorino		DTE Energy	\$ 1,136.24	Account #9100 335 6116 8 - 08.31.22	Monthly Electric 07.30.22 - 08.30.22	
		Astorino		Fishbeck	\$ 676.50	Invoice #415091 - 09.09.22	Garfield Interceptor	\$ 27,530.86
		Astorino		Fishbeck	\$ 14,859.50	Invoice #415101 - 09.09.22	Wastewater Master Plan 08.06.22 - 09.02.22	\$ 275,415.99
		Astorino		Fishbeck	\$ 948.00	Invoice #415079 - 09.09.22	GLWA Assistance 08.06.22 - 09.02.22	
		Astorino		Fishbeck	\$ 1,659.00	Invoice #415769 - 10.05.22	GLWA Assistance 09.03.22 - 09.30.22	
		Astorino		Fishbeck	\$ 1,519.00	Invoice #415817 - 10.05.22	Confined Space/GI - Hydraulic Analysis	\$ 26,011.86
		Downing		FK Engineering Associates	\$ 68,558.82	Invoice #22-058-027 - 09.08.22	Segment 6 Rehabilitation 08.07.22 - 09.03.22	\$ 876,611.45
		Downing		FK Engineering Associates	\$ 95,670.87	Invoice #20-152-021 - 09.08.22	Romeo Arm Lining Segment 5 CCA - August 2022	\$ 1,736,138.63
		Astorino		FK Engineering Associates	\$ 836.00	Invoice #22-061-002 - 09.13.22	Annual Interceptor Inspection	\$ 4,137.60
		Baker		KHVVPF	\$ 797.50	Invoice #48711 - 09.01.22	Master Plan	
		Baker		KHVVPF	\$ 525.00	Invoice #48712 - 09.01.22	Highland Park Review	
		Downing		Meadowbrook Insurance	\$ 20,450.80	Invoice #10611 - 09.08.22	Segment 5 Project - Policy Extension	
		Downing		Meadowbrook Insurance	\$ 33,583.10	Invoice #10613 - 09.08.22	Segment 5 Project - Policy Extension	
		Downing		Meadowbrook Insurance	\$ 30,523.48	Invoice #10592 - 09.08.22	Segment 5 Project - Policy Extension	
		Downing		Meadowbrook Insurance	\$ 34,561.98	Invoice #10612 - 09.08.22	Segment 5 Project - Policy Extension	
	Downing		Meadowbrook Insurance	\$ 25,522.50	Invoice #10614 - 09.08.22	Segment 5 Project - Policy Extension		
	Downing		Meadowbrook Insurance	\$ 12,812.50	Invoice #10587 - 09.08.22	Segment 5 Project - Policy Extension		
	Downing		Meadowbrook Insurance	\$ 952.00	Invoice #10688 - 09.26.22	Garfield Interceptor Lining Pilot Project		
	Astorino		METCO Consulting Services	\$ 10,478.10	Invoice #1717-38 - 10.03.22	Flow Control Services 08.29.22 - 10.02.22	\$ 61,640.39	
	Astorino		NexGen	\$ 28,196.50	Invoice #3356 - 07.01.22	Annual License/Support/Contractor Portal - IT to Reimburse \$13,390		
	Astorino		NTH Consultants, Ltd	\$ 6,213.00	Invoice #630719 - 09.30.22	2023 Interceptor Inspection Program - Design	\$ 73,896.50	
	Downing		Oscar Renda Contracting	\$ 38,120.98	Invoice #22-320 - 09.22.22	Installation of Odor Control Media - ST-S-3, ST-S-1		
	Downing		Oscar Renda Contracting	\$ 255,330.00	Invoice #WO19024 Est #25 - 09.30.22	Romeo Arm Segment 5 Lining	\$ 17,589,656.95	
	Downing		Ric-Man Construction	\$ 342,253.42	Invoice #WO21026 Est #13 - 09.27.22	Segment 6 Services 09.01.22 - 09.28.22	\$ 8,935,258.10	
	Astorino		TBM Property Management LLC	\$ 750.00	Invoice #726 - 10.01.22	Storage Rental - July 2022 - August 2022		
	Downing		Tetra Tech, Inc.	\$ 2,000.00	Invoice #51953712 - 09.21.22	Odor & Corrosion Design 7.30.22 - 8.26.22	\$ 33,249.22	
	Downing		Tetra Tech, Inc.	\$ 4,562.50	Invoice #51964760 - 09.30.22	Odor & Corrosion Design 8.27.22 - 9.30.22	\$ 28,686.72	

<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>
		Astorino	Verizon	\$ 1,318.69	Invoice #9909541461 - 06.23.22	Monthly Cellular - 05.24.22 - 06.23.22 (Eq. Fund)	
		Astorino	Verizon	\$ 1,506.29	Invoice #9909541461 - 06.23.22	Monthly Cellular - 05.24.22 - 06.23.22	
		Astorino	Verizon	\$ 1,298.49	Invoice #9911862242 - 07.23.22	Monthly Cellular - 06.24.22 - 07.23.22 (Eq. Fund)	
		Astorino	Verizon	\$ 1,767.43	Invoice #9911862242 - 07.23.22	Monthly Cellular - 06.24.22 - 07.23.22	
	<u>Biofilter</u>	Astorino	City of Fraser	\$ 861.37	Invoice #22-316 - 08.16.22	Monthly Utilities 07.15.22 - 08.16.22	
	<u>CPS</u>	Astorino	Clinton Township Treasurer	\$ 2,485.27	Invoice #22-308 - 08.29.22	Monthly Water - 07.26.22 - 08.23.22	
		Astorino	De-Cal, Inc.	\$ 5,991.20	Invoice #WO9221119 - 08.22.22	Install 24" Plug Valve	
		Astorino	De-Cal, Inc.	\$ 609.20	Invoice #WO9222136 - 09.26.22	Backflow Testing	
		Astorino	Duperon Corporation	\$ 2,361.25	Invoice #24192 - 09.29.22	Parts and Labor on Mechanical Screen Rake	
		Astorino	Home Depot	\$ 509.63	Invoice #5014020 - 08.30.22	Paint/Supplies	
	<u>METERS</u>	Astorino	Aquasight	\$ 18,000.00	Invoice #000724 - 09.05.22	ACE Install Storm Event and Rain Heatmaps	
	<u>NGI</u>	Astorino	Fishbeck	\$ 13,020.16	Invoice #415096 - 09.09.22	Interceptor Inspection Program 07.09.22 - 09.02.22	\$ 82,855.53
		Astorino	Fishbeck	\$ 1,712.00	Invoice #415823 - 10.05.22	Interceptor Inspection Program 09.03.22 - 09.30.22	\$ 75,750.53
		Astorino	JGM Valve	\$ 2,207.41	Invoice #22-15325 - 09.16.22	Plug and Check Valve	
		Astorino	National Industrial Maintenance	\$ 1,000.00	Invoice #42102 - 12.15.21	Jet Vac Cleaning	
		Astorino	National Industrial Maintenance	\$ 1,726.30	Invoice #42542 - 04.14.22	Jet Vac Cleaning	
	<u>OMID</u>	Astorino	Access Interactive LLC	\$ 1,163.26	Invoice #INV000109874 - 07.07.22	SCADA Server Upgrade	
		Astorino	Access Interactive LLC	\$ 2,828.00	Invoice #INV000110277 - 09.07.22	SCADA Server	
		Baker	KHVPF	\$ 1,127.50	Invoice #48821 - 10.01.22	LOTO/Operations Agreement Revisions	
		Total		\$ 1,293,047.71			

Budget to Actual
MIDDD
As of Sept 30, 2022 = 25%

DESCRIPTION	2023 FINAL BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
GLWA-OMID	48,014,249		12,004,906	36,009,343	25.0%
OMID O&M	4,358,913		1,089,728	3,269,185	25.0%
Settlement	100,000			100,000	0.0%
Reimbursements	225,000		1,220	223,780	0.5%
PY Revenue-Fund Balance	16,738,220			16,738,220	0.0%
Reimb-Local Communities	17,159,080			17,159,080	0.0%
COVID Grant	-		342,485		
Interest	50,000		29,475	20,525	59.0%
<i>Total Revenue Accounts</i>	86,645,462	-	13,467,815	73,520,133	15.5%
EXPENSE ACCOUNTS					
GLWA-OMID	48,014,249		12,004,906	36,009,343	25.0%
OMID O&M	4,358,913		1,089,728	3,269,185	25.0%
Public Works Wastewater Disposal Division	1,889,760			1,889,760	0.0%
Office Operations/Insurance	343,100		32,966	310,134	9.6%
SCADA	461,990		39,681	422,309	8.6%
<u>Engineering</u>					
Replenish reserve from CPS refunding	618,680			618,680	0.0%
Drop shaft rehab Design	1,600,000		177,965	1,422,035	11.1%
METCO As Needed	75,000		18,595	56,405	24.8%
Data Review-Aquasight	58,000		18,000	40,000	31.0%
Annual Meter Dye Testing	50,000		26,181	23,819	52.4%
As Needed Engineering	250,000		38,130	211,870	15.3%
Odor and Corrosion Construction/CCA	3,280,000		4,223	3,275,777	0.1%
GLWA Assistance	30,000		2,492	27,508	8.3%
General Construction/Engineering Contingency-All Projects	450,000			450,000	0.0%
As Needed Applied Science	25,000			25,000	0.0%
As Needed Metco	60,000		7,433	52,567	12.4%
Level Sensors/Pressure/H2S-Meters	214,200			214,200	0.0%
Odor and Control-Construction	7,010,000			7,010,000	0.0%
Segment 6 Construction Administration	685,530		235,500	450,030	34.4%
Segment 6 Construction/CCA from reserve	-		882,028	(882,028)	100.0%
SY-S-1, SY-S-2, & WA-S-1 Meter Const Admin/Rehab	927,790		1,620	926,170	0.2%
Segment 5 Construction Admin	972,500		180,072	792,428	18.5%
COVID Grant	-		342,485	(342,485)	100.0%
Segment 5 Construction	611,240		772,318	(161,078)	126.4%
Legal Services	75,000		4,277	70,723	5.7%
Clintondale PS O&M	870,000		82,574	787,426	9.5%
NGI O&M	307,500		13,275	294,225	4.3%
Meters O&M	228,400		12,078	216,322	5.3%
Control Structures and Pump Station O&M	281,370		46,895	234,475	16.7%
Biofilter O&M	25,500		2,503	22,997	9.8%
Contribution Life Cycle Reserve	184,300			184,300	0.0%
Interceptor O&M	9,898,300		371,578	9,526,722	3.8%
Stormwater Pump Stations	131,000		32,750	98,250	25.0%
Sewage Disposal Charges - Mt. Clemens	200,000		64,146	135,854	32.1%
Debt Service - Revenue Bonds	2,458,140		614,535	1,843,605	25.0%
<i>Total Expense Accounts</i>	86,645,462	-	17,118,935	69,526,528	19.8%

	O&M Balance 6/30/2022	O&M	Total 9/30/2022
Cash - Operating	34,922,137	(3,651,120)	31,271,017
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		13,467,815	13,467,815
Expenditures		17,118,935	17,118,935
			0
Equity*	34,922,137		31,271,017

Detail of 2022 Equity*

Reserve at 6/30/2022	10,665,604
Construction/ Engineering Reserve	23,088,928
Life Cycle Reserve	1,167,605