

MACOMB INTERCEPTOR DRAIN
INTRA-COUNTY DRAINAGE BOARD
DECEMBER 13, 2021
10:30 A.M.
AGENDA

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

**Call in Number: 1-423-720-0191
Access Code: 311 154 467**

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for December 13, 2021	
3. Approval of Minutes for November 8, 2021	4
4. Public Participation	
5. Project Updates – Stephen Downing	6
6. Meter Facility Rehabilitation HRC Change Order No. 3 – Additional CCA Services - Stephen Downing	24
Motion: To approve Change Order #3 with HRC for \$58,000 for additional Construction Contract Administration costs incurred during the meter rehabilitation project.	
7. Segment 5 Rehabilitation – Change Order - Builder's Risk Claim Settlement – Stephen Downing	29
Motion: To approve the Oscar Renda Change Order No. 1 for the net increase of \$349,917.81 and the additional 22 days to the schedule.	
Motion: To approve the FK Engineering Change Order No. 5 for the net increase of \$77,774.90.	
8. Segment 5 Rehabilitation – Change Order - Permanent Electrical Equipment for Pumps at CS-12 – Stephen Downing	34
Motion: To approve the Oscar Renda Change Order No. 2 for the net increase of \$1,187,585.58 and the addition of 30 days to the schedule.	

9. Segment 5 Rehabilitation – Change Order - Northeast Sewarage Pump Station (NESPS) Related Delays – Stephen Downing 42

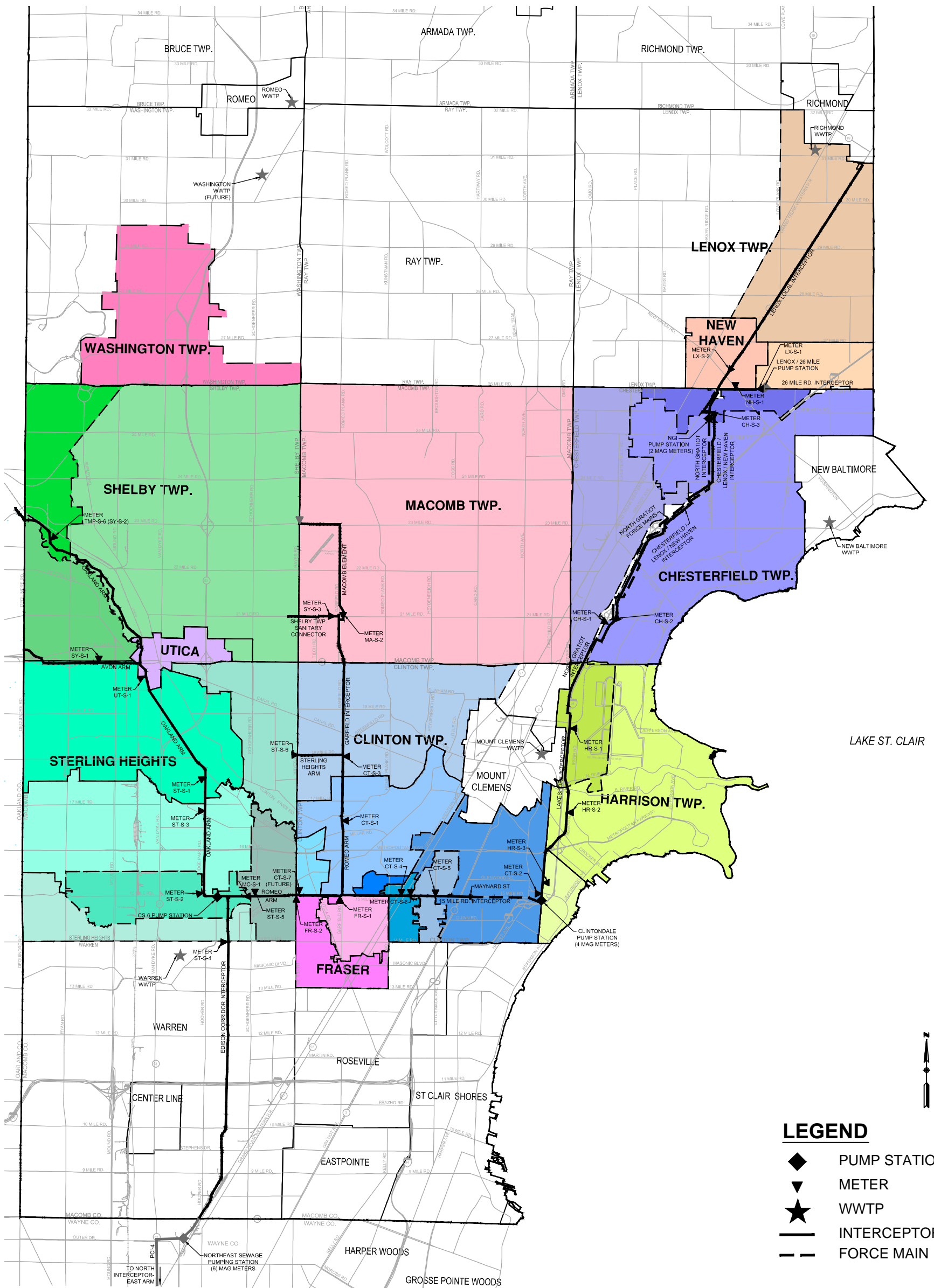
Motion: To approve the Oscar Renda Change Order No. 3 for the net increase of \$327,244.93 and the addition of 29 days to the schedule.

10. Consideration for approval of invoices (see attached) 51

11. Financial Report – Bruce Manning 53

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 in the Office of the Macomb County Public Works Commissioner, 21777 Dunham Clinton Township, Michigan, and virtually per the State Public Act 254 of 2020, on November 8, 2021, at 10:19 A.M.

PRESENT: Candice S. Miller, Chair
Don VanSyckel, Member
Bryan Santo, Member

ALSO PRESENT: Brian Baker, Chief Deputy, Stephen Downing, Construction & Maintenance Manager, Bruce Manning, Financial Manager, Vince Astorino, Operations & Flow Manager, Kellie Kource, Drain Account Specialist, Norb Franz, Communications Manager, Dan Acciavatti, Deputy Government Relations, Macomb County Public Works

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

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of October 18, 2021 were presented. A motion was made by Mr. Santo, supported by Mr. VanSyckel 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 the board that work on Segment 5 dewatering issues are resolved and they have continued to excavate the lower half of the interceptor. A safety training was complete as a precaution. Oscar Renda is prepping for the spray lining activities that should start within a month.

Phase 2 grouting is being done in the evening for flow control purposes.

The Meter Rehab project is very close to being completed, and our team will do a punch list walk through to close out the project.

The Segment 6 rehabilitation excavation has begun.

The Interceptor Inspection Program has slowed due to Doetsch being down for a lot of the month due to equipment and weather issues. They will be back on track soon.

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

Adopted: YEAS: 3
NAYS: 0

The Chair presented the invoices totaling \$1,440,260.90 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 10:52 a.m.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

STATE OF MICHIGAN
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taken by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on November 8, 2021 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: 11/8/21



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: December 13, 2021

Subject: Construction Projects Status Updates for December 2021 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. Chemical Grout injection around the eye of the Interceptor within the CS-12 Shaft.
4. Excavation and demolition of the Interceptor within the CS-12 Shaft.
5. Oscar Renda continued preparation work prior to starting the spray-lining activity between Fontana and Hayes, including:

- Installation of the temporary half-height bulk heads at the manholes both upstream and downstream of the area to be spray-lined.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	10/21/2020	\$28,807,500.00
Total Spent to Date	12/1/2021	\$8,328,443.79
Remaining Budget	12/1/2021	\$20,479,056.20



Figure 1 - Chemical Grouting at the Tunnel Eye



Figure 2 – Chemical Grouting at the Tunnel Eye



Figure 3 – Demolition of the existing Concrete Interceptor within the CS-12 Shaft



Figure 4 - Top Plate for Half-Height Bulkhead at MH-05

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 continued work in the Garfield Interceptor near Hall Road. This work is occurring during the evening and overnight hours due to flow storage during normal working hours.
2. The wet-weather conditions have impacted the crew's ability to access the Interceptor on a consistent basis.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	6/24/2020	\$3,000,000.00
Total Spent to Date	12/1/2021	\$2,763,895.65
Remaining Budget	12/1/2021	\$236,104.35



Figure 5 - Garfield Interceptor MH-19 Setup Near Hall Road



Figure 6 – Confined Space Entry & Ventilation Setup



Figure 7 - Typical Infiltration Near MH-019

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 Contractor is scheduled to conduct the punch list walk-through in mid-December.
3. The Certificate of Substantial is expected to be issued after completion of the punch list walk-through.
4. Weiss did not submit a pay application for the month of November.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	12/3/2020	\$857,159.00
Total Spent to Date	11/1/2021	\$655,293.87
Remaining Budget	11/1/2021	\$201,865.13

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 is scheduled to start in August 2021 and 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 Contractor continued excavation for the CS-13 Structure.
3. The Contractor performed the required cleaning of the Interceptor between Garfield and MH-04, a post-cleaning inspection by the Engineering team is scheduled for mid-December.

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 Spent to Date	12/1/2021	\$1,507,912.32
Remaining Budget	12/1/2021	\$12,166,297.38



Figure 8 – Work on the Temporary Earth Retention System (TERS)



Figure 9 – Construction of the CS-13 TERS

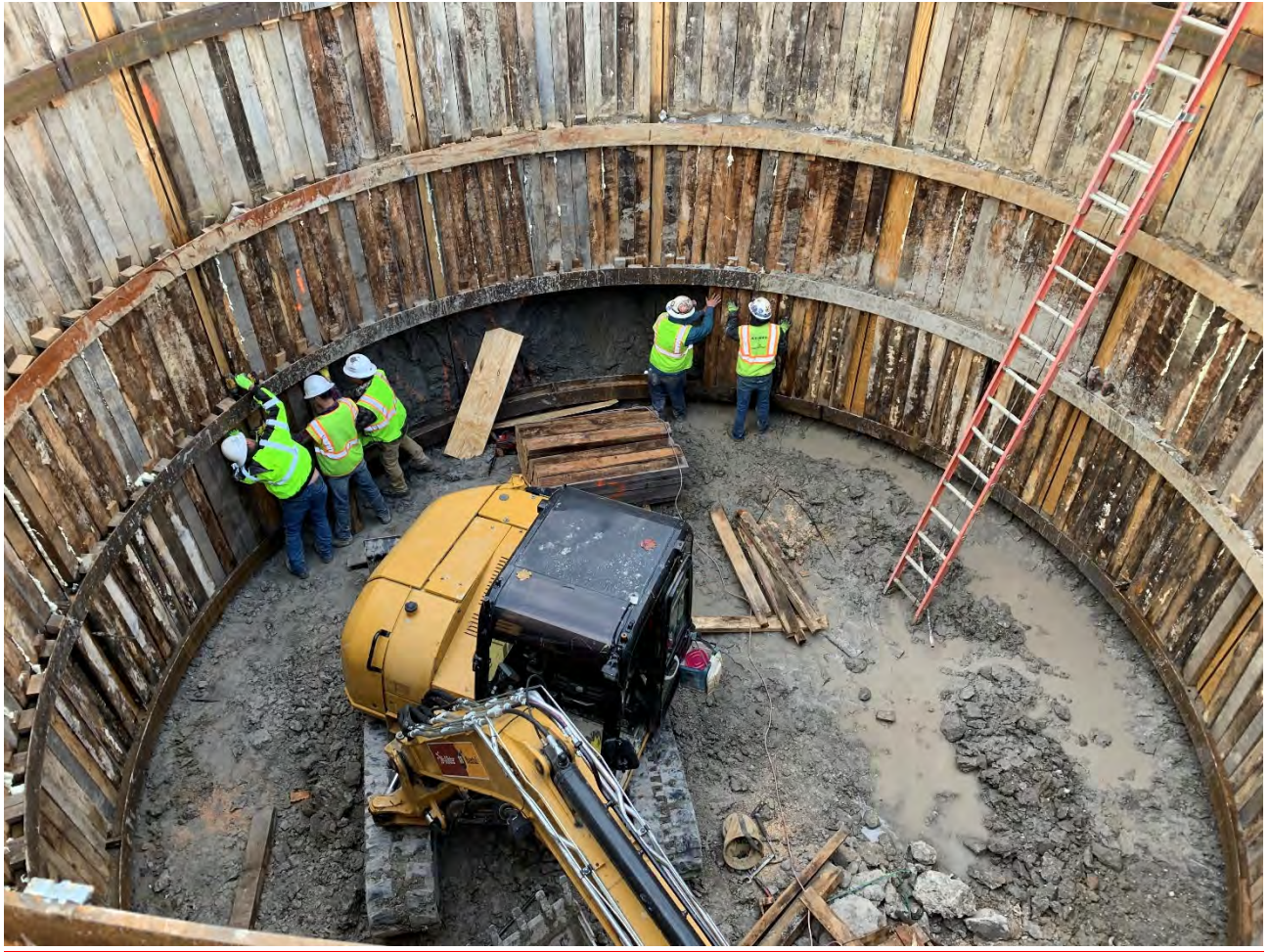


Figure 10 - Construction of the CS-13 TERS

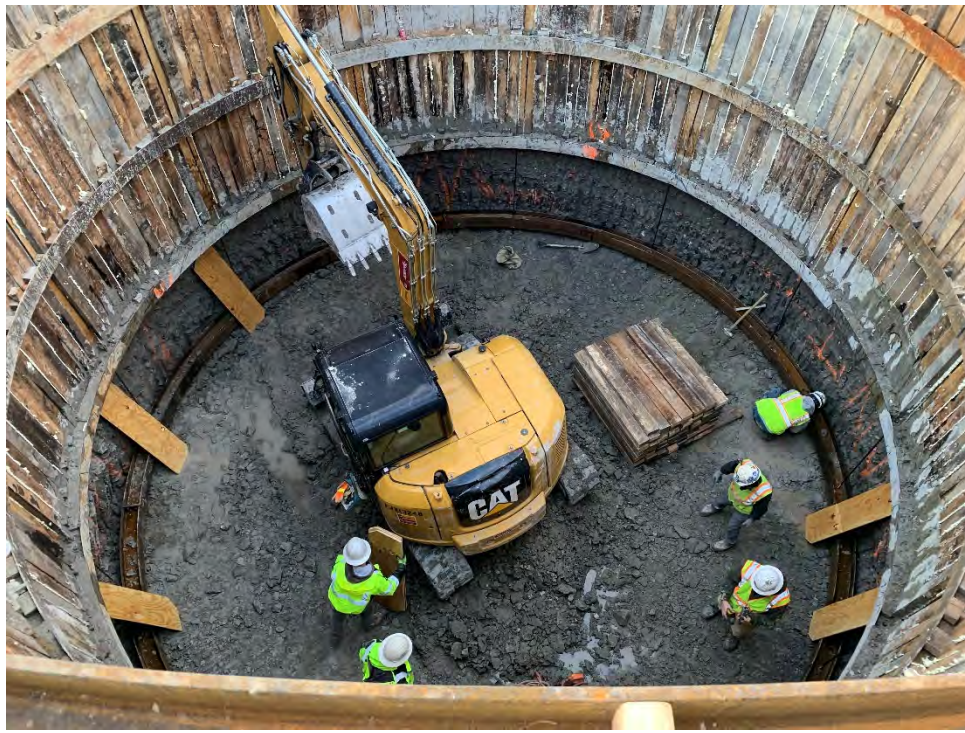


Figure 11 – Installation of the wood lagging Boards for the TERS

OFFICE LOCATION: 21777 Dunham Road, Clinton Township, Michigan 48036 • Phone: 586-469-5325 • Fax: 586-469-5933
ENGINEERING • Phone: 586-469-5910 • Fax: 586-469-7693 ♦ **SOIL EROSION** • Phone: 586-469-5327 • Fax 586-307-8264



Figure 12 – Grout Placement Behind the TERS

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 October 2021.

Significant project tasks that have occurred over the past month:

1. The Contractor completed the inspection of the Chesterfield Interceptor.
2. The Contractor started the manned-entry inspection of the large diameter pipes in the Garfield Interceptor at 21 Mile and Garfield.
3. The Contractor did not submit a pay application for the month of November.
4. The maps of the inspection progress are attached for reference.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	1/19/2021	\$280,034.00
Total Spent to Date	11/1/2021	\$62,703.85
Remaining Budget	11/1/2021	\$217,330.15

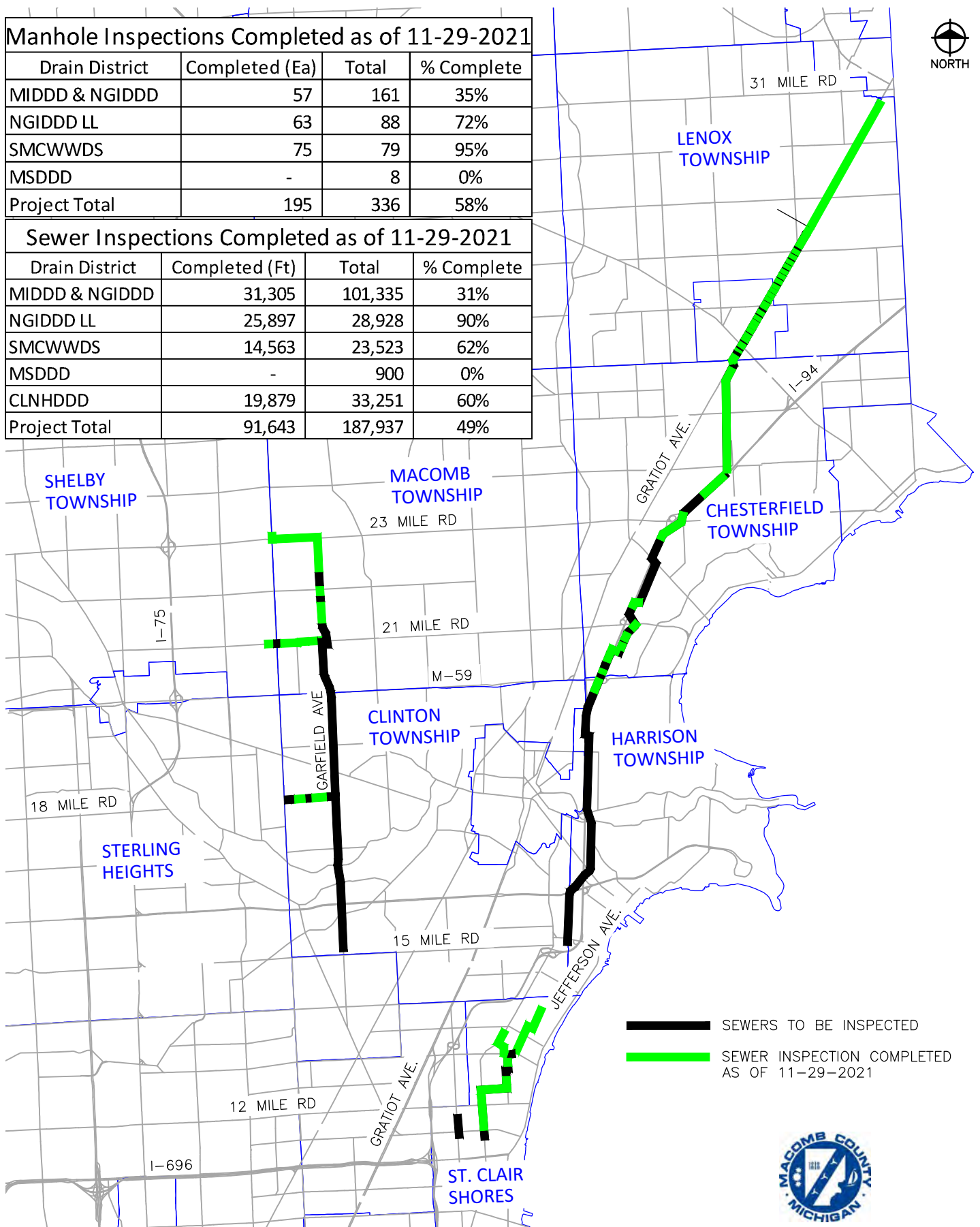
***This Table reflects the MIDDD costs only.**

Manhole Inspections Completed as of 11-29-2021

Drain District	Completed (Ea)	Total	% Complete
MIDDD & NGIDDD	57	161	35%
NGIDDD LL	63	88	72%
SMCWWDS	75	79	95%
MSDDD	-	8	0%
Project Total	195	336	58%

Sewer Inspections Completed as of 11-29-2021

Drain District	Completed (Ft)	Total	% Complete
MIDDD & NGIDDD	31,305	101,335	31%
NGIDDD LL	25,897	28,928	90%
SMCWWDS	14,563	23,523	62%
MSDDD	-	900	0%
CLNHDDD	19,879	33,251	60%
Project Total	91,643	187,937	49%



- SEWERS TO BE INSPECTED
- SEWER INSPECTION COMPLETED AS OF 11-29-2021



Candice S. Miller
MACOMB COUNTY PUBLIC WORKS COMMISSIONER



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: December 13, 2021

Subject: Meter Facility Rehabilitation - HRC Change Order No. 3 – Additional CCA Services

The rehabilitation of the SY-S-1, SY-S-2 and WA-S-1 metering facilities is in the final phases. The Owner, Engineer and Contractor are conducting a punch list walk-through during the second week of December and the project will achieve final completion sometime in January. The construction phase of the project commenced in the later part of Spring 2021 with a projected duration of 12 weeks. As with many projects throughout the past 18 months we have seen a wide range of issues resulting in construction delays. The procurement lead times for equipment and material, transportation, man-power shortages, material availability, just to name a few. Additionally, the DTE schedule for energization of new lines and de-energization of the old lines was delayed several times, resulting in additional costs to Weiss that were not passed on to the Owner. This project encountered many of the aforementioned challenges, which resulted in the delayed completion of the project. As a result, the HRC Engineering staff were required to provide an additional level of effort. This was to address two main components: 1) Assist in the mitigation of the many negative factors that impacted the schedule and 2) additional staff hours in the field to monitor the Contractor's activity.

The additional Construction Contract Administration costs that were incurred by HRC during this project are \$58,000. The HRC proposal dated October 27, 2021, is attached to this memo for reference, it provides a detailed explanation and breakdown of the additional costs. The Weiss contract is forecasted to be approximately \$25,000 under the contract amount which will help offset the additional HRC costs. The proposed costs are reasonable based on the circumstances, especially since Weiss encountered additional costs that were not passed to the Owner.

The recommendation is that the Board approve HRC Change Order No. 3 for the net increase of \$58,000 to the contract.

Attachments: HRC Change Order No. 3
HRC Proposal October 27, 2021

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

		Change Order	03
Date of Issuance:	12/01/2021	Effective Date:	12/01/2021
Owner:	Macomb Interceptor Drain Drainage District	Design Project No.:	WWS-2018-009
Engineer:	Hubbell, Roth & Clark, Inc.	Construction Project No.:	WWS-2020-003
Project:	Metering Facility Rehabilitation Project (SY-S-1, SY-S-2, & WA-S-1)		

The Contract is modified as follows upon execution of this Change Order: Construction Contract Administration (“CCA”) services are being increased due to the extension of the construction schedule for several reasons, which include material procurement lead time, delays by the energy provider (DTE) and coordination with the Contractor (Weiss) and their respective sub-contractors. The HRC proposal dated October 27, 2021 (attached for reference) provides a detailed explanation and breakdown of the required additional costs.

Total this Change Order \$ 58,000.00

The original Contract Sum was \$ 20,325.00

The net change from previously approved Change Order No. 2: \$ 149,200.00

The Contract Sum prior to this Change Order: \$ 215,140.00

The Contract Sum prior to this Change Order will be increased by: \$ 58,000.00

The new Contract Sum, including this Change Order, will be: \$ 273,140.00

The Contract Time will be [increased/decreased/unchanged by]: N/A (days)

The date of Substantial Completion as of the date of this Change Order, therefore, is: N/A

ACCEPTED:

By: _____
Owner (Authorized Signature)

ACCEPTED:

By: _____
Engineer (Authorized Signature)

Title MIDDD Board Chairperson

Date _____

Title _____

Date _____

October 27, 2021

Macomb County Public Works Office
21777 Dunham Rd
Clinton Township, Michigan 48036

Attn: Mr. Stephen Downing, Construction & Maintenance Manager

Re: Metering Facility Rehabilitation Project (Sy-S-1, SY-S-2 & WA-S-1)
MCPWO Project #WWS-2020-003
Construction Engineering Services Amendment

HRC Job No. 20180441

Dear Mr. Downing,

Thank you for the opportunity to allow Hubbell, Roth, & Clark, Inc. (HRC) to assist with professional construction engineering services for the subject project, including contract administration and full-time construction observation. The subject project is nearing completion. **HRC's current contract was based on the estimate of probable cost developed for your office** and the scope of work as outlined in our proposal letter dated October 14, 2020. As shown in the Proposal Letter, HRC had a current base construction administration services and full-time observation contract in the amount of \$120,300.

It is in our opinion that the project included additional items and communication, coordination, and scheduling efforts that we believe constitute a change in the scope of services currently being provided by HRC under contract with the Macomb County Public Works Office (MCPWO). Overall, our original scope contemplated a 12-week construction period. The Contractor needed 17 plus weeks to complete the project. A significant portion of the additional work performed by HRC was due to additional meetings, change management, and schedule extensions requested by the Contractor. These changes in scope, described in this amendment letter, were needed to provide the MCPWO with a successful project that meets your expectations and long-term goals.

HRC requests that the MCPWO consider an amendment to the current base construction administration services and full-time observation contract in the amount of \$58,000. This amount represents the approximately 286 additional hours of HRC staff time needed for contract administration and approximately 210 additional hours for full time observation.

The additional services and scope alterations necessary to successfully complete this project are summarized as follows:

Additional Meetings & Communication – **HRC's proposal for this project** provided a budgetary estimate of staff time based on an assumed construction schedule and administrative expectations. The proposal assumed a 12-week construction schedule and bi-weekly progress meetings. It was assumed that HRC would attend and memorialize up to six (6) progress meetings and our estimated staff time for this task was based on 80 hours of work to prepare, attend, and memorialize each of these meetings. This works out to approximately 13.3 hours per meeting, which based on our experience with this project thus far, is a good estimate of the cumulative time spent amongst all HRC departments involved in this project per meeting.

At the start of construction, it was requested by MCPWO Construction Services staff that weekly progress meetings be held. As of this date, we have held 22 progress meetings. In our opinion, these additional meetings and communications have helped the future success of the project, however, it was not originally anticipated nor projected in our estimated fee.

HRC estimated the cost for the additional time to prepare, attend and summarize these meetings, provide the additional communications necessary to fulfill the expectations of the MCPWO Construction Services division was estimated at \$26,500.

Additional Construction Observation – In HRC's proposal for this project, it was noted that actual costs for full-time construction observation services are heavily dependent on Contractor capabilities and performance. HRC's original estimate of hours for full-time construction observation was based on a 12-week construction period. Thus far, the contractor worked 16 consecutive weeks (between April 26th and August 13th) and has worked approximately five (5) additional days on an agreed to as-needed schedule since then. This accounts for approximately 17 weeks of full-time observation required for this project. For estimating purposes, we had assumed approximately 45 hours a week for full-time observation, coordination, and periodic inspections. Our project tracking spreadsheets indicate that we met those projections, however, the extended schedule and "as-needed" full-time observation and coordination was not originally anticipated nor projected in our estimated fee.

HRC has tracked this additional full-time observation at 8 hours per day and has estimated the additional coordination efforts at 2 hours a week (210 hours total). Therefore, the estimated cost to coordinate and perform the additional full-time observation was \$23,000.

Additional Pay Application Processing – HRC's proposal for this project assumed a 12-week construction period which would account for up to four (4) pay applications to process. Thus far, HRC and your office have processed six (6) pay applications and will likely need to process one to two more to finalize the project. HRC assumed approximately 12 hours per pay application to coordinate daily reports between the observer and the contractor, review construction progress and tracking with the contractor, collect all the necessary paperwork and signatures for the pay application, and submit all the required documentation to the MCPWO. This work has generally taken longer than estimated and HRC is comfortable with our assumptions. However, the additional number of pay applications to coordinate and process was not originally anticipated nor projected in our estimated fee.

HRC estimated the cost for the additional time to prepare and submit an additional three (3) to four (4) pay applications was estimated at 36 hours and \$4,000.

Additional Tracking and Support of Construction Progress – HRC's proposal for this project assumed a 12-week construction period and estimated staff hours to track and support the progress of the Work over that assumed period. HRC projected approximately 7 – 8 hours per week split amongst civil, process, structural and electrical staff to sufficiently track the construction progress and support the full-time observer. The time projected supporting and tracking the construction progress was well utilized during the project. However, the additional duration of the project construction was not originally anticipated nor projected in our estimated fee.

HRC estimated the cost for the additional staff time to track and support construction progress was estimated at 38 hours and \$4,500.

HRC believes that the changes to and extension of the schedule were unanticipated while other changes were requests made by the MCPWO in order to provide progress updates regarding the construction project that met their expectations.

The additional time spent reviewing and tracking the progress of the project and coordinating future work were beneficial to the overall success of the project. Nonetheless, the additional meetings did require additional preparation, communication, coordination, and documentation and the extended schedule did require additional staff time to observe and track the work and process additional pay applications. HRC is therefore requesting MCPWO consideration of this amendment to our current Contract.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



Bradley Shepler, P.E., CCCA, LEED AP
Associate

pc: MCPWO; Vince Astorino, Keith Lumma
HRC; J. Burton, E. Ause, File



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: December 13, 2021

Subject: Segment 5 Rehabilitation– Builder’s Risk Claim Settlement

On December 2, 2020, during the initial excavation and construction of the temporary earth retention system (TERS) for the CS-12 structure an unexpected collapse of the TERS occurred. As a result of this collapse both Oscar Renda and FK Engineering incurred costs that were not included in their respective base contracts. The MIDDD immediately initiated a Builder’s Risk claim through the OCIP for this event. The Project Team, comprised of the Owner’s Representatives, Oscar Renda and FK Engineering worked quickly to assess the loss and develop a recovery plan. The TERS was successfully recovered in just three weeks.

During the recovery effort Oscar Renda incurred a total cost of \$487,491. This was comprised mostly of the man-hours, equipment, and material to recover the collapsed shaft.

FK Engineering incurred a total cost of \$77,774.90. This was comprised mostly of man-hours and the replacement of geotechnical monitoring equipment that was damaged during the collapse.

After a long investigation, the insurance carrier, Chubb, and the Owner agreed to terms on the value of the net loss incurred by Oscar Renda and FK Engineering in the amount of \$527,692.71. The deductible for this type of claim is \$100,000 which resulted in a net settlement in the amount of \$427,692,71. In accordance with the Contract Documents, the Contractor is responsible for the deductible, this has been applied appropriately.

The recommendation is that the Macomb Interceptor Drain Drainage District Board approve Oscar Renda Change Order No. 1 for the net increase of \$349,917.81 and the addition of 22 days to the schedule.

The recommendation is that the Macomb Interceptor Drain Drainage District Board approve FK Engineering Change Order No. 5 for the net increase of \$77,774.90.

Attachments: Sworn Statement in Proof of Loss
Oscar Renda Change Order No. 1
FKE Change Order No. 5

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

11177256 001

SWORN STATEMENT

KY20K3026903

POLICY NO.

CLAIM NO.

\$52,400,000.00

IN

Meadowbrook Insurance Group

AMOUNT OF POLICY AT TIME OF LOSS

NAME OF AGENCY

PROOF OF LOSS

9/4/2020

Final

Southfield, MI

DATE ISSUED

AGENCY CITY, STATE

3/4/2024

DATE EXPIRES

To: Chubb

At time of loss, by the above indicated policy of insurance you insured:

Macomb County Public Works – Macomb Interceptor Drain Drainage District

NAME OF INSURED PROPERTY

12567 15 Mile Rd., Sterling Heights, MI 48312

LOCATION OF PROPERTY

Against loss by Collapse to the property described according to the terms and conditions of said and of all Forms, endorsements, and assignments attached thereto.

TIME AND ORIGIN Collapse of earth around Temporary A Earth Retentions System (TERS) loss occurred about the hour of N/A on December 2, 2020, the cause and origin of the said loss was earth/loose soil movement collapsing into void created by excavation

OCCUPANCY The building described, or containing the property described, was occupied at the time of the loss as follows, and for no other purpose whatever: Construction of Tunnel to Sewer System

TITLE AND INTEREST At the time of the loss, the interest of your insured in the property described therein was As referenced

CHANGES No other person or persons had any interest therein or encumbrance thereon, except: As referenced

Since the said policy was issued, there has been no assignment thereof, or change of interest, use, occupancy, possession, location or exposure of the property described, except: None

TOTAL INSURANCE The TOTAL AMOUNT OF INSURANCE, upon the property described by this policy at the time of the loss was \$52,400,000.00 besides which there was no policy or other contract of insurance, written or oral, valid or invalid.

REPLACEMENT COST The Net Loss and Damage of property at the time of the loss: \$ 527,692.71

DEDUCTIBLE The Deductible is: \$ 100,000.00

NET CLAIM The Full Claim is: \$ 427,692.71

STATEMENTS OF INSURED The said loss did not originate by any act, design or procurement on the part of your insured, or this affiant; nothing has been done by or with the privity or consent of your insured or this affiant, to violate the conditions of the policy, or render it void; no articles are mentioned herein or in annexed schedules but such as were destroyed or damaged at the time of said loss; property saved has in any manner been concealed, and no attempt to deceive the said company, as to the extent of said loss, has in any manner been made. Any other information that may be required will be furnished and considered a part of this proof.

The furnishing of this blank or the preparation of proofs by a representative of the above insurance company is not a waiver of any rights.

STATE OF: Michigan BY: Stephen Downing

COUNTY OF: Macomb TITLE: Construction + Maintenance Manager

SUBSCRIBED AND SWORN BEFORE ME THIS 12th DAY OF November, 2021

Emily Engelmann Notary Public Emily Engelmann

CHANGE ORDER NO.: 1

	Macomb Interceptor Drain		
Owner:	Drainage District	Owner's Project No.:	WWS-2020-007
Engineer:	FK Engineering Associates	Engineer's Project No.:	19-134
Contractor:	Oscar Renda Contracting	Contractor's Project No.:	WO19024
Project:	Romeo Arm Lining – Segment 5		
Contract Name:	Romeo Arm Lining – Segment 5		
Date Issued:	December 17, 2021	Effective Date of Change Order:	December 17, 2021

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

Description:

Increase in Original Contract Price and Time due to insurance claim from collapse of earth around Temporary Earth Retentions System (TERS).

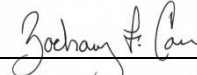
Attachments:

- **Proof of Loss document**
- **Cost Summary from ORC**


Change in Contract Times

Change in Contract Price		Change in Contract Times	
Original Contract Price:	Original Contract Times:	Substantial Completion:	September 21, 2022
\$ 28,807,500.00	Ready for final payment:	Ready for final payment:	October 21, 2022
[Increase] this Change Order:	[Increase] this Change Order:	Substantial Completion:	22 days
\$ 349,917.81	Ready for final payment:	Ready for final payment:	22 days
Contract Price incorporating this Change Order:	Contract Times with all approved Change Orders:	Substantial Completion:	October 13, 2022
\$ 29,157,417.80	Ready for final payment:	Ready for final payment:	November 12, 2022

Recommended by Engineer

By: 
 Title: Vice President
 Date: December 7, 2021

Authorized by Contractor


 Area Manager
 December 7, 2021

Authorized by Owner

By: _____
 Title: _____
 Date: _____

Approved by Funding Agency (if applicable)

COST SUMMARY

DATE: 5-Aug-21

PROJECT: Romeo Arm Interceptor Segment 5 Lining
OWNER: Macomb County Public Works
ENGINEER: FK Engineering
CONTRACTOR: Oscar Renda Contracting, Inc.

Description: **CS-12 Shaft Collapse OCIP Claim**

SUMMARY SHEET

1 MATERIAL

Material Cost			\$	136,772.49
Sales Tax	@	8.25%	\$	-
Material Handling Cost	@	0.00%	\$	-
Expendable Material	@	0.00%	\$	-
			\$	136,772.49

2 LABOR

Labor	1 LS	\$ 55,761.97	\$	55,761.97
Supervision	1 LS	\$ 21,471.98	\$	21,471.98
Fringe Benefits			\$	-
Labor Cost			\$	77,233.95
Labor Burden	@			
Consumables	@	3.0%	\$	1,672.86
TOTAL LABOR COST			\$	78,906.81

3 EQUIPMENT COSTS

\$166,170.22

4 SUBCONTRACTOR COST

\$ 37,028.82

SUBTOTAL

\$ 418,878.33

7 OH / P

@ 15% \$ 62,831.75

5 BOND/INSURANCE COST

@ 1.2% \$ 5,780.52

CHANGE REQUEST TOTAL

\$ **487,491**

Date of Issuance: 12/1/2021
Owner: Macomb Interceptor Drain
Drainage District
Engineer: FK Engineering

Effective Date: 12/1/2021
Owner's Contract No.: WWS-2019-013
Engineer Contract No.: N/A
Contract Name: Segment 5 Lining

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

Increase the contract value by \$77,774.90 because of the settlement of the Builder's Risk Claim related to the CS-12 TERS Collapse. The cost is summarized in the attached FK Engineering memo dated June 25, 2021.

The original Contract Sum was: \$ 498,881.50

The net change from previously approved Change Orders No.1 to No. 4: \$ 2,740,365.00

The Contract Sum prior to this Change Order: \$ 3,239,246.50

The Contract Sum prior to this Change Order will be increased by: \$ 77,774.90

The new Contract Sum, including this Change Order, will be: \$ 3,317,021.40

The Contract Time will be unchanged by: 0 (days)

The date of Substantial Completion as of the date of this Change Order, therefore, is: N/A

ACCEPTED:

By: _____
Owner (Authorized Signature)

ACCEPTED:

By: _____
Engineer (Authorized Signature)

Title _____

Date _____

Title _____

Date _____



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: December 13, 2021

Subject: Segment 5 Rehabilitation— Permanent Electrical Equipment for Pumps at CS-12

During the design phase of this project the CS-12 Pump Station was envisioned to be a temporary measure to facilitate the rehabilitation of the Segment 5 portion of the Interceptor only. In the final days prior to posting the Request for Bids (RFB) to MITN the Owner's Representatives and members of the Design Team identified the long-term benefit of the CS-12 Pump Station. It would provide a significant advantage during the rehabilitation of the upstream segments, most immediately the rehabilitation of Segment 6 which was being designed when this project was issued for bid. In addition, there is added value for the future inspection, maintenance and rehabilitation of the remaining up stream segments of the Interceptor.

To maintain the bid schedule required for SRF the RFB for Segment 5 was issued without a permanent electrical design component. The bid form was adjusted to include an optional allowance to purchase the pumps instead of renting them for the project. This provided the Project Team additional insight on the viability of making the CS-12 Pump Station permanent. As such, at the time of award, we opted to purchase the pumps in lieu of renting.

To facilitate the design, FK Engineering subcontracted Fishbeck to design the permanent electrical for the CS-12 pump station. The cost for the design was allocated in FK Engineering Change Order No. 3 which was previously approved the Board.

Upon completion of the electrical design, Oscar Renda reviewed the design and developed a cost proposal for this work. The Project Team (Owner, Engineer and Contractor) have worked closely throughout the past several months to finalize the details of this design to arrive at the final costs presented in this change order. This change warrants the addition of 30 days to the construction schedule.

The recommendation is that the Macomb Interceptor Drain Drainage District Board approve Oscar Renda Change Order No. 2 for the net increase of \$1,187,585.58 and the addition of 30 days to the schedule.

Attachments: Oscar Renda Change Order No. 2 with backup

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

CHANGE ORDER NO.: 2

	Macomb Interceptor Drain		
Owner:	Drainage District	Owner's Project No.:	WWS-2020-007
Engineer:	FK Engineering Associates	Engineer's Project No.:	19-134
Contractor:	Oscar Renda Contracting	Contractor's Project No.:	WO19024
Project:	Romeo Arm Lining – Segment 5		
Contract Name:	Romeo Arm Lining – Segment 5		
Date Issued:	December 17, 2021	Effective Date of Change Order:	December 17, 2021

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

Description:

Additional work not included as part of the original contract. This additional work was described in Work Change Directives #1 and # 5 (attached) and is related to the electrical at Control Structure 12.

Attachments:

- **WCD #1 Documents**
- **WCD #5 Documents**
- **WCD# 1/5 Cost Summary by ORC**

Change in Contract Price	Change in Contract Times
Original Contract Price: \$ <u>28,807,500.00</u>	Original Contract Times: Substantial Completion: <u>September 21, 2022</u> Ready for final payment: <u>October 21, 2022</u>
Increase from previously approved Change Order No. 1 \$ <u>349,917.81</u>	Increase from previously approved Change Orders No.1 Substantial Completion: <u>22 days</u> Ready for final payment: <u>22 days</u>
Contract Price prior to this Change Order: \$ <u>29,157,417.81</u>	Contract Times prior to this Change Order: Substantial Completion: <u>October 13, 2022</u> Ready for final payment: <u>November 12, 2022</u>
Increase this Change Order: \$ <u>1,187,585.58</u>	Increase this Change Order: Substantial Completion: <u>30 days</u> Ready for final payment: <u>30 days</u>
Contract Price incorporating this Change Order: \$ <u>30,345,003.39</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>November 12, 2022</u> Ready for final payment: <u>December 12, 2022</u>

Recommended by Engineer

By: Zachary A. Carr
Title: Vice President
Date: December 7, 2021

Authorized by Contractor

[Signature]
Area Manager
December 7, 2021

Authorized by Owner

By: _____
Title: _____
Date: _____

Approved by Funding Agency (if applicable)

WORK CHANGE DIRECTIVE NO. 1: CS-12 Electrical

Owner: Macomb Interceptor Drain Drainage
District
Owner’s Project No.: WWS-2020-007
Engineer: FK Engineering Associates
Engineer’s Project No.: 19-134
Contractor: Oscar Renda Contracting
Contractor’s Project No.: WO19024
Project: Romeo Arm Lining – Segment 5
Contract Name: Romeo Arm Lining – Segment 5
Date Issued: June 15, 2021 Effective Date of Work Change Directive:

Contractor is directed to proceed promptly with the following change(s):

Description:

Delete previously included permanent electrical, instrumentation, and controls work associated with the permanent submersible pumps. Provide electrical, instrumentation, and controls work as indicated in the attached electrical drawings and Division 26 and 40 specifications. Permanent submersible pumps, cables, and accessories shall remain as originally specified.

Attachments:

Electrical plan sheets, Division 26 and 40 Specifications

Purpose for the Work Change Directive:

Work was not included as part of original project

Directive to proceed promptly with the Work described herein, prior to agreeing to change in Contract Price and Contract Time, is issued due to:

Notes to User—Check one or both of the following

Non-agreement on pricing of proposed change. Necessity to proceed for schedule or other reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price: **\$ not yet estimated**

Contract Time: **not yet estimated** days

Basis of estimated change in Contract Price:

Lump Sum Unit Price Cost of the Work Other

	Recommended by Engineer	Authorized by Owner
By:	Zach Carr, P.E.	Stephen Downing
Title:	Vice President	Construction & Maintenance Manager
Date:	June 15, 2021	June 15, 2021

WORK CHANGE DIRECTIVE NO. 5: CS-12 Internet Service

Owner: Macomb Interceptor Drain Drainage
District
Owner’s Project No.: WWS-2020-007
Engineer: FK Engineering Associates
Engineer’s Project No.: 20-152
Contractor: Oscar Renda Contracting
Contractor’s Project No.: WO19024
Project: Romeo Arm Lining – Segment 5
Contract Name: Romeo Arm Lining – Segment 5
Date Issued: October 22, 2021
Effective Date of Work Change Directive: October 22, 2021

Contractor is directed to proceed promptly with the following change(s):

Description:

The County will be obtaining cable internet service from the local Cable Company to connect CS-12 and CS-6 to the County’s SCADA network. A concrete encased 2-inch PVC conduit shall be provided (for the cable internet service coaxial cable) from the new control panel inside the motor control center enclosure for CS-12 to an existing utility pole. Coordinate exact location for routing/stubbing up conduit and connecting to cable internet service with the County and local Cable Company. The cable service coaxial cable will be provided by others (local Cable Company). A cable modem shall be provided in the new control panel for CS-12 (furnished by the local Cable Company, installed by Motor City Electric). New Ethernet switches shall be provided (by Motor City Electric) in the existing stop gate control panel for CS-6 and new control panel for CS-12. The Ethernet switches shall be capable of accepting direct fiber optic cable connections. Fiber optic patch panels shall be provided in each control panel (by Motor City Electric). Modifications to the existing and new control panels shall be coordinated with Motor City Electric. A concrete encased 2-inch PVC conduit shall be provided between the new and existing control panels (in the motor control center enclosure for CS-12 and stop gate control panel for CS-6). Multi-mode fiber optic cable (6-strand) in innerduct shall be provided in the concrete encased conduit between the control panels. Cable internet service will be connected to CS-12. The Ethernet switches will be connected to each other via 2-strands of the multi-mode fiber optic cable. Cellular modems in the existing control panel for CS-6 and new control panel for CS-12 will remain for backup connections to the County’s SCADA network. A CompactLogix programmable logic controller (PLC) shall be provided in the control panel for CS-12 (by Motor City Electric). The existing PLC in the existing control panel for CS-6 will be reused.

Attachments:

Plan Sheets

Purpose for the Work Change Directive:

Work was not included as part of original project or Work Change Directive #1

Directive to proceed promptly with the Work described herein, prior to agreeing to change in Contract Price and Contract Time, is issued due to:

Notes to User—Check one or both of the following

Non-agreement on pricing of proposed change. Necessity to proceed for schedule or other reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price: **\$ not yet estimated**

Contract Time: **not yet estimated** days

Basis of estimated change in Contract Price:

Lump Sum Unit Price Cost of the Work Other

Recommended by Engineer

Authorized by Owner

By: Zach Carr, P.E.

Stephen Downing

Title: Vice President

Construction & Maintenance Manager

Date: October 22, 2021

October 22, 2021



Monday, December 6, 2021

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

Ref: Romeo Arm Interceptor Seg 5 Lining #WWS-2020-007

Sub: WCD 1 & 5 – Electrical Scope of Work

Mr. Downing,

Oscar Renda Contracting, Inc. (ORC) is pleased to forward the attached cost summary for proposed Work Change Directive 1 & 5, as requested. This includes electrical, instrumentation and controls work for CS-12 as indicated in electrical drawings and Division 26 and 40 specifications provided in WCD 1. As well as CS-12 fiber optics and internet service work as indicated in WCD 5. ORC's price for furnishing all supervision, labor, material, and equipment for completion of the work outlined is \$1,187,585.58 (one million one hundred eighty-seven thousand five hundred eighty-five dollars and fifty-eight cents).

ORC anticipates that this additional work will impact the schedule's critical path and requests a time extension of 30 calendar days (26 working days) be added to the Contract.

Your prompt written approval of this proposal is greatly appreciated. Please call or email if you require additional information.

Thank you,

Marco Bartolomei

Area Manager

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

847.877.0839 m

817.293.4263 p

817.293.5065 f

ATT: WCD 1/5 – Electrical Scope

Quote #210289

Quote #210298

Quote #210368

608 Henrietta Creek Road | Roanoke Texas 76262



COST CHANGE REQUEST

DATE: 12/06/21
RFP WCD 1 & 5

PROJECT: Romeo Arm Interceptor
 OWNER: Macomb County
 ENGINEER: FK Engineering
 CONTRACTOR: Oscar Renda Contracting, Inc.

Description: WCD 1 & 5 - Electrical Scope
 Time Extension Request: 30
 Working Days: 26
 Calendar Days: 30

SUMMARY SHEET

1 MATERIAL					\$ 6,840.50
Material Cost				\$ 6,840.50	
Sales Tax	@	6.00%	\$	-	
Material Handling Cost	@	0.00%	\$	-	
Expendable Material	@	0.00%	\$	-	
 2 LABOR					 \$ 85,423.38
	Manhours	260 @	\$62.44	\$	16,235.18
	Area Manager	52 @	\$80.00	\$	4,160.00
	Project Superintendent	208 @	\$65.00	\$	13,520.00
	Project Manager	208 @	\$65.00	\$	13,520.00
	Project Engineer	208 @	\$50.00	\$	10,400.00
				\$	-
	Labor Cost (Field)			\$	16,235.18
	Labor Cost (Supervision)			\$	41,600.00
	Labor Burden (Field)	@	25.0%	\$	4,058.80
	Labor Burden (Supervision)	@	55.0%	\$	22,880.00
	Tool Replacement Cost	@	4.00%	\$	649.41
 3 EQUIPMENT COSTS					 \$61,581.00
 4 SUBCONTRACTOR COST					 \$ 948,055.00
					<u>\$ 1,101,899.88</u>
5 BOND COST		@	1.2%	\$	13,222.80
					SUBTOTAL \$ 1,115,122.68
 6 OH / P (On ORC Cost)		@	15%	\$	25,060.15
6 OH / P (On ORC Cost)		@	5%	\$	47,402.75
 CHANGE REQUEST TOTAL					 \$ 1,187,585.58



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: December 13, 2021

Subject: Segment 5 Rehabilitation– Northeast Sewerage Pump Station (NESPS) Related Delays

A large portion of this project requires work to be performed within the Interceptor. To facilitate this in-sewer work the Owner is responsible to provide flow control measures through utilization of existing flow control structures in the MID and OMID system. Additionally, the ability to store and release flow is dependent on the ability of the downstream system to convey flow via the NESPS which is operated by the GLWA. On two separate occasions the NESPS encountered critical issues preventing the storage of flow in the system, subsequently resulting in Oscar Renda not being able to access the Interceptor.

The first issue was related to multiple electrical failures that required the NESPS to be operated on stand-by generator power for several days. The second issue was related to the failure of two large pumps within days of one another, this significantly reduced the pumping capacity at the station which required to construction of an emergency by-pass pumping system immediately downstream of the CS-12 construction site.

During each delay Oscar Renda incurred costs for equipment idle time, manpower to maintain the site safety/security, ground dewatering operation/maintenance and loss of time in the construction schedule. In addition, Oscar Renda provided the OMID support during the construction of the emergency by-pass pumping system within the ITC Corridor adjacent to the CS-12 Project Site. A detailed summary and breakdown of the costs incurred is included in the attached change order with back-up documentation.

The recommendation is that the Macomb Interceptor Drain Drainage District Board approve Oscar Renda Change Order No. 3 for the net increase of \$327,244.93 and the addition of 29 days to the construction schedule.

Attachments: Oscar Renda Change Order No. 3 with backup

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

CHANGE ORDER NO.: 3

	Macomb Interceptor Drain		
Owner:	Drainage District	Owner's Project No.:	WWS-2020-007
Engineer:	FK Engineering Associates	Engineer's Project No.:	19-134
Contractor:	Oscar Renda Contracting	Contractor's Project No.:	WO19024
Project:	Romeo Arm Lining – Segment 5		
Contract Name:	Romeo Arm Lining – Segment 5		
Date Issued:	December 17, 2021	Effective Date of Change Order:	December 17, 2021

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

Description:

The Segment 5 project was delayed due to the electrical and pumping issues at the Northeast Sewage Pump Station which did not allow for flow control and access into the Romeo Arm Interceptor that had been previously approved by OMID / MID for Oscar Renda Contracting (ORC). These delays were described in Work Change Directives #6 and # 7 (attached)

Attachments:

- **WCD #6 Documents**
- **WCD #7 Documents**
- **WCD# 6 Cost Summary by ORC**
- **WCD# 7 Cost Summary by ORC**

Change in Contract Price	Change in Contract Times
Original Contract Price: \$ <u>28,807,500.00</u>	Original Contract Times: Substantial Completion: <u>September 21, 2022</u> Ready for final payment: <u>October 21, 2022</u>
Increase from previously approved Change Orders No. 1 to No. 2: \$ <u>1,537,503.39</u>	Increase from previously approved Change Orders No.1 to No. 2: Substantial Completion: <u>52 days</u> Ready for final payment: <u>52 days</u>
Contract Price prior to this Change Order: \$ <u>30,345,003.39</u>	Contract Times prior to this Change Order: Substantial Completion: <u>November 12, 2022</u> Ready for final payment: <u>December 12, 2022</u>
Increase this Change Order: \$ <u>327,244.93</u>	Increase this Change Order: Substantial Completion: <u>29 days</u> Ready for final payment: <u>29 days</u>
Contract Price incorporating this Change Order: \$ <u>30,672,248.32</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>December 11, 2022</u> Ready for final payment: <u>January 10, 2023</u>

WORK CHANGE DIRECTIVE NO. 6: NESPS Delay #1

Macomb Interceptor Drain Drainage
Owner: District Owner's Project No.: WWS-2020-007
Engineer: FK Engineering Associates Engineer's Project No.: 20-152
Contractor: Oscar Renda Contracting Contractor's Project No.: WO19024
Project: Romeo Arm Lining – Segment 5
Contract Name: Romeo Arm Lining – Segment 5
Date Issued: December 2, 2021 Effective Date of Work Change Directive: December 2, 2021

Contractor is directed to proceed promptly with the following change(s):

Description:

The Segment 5 project was delayed due to the electrical issues at the Northeast Sewage Pump Station (NESPS), which did not allow for flow control and access into the Romeo Arm Interceptor (RAI) that had been previously approved by OMID / MID for Oscar Renda Contracting (ORC). ORC was notified of the situation on Sunday June 6, 2021 and was not allowed flow control and access into the RAI until Monday June 14, 2021. In addition, once ORC was granted flow control on June 14, 2021, ORC had to re-clean a section of the RAI that had been previously cleaned due to refilling with debris. Please provide any costs and time delay due to the issues at the NESPS.

Attachments:

None

Purpose for the Work Change Directive:

Work was not included as part of original project

Directive to proceed promptly with the Work described herein, prior to agreeing to change in Contract Price and Contract Time, is issued due to:

Notes to User—Check one or both of the following

Non-agreement on pricing of proposed change. Necessity to proceed for schedule or other reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price: **\$ not yet estimated**

Contract Time: **not yet estimated** days

Basis of estimated change in Contract Price:

Lump Sum Unit Price Cost of the Work Other

Recommended by Engineer	Authorized by Owner
By: <u>Zachary Carr, P.E.</u>	<u>Stephen Downing</u>
Title: <u>Vice President</u>	<u>Construction & Maintenance Manager</u>
Date: <u>December 2, 2021</u>	<u>December 2, 2021</u>

WORK CHANGE DIRECTIVE NO. 7: NESPS Delay #2

Owner:	Macomb Interceptor Drain Drainage District	Owner’s Project No.:	WWS-2020-007
Engineer:	FK Engineering Associates	Engineer’s Project No.:	20-152
Contractor:	Oscar Renda Contracting	Contractor’s Project No.:	WO19024
Project:	Romeo Arm Lining – Segment 5		
Contract Name:	Romeo Arm Lining – Segment 5		
Date Issued:	December 2, 2021	Effective Date of Work Change Directive:	December 2, 2021

Contractor is directed to proceed promptly with the following change(s):

Description:

The Segment 5 project was delayed due to pumping issues at the Northeast Sewage Pump Station (NESPS), which did not allow for flow control and access into the Romeo Arm Interceptor (RAI) that had been previously approved by OMID / MID for Oscar Renda Contracting (ORC). ORC was notified of the situation on Sunday August 1, 2021 and was not allowed flow control and access into the RAI until Monday August 23, 2021. Please provide any costs and time delay due to the issues at the NESPS and work provided by ORC to MIDDD to aid in emergency bypass setup and breakdown.

Attachments:

None

Purpose for the Work Change Directive:

Work was not included as part of original project

Directive to proceed promptly with the Work described herein, prior to agreeing to change in Contract Price and Contract Time, is issued due to:

Notes to User—Check one or both of the following

Non-agreement on pricing of proposed change. Necessity to proceed for schedule or other reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price: **\$ not yet estimated**

Contract Time: **not yet estimated** days

Basis of estimated change in Contract Price:

Lump Sum Unit Price Cost of the Work Other

	Recommended by Engineer	Authorized by Owner
By:	<u>Zachary Carr, P.E.</u>	<u>Stephen Downing</u>
Title:	<u>Vice President</u>	<u>Construction & Maintenance Manager</u>
Date:	<u>December 2, 2021</u>	<u>December 2, 2021</u>

Friday, October 29, 2021

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

Ref: Romeo Arm Interceptor Seg 5 Lining #WWS-2020-007

Sub: WCD #6 – NESPS Delay #1

Mr. Downing,

Oscar Renda Contracting, Inc. (ORC) is pleased to forward the attached cost summary for proposed Contract Modification Request #1 – CDPS Delays. **ORC's price for furnishing all supervision, labor, material, and equipment** for completion of the work outlined is \$106,312.77 (one-hundred six-thousand three-hundred twelve dollars and seventy-seven cents).

Below is a timeline of events contributing to this delay:

- 6/6/2021 – Macomb County informed ORC that there were electrical issues at the Northeast Sewage Pump Station (NESPS), which did not allow for flow control and access into the Romeo Arm Interceptor.
- 6/14/2021 – ORC was notified that the NESPS electrical issues had been fixed, and work in the CS-12 shaft could resume.
- 6/14/2021 – 6/16/2021 – ORC performed rework with cleaning the Romeo Arm Interceptor on the upstream side of the CS-12 shaft. Debris was previously cleaned in this area, however, additional debris had accumulated during the delayed period.
- 6/17/2021 – ORC resumed work that was scheduled prior to the delay.

ORC requests a time extension of 10 calendar days be added to the Contract Substantial Completion date.

Your prompt written approval of this proposal is greatly appreciated. Please call or email if you require additional information.

Thank you,



Marco Bartolomei
Area Manager
Southland Holdings, LLC. | Oscar Renda Contracting, Inc.
847.877.0839 m
817.293.4263 p
817.293.5065 f

ATT: 1. CMR 1 Cost Change Request Worksheet
2. Daily Reports
3. Certified Payroll
4. Equipment Watch Reports
5. Mersino Invoice

COST CHANGE REQUEST

DATE: 09/16/21
RFP WCD #6

PROJECT: Romeo Arm Interceptor
 OWNER: Macomb County
 ENGINEER: FK Engineering
 CONTRACTOR: Oscar Renda Contracting, Inc.

Description: WCD #6 - NESPS Delay #1
 Time Extension Request:
 Working Days: 8
 Calendar Days: 10

SUMMARY SHEET

1 MATERIAL					\$ 2,280.17
Material Cost				\$ 2,280.17	
Sales Tax	@	6.00%		\$ -	
Material Handling Cost	@	0.00%		\$ -	
Expendable Material	@	0.00%		\$ -	
 2 LABOR					 \$ 32,647.03
	Manhours	202.50 @	\$13.10	\$	9,927.93
	Area Manager	16 @	\$80.00	\$	1,280.00
	Project Superintendent	64 @	\$65.00	\$	4,160.00
	Project Manager	64 @	\$65.00	\$	4,160.00
	Project Engineer	64 @	\$50.00	\$	3,200.00
				\$	-
	Labor Cost (Field)			\$	9,927.93
	Labor Cost (Supervision)			\$	12,800.00
	Labor Burden (Field)	@	25.0%	\$	2,481.98
	Labor Burden (Supervision)	@	55.0%	\$	7,040.00
	Tool Replacement Cost	@	4.00%	\$	397.12
 3 EQUIPMENT COSTS					 \$45,301.25
 4 SUBCONTRACTOR COST					 \$ 12,166.67
					<u>\$ 92,395.11</u>
5 BOND COST		@	1.2%		\$ 1,108.74
					SUBTOTAL \$ 93,503.85
6 OH / P (On ORC Cost)		@	15%		\$ 12,200.58
7 OH / P (On SUB Cost)		@	5%		\$ 608.33
 CHANGE REQUEST TOTAL					 \$ 106,312.77

December 4, 2021

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

Ref: Romeo Arm Interceptor Seg 5 Lining #WWS-2020-007

Sub: WCD #7 – NESPS Delay #2

Mr. Downing,

Oscar Renda Contracting, Inc. (ORC) is pleased to forward the attached cost summary for proposed Work Change Directive #7 – NESPS Delay #2. **ORC's price for furnishing all supervision, labor**, material, and equipment for completion of the work outlined is \$220,932.16 (two-hundred twenty thousand nine-hundred thirty-two dollars and sixteen cents).

Below is a timeline of events contributing to this delay:

- 7/31/2021 – Macomb County notified ORC that pumps at the NESPS were down, and ORC was to evacuate equipment out of the CS-12 shaft. Macomb County requested that ORC provide assistance during the time that we could not work in the shaft.
- 8/2/2021 – 8/12/2021 – ORC assisted Macomb County in removing flat top from CS-4, removing platforms & handrails, **moving 12" pumps to CS-3**, fabricating a screen gate, and fabricating a base plate to set backup pumps at CS-4.
- 8/16/2021 – Macomb County informed ORC that work within CS-12 may proceed.
- 8/20/2021 – ORC resumed work in CS-12.

ORC requests a time extension of 19 calendar days be added to the Contract Substantial Completion date.

Your prompt written approval of this proposal is greatly appreciated. Please call or email if you require additional information.

Thank you,



Marco Bartolomei
Area Manager
Southland Holdings, LLC. | Oscar Renda Contracting, Inc.
847.877.0839 m
817.293.4263 p
817.293.5065 f

ATT: 1. WCD #7 Cost Change Request Worksheet
2. Daily Reports
3. Certified Payroll
4. Equipment Watch Reports
5. Air Gas, Tri Star, Mersino Invoices

COST CHANGE REQUEST

DATE: 12/04/21
RFP WCD #7

PROJECT: Romeo Arm Interceptor
 OWNER: Macomb County
 ENGINEER: FK Engineering
 CONTRACTOR: Oscar Renda Contracting, Inc.

Description: WCD #7 - NESPS Delay #2
 Time Extension Request: 19 Calendar Days
 Working Days: 16
 Calendar Days: 19 (7/31/2021 - 8/19/2021)

SUMMARY SHEET

1 MATERIAL					\$ 20,285.52
Material Cost				\$	20,285.52
Sales Tax	@	6.00%		\$	-
Material Handling Cost	@	0.00%		\$	-
Expendable Material	@	0.00%		\$	-
2 LABOR					\$ 76,465.23
	Manhours	622.50 @	\$13.10	\$	28,515.68
	Area Manager	32 @	\$80.00	\$	2,560.00
	Project Superintendent	128 @	\$65.00	\$	8,320.00
	Project Manager	128 @	\$65.00	\$	8,320.00
	Project Engineer	128 @	\$50.00	\$	6,400.00
				\$	-
	Labor Cost (Field)			\$	28,515.68
	Labor Cost (Supervision)			\$	25,600.00
	Labor Burden (Field)	@	25.0%	\$	7,128.92
	Labor Burden (Supervision)	@	55.0%	\$	14,080.00
	Tool Replacement Cost	@	4.00%	\$	1,140.63
3 EQUIPMENT COSTS					\$71,955.78
4 SUBCONTRACTOR COST					\$ 23,116.67
					<u>\$ 191,823.19</u>
5 BOND COST		@	1.2%		\$ 2,301.88
					<u>\$ 194,125.07</u>
6 OH / P (On ORC Cost)		@	15%		\$ 25,651.26
6 OH / P (On ORC Cost)		@	5%		\$ 1,155.83
CHANGE REQUEST TOTAL					\$ 220,932.16

<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 – 7.3432% Clinton – 21.3460% Fraser – 4.1370% Harrison – 6.4221% Lenox – 1.0652% Macomb – 13.9284% New Haven – .8271% Shelby – 9.7757% Sterling Heights – 30.7833% Utica – 1.6268% Washington – 2.7451%	Astorino	Anderson, Eckstein & Westrick	\$ 10,711.15	Invoice #134003 - 11.2.21	Engineering Oversight Phase 2 Grouting	\$ 102,937.35
		Astorino	CDW Government	\$ 874.98	Invoice #M608151 - 10.22.21	SCADA Digi Transport	
		Manning	County of Macomb	\$ 434,046.89	Invoice #AR211081 - 11.9.21	Personnel/Operating Expense 3rd Quarter 2021	
		Astorino	Department of Roads	\$ 1,344.88	Invoice #301982 - 10.13.21	September Fleet Fuel	
		Astorino	Doetsch	\$ 89,104.45	Invoice #71832 - 10.27.21	Phase 2 Grouting - 9.27.21 - 10.27.21	\$ 431,674.05
		Downing	Doetsch	\$ 195,579.70	Invoice #71871 - 11.26.21	Phase 2 Grouting	\$ 236,094.35
		Astorino	DTE Energy	\$ 1,178.70	Invoice #S3RRJ-8RB0Q - 11.1.21	Monthly Electric - 9.30.21 - 10.29.21	
		Astorino	Fishbeck	\$ 7,629.50	Invoice #406511 - 11.30.21	Wastewater Master Plan	\$ 390,647.99
		Astorino	Fishbeck	\$ 1,875.00	Invoice #405706 - 11.3.21	GLWA Assistance through 10.29.21	
		Downing	FK Engineering Associates	\$ 18,101.12	Invoice #20-058-017 - 10.17.21	Segment 6 Rehabilitation - 9.19.21 - 10.16.21	\$ 1,632,858.04
		Downing	FK Engineering Associates	\$ 82,569.38	Invoice #20-152-011 - 10.27.21	Romeo Arm Segment 5 Lining	\$ 1,469,105.36
		Downing	FK Engineering Associates	\$ 105,802.04	Invoice #20-152-012 - 11.22.21	Romeo Arm Segment 5 through 11.20.21	\$ 1,363,303.32
		Downing	FK Engineering Associates	\$ 61,579.09	Invoice #20-058-018 - 11.22.21	Segment 6 Services through 11.20.21	\$ 1,577,278.95
		Astorino	KHVPF, PLC	\$ 652.50	Invoice #47468 - 11.1.21	General Matters through 11.1.21	
		Manning	Macomb County Treasurer	\$ 767.73	Invoice #21-502 - 10.20.21	Training Expenses	
		Astorino	METCO Consulting Services	\$ 3,529.66	Invoice #1717-26 - 10.5.21	Flow Control Services through 10.3.21	\$ 87,446.57
		Astorino	METCO Consulting Services	\$ 5,604.46	Invoice #1717-27 - 11.2.21	Flow Control Services through 10.31.21	\$ 81,842.11
		Astorino	METCO Consulting Services	\$ 7,951.73	Invoice #1717-28 - 12.1.21	Flow Control Services	\$ 73,890.38
		Downing	Oscar Renda Contracting	\$ 313,002.20	Invoice #WO19024 Est #15 - 12.1.21	Romeo Arm Segment 5 Lining through 11.30.21	\$ 20,479,056.21
		Astorino	Presidio	\$ 1,616.80	Invoice #6023421005842 - 11.30.21	SCADA Maintenance	\$ 2,350.00
		Downing	Ric-Man Construction	\$ 442,603.42	Invoice #WO21026 EST3 - 11.22.21	Segment 6 Services through 11.30.21	\$ 12,166,297.38
		Downing	Tetra Tech, Inc.	\$ 51,452.50	Invoice #51815334 - 11.5.21	Odor and Corrosion through 10.29.21	\$ 365,316.27
		Downing	Tetra Tech, Inc.	\$ 45,853.25	Invoice #51825532 - 12.1.21	Odor & Corrosion Design through 11.26.21	\$ 299,860.52
		Sucharski	Verizon	\$ 1,504.64	Invoice #9891314855 - 10.23.21	Monthly Cellular - 9.24.21 - 10.23.21 (Eq. Fund)	
		Sucharski	Verizon	\$ 1,018.88	Invoice #9891314855 - 10.23.21	Monthly Cellular - 9.24.21 - 10.23.21	
		Sucharski	Verizon	\$ 1,223.33	Invoice #9893529065 - 11.23.21	Monthly Cellular - 10.24.21 - 11.23.21 (Eq. Fund)	
		Sucharski	Verizon	\$ 596.37	Invoice #9893529065 - 11.23.21	Monthly Cellular - 10.24.21 - 11.23.21	
		<u>CPS</u>	Astorino	Clinton Township Treasurer	\$ 2,377.93	Invoice #21-506 - 10.31.21	Monthly Utilities - 9.28.21 - 10.25.21
Astorino	Clinton Township Treasurer		\$ 2,196.43	Invoice #21-527 - 11.30.21	Monthly Utilities - 10.25.21 - 11.19.21		
Astorino	DTE Energy		\$ 17,798.62	Invoice #S45C8-W2HQ9 - 11.1.21	Monthly Electric - 10.4.21 - 11.1.21		
Astorino	Rotor Electric		\$ 28,632.59	Invoice #12461 - 11.11.21	Resistor Banks Installation (4)		
Astorino	Wade Trim		\$ 696.25	Invoice #2022254 - 11.4.21	Valve Automation		

<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>
Meters		Astorino	Colville Electric Co., LLC	\$ 697.36	Invoice #210580 - 11.7.21	Power Supply Replacement	
NGI		Astorino	Fishbeck	\$ 525.00	Invoice #405727 - 11.3.21	Inspection Program	\$ 214,143.72
		Astorino	Kennedy Industries	\$ 2,715.00	Invoice #628400 - 11.17.21	Field Service - Inspection	
		Astorino	Motor City Electric Technologies	\$ 708.98	Invoice #94005 - 11.2.21	Pressure Transducers Installation on West Pump	
		Astorino	National Industrial Maintenance	\$ 1,000.00	Invoice #41553 - 10.19.21	Jet Vac Cleaning	
OMID		Downing	Oakland County	\$ 4,259,286.67	Invoice #SDS0007963-OCT - 11.3.21	Monthly Utilities - October 2021	
SCADA		Astorino	Colville Electric Co., LLC	\$ 3,965.19	Invoice #210593 - 11.12.21	Modems for SCADA	
Total				\$ 6,208,374.37			

Budget to Actual
MIDD
As of Nov 30, 2021 = 42%

DESCRIPTION	2022 FINAL BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
GLWA-OMID	47,284,425		19,703,718	27,580,707	41.7%
OMID O&M	3,827,015		1,594,590	2,232,425	41.7%
Settlement	100,000		427,693	(327,693)	427.7%
Reimbursements	200,000		35,569	164,431	17.8%
PY Revenue-Fund Balance	10,370,340			10,370,340	0.0%
Washington Twp Meter Project	47,470			47,470	0.0%
Reimb-Local Communities	16,476,210		6,865,088	9,611,123	41.7%
COVID Grant	-		385,098		
Interest	60,000		5,077	54,923	8.5%
<i>Total Revenue Accounts</i>	78,365,460	-	29,016,832	49,733,726	37.0%
EXPENSE ACCOUNTS					
GLWA-OMID	47,284,425		19,703,718	27,580,707	41.7%
OMID O&M	3,827,015		1,594,590	2,232,425	41.7%
Public Works Wastewater Disposal Division	1,702,960		807,329	895,631	47.4%
Office Operations/Insurance	332,250		107,117	225,133	32.2%
SCADA	280,490		49,828	230,662	17.8%
Engineering					
Replenish reserve from CPS refunding	618,680			618,680	0.0%
Segment 5(Paid from const/ eng reserve)	-		1,817,926	(1,817,926)	0.0%
GLWA Assistance	40,000		9,450	30,550	23.6%
Repair work stemming from inspection program/Phase III Grout	3,200,000			3,200,000	0.0%
Segment 6 Construction Admin	1,500,000		85,295	1,414,705	5.7%
Odor and Control Construction	6,000,000			6,000,000	0.0%
General Construction/Engineering Contingency-All Projects	225,000			225,000	0.0%
Aquasight-On going improvements to program	175,000		58,096	116,904	33.2%
As Needed Applied Science	25,000			25,000	0.0%
As Needed FK Engineering	60,000			60,000	0.0%
As Needed FTCH	50,000		8,103	41,897	16.2%
As Needed Metco	90,000		11,942	78,058	13.3%
As Needed Wade Trim	70,000		674	69,326	1.0%
Level Sensors/Pressure/H2S-Meters	214,200			214,200	0.0%
Meter Dye Testing(Part of carryforward below)	38,600		69,996	(31,396)	181.3%
Odor and Control-Construction	1,000,000			1,000,000	0.0%
Odor and Corrosion Design	375,260		252,833	122,427	67.4%
COVID Monitoring -Reimburse from grant	-		385,098	(385,098)	100.0%
Phase II Grouting	2,000,000		470,983	1,529,017	23.5%
Phase III Grouting	325,000			325,000	0.0%
Segment 6 Construction Administration	1,503,560		1,016,130	487,430	67.6%
SY-S-1, SY-S-2, & WA-S-1 Meter Const Admin/Rehab	1,804,590		523,171	1,281,419	29.0%
Wastewater Master Plan/Contract Capacity	330,050		18,958	311,092	5.7%
Data Review-Aquasight	24,090		22,596	1,494	93.8%
Legal Services	150,000		2,044	147,956	1.4%
Clintondale PS O&M	580,000		145,028	434,972	25.0%
NGI O&M	225,000		64,361	160,639	28.6%
Meters O&M	190,970		38,770	152,200	20.3%
CS-3 O&M	216,000		4,026	211,974	1.9%
Biofilter O&M	26,000		20,840	5,160	80.2%
Contribution Life Cycle Reserve	171,700			171,700	0.0%
Interceptor O&M	1,738,450		29,131	1,709,319	1.7%
Stormwater Pump Stations	91,000		37,917	53,083	41.7%
Sewage Disposal Charges - Mt. Clemens	200,000		54,109	145,891	27.1%
Debt Service - Revenue Bonds	1,680,170		700,071	980,099	41.7%
<i>Total Expense Accounts</i>	78,365,460	-	28,110,129	50,255,331	35.9%

	O&M Balance 6/30/2021	O&M	Total 11/30/2021
Cash - Operating	37,753,257	906,703	38,659,960
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		29,016,832	29,016,832
Expenditures		28,110,129	28,110,129
			0
Equity*	37,753,257		38,659,960

Detail of 2021 Equity*

Projected reserve at 6/30/2021	8,749,004
Projected Construction/ Engineering Reserve	28,001,153
Life Cycle Reserve	1,003,100