

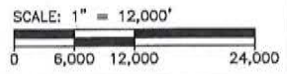
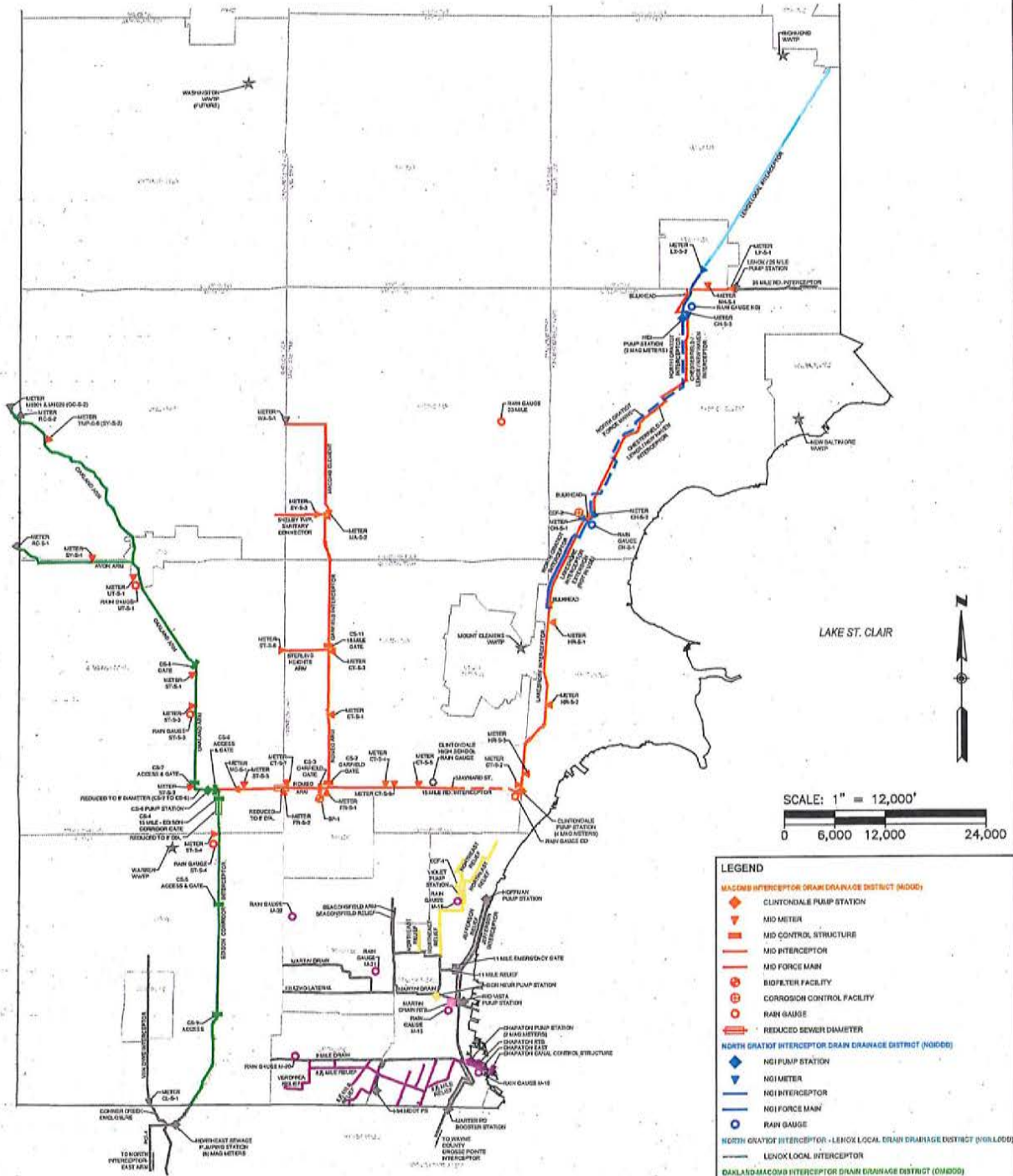
EIGHT AND ONE-HALF MILE RELIEF DRAIN
INTRA-COUNTY DRAINAGE BOARD
SEPTEMBER 14, 2020
10:00 A.M.
AGENDA

NOTE: THIS MEETING WILL BE HELD BY TELECONFERENCE

Call in Number: 1-408-418-9388
Access Code: 173 370 3944

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for September 14, 2020	
3. Approval of Minutes for August 10, 2020	3
4. Public Participation	
5. Project Updates - Vince Astorino	
6. Owner's Controlled Insurance Program (OCIP) Premium Update – Stephen Downing	6
Motion: To receive and file.	
7. Award of Retention Basin Disinfection Improvements - Vince Astorino	11
Motion: To award the bid for the Chapaton and Martin Retention Basin Disinfection Improvement Project to Weiss Construction Co., LLC in the amount of \$995,925 (Chapaton share \$806,425).	
8. Chapaton & Martin Disinfection Project - Contract Administration - Vince Astorino	21
Motion: To approve the proposal from Wade Trim to perform construction contract administration for the Chapaton and Martin disinfection project at a not to exceed cost of \$99,890 (8½ Mile share \$74,917.50)	
9. Consideration for approval of invoices (see attached)	26
10. Financial Report – Bruce Manning	95
11. Adjourn	

MACOMB COUNTY WASTEWATER SYSTEMS



- LEGEND**
- MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT (MIDD)**
 - CLINTONDALE PUMP STATION
 - MID METER
 - MID CONTROL STRUCTURE
 - MID INTERCEPTOR
 - MID FORCE MAIN
 - BIOFILTER FACILITY
 - CORROSION CONTROL FACILITY
 - RAIN GAUGE
 - REDUCED SEWER DIAMETER
 - NORTH GRAYTIDE INTERCEPTOR DRAIN DRAINAGE DISTRICT (NGIDD)**
 - NEI PUMP STATION
 - NGI METER
 - NGI INTERCEPTOR
 - NGI FORCE MAIN
 - RAIN GAUGE
 - NORTH GRAYTIDE INTERCEPTOR - LENOX LOCAL DRAIN DRAINAGE DISTRICT (NGI/LOLD)**
 - LENOX LOCAL INTERCEPTOR
 - OAKLAND/MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT (OMIDD)**
 - OS 6 PUMP STATION
 - QMD METER
 - QMD CONTROL STRUCTURE
 - QMD INTERCEPTOR
 - REDUCED SEWER DIAMETER
 - 1/2 MILE RELIEF DRAIN DRAINAGE DISTRICT**
 - CHAPATON WEST PUMP STATION
 - CHAPATON RETENTION TREATMENT BASIN
 - CHAPATON CANAL CONTROL GATE
 - 1/2 MILE INTERCEPTOR
 - RAIN GAUGE
 - 1/2 MILE RELIEF DRAIN DRAINAGE DISTRICT (MIDD)**
 - SEMOWS PUMP STATION
 - CORROSION CONTROL FACILITY
 - SEMOWS INTERCEPTOR
 - MARTIN SANITARY OVERSIGHT DRAIN DRAINAGE DISTRICT (MSIDD)**
 - MARTIN DRAIN RETENTION TREATMENT BASIN
 - OTHER SYSTEMS**
 - PUMP STATION
 - METER
 - WWTP
 - INTERCEPTOR

Candice S. Miller
MACOMB COUNTY PUBLIC WORKS COMMISSIONER



UPDATED: APRIL 2017

An adjourned meeting of the Intra-County Drainage Board for the **EIGHT AND ONE-HALF MILE RELIEF DRAIN** was held via telephone conference per the State of Michigan Executive Order due to the COVID-19 pandemic, on August 10, 2020, at 10:00 A.M.

PRESENT: Candice S. Miller, Chair
Veronica Klinefelt, Member

ABSENT: Bryan Santo, Member

ALSO PRESENT: Harold Haugh, Robert Mijac, Macomb County Board of Commissioners; Brian Baker, Chief Deputy, Stephen Downing, Construction & Maintenance Manager, Bruce Manning, Financial Manager, Tom Stockel, Construction Engineer, Jeff Bednar P.E., Environmental Resources Manager, Vince Astorino, Operations & Flow Manager, Kellie Kource, Drain Account Specialist, Karen Czernel, Deputy, Norb Franz, Communications Manager, Denise Harwood, Accountant, Macomb County Public Works

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

Adopted: YEAS: 2
NAYS: 0

Minutes of the meeting of July 13, 2020 were presented. A motion was made by Ms. Klinefelt, supported by Ms. Miller to approve the minutes as presented.

Adopted: YEAS: 2
NAYS: 0

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

Mr. Astorino updated the board that the disinfection project is out to bid and will bring a recommendation to the board in September. The pump and screen project is progressing well, and the bar screen is complete.

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

Adopted: YEAS: 2
NAYS: 0

Mr. Baker updated the board that we anticipated a 5% increase in the 2020/21 budget and the budget came in at 4.9%. We continue to identify needs of the station based on the SAW Grant. Most of the budget is for repair and maintenance on items that are in need of replacement.

A motion was made by Ms. Klinefelt, supported by Ms. Miller to approve the 2020/21 Eight and One-Half Mile Relief Drain budget and revenue requirement for the fiscal year beginning October 1, 2020.

Adopted: YEAS: 2
NAYS: 0

Mr. Downing updated the board that we initiated an OCIP agreement with Meadowbrook insurance back in February for several upcoming projects. Approving this motion locks in the insurance at the current rates for the upcoming projects.

A motion was made by Ms. Klinefelt, supported by Ms. Miller to authorize the Board Chair to bind the Builder's Risk, Contractor's Pollution Liability, and Owner's Protective Professional Liability insurance for the In-System Storage project through Meadowbrook Insurance Agency for an amount not to exceed \$79,317.

The Chair presented the invoices totaling \$636,916.93 to the board for review and approval.

A motion was made by Ms. Klinefelt, supported by Ms. Miller to approve the invoices as presented.

Adopted: YEAS: 2
NAYS: 0

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

Adopted: YEAS: 2
NAYS: 0

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

Adopted: YEAS: 2
NAYS: 0

The meeting was adjourned at 10:32 a.m.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

STATE OF MICHIGAN
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taking by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on August 10, 2020 the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

DATED: 8/10/20



Candice S. Miller

Public Works Commissioner
Macomb County

To: 8 ½ Mile Relief Drain Drainage District Board Members

From: Stephen Downing, Construction & Maintenance Manager

Date: September 9, 2020

Subject: Owner Controlled Insurance Program (OCIP) Premium Update

The Macomb Interceptor Drain Drainage District and 8 ½ Mile Relief Drain authorized the Board Chair to bind insurance coverage for the less than or equal to the estimates provided by Meadowbrook Insurance Agency (MIA) at the August 10, 2020 Drain Board meetings. The memos have been attached for reference.

On August 26, 2020 MIA submitted a revised proposal with premiums that came in approximately 14% lower than the previous estimate. MIA secured better coverage for less cost in the final round of negotiations with the insurance carriers. The table below summarizes the final premium cost for each of the respective coverages. The final summary of premium costs from MIA is attached for reference.

Cost Allocation / Project	(Rounded) Premium Estimates	Seg 5 45%	Seg 6 36%	8 1/2 Mile 19%
Primary GL	\$124,222			
5M x P	\$84,145			
5M x 5M	\$49,092			
10M x 10M	\$70,216			
15M x 20M	\$67,957			
15M x 35M	\$51,250			
Liability Subtotal	\$446,882	\$446,882		
BR	\$199,957	\$102,705	\$82,164	\$43,364
CPL	\$57,254	\$25,764	\$20,611	\$10,878
OPPI	\$131,968	\$59,386	\$47,508	\$25,074
BR, CPL & OPPI Subtotal	\$389,179	\$175,131	\$140,104	\$73,944
Grand Total	\$836,061	\$622,013	\$140,104	\$73,944

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

The action is that the Eight ½ Mile Relief Drain Drainage District Board receive and file the updated premiums detailed in the Meadowbrook Insurance Agency proposal for Builder's Risk, Contractor's Pollution Liability and Owner's Protective Professional Liability insurance coverage for Indemnity for the In-system Storage Project for the amount of \$73,944, which is \$5,373 less than the amount authorized in the August 10, 2020 Drain Board meeting.

Attachments: Meadowbrook Insurance Agency Proposal
August 10, 2020 OCIP Premium Memo

Macomb County Public Works Premium Summary

INSURANCE POLICIES	Projects Covered	PROPOSED PREMIUM
General Liability Everest Indemnity Insurance Co.	- Romeo Arm Segment 5 Rehab	\$124,222.45
Excess Liability \$5M X Primary <i>Everest Indemnity Insurance Co.</i>	- Romeo Arm Segment 5 Rehab	84,145.05
Excess Liability \$5M X \$5M <i>Navigator Specialty Insurance Co.</i>	- Romeo Arm Segment 5 Rehab	49,092.38
Excess Liability \$10M X \$10M <i>Capital Specialty Insurance Corp.</i>	- Romeo Arm Segment 5 Rehab	70,216.88
Excess Liability \$15M X \$20M <i>Endurance American Specialty Inc. Co.</i>	- Romeo Arm Segment 5 Rehab	67,957.50
Excess Liability \$15M X \$35M <i>Liberty Capital</i>	- Romeo Arm Segment 5 Rehab	51,250.00
Builder's Risk <i>Chubb - ACE American</i>	- Romeo Arm Segment 5 Rehab - 15 Mile Interceptor Segment 6 Rehab - 8 ½ Mile Relief In-System Storage	199,957.00
Contractor's Pollution Liability <i>AIG Specialty Insurance Company</i>	- Romeo Arm Segment 5 Rehab - 15 Mile Interceptor Segment 6 Rehab - 8 ½ Mile Relief In-System Storage	57,254.45
Owners Protective Professional Indemnity <i>Berkley Assurance Company</i>	- Romeo Arm Segment 5 Rehab - 15 Mile Interceptor Segment 6 Rehab - 8 ½ Mile Relief In-System Storage	131,968.75
TOTAL		\$836,064.46



Candice S. Miller

Public Works Commissioner
Macomb County

To: 8 ½ Mile Relief Drain Drainage District Board Members

From: Stephen Downing, Construction & Maintenance Manager

Date: August 6, 2020

Subject: Owner Controlled Insurance Program (OCIP) Premium Recommendation

The Macomb Interceptor Drain Drainage District and 8 ½ Mile Relief Drain engaged with Meadowbrook Insurance Agency (MIA) in February 2020 to provide the services required to procure and manage an Owner Controlled Insurance Program (OCIP) for upcoming CIP projects. MIA has assisted the MCPWO Engineering staff with development of the OCIP specific contract documents for construction projects and have developed a comprehensive insurance program to obtain pricing from insurance carriers. In addition to setting coverage limits for the required coverages, MIA has developed a project specific profile of each project, collecting the required information to solicit premium costs from insurance carriers. To obtain the most competitive premiums, MIA worked extensively with both MCPWO staff Engineers and each of the project's respective lead engineering consultants.

The first of three projects included in this OCIP, MIDDD Segment 5 rehabilitation, is scheduled to start in September 2020. The other two projects, MIDDD Segment 6 Rehabilitation and 8 ½ Mile Relief Drain In-system Storage, are currently slated to start construction in May 2020. This presents a need to split procurement of the General Liability and Excess Liability coverages into separate programs due to the insurance carriers' inability to provide accurate premium cost prior to the prime contractor being selected for the work. The Builder's Risk, Contractor's Pollution Liability and Owner's Protective Professional Liability Indemnity coverages are independent of the prime contractor selected for the work; therefore, these coverages will remain bundled in a single program.

The benefit of procuring the Builder's Risk, Contractor's Pollution Liability and Owner's Protective Professional Liability Indemnity coverages now for the entire program is that the premiums are locked in for the duration of the 42-month program. The premiums for each of these three coverages are a one-time cost. If we wait to bid these coverages for the two projects starting in 2021, we risk the premiums increasing, which is expected in the current market.

MIA provided a proposal summarizing the insurance premiums for each of the coverages required to provide a comprehensive and protective OCIP. The MIA proposal is attached for reference. The deadline to bind coverage for the Segment 5 Rehabilitation is September 1, 2020. MIA will continue negotiating with insurance carriers until August 20th, 2020 to secure the least expensive premium costs. The final proposal will be submitted on August 20th, 2020 for review. The Owner will authorize MIA to bind coverage by August 25th, 2020 to meet the September 1st, 2020 deadline for effective coverage. The final premium costs will be equal to or less than what is presented in the attached proposal. The table below summarizes the current premium cost estimates for each project.

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Cost Allocation / Project	Premium Estimates	Seg 5 45%	Seg 6 36%	8 1/2 Mile 19%
GL / Excess 25M	\$129,138			
5M x P	\$84,665			
10M x 5M	\$109,038			
10M x 15M	\$71,594			
Subtotal	\$394,434	\$394,434		
BR	\$228,234	\$102,705	\$82,164	\$43,364
CPL	\$57,254	\$25,764	\$20,611	\$10,878
OPPI	\$131,968	\$59,386	\$47,508	\$25,074
	\$417,456	\$582,289	\$150,284	\$79,317
Subtotal	\$811,890			
Option 25M x 25M	\$157,325	\$157,325	N/A	N/A
Total at 50M excess limits	\$969,215	\$739,614	N/A	N/A
Grand Total	\$969,215	\$739,614	\$150,284	\$79,317

The recommendation is that the 8 ½ Mile Relief Drain Drainage District Board authorize the Board Chair to authorize Meadowbrook Insurance Agency to bind insurance coverage for Builder's Risk, Contractor's Pollution Liability and Owner's Protective Professional Liability Indemnity for the In-system Storage project for the amount equal to or less than \$79,315.

Attachments: Meadowbrook Insurance Agency Proposal

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Candice S. Miller
Public Works Commissioner
Macomb County

To: 8 ½ Mile Relief Drain Drainage District Board Members
Martin Sanitary Diversion Drainage District Board Members

CC: File

From: Vincent Astorino, Operations & Flow Manager

Date: September 9, 2020

Subject: Chapaton and Martin RTB Disinfection Project - Construction Contract Recommendation

The Macomb County Public Works Office (MCPWO) has identified that a critical capital improvement need for the Chapaton and Martin RTB's is the replacement of the disinfection systems. These are systems that were installed in approximately 1978 and have exceeded the end of their useful life. MCPWO staff has worked diligently to keep the existing disinfection pumps in service as they are prone to failure and require expensive, difficult to obtain parts. As part of the 2019/2020 budgets, \$1,000,000 was allocated for Chapaton and \$200,000 was allocated for Martin. These budgets were established using the conceptual cost estimates from the 2018/2019 disinfection replacement study. The conceptual estimates at that time were \$703,876 for Chapaton and \$86,441 for Martin. These estimates were construction only and therefore the budgets were elevated to cover design, construction administration, and contingency.

In January 2020, Wade Trim was awarded the engineering design contract for the disinfection improvement project and prepared plans and specifications for the work. The construction project was then publicly advertised on MITN. On September 3, 2020, MCPWO received the two lump sum bids as follows:

- J.F. Cavanaugh Company – \$1,114,825.00
- Weiss Construction Co., LLC – \$995,925.00

Wade Trim performed a review of the documents submitted by Weiss and has indicated they believe Weiss is capable of performing the work. Similar to the design contract, the project has been broken into two separate tasks corresponding to work in the 8 ½ District and the Martin District. Each District will only be invoiced for work performed in the respective District.

The initial cost estimates compared to current competitively bid out construction costs are off and therefore will create a shortage in funds. Below you will find a breakdown of this. Due to immediate need for the replacement of these disinfection pumps the recommendation from MCPWO staff is to move forward with the project. The shortage in funding can be recovered from other budgeted projects and reserves. MCPWO staff is recommending to award the contract to Weiss Construction Co., LLC in the total amount of \$995,925.00 to construct the disinfection system improvements. MCPWO staff is confident that Weiss Construction will be able to perform the work for the above-noted price. Upon board approval, MCPWO staff will coordinate with Weiss to finalize the contract.

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	Chapaton (Task 1)	Martin (Task 2)
STUDY: 2018 WT Cost Est.:	\$703,876	\$86,441
BUDGETED:	\$1,000,000.00	\$200,000.00
DESIGN:	\$107,780.00	\$49,450.00
CONST - Hose Pump Purchase:	\$79,415.71	\$31,766.29
CONST BID:	\$806,425.00	\$189,500.00
CONST ADMIN - WT NTE:	\$74,917.50	\$24,972.50
BUDGET DEFICIT/SURPLUS:	-\$68,538.21	-\$95,688.79

Attachments: Weiss Construction Bid Form Dated 09-03-20
Wade-Trim Recommendation Letter Dated 09-08-20



Wade Trim Associates, Inc.
25251 Northline Road • Taylor, MI 48180
734.947.9700 • www.wadetrim.com

September 8, 2020

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

Attention: Mr. Steve Wagner

Re: Chapaton RTB and Martin RTB Disinfection Improvements
8½ Mile Relief Drain Drainage District

Dear Mr. Wagner:

On Thursday, September 3, 2020, bids were received by Macomb County Public Works Office and opened for the above-referenced project. The bids are summarized as follows:

- Weiss Construction Co., LLC – \$995,925.00
- J.F. Cavanaugh Company – \$1,114,825.00 (as corrected)

A bid tab is enclosed for your use. As part of the Bid Documents, Weiss Construction Co., LLC submitted the following items with their bid which we reviewed:

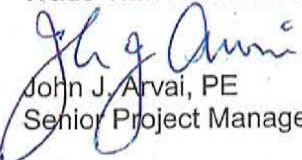
- Bid Bond
- Proposed Subcontractor Form
- Qualification Statement
- Schedule of Current Projects
- Key Individuals Resume
- Financial Statement

We have reviewed their qualifications and believe that Weiss Construction Co., LLC is capable of performing the work of this contract. We, therefore, recommend award of the Chapaton RTB and Martin RTB Disinfection Improvements project to Weiss Construction Co., LLC in the amount of \$995,925.00.

If you have any questions in your review, please contact us.

Very truly yours,

Wade Trim Associates, Inc.


John J. Arvai, PE
Senior Project Manager

JJA:RJM:ka
MCW 2006-01T
Recommend Award Letter.docx
Enclosure



Tabulation of Bids
 Chapaton RTB and Martin RTB
 Disinfection Improvements
 3-Sep-20
 WWS-2020-009

BASE BID ITEMS

Item No.	Description	Quantity	Unit	Weiss Construction Co.	J.F. Cavanaugh Company Amount
1	Chapaton RTB Disinfection Improvements, Complete	1	LS	\$799,700.00	\$739,400.00
2	Martin RTB Disinfection Improvements, Complete	1	LS	\$184,500.00	\$363,700.00
3	Allowance for Lutz Roofing	1	LS	\$1,725.00	\$1,725.00
4	Allowance for Permits	1	LS	\$10,000.00	\$10,000.00
	TOTAL BASE CONTRACT PRICE			\$995,925	\$1,114,825 *

* - Corrected by Engineer

BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

- 1.01 This Bid is submitted to: **8 1/2 Mile Relief Drain Drainage District**
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
- A. Required Bid security;
 - B. List of Proposed Subcontractors;
 - C. List of Proposed Suppliers;
 - D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
 - E. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;
 - F. Required Bidder Qualification Statement with supporting data;

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

3.01 Lump Sum Bids

- A. Bidder will complete the Work in accordance with the Contract Documents for the following lump sum (stipulated) price(s), together with any Unit Prices indicated in Paragraph 3.02:

1. Lump Sum Price (Single Lump Sum)

Chapaton RTB Disinfection Improvements, Complete	\$ 799,700.00
Martin RTB Disinfection Improvements, Complete	\$ 184,500.00

2. Lump Sum Price (Base Bid and Alternates)

Lump Sum Bid Price for Base Bid	\$
Alternate A [Add] [Deduct]	\$
Alternate B [Add] [Deduct]	\$

3. Lump Sum Price (Sectional Lump Sum Bids)

Lump Sum Bid Price for Section I only	\$
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Lump Sum Bid Price for Section II only	\$
Lump Sum Bid Price for Section I and II	\$

B. All specified cash allowance(s) are included in the price(s) set forth below, and have been computed in accordance with Paragraph 13.02 of the General Conditions.

Lump Sum for Cash Allowance 1 – Lutz Roofing	\$1,725.00
Lump Sum for Cash Allowance 2 – Permits	\$10,000.00
	\$
Total for all Lump Sum for Cash Allowances	\$11,725.00

C. All specified contingency allowances are included in the price(s) set forth below, and have been computed in accordance with Paragraph 13.02 of the General Conditions.

Lump Sum Contingency Allowance 1	\$
Lump Sum Contingency Allowance 2	\$
Lump Sum Contingency Allowance 3	\$
Total for all Lump Sum Contingency Allowances	\$

3.02 Unit Price Bids

A. Bidder will perform the following Work at the indicated unit prices:

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price \$	Bid Amount \$
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
Total of All Unit Price Bid Items					\$

B. Bidder will perform the following Alternatives Work at the indicated unit prices:

1. ALTERNATE A BID

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Amount
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Total of All ALTERNATE A Unit Price Bid Items					\$

C. Bidder will perform the following Alternatives Work at the indicated unit prices:

1. ALTERNATE B BID — ADD CHANTICLEER PEAR TREE TO BASE BID: _____

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Amount
Total of All ALTERNATE B Unit Price Bid Items					\$

D. Bidder acknowledges that:

1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
2. estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

3.03 Total Base Bid Price (Lump Sum and Unit Prices)

Total Base Bid Price (Total of all Lump Sum and Unit Price Bids)	\$ 995,925.00
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ARTICLE 4—TIME OF COMPLETION

- 4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

5.01 Bid Acceptance Period

- A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

5.02 Instructions to Bidders

- A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 Receipt of Addenda

- A. Bidder hereby acknowledges receipt of the following Addenda: **[Add rows as needed. Bidder is to complete table.]**

Addendum Number	Addendum Date
1	8/19/2020

2	8/28/2020
3	9/1/2020

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 Bidder's Representations

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

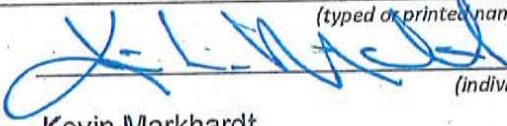
BIDDER hereby submits this Bid as set forth above:

Bidder:

Weiss Construction Co. LLC

(typed or printed name of organization)

By:



(individual's signature)

Name: Kevin Markhardt

(typed or printed)

Title: Vice President

(typed or printed)

Date: September 3, 2020

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest:



(individual's signature)

Name: Karen Longuski

(typed or printed)

Title: Office Administrator

(typed or printed)

Date: September 3, 2020

(typed or printed)

Address for giving notices:

41001 Grand River
Novi, MI 48375

Bidder's Contact:

Name: Kevin Markhardt

(typed or printed)

Title: Vice President

(typed or printed)

Phone: 313.567.4500

Email: kmarkhardt@weiss-construction.com

Address:

41001 Grand River
Novi, MI 48375

Bidder's Contractor License No.: (if applicable) 8000666



Candice S. Miller

Public Works Commissioner
Macomb County

To: 8 ½ Mile Relief Drain Drainage District Board Members
Martin Sanitary Diversion Drainage District Board Members

CC: File

From: Vincent Astorino, Operations & Flow Manager

Date: September 9, 2020

Subject: Chapaton and Martin RTB Disinfection Project – Const. Admin. Contract Recommendation

The Macomb County Public Works Office (MCPWO) identified that the disinfection equipment at the Chapaton and Martin RTB's is in need of replacement. MCPWO subsequently contracted with Wade Trim to prepare plans and specifications for the complete replacement of the disinfection systems. On September 3, 2020, MCPWO received bids from two contractors for the construction of the proposed work. Under separate cover, MCPWO staff has recommended to award the construction contract to Weiss Construction Co., LLC.

Wade Trim has submitted a proposal of \$99,890 to perform oversight and administer this work from start to finish. Their not-to-exceed amount falls in line with our offices estimates for their defined scope of work. In an effort to reduce costs, MCPWO staff will self-perform many of the on-site services associated with this project. Wade Trim will then assist with additional inspection, submittal reviews, contractor payment reviews, and general project management.

MCPWO staff is recommending to award the Chapaton and Martin RTB Disinfection Project construction administration contract to Wade Trim for a not-to-exceed amount of \$74,917.50 for Chapaton and \$24,972.50 to Martin. Upon board approval, MCPWO staff will coordinate with Wade Trim to finalize the contract.

Attachments: Wade-Trim Construction Administration Proposal Dated 09-09-20



Wade Trim Associates, Inc.
500 Griswold • Suite 2500 • Detroit, MI 48226
313.961.3650 • www.wadetrim.com

September 9, 2020

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

Attention: Mr. Steven Wagner, PE

Re: Chapaton RTB and Martin RTB Disinfection Improvements
Project No. WWS-2020-009

Dear Mr. Wagner:

Wade Trim Associates, Inc. (WT) is pleased to submit our proposal to perform construction phase services for the Chapaton RTB and Martin RTB Disinfection Improvements project. The overall objective is to provide construction engineering and part time observation services during the construction phase as the Owner's representative of the project. These services will include the following:

Scope of Work

The following is a summary of the major task items:

- A. Project Management
 - Prepare for and attend construction kick-off meeting
 - Prepare for and attend monthly progress meetings and prepare meeting minutes (assume nine meetings)
 - Project invoicing and other project administrative duties
- B. Resident Project Representative (RPR) Services
 - Provide part-time on-site RPR services during all phases of construction activity (as directed by the Owner)
 - Perform part time observation on Contractor activity (as directed by the Owner)
- C. RPR Field Observations, Reporting and Documentation
 - Observe construction activity when requested by owner to be on site.
 - Prepare an Inspection Daily Report (IDR) when requested by owner to be on site
 - Take photographs of work to capture Contractor progress when on site
 - Correspondence with MCPWO and Contractor regarding construction related matters
 - Review and comment on Contractor provided progress schedules
 - Review and provide input on all Contractor Applications for Payment
- D. RPR Meetings
 - Prepare for and attend monthly progress meetings with Contractors and Owner (assume nine meetings)
 - Discuss ongoing issues with regards to construction (including issues that could impact schedule or costs)
 - Identify action items identified during progress meetings

E. Construction Phase Engineering Services

- Review shop drawings, assuming the following:

<i>Submittal Quantity</i>	<i>Duration</i>	<i># of Reviews per Submittal</i>	<i>Total Hours</i>
15	2 hours each	1.5	45

- Review RFIs, assuming the following:

<i>RFI Quantity</i>	<i>Duration</i>	<i># of Reviews per Rfi</i>	<i>Total Hours</i>
15	2 hours each	1	30

Project Schedule

The contract documents currently indicate all construction activity will be completed within 300 days from notice to proceed. A Contractor schedule has not yet been provided. All on site part time RPR field observation services will be as directed by the owner.

Estimate Project Budget

Based on the detailed scope of work presented herein and the project schedule discussed above, WT has identified a level of effort and budget estimate of \$99,890 to complete the above tasks based on the following:

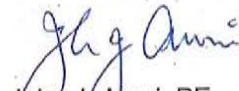
Staff	Rate	Hours	Cost
Senior Professional - PM	\$265.00	80	\$21,200.00
Senior Professional Engineer	\$265.00	42	\$11,130.00
Engineer II / Field RPR Observation	\$105.00	576	\$60,480.00
Project Administrator III	\$130.00	16	\$ 2,080.00
Expenses			\$ 5,000.00
Total			\$99,890.00

These fees have been estimated for budget purposes associated with construction phase services. As discussed, WT will proceed with construction phase services as directed by the owner on a time and material basis up until the estimated budget has been reached. After such time, should it occur, WT will review additional effort and associated fees needed to continue our services for the remainder of the construction phase.

We have attached our 2020 Billing Rate Schedule that will be utilized on this project. Wade Trim looks forward to working with MCPWO on this construction project. If you have any questions or require further information, please do not hesitate to contact us at 313.961.3650.

Very truly yours,

Wade Trim Associates, Inc.



John J. Arvai, PE
 Senior Project Manager

JJA:lkf
 MCW 2006-01T
 20200909_Wagner-Ltr.docx
 Enclosure

**Wade Trim Billing Rate Schedule
Water Resources
With Equipment Billed Separately
Effective January 2020**

Labor Cost Classification Code	Classification Title	2020 Rate Per Hour
299	Professional Engineer V	\$ 205.00
298	Professional Engineer IV	\$ 185.00
297	Professional Engineer III	\$ 160.00
296	Professional Engineer II	\$ 140.00
295	Professional Engineer I	\$ 120.00
294	Engineer IV	\$ 145.00
293	Engineer III	\$ 130.00
292	Engineer II	\$ 105.00
291	Engineer I	\$ 95.00
246	Professional Planner III	\$ 140.00
245	Professional Planner II	\$ 120.00
244	Professional Planner I	\$ 105.00
243	Planner III	\$ 110.00
242	Planner II	\$ 80.00
241	Planner I	\$ 70.00
256	Prof. Landscape Architect III	\$ 150.00
255	Prof. Landscape Architect II	\$ 115.00
254	Prof. Landscape Architect I	\$ 100.00
253	Landscape Architect III	\$ 95.00
252	Landscape Architect II	\$ 85.00
251	Landscape Architect I	\$ 75.00
266	Professional Scientist III	\$ 140.00
265	Professional Scientist II	\$ 100.00
264	Professional Scientist I	\$ 85.00
263	Scientist III	\$ 110.00
262	Scientist II	\$ 80.00
261	Scientist I	\$ 60.00
286	Professional Surveyor III	\$ 145.00
285	Professional Surveyor II	\$ 115.00
284	Professional Surveyor I	\$ 105.00
283	Surveyor III	\$ 100.00
282	Surveyor II	\$ 90.00
281	Surveyor I	\$ 80.00
786	Survey Technician VI	\$ 125.00
785	Survey Technician V	\$ 110.00
784	Survey Technician IV	\$ 95.00
783	Survey Technician III	\$ 80.00

**Wade Trim Billing Rate Schedule
Water Resources
With Equipment Billed Separately
Effective January 2020**

Labor Cost Classification Code	Classification Title	2020 Rate Per Hour
782	Survey Technician II	\$ 65.00
781	Survey Technician I	\$ 50.00
716	Construction Technician VI	\$ 145.00
715	Construction Technician V	\$ 115.00
714	Construction Technician IV	\$ 100.00
713	Construction Technician III	\$ 90.00
712	Construction Technician II	\$ 80.00
711	Construction Technician I	\$ 65.00
726	CADD Technician VI	\$ 115.00
725	CADD Technician V	\$ 105.00
724	CADD Technician IV	\$ 95.00
723	CADD Technician III	\$ 85.00
722	CADD Technician II	\$ 75.00
721	CADD Technician I	\$ 70.00
736	Engineering Specialist II	\$ 165.00
735	Engineering Specialist I	\$ 145.00
734	Engineering Technician IV	\$ 175.00
733	Engineering Technician III	\$ 100.00
732	Engineering Technician II	\$ 75.00
731	Engineering Technician I	\$ 60.00
756	Project Specialist III/Manager	\$ 170.00
755	Project Specialist II	\$ 145.00
754	Project Specialist I	\$ 105.00
753	Project Aide III	\$ 130.00
752	Project Aide II	\$ 90.00
751	Project Aide I	\$ 65.00
443	Electrical Foreman	\$ 155.00
203	Senior Principal	\$ 295.00
202	Principal	\$ 285.00
201	Senior Professional	\$ 265.00

Outside expenses and subconsultants at cost times 1.15.

Special billing rates will apply in matters requiring expert witnesses or other consulting as it relates to legal matters.

Reviewed and Revised Annually

EIGHT AND ONE HALF MILE RELIEF DRAIN - 8/11/20 - 9/8/20

<u>Funding Source</u>	<u>Apportionment</u>	<u>Manager</u>	<u>Vendor</u>	<u>Amount</u>	<u>Invoice Detail</u>	<u>Project Summary</u>	<u>Project Balance</u>		
8 1/2 Mile Relief	Chapter 20 State of MI - 16.04% County of Macomb - 2.25% Dept. of Roads - 2.25% Eastpointe - 54.33% St. Clair Shores - 25.13%	Astorino	DTN, LLC	\$ 571.50	Invoice #5788052 - 7.24.20	Storm Sentry			
		Astorino	Grainger	\$ 593.34	Invoice #9591708954 - 7.16.20	Replacement Utility Pump			
		Astorino	Green For Life	\$ 1,820.80	Invoice #45769000 - 8.14.20	Wet Well Cleaning Special Collections			
		Astorino	Howard T Moriarty	\$ 2,897.50	Invoice #13730 - 8.13.20	Traffic Arrow Board			
		Astorino	Jacobs	\$ 8,747.00	Invoice #2 - 5.14.20	Chapaton Odor Study - Final			
		Astorino	JCI Jones Chemicals Inc.	\$ 3,993.28	Invoice #829567 - 8.12.20	Hypochlorite Solution - 4,423 Gallons			
		Astorino	JCI Jones Chemicals Inc	\$ 3,971.68	Invoice #831726 - 9.1.20	Hypochlorite Solution - 4,399 Gallons			
		Astorino	Lardner Elevator	\$ 2,400.00	Invoice #187787 - 12.5.19	Elevator Repair			
		Slanec	Marino's Landscape	\$ 1,156.00	Invoice #10629 - 7.31.20	Lawn Care July 2020			
		Slanec	Marino's Landscape	\$ 1,156.00	Invoice #10956 - 8.31.20	Lawn Care August 2020			
		Astorino	Tetra Tech, Inc.	\$ 7,000.00	Invoice #51617174 - 7.29.20	9 Mile Pump Station Evaluation			
		Astorino	Tetra Tech, Inc.	\$ 69,131.63	Invoice #51618840 - 8.3.20	In-System Storage Devices	\$ 890,598.14		
		Astorino	Tetra Tech, Inc.	\$ 86,908.25	Invoice #51628645 - 8.28.20	In-System Storage Devices	\$ 803,689.89		
		Astorino	Wade Trim	\$ 10,310.08	Invoice #2018671 - 8.3.20	Chapaton RTB Disinfection Improvements	\$ 30,741.18		
		Astorino	Wade Trim	\$ 15,423.69	Invoice #2018937 - 9.3.20	Chapaton RTB Disinfection Improvements	\$ 15,317.49		
		Total				\$ 216,080.75			



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 8/6/20
4. SET ID VP200806MUA		5. POST DATE

PARENT RECORD INFORMATION	
6. VENDOR NAME (Check to be issued to) DTN, LLC	7. VENDOR NUMBER V43568
8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) 5788052
10. Invoice Date 7/24/2020	11. Invoice Amount \$ 1,524.00

CHILD RECORD DETAIL INFORMATION												
Line	General Ledger			Job Ledger			OPTIONAL			20. DIV	21. MISC	22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount				
A	8210166M	92113	CC0018	92113		MIDDD	Acct#0322513, 8/15-11/14	\$ 762.00	GEN			
B	8210017M	92113	CC0004	92113	WO18006	8 1/2 Mile Relief	Acct#0322513, 8/15-11/14	\$ 571.50	GEN		0	
C	8210072M	92113				Martin	Acct#0322513, 8/15-11/14	\$ 114.30	GEN		0	
D	8713018M	92113				SEMCWWDSD	Acct#0322513, 8/15-11/14	\$ 76.20	GEN		0	
E												
F												
G												

23. Total: \$ **1,524.00**

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
Storm Sentry

25. Finance Officer:	Bm/mh	30. Drain:	Multiple
26. Chief Deputy:		31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	8/11/2020
28. Managers:		33. Board Date:	9/14/2020
29. Coordinator:		34. Select For Pay Date:	



Account No.	Invoice No.	Invoice Date
0322513	5788052	24-Jul-2020

BETZ, JOSEPH
 MACOMB COUNTY OPW
 21777 DUNHAM
 CLINTON TOWNSHIP, MI 48036

DTN Did you know? DTN fully understands the gravity of the situation our world currently faces. We are doing all we can to ensure our business operations are fully functional to continue to help you-our customers-to be serviced in the great manner you expect from DTN. If you have any questions, you're encouraged to contact your Customer Success Manager and look at www.dtn.com for additional resources.

New Charges	\$ 1,524.00
Late Fees	\$ 0.00
Total Due	\$ 1,524.00

Please send your payment 7-10 days before the due date to allow time for payment processing. To ensure proper payment posting, detach and return lower portion with your payment.

Customer Service

Billing Customer Service:

888-826-4282, weatherbilling@dtn.com

Technical Support:

800-485-4000

Postal Correspondence:

DTN
 9110 W Dodge Rd Ste 100
 Omaha, NE 68114-3334

Be sure to include your name, telephone number and DTN account number whenever you contact us.

Pay My Bill

Online: Visit myaccount.dtn.com to submit payments or update your contact information 24 hours a day.

By Mail: Send your check and payment slip to the address on payment slip below.

By Phone: Call billing customer service at the number provided to pay by credit card or make changes to your account MONDAY THROUGH FRIDAY 7:00AM TO 5:00PM (CST).

Detach and return this payment slip with your check payable to DTN

T1200724.001-331-000000259

Account No.	Invoice No.	Due Date
0322513	5788052	14-Aug-2020
	Amount Due	\$ 1,524.00
Payment enclosed		.



DTN, LLC
 9110 W Dodge Rd Ste 100
 Omaha, NE 68114-3334

#BWNCVKR
 0322513

000166 000000259



BETZ, JOSEPH
 MACOMB COUNTY OPW
 21777 DUNHAM RD
 CLINTON TOWNSHIP MI 48036-1005



DTN, LLC
 26385 NETWORK PLACE
 CHICAGO, IL 60673-1263



10000000057880520000000003225139 00000152400

Account Status

New Invoice	Due Date	Balance	Total
5788052	14-Aug-2020	\$ 1,524.00	\$ 1,524.00
TOTAL DUE			\$ 1,524.00

New Charges

Detailed Charges

Customer: MACOMB COUNTY OPW, CLINTON TOWNSHIP, MI
 Account Number: 0322513 UserID: MACOMB
 Email: JOSEPH.BETZ@MACOMBGOV.ORG

Service Period		
08/15/20-11/14/20	WxSentry Trans Online-Platinum	\$ 954.00
SUBTOTAL		\$ 954.00

Customer: MACOMB COUNTY OPW, CLINTON TOWNSHIP, MI
 Account Number: 0322513 UserID: MACOMB2
 Email: JOSEPH.BETZ@MACOMBGOV.ORG

Service Period		
08/15/20-11/14/20	WxSentry Transp Online-Std	\$ 120.00
SUBTOTAL		\$ 120.00

Customer: MACOMB COUNTY OPW, CLINTON TOWNSHIP, MI
 Account Number: 0322513 UserID: MACOMB3
 Email: JOSEPH.BETZ@MACOMBGOV.ORG

Service Period		
08/15/20-11/14/20	WxSentry Transp Online-Std	\$ 150.00
SUBTOTAL		\$ 150.00

Customer: MACOMB COUNTY OPW, CLINTON TOWNSHIP, MI

Subject to DTN Terms and Conditions

Customer's acceptance and activation of the DTN goods or services constitutes express acceptance of the Terms and Conditions, a copy of which was provided to Customer upon inception of the service. Any other terms and conditions presented by the Customer, contrary to those provided DTN, do not apply. Canceling service will result in the billing for the duration of the then-current term under the DTN Subscription Agreement.

Services Provided By:	PST
DTN, LLC	QC: 1216123332
Omaha, NE 68114-3334	SK: 2446102
Tax ID (EIN) - 20-5551424	MB: 087446-1
GST: 83187 6255 RT0001	BC: PST-1000-7804

Payment Information

If payment is not received by the due date, late fees and/or collection charges may be assessed. Customer understands that DTN may reduce or disconnect services offered to Customer for non-payment of any charges due. Customer agrees that DTN may charge a reconnection fee in the event that service is disconnected for nonpayment. A \$25.00 USD fee will be assessed for all returned checks. For your convenience, DTN accepts the following credit cards: Master Card, VISA, Discover, and American Express.

T1200724.001-332-000000259

Weather Did you know? Worldwide, weather poses serious threats and challenges for a number of industries. Our leading decision support tools and forecast insights help ensure safe, efficient operations. In a time of increasing weather volatility, managing weather risk is becoming an even more important. From Aviation to Marine to Energy and Sports and Outdoor events our solutions and meteorologists are dedicated to your needs. Find out more about our DTN weather solutions at www.dtn.com

Electronic Payment Information:
 Must reference DTN Account No. and Invoice No.

Banking Details: Remit in USD
 DTN, LLC
 Account No.: 464642771
 (ACH) - ABA (Routing)#: 071000013
 (Wire) - ABA (Routing)#: 021000021
 SWIFT ID: CHASUS33

Bank Address:
 (ACH) - JPMorgan Chase, Chicago, IL
 (Wire) - JPMorgan Chase, New York, NY

Account Number: 0322513 UserID: MACOMB4

Email: JOSEPH.BETZ@MACOMBGOV.ORG

Service Period

08/15/20-11/14/20 WxSentry Transp Online-Std \$ 150.00

SUBTOTAL \$ 150.00

Customer: MACOMB COUNTY OPW, CLINTON TOWNSHIP, MI

Account Number: 0322513 UserID: MACOMB5

Email: JOSEPH.BETZ@MACOMBGOV.ORG

Service Period

08/15/20-11/14/20 WxSentry Transp Online-Std \$ 150.00

SUBTOTAL \$ 150.00

Total New Charges \$ 1,524.00





ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	8/27/20
4. SET ID		
VP200827MIA		
5. POST DATE		

PARENT RECORD INFORMATION			
6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)
Green For Life	V46134	05	45769000
			10. Invoice Date
			8/14/2020
			11. Invoice Amount
			1,820.80

CHILD RECORD DETAIL INFORMATION										
Line	General Ledger			Job Ledger			OPTIONAL			22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	15. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	
A	8210017M	92800	CC0004	92800	WO18006	8 1/2 Mile Relief	Ac#001724936, September	\$ 1,820.80	GEN	
B										
C										
D										
E										
F										
G										

23. Total: \$ 1,820.80

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
Special Collections for Wet Well Cleaning

25. Finance Officer: _____ Drain: 8 1/2 Mile Relief

26. Chief Deputy: _____ Project Balance: N/A

27. Engineers: _____ Staff Date: 9/8/2020

28. Managers: _____ Board Date: 9/14/2020

29. Coordinator: _____ Select For Pay Date: _____



GFL ENVIRONMENTAL
6200 ELMRIDGE DR
STERLING HEIGHTS, MI 48313-3706

<h1>INVOICE</h1>
PAYMENT DUE: 09-13-20

SERVICE ADDRESS:
CHAPATON PUMP STATION
23001 E MILE RD #9
ST CLAIR SHORES, MI 48080

INVOICE NUMBER: 0045769000
INVOICE DATE: 08-14-20
SERVICE PERIOD: SEPTEMBER

BILLING CONTACT #:
(586) 260-4908

ACCOUNT #: 001724936

PREVIOUS BALANCE		715.00
CURRENT CHARGES	+	1,820.80
PAYMENTS/ADJUSTMENTS	-	715.00
BALANCE NOW DUE	=	1,820.80

DATE	DESCRIPTION	QTY X UNIT PRICE	TOTAL
	*** SiteID 00002 - CHAPATON PUMP STATION 23001 E MILE RD #9		
07-16-20	DISPOSAL RO SPECIAL WASTE WO#0015727233	7.79 X 80.00	623.20
07-17-20	DISPOSAL RO SPECIAL WASTE WO#0015727234	6.19 X 80.00	495.20
08-07-20	DISPOSAL RO SPECIAL WASTE WO#0015874385	8.78 X 80.00	702.40
	Sub Total Services Only:		1,820.80
	Sub Total Taxes, Oil/Environmental & Fees:		0.00
	Site Sub Total:		1,820.80
Total New Charges			1,820.80

IMPORTANT NEWS:

GFL Environmental Offers Pay-By-Phone!
Call **1-844-464-3587**. Choices. Checking, Visa, American Express and Mastercard are accepted.

For Customer Service and Account Inquiries. Please call **(844) 464-3587**

Convenience. It's fast! Your statement is online right now. **Control.** You decide how and when to pay. To Enroll: myaccount.gflusa.com

To avoid late fees and service interruption, payments must be received by the due date. Except as may be otherwise provided by written contract, all past due balances will be assessed a 1.5% late fee with a minimum charge of \$5.00. By payment of this invoice, you are expressly confirming your consent to be contacted, with respect to this account, at the Billing Contact # reflected above.

▼ PLEASE DETACH AND RETURN THE BOTTOM PORTION WITH YOUR PAYMENT ▼

BE SURE TO WRITE YOUR INVOICE NUMBER ON YOUR CHECK.
CUSTOMER ACCOUNT #: 001724936
INVOICE NUMBER: 0045769000
PAYMENT DUE: 09-13-20
TOTAL AMOUNT DUE: **\$1,820.80**

Amount Enclosed \$

▼ Remit to: **TO PAY ONLINE, GO TO**
www.gflusa.com



GFL ENVIRONMENTAL
6200 ELMRIDGE DR
STERLING HEIGHTS, MI 48313-3706

Check here and see reverse for address and phone corrections

9185904-535-1 1 1 535 1 AV 0.389 2

MACOMB COUNTY PUBLIC WORKS
21777 DUNHAM RD
CLINTON TOWNSHIP MI 48036-1005



GFL ENVIRONMENTAL
PO BOX 791519
BALTIMORE, MD 21279-1519

0045769000001724936000018208000001820805000

How to Read Your Statement

- 1 Customer Account Number:**
For prompt service, please use this number when referring to your account.
- 2 Easy to Read:**
All your services and the description of the associated charges are easy to understand.
- 3 New Charges Summary:**
This information provides the dollar amount for the various services and transactions.
- 4 Important News:**
Please read these important messages that may have an impact on your account or service.
- 5 Statement Review:**
At-a-glance review of your statement and any outstanding charges.
- 6 Easy to Pay:**
You can pay via mail, on-line or call us toll-free to expedite your remittance with automatic credit card payments.
- 7 Remit to:**
If paying by mail, detach and mail to this address with your payment. Please include invoice number on your check.
- 8 On-Line Bill Payment:**
Visit our website for on-line access to your account info and bill payment. Register for electronic delivery of your bill and free payment service.



GFL ENVIRONMENTAL
3741 CONQUEST DRIVE
GARNER, NC 27529

SERVICE ADDRESS:
JOHN DOE
1234 MAIN ST
ANYTOWN, US 99999-9999

BILLING CONTACT:
JOHN DOE
1234 MAIN ST
ANYTOWN, US 99999-9999

ACCOUNT # 012345678

INVOICE

INVOICE NUMBER: 12345678
INVOICE DATE: 01-15-19
SERVICE PERIOD: JANUARY - FEBRUARY

UPON RECEIPT

DESCRIPTION	AMOUNT	DATE
01-15-19 Fuel & Oil Fee	1.00	1-15
01-15-19 1234 Main Street, Anytown, US	119.40	1-15
01-15-19 5678 Main Street, Anytown, US	119.40	1-15
01-15-19 9012 Main Street, Anytown, US	119.40	1-15
01-15-19 3456 Main Street, Anytown, US	119.40	1-15
01-15-19 7890 Main Street, Anytown, US	119.40	1-15
01-15-19 1234 Main Street, Anytown, US	119.40	1-15
Total New Charges	1123.50	

IMPORTANT NEWS:
Your invoice may reflect a price increase to cover rising operating costs and regulatory compliance.

6 **CONSUMER BILLING RIGHTS:**
You have the right to request a copy of this statement and to dispute any charges.

GFL ENVIRONMENTAL
3741 CONQUEST DRIVE
GARNER, NC 27529

JOHN DOE
1234 MAIN ST
ANYTOWN, US 99999-9999

YOUR ACCOUNT # 012345678
SERVICE NUMBER 12345678
TOTAL AMOUNT DUE \$ 1123.50

7 **AMOUNT DUE** \$ 1123.50
8 **DATE DUE** 02-15-19

Billing Rights Summary

If you think your bill is incorrect, or if you need more information about the details of your bill, please contact us at the number listed on the front of your bill or email us at mybilling@gflenv.com. We must hear from you no later than 60 days from the date of your bill on which the error occurred. Your bill shall be deemed correct unless disputed within 60 days from receipt.

Electronic Funds Transfer Notice

If you pay by check, it will be converted into an "Electronic Funds Transfer" (EFT), a process in which your financial institution is electronically instructed to transfer funds from your account to ours in lieu of processing the check. By sending your completed check to us, you authorize us to use the account information therein to create an EFT for the amount indicated on the check. If the EFT cannot be processed for technical or other reasons, you authorize us to process an image replacement document, draft, or copy of your check.

Late Fees & Service Fees

Except as may be otherwise provided by written contract, all past due balances will be assessed a 1.5% late fee with a minimum charge of \$5.00. GFL Environmental reserves the right to charge service related fees associated with but not limited to the following: setup fees, early termination fees, container return fees, etc.

Cancellation Policy and Proration Policy

The customer must provide notice of cancellation by phone or mail at the phone number or address on the front of your bill, or by email at mybilling@gflenv.com. There will be no proration of billing and you will not be entitled to a refund if service is canceled during a billing cycle. You will remain responsible for all charges, fees and taxes through the end of the billing cycle (including the period between the notice of termination and the end of the current billing cycle). This provision will not apply if it is contrary to a current franchise agreement, municipal contract, or other written contract applicable to this account or is otherwise prohibited by law.

Insufficient Funds Notice

If your check is returned for insufficient or uncollected funds (NSF), your signature on your check gives us permission to debit your checking account electronically for the uncollected amount. Payment by check constitutes your acceptance of these terms. For each returned check a fee will be assessed on your next billing equal to the maximum amount permitted by state law.

PLEASE PRINT ONLY NEW ADDRESS INFORMATION BELOW AND CHECK THE BOX ON THE REVERSE SIDE. THANK YOU.

Address Change(s)

MAILING ADDRESS PAY BY CHECK

Name _____

Address _____

City _____

State _____

Phone Number _____

Customer Account Number _____

Optional Payment Methods

eBilling:
Invoices in an Instant! Enroll in eBilling at myaccount.gflusa.com and click My Account. No fees apply when paying through this method and your statement is always ready! You decide when to pay! Choose to enroll in automatic payments or pay on demand. Checking, Visa, American Express and Mastercard are accepted.

Pay-By-Phone:
Call our toll-free number 1-844-464-3587 and have your account number ready. Checking, Visa, American Express and Mastercard are accepted. Fees will apply when using this method.



Mark A. Hackel
County Executive

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	8/5/20
4. SET ID	5. POST DATE	
VF202806MA		

6. VENDOR NAME (Check to be issued to)		7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date	11. Invoice Amount
Grainger		V01909	04	9591708954	7/16/2020	\$ 593.34

General Ledger		Job Ledger		OPTIONAL			21. MISC	22. Sep CK	
12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	
A	8210017M	97002	97002	WO18006	8 1/2 Mile Relief	Ac#803170893, Utility pump	\$ 593.34	GEN	
B									
C									
D									
E									
F									
G									

23. Total: \$ 593.34

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer: Bm/mwh

26. Chief Deputy: _____

27. Engineers: _____

28. Managers: _____

29. Coordinator: _____

30. Drain: 8 1/2 Mile Relief

31. Project Balance: N/A

32. Staff Date: 8/11/2020

33. Board Date: 9/14/2020

34. Select For Pay Date: _____

GRAINGER®

25940 GROESBECK HWY.
WARREN, MI 48089-4144
www.grainger.com

PAGE 1 OF 1

INVOICE

GRAINGER ACCOUNT NUMBER 803170893
INVOICE NUMBER 9591708954
INVOICE DATE 07/16/2020
DUE DATE 08/15/2020
AMOUNT DUE \$593.34

SHIP TO

MACOMB COUNTY PUBLIC WORKS
23001 E 9 MILE RD
SAINT CLAIR SHORES MI 48080-1576

PO NUMBER: CHAPITON RTB
CALLER: BOB BUGAMELLI
CUSTOMER PHONE: 5867723434
ORDER NUMBER: 1388310418
INCO TERMS: FOB ORIGIN

BILL TO
MACOMB COUNTY PURCHASING
120 N MAIN ST
MOUNT CLEMENS MI 48043-5605

Pay invoices online at:
www.grainger.com/invoicing
Sign up for paperless invoicing at:
www.grainger.com/paperlessinvoicing

THANK YOU! FEI NUMBER 36-1150280

FOR QUESTIONS ABOUT THIS INVOICE OR ACCOUNT CALL 1-800-472-4643

PO LINE #	ITEM #	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL
	38H468	PLUG-IN UTILITY PUMP; 1 HP, 115VAC MANUFACTURER # LB-800 Delivery #:6476229202 Date: 07/16/2020 Carrier: UPS GROUND No.of Pkgs:1 Wt: 35.000 Trk #:1Z59A88R0322496245 SHIPPED FROM: DC MACEDONIA 935 8211 BAVARIA ROAD,MACEDONIA,OH 44056-2259	1	593.34	593.34
INVOICE SUB TOTAL					593.34

THIS PURCHASE IS GOVERNED EXCLUSIVELY BY GRAINGER'S TERMS OF SALE, INCLUDING: (I) DISPUTE RESOLUTION REMEDIES, AND (II) CERTAIN WARRANTY AND DAMAGES LIMITATIONS AND DISCLAIMERS IN EFFECT AT THE TIME OF THE ORDER, WHICH ARE INCORPORATED BY REFERENCE HEREIN. GRAINGER'S TERMS OF SALE ARE AVAILABLE AT WWW.GRAINGER.COM
PRODUCT RETURN INSTRUCTIONS ARE AVAILABLE AT WWW.GRAINGER.COM/RETURNS

These items are sold for domestic consumption. If exported, purchaser assumes full responsibility for compliance with US export controls. Diversion contrary to US law prohibited.
Reprint

PAY THIS INVOICE - PAYMENT TERMS Net 30 days after inv IN U.S. DOLLARS.

AMOUNT DUE

\$593.34

PLEASE DETACH THIS PORTION AND RETURN WITH YOUR PAYMENT

BILL TO:

MACOMB COUNTY PURCHASING
120 N MAIN ST
MOUNT CLEMENS MI 48043-5605
UNITED STATES OF AMERICA

REMIT TO:

GRAINGER
DEPT. 803198225
PALATINE, IL 60038-0001

803198225959170895410000593341000000010000000100000020081573

X

ACCOUNT NUMBER

DATE

INVOICE NUMBER

AMOUNT DUE

803170893

07/16/2020

9591708954

\$593.34

FOR COMMENTS OR CHANGE OF ADDRESS, ENTER INFORMATION ON REVERSE SIDE

35



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 8/17/20
4. SET ID VP200817MA		
6. POST DATE		

PARENT RECORD INFORMATION		
6. VENDOR NAME (Check to be issued to) Howard T Moriarty	7. VENDOR NUMBER V73739	8. ADDR CODE 01
9. Invoice No (MAX = 16 CHARACTERS) 13730	10. Invoice Date 8/13/2020	11. Invoice Amount 5,795.00

CHILD RECORD DETAIL INFORMATION										
Line	General Ledger			Job Ledger			OPTIONAL			
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC
A	8210017M	97002	CC00004	97002	WO18006	8 1/2 Mile Relief	Acct #41142 - Arrow Board	\$ 2,897.50	GEN	
B	8210166M	97002	CC00018	97002		MIDDD	Acct #41142 - Arrow Board	\$ 2,897.50	GEN	0
C										
D										
E										
F										
G										

23. Total: \$ **5,795.00**

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	BM/mh	30. Drain:	8 1/2 Mile; MIDDD
26. Chief Deputy:		31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	8/25/2020
28. Managers:		33. Board Date:	9/14/2020
29. Coordinator:		34. Select For Pay Date:	



Howard T. Moriarty Co., Inc.
 143 Broadway Toledo, OH 43604
 (419) 243-3111 - FAX (419) 243-5708
www.htmtoledo.com

Account #	Salesperson
41142	Pat Moriarty

SALES INVOICE

Date:	Invoice No.
8-13-2020	13730

Sold to: 6 Pat Moriarty
 Macomb County Public Works
 Finance Department
 21777 Dunham Roan
 Clinton Township MI 48035

Ship to:
 PW--Chapaton Pump Station
 23001 9 Mile Rd.
 St. Clair Shores, MI 48080

Ship Via:

Entered By	Purchase Order	Job No.	Customer Contact	Ord Date	Customer Phone #
Pat Moriarty	PW000077		Candice Miller	8-11-2020	

Part Number	Description	Meter Out	Ord	Ship	B/O	Unit Price	Extended
531571	SOLAR TECHNOLOGY SILENT SENTINEL ARROW BOARD		1	1		5,795.00	5,795.00

S/N 531571

Sub Total	\$5,795.00
Total	\$5,795.00
Paid	\$0.00
Balance	\$5,795.00

**MACOMB COUNTY PUBLIC WORKS OFFICE
ENGINEERING INVOICE COVER SHEET**

WORK ORDER NUMBER	WWS-2020-002
PROJECT NUMBER	C6A14800
PROJECT NAME	Chapaton Odor Study
DRAINAGE DISTRICT	8 1/2 Mile Drain Drainage District c/o Macomb County Public Works Office
CONSULTANT NAME	Jacobs Consultants Inc.
INVOICE DATE	5/14/2020
INVOICE START DATE	4/1/2020
INVOICE END DATE	4/30/2020
ORIGINAL CONTRACT AMOUNT	\$ 68,639.00
CHANGE ORDER TOTAL	\$ -
TOTAL REVISED CONTRACT AMOUNT	\$ 68,639.00
(includes all approved change orders only)	
TOTAL AMOUNT PREVIOUSLY INVOICED	\$ 59,892.00
TOTAL AMOUNT DUE THIS INVOICE	\$ 8,747.00
TOTAL BUDGET REMAINING	\$ -
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)	



8 1/2 Mile Drain Drainage District
 c/o Macomb County Public Works Office
 Attn.: Accounts Payable
 21777 Dunham Road
 Clinton Township, MI 48036

Project Manager: Allen Gelderloos
 (Ph: 616.430.9298)

Client Project No: WWS-2020-002
 Contract Amount: \$ 68,639.47

Invoice No.: 2
 Client Project No: WWS-2020-002
 Contractor Invoice No.: C6A14800-002
 Date: 5/14/2020

Services From: 04/01/20
 Services Through: 04/30/20
 Start Work Date: 01/07/20
 Contract Completion: 12/01/20

Task No.	Task Description	Scheduled Values	Work Completed from Previous Invoice	Amount Due This Invoice	Total % Complete to Date	Total Value Completed to Date	Balance Remaining
01	Collect and Review Background Data	\$ 8,247.40	\$ 8,247.40	\$ -	100.00%	\$ 8,247.40	\$ -
02	Perform Field Investigation	\$ 1,840.00	\$ 1,840.00	\$ -	100.00%	\$ 1,840.00	\$ -
03	Conduct Air Dispersion Modeling	\$ 21,970.00	\$ 21,970.00	\$ -	100.00%	\$ 21,970.00	\$ -
04	Prepare Draft Study Report	\$ 18,926.60	\$ 18,926.60	\$ -	100.00%	\$ 18,926.60	\$ -
05	Meet with MCPWO and Project Stakeholders	\$ 2,908.00	\$ 2,908.00	\$ -	100.00%	\$ 2,908.00	\$ -
06	Finalize Study Report	\$ 8,747.00	\$ -	\$ 8,747.00	100.00%	\$ 8,747.00	\$ -
07	Expenses	\$ 6,000.00	\$ 6,000.00	\$ -	100.00%	\$ 6,000.00	\$ -
Contract Summary		\$ 68,639.00	\$ 59,892.00	\$ 8,747.00	100.00%	\$ 68,639.00	\$ -

To ensure accurate posting, please note the invoice number on your check.

Remit Electronic payment to :
 Beneficiary Bank: Wells Fargo
 ABA No: 121000248
 Account No (USD): 4121034003
 SWIFT: W F BIUS66

Chapaton RTB Canal Upgrades

Invoice #	Date	Amount	
Wade Trim - Chapaton Canal Upgrades Contract Value (with Approved Change Orders) \$1,387,874			
M2014218	WADE TRIM	4/1/19	\$27,661.89
M2014455	WADE TRIM	4/26/19	\$45,574.73
M2014760	WADE TRIM	5/31/19	\$123,741.89
M2015047	WADE TRIM	7/1/19	\$82,296.39
M2015870	WADE TRIM	9/24/19	\$89,256.89
M2015339	WADE TRIM	7/30/19	\$81,989.55
M2015602	WADE TRIM	8/28/19	\$78,710.44
2016150	WADE TRIM	1/1/19	\$140,190.80
2016457	WADE TRIM	12/5/19	\$131,501.95
2016836	WADE TRIM	1/3/20	\$63,603.78
2017103	WADE TRIM	1/31/20	\$96,050.13
2017374	WADE TRIM	2/28/20	\$120,258.91
2017671	WADE TRIM	3/27/20	\$100,077.90
2017951	WADE TRIM	4/29/20	\$58,377.75
2018187	WADE TRIM	6/1/20	\$8,312.67

Jacob - Odor Evaluation Study Contract Value \$68,639

Inv #1	JACOBS	4/16/20	\$59,892.00
Inv #2	JACOBS	5/14/20	\$8,747.00

Tetra Tech - In-System Storage Contract Value (with Approved Change Orders) \$1,430,533

51471309	TETRA TECH	8/2/19	\$5,891.00	
51486824	TETRA TECH	9/12/19	\$9,346.50	
51519169	TETRA TECH	11/14/19	\$105,806.32	
51532937	TETRA TECH	12/18/19	\$60,288.70	\$3,000,000.00
51533040	TETRA TECH	12/19/19	\$23,104.82	-\$1,387,874.00
51540373	TETRA TECH	1/10/20	\$60,213.92	-\$68,639.00
51548755	TETRA TECH	1/31/20	\$25,087.35	-\$1,430,533.00
51561487	TETRA TECH	3/4/20	\$37,671.68	\$112,954.00 Balance of Grant less existing contracts
51571567	TETRA TECH	4/2/20	\$42,241.43	
51583201	TETRA TECH	4/24/2020	\$17,286.00	
51597243	TETRA TECH	6/5/20	\$13,300.51	
51608770	TETRA TECH	7/8/20	\$70,565.00	
51618840	TETRA TECH	8/3/20	\$69,131.63	
51628645	TETRA TECH	8/28/20	\$86,908.25	
	Wade Trim Invoiced To Date		\$1,247,605.67	
	Jacobs Invoiced To Date		\$68,639.00	
	Tetra Tech Invoiced To Date		\$626,843.11	
Balance of \$3M State Grant Remaining:			\$1,056,912.22	

Wade PJT Balance	\$140,268.33
JACOBS PJT Balance	\$0.00
Tetra Tech PJT Balance	\$603,689.89



Mark A. Hackel
County Executive

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST
PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	8/17/20
4. SET ID		5. POST DATE
VP200817MUA		

PARENT RECORD INFORMATION					
6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date	11. Invoice Amount
JCI JONES CHEMICALS INC	V65297	01	829567	8/12/2020	\$ 3,993.28

CHILD RECORD DETAIL INFORMATION						
Line	General Ledger		Job Ledger		OPTIONAL	
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)
A	8210017M	72650	CC0004	72650	WO18006	8 1/2 Mile Relief
B						
C						
D						
E						
F						
G						
					19. Amount	20. DIV
					\$ 3,993.28	GEN

23. Total: \$ 3,993.28

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	BM/mh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	8/25/2020
28. Managers:		33. Board Date:	9/14/2020
29. Coordinator:		34. Select For Pay Date:	



www.jcichemicals.com

INVOICE

Inv Date	Invoice #
08/12/2020	829567
Date Shipped	Order/BOL #
08/12/2020	614661

*** ORIGINAL ***
 JCI JONES CHEMICALS, INC..
 RIVERVIEW BRANCH LOCATION
 18000 PAYNE AVENUE
 RIVERVIEW, MI 48192
 Phone: (734) 283-0677
 Fax: (734) 283-0979
 email: cs@jcichem.com

Customer Number
 21543215

S MACOMB COUNTY
 O ATTN: ACCTS PAYABLE
 L 23001 9 MILE ROAD
 D Saint Clair Shores , MI 48080-
 T USA
 O

S ID #: 1
 H CHAPATON PUMPING STATION
 I 23001 NINE MILE RD
 P ST CLAIR SHORES , MI 48080-
 T USA
 O

Customer PO #		FOB Remark	Freight Terms		Sales ID
VBL-PETE/CHAPATON		Destination	Delivered		NORTH
Release #		Ship Via	Terms	Due Date	Discount Due Date
		Harold Marcu	N 30	09/11/2020	9/11/2020
Units	Package	Product Name	Total Quantity	Unit Price	Amount
4,423.00	Gal Bulk	HYPOCHLORITE SOLUTION, SS150 1201-001 BULK (\$85 Stop Fee) (+ fsc)	4,423.0000/Gal	0.9000 /Gal	3,980.70
General Remarks:		<> EMAIL INVOICE TO: michelle.houvenier@macombgov.org <> OUTSIDE CARRIER: MARCUS NET WEIGHT: 44520 FSC \$12.58			
		Fuel Surcharge			12.58

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Total: 3,993.28

PLEASE PAY
THIS AMOUNT



Remit To: JCI Jones Chemicals, Inc.
 MSC# 729
 PO BOX 830674
 Birmingham, AL 35283-0674 USA

JCI Welcomes payments via ACH, EFT and WIRE



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 9/1/20
4. SET ID VP200903MUA		
5. POST DATE		

PARENT RECORD INFORMATION			
6. VENDOR NAME (Check to be issued to) JCI JONES CHEMICALS INC	7. VENDOR NUMBER V65297	8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) 831726
			10. Invoice Date 9/1/2020
			11. Invoice Amount 3,971.68

CHILD RECORD DETAIL INFORMATION												
Line	General Ledger		Job Ledger		16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	OPTIONAL	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object								
A	8210017M	72650	CC0004	72650	CC18006	8 1/2 Mile Relief		Order #616247, 9/1/20	\$ 3,971.68	GEN		
B												
C												
D												
E												
F												
G												

23. Total: \$ **3,971.68**

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	BM/mh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	9/8/2020
28. Managers:		33. Board Date:	9/14/2020
29. Coordinator:		34. Select For Pay Date:	



www.jcichemicals.com

INVOICE

Inv Date	Invoice #
09/01/2020	831726
Date Shipped	Order/BOL #
09/01/2020	616247

*** ORIGINAL ***
 JCI JONES CHEMICALS, INC..
 RIVERVIEW BRANCH LOCATION
 18000 PAYNE AVENUE
 RIVERVIEW , MI 48192
 Phone: (734) 283-0677
 Fax: (734) 283-0979
 email: cs@jcichem.com

Customer Number
 21543215

S MACOMB COUNTY
 O ATTN: ACCTS PAYABLE
 L 23001 9 MILE ROAD
 D Saint Clair Shores , MI 48080-
 T USA
 O

S ID #: 1
 H CHAPATON PUMPING STATION
 I 23001 NINE MILE RD
 P ST CLAIR SHORES , MI 48080-
 T USA
 O

Customer PO #	FOB Remark		Freight Terms		Sales ID
VERBAL-PETE	Destination		Delivered		NORTH
Release #	Ship Via	Terms	Due Date	Discount Due Date	
	Harold Marcu	N 30	10/01/2020	10/1/2020	
Units	Package	Product Name	Total Quantity	Unit Price	Amount
4,399.00	1 Gal Bulk	HYPOCHLORITE SOLUTION, SS150 1201-001 BULK (\$85 Stop Fee) (+ fsc)	4,399.0000/Gal	0.9000 /Gal	3,959.10
General Remarks:		<> EMAIL INVOICE TO: michelle.houvener@macombgov.org <> OUTSIDE CARRIER: HAROLD MARCUS NET WEIGHT: 44.460 FSC			
		Fuel Surcharge			12.58

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Total: **3,971.68**

Remit To: JCI Jones Chemicals, Inc.
 MSC# 729
 PO BOX 830674
 Birmingham, AL 35283-0674 USA

PLEASE PAY
 THIS AMOUNT



JCI Welcomes payments via ACH, EFT and WIRE



Mark A. Hackel
County Executive

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	8.6.20
4. SET ID	5. POST DATE	
VP200806MA		

PARENT RECORD INFORMATION		
6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	8. ADDR CODE
Lardner Elevator	V02788	01
9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date	11. Invoice Amount
187787	12-5-19	\$ 2,400.00

CHILD RECORD DETAIL INFORMATION				19. Amount	20. DIV	21. MISC	22. Sep CK	
General Ledger		Job Ledger		18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object					
A	8210017M	93005	93005	WO18006 : 8 1/2 Mile Relief	\$ 2,400.00	GEN		
B								
C								
D								
E								
F								
G								

23. Total: \$ 2,400.00

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer: BML/mh

26. Chief Deputy: _____

27. Engineers: _____

28. Managers: _____

29. Coordinator: _____

30. Drain: 8 1/2 Mile Relief

31. Project Balance: N/A

32. Staff Date: 8/11/2020

33. Board Date: 9/14/2020


34. Select For Pay Date: _____

LARDNER ELEVATOR

729 Meldrum, Detroit, MI 48207
 Phone: (313) 568-1600 Fax: (313) 568-0488
 Email: info@lardnerelevator.com
 www.lardnerelevator.com

INVOICE

Invoice #
187787

Bill To: 
 Chapaton Pump Station
 23001 E. Nine Mile
 St. Clair Shores, MI 48080

Account: Chapaton Pump Station
 23001 E. Nine Mile
 St. Clair Shores, MI 48080
 Account #: 00-6198-4

Date	Dec 05, 2019	Terms	Upon Receipt	Route	Non-contract	Job #	3110
Inv #	187787	PO #	18-9318	Territory	LECO	Type	Repair

Quantity	Description	Taxable	Measure	Price	Amount	
1.00	Quoted Price - #196 & 198	No	Each	2,400.00	\$2,400.00	
11/26/2019 TT# 145731 & 154732 E# 11101 Replaced control board for ICU. Left remaining parts on job. Check operation and return to service.						
					Taxable	\$0.00
					Non-Taxable	\$2,400.00
					Sub-Total	\$2,400.00
					Sales Tax	\$0.00
					TOTAL	\$2,400.00

Page 1

Rev. 01/15/14

PLEASE DETACH THIS PORTION AND RETURN WITH PAYMENT



Lardner Elevator Company
 729 Meldrum
 Detroit, MI 48207

Account # 00-6198-4
 Chapaton Pump Station
 Invoice # 187787
 Amount \$ 2,400.00
 Paid \$



Mark A. Hackel
County Executive

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	9/8/20
4. SET ID		5. POST DATE
VP200903MA		

PARENT RECORD INFORMATION

6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date	11. Invoice Amount
Marino's Landscape	V66876	01	10956	8/31/2020	\$ 1,156.00

CHILD RECORD DETAIL INFORMATION

Line	General Ledger		Job Ledger		16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object							
A	8210017M	92900	CC0004	92900	8 1/2 Mile Relief		Lawn Care Aug 2020	\$ 1,156.00	GEN		
B											
C											
D											
E											
F											
G											

REV 09/2018

23. Total: \$ 1,156.00

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	BIM/rmh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	9/8/2020
28. Managers:		33. Board Date:	9/14/2020
29. Coordinator:		34. Select For Pay Date:	

Marino's Landscape
 51879 Schoenherr Rd
 Shelby Twp, MI 48315
 586-803-3860



Macomb County Public Works Office
 21777 Dunham Rd.
 Clinton Twp, MI 48036

PO #
 Invoice # 10956
 Invoice Date 8/31/2020
 Invoice Balance **1156.00**

Email: Lori@marinoslandscape.com
 Website: www.marinoslandscape.com

Date	Description	Qty	Price	Total
8/4/2020	Lawn Maintenance	1.00	289.00	289.00
8/11/2020	Lawn Maintenance	1.00	289.00	289.00
8/18/2020	Lawn Maintenance	1.00	289.00	289.00
8/25/2020	Lawn Maintenance	1.00	289.00	289.00

Terms Due on receipt
 For 23001 E. 9 Mile Rd. - Chapaon 8 1/2 Mile, St Clair Shores MI 48080

Subtotal 1156.00
 Invoice Total 1156.00

Invoice Balance 1156.00

Client Name Macomb County Public Works Office
 For 23001 E. 9 Mile Rd. - Chapaon 8 1/2 Mile, St Clair Shores MI 48080
 Invoice # 10956
 Invoice Date 8/31/2020
 Invoice Balance 1156.00
 Amount Enclosed

PAYMENT STUB

Marino's Landscape
 51879 Schoenherr Rd
 Shelby Twp, MI 48315

Card #
 Exp. Date
 Signature

Invoices are due by terms listed. A monthly Finance Charge of 1 1/2% will be added monthly to balance 30 days past due.
NEW FOR 2019 Client portal - make payments and more!
<http://marinoslandscape.manageandpaymyaccount.com>
 (If you do not have your login information contact our office)
 Thank you for choosing Marino's Landscape.



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	8/5/20
4. SET ID		
6. POST DATE		
V9200806MA		

PARENT RECORD INFORMATION			
6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)
Marino's Landscape	V66876	01	10629
			10. Invoice Date
			7/31/2020
			11. Invoice Amount
			\$ 1,156.00

CHILD RECORD DETAIL INFORMATION												
Line	12. Org Key	13. Object	14. Job Ledger Cost Center (CCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)		18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
						OPTIONAL						
A	8210017M	92900	CC0004	92900	W15500	8 1/2 Mile Relief		Lawn Care July 2020	\$ 1,156.00	GEN		
B												
C												
D												
E												
F												
G												

23. Total: \$ 1,156.00

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer: BM/ink 30. Drain: 8 1/2 Mile Relief

26. Chief Deputy: _____ 31. Project Balance: N/A

27. Engineers: _____ 32. Staff Date: 8/11/2020

28. Managers: _____ 33. Board Date: 9/14/2020

29. Coordinator: _____ 34. Select For Pay Date: _____

Marino's Landscape
 51879 Schoenherr Rd
 Shelby Twp, MI 48315
 586-803-3860



Macomb County Public Works Office
 21777 Dunham Rd.
 Clinton Twp, MI 48036

PO #
Invoice # 10629
Invoice Date 7/31/2020
Invoice Balance **1156.00**

Email: Lori@marinoslandscape.com
 Website: www.marinoslandscape.com

Date	Description
7/7/2020	Lawn Maintenance
7/14/2020	Lawn Maintenance
7/21/2020	Lawn Maintenance
7/28/2020	Lawn Maintenance

Qty	Price	Total
1.00	289.00	289.00
1.00	289.00	289.00
1.00	289.00	289.00
1.00	289.00	289.00

Terms Due on receipt
For 23001 E. 9 Mile Rd. - Chapaon 8 1/2 Mile, St Clair Shores MI 48080

Subtotal 1156.00
Invoice Total 1156.00

Invoice Balance **1156.00**

Client Name Macomb County Public Works Office
For 23001 E. 9 Mile Rd. - Chapaon 8 1/2 Mile, St Clair Shores MI 48080
Invoice # 10629
Invoice Date 7/31/2020
Invoice Balance 1156.00
Amount Enclosed

PAYMENT STUB

Marino's Landscape
 51879 Schoenherr Rd
 Shelby Twp, MI 48315

Card #
Exp. Date
Signature

Invoices are due by terms listed. A monthly Finance Charge of 1 1/2% will be added monthly to balance 30 days past due.
NEW FOR 2019 Client portal - make payments and more!
<http://marinoslandscape.manageandpaymyaccount.com>
 (If you do not have your login information contact our office)
 Thank you for choosing Marino's Landscape.



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST
PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 7/30/20
4. SET ID VP200803MA		6. POST DATE

PARENT RECORD INFORMATION	
5. VENDOR NAME (Check to be issued to) Tetra Tech, Inc.	7. VENDOR NUMBER V16060
8. ADDR CODE 02	9. Invoice No (MAX = 16 CHARACTERS) 51617174
10. Invoice Date 7/29/2020	11. Invoice Amount \$ 7,000.00

CHILD RECORD DETAIL INFORMATION											
Line	12. Org Key	13. Object	14. Job Ledger		16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22 Sep CK
			Cost Center (CCNT)	15. Object							
A	8210017M	80138	CC0004	80138	WO20027	8 1/2 Mile Relief	Pjt #200-16347-20001 thru 7/24/20	\$ 7,000.00	GEN		
B											
C											
D											
E											
F											
G											

23. Total: \$ **7,000.00**

REV 09/2018

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer: **Bm/mh** 30. Drain: 8 1/2 Mile Relief

26. Chief Deputy: _____ 31. Project Balance: \$0.00

27. Engineers: _____ 32. Staff Date: 8/11/2020

28. Managers: _____ 33. Board Date: 9/14/2020

29. Coordinator: _____ 34. Select For Pay Date: _____

**MACOMB COUNTY PUBLIC WORKS OFFICE
ENGINEERING INVOICE COVER SHEET**

WORK ORDER NUMBER WO20027

PROJECT NUMBER WWS-2020-008 (Tetra Tech 200-16347-20001/INV 51617174)

PROJECT NAME Nine Mile Pump Station Risk & Cost Evaluation

DRAINAGE DISTRICT

CONSULTANT NAME: Tetra Tech of Michigan

INVOICE DATE 7/29/2020

INVOICE START DATE 6/27/2020

INVOICE END DATE 7/24/2020

ORIGINAL CONTRACT AMOUNT	\$	31,800.00
CHANGE ORDER TOTAL	\$	-
Change Order No. 1		
Change Order No. 2		
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	31,800.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	24,800.00
TOTAL AMOUNT DUE THIS INVOICE	\$	7,000.00
TOTAL BUDGET REMAINING	\$	-
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)		



Tetra Tech, Inc.
 424 Lewis Hargett Cir.
 Ste. 110
 Lexington, KY 40503
 (859) 223-8000

BILL TO: MACOMB COUNTY
ATTN: FINANCE DEPARTMENT
 OFFICE OF PUBLIC WORKS
 COMMISSIONER
 21777 DUNHAM RD
 PO BOX 806
 CLINTON TOWNSHIP, MI 48036

INVOICE NUMBER: 51617174
INVOICE DATE: 07/29/2020
SERVICES THROUGH: 07/24/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

Engineering Letter dated April 27, 2020
 Client Contact: Vincent Astorino

PROFESSIONAL SERVICES:

Project Number 200-16347-20001 **9 Mile Pump Station Risk and Cost Evaluation**
Top Task 001 **Cost & Risk Evaluation**

EVENT DESCRIPTION	TYPE	CURRENT AMOUNT
Spent to Date	Event	\$7,000.00
TOTAL EVENT		\$7,000.00
	SUBTOTAL	\$7,000.00
	Total Top Task# 001	\$7,000.00
	Total Project# 200-16347-20001	\$7,000.00

TOTAL AMOUNT DUE THIS INVOICE: \$7,000.00

Gross Contract Summary	
Contract Amount	\$31,800.00
Previously Billed	\$24,800.00
Current Billing	\$7,000.00
Total Billed to Date	\$31,800.00
Contract Balance Remaining	\$0.00

REMIT PAYMENT TO:

TETRA TECH, INC.
 PO BOX 911967
 DENVER, CO 80291-1967

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



PROJECT STATUS COMMUNICATION

DATE: July 29, 2020

PREPARED BY: Brian Rubel / Eric Geerlings

PROJECT: Macomb Co. Nine Mile Pump Station Risk and Cost Evaluation

Tt PROJECT NO: 200-16347-20001 CONTACT: Mr. Vince Astorino
(INVOICE 51617174)

Task completed or in-progress since last status communication.

Completed hydraulic model runs for large storms with 3 pumps running and at various high lake levels. On July 23rd, provided follow-up correspondence with HGL figures for large storms.

Opportunities for cost avoidance or added value.

None identified at this time.

Impediments, roadblocks, assistance needed.

None.

Change (or potential change) of scope items or customer concession. (Details on attached Request to Change Authorization)

The latest model run findings necessitate some minor revisions to the previously submitted report. Updates can be made once requested.

Schedule:

Scope has been completed. We stand ready to discuss the report and our follow-up correspondence further upon request.

Next task or action items.

1. Provide SWMM5 model files for large storm events if and when requested.
2. Participate in additional review calls with MCPWO if and when requested.
3. Update draft report.

Please do not hesitate to contact any member of our Team at any time.

Brian Rubel Phone: (734) 213-4081 Email: Brian.Rubel@tetrattech.com
Project Manager



Mark A. Hackel
County Executive

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	8/3/20
4. SET ID		5. POST DATE
V1200803MA		

PARENT RECORD INFORMATION

6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date	11. Invoice Amount
Tetra Tech, Inc.	V16060	02	51618840	8/3/2020	\$ 69,131.63

CHILD RECORD DETAIL INFORMATION

Line	General Ledger		Job Ledger		15. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	16. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object							
A	8210017C	80138	CC0004	80138	WO19004	8 1/2 Mile Relief	Pjt #200-16347-19001 thru 7/24/20	\$ 69,131.63	GEN		
B											
C											
D											
E											
F											
G											

REV 09/2018

23. Total: \$ 69,131.63

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

In-System Storage Devices - MEDC GRANT BALANCE \$1,152,567.47

25. Finance Officer:	BM/mh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	\$890,598.14
27. Engineers:		32. Staff Date:	8/11/2020
28. Managers:		33. Board Date:	9/14/2020
29. Coordinator:		34. Select For Pay Date:	

**MACOMB COUNTY PUBLIC WORKS OFFICE
ENGINEERING INVOICE COVER SHEET**

WORK ORDER NUMBER	WO19004	
PROJECT NUMBER	WWS-2019-003	(Tetra Tech# 200-16347-19001)
PROJECT NAME	In-System Storage Devices	
DRAINAGE DISTRICT	Eight and One-Half Mile Relief Drain Drainage District	
CONSULTANT NAME	Tetra Tech of Michigan	
INVOICE DATE	8/3/2020 (Invoice 51618840)	
INVOICE START DATE	6/27/2020	
INVOICE END DATE	7/24/2020	
ORIGINAL CONTRACT AMOUNT	\$	481,098.00
CHANGE ORDER TOTAL	\$	949,435.00
Change Order No. 1	\$	949,435.00
Change Order No. 2		
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	1,430,533.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	470,803.23
TOTAL AMOUNT DUE THIS INVOICE	\$	69,131.63
TOTAL BUDGET REMAINING	\$	890,598.14
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)		



Tetra Tech, Inc.
 424 Lewis Hargett Cir.
 Ste. 110
 Lexington, KY 40503
 (859) 223-8000

BILL TO: MACOMB COUNTY
ATTN: FINANCE DEPARTMENT
 OFFICE OF PUBLIC WORKS
 COMMISSIONER
 21777 DUNHAM RD
 PO BOX 806
 CLINTON TOWNSHIP, MI 48036

INVOICE NUMBER: 51618840
INVOICE DATE: 08/03/2020
SERVICES THROUGH: 07/24/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

ESA dated 10July 2019

Client Contact: Vince Astorino. Email vincent.astorino@macombgov.org

PROFESSIONAL SERVICES:

Project Number 200-16347-19001 **In-System Storage Devices**
Top Task 01DS **Basis of Design Subcontractors**

SUBCONTRACTOR	TYPE	CURRENT AMOUNT
ENVIRONMENTAL CONSULTING & TECHNOLOGY INC	Subcontractor-External	\$910.00
TOTAL SUBCONTRACTOR CHARGES		\$910.00
SUBTOTAL		\$910.00
Total Top Task# 01DS		\$910.00

Top Task 02A **Project Management / Design**

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Rubel, Brian M.	Program Manager	20.00	\$225.00	\$4,500.00
TOTAL LABOR		20.00		\$4,500.00
SUBTOTAL				\$4,500.00
Total Top Task# 02A				\$4,500.00

Top Task 02B **Design**

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Geerlings, Eric P.	Project Engineer 1	57.00	\$155.00	\$8,835.00
Graf, Mitchell J.	Project Manager 2	1.75	\$200.00	\$350.00
Kaliman, Roger G.	Sr Engineer 1	70.00	\$180.00	\$12,600.00
Lortz, Thomas J.	CAD Designer	14.00	\$140.00	\$1,960.00
Newman, Thomas S.	Architect	1.00	\$137.00	\$137.00
Paison, William A.	Sr Engineer 1	9.00	\$215.00	\$1,935.00
Sissoko, Moussa D.	Sr Engineer 2	13.00	\$200.00	\$2,600.00
Tervo, Jeffrey A.	CAD Designer	4.00	\$140.00	\$560.00
Troppman, Jenna R.	Engineer 3	4.00	\$125.00	\$500.00
TOTAL LABOR		173.75		\$29,477.00
SUBTOTAL				\$29,477.00
Total Top Task# 02B				\$29,477.00

Top Task 02BS_ECT **Design - Subcontractor ECT**

BILL TO: MACOMB COUNTY
ATTN: FINANCE DEPARTMENT
 OFFICE OF PUBLIC WORKS
 COMMISSIONER
 21777 DUNHAM RD
 PO BOX 808
 CLINTON TOWNSHIP, MI 48036

INVOICE NUMBER: 51618840
INVOICE DATE: 08/03/2020
SERVICES THROUGH: 07/24/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

SUBCONTRACTOR	TYPE	CURRENT AMOUNT
ENVIRONMENTAL CONSULTING & TECHNOLOGY INC	Subcontractor-External	\$1,700.00
TOTAL SUBCONTRACTOR CHARGES		\$1,700.00
SUBTOTAL		\$1,700.00
Total Top Task# 02BS_ECT		\$1,700.00

Top Task 02BS_FKE Design - Subcontractor FKE

SUBCONTRACTOR	TYPE	CURRENT AMOUNT
FK ENGINEERING ASSOCIATES	Subcontractor-External	\$21,478.38
TOTAL SUBCONTRACTOR CHARGES		\$21,478.38
SUBTOTAL		\$21,478.38
Total Top Task# 02BS_FKE		\$21,478.38

Top Task 02B_TCI Design - TCI

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Fortier, Véronique	Sr Modeler	1.75	\$210.00	\$367.50
Robitaille, Luc	Engineer 3	18.50	\$250.00	\$4,625.00
Tremblay, Simon	Sr Engineer I&C	28.25	\$215.00	\$6,073.75
TOTAL LABOR		48.50		\$11,066.25
SUBTOTAL				\$11,066.25
Total Top Task# 02B_TCI				\$11,066.25
Total Project# 200-16347-19001				\$69,131.63

TOTAL AMOUNT DUE THIS INVOICE: \$69,131.63

Gross Contract Summary	
Contract Amount	\$1,430,533.00
Previously Billed	\$470,803.23
Current Billing	\$69,131.63
Total Billed to Date	\$539,934.86
Contract Balance Remaining	\$890,598.14

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911967
 DENVER, CO 80291-1967

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.

11/17

ECT Environmental Consulting & Technology, Inc.
 3701 Northwest 98th Street
 Gainesville, FL 32606 - 352-332-0444

P.O. 1166619: X

TETRA TECH OF MICHIGAN
 710 AVIS DRIVE
 STE 100
 ANN ARBOR, MI 48108

Invoice #: 203002
 Invoice Date: 7/16/2020
 Project: 190509
 Project Name: MACOMB IN-SYS STRGE DEVICE-LANDA
 Fed ID: 59-2921038
 Terms: NET 10 DAYS

Attention: BRIAN RUBEL P E

Client Ref: TT PN - 200-16347-19001-1

For Professional Services Rendered through: 6/26/2020
 EMAIL INVOICE TO BRIAN.RUBEL@TETRATECH.COM

Phase Code / Name	Phase Fee	Previous Amount	Current Amount	% Complete	Total Fee Earned
0100 -- STUDY	.01DS 23,068.00	4,925.00	910.00	25.29	5,835.00 (1)
0200 -- WELSH CONSTR DRAWINGS	.02BS-ECT 42,750.00	0.00	1,700.00	3.98	1,700.00 (2)
0300 -- BEACONFIELD CONSTR DRAWINGS	7,775.00	0.00	0.00	0.00	0.00
Total Fee:	73,593.00				

Total Fee Earned To Date 7,535.00
 Less Previous Billings 4,925.00
Amount Due this Invoice 2,610.00

Project Manager: PATRICK J. JUDD
 Billings: 000596

129566

Ok to pay when paid
 B. Rubel
 7/16/20

200-16347-19001
 .01DS - 910.00 (1)
 .02BS-ECT - 1700.00 (2)
 sub-ECT
 200 FEW AA

RECEIVED
 JUL 20 2020
 TETRATECH

11/17



FK Engineering Associates
 30425 Stephenson Hwy
 Madison Heights, MI 48071
 (248) 817-2946

INVOICE

Invoice Date: 07/14/20
 Total Amount: \$21,478.38
 Number: 19-102-005
 Invoice Period: 06/07/20 - 07/04/20
 PO Number: 1166826.2
 Project Code: 19-102
 Project: Macomb In-Line Storage

Tetra Tech
 Brian Rubel
 710 Avis Drive - Suite 100
 Ann Arbor, MI 48108

OK to Pay - 07/23/2020

Brian M. Rubel

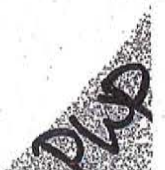
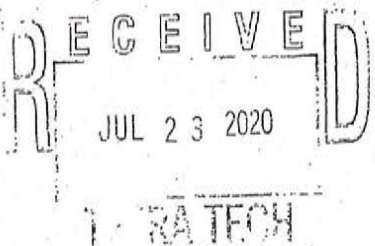
INVOICE SUMMARY

Description	Amount
Task 2 - Design Phase.	\$16,501.00
Task 2 - Design Phase Expenses.	\$4,977.38

Description	Total Budget	Remaining Budget (\$)	Prior Billing (\$)	This Invoice (\$)
Task 1 - Study Phase	\$15,000.00	\$4,896.15	\$10,103.85	--
Task 2 - Design Phase	\$68,000.00	\$45,355.63	\$1,166.00	\$21,478.38
BUDGET TOTALS	\$83,000.00	\$50,251.78	\$11,269.85	\$21,478.38
TOTAL AMOUNT DUE				\$21,478.38

Remit payment to:
 30425 Stephenson Hwy, Madison Heights, MI 48071
 Terms: Due upon receipt or per contract

184671
 200-16347-19001.02BS-FKE
 SUB. EXT
 200 1EW AA





PROJECT STATUS COMMUNICATION

DATE: July 29, 2020
PREPARED BY: Brian Rubel / Eric Geerlings

PROJECT: Macomb Co. In-System Storage Devices

Tt PROJECT NO: 200-16347-19001 CONTACT: Mr. Vince Astorino / Mr. Steve Rozycki
(Invoice 51618840)

Tasks completed or in-progress since last status communication.

- The week of July 6th, FKE completed soil borings at Beaconsfield.
- On July 14th, FKE completed confined space entry with MCPWO at Beaconsfield site for concrete strength and wall depth tests.
- Structural engineer reviewed the raw data supplied by FKE regarding the strength of the concrete and thickness of the walls.
- Held a conference call on July 14th with St. Clair Shores to discuss playground equipment costs and control building details.
- Initiated 30% design for Welsh Park site for all disciplines including architectural, and gathered design input from MCPWO.
- Aligned with MCPWO regarding the path forward for the Beaconsfield site, and the target of storing water up to the crown.
- Contacted reference for the inflatable dam supplier Dyrhoff, and requested references from Mecan-Hydro/Floecksmuehle.
- Fishbeck coordinated with St. Clair Shores regarding Welsh Park topics including traffic control, entrance bollards, and lighting.
- Continued locating and sizing vents, and aligned the overall venting and odor control plan with MCPWO.
- Held multiple progress meetings with MCPWO via video conference calls on July 8th and July 22nd.
- Aligned with MCPWO regarding telemetry on July 28th.

Opportunities for cost avoidance or added value.

If Comcast can be used instead of fiber optic this will save on installation costs for telemetry.

Impediments, roadblocks, assistance needed.

Getting input from communities early on in the design process will be beneficial to help keep the project on schedule. The topics and questions being reviewed with the communities were provided in the agenda for the Design Kickoff Meeting call on May 29th. In particular, getting feedback from Eastpointe is critical to keep the Beaconsfield site design on schedule.

Tetra Tech stopped work on Eastpointe for a few weeks while the county was considering removing this site. Consequently, progress on Welsh is ahead of Eastpointe.

Change (or potential change) of scope items or customer concession. (Details on attached Request to Change Authorization)

Macomb has requested Q3 SRF funding which will allow more time for community reviews should those be necessary.

Schedule:

We are on track with the contract schedule which is ahead of Q3 SRF dates.

Next task or action items.

1. Finish gathering feedback for inflatable dam references.
2. Obtain feedback from Eastpointe on Beaconsfield site plan drawing which includes the control building in the public right-of-way.
3. Complete 30% design for all sites by mid-August. Deliverables will include drawings and an updated cost estimate.
4. Deliver soil boring and concrete testing reports to MCPWO.

Please do not hesitate to contact any member of our Team at any time.

Brian Rubel Phone: (734) 649-4546 Email: Brian.Rubel@tetrattech.com
Project Manager



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST
PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 8/27/20
--	----------------------------	---------------------------

4. SET ID VP200827MA	5. POST DATE
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PARENT RECORD INFORMATION					
6. VENDOR NAME (Check to be issued to) Tetra Tech, Inc.	7. VENDOR NUMBER V16060	8. ADDR CODE 02	9. Invoice No. (MAX = 16 CHARACTERS) 51628645	10. Invoice Date 8/28/2020	11. Invoice Amount \$ 86,908.25

CHILD RECORD DETAIL INFORMATION									
General Ledger		Job Ledger		OPTIONAL					
12. Org Key	13. Object	14. Cost Center (GCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC
A	8210017C	80138	80138	WO19004	8 1/2 Mile Relief	Pjt #200-16347-19001 thru 8/21/20	\$ 86,908.25	GEN	
B									
C									
D									
E									
F									
G									

REV 09/2018

23. Total: \$ 86,908.25

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
In-System Storage Devices - MEDC GRANT BALANCE \$1,065,659.22

25. Finance Officer:	BM/rmh
26. Chief Deputy:	8 1/2 Mile Relief
27. Engineers:	\$803,689.89
28. Managers:	9/8/2020
29. Coordinator:	9/14/2020

**MACOMB COUNTY PUBLIC WORKS OFFICE
ENGINEERING INVOICE COVER SHEET**

WORK ORDER NUMBER	WO19004	
PROJECT NUMBER	WWS-2019-003	(Tetra Tech# 200-16347-19001)
PROJECT NAME	In-System Storage Devices	
DRAINAGE DISTRICT	Eight and One-Half Mile Relief Drain Drainage District	
CONSULTANT NAME	Tetra Tech of Michigan	
INVOICE DATE	8/28/2020 (Invoice 51628645)	
INVOICE START DATE	7/25/2020	
INVOICE END DATE	8/21/2020	
ORIGINAL CONTRACT AMOUNT	\$	481,098.00
CHANGE ORDER TOTAL	\$	949,435.00
Change Order No. 1	\$	949,435.00
Change Order No. 2		
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	1,430,533.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	539,934.86
TOTAL AMOUNT DUE THIS INVOICE	\$	86,908.25
TOTAL BUDGET REMAINING	\$	803,689.89
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)		

\$3M MEDC GRANT - CHAPATON CANAL UPGRADES

Wade Trim - Chapaton Canal Upgrades Contract Value (with Approved Change Orders) \$1,387,874			
M2014218	WADE TRIM	4/1/2019	\$27,661.89
M2014455	WADE TRIM	4/26/2019	\$45,574.73
M2014760	WADE TRIM	5/31/2019	\$123,741.89
M2015047	WADE TRIM	7/1/2019	\$82,296.39
M2015870	WADE TRIM	9/24/2019	\$89,256.89
M2015339	WADE TRIM	7/30/2019	\$81,989.55
M2015602	WADE TRIM	8/28/2019	\$78,710.44
2016150	WADE TRIM	11/1/2019	\$140,190.80
2016457	WADE TRIM	12/5/2019	\$131,501.95
2016836	WADE TRIM	1/3/2020	\$63,603.78
2017103	WADE TRIM	1/31/2020	\$96,050.13
2017374	WADE TRIM	2/28/2020	\$120,258.91
2017671	WADE TRIM	3/27/2020	\$100,077.90
2017951	WADE TRIM	4/29/2020	\$58,377.75
2018187	WADE TRIM	6/1/2020	\$8,312.67

Jacob - Odor Evaluation Study Contract Value \$68,639			
Inv #1	JACOBS	4/16/2020	\$59,892.00

Tetra Tech - In-System Storage Contract Value (with Approved Change Orders) \$1,430,533			
51471309	TETRA TECH	8/2/2019	\$5,891.00
51486824	TETRA TECH	9/12/2019	\$9,346.50
51519169	TETRA TECH	11/14/2019	\$105,806.32
51532937	TETRA TECH	12/18/2019	\$60,288.70
51533040	TETRA TECH	12/19/2019	\$23,104.82
51540373	TETRA TECH	1/10/2020	\$60,213.92
51548755	TETRA TECH	1/31/2020	\$25,087.35
51561487	TETRA TECH	3/4/2020	\$37,671.68
51571567	TETRA TECH	4/2/2020	\$42,241.43
51583201	TETRA TECH	4/24/2020	\$17,286.00
51597243	TETRA TECH	6/5/2020	\$13,300.51
51608770	TETRA TECH	7/8/2020	\$70,565.00
51618840	TETRA TECH	8/3/2020	\$69,131.63
51628645	TETRA TECH	8/28/2020	\$86,908.25

Wade Trim Invoiced To Date	\$1,247,605.67
Jacobs Invoiced To Date	\$59,892.00
Tetra Tech Invoiced To Date	\$626,843.11

Balance of \$3M State Grant Remaining:	\$1,065,659.22
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Wade Pjt Balance	\$140,268.33
JACOBS PJT Balance	\$8,747.00
Tetra Tech Pjt Balance	\$803,689.89

\$3M Grant	\$3,000,000.00
Wade Trim Contract	-\$1,387,874.00
Jacobs Contract	-\$68,639.00
Tetra Tech Contract	-\$1,430,533.00
Balance of Funds	\$112,954.00



Tetra Tech, Inc.
 424 Lewis Hargett Cir.
 Ste. 110
 Lexington, KY 40503
 (859) 223-8000

BILL TO: MACOMB COUNTY
ATTN: FINANCE DEPARTMENT
 OFFICE OF PUBLIC WORKS
 COMMISSIONER
 21777 DUNHAM RD
 PO BOX 806
 CLINTON TOWNSHIP, MI 48036

INVOICE NUMBER: 51628645
INVOICE DATE: 08/28/2020
SERVICES THROUGH: 08/21/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

ESA dated 10 July 2019

Client Contact: Vince Astorino. Email vincent.astorino@macombgov.org

PROFESSIONAL SERVICES:

Project Number 200-16347-19001 **In-System Storage Devices**
Top Task 01BS **Infrastructure Survey Subcontractors**

SUBCONTRACTOR	TYPE	CURRENT AMOUNT
FK ENGINEERING ASSOCIATES	Subcontractor-External	\$648.00
TOTAL SUBCONTRACTOR CHARGES		\$648.00
SUBTOTAL		\$648.00
Total Top Task# 01BS		\$648.00

Top Task 01DS **Basis of Design Subcontractors**

SUBCONTRACTOR	TYPE	CURRENT AMOUNT
FISHBECK THOMPSON CARR & HUBER INC	Subcontractor-External	\$3,570.00
TOTAL SUBCONTRACTOR CHARGES		\$3,570.00
SUBTOTAL		\$3,570.00
Total Top Task# 01DS		\$3,570.00

Top Task 02A **Project Management / Design**

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Rubel, Brian M.	Program Manager	20.00	\$225.00	\$4,500.00
Snable, Madison T.	Engineering Intern	13.00	\$70.00	\$910.00
TOTAL LABOR		33.00		\$5,410.00
SUBTOTAL				\$5,410.00
Total Top Task# 02A				\$5,410.00

Top Task 02B **Design**

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Boehmke, Brett	Engineer 2	13.50	\$115.00	\$1,552.50
Geerlings, Eric P.	Project Engineer 1	83.00	\$155.00	\$12,865.00
Graf, Mitchell J.	Project Manager 2	9.00	\$200.00	\$1,800.00
Johnston, Jeffrey	Engineer 2	11.00	\$115.00	\$1,265.00
Kaliman, Roger G.	Sr Engineer 1	57.00	\$180.00	\$10,260.00
Lortz, Thomas J.	CAD Designer	81.00	\$140.00	\$11,340.00

BILL TO: MACOMB COUNTY
ATTN: FINANCE DEPARTMENT
 OFFICE OF PUBLIC WORKS
 COMMISSIONER
 21777 DUNHAM RD
 PO BOX 806
 CLINTON TOWNSHIP, MI 48036

INVOICE NUMBER: 51628645
INVOICE DATE: 08/28/2020
SERVICES THROUGH: 08/21/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Melling, Vickie L.	CAD Technician 2	37.00	\$80.00	\$2,960.00
Newman, Thomas S.	Architect	24.00	\$137.00	\$3,288.00
Paison, William A.	Sr Engineer 1	26.00	\$215.00	\$5,590.00
Perrin, Paul C.	Project Engineer 2	4.00	\$115.00	\$460.00
Sissoko, Moussa D.	Sr Engineer 2	24.00	\$200.00	\$4,800.00
Tervo, Jeffrey A.	CAD Designer	29.00	\$140.00	\$4,060.00
Ungerer, Jacob	CAD Technician 2	24.00	\$90.00	\$2,160.00
Zalubas, Grace J.	Engineering Technician	12.00	\$70.00	\$840.00
TOTAL LABOR		434.50		\$63,240.50
		SUBTOTAL		\$63,240.50

Total Top Task# 02B \$63,240.50

Top Task 02BS_FKE Design - Subcontractor FKE

SUBCONTRACTOR	TYPE	CURRENT AMOUNT
FK ENGINEERING ASSOCIATES	Subcontractor-External	\$1,166.00
TOTAL SUBCONTRACTOR CHARGES		\$1,166.00
	SUBTOTAL	\$1,166.00

Total Top Task# 02BS_FKE \$1,166.00

Top Task 02B_TCI Design - TCI

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Fortier, Véronique	Sr Modeler	0.50	\$210.00	\$105.00
Robitaille, Luc	Engineer 3	17.75	\$250.00	\$4,437.50
Tremblay, Simon	Sr Engineer I&C	38.75	\$215.00	\$8,331.25
TOTAL LABOR		57.00		\$12,873.75
	SUBTOTAL			\$12,873.75

Total Top Task# 02B_TCI \$12,873.75

Total Project# 200-16347-19001 \$86,908.25

TOTAL AMOUNT DUE THIS INVOICE: \$86,908.25

BILL TO: MACOMB COUNTY
ATTN: FINANCE DEPARTMENT
OFFICE OF PUBLIC WORKS
COMMISSIONER
21777 DUNHAM RD
PO BOX 806
CLINTON TOWNSHIP, MI 48036

INVOICE NUMBER: 51628645
INVOICE DATE: 08/28/2020
SERVICES THROUGH: 08/21/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

Gross Contract Summary	
Contract Amount	\$1,430,533.00
Previously Billed	\$539,934.86
Current Billing	\$86,908.25
Total Billed to Date	\$626,843.11
Contract Balance Remaining	\$803,689.89

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911967
DENVER, CO 80291-1967

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.P



FK Engineering Associates
 30425 Stephenson Hwy
 Madison Heights, MI 48071
 (248) 817-2946

INVOICE

Invoice Date: 06/09/20
 Total Amount: \$1,814.00
 Number: 19-102-004
 Invoice Period: 03/01/20 - 06/06/20
 PO Number: 1166826 X
 Project Code: 19-102
 Project: Macomb In-Line Storage

Tetra Tech
 Brian Rubel
 710 Avis Drive - Suite 100
 Ann Arbor, MI 48108

OK to Pay - 07/24/2020

Brian M. Rubel

INVOICE SUMMARY

Description	Amount
Task 1 - Study Phase.	\$834.25
Task 2 - Design Phase.	\$970.00
Task 2 - Design Phase Expenses.	\$9.75

Description	Total Budget	Remaining Budget (\$)	Prior Billing (\$)	This Invoice (\$)
Task 1 - Study Phase	\$15,000.00	\$4,896.15	\$9,269.60	\$834.25 01BS 648.00 (1)
Task 2 - Design Phase	\$68,000.00	\$66,834.00	\$186.25	\$979.75 02BS_FKE 1166.00 (2)
BUDGET TOTALS	\$83,000.00	\$71,730.15	\$9,455.85	\$1,814.00
TOTAL AMOUNT DUE				\$1,814.00

Remit payment to:
 30425 Stephenson Hwy, Madison Heights, MI 48071
 Terms: Due upon receipt or per contract

184671

200 - 16347 - 19001. XXX
 sub-EXT
 200 1EW AA





FK Engineering Associates
 30425 Stephenson Hwy
 Madison Heights, MI 48071
 (248) 817-2946

INVOICE

Tetra Tech
 Brian Rubel
 710 Avis Drive - Suite 100
 Ann Arbor, MI 48108

Invoice Date: 06/09/20
 Total Amount: \$1,814.00
 Number: 19-102-004
 Invoice Period: 03/01/20 - 06/06/20
 PO Number:
 Project Code: 19-102
 Project: Macomb In-Line Storage

INVOICE DETAILS

Source	Date	Code	Hrs / Qnt	Rate	Amount
Professional Fees					
Zachary Carr	04/22/20	02-Principal Engineer/Officer	0.50	\$145.00	\$72.50
Zachary Carr	04/24/20	02-Principal Engineer/Officer	4.00	\$145.00	\$580.00
Kyle Thompson	04/27/20	04-Project Engineer/Geologist	1.50	\$112.00	\$168.00
Ava Riley	05/11/20	09-Administrative Assistant	0.25	\$55.00	\$13.75
		Task 1 - Study Phase	6.25		\$834.25
Margaret O'Reilly	03/05/20	09-Administrative Assistant	0.25	\$55.00	\$13.75
Zachary Carr	03/11/20	02-Principal Engineer/Officer	1.00	\$145.00	\$145.00
Margaret O'Reilly	03/12/20	09-Administrative Assistant	0.25	\$55.00	\$13.75
Margaret O'Reilly	03/13/20	09-Administrative Assistant	0.25	\$55.00	\$13.75
Zachary Carr	03/22/20	02-Principal Engineer/Officer	0.50	\$145.00	\$72.50
Margaret O'Reilly	04/09/20	09-Administrative Assistant	0.25	\$55.00	\$13.75
Margaret O'Reilly	05/14/20	09-Administrative Assistant	0.25	\$55.00	\$13.75
Margaret O'Reilly	05/15/20	09-Administrative Assistant	0.25	\$55.00	\$13.75
Zachary Carr	05/26/20	02-Principal Engineer/Officer	1.00	\$145.00	\$145.00
Victor Ankley	05/27/20	11-Engineering Tech 3	1.50	\$60.00	\$90.00
Courtney Muchez	05/30/20	06-Staff Engineer/Geologist	1.00	\$85.00	\$85.00
Zachary Carr	06/03/20	02-Principal Engineer/Officer	1.00	\$145.00	\$145.00
Zachary Carr	06/04/20	02-Principal Engineer/Officer	1.00	\$145.00	\$145.00
Nicholas Bassett	06/05/20	03-Senior Project Engineer/Geologist	0.50	\$120.00	\$60.00
		Task 2 - Design Phase	9.00		\$970.00
		Professional Fees	15.25		\$1,804.25
Reimbursable Expenses					
Zachary Carr	05/26/20	PR- Car Mileage	15.00	\$0.65	\$9.75
		Task 2 - Design Phase	-		\$9.75
		Reimbursable Expenses	--		\$9.75
		TOTAL FEES/EXPENSES	--		\$1,814.00



fishbeck

Engineers | Architects | Scientists | Constructors

ACH

Payment Options

Remit Wire/ACH payments to Acct: 100094457 ABA: 072413829
Remit checks to: 1515 Arboretum Drive, SE, Grand Rapids, Michigan 49546
Remittance Advice: accounts.receivable@fishbeck.com
616.575.3824
Federal I.D. No. 38-1841857 | Incorporated

Attention: Brian Rubel PE
Tetra Tech Mps
710 Avis Drive Suite 100
Ann Arbor, MI 48108
United States

Invoice : 393295
Invoice Date : 7/20/2020
Project : 190884
Project Name : Macomb Co PW/In-system Storage
Bill Term : 1

P.O. 1166522:1

For Professional Services Rendered Through 7/10/2020

	Fee	Available	Billings		
			To Date	Previous	Current
1.A - Task 1A - 8.5 Mile Project Management	4,493.85	0.00	4,493.85	4,493.85	0.00
1.B - Task 1B - 8.5 Mile Infrastructure Survey	65,938.40	0.00	65,938.40	65,938.40	0.00
1.C - Task 1C - 8.5 Mile Utility Survey	16,392.00	0.00	16,392.00	16,392.00	0.00
1.D - Task 1D - 8.5 Mile BOD/Addit Survey	25,042.75	18,116.25	10,496.50	6,926.50	3,570.00
Rate Labor		3,570.00			

Current Billings	3,570.00
Amount Due This Bill	3,570.00

103976
200 - 16347 - 19001. OLDS
SUB. EXT
200 NEW AA

OK to pay when paid
B. Rubel
7/24/20

RECEIVED
AUG 5 2020
TETRA TECH



Project: 190884 - Macomb Co PW/In-system Storage

Invoice: 393295

1.D - Task 1D - 8.5 Mile BOD/Addit Survey

Rate Labor

<u>Class</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Senior Technician	34.00	105.0000	3,570.00
Total Rate Labor			3,570.00

Total Project: 190884 - Macomb Co PW/In-system Storage

3,570.00



PROJECT STATUS COMMUNICATION

DATE: August 25, 2020

PREPARED BY: Brian Rubel / Eric Geerlings

PROJECT: Macomb Co. In-System Storage Devices

Tt PROJECT NO: 200-16347-19001 CONTACT: Mr. Vince Astorino / Mr. Steve Rozycki
(INVOICE 51628645)

Tasks completed or in-progress since last status communication.

- Corresponded with references for the inflatable dam suppliers Dyrhoff, and Mekan-Hydro/Floecksmuhle.
- Realigned with MCPWO regarding direction to use circular inflatable dams to target storing water up to the crown at both sites.
- Held multiple progress meetings with MCPWO via video conference calls on August 4th and August 18th.
- Each discipline and sub-consultant drafted 30% design drawings, with the exception of mechanical and structural.
- Submitted the 30% Design deliverables (drawings, opinion of probable construction cost, and RTC plan) on August 17th.
- On August 17th, provided Eastpointe the Preliminary Design drawings (the 30% design) of the Beaconsfield site for review.
- Held a conference call on August 18th with Mekan-Hydro/Floecksmuhle regarding their Inflatable Sewer Gate (ISG).
- Coordinated with both inflatable dam manufacturers to request updated quotes and ask follow-up questions.
- On August 18th and 19th, FKE completed additional soil borings at Beaconsfield.
- Sent MCPWO the Mekan-Hydro non-disclosure agreement on August 20th which is required for ISG scale model test phase.

Opportunities for cost avoidance or added value.

MCPWO has shared that bidding and construction of the Beaconsfield site could be delayed to defer some cost. However, the final design for the Beaconsfield site would still be completed in parallel with Welsh Family Park site.

Impediments, roadblocks, assistance needed.

MCPWO is completing internal review of the Gaukler and Malvern venting sites, and until feedback is provided a temporary hold on design of those two sites has been requested.

Getting feedback from Eastpointe on the Preliminary Design is critical to keep the Beaconsfield site design on schedule.

Change (or potential change) of scope items or customer concession. (Details on attached Request to Change Authorization)

Macomb has requested Q3 SRF funding which will allow more time for community reviews should those be necessary.

Schedule:

We are on track with the contract schedule which is ahead of Q3 SRF dates.

Mekan-Hydro's proposed schedule for completing a scale model test would likely impact the bidding and construction schedule.

Next task or action items.

1. Assist MCPWO with decision regarding which inflatable dam vendor(s) to approve, and implement direction received.
2. Refine the venting and odor control plan for St. Clair Shores sites based on feedback from MCPWO.
3. Coordinate with utilities (electrical, gas, water, stormwater, sewer, and telecommunications).
4. Coordinate with public works departments for proposed pavement replacement design, road closures, and traffic control plans.
5. Begin compiling specifications for the project, and add further details to drawings based on continued design and coordination.
6. Begin preparation of permitting documentation and reports.
7. 60% Design deliverables are due to MCPWO in mid-October.

Please do not hesitate to contact any member of our Team at any time.

Brian Rubel
Project Manager

Phone: (734) 649-4546

Email: Brian.Rubel@tetrattech.com



April 20, 2020

Mr. Vincent Astorino
Operations and Flow Manager
Macomb County Public Works Commissioner Candice S. Miller
21777 Dunham Road
Clinton Township, MI 48036

**Re: 8 ½ Mile Drain Drainage District In-System Storage
Design and Bidding Proposal**

Dear Mr. Astorino:

Tetra Tech has appreciated the opportunity to complete a feasibility study for the above referenced project. We have appreciated the collaborative effort of your staff to participate in critical meetings to shape the direction of this project.

A draft report will be delivered to your office this month and we remain available to discuss your comments over the next few weeks. Attached to this letter is a draft scope of work to complete the design phase of this project. We are also available to discuss this design proposal and any revisions you may need to consider.

We propose a budget of \$949,435 for the work outlined in this proposal. We will invoice based on our standard hourly rates. This budget will not be exceeded without your prior, written authorization. We understand that Macomb County Public Works will issue an amendment to our professional services agreement for this work.

We are looking forward to the design and construction phases so this critical project can be commissioned to further the Public Works Commissioner's goal of protecting Lake St. Clair.

Sincerely;

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

Brian M. Rubel, P.E.
Vice President

Tetra Tech, Inc.
710 Avis Drive, Suite 100, Ann Arbor, MI 48108
Tel 734.665.6000 Fax 734.213.3002 www.tetratech.com

**MACOMB COUNTY PUBLIC WORKS OFFICE
8 ½ MILE DRAINAGE DISTRICT IN-SYSTEM STORAGE
FINAL DESIGN SCOPE OF WORK
PREPARED APRIL 20, 2020**

INTRODUCTION

A feasibility study has been completed that recommends two In-system Storage Devices on the 8 ½-Mile Drain. The study has narrowed the scope to consist of the design of two, inflatable control structures. One structure will be located at Welsh Family Park and one west of I-94 in the Beaconsfield right-of-way. Real-time control systems will be designed for connectivity via telemetry to the Chapaton control center.

The project also contains design and installation of a multipath flow meter on the 8 ½ Mile system.

TEAM MEMBERS

For this effort, the team will divide the work as follows:

- Tetra Tech – Real-time control, structural, process, and I&C design
- FTCH – Site plan including traffic control
- ECT – Landscape architecture for the two sites
- FKE – Geotechnical design and specifications (including measures to control impacts on adjacent properties)

The next phase of the project is design and bidding services. The scope of work below has been prepared to describe this work. Where not described, the assumption is that the design will follow the work described in the Feasibility Study.

SCOPE OF WORK

PROJECT MANAGEMENT

Meetings

In addition to managing the team and subconsultants, the following meetings are anticipated:

1. Kickoff
2. Monthly progress meetings including detailed review of drawings/specs. We have assumed that at least one meeting with St. Clair Shores will be held adjacent to the progress meetings.
3. Up to two public meetings (evenings) to solicit input on the Welsh Family Park work from the public.

4. One meeting with a planning commission associated with the Beaconsfield structure as this structure may require design variances to construct an above-ground structure.
5. One meeting with the Michigan Department of EGLE to review the project and permit application
6. One meeting with DTE and/or other utilities to coordinate construction requirements to construct the projects.

Envision Sustainability Rating

Tetra Tech will complete the design so that the maximum credits are achieved for ASCE's Sustain-certification and complete the application for the certification upon conclusion.

Public Engagement

Public engagement is key to providing stakeholders with important project updates and allowing them to provide input on topics that involve them and their community. We understand that Macomb County has a public engagement expert on staff who will lead these interactions. Tetra Tech has made the following assumptions regarding public engagement:

- Up to two meetings will be held during design and bidding
- Macomb County will handle scheduling, invitations, meeting location arrangements, and meeting facilitation
- Tetra Tech's responsibilities will include preparing materials summarizing the project for the meeting and attendance at the meeting

State Revolving Fund (SRF) Loan Applications

Tetra Tech will lead production of the parts 1 and 2 applications. Tetra Tech will participate with completing the part 3 application, although the majority of the data within this application must come from Macomb County's financial advisors.

BASIS OF DESIGN REPORT/PERMITTING

Basis of Design Report

The study report will be summarized and formatted to create a document suitable to serve as a Basis of Design for EGLE permitting. Specific enhancements will include:

Finalize Real-Time Control

RTC schemes will be finalized to confirm final instrumentation and control system selection. The validation of the design features enables detailed design of RTC monitoring device locations, elevations, and control strategies.

Once the final design elements are defined, final confirmation of the preferred RTC approach will be provided through a last update of the model and performance evaluation. Stress test scenarios, selected with MCPWO, will be evaluated. Although the SWMM5 model allows for the detailed set-up of programmed control loops and process and gate movement characteristics, control needs and requirements will be further refined through the instrumentation, control, and equipment design process.

Permitting

Michigan Department of EGLE permit application will be prepared. We anticipate preparing this around the 90% submittal timeline so comments are received prior to the end of bidding.

Soil erosion permit applications will be prepared although we propose to make the acquisition of the permits part of the contractor's responsibility.

We have included a small allowance of hours to include applying for permits that may be required from St. Clair Shores (such as planning commission variances).

SITE WORK AND LANDSCAPE ARCHITECTURE

Landscape Architecture

Landscape architecture services conceived for both sites are summarized within the feasibility study. The concepts assumed at Welsh Family Park include:

- Two play areas
- Natural play area
- Pathways (crushed stone) and/or grass pavers
- Benches, picnic tables, and grills
- Plantings
- Removable bollards
- Flagpole

For Beaconsfield, the following are assumed:

- Plantings around the control building
- Grass pavers for vehicular access to the buildings

Site Work

Site work is assumed to include the following:

- Traffic control
- Road demolition and reconstruction
- Sidewalk and underground utility design
- Site grading and soil erosion

Work from this section will conclude with drawings, specifications and permit applications.

GEOTECHNICAL

Soil borings were not obtained for the Beaconsfield location during the study and will be obtained as an initial step for the design.

During the design phase and on the basis of the selected design concepts, FKE will conduct a Phase II geotechnical investigation as necessary to conduct detailed design of structures. This will include two to three test borings at the proposed structures, together with in-situ testing (vane shear and in-situ permeability testing to determine appropriate design parameters). FKE will conduct laboratory soils testing, conduct data analysis, develop lateral earth pressures, and prepare a geotechnical report summarizing the investigation and analysis. FKE will provide soil-structure design details including requirements for temporary earth retention systems (TERS), safely tapping and/or modifying the tunnels without compromising them, controlling groundwater during construction, controlling and monitoring ground movements (via geotechnical instrumentation), and development of specifications to address underground construction. Shaft designs will include TERS tunnel tap details, fluming of flow through the proposed construction areas, structural analysis of tunnel (finite element analysis, soil structure interaction, lining design if needed, etc.), and related design.

PROCESS, MECHANICAL, STRUCTURAL, ARCHITECTURAL, ELECTRICAL AND INSTRUMENTATION

Process/Mechanical

Process/mechnaical design will consist of design features such as control gates, sewer venting, odor control, ventilation (control building), plumbing (control building), and generator fuel/noise control.

Structural

Structural design will consist of features such as junction chamber and access shaft design.

Architectural

Architectural design will consist of the exterior treatments for the proposed control buildings at each location.

Electrical

Electrical design will consist of supplying power to each of the two control buildings, gate operators, and instruments. Design of backup power (generators) will also be conducted at this step.

Instrumentation

Instrumentation design will consist of specifying electronic instruments to be installed in the sewer system to monitor the system performance. Telemetry to transmit the gathered information will be specified.

This task will also specify the real-time control logic to be used to operate the new structures including improvements needed at the Chapaton control room to interpret the measured data and control the gate operation. This task will also include the design of the additional Accusonic flow meter requested by Macomb County.

Specifics on the Instrumentation include:

- **Process Control Narratives:** Preliminary process narratives will be provided and will describe the various operating modes, process monitoring, controls and alarms, as well as their respective functionality. Normal operating modes will optimize the regulator site interception capacity, while controlling the 8 ½ Mile Interceptor surcharge conditions. Degraded control modes will adopt the appropriate behaviour in reaction to the failure of various instruments, equipment or site components such as power loss.
- **Fail-Safe Design for Reliable Operation:** The preliminary process narratives will define level of functionality, redundancy, safety and reliability of all control system components based on the requirements of the operating modes as well as the impacts of a component failure on the control site, upstream sewers and on the interceptors. Critical components might require a redundant or backup system, other components might need increased functionality or reliability compared to industry standards, etc. As such, to increase system reliability, the I&C design will consider:
 - redundancy in water level sensors at strategic locations
 - equipment interlocks
 - data validation
 - equipment behavior on invalidated data
 - multi-channel or multi-path communication
 - operator override locally and remotely
- **Selection and Location of Instrumentation:** Level measurement and detection being critical information required by operation modes, the design includes the selection of the proper technology (hydrostatic, ultrasonic, radar, float, vibrating fork, etc.) in regards to accuracy and reliability. Installation and operating & maintenance constraints will also be considered as a key element of technology selection.

30/60/90 AND 100% SUBMITTALS

Detailed drawings and specifications will be developed at these stages and reviewed with Macomb County. This progression allows the county to develop comfort with the current state of the design before proceeding to the next. Tetra Tech will utilize a Building Information Management (BIM) tool such as REVIT to prepare all drawings. The preliminary sketches in this proposal were created in REVIT, which excels as creating 3D design spaces. Presenting the design in 3D allows the County and the public to better visualize the completed work while allowing the designer to better understand conflicts that may be present, reducing construction contract changes. The completed work can be converted to AutoCADD 2017 at the completion of the project for Macomb County's records. Specifications will be prepared in

MasterFormat 2014 as requested.

At each of these project stages, cost opinions will be developed. Construction sequencing will be a critical consideration. The sewers cannot be taken out of service so construction planning will consider how the contractor may choose to maintain flow. A suggested sequence will be included in the specifications.

BIDDING

This phase will consist of the following:

- Prebid meeting
- Prepare addenda and clarify questions
- Review the bids, conduct reference checks, and other bidder evaluation
- Conduct a pre-award meeting

Given the tight construction market southeastern Michigan is experiencing, we also believe that recruiting contractors may be beneficial for MCPWO so that adequate competition is achieved. Tetra Tech, FTCH and FKE have developed relationships with all of the large contractors in the area who are qualified to complete this work. These relationships will be invaluable to invite and encourage competent contractors (even before bids are formally advertised) to bid the project.

SCHEDULE

An approximate schedule is presented below :

<u>Task</u>	<u>Start</u>	<u>Finish</u>
Geotech	5/15/20	7/15/20
30% Design	5/15/20	8/15/20
60% Design	8/15/20	10/15/20
90% Design	10/15/20	12/5/20
Bidding	1/15/21	2/31/21

ASSUMPTIONS

- Public engagement as described within the corresponding section
- No easements will be needed. This appears correct for Welsh Family Park and a determination has not yet been made for the Beaconsfield site.
- Permit fees, if any, will be paid directly by the drainage district. Fees associated with obtaining the SUSTAIN certification will be paid directly by the drainage district.
- Instrumentation services assume modest process control narratives for bidding assuming that the design team will program the PLCs during design

Hourly Rate Table



Rates for: Macomb County

Updated: March 19, 2020

Rate Table - Macomb County

Labor Group	Billing Titles	Billing Rate
Project Management		
	Project Manager 1	190.00
	Project Manager 2	210.00
	Sr Project Manager	235.00
Engineers and Technicians		
	Engineer 1	100.00
	Engineer 2	115.00
	Engineer 3	140.00
	Project Engineer 1	150.00
	Project Engineer 2	165.00
	Sr Engineer 1	175.00
	Sr Engineer 2	200.00
	Sr Engineer 3	225.00
	Sr Engineer 4	240.00
	Practice Leader	250.00
	Engineering Technician	70.00
	Engineering Designer 1	95.00
	Engineering Designer 2	110.00
	Engineering Designer 3	130.00
	Sr Eng Designer 1	155.00
	Sr Eng Designer 2	165.00
	Sr Eng Designer 3	180.00
Arhitects		
	Architect 1	100.00
	Architect 2	150.00
	Sr. Architect	185.00
Computer Aided Design (CAD)		
	CAD Technician 1	65.00
	CAD Technician 2	90.00
	CAD Technician 3	95.00
	CAD Designer	110.00
	Sr CAD Designer 1	120.00
	Sr CAD Designer 2	150.00
	CAD Director	160.00
Project Administration		
	Project Assistant 1	65.00
	Project Assistant 2	80.00
	Project Administrator	95.00
	Sr Project Administrator	115.00
Graphics		
	Graphic Artist	100.00

Mileage reimbursed at current federal (GSA) rates



Mark A. Hackel
County Executive

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 8/5/20
4. SET ID VP200806MA		
6. POST DATE		

6. VENDOR NAME (Check to be issued to) Wade Trim		7. VENDOR NUMBER V09446	8. ADDR CODE 02	9. Invoice No (MAX = 16 CHARACTERS) 2018671	10. Invoice Date 8/3/2020	11. Invoice Amount \$ 10,310.08
--	--	-----------------------------------	---------------------------	---	-------------------------------------	---

General Ledger		Job Ledger		OPTIONAL			19. Amount	20. DIV	21. MISC	22. Sep CK
12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)				
A	8210017M	80138	80138	WO19073	8 1/2 Mile Relief	Pjt #MCW200601T, thru 6/27-7/24	\$ 10,310.08	GEN		
B										
C										
D										
E										
F										
G										

23. Total: \$ **10,310.08**

REV 09/2018

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
Chapaton RTB Disinfection Improvements

25. Finance Officer: *Dwight* 30. Drain: 8 1/2 Mile Relief

26. Chief Deputy: _____ 31. Project Balance: \$30,741.18

27. Engineers: _____ 32. Staff Date: 8/11/2020

28. Managers: _____ 33. Board Date: 9/14/2020

29. Coordinator: _____ 34. Select For Pay Date: _____

**MACOMB COUNTY PUBLIC WORKS OFFICE
ENGINEERING INVOICE COVER SHEET**

WORK ORDER NUMBER	19073
PROJECT NUMBER	WWS-2019-017
PROJECT NAME	Chapaton RTB Disinfection Improvements
DRAINAGE DISTRICT	Eight and One-Half Mile
CONSULTANT NAME	Wade Trim Associates, Inc.
INVOICE DATE	8/3/2020
INVOICE START DATE	6/27/2020
INVOICE END DATE	7/24/2020
ORIGINAL CONTRACT AMOUNT	\$ 107,780.00
CHANGE ORDER TOTAL	\$ -
Change Order No. 1	
Change Order No. 2	
Change Order No. 3	
Change Order No. 4	
TOTAL REVISED CONTRACT AMOUNT	\$ 107,780.00
(includes all approved change orders only)	
TOTAL AMOUNT PREVIOUSLY INVOICED	\$ 66,728.74
TOTAL AMOUNT DUE THIS INVOICE	\$ 10,310.08
TOTAL BUDGET REMAINING	\$ 30,741.18
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)	



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INVOICE

Terms: Net 30 Days
1.5% Per Month After 30 Days
18% Annual Rate

ACH payments accepted. Send inquiries to remit@wadetrim.com

Remit Payment To: Wade Trim, 25251 Northline Road, Taylor, MI 48180

Attention: Vince Astorino
Operations and Flow Manager
Macomb County Public Works
21777 Dunham Road
Clinton Township, MI 48036

Invoice : 2018671
Invoice Date : 8/3/2020
Project : MCW200601T
Project Name : Chapaton RTB Disinfection
Improvements

For Professional Services Rendered For 6/27/2020 Through 7/24/2020

		<u>Billings</u>				
		<u>Fee</u>	<u>Available</u>	<u>To Date</u>	<u>Previous</u>	<u>Current</u>
<i>Rate Labor</i>	10,282.50	107,780.00	41,051.26	77,038.82	66,728.74	10,310.08
<i>Expenses</i>	27.58					
					Current Billings	<u>10,310.08</u>
					Amount Due This Bill	<u>10,310.08</u>

Total Fee : 107,780.00
To Date Billings : 77,038.82
Total Remaining : 30,741.18

100 - Project Management

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Project Aide III				
Melanie A Phillips	7/6/2020	0.50	125.0000	62.50
Senior Professional				
John Arvai	7/1/2020	1.00	260.0000	260.00
	7/2/2020	0.25	260.0000	65.00
	7/8/2020	2.00	260.0000	520.00
	7/9/2020	1.00	260.0000	260.00
	7/16/2020	1.00	260.0000	260.00
		-----		-----
Total Senior Professional		5.25		1,365.00
			Total Rate Labor	1,427.50

Expenses

<i>Account / Vendor</i>	<i>Doc Number</i>	<i>Date</i>	<i>Cost</i>	<i>Multiplier</i>	<i>Amount</i>
Architectural/Engineering Supplies					
John Arvai	ER000154589	6/14/2020	11.99	1.150	13.79
Jason Obrycki-Smith	ER000154876	6/29/2020	11.99	1.150	13.79
			-----		-----
Total Architectural/Engineering Supplies			23.98		27.58
			Total Expenses		27.58

Total Bill Task: 100 - Project Management

1,455.08

400 - Final Design

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineer II				
Jason Obrycki-Smith	6/29/2020	2.00	105.0000	210.00
	6/30/2020	1.00	105.0000	105.00
	7/1/2020	1.00	105.0000	105.00
	7/6/2020	4.00	105.0000	420.00
	7/7/2020	4.00	105.0000	420.00
	7/8/2020	4.00	105.0000	420.00
	7/9/2020	2.00	105.0000	210.00
	7/10/2020	2.00	105.0000	210.00
	7/13/2020	4.00	105.0000	420.00
	7/14/2020	4.00	105.0000	420.00
	7/15/2020	4.00	105.0000	420.00
	7/16/2020	2.00	105.0000	210.00
	7/20/2020	2.00	105.0000	210.00
	7/21/2020	2.00	105.0000	210.00
		-----		-----
Total Engineer II		38.00		3,990.00
Engineer III				
Oneida Westhoff	6/29/2020	1.00	125.0000	125.00
	7/6/2020	0.50	125.0000	62.50
	7/8/2020	6.00	125.0000	750.00
	7/16/2020	2.50	125.0000	312.50
		-----		-----
Total Engineer III		10.00		1,250.00

400 - Final Design

Rate Labor

Class / Employee	Date	Hours	Rate	Amount
Engineering Specialist II				
Robert J Marker	7/7/2020	1.00	165.0000	165.00
Senior Professional				
John Arvai	6/29/2020	2.00	260.0000	520.00
	6/30/2020	1.00	260.0000	260.00
	7/6/2020	1.00	260.0000	260.00
	7/7/2020	1.00	260.0000	260.00
	7/15/2020	1.00	260.0000	260.00
Jeffrey W Reynhout	7/6/2020	1.00	260.0000	260.00
	7/8/2020	1.00	260.0000	260.00
	7/9/2020	1.00	260.0000	260.00
	7/14/2020	1.00	260.0000	260.00
	7/15/2020	1.00	260.0000	260.00
	7/16/2020	1.00	260.0000	260.00
Total Senior Professional		12.00		3,120.00
Total Rate Labor				8,525.00
Total Bill Task: 400 - Final Design				8,525.00

500 - Bidding

Rate Labor

Class / Employee	Date	Hours	Rate	Amount
Engineering Specialist II				
Robert J Marker	7/13/2020	1.00	165.0000	165.00
	7/17/2020	1.00	165.0000	165.00
Total Engineering Specialist II		2.00		330.00
Total Rate Labor				330.00
Total Bill Task: 500 - Bidding				330.00

Total Project: MCW200601T - Chapaton RTB Disinfection Improvements

10,310.08

Work Description:

Project management and coordination of design activities, staff and team meetings. Prepared monthly invoice and progress report. 90% drawing and spec review workshop held. Progressed drawings to 100% and submitted for MCPWO final review.



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	9/3/20
4. SET ID		5. POST DATE
VP200903MA		

PARENT RECORD INFORMATION		
6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	11. Invoice Amount
Wade Trim	V09446	15,423.69
8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date
02	2018937	9/3/2020

CHILD RECORD DETAIL INFORMATION											
Line	General Ledger			Job Ledger			OPTIONAL			21. MISC	22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV		
A	8210017M	80138	CC0004	80138	WO19073	8 1/2 Mile Relief	Pjt #MCW200601T, thru 7/25-8/28	\$ 15,423.69	GEN		
B											
C											
D											
CP											
GD											
F											
G											

23. Total: \$ 15,423.69

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
Chapaton RTB Disinfection Improvements

25. Finance Officer:	BM/mh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	\$15,317.49
27. Engineers:		32. Staff Date:	9/8/2020
28. Managers:		33. Board Date:	9/14/2020
29. Coordinator:		34. Select For Pay Date:	

**MACOMB COUNTY PUBLIC WORKS OFFICE
ENGINEERING INVOICE COVER SHEET**

WORK ORDER NUMBER	19073
PROJECT NUMBER	WWS-2019-017
PROJECT NAME	Chapaton RTB Disinfection Improvements
DRAINAGE DISTRICT	Eight and One-Half Mile
CONSULTANT NAME	Wade Trim Associates, Inc.
INVOICE DATE	9/3/2020
INVOICE START DATE	7/25/2020
INVOICE END DATE	8/28/2020
ORIGINAL CONTRACT AMOUNT	\$ 107,780.00
CHANGE ORDER TOTAL	\$ -
Change Order No. 1	
Change Order No. 2	
Change Order No. 3	
Change Order No. 4	
TOTAL REVISED CONTRACT AMOUNT	\$ 107,780.00
(includes all approved change orders only)	
TOTAL AMOUNT PREVIOUSLY INVOICED	\$ 77,038.82
TOTAL AMOUNT DUE THIS INVOICE	\$ 15,423.69
TOTAL BUDGET REMAINING	\$ 15,317.49
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)	



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INVOICE

Terms: Net 30 Days
1.5% Per Month After 30 Days
18% Annual Rate

ACH payments accepted. Send inquiries to remit@wadetrim.com

Remit Payment To: Wade Trim, 25251 Northline Road, Taylor, MI 48180

Attention: Vince Astorino
Operations and Flow Manager
Macomb County Public Works
21777 Dunham Road
Clinton Township, MI 48036

Invoice : 2018937
Invoice Date : 9/3/2020
Project : MCW200601T
Project Name : Chapaton RTB Disinfection
Improvements

For Professional Services Rendered For 7/25/2020 Through 8/28/2020

	Fee	Available	Billings		
			To Date	Previous	Current
	107,780.00	30,741.18	92,462.51	77,038.82	15,423.69
Rate Labor	15,247.50				
Expenses	13.79				
Unit Rate Expense	162.40				
Total Expense	176.19				

Current Billings 15,423.69
Amount Due This Bill 15,423.69

Total Fee : 107,780.00
To Date Billings : 92,462.51
Total Remaining : 15,317.49

Outstanding Receivables	Invoice Number	Date	Amount	Balance Due
	2018671	8/3/2020	10,310.08	<u>10,310.08</u>
				10,310.08

100 - Project Management

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Project Aide II				
Jack R Simmons	8/5/2020	2.00	90.0000	180.00
Project Aide III				
Melanie A Phillips	8/18/2020	0.50	125.0000	62.50
Senior Professional				
John Arvai	7/27/2020	1.00	260.0000	260.00
	7/29/2020	0.50	260.0000	130.00
	7/30/2020	1.00	260.0000	260.00
	7/31/2020	0.75	260.0000	195.00
	8/3/2020	1.00	260.0000	260.00
	8/7/2020	1.00	260.0000	260.00
	8/12/2020	1.00	260.0000	260.00
	8/13/2020	1.00	260.0000	260.00
	8/14/2020	1.00	260.0000	260.00
	8/20/2020	1.00	260.0000	260.00
	8/26/2020	0.50	260.0000	130.00
		9.75		2,535.00
Total Senior Professional				2,535.00
Total Rate Labor				2,777.50

Expenses

<i>Account / Vendor</i>	<i>Doc Number</i>	<i>Date</i>	<i>Cost</i>	<i>Multiplier</i>	<i>Amount</i>
Architectural/Engineering Supplies					
Jason Obrycki-Smith	ER000155194	7/29/2020	11.99	1.150	13.79
Total Expenses					13.79

Unit Rate Expenses

<i>Account / Unit / Vendor</i>	<i>Quantity</i>	<i>Rate</i>	<i>Amount</i>
Equipment Usage Charges			
Oce Printer			
Jack R Simmons	116.00	1.4000	162.40
Total Unit Rate Expenses			162.40

Total Bill Task: 100 - Project Management

2,953.69

400 - Final Design

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineer II				
Jason Obrycki-Smith	7/27/2020	1.00	105.0000	105.00
	7/28/2020	1.00	105.0000	105.00
	7/30/2020	3.00	105.0000	315.00
	7/31/2020	4.00	105.0000	420.00
	8/3/2020	7.00	105.0000	735.00
		16.00		1,680.00
Total Engineer II				1,680.00
Engineer III				
Oneida Westhoff	8/3/2020	1.00	125.0000	125.00
Engineering Specialist II				
Robert J Marker	7/31/2020	3.00	165.0000	495.00

400 - Final Design

Rate Labor

Class / Employee

Senior Professional

John Arvai

Date	Hours	Rate	Amount
7/27/2020	1.00	260.0000	260.00
7/28/2020	1.00	260.0000	260.00
7/29/2020	1.00	260.0000	260.00
7/30/2020	1.50	260.0000	390.00
7/31/2020	0.50	260.0000	130.00
8/7/2020	1.00	260.0000	260.00
8/12/2020	0.50	260.0000	130.00

Jeffrey W Reynhout

7/28/2020	1.00	260.0000	260.00
7/29/2020	2.00	260.0000	520.00
7/31/2020	1.00	260.0000	260.00
8/4/2020	1.00	260.0000	260.00
8/5/2020	1.00	260.0000	260.00
8/7/2020	2.00	260.0000	520.00
8/10/2020	1.00	260.0000	260.00
8/13/2020	1.00	260.0000	260.00

Total Senior Professional

16.50 4,290.00

Total Rate Labor

6,590.00

Total Bill Task: 400 - Final Design

6,590.00

500 - Bidding

Rate Labor

Class / Employee

Engineer II

Jason Obrycki-Smith

Date	Hours	Rate	Amount
8/13/2020	0.50	105.0000	52.50
8/25/2020	2.00	105.0000	210.00
8/26/2020	1.00	105.0000	105.00
8/27/2020	3.00	105.0000	315.00
8/28/2020	4.00	105.0000	420.00

Total Engineer II

10.50 1,102.50

Engineer III

Oneida Westhoff

8/28/2020	1.00	125.0000	125.00
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Engineering Specialist II

Robert J Marker

8/3/2020	2.00	165.0000	330.00
8/13/2020	1.00	165.0000	165.00
8/14/2020	0.50	165.0000	82.50
8/26/2020	1.00	165.0000	165.00
8/27/2020	2.00	165.0000	330.00
8/28/2020	2.00	165.0000	330.00

Total Engineering Specialist II

8.50 1,402.50

Senior Professional

John Arvai

8/17/2020	1.00	260.0000	260.00
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500 - Bidding

Rate Labor

Class / Employee

Senior Professional

	Date	Hours	Rate	Amount
John Arvai	8/25/2020	0.50	260.0000	130.00
	8/26/2020	2.50	260.0000	650.00
	8/27/2020	0.50	260.0000	130.00
	8/28/2020	2.00	260.0000	520.00
Jeffrey W Reynhout	8/17/2020	1.00	260.0000	260.00
	8/20/2020	1.00	260.0000	260.00
	8/21/2020	1.00	260.0000	260.00
	8/24/2020	2.00	260.0000	520.00
	8/27/2020	1.00	260.0000	260.00
Total Senior Professional		12.50		3,250.00
	Total Rate Labor			5,880.00
Total Bill Task: 500 - Bidding				5,880.00

Total Project: MCW200601T - Chapaton RTB Disinfection Improvements

15,423.69

Work Description:

Project management and coordination of design activities, bidding, staff and team meetings. Prepared monthly invoice and progress report. Reviewed 100% drawing and specs and incorporated comments. Provided bidding assistance and issuance of addendums.

Budget to Actual
8.5 Mile Relief
As of Aug 31, 2020 = 92%

DESCRIPTION	2020 FINAL BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
Interest Earned	80,000		159,313	(79,313)	199.1%
Canal Expansion(SMSD and Macomb County)	-		3,000,000	(3,000,000)	0.0%
Other Revenue	5,000		1,666	3,334	33.3%
State Grant	-		-	-	0.0%
LSCWWI 04B Transfer	-		738,112	(738,112)	100.0%
8.5 O&M/Charge Required Revenue	4,279,768		4,279,768	-	100.0%
PY Revenue-Fund Balance	3,098,050		58,090	3,039,960	1.9%
Rental Fee	16,464		10,976	5,488	66.7%
Total Revenue Accounts	7,479,282	-	8,247,925	(768,643)	110.3%
EXPENSE ACCOUNTS					
Application/Permit Fee	3,000		6,000	(3,000)	200.0%
Dues, Training, Conf, Subs.	5,750		3,517	2,233	61.2%
Engineering					
As needed Engineering	75,000		46,520	28,480	62.0%
Chapaton Improvements-Office Space	500,000		12,647	487,353	2.5%
Disinfection system upgrade (Design and Construction)	1,000,000		77,039	922,961	7.7%
Basin Structural Integrity Study**	-		14,097	(14,097)	0.0%
Phase 1 TRC Basin Equipment**	-		20,105	(20,105)	0.0%
Security Fence Structure-Gate Act**	-		25,150	(25,150)	0.0%
HVAC Design	200,000		-	200,000	0.0%
Flushing Study	75,000		-	75,000	0.0%
RTB/PS Ventilation Design	120,000		-	120,000	0.0%
Chapaton Improvements-Lab Relocation	250,000		70,444	179,556	28.2%
Basin Expansion Design	775,000		596,614	178,386	77.0%
In-System Storage Design(Gates on 8.5 Tunnel)	1,200,000		535,925	664,075	44.7%
9 Mile & 8 1/2 Mile Rehab	75,000		42,691	32,309	56.9%
New Equipment	23,500		12,236	11,264	52.1%
Office Supplies	1,000		362	638	36.2%
Operating Supplies	74,600		46,513	28,087	62.4%
Other Professional Svcs	46,800		38,584	8,216	82.4%
Personnel Services	979,953		438,700	541,253	44.8%
Repair & Maintenance	148,500		137,897	10,603	92.9%
Pumping and screening improvements	1,150,000		684,205	465,795	59.5%
SRF Replacement Reserve	259,215		-	259,215	0.0%
Scada System	243,839		120,091	123,748	49.3%
Utilities	273,125		201,224	71,901	73.7%
Total Expense Accounts	7,479,282	-	3,130,561	4,348,721	41.9%

	O&M Balance 9/30/2019	O&M	Total 8/31/2020
Cash - Operating	8,846,231	5,117,364	13,963,595
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		8,247,925	8,247,925
Expenditures		3,130,561	3,130,561
			0
Equity*	8,846,231		13,963,595

Detail of 2019 Equity*

Disinfection system upgrade (Design and Construction)	100,000	Basin Expansion Design	450,000
RTB/PS Ventilation Design	120,000	Pumping and screening improvements	1,215,000
Chapaton Improvements-Office Space	228,000	PLC Replacements at Chapaton East	40,000
In-System Storage Design (Gates on 8.5 Tunnel)	425,000	SRF Replacement Reserve	1,814,505
9 Mile & 8 1/2 Mile Rehab	67,800	Expansion Reserve (From State)	3,000,000
Scada Reserve	109,025	Capital Reserve	936,901
Phase 1 TRC Basin Equipment**	100,000	Basin Structural Integrity Study**	60,000
As needed Engineering	40,000	Painting interior and garage façade	20,000
HVAC Design	60,000	Security Fence Structure-Gate Act**	60,000

** Project was projected to be completed during 18/19 budget cycle. However it was not completed, so funds designated in 18/19 for this project will be used in 19/20