

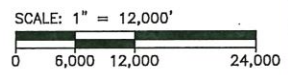
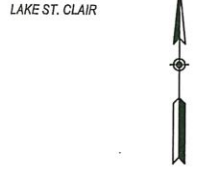
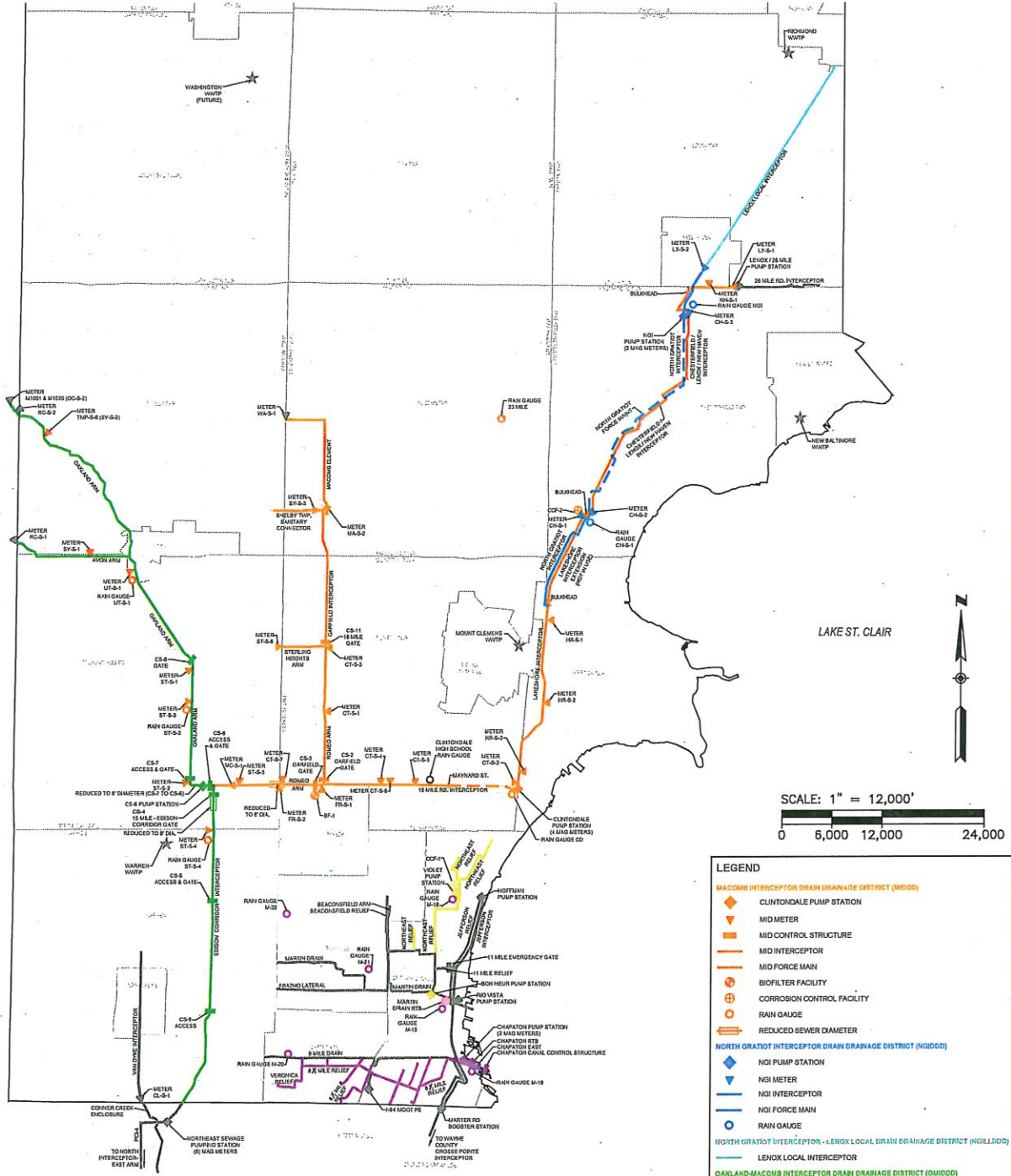
EIGHT AND ONE-HALF MILE RELIEF DRAIN
INTRA-COUNTY DRAINAGE BOARD
MAY 11, 2020
10:00 A.M.
AGENDA

NOTE: THIS MEETING WILL BE HELD BY TELECONFERENCE

Call in Number: 1-408-418-9388
Access Code: 710 147 644

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for May 11, 2020	
3. Approval of Minutes for April 13, 2020	3
4. Public Participation	
5. Project Updates - Vince Astorino	
6. Chapaton In-System Storage Design Recommendation – Vince Astorino	5
Motion: To approve the design proposal from Tetra Tech for the Chapaton In-System Storage Project at a not to exceed cost of \$943,435 as a change order to the existing MCPWO/Tetra Tech contract WWS-2019-003.	
7. Chapaton Wet Well Cleaning Recommendation - Vince Astorino	17
Motion: To approve the proposal from Doetsch Environmental Services for the Chapaton Pump Station Wet Well Cleaning at a not to exceed cost of \$51,150.	
8. Consideration for approval of invoices (see attached)	20
9. Financial Report – Bruce Manning	138
10. 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 GRATIOT INTERCEPTOR DRAIN DRAINAGE DISTRICT (NGIDD)**
 - NGI PUMP STATION
 - NGI METER
 - NGI INTERCEPTOR
 - NGI FORCE MAIN
 - RAIN GAUGE
 - NORTH GRATIOT INTERCEPTOR - LENOX LOCAL DRAIN DRAINAGE DISTRICT (NGLLDD)**
 - LENOX LOCAL INTERCEPTOR
 - OAKLAND-MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT (OMIDD)**
 - CS-4 PUMP STATION
 - OMD METER
 - OMD CONTROL STRUCTURE
 - OMD 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 (SPECIAL USE)**
 - SEMCOWOS PUMP STATION
 - CORROSION CONTROL FACILITY
 - SEMCOWOS INTERCEPTOR
 - MARTIN SANITARY OVERSEEN DRAINAGE DISTRICT (MSDD)**
 - 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 April 13, 2020, at 10:02 A.M.

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

ALSO PRESENT: Harold Haugh, 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, Karen Czernel, Deputy, Kellie Kource, Drain Account Specialist, Macomb County Public Works, Stephen Saph Jr., Nickel & Saph, Inc. Insurance Agency

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

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of March 9, 2020 were presented. A motion was made by Ms. Klinefelt, supported by Mr. Santo to approve the minutes as presented.

Adopted: YEAS: 3
NAYS: 0

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

Mr. Astorino updated the board that we have submitted our response to EGLE regarding the canal expansion project. We have asked EGLE for a yes or no at this point. We are now working on Part 41 which is the next phase of permitting for the project and are also finalizing legal agreements with Shore Club for easements.

Steel plates have been added at Chapton to protect against the high water levels.

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

Adopted: YEAS: 3
NAYS: 0

Mr. Baker updated the board that the insurance renewal policy will have a 2% increase. We still do not have the 3 year history to get additional quotes. The cost will be split among each of the drainage districts (8.5, Martin, and MIDDD). A charge of \$5,102 will be added to the cost of the policy for terrorism risk insurance.

A motion was made by Ms. Klinefelt, supported by Mr. Santo to approve the Chapter 20 General Liability Insurance coverage renewal with Argonaut Insurance Company in the amount of \$189,369 and \$5,102 for terrorism risk insurance (8.5 Mile share \$6,612.02)

Adopted: YEAS: 3
NAYS: 0

The Chair presented the invoices totaling \$293,852.68 to the board for review and approval.

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

Adopted: YEAS: 3
NAYS: 0

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

Adopted: YEAS: 3
NAYS: 0

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

Adopted: YEAS: 3
NAYS: 0

The meeting was adjourned at 10:24 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 April 13, 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: 4/13/20



Candice S. Miller
Public Works Commissioner
Macomb County

To: 8 ½ Mile Relief Drain Drainage District Board Members

CC: File

From: Vincent Astorino, Operations & Flow Manager

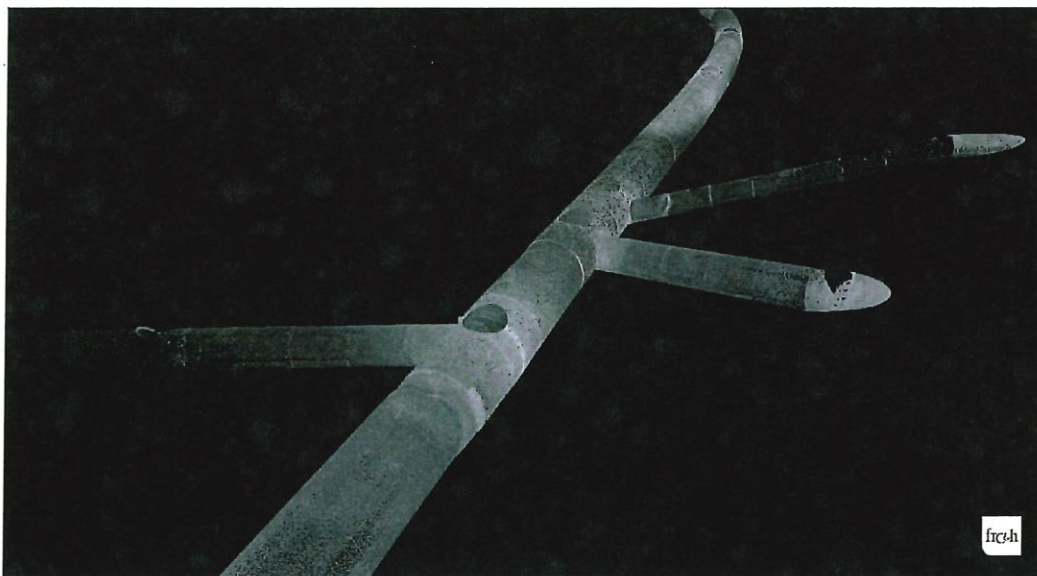
Date: May 1, 2020

Subject: 8 ½ Mile Relief In-System Storage Design Recommendation

The 8 ½ Mile Relief Drain Drainage District approved the first phase of a feasibility study for the In-System Storage project on June 10, 2019 in the amount of \$481,098. This phase of the project has been completed with the final report being submitted at the end of April.

Due to the higher risk of installing in-system storage devices compared to the Chapaton Canal Expansion project as we will be using the existing tunnel for storage, it was critical that this first phase of the project happened. Tetra Tech and their sub-consultants completed a three-dimensional scan of the 8 ½ Mile tunnel which confirmed pipe alignment and lowest basement elevations. This was an important step to minimize risk. Below in Figure 1 you will see an image of what this scan looks like after being completed.

Figure 1- 8 1/2 Tunnel West of I-94



Tetra Tech also completed a full evaluation of technologies that can be used for the In-System Storage project. After careful review the decision has been made to proceed with inflatable bladders that can be

installed within the sewer which will allow storage to near the top of the interceptor. With 2 sites being selected for this, these bladders will yield a maximum storage of 6.7 million gallons. The two sites currently selected for this are within the Welsh Family Park and in the intersection of Beaconsfield and Oak.

For the first phase of this project, MCPWO went out for competitive bids and Tetra Tech was the highest scoring and lowest cost firm of the 3 that originally submitted for this project. Within the current contract, the 8 ½ Mile Drain Drainage District has the option to keep on Tetra Tech for the next phase or go back out to bid. It is the MCPWO's recommendation to continue with Tetra Tech as they have done an excellent job to this point. Their work has been done at a high level and was done on time and under budget.

For the second phase of the project, Tetra Tech will go through the standard 30/60/90 and 100% design submittals. The full scope of work has been attached to this recommendation for reference.

The MCPWO staff is still confident that this project is in the top 2 projects for yielding the best CSO reduction results in the 8 ½ Mile Relief Drain Drainage District. This project combined with the operational improvements at the Chapaton Pump Station that are already in progress are projected to yield an average volume reduction of 36%. We are still hopefully that the canal expansion project will happen which combined with that will then yield approximately a 70% reduction, but with permitting concerns, it is unclear at this time. Permitting is not expected to be an issue with the In-System Storage project.

For the 2019/2020 budget, MCPWO included \$750,000 for phase 2 of this project. This was set before some conditions were made aware to the MCPWO staff and therefore the total cost of the project is projected to be higher than expected which has driven the phase 2 cost for Tetra Tech to \$949,435. The current conceptual cost estimate for both structures to be built is \$15,430,000. It should be noted that this total conceptual cost estimate does include a 50% contingency for engineering, legal, and contingency. Since the proposal from Tetra Tech is higher than budgeted, MCPWO will use funding that has been provided by the State of Michigan for the CSO reduction projects to cover the difference. MCPWO has also taken this opportunity to have Tetra Tech provide updated rates ensuring that their team will follow federal mileage reimbursement rates for standard vehicles.

MCPWO staff is recommending to award the next phase of design to Tetra Tech in the amount of \$949,435 as Change Order #1 to the existing MCPWO contract WWS-2019-003.

Attachments: Tetra Tech Combined Design Proposal 5-1-20



TETRA TECH

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;

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.tetrattech.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/mechanical 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

Price Proposal
Macomb In-System Design

April 20, 2020 Revision

Bill Rate / Labor Hr	Labor Plan																							Pricing by Resource		Task Pricing Totals															
	23 Resource																							Sub	Travel Mattrls & Equip																
355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00										
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Project Phases / Tasks																																									
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4.122	18	512	424	248	164	446	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330			
2. Instrumentation / Telemetry																																									
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3. Design																																									
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4. Pre-construction / Mobilization																																									
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355.00	4	15	15	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
5. Bidding																																									
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6. Construction / Installation																																									
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7. Commissioning / Closeout																																									
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8. Total																																									
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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



Candice S. Miller

Public Works Commissioner
Macomb-County

To: 8 ½ Mile Relief Drain Drainage District Board Members

CC: File

From: Vincent Astorino, Operations & Flow Manager

Date: April 30, 2020

Subject: Chapaton Wet Well Cleaning Recommendation

The Chapaton Pump Station has a wet well which requires manual cleaning and this has been set to an annual frequency to be performed. Due to this facility taking on combined sewage, debris builds within this wet well as it is the lowest point within the system. This debris consists of rocks, sand, sludge, and anything that can be found within a wastewater system or street drainage.

This cleaning was last performed in late 2018. At that time, MCPWO solicited proposals from multiple contractors and Doetsch Environmental Services (Doetsch) was the lowest and most qualified contractor. This cleaning was intentionally pushed beyond the annual reoccurrence interval to coincide with the start of the Chapaton Pump & Screen project. That project is scheduled to start in May and by coordinating this cleaning for the start of their work it will guarantee the best working conditions for their staff.

The MCPWO reached out to Doetsch again to get a proposal from them to perform this work. Since they were the lowest and most qualified a little over a year ago our staff did not feel it was necessary to solicit other proposals from additional contractors at this time. In the 2019-2020 budget, \$55,000 has been allocated for this work. Doetsch has submitted a proposal in the NTE amount of \$51,150.00.

It is the recommendation of the MCPWO to award the work to Doetsch in the NTE amount of \$51,150.00. Doetsch is ready to mobilize immediately to perform this work in order to not impact construction operations of the Pump & Screen project.

Attachments: Doetsch Proposal 4-30-20

Doetsch

ENVIRONMENTAL SERVICES

21221 Mullin Ave. Warren MI 48089

April 30, 2020

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

RE: Chapaton PS well cleaning

Mr. Astorino,

Doetsch Environmental Services will provide necessary vacuum equipment, air compressor for deep vacuuming, transfer dump box, confined space entry equipment, labor and supervision to clean the wet well.

- Crew to make safe entry into wet well.
- Ventilate if necessary.
- Vacuuming of material in well will be thru vertical pipe permanently mounted in well
- Debris to be transferred and dewatered onsite.
- Loaded into open top containers.
- Debris to be handled per options below.

Debris sampling and lab analysis (profile waste stream for landfill disposal): \$1600.00 (includes entry into well and lab work by Brighton Analytical.

** Depending on landfill, profile will be current for 1-3 years

Debris removal:

\$4650.00 per day (10 hours onsite)

Set up and tear down charged at ½ day rate: \$2325.00

Price not to exceed: \$51,150.00 (assume county pays disposal direct (#3))

Disposal options:

1. Haul debris to DART: \$0.55 per gallon
2. Haul to Woodland Meadows (Waste Management): Tonnage and associated tip charges + 10%, roll off truck \$75.00 per hour.
3. County to contract direct for hauling and disposal thru GFL. Doetsch to load GFL boxes for shipping (charge at cost for tarps, wood, etc. to make boxes haul worthy)

Please contact me with any questions or concerns.

Thank you for the opportunity to be of service,

A handwritten signature in blue ink, appearing to read "Joseph G. Schotthoefer IV".

Joseph G Schotthoefer IV

Funding Source	Apportionment	Manager	Vendor	Amount	Invoice Detail	Project Summary	Project Balance
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	Access Interactive	\$ 39,882.75	Invoice #INV000102397 - 4.16.20	SCADA Equipment	\$ 23,055.00
		Astorino	Access Interactive	\$ 1,046.72	Invoice #INV000102366 - 4.15.20	SCADA Maintenance	
		Astorino	City of St. Clair Shores	\$ 644.10	Invoice #20-192 - 4.1.20	Water Bill - 12.15.19 - 3.15.20	
		Astorino	Colville Electric Co. LLC	\$ 1,529.83	Invoice #200208 - 3.30.20	Outfall Gate Repair	
		Astorino	Colville Electric Co., LLC	\$ 3,937.50	Invoice #I20-0241 - 4.28.20	On-Call Emergency Response Agreement - Possible COVID Reimbursement	
		Astorino	Consumers Energy	\$ 1,084.45	Invoice #203498014815 - 4.7.20	Monthly Electric - 3.10.20 - 4.7.20	
		Astorino	De-Cal, Inc.	\$ 546.20	Invoice #W09200097 - 3.30.20	Chapaton Service Garage Unit Heaters	
		Astorino	DTE Energy	\$ 9,155.01	Invoice #20-189 - 4.7.20	Monthly Electric - 3.10.20 - 4.7.20	
		Astorino	DTN, LLC	\$ 762.00	Invoice #5738555 - 4.17.20	Storm Sentry	
		Astorino	Fishbeck	\$ 2,325.00	Invoice #390564 - 3.30.20	As-needed Services through 3.20.20	\$ 118,893.11
		Astorino	Fishbeck	\$ 1,393.00	Invoice #391446 - 4.17.20	As-needed Services through 4.17.20	\$ 117,500.11
		Astorino	Hubbell, Roth & Clark	\$ 10,173.74	Invoice #178307 - 4.2.20	Chapaton Dry Weather and Pump Screen Improvements - Contract Administration	\$ 164,402.69
		Astorino	Hubbell, Roth & Clark	\$ 76,716.43	Invoice #178310 - 4.2.20	Chapaton Dry Weather and Pump Screen Improvements - Design	\$ 86,890.17
		Astorino	Jacobs	\$ 59,892.00	Invoice #1 - 4.16.20	Chapaton Odor Study	\$ 8,747.00
		Baker	Nickel & Saph, Inc.	\$ 6,612.00	Invoice #20492 - 4.13.20	Liability Insurance	
		Astorino	Swan Analytical	\$ 1,369.25	Invoice #N-US20-0066	TRC Unit Chemicals	
		Astorino	Tetra Tech, Inc.	\$ 17,286.00	Invoice #51583201 - 4.24.20	In-System Storage Feasibility Study	\$ 94,160.28
		Astorino	Wade Trim	\$ 100,077.90	Invoice #2017671 - 3.27.20	Chapaton RTB Canal Upgrades	\$ 206,958.75
		Astorino	Wade Trim	\$ 58,377.75	Invoice #2017951 - 4.29.20	Chapaton RTB Canal Upgrades	\$ 148,581.00
		Astorino	Wade Trim	\$ 11,920.00	Invoice #2017956 - 4.30.20	Chapaton RTB Disinfection Improvements - Design	\$ 59,405.13
		Astorino	Wyatt Performance & Fab	\$ 675.00	Invoice #2506 - 4.9.20	Drain Cover	
			Total	\$ 405,406.63			



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

PREPARED BY	PHONE NUMBER	DATE
Houvener	95966	4/17/2020

SET ID	POST DATE
VP200417MA	

PARENT RECORD INFORMATION			
VENDOR NAME	VENDOR NUMBER	ADDR CODE	INVOICE DATE
Access Interactive, LLC	V00035	01	4/16/2020
			INVOICE AMOUNT
			\$ 106,354.00

CHILD RECORD DETAIL INFORMATION										
GENERAL LEDGER			JOB LEDGER							
ORG KEY	OBJECT	COST CENTER	OBJECT	WORK ORDER NUMBER	DRAIN NAME	DESCRIPTION	AMOUNT	DIV	MISC	SEP CK
8210166M	97002	CC0014	97002	WO20012	MIDDD	PW000068; SCADA Equipment	\$ 43,582.22	GEN		
8210166M	80126	CC0014	80126	WO20012	MIDDD	PW000068; SCADA Equipment	\$ 2,150.00	GEN		
8210166M	97002	CC0014	97002	WO20016	MIDDD (OMID)	PW000068; SCADA Equipment	\$ 7,094.78	GEN		
8210166M	80126	CC0014	80126	WO20016	MIDDD (OMID)	PW000068; SCADA Equipment	\$ 350.00	GEN		
8210017M	97002	CC0014	97002	WO20013	8 1/2 Mile Relief	PW000068; SCADA Equipment	\$ 38,007.75	GEN		
8210017M	80126	CC0014	80126	WO20013	8 1/2 Mile Relief	PW000068; SCADA Equipment	\$ 1,875.00	GEN		
8210072M	97002	CC0014	97002	WO20014	Martin	PW000068; SCADA Equipment	\$ 7,601.55	GEN		
8210072M	80126	CC0014	80126	WO20014	Martin	PW000068; SCADA Equipment	\$ 375.00	GEN		
8713018M	97002	CC0014	97002	WO20015	SEMCWWDS	PW000068; SCADA Equipment	\$ 5,067.70	GEN		
8713018M	80126	CC0014	80126	WO20015	SEMCWWDS	PW000068; SCADA Equipment	\$ 250.00	GEN		

TOTAL: \$ 106,354.00

COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

Finance Manager: Jim
 Chief Engineer: Ab
 Engineer(s): _____
 Manager(s): _____
 Coordinator: _____

Drain: Multiple
 Project Balance: N/A
 Staff Date: 4/21/2020
 Board Date: 5/11/2020
 Select for Pay Date: _____

Access Interactive, LLC.
 46635 Magellan Drive
 Novi MI 48377

Invoice	INV000102397
Date	4/16/2020
Page	1

Phone (248) 567-3000

Bill To:

Macomb County Public Works Office (MCPWO)
 Attn: Accounts Payable
 21777 Dunham Road
 Clinton Township MI 48036

Ship To:

DPWK - Public Works Office
 Chapaton Pump Station
 23001 9 Mile Road
 St.Clair Shores MI 48080

Purchase Order No.	Customer ID	Salesperson ID	Shipping Method	Payment Terms	Req Ship Date	Master No.
PW000068	MACOMBDPW4257	1004	DROP SHIP	Net 30	3/27/2020	108,159
Ordered	Shipped	B/O	Item Number	Description	Unit Price	Ext. Price
1	1	0	SYS-DELL-604450501 9NK1333	Dell Storage SCv3020 SAN	\$34,726.00	\$34,726.00
1	1	0	SYS-DELL-608633896	Dell Storage SC5020 SAN B20P333	\$66,628.00	\$66,628.00
16	16	0	CBL-FIBE-SFPP-PC02	2m 10G SFP+ Passive DAC Twinax Cable	\$0.00	\$0.00
1.00	1.00	0.00	LBR-AI-SAN-DEPLOY	Professional Services: Install,Deployment	\$5,000.00	\$5,000.00

Subtotal	\$106,354.00
Misc	\$0.00
Tax	\$0.00
Freight	\$0.00
Trade Discount	\$0.00
Total	\$106,354.00

Signature _____

Date _____

Thank you for your order!

If you have any questions regarding your invoice,
 please call (248)567-3000.



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 4/17/20
4. SET ID VP200424MA		
5. POST DATE		

PARENT RECORD INFORMATION			
6. VENDOR NAME (Check to be issued to) Access-Interactive LLC	7. VENDOR NUMBER V00035	8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) INV000102366A
			10. Invoice Date 4/15/2020
			11. Invoice Amount \$ 2,791.25

CHILD RECORD DETAIL INFORMATION										
12. Org Key	13. Object	14. Cost Center (CGNT)	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
8210166M	80146	CC0014	80146	WO20001	MIDDD	SCADA Maintenance	\$ 1,200.24	GEN		
8210166M	80146	CC0014	80146	WO20016	MIDDD (OMID)	SCADA Maintenance	\$ 195.39	GEN		0
8210017M	80146	CC0014	80146	WO20001	8 1/2 Mile Relief	SCADA Maintenance	\$ 1,046.72	GEN		0
8210072M	80146	CC0014	80146	WO20001	Martin	SCADA Maintenance	\$ 209.34	GEN		0
8213018M	80146	CC0014	80146	WO20001	SEMCWWDS	SCADA Maintenance	\$ 139.56	GEN		0

23. Total: \$ **2,791.25**

REV 09/2018

4. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer: BH/HR	30. Drain: Multiple
26. Chief Deputy: AB	31. Project Balance: \$23,055.00
27. Engineers:	32. Staff Date: 5/5/2020
28. Managers:	33. Board Date: 5/11/2020
29. Coordinator:	34. Select For Pay Date:

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

WORK ORDER NUMBER	WO20001
PROJECT NUMBER	WWS-2020-004
PROJECT NAME	SCADA Maintenance
DRAINAGE DISTRICT	MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT, EIGHT AND ONE-HALF MILE DRAINAGE DISTRICT, MARTIN SANITARY DIVERSION DRAINAGE DISTRICT, MACOMB COUNTY
CONSULTANT NAME	BILL FEDAK (DESIGNATED REPRESENTATIVE)
INVOICE DATE	4/15/20
INVOICE START DATE	4/15/20
INVOICE END DATE	

ORIGINAL CONTRACT AMOUNT	\$	29,000.00
CHANGE ORDER TOTAL		
Change Order No. 1	\$	-
Change Order No. 2		
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	29,000.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	3,153.75
TOTAL AMOUNT DUE THIS INVOICE	\$	2,791.25
TOTAL BUDGET REMAINING	\$	23,055.00
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)		

W020001

Access Interactive, LLC.
46635 Magellan Drive
Novi MI 48377

Invoice	INV000102366 A
Date	4/15/2020
Page	1

Phone (248) 567-3000

Bill To:

Macomb County Public Works Office (MCPWO) Attn: Accounts Payable 21777 Dunham Road Clinton Township MI 48036

Ship To:

Macomb County Public Works Office (MCPWO) Brent Welser, SCADA System Mgr 21777 Dunham Road Clinton Township MI 48036

Purchase Order No.	Customer ID	Salesperson ID	Shipping Method	Payment Terms	Req Ship Date	Master No.
WO20001	MACOMBDPW4257	1004		Net 30	4/16/2020	108,318
Ordered	Shipped	B/O	Item Number	Description	Unit Price	Ext. Price
19.25	19.25	0.00	LBR-HOUR-RBPLABOR	Robb Pickinpaugh Labor per Hour 04/01/2020 - 04/06/2020	\$145.00	\$2,791.25

Subtotal	\$2,791.25
Misc	\$0.00
Tax	\$0.00
Freight	\$0.00
Trade Discount	\$0.00
Total	\$2,791.25

Signature _____

Date _____

Thank you for your order!

If you have any questions regarding your invoice,
please call (248)567-3000.

Access Interactive, LLC.
 46635 Magellan Drive | Novi, MI 48377
 Phone: 248-567-3000 | Fax: 248-567-3050
<http://www.access-interactive.com>

4/13/2020

SERVICE REPORT FORM

Timestamp	Email Address	Date	Company Name	Contact	Case Number	Onsite Time	Office Time/ Off-Site Time	Drive Time	Details	Case Status	Internal Comments	Sales Rep	Rate	OK to Bill? Y/N
4/6/2020 9:14	robbp@access-interactive.com	4/1/2020	Macomb DPW		Network		5:15:00		Review Documentation	On-Going				
4/6/2020 9:17	robbp@access-interactive.com	4/2/2020	Macomb DPW		Network		7:30:00		Review Documentation	On-Going				
4/6/2020 9:19	robbp@access-interactive.com	4/3/2020	Macomb DPW		Network		4:30:00		review documentation, work Sonicwall configs	On-Going				
4/9/2020 9:18	robbp@access-interactive.com	4/6/2020	Macomb DPW		Network project		2:00:00		Sonicwall Configuration Interpretation	On-Going				



St. Clair Shores Water Bill

ACCOUNT NUMBER

25776-00

SERVICE ADDRESS

23009 NINE MILE

SERVICE TYPE

Government

PREVIOUS READ

502

CURRENT READ

548 E

CONSUMPTION

46

FROM: SERVICE PERIOD TO:

12/15/19

03/15/20

DUE DATE

05/13/2020

PAY AFTER DUE DATE

644.10

PAY BY DUE DATE

644.10

PREVIOUS BALANCE	0.00
Water	238.88
Sewer	306.22
Customer Chg	98.51
Retention Basins O&M	0.49

CURRENT BALANCE

644.10

MONTHLY BUDGET

Temp-Return Service Requested

8298 1 AB 0.419

8298-8298-20



20.192

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

PLEASE RETAIN THIS UPPER PORTION FOR YOUR RECORDS.
YOUR CANCELLED CHECK IS YOUR RECEIPT.

IF YOU HAVE AN ESTIMATED
BILL, PLEASE CALL
586-447-3317 FOR A
SERVICE APPOINTMENT.



City of
St. Clair
Shores

27600 Jefferson Ave.
St. Clair Shores, MI 48081

FOR FURTHER INFORMATION PLEASE CALL:
BILLING INFORMATION - (586) 447-3317
SERVICE INFORMATION - (586) 445-5374
VISIT US ON THE WEB AT www.scsmi.org

To Pay by Credit Card or Electronic Check



Visit www.scsmi.org
Online Payments and Services
or call 1-855-414-9009 (credit card only)

Point and Pay LLC, the service provider, charges a fee for this service of:
3.00% for credit cards (\$1.50 minimum)
Electronic checks are provided as a FREE service.

IMPORTANT INFORMATION - SEE REVERSE SIDE

REMOVE DOCUMENT ALONG THIS PERFORATION
AND MAKE SURE RETURN ADDRESS APPEARS THROUGH WINDOW



St. Clair Shores Water Bill

Due Date

05/13/2020

Pay After Due Date

644.10

PAY BY DUE DATE

644.10

Service Address

23009 NINE MILE

City of St. Clair Shores
27600 Jefferson Ave
Saint Clair Shores MI 48081-2075

Account Number

25776-00



28

1.349 1. 2577600 0064410 0064410 7



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 4/9/20
4. SET ID VP200409MA		
5. POST DATE		

PARENT RECORD INFORMATION			
6. VENDOR NAME (Check to be issued to) Colville Electric Co., LLC	7. VENDOR NUMBER V50164	8. ADDR CODE 02	9. Invoice No (MAX = 16 CHARACTERS) 200208
10. Invoice Date 3/30/2020			11. Invoice Amount \$ 1,529.83

CHILD RECORD DETAIL INFORMATION										
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
8210017M	93002	CC0004	93002	WO18006	8 1/2 Mile Relief	Outfall Gates	\$ 1,529.83	GEN		
29										

23. Total: \$ **1,529.83**

REV 09/2018

4. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
Outfall Gates Repair

25. Finance Officer: BH/MH	30. Drain: 8 1/2 Mile Relief
26. Chief Deputy: <i>AB</i>	31. Project Balance: N/A
27. Engineers:	32. Staff Date: 4/21/2020
28. Managers:	33. Board Date: 5/11/2020
29. Coordinator:	34. Select For Pay Date:

Colville Electric Co., LLC

23416 Gratiot Ave
 Eastpointe MI 48021
 (586) 774-9110
 Office@colvilleelectric.com

Invoice

Chap outfall gates

DATE	03/30/2020
INVOICE #	200208
TERMS	NET 15

BILL TO
Macomb County DPW 23001 Nine Mile Rd. St. Clair Shores, MI, 48080

SERVICE LOCATION
Macomb County-DPW Chapton East

JOB#	DATE	PO	DESCRIPTION
33506307	03/26/2020		Relocate conduits and strut on outer lake gates. Completion Notes: 3/26/2020- Unstrapped conduits and moved racks. Need to move level sensor conduit and re strap conduits. 3/27/2020- Reconfigured level sensor conduit. Pulled wiring back in and terminated. Restrapped conduits.

Description	Qty	Rate	Total
1/4-20 Nut 1/4-20 Machine Screw Nut	19.00	\$0.04	\$0.76
1/4-20 x 1-1/4 Hex 1/4-20 x 1-1/4" Hex Head Bolt	19.00	\$0.10	\$1.90
RMC UNI 075 3/4' RMC Unistrut Strap	1.00	\$1.26	\$1.26
PVCGRC ERC 075 3/4" PVC Coated 3 Piece Coupling	1.00	\$58.91	\$58.91
03/26/2020 - Jared Hayosh			
Labor Time (2hr 43min)		\$90.00/hr	\$244.50
03/26/2020 - Evan Nicholson			
Labor Time (2hr 41min)		\$90.00/hr	\$241.50
03/27/2020 - Evan Nicholson			
Labor Time (6hr 6min)		\$90.00/hr	\$549.00

Description	Qty	Rate	Total
03/27/2020 - Jared Hayosh			
Labor Time (4hr 48min)		\$90.00/hr	\$432.00

SUB-TOTAL:	TIME & LABOR:	EXPENSES:	PMTS/DEPS:	TOTAL DUE:
\$62.83	\$1,467.00	\$0.00	\$0.00	\$1,529.83

CUSTOMER MESSAGE

Invoice Total:	\$1,529.83
Deposits (-):	\$0.00
Payments (-):	\$0.00
Total Due:	\$1,529.83



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 4/29/20
4. SET ID VP20501MA		
5. POST DATE		

PARENT RECORD INFORMATION			
6. VENDOR NAME (Check to be issued to) Colville Electric Co., LLC	8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) 120-0241	10. Invoice Date 4/28/2020
7. VENDOR NUMBER V50164	11. Invoice Amount \$ 10,500.00		

CHILD RECORD DETAIL INFORMATION									
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
8210166M	80146	C00014	80146	WO20024	MIDDD	Service Agreement 3/22-4/25	\$ 5,250.00	GEN	
8210017M	80146	C00014	80146	WO20024	8 1/2 Mile Relief	Service Agreement 3/22-4/25	\$ 3,937.50	GEN	0
8210072M	80146	C00014		WO20024	Martin	Service Agreement 3/22-4/25	\$ 787.50	GEN	0
8713018M	80146	C00014		WO20024	SEMCWWDSD	Service Agreement 3/22-4/25	\$ 525.00	GEN	0
32									

23. Total: \$ **10,500.00**

REV 09/2018

4. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

Possible Covid Reimb.

25. Finance Officer: BM/MT

26. Chief Deputy: AB

27. Engineers: _____

28. Managers: _____

29. Coordinator: _____

30. Drain: Multiple

31. Project Balance: N/A

32. Staff Date: 5/5/2020

33. Board Date: 5/11/2020

34. Select For Pay Date: _____

Colville Electric Co., LLC
23416 Gratiot Ave
Eastpointe, MI 48021
office@colvilleelectric.com



BILL TO

Macomb County DPW
23001 Nine Mile Rd.
St. Clair Shores, MI 48080

SHIP TO

Macomb County DPW
23001 Nine Mile Rd.
St. Clair Shores, MI 48080

INVOICE I20-0241

DATE 04/28/2020 **TERMS** Net 30

DUE DATE 05/28/2020

DATE	DESCRIPTION	AMOUNT
	Based from Estimate 20-097, Approved By Vince Astorino.	
	Service Agreement 3/22-3/28, 1 @ \$2,100.00	2,100.00
	Service Agreement 3/29-4/4, 1 @ \$2,100.00	2,100.00
	Service Agreement 4/5-4/11, 1 @ \$2,100.00	2,100.00
	Service Agreement 4/12-4/18, 1 @ \$2,100.00	2,100.00
	Service Agreement 4/19-4/25, 1 @ \$2,100.00	2,100.00

TOTAL DUE **\$10,500.00**

Terms are NET 30 unless otherwise noted.
All past due accounts subject to 1.5% per month finance charge.



Questions:
Visit: ConsumersEnergy.com
Call us: **800-805-0490**

Amount Due: **\$1,084.45**
Please pay by: **May 05, 2020**

In case of an emergency, call us immediately day or night at **1-800-477-5050**.



**CHAPTON PUMPING STATION
MACOMB CO DRAIN COMM
21777 DUNHAM RD
CLINTON TOWNSHIP MI 48036-1005**



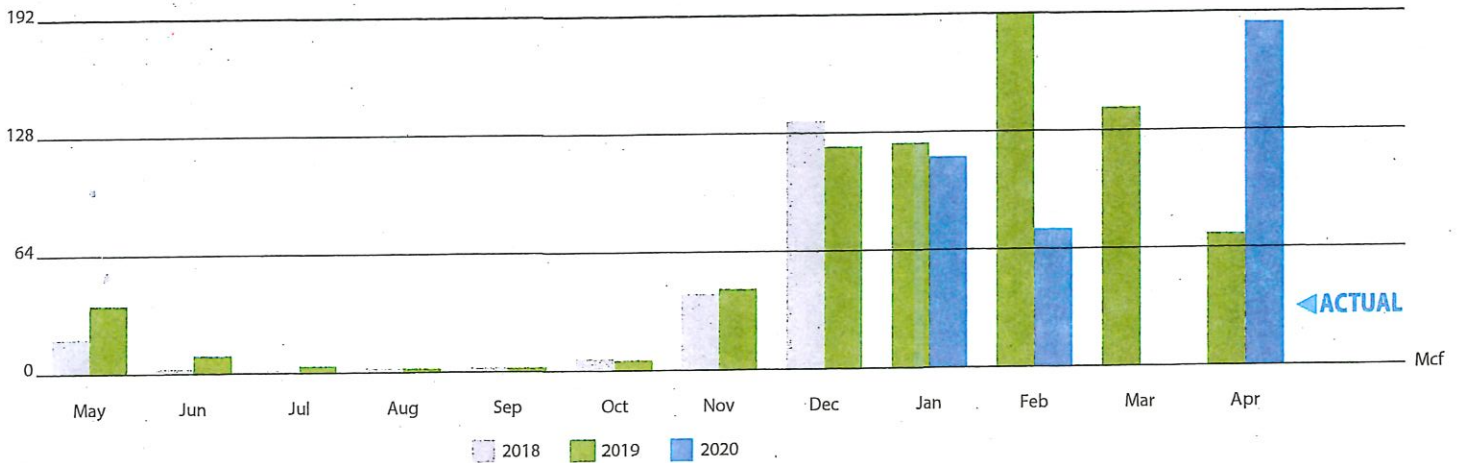
▶ **Thank You** - We received your last payment of **\$81.86** on **March 27, 2020**

▶ **Service Address:**
23001 E 9 MILE RD
SAINT CLAIR SHORES MI
48080-1576

April Energy Bill

Service dates: **March 10, 2020 - April 07, 2020 (29 days)**

Total Natural Gas Use (Mcf - thousand cubic feet)



April Natural Gas Use
186.5 Mcf

Cost per day:
\$37.39

Mcf per day:
6.431

Prior 12 months of gas use:
600 Mcf

For more information, visit ConsumersEnergy.com/waysstopay

In person
Cash, check, card
or money order
Varies by authorized
payment location
Fee may apply

By mail
Check, money order
Consumers Energy
Payment Center
P.O. Box 740309
Cincinnati, OH 45274-0309

Same-day payment
866-329-9593
Discover® MasterCard®
or eCheck

Same-day payment
ConsumersEnergy.com
Discover® MasterCard®
or eCheck

eLockbox
via ACH
Secure electronic
payment with
emailed remittance

Auto-pay
Checking or savings
Discover® MasterCard®
or Visa®
(Eligibility varies)

Ways to pay your energy bill:



Need to talk to us? Visit ConsumersEnergy.com
or call **800-805-0490**
Hearing/speech impaired: Call 7-1-1

Service Address:
23001 E 9 MILE RD; SAINT CLAIR SHORES
MI 48080-1576
Account: **1000 0005 7313**

Account Information

Bill Month: April
Service dates: 03/10/2020 - 04/07/2020
Days Billed: 29
Portion: 12 04/20

Rate Information

Gas Gen Serv Rate GS-2 - Com Cust Choice
Rate: 278

Meter Information

Your next scheduled meter read
date is on or around 05/11/2020

Meter exchange on 03/17/20
Old Meter = 96483303 New Meter = 96482875

Gas Service:

AMR Meter
Meter Number: 96483303
POD: 0000003537725
Beginning Read Date: 03-10
Ending Read Date: 03-17
Beginning Read: 8927
Ending Read: 10233 (Actual)
Differential: 1306
Constant: 0.1
Correction factor: 1.01028
Usage: 131.9 Mcf

Gas Service:

AMR Meter
Meter Number: 96482875
POD: 0000003537725
Beginning Read Date: 03-18
Ending Read Date: 04-07
Beginning Read: 2
Ending Read: 542 (Actual)
Differential: 540
Constant: 0.1
Correction factor: 1.01028
Usage: 54.6 Mcf

Total Metered Energy Use: 186.5 Mcf

NEWS AND INFORMATION

Natural gas safety. Learn how to recognize, react to and report natural gas emergencies that may occur from a gas leak or damage to gas lines. *See the insert.*

Compare natural gas prices among Consumers Energy and other gas providers at www.Michigan.gov/CompareMIGas.

ALERT - Beware of phone and email scams regarding utility payments: Consumers Energy never demands

payment using only a prepaid card. Many options at www.ConsumersEnergy.com/waystopay.

April Energy Bill

Invoice: 203498014815

Account Summary

Last Month's Account Balance	\$81.86
Payment on March 27, 2020	<u>\$81.86-</u>
Balance Forward	\$0.00

Payments applied after Apr 13, 2020 are not included.

Natural Gas Charges

Customer Charge		\$81.86
Gas Distribution	186.5@ 2.449100	\$456.76
Energy Efficiency	186.5@ 0.306700	\$57.20

Kratos Gas & Power (800/296-2203)

Supplier Charge KR3	186.5@ 2.620000	<u>\$488.63</u>
---------------------	-----------------	-----------------

Total Natural Gas **\$1,084.45**

Total Energy Charges **\$1,084.45**

Amount Due: **\$1,084.45**
by May 05, 2020

If you pay after the due date, a 2% late payment charge will be added to your next bill.

Please make any inquiry or complaint about this bill before the due date listed on the front.
Visit ConsumersEnergy.com/aboutmybill for details about the above charges.



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 4/9/20
4. SET ID VP200409MA		5. POST DATE

6. VENDOR NAME (Check to be issued to) De-Cal, Inc.			7. VENDOR NUMBER V59694			8. ADDR CODE 01			9. Invoice No (MAX = 16 CHARACTERS) WO9200097			10. Invoice Date 3/30/2020			11. Invoice Amount \$ 546.20		
---	--	--	-----------------------------------	--	--	---------------------------	--	--	---	--	--	--------------------------------------	--	--	--	--	--

PARENT RECORD INFORMATION

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)				
8210017M	93002	CC0004	93002	WO18006	8 1/2 Mile Relief	546.20	GEN		
						\$			

CHILD RECORD DETAIL INFORMATION

23. Total: \$ **546.20**

REV 09/2018

4. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer: **BH/MH**

30. Drain: **8 1/2 Mile Relief**

26. Chief Deputy: **AB**

31. Project Balance: **N/A**

27. Engineers: **4/21/2020**

32. Staff Date: **4/21/2020**

28. Managers: **5/11/2020**

33. Board Date: **5/11/2020**

29. Coordinator: _____

34. Select For Pay Date: _____



DE-CAL, Inc.
 24659 Schoenherr Rd.
 Warren, MI 48089-4775
 Service Phone: 586-619-0281
 Service Fax: 586-486-5242

Service Invoice

Invoice #: WO9200097

Date: 03/30/2020

Billed To: Macomb County Chapaton
 23001 E. 9 Mile Rd.
 St. Clair Shores MI 48080

Location: Macomb Chapaton Pumping
 23001 E. 9 Mile Rd.
 St. Clair Shores MI 48080

Attn: Accounts Payable

Client PO#:	Employee:	Due Terms: 30DY
--------------------	------------------	------------------------

Assembly#	Part#	Description	Quantity	Price	Ext Price	Sales Tax
		See Attached	1.0000	546.200000	546.20	N

Notes:

See work order for details

*Chap service garage
 unit heaters*

De-Cal Service Group is a division of De-Cal, Inc.

Please Make Checks Payable to: De-Cal, Inc.

Thank you for your prompt payment!

Amount Due: \$	546.20
-----------------------	---------------



De - Cal Service Group

Commercial & Industrial HVAC Service, Building Automation

Chillers, Boilers, Piping & Plumbing

24659 Schoenherr Rd.

Warren, MI 48089

Phone: 586-619-0281

www.de-cal.com

Customer Name:	Macomb Chapaton	Date:		De-Cal Job #	9200097
Job Site Location:					
Description Of Work Performed:	1-13 Pete asked me to check out ex-fan in garage area, due to it not working	PO #			
		Site Contact:			
LABOR HOURS					
<i>Labor Type</i>	<i>Dates, Technicians</i>	<i>Total Hours</i>	<i>Total</i>		
HVAC Technician		4.0	\$	450.00	
Controls Technician			\$	-	
Boiler Technician			\$	-	
Chiller Technician			\$	-	
OT			\$	-	
DT			\$	-	
Veh/Tool Allowance		1.0	\$	75.00	
MATERIALS/SUBCONTRACTORS UTILIZED					
<i>Unit #</i>	<i>Material Description</i>	<i>Part #</i>	<i>Quantity</i>	<i>Price</i>	
	Consumables		1.0	\$	20.00
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
Total Work Order				Material Tax %	\$ 1.20
				Sell For	
				TOTAL BILLING:	\$ 546.20

Service Report

Service Report No : 9200097-1



Date: January 13, 2020

Client P.O. #: N/A

HVAC Service

Ready to Invoice/Work Complete

Site:

Macomb Chapaton Pumping
23001 E. 9 Mile Rd., St. Clair Shores , MI ,
48080

Client:

Macomb County Chapton
23001 E. 9 Mile Rd., St. Clair Shores , MI ,
48080

Reason for Call:

1-13 Pete ask me to check out ex-fan in garage area, due to it not working

Description of Service:

1-13 arrived onsite checked in with Pete, checked on power to unit, found no power to unit, checked electrical panel, found no designated breaker for ex-fan, traced down wiring back to panel, found wiring had been disconnected from panel no breakers available to tie in wires, checked condition of ex-fan, has not been used in many years, pulleys are rusted, bearings are sticking due to rust, no data tag on unit, other than mtr states 115v, 1phase, 60 hz.unit is in bad shape, probably original unit since 1970's, took pictures, showed Pete pictures of condition of unit, he gave me okay to get a proposal together for replacement,

Technician Work

Name	Date	Reg. hrs	Prem. hrs
Cliff Wilkerson	Jan 13, 2020	4	0



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Kellie Kource	2. PHONE # 95337	3. DATE 4/20/20
4. SET ID VP2004@SMWA		5. POST DATE

PARENT RECORD INFORMATION				
6. VENDOR NAME (Check to be issued to) DTE Energy	8. ADDR CODE 08	9. Invoice No (MAX = 16 CHARACTERS) 20-189	10. Invoice Date 4/7/2020	11. Invoice Amount \$ 9,155.01

CHILD RECORD DETAIL INFORMATION									
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
8210017M	92101	CC0004	92101	WO18006	8 1/2 Mile Relief	Acct #9100-0005-3785, 3/10-4/7	\$ 9,155.01	GEN	
41									
23. Total: \$ 9,155.01									

REV 09/2018

4. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	Bm/mw	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:	AB	31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	5/5/2020
28. Managers:		33. Board Date:	5/11/2020
29. Coordinator:		34. Select For Pay Date:	



Payment Coupon

Empty rectangular box for stamp or marking.

Account Number	910000053785
Due Date:	May 05, 2020
Total Due:	\$9,155.01

MACOMB COUNTY
 MACOMB COUNTY DRAIN COMM
 21777 DUNHAM RD
 CLINTON TWP MI 48036-1005

20.189

Mail Payments to:
 DTE Energy
 P.O. Box 630795
 Cincinnati OH 45263-0795

Please detach and return coupon with account number on check. Agencies are not authorized to accept payment of this bill.

Account Information

Empty rectangular box for stamp or marking.

MACOMB COUNTY
 MACOMB COUNTY DRAIN COMM
 21777 DUNHAM RD
 CLINTON TWP, MI 48036

Account Number	9100-0005-3785
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DTE-Energy Federal ID No.	38-3217752
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Programs you are enrolled in:

SolarCurrents Program

How to contact us:

Power Outage	See Detail Charges
Billing Inquiry	1-734-397-4309

Please make any inquiry or complaint about this bill to DTE Energy before the Due Date.
 DTE Energy is regulated by the Michigan Public Service Commission, Lansing, Michigan

Important Information

Shaded rectangular box for important information.



Detail Charges

For Service at: 23001 E 9 Mile Rd, St Clair Shores, MI 48082

Outage Contact Number: 1-313-235-1300

Invoice: 200002179350

Billing Period: 03/10/2020 through 04/07/2020

Days Billed: 29

Metering Information

Meter Number	Start Date	Start Read	Stop Date	Stop Read	Read Difference	Units Multiplier	Usage Used	Type
6321448	03/10	400.9A	04/07	406.5A	5.6	6,400.0000	35,840.0	P - In-V
6321448	03/10	511.9A	04/07	520.4A	8.5	6,400.0000	54,400.0	P - In-W
6321449	03/10	0.0A	04/07	1.4A	0.0	- 6400.000	0.0	P - Out-V
6321449	03/10	0.0A	04/07	0.0A	0.0	- 6400.000	0.0	P - Out-W
6321451	03/10	0.0A	04/07	0.5A	0.0	6,400.0000	0.0	P - In-V
6321451	03/10	0.0A	04/07	0.5A	0.0	6,400.0000	0.0	P - In-W
Total KVARH							35,840.00	
Total KWH							54,400.00	

Invoice: 200002179350 Service Name: Chapaton Pumping Station

Item: 7004376662 Cycle: 05

General Service Municipal Pumping-Net Metering Cat1

Billing Status Information

1	On-peak Billing Demand	236	KW	ESTABLISHED	04/02/2020	17:00
3	65% High OP Bill Dmd June-Oct prec 11 mths	1105	KW	ESTABLISHED	09/17/2019	18:00
8	Highest Single Billing Demand	2309	KW	ESTABLISHED	03/28/2020	08:30
A	Current PV High Monthly Demand	2309	KW	ESTABLISHED	03/28/2020	08:30
B	50% of the Contract Capacity for PV	0	KW			
C	Primary Voltage Maximum Demand	4956	KW	ESTABLISHED	05/01/2019	04:30
	Contract Capacity for Location	6738	KW	ESTABLISHED	08/16/2016	05:00
	Power Factor (ratio) for all voltages	83	PCT			
	Total Number of days in the Billing Period	29	DAYS			
	Avg Kilowatthours Used Per Day This Period	1876	KWH			
	Avg Kilowatthours Used Per Day A Year Ago	1820	KWH			
	kWh percentage change from a year ago	3	PCT			
	Metered outflow	0	KWH			
	Net Delivery Billed (inflow)	54400	KWH			
	Net Inflow (In - Out)	54400	KWH			

Charges for 03/10/2020 through 04/07/2020

Power Supply Charges:

Power Supply Energy:						
Power Supply Capacity Charge	54,400	KWH	@ \$	0.0329700	Per Total KWH	1,793.57
Power Supply Non Capacity Charge	54,400	KWH	@ \$	0.0464000	Per Total KWH	2,524.16
Surcharges:						
Power Supply Cost Recovery Factor	54,400	KWH	@ \$	0.0015600	Per Total KWH	84.86
	Sub Total:					4,402.59

Delivery Charges:

Service Charge						11.25
Distribution:						
Distribution Energy	54,400	KWH	@ \$	0.0386600	Per Total KWH	2,103.10
Surcharges:						
Nuclear Surcharge	54,400	KWH	@ \$	0.0008270	Per Total KWH	44.99
Energy Waste Reduction	2	MTR	@ \$	45.6200000		91.24
LIEAF Factor	2	MTR	@ \$	0.9200000		1.84
	Sub Total:					2,252.42
Special Facilities Charge						2,500.00

Invoice Subtotal

9,155.01

Michigan State Sales Tax On Taxable Portion

0.00

Invoice Total

\$9,155.01

Summary Of Charges

Account Number 9100-0005-3785

Previous Balance as of 03/12/2020 7,151.28
Payment(s) and Credit(s) - 7,151.28
Remaining Balance \$0.00

Current Charges

Service Location	Item	Service Type	Rate	Bill Period	Amount
23001 E 9 Mile Rd	7004376662	General Service Municipal Pumping-Net Metering Cat1	EFCND3_WP	03/10 - 04/07/20	9,155.01
		Taxes			0.00
		Miscellaneous Charges			0.00
		Current Bill			\$9,155.01

Amount Due on or before Due Date of 05/05/2020 \$9,155.01

Your current charges are due on May 5, 2020. A 2% late payment charge will be applied if paid after the due date.



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 4/30/20
4. SET ID VP200SOIMA		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) 5738555
		10. Invoice Date 4/17/2020	11. Invoice Amount \$ 1,524.00

CHILD RECORD DETAIL INFORMATION									
General Ledger			Job Ledger		OPTIONAL			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	21. MISC
8210166M	92113	CC0018	92113		MIDDD	Acct#03222513, 5/15-8/14	\$ 762.00	GEN	MIDDD
8210017M	92113	CC0004	92113	WO18006	8 1/2 Mile Relief	Acct#03222513, 5/15-8/14	\$ 571.50	GEN	
8210072M	92113				Martin	Acct#03222513, 5/15-8/14	\$ 114.30	GEN	
8713018M	92113				SEMCWWDS	Acct#03222513, 5/15-8/14	\$ 76.20	GEN	
45									

23. Total: \$ **1,524.00** REV 09/2018

4. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
Storm Sentry

25. Finance Officer:	BH/MH	30. Drain:	Multiple
26. Chief Deputy:	AB	31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	5/5/2020
28. Managers:		33. Board Date:	5/11/2020
29. Coordinator:		34. Select For Pay Date:	



Account No.	Invoice No.	Invoice Date
0322513	5738555	17-Apr-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

T1200417.001-255-00000296



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

#BWNCVKR
 0322513

000128 000000296



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

Account No.	Invoice No.	Due Date
0322513	5738555	08-May-2020
Amount Due		\$ 1,524.00
Payment enclosed		



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

10000000057385550000000003225136 00000152400

Account Status

New Invoice	Due Date	Balance	Total
5738555	08-May-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	Description	Amount
05/15/20-08/14/20	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	Description	Amount
05/15/20-08/14/20	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	Description	Amount
05/15/20-08/14/20	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.

TI200417.001-256-00000296

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

Weather Did you know? Wondering what spring will bring? Check out what DTN's expert long-range forecasters shared during DTN's spring and severe weather outlook webinar. No time to watch? No worries, you can watch the recorded webinar: <https://dtn.webex.com/dtn/lr.php?RCID=8ca42a077bf2>

Account Number: 0322513 UserID: MACOMB4

Email: JOSEPH.BETZ@MACOMBGOV.ORG

Service Period

05/15/20-08/14/20 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

05/15/20-08/14/20 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) Michelle Houvener	2. PHONE # 95966	3. DATE 4/30/20
4. SET ID		
5. POST DATE		
VP200501MA		

PARENT RECORD INFORMATION			
6. VENDOR NAME (check to be issued to) Fishbeck	7. VENDOR NUMBER V44063	8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) 390564
		10. Invoice Date 3/30/2020	11. Invoice Amount \$ 2,325.00

CHILD RECORD DETAIL INFORMATION									
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
8210017M	80138	CC0004	80138	WO19005	8 1/2 Mile Relief	Pjt #190051 through 3/20/20	\$ 2,325.00	GEN	
49									
							23. Total: \$	2,325.00	

REV 09/2018

4. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
As Needed Services

25. Finance Officer: BM/MH	30. Drain: 8 1/2 Mile Relief	
26. Chief Deputy: MB	31. Project Balance: \$118,893.11	
27. Engineers:	32. Staff Date: 5/5/2020	
28. Managers:	33. Board Date: 5/11/2020	
29. Coordinator:	34. Select For Pay Date:	

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

WORK ORDER NUMBER WO19005

PROJECT NUMBER WWS-2019-001

PROJECT NAME As-Needed General Engineering Services

DRAINAGE DISTRICT Eight and One-Half Mile Relief Drain Drainage District

CONSULTANT NAME Fishbeck

INVOICE DATE 3/26/2020

INVOICE START DATE 2/22/2020

INVOICE END DATE 3/20/2020

ORIGINAL CONTRACT AMOUNT	\$	151,919.00
CHANGE ORDER TOTAL	\$	75,000.00
Change Order No. 1	\$	75,000.00
Change Order No. 2		
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	226,919.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	105,700.89
TOTAL AMOUNT DUE THIS INVOICE	\$	2,325.00
TOTAL BUDGET REMAINING	\$	118,893.11
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)		

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: Mr Vincent Astorino
Macomb County Public Works Commissioner
21777 Dunham Road
Clinton Township, MI 48036
United States

Invoice : 390564
Invoice Date : 3/30/2020
Project : 190051
Project Name : Macomb Co PW/8.5 As-needed
Engineering
Bill Term : 1

For Professional Services Rendered Through 3/20/2020

WO19005

	Fee	Available	Billings		
			To Date	Previous	Current
1 - Task 1 - Genral As Needed	67,724.50	67,724.50	0.00	0.00	0.00
1.A - Task 1a - Chapaton Structural Study	50,663.00	12,796.76	37,866.24	37,866.24	0.00
1.B - Task 1b - 9 Mile Pipe Repair (WO19105)	26,256.00	5,521.85	20,734.15	20,734.15	0.00
1.C - Task 1c - In-System Storage As-Needed	5,250.00	5,250.00	0.00	0.00	0.00
1.D - Task 1d - Office Improvements	21,393.90	0.00	21,393.90	21,393.90	0.00
1.E - Task 1e - Maps	7,500.00	5,678.59	1,821.41	1,821.41	0.00
1.F - Task 1f - Chapaton Sampling Plan	4,065.60	0.00	4,065.60	4,065.60	0.00
1.G - Task 1g - Chapaton Survey	2,084.25	0.00	2,084.25	2,084.25	0.00
1.H - Task 1h - Chapaton Bar Screen Hydraulic Isolation	2,976.75	0.00	2,976.75	2,976.75	0.00
1.I - Task 1i - Chapaton Environmental Study	9,730.00	1,208.41	8,521.59	8,521.59	0.00
1.j - Task 1j - Chapaton Flow Meter Drawings	3,000.00	320.00	2,680.00	2,680.00	0.00
1.k - Task 1k - Chapaton High Water Protection	14,175.00	14,175.00	0.00	0.00	0.00
1.l - Task 1l - Chapaton 3D Animation	4,000.00	443.00	3,557.00	3,557.00	0.00
1.M - Task 1m - Chapaton Ground Penetrating Radar	4,600.00	4,600.00	465.00	0.00	465.00
Rate Labor	465.00				
1.N - Task 1n - Chapaton Div 01 Specs	3,500.00	3,500.00	1,860.00	0.00	1,860.00
Rate Labor	1,860.00				
			Current Billings		2,325.00
			Amount Due This Bill		2,325.00

1.M - Task 1m - Chapaton Ground Penetrating Radar

Rate Labor

<u>Class</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Senior Architect	3.00	155.0000	465.00
Total Rate Labor			465.00

1.N - Task 1n - Chapaton Div 01 Specs

Rate Labor

<u>Class</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Senior Architect	12.00	155.0000	1,860.00
Total Rate Labor			1,860.00

Total Project: 190051 - Macomb Co PW/8.5 As-needed Engineering

2,325.00

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

WORK ORDER NUMBER	WO19005
PROJECT NUMBER	WWS-2019-001
PROJECT NAME	As-Needed General Engineering Services
DRAINAGE DISTRICT	Eight and One-Half Mile Relief Drain Drainage District
CONSULTANT NAME	Fishbeck
INVOICE DATE	4/27/2020
INVOICE START DATE	3/21/2020
INVOICE END DATE	4/17/2020

ORIGINAL CONTRACT AMOUNT	\$	151,919.00
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CHANGE ORDER TOTAL	\$	75,000.00
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Change Order No. 1	\$	75,000.00
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Change Order No. 2		
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Change Order No. 3		
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Change Order No. 4		
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TOTAL REVISED CONTRACT AMOUNT	\$	226,919.00
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(includes all approved change orders only)

TOTAL AMOUNT PREVIOUSLY INVOICED	\$	108,025.89
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TOTAL AMOUNT DUE THIS INVOICE	\$	1,393.00
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TOTAL BUDGET REMAINING	\$	117,500.11
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(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)

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: Mr Vincent Astorino
Macomb County Public Works Commissioner
21777 Dunham Road
Clinton Township, MI 48036
United States

Invoice : 391446
Invoice Date : 4/27/2020
Project : 190051
Project Name : Macomb Co PW/8.5 As-needed
 Engineering
Bill Term : 1

For Professional Services Rendered Through 4/17/2020

WO19005

	Fee	Available	Billings		
			To Date	Previous	Current
1 - Task 1 - Genral As Needed	67,724.50	67,724.50	0.00	0.00	0.00
1.A - Task 1a - Chapaton Structural Study	50,663.00	12,796.76	37,866.24	37,866.24	0.00
1.B - Task 1b - 9 Mile Pipe Repair (WO19105)	26,256.00	5,521.85	20,734.15	20,734.15	0.00
1.C - Task 1c - In-System Storage As-Needed	5,250.00	5,250.00	0.00	0.00	0.00
1.D - Task 1d - Office Improvements	21,393.90	0.00	21,393.90	21,393.90	0.00
1.E - Task 1e - Maps	7,500.00	5,678.59	1,821.41	1,821.41	0.00
1.F - Task 1f - Chapaton Sampling Plan	4,065.60	0.00	4,065.60	4,065.60	0.00
1.G - Task 1g - Chapaton Survey	2,084.25	0.00	2,084.25	2,084.25	0.00
1.H - Task 1h - Chapaton Bar Screen Hydraulic Isolation	2,976.75	0.00	2,976.75	2,976.75	0.00
1.I - Task 1i - Chapaton Environmental Study	9,730.00	1,208.41	8,521.59	8,521.59	0.00
1.j - Task 1j - Chapaton Flow Meter Drawings	3,000.00	320.00	2,680.00	2,680.00	0.00
1.k - Task 1k - Chapaton High Water Protection	14,175.00	14,175.00	0.00	0.00	0.00
1.l - Task 1l - Chapaton 3D Animation	4,000.00	443.00	3,557.00	3,557.00	0.00
1.M - Task 1m - Chapaton Ground Penetrating Radar	4,600.00	4,135.00	1,858.00	465.00	1,393.00
Rate Labor	1,393.00				
1.N - Task 1n - Chapaton Div 01 Specs	3,500.00	1,640.00	1,860.00	1,860.00	0.00
				Current Billings	<u>1,393.00</u>
				Amount Due This Bill	<u>1,393.00</u>

1.M - Task 1m - Chapaton Ground Penetrating Radar

Rate Labor

<u>Class</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Engineer	2.00	136.0000	272.00
Senior Architect	3.50	155.0000	542.50
Staff Architect	6.50	89.0000	578.50

Total Rate Labor

1,393.00

Total Bill Task: 1.M - Task 1m - Chapaton Ground Penetrating Radar

1,393.00

Total Project: 190051 - Macomb Co PW/8.5 As-needed Engineering

1,393.00

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

WORK ORDER NUMBER 18350

PROJECT NUMBER MCPWO-WWS-2018-RFP-008

PROJECT NAME CHAPATON DRY WEATHER PUMP AND SCREEN IMPROVEMENTS

DRAINAGE DISTRICT EIGHT AND ONE-HALF MILE RELIF DRAIN

CONSULTANT NAME HUBBELL, ROTH & CLARK, INC

INVOICE DATE 4/2/2020

INVOICE START DATE 1/27/2019

INVOICE END DATE 3/21/2020

Inv # 0178307 & 0178310
 ①
 \$ 10,173.74 \$ 76,716.43
 Balance Balance
 \$ 164,402.69 \$ 86,890.17

ORIGINAL CONTRACT AMOUNT	\$	110,908.00
CHANGE ORDER TOTAL	\$	97,860.00
Change Order No. 1	\$	97,860.00
Change Order No. 2		
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	208,768.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	34,191.57
TOTAL AMOUNT DUE THIS INVOICE	\$	★ 86,890.17
TWO INVOICES		
TOTAL BUDGET REMAINING	\$	87,686.26
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)		



HUBBELL, ROTH & CLARK, INC.
CONSULTING ENGINEERS
PO BOX 824
BLOOMFIELD HILLS, MICHIGAN 48303-0824
(248) 454-6300

April 2, 2020
Project No: 20180363.13
Invoice No: 0178307

MACOMB COUNTY PUBLIC WORKS
21777 DUNHAM ROAD
CLINTON TOWNSHIP, MI 48036

WO 18350
CHAPATON DRY WEATHER PUMP AND SCREEN IMPROVEMENTS

Professional Services for period ending March 21, 2020

PROJECT 20180363.13
CONSTRUCTION ADMINISTRATION

Professional Personnel

	Hours	Amount	
Totals	4.00	614.70	
Total Labor			614.70
		Total this Project	\$614.70

PROJECT 20180363.11
BIDDING PHASE

Professional Personnel

	Hours	Amount	
Totals	20.50	2,914.20	
Total Labor			2,914.20
		Total this Project	\$2,914.20

PROJECT 20180363.12
SHOP DRAWINGS

Professional Personnel

	Hours	Amount	
Totals	54.50	6,644.84	
Total Labor			6,644.84
		Total this Project	\$6,644.84

Billing Limits

	Current	Prior	To-Date
Total Billings	10,173.74	0.00	10,173.74
Limit			97,860.00
Remaining			87,686.26

Total Due this Invoice	\$10,173.74
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Balance \$164402.69

Billing Backup

Thursday, April 2, 2020

HUBBELL, ROTH & CLARK, INC.

Invoice 0178307 Dated 4/2/2020

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Project 20180363.13

			Hours		Amount
02270	URANGA, AARON	2/8/2020	3.00	143.40	430.20
01586	VANDECREEK, JESSE	2/8/2020	1.00	184.50	184.50
	Totals		4.00		614.70
	Total Labor				614.70

Total this Project \$614.70

Project 20180363.11

			Hours		Amount
01773	CRIST, CHRISTA	11/16/2019	1.00	117.90	117.90
02270	URANGA, AARON	11/2/2019	1.50	143.40	215.10
02270	URANGA, AARON	11/2/2019	1.00	143.40	143.40
02270	URANGA, AARON	11/16/2019	1.50	143.40	215.10
02270	URANGA, AARON	11/16/2019	1.00	143.40	143.40
02270	URANGA, AARON	11/16/2019	1.00	143.40	143.40
02270	URANGA, AARON	11/16/2019	.50	143.40	71.70
02270	URANGA, AARON	11/16/2019	2.00	143.40	286.80
02270	URANGA, AARON	11/30/2019	1.00	143.40	143.40
02270	URANGA, AARON	11/30/2019	3.00	143.40	430.20
02270	URANGA, AARON	11/30/2019	2.50	143.40	358.50
02270	URANGA, AARON	11/30/2019	2.50	143.40	358.50
02270	URANGA, AARON	11/30/2019	2.00	143.40	286.80
	Totals		20.50		2,914.20
	Total Labor				2,914.20

Total this Project \$2,914.20

Project 20180363.12

			Hours		Amount
01773	CRIST, CHRISTA	2/22/2020	.50	123.57	61.79
01773	CRIST, CHRISTA	2/22/2020	6.00	123.57	741.42
01773	CRIST, CHRISTA	3/21/2020	3.00	124.26	372.78
01773	CRIST, CHRISTA	3/21/2020	4.00	124.26	497.04
01773	CRIST, CHRISTA	3/21/2020	1.00	124.26	124.26
01773	CRIST, CHRISTA	3/21/2020	2.00	124.26	248.52
02275	ROSKELLEY, MICHAEL	3/7/2020	.50	116.46	58.23
02275	ROSKELLEY, MICHAEL	3/7/2020	.50	116.46	58.23
02416	SCHOONVELD, KRISTA	3/21/2020	11.00	100.92	1,110.12
02416	SCHOONVELD, KRISTA	3/21/2020	7.50	100.92	756.90
02416	SCHOONVELD, KRISTA	3/21/2020	2.50	100.92	252.30
02270	URANGA, AARON	2/22/2020	2.50	143.40	358.50
02270	URANGA, AARON	3/7/2020	4.50	148.50	668.25
02270	URANGA, AARON	3/7/2020	1.50	148.50	222.75

Project	20180363.13	CONTRACT ADMIN CHAPATON DRY WEATHER PUMP	Invoice	0178307	
02270	URANGA, AARON	3/7/2020	3.00	148.50	445.50
02270	URANGA, AARON	3/7/2020	.50	148.50	74.25
02270	URANGA, AARON	3/7/2020	3.00	148.50	445.50
02270	URANGA, AARON	3/7/2020	.50	148.50	74.25
02270	URANGA, AARON	3/21/2020	.50	148.50	74.25
	Totals		54.50		6,644.84
	Total Labor				6,644.84
				Total this Project	\$6,644.84
				Total this Report	\$10,173.74

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

WORK ORDER NUMBER	18350	
PROJECT NUMBER	MCPWO-WWS-2018-RFP-008	
PROJECT NAME	CHAPATON DRY WEATHER PUMP AND SCREEN IMPROVEMENTS	
DRAINAGE DISTRICT	EIGHT AND ONE-HALF MILE RELIF DRAIN	
CONSULTANT NAME	HUBBELL, ROTH & CLARK, INC	
INVOICE DATE	4/2/2020	inv # 0178307 ① 0178310 ②
INVOICE START DATE	1/27/2019	\$ 10,173.74 Balance
INVOICE END DATE	3/21/2020	\$ 76,716.43 Balance

ORIGINAL CONTRACT AMOUNT	\$	110,908.00
CHANGE ORDER TOTAL	\$	97,860.00
Change Order No. 1	\$	97,860.00
Change Order No. 2		
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	208,768.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	34,191.57
TOTAL AMOUNT DUE THIS INVOICE	\$	★ 86,890.17
TWO INVOICES		
TOTAL BUDGET REMAINING	\$	87,686.26
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)		



HUBBELL, ROTH & CLARK, INC.
CONSULTING ENGINEERS
PO BOX 824
BLOOMFIELD HILLS, MICHIGAN 48303-0824
(248) 454-6300

April 2, 2020

Project No:

20180363.09

Invoice No:

0178310

MACOMB COUNTY PUBLIC WORKS
21777 DUNHAM ROAD
CLINTON TOWNSHIP, MI 48036

WO 18350
CHAPATON DRY WEATHER PUMP AND SCREEN IMPROVEMENTS

Professional Services for period ending March 21, 2020

PROJECT 20180363.09
CONTRACT ADMINISTRATION

Professional Personnel

		Hours	Amount	
Totals		94.50	14,569.92	
Total Labor				14,569.92
			Total this Project	\$14,569.92
Billings to Date				
	Current	Prior	Total	
Labor	14,569.84	8,244.00	22,813.84	
Totals	14,569.84	8,244.00	22,813.84	

PROJECT 20180363.20
PUMP EVALUATION AND DESIGN

Professional Personnel

		Hours	Amount	
Totals		213.00	26,346.41	
Total Labor				26,346.41
			Total this Project	\$26,346.41
Billings to Date				
	Current	Prior	Total	
Labor	26,346.25	6,458.33	32,804.58	
Totals	26,346.25	6,458.33	32,804.58	

PROJECT 20180363.21
BAR SCREEN REPLACEMENT

Professional Personnel

		Hours	Amount	
Totals		260.00	32,691.51	
Total Labor				32,691.51
			Total this Project	\$32,691.51
Billings to Date				
	Current	Prior	Total	
Labor	32,691.31	19,489.24	52,180.55	
Totals	32,691.31	19,489.24	52,180.55	

Continued next page

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PROJECT 20180363.30
NET STUDY

Professional Personnel

	Hours	Amount	
Totals	6.00	1,085.40	
Total Labor			1,085.40
		Total this Project	\$1,085.40

Billings to Date

	Current	Prior	Total
Labor	1,085.39	0.00	1,085.39
Totals	1,085.39	0.00	1,085.39

PROJECT 20180363.40
NEW INTERMEDIATE PUMP EVALUATION

Professional Personnel

	Hours	Amount	
Totals	19.50	2,023.65	
Total Labor			2,023.65
		Total this Project	\$2,023.65

Billings to Date

	Current	Prior	Total
Labor	2,023.64	0.00	2,023.64
Totals	2,023.64	0.00	2,023.64

Billing Limits

	Current	Prior	To-Date	
Total Billings	76,716.89	34,191.57	110,908.46	
Limit			110,908.00	
Adjustment				-.46

Total Due this Invoice	\$76,716.43
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Billing Backup

Thursday, April 2, 2020

HUBBELL, ROTH & CLARK, INC.

Invoice 0178310 Dated 4/2/2020

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Project 20180363.09

				Hours		Amount
02465	BARANSKI, DANIELLE	6/1/2019		2.50	84.00	210.00
02332	BEDNAR, NOAH	2/9/2019		1.00	83.28	83.28
01773	CRIST, CHRISTA	6/29/2019		.50	117.90	58.95
01773	CRIST, CHRISTA	6/29/2019		3.00	117.90	353.70
01773	CRIST, CHRISTA	7/13/2019		1.50	117.90	176.85
01773	CRIST, CHRISTA	7/13/2019		.50	117.90	58.95
01773	CRIST, CHRISTA	1/11/2020		1.00	117.90	117.90
02371	HAMMERL, PAIGE	10/19/2019		3.00	93.06	279.18
01705	KIJEWSKI-ADAMS, KRYSTYNA	7/13/2019		.50	119.58	59.79
01705	KIJEWSKI-ADAMS, KRYSTYNA	7/27/2019		2.00	120.63	241.26
01402	ROBERTS, THOMAS	7/27/2019		2.00	114.48	228.96
01727	SULLIVAN, TIMOTHY	2/9/2019		8.00	175.50	1,404.00
01727	SULLIVAN, TIMOTHY	2/9/2019		6.00	175.50	1,053.00
01727	SULLIVAN, TIMOTHY	2/9/2019		1.50	175.50	263.25
01727	SULLIVAN, TIMOTHY	2/23/2019		4.00	175.50	702.00
01727	SULLIVAN, TIMOTHY	2/23/2019		1.00	175.50	175.50
01727	SULLIVAN, TIMOTHY	2/23/2019		1.00	175.50	175.50
01727	SULLIVAN, TIMOTHY	4/6/2019		1.00	180.90	180.90
01727	SULLIVAN, TIMOTHY	4/6/2019		2.00	180.90	361.80
01727	SULLIVAN, TIMOTHY	4/20/2019		1.00	180.90	180.90
01727	SULLIVAN, TIMOTHY	5/4/2019		1.50	180.90	271.35
01727	SULLIVAN, TIMOTHY	6/29/2019		2.00	180.90	361.80
01727	SULLIVAN, TIMOTHY	7/13/2019		3.00	180.90	542.70
01727	SULLIVAN, TIMOTHY	9/7/2019		4.00	180.90	723.60
01727	SULLIVAN, TIMOTHY	9/21/2019		3.00	180.90	542.70
01727	SULLIVAN, TIMOTHY	10/5/2019		2.00	180.90	361.80
01727	SULLIVAN, TIMOTHY	10/5/2019		6.00	180.90	1,085.40
01727	SULLIVAN, TIMOTHY	1/11/2020		2.00	180.90	361.80
02270	URANGA, AARON	2/9/2019		1.00	138.00	138.00
02270	URANGA, AARON	2/9/2019		.50	138.00	69.00
02270	URANGA, AARON	2/9/2019		.50	138.00	69.00
02270	URANGA, AARON	2/23/2019		3.00	138.00	414.00
02270	URANGA, AARON	2/23/2019		1.50	138.00	207.00
02270	URANGA, AARON	2/23/2019		1.00	138.00	138.00
02270	URANGA, AARON	2/23/2019		1.00	138.00	138.00
02270	URANGA, AARON	2/23/2019		2.50	138.00	345.00
02270	URANGA, AARON	2/23/2019		.50	138.00	69.00
02270	URANGA, AARON	1/11/2020		2.50	143.40	358.50
02270	URANGA, AARON	1/25/2020		4.50	143.40	645.30
02270	URANGA, AARON	1/25/2020		3.00	143.40	430.20
02270	URANGA, AARON	1/25/2020		1.00	143.40	143.40
02270	URANGA, AARON	1/25/2020		.50	143.40	71.70
02270	URANGA, AARON	2/8/2020		1.50	143.40	215.10
02270	URANGA, AARON	2/8/2020		3.00	143.40	430.20
02270	URANGA, AARON	2/8/2020		.50	143.40	71.70
	Totals			94.50		14,569.92
	Total Labor					14,569.92
					Total this Project	\$14,569.92

Project 20180363.20

			Hours		Amount
01773	CRIST, CHRISTA	2/9/2019	.50	117.33	58.67
01773	CRIST, CHRISTA	3/9/2019	1.00	119.49	119.49
01773	CRIST, CHRISTA	3/9/2019	6.00	119.49	716.94
01773	CRIST, CHRISTA	3/9/2019	4.50	119.49	537.71
01773	CRIST, CHRISTA	3/9/2019	1.00	119.49	119.49
01773	CRIST, CHRISTA	4/20/2019	.50	117.90	58.95
01773	CRIST, CHRISTA	4/20/2019	5.50	117.90	648.45
01773	CRIST, CHRISTA	6/1/2019	5.00	117.90	589.50
01773	CRIST, CHRISTA	6/1/2019	.50	117.90	58.95
01773	CRIST, CHRISTA	6/15/2019	.50	120.99	60.49
01773	CRIST, CHRISTA	6/15/2019	.50	120.99	60.50
01773	CRIST, CHRISTA	7/27/2019	.50	119.37	59.68
01773	CRIST, CHRISTA	7/27/2019	.50	119.37	59.69
01773	CRIST, CHRISTA	7/27/2019	.50	119.37	59.69
01773	CRIST, CHRISTA	7/27/2019	8.00	119.37	954.96
01773	CRIST, CHRISTA	8/10/2019	7.00	117.90	825.30
01773	CRIST, CHRISTA	8/10/2019	.50	117.90	58.95
01773	CRIST, CHRISTA	8/10/2019	5.50	117.90	648.45
01773	CRIST, CHRISTA	8/24/2019	3.50	117.90	412.65
01773	CRIST, CHRISTA	8/24/2019	5.50	117.90	648.45
01773	CRIST, CHRISTA	8/24/2019	2.00	117.90	235.80
01773	CRIST, CHRISTA	9/7/2019	1.00	117.90	117.90
01773	CRIST, CHRISTA	9/21/2019	1.00	117.90	117.90
01773	CRIST, CHRISTA	10/5/2019	1.00	117.90	117.90
01773	CRIST, CHRISTA	10/5/2019	2.50	117.90	294.75
01773	CRIST, CHRISTA	10/5/2019	2.00	117.90	235.80
01773	CRIST, CHRISTA	10/5/2019	.50	117.90	58.95
01773	CRIST, CHRISTA	10/5/2019	1.50	117.90	176.85
01773	CRIST, CHRISTA	10/19/2019	4.00	117.90	471.60
01705	KIJEWSKI-ADAMS, KRYSTYNA	4/6/2019	.50	127.86	63.93
01705	KIJEWSKI-ADAMS, KRYSTYNA	4/6/2019	3.50	127.86	447.51
01705	KIJEWSKI-ADAMS, KRYSTYNA	4/20/2019	3.00	127.05	381.15
01705	KIJEWSKI-ADAMS, KRYSTYNA	8/10/2019	7.00	122.64	858.48
01705	KIJEWSKI-ADAMS, KRYSTYNA	10/5/2019	2.50	118.86	297.15
01705	KIJEWSKI-ADAMS, KRYSTYNA	10/19/2019	2.50	118.86	297.15
01705	KIJEWSKI-ADAMS, KRYSTYNA	10/19/2019	.50	118.86	59.43
02495	MANSER, EVAN	3/23/2019	.50	48.00	24.00
02495	MANSER, EVAN	3/23/2019	.50	48.00	24.00
02495	MANSER, EVAN	5/4/2019	6.00	49.77	298.62
02495	MANSER, EVAN	5/4/2019	1.00	49.77	49.77
02495	MANSER, EVAN	5/4/2019	7.00	49.77	348.39
02495	MANSER, EVAN	6/1/2019	1.50	48.00	72.00
02495	MANSER, EVAN	6/1/2019	1.00	48.00	48.00
02495	MANSER, EVAN	8/10/2019	2.00	48.72	97.44
02495	MANSER, EVAN	10/19/2019	.50	48.00	24.00
02356	MICHALAK, MICHAEL	3/9/2019	4.00	91.14	364.56

Project	20180363.09	CONTR ADMIN CHAPATON DRY WEATHER PUMP			Invoice	0178310
01300	OLANE, MARVIN	3/9/2019	.50	165.00	82.50	
01300	OLANE, MARVIN	6/1/2019	2.00	165.00	330.00	
01300	OLANE, MARVIN	6/1/2019	2.00	165.00	330.00	
01482	PAREDES, EDUARDO	7/27/2019	7.50	124.50	933.75	
01482	PAREDES, EDUARDO	7/27/2019	.50	124.50	62.25	
01482	PAREDES, EDUARDO	8/24/2019	3.50	128.70	450.45	
02275	ROSKELLEY, MICHAEL	2/9/2019	.50	98.79	49.40	
02275	ROSKELLEY, MICHAEL	3/9/2019	4.50	106.41	478.85	
02275	ROSKELLEY, MICHAEL	4/6/2019	.50	108.87	54.44	
02275	ROSKELLEY, MICHAEL	4/6/2019	3.00	108.87	326.61	
02275	ROSKELLEY, MICHAEL	4/20/2019	1.00	104.82	104.82	
02275	ROSKELLEY, MICHAEL	4/20/2019	.50	104.82	52.41	
02275	ROSKELLEY, MICHAEL	4/20/2019	1.00	104.82	104.82	
02275	ROSKELLEY, MICHAEL	5/4/2019	1.00	110.49	110.49	
02275	ROSKELLEY, MICHAEL	5/4/2019	2.50	110.49	276.23	
01727	SULLIVAN, TIMOTHY	7/27/2019	4.00	180.90	723.60	
01727	SULLIVAN, TIMOTHY	7/27/2019	3.00	180.90	542.70	
01727	SULLIVAN, TIMOTHY	7/27/2019	4.00	180.90	723.60	
01727	SULLIVAN, TIMOTHY	8/10/2019	5.00	180.90	904.50	
02270	URANGA, AARON	3/9/2019	.50	143.40	71.70	
02270	URANGA, AARON	3/9/2019	1.00	143.40	143.40	
02270	URANGA, AARON	3/9/2019	2.00	143.40	286.80	
02270	URANGA, AARON	3/9/2019	.50	143.40	71.70	
02270	URANGA, AARON	3/9/2019	2.50	143.40	358.50	
02270	URANGA, AARON	3/23/2019	.50	143.40	71.70	
02270	URANGA, AARON	3/23/2019	1.00	143.40	143.40	
02270	URANGA, AARON	4/20/2019	1.00	143.40	143.40	
02270	URANGA, AARON	4/20/2019	1.00	143.40	143.40	
02270	URANGA, AARON	4/20/2019	2.00	143.40	286.80	
02270	URANGA, AARON	4/20/2019	1.00	143.40	143.40	
02270	URANGA, AARON	5/18/2019	2.00	143.40	286.80	
02270	URANGA, AARON	5/18/2019	.50	143.40	71.70	
02270	URANGA, AARON	5/18/2019	5.50	143.40	788.70	
02270	URANGA, AARON	6/1/2019	3.00	143.40	430.20	
02270	URANGA, AARON	6/1/2019	1.50	143.40	215.10	
02270	URANGA, AARON	6/1/2019	2.00	143.40	286.80	
02270	URANGA, AARON	6/1/2019	.50	143.40	71.70	
02270	URANGA, AARON	6/1/2019	1.50	143.40	215.10	
02270	URANGA, AARON	7/13/2019	1.50	143.40	215.10	
02270	URANGA, AARON	10/19/2019	2.00	143.40	286.80	
02270	URANGA, AARON	10/19/2019	1.50	143.40	215.10	
02270	URANGA, AARON	10/19/2019	1.50	143.40	215.10	
02270	URANGA, AARON	10/19/2019	.50	143.40	71.70	
02270	URANGA, AARON	10/19/2019	3.00	143.40	430.20	
02270	URANGA, AARON	10/19/2019	6.00	143.40	860.40	
02270	URANGA, AARON	2/22/2020	1.00	143.40	143.40	
02270	URANGA, AARON	2/22/2020	1.00	143.40	143.40	
01586	VANDECREEK, JESSE	2/23/2019	2.00	184.50	369.00	
01586	VANDECREEK, JESSE	6/1/2019	1.00	184.50	184.50	
	Totals		213.00		26,346.41	
	Total Labor					26,346.41
				Total this Project		\$26,346.41

Project 20180363.21

			Hours		Amount
01773	CRIST, CHRISTA	2/9/2019	.50	117.33	58.67
01773	CRIST, CHRISTA	3/23/2019	2.50	117.90	294.75
01773	CRIST, CHRISTA	3/23/2019	3.50	117.90	412.65
01773	CRIST, CHRISTA	3/23/2019	2.00	117.90	235.80
01773	CRIST, CHRISTA	3/23/2019	.50	117.90	58.95
01773	CRIST, CHRISTA	3/23/2019	1.50	117.90	176.85
01773	CRIST, CHRISTA	3/23/2019	5.00	117.90	589.50
01773	CRIST, CHRISTA	3/23/2019	2.00	117.90	235.80
01773	CRIST, CHRISTA	4/6/2019	4.50	117.90	530.55
01773	CRIST, CHRISTA	4/6/2019	6.50	117.90	766.35
01773	CRIST, CHRISTA	4/6/2019	9.50	117.90	1,120.05
01773	CRIST, CHRISTA	4/6/2019	7.00	117.90	825.30
01773	CRIST, CHRISTA	8/24/2019	3.00	117.90	353.70
01773	CRIST, CHRISTA	8/24/2019	7.00	117.90	825.30
01773	CRIST, CHRISTA	8/24/2019	1.00	117.90	117.90
01773	CRIST, CHRISTA	8/24/2019	2.00	117.90	235.80
01773	CRIST, CHRISTA	8/24/2019	8.00	117.90	943.20
01773	CRIST, CHRISTA	9/7/2019	4.50	117.90	530.55
01773	CRIST, CHRISTA	9/21/2019	2.00	117.90	235.80
01773	CRIST, CHRISTA	9/21/2019	3.50	117.90	412.65
01773	CRIST, CHRISTA	10/5/2019	2.00	117.90	235.80
01773	CRIST, CHRISTA	10/5/2019	.50	117.90	58.95
01773	CRIST, CHRISTA	10/5/2019	3.00	117.90	353.70
01773	CRIST, CHRISTA	10/5/2019	1.50	117.90	176.85
01773	CRIST, CHRISTA	10/19/2019	2.50	117.90	294.75
01773	CRIST, CHRISTA	10/19/2019	1.50	117.90	176.85
02540	HERRLE, SEAN	8/24/2019	4.00	105.93	423.72
02540	HERRLE, SEAN	8/24/2019	4.00	105.93	423.72
02540	HERRLE, SEAN	8/24/2019	1.50	105.93	158.90
02540	HERRLE, SEAN	9/7/2019	5.00	105.69	528.45
02540	HERRLE, SEAN	9/7/2019	2.00	105.69	211.38
02540	HERRLE, SEAN	9/7/2019	4.00	105.69	422.76
01705	KIJEWSKI-ADAMS, KRYSTYNA	4/6/2019	7.50	127.86	958.95
01705	KIJEWSKI-ADAMS, KRYSTYNA	4/6/2019	7.00	127.86	895.02
01705	KIJEWSKI-ADAMS, KRYSTYNA	4/6/2019	3.00	127.86	383.58
01705	KIJEWSKI-ADAMS, KRYSTYNA	4/20/2019	9.00	127.05	1,143.45
01705	KIJEWSKI-ADAMS, KRYSTYNA	8/24/2019	7.00	118.86	832.02
01705	KIJEWSKI-ADAMS, KRYSTYNA	9/7/2019	2.50	119.22	298.05
01705	KIJEWSKI-ADAMS, KRYSTYNA	9/7/2019	2.50	119.22	298.05
01705	KIJEWSKI-ADAMS, KRYSTYNA	10/5/2019	2.00	118.86	237.72
02553	OWENS, MATTHEW	4/6/2019	2.00	97.50	195.00
02553	OWENS, MATTHEW	4/6/2019	5.00	97.50	487.50
02553	OWENS, MATTHEW	4/6/2019	3.00	97.50	292.50
02553	OWENS, MATTHEW	4/6/2019	6.00	97.50	585.00
02553	OWENS, MATTHEW	4/20/2019	1.00	97.50	97.50
02553	OWENS, MATTHEW	4/20/2019	4.00	97.50	390.00

Project	20180363.09	CONTR ADMIN CHAPATON DRY WEATHER PUMP			Invoice	0178310
01482	PAREDES, EDUARDO	2/9/2019	3.00	121.02	363.06	
01482	PAREDES, EDUARDO	2/9/2019	2.50	121.02	302.55	
01482	PAREDES, EDUARDO	8/10/2019	2.50	122.61	306.53	
01482	PAREDES, EDUARDO	8/24/2019	3.00	128.70	386.10	
01482	PAREDES, EDUARDO	9/7/2019	1.00	127.92	127.92	
01482	PAREDES, EDUARDO	9/7/2019	1.50	127.92	191.88	
01482	PAREDES, EDUARDO	10/5/2019	2.00	122.94	245.88	
01727	SULLIVAN, TIMOTHY	8/24/2019	2.00	180.90	361.80	
01727	SULLIVAN, TIMOTHY	10/19/2019	6.00	180.90	1,085.40	
02270	URANGA, AARON	2/9/2019	.50	138.00	69.00	
02270	URANGA, AARON	3/9/2019	1.50	143.40	215.10	
02270	URANGA, AARON	3/23/2019	1.00	143.40	143.40	
02270	URANGA, AARON	3/23/2019	2.00	143.40	286.80	
02270	URANGA, AARON	3/23/2019	.50	143.40	71.70	
02270	URANGA, AARON	4/6/2019	2.50	143.40	358.50	
02270	URANGA, AARON	4/6/2019	1.00	143.40	143.40	
02270	URANGA, AARON	4/6/2019	1.00	143.40	143.40	
02270	URANGA, AARON	4/20/2019	1.00	143.40	143.40	
02270	URANGA, AARON	4/20/2019	1.00	143.40	143.40	
02270	URANGA, AARON	6/15/2019	.50	143.40	71.70	
02270	URANGA, AARON	6/15/2019	.50	143.40	71.70	
02270	URANGA, AARON	6/29/2019	2.00	143.40	286.80	
02270	URANGA, AARON	7/27/2019	1.00	143.40	143.40	
02270	URANGA, AARON	7/27/2019	1.00	143.40	143.40	
02270	URANGA, AARON	7/27/2019	2.00	143.40	286.80	
02270	URANGA, AARON	7/27/2019	1.00	143.40	143.40	
02270	URANGA, AARON	7/27/2019	4.00	143.40	573.60	
02270	URANGA, AARON	7/27/2019	1.50	143.40	215.10	
02270	URANGA, AARON	8/10/2019	2.50	143.40	358.50	
02270	URANGA, AARON	8/10/2019	8.00	143.40	1,147.20	
02270	URANGA, AARON	8/10/2019	1.00	143.40	143.40	
02270	URANGA, AARON	8/10/2019	1.50	143.40	215.10	
02270	URANGA, AARON	8/24/2019	2.50	143.40	358.50	
02270	URANGA, AARON	8/24/2019	.50	143.40	71.70	
02270	URANGA, AARON	9/7/2019	1.00	143.40	143.40	
02270	URANGA, AARON	9/7/2019	1.50	143.40	215.10	
02270	URANGA, AARON	9/21/2019	6.00	143.40	860.40	
02270	URANGA, AARON	9/21/2019	1.00	143.40	143.40	
02270	URANGA, AARON	9/21/2019	1.00	143.40	143.40	
02270	URANGA, AARON	10/5/2019	1.00	143.40	143.40	
02270	URANGA, AARON	10/5/2019	6.50	143.40	932.10	
02270	URANGA, AARON	10/5/2019	2.00	143.40	286.80	
02270	URANGA, AARON	10/5/2019	3.00	143.40	430.20	
01586	VANDECREEK, JESSE	7/27/2019	2.00	184.50	369.00	
01586	VANDECREEK, JESSE	9/7/2019	1.00	184.50	184.50	
	Totals		260.00		32,691.51	
	Total Labor					32,691.51
				Total this Project		\$32,691.51
Project 20180363.30						
			Hours		Amount	
01727	SULLIVAN, TIMOTHY	5/4/2019	3.00	180.90	542.70	
01727	SULLIVAN, TIMOTHY	5/4/2019	1.00	180.90	180.90	
01727	SULLIVAN, TIMOTHY	5/18/2019	2.00	180.90	361.80	
	Totals		6.00		1,085.40	
	Total Labor					1,085.40
				Total this Project		\$1,085.40

Project 20180363.40

			Hours		Amount	
01773	CRIST, CHRISTA	4/20/2019	6.00	117.90	707.40	
02553	OWENS, MATTHEW	4/6/2019	8.00	97.50	780.00	
02553	OWENS, MATTHEW	4/6/2019	5.50	97.50	536.25	
	Totals		19.50		2,023.65	
	Total Labor					2,023.65

Total this Project \$2,023.65

Total this Report \$76,716.89



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 4/22/20
4. SET ID VP 200424MB		
5. POST DATE		

PARENT RECORD INFORMATION	
6. VENDOR NAME (Check to be issued to) Jacobs	7. VENDOR NUMBER V73259
8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) 1
10. Invoice Date 4/16/2020	11. Invoice Amount \$ 59,892.00

CHILD RECORD DETAIL INFORMATION			
General Ledger	Job Ledger	OPTIONAL	
12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object
8210017C	80138	CC0004	80138
			16. Work Order Number WO19004
			17. Secondary Reference (MAX = 16 CHARACTERS) 8 1/2 Mile Relief
			18. Description (MAX = 30 CHARACTERS) Pjt #C6A14800, 1/7-3/31
			19. Amount \$ 59,892.00
			20. DIV GEN
			21. MISC
			22. Sep CK

23. Total: \$ **59,892.00** REV 09/2018

4. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
Jacobs balance: \$8,747.00, MDEC Grant Balance \$1,859,270.65

25. Finance Officer:	By/MLH	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:	LB	31. Project Balance:	\$8,747.00
27. Engineers:		32. Staff Date:	5/5/2020
28. Managers:		33. Board Date:	5/11/2020
29. Coordinator:		34. Select For Pay Date:	

W019004

**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 4/16/2020
INVOICE START DATE 1/7/2020
INVOICE END DATE 3/31/2020

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	\$	-
TOTAL AMOUNT DUE THIS INVOICE	\$	59,892.00
TOTAL BUDGET REMAINING	\$	8,747.00
(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

Invoice No.: 1
 Client Project No: WWS-2020-002
 Contractor Invoice No.: C6A14800-001
 Date: 4/16/2020

Services From: 01/07/20
 Services Through: 03/31/20
 Start Work Date: 01/07/20
 Contract Completion: 12/01/20

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

Project Manager: Allen Gelderloos
 (Ph: 616.430.9298)

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	\$ -	\$ -	0.00%	\$ -	\$ 8,747.00
07	Expenses	\$ 6,000.00	\$ -	\$ 6,000.00	100.00%	\$ 6,000.00	\$ -
Contract Summary		\$ 68,639.00	\$ -	\$ 59,892.00	87.26%	\$ 59,892.00	\$ 8,747.00

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



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	4/20/20
4. SET ID		5. POST DATE
V19200420MA		

PARENT RECORD INFORMATION			
6. VENDOR NAME (Check to be issued to)	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date
Nickel & Saph, Inc.	01	20492	4/13/2020
			11. Invoice Amount
			194,471.00

CHILD RECORD DETAIL INFORMATION									
General Ledger			Job Ledger		OPTIONAL			20. DIV	
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
8210017M	91102	CC0004	91102		8 1/2 Mile Relief	Acct #MACO-17, 4/26-9/26	\$ 2,755.00	GEN	
8210017M	12301	CC0004	12301		8 1/2 Mile Relief	Acct #MACO-17, 9/27-4/26	\$ 3,857.00	GEN	0
8210072M	91102				Martin	Acct #MACO-17, 4/26-9/26	\$ 486.18	GEN	0
8210072M	12301				Martin	Acct #MACO-17, 9/27-4/26	\$ 680.65	GEN	0
8210166M	91102	CC0018	91102		MIDDD	Acct #MACO-17, 4/26-9/26	\$ 77,788.40	GEN	0
8210166M	12301	CC0018	12301		MIDDD	Acct #MACO-17, 9/27-4/26	\$ 108,903.77	GEN	0
							23. Total: \$		
							194,471.00		

REV 09/2018

1. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

Excess Liability Insurance with Terrorism Addendum 4/26/2020 - 4/26/2021

25. Finance Officer: BM/MLH

26. Chief Deputy: 4/2

27. Engineers: _____

28. Managers: _____

29. Coordinator: _____

30. Drain: 8 1/2 Mile; MIDDD

31. Project Balance: N/A

32. Staff Date: 5/5/2020

33. Board Date: 5/11/2020

34. Select For Pay Date: _____

Nickel & Saph, Inc.
P. O. Box 46907
Mt. Clemens, MI 48046-6907
Phone: 586-463-4573

INVOICE NO. 20492		Page 1
ACCOUNT NO.	CSR	DATE
MACO-17	AJ	04/13/2020
Commercial Application		
POLICY #		
2902101-02		
EFFECTIVE	EXPIRATION	BALANCE DUE ON
04/26/2020	04/26/2021	04/26/2020

Macomb County Intra-County
Drains Drainage Districts
21777 Dunham Road
Clinton Twp., MI 48036

Itm #	Eff Date	Trn	Type	Description	Amount
71896	04/26/20	MEM	PCKG	Annual Renewal Premium	\$189,369.00
71897	04/26/20	MEM	PCKG	Terrorism Premium	\$5,102.00
Invoice Balance:					\$194,471.00

Thank you.

Chapter 20
 Insurance Cost Breakdown
 April 26, 2020 Renewal

DRAIN NAME	PERCENT	PORTION OF INSURANCE
Eight Half Mile Relief	3.400%	\$ 6,612.01
Martin	0.600%	\$ 1,166.83
MIDDD	96.000%	\$ 186,692.16

Insurance bill (Including Terrorism Risk)	194,471.00
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MIDDD Costs	
Liability	\$ 186,692.16
Third-Party Administrator	\$ 1,500.00
Underground Infrastructure	\$ 12,000.00
MIDDD Total Cost	\$ 200,192.16



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	4/17/20
4. SET ID		
VP200417MA		
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)	10. Invoice Date	11. Invoice Amount
Swan Analytical Instruments	V67870	01	IN-US20-0066	1/9/2020	\$ 1,369.25

CHILD RECORD DETAIL INFORMATION												
12. Org Key	13. Object	14. Job Ledger		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
		Cost Center (CCNT)	Job Ledger			MAX = 16 CHARACTERS	MAX = 16 CHARACTERS					
8210017M	93002	CC0004		93002	WO18066	8 1/2 Mile Relief		PW000060, Cust 625052	\$ 492.00	GEN		
8200017M	93002	CC0004		93002	WO18066	8 1/2 Mile Relief		PW000060, Cust 625052	\$ 810.00	GEN		0
8200017M	72901	CC0004		72901	WO18066	8 1/2 Mile Relief		PW000060, Cust 625052	\$ 67.25	GEN		0
78												

23. Total: \$ 1,369.25

REV 09/2018

4. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

PW000060

25. Finance Officer: HAM

26. Chief Deputy: AS

27. Engineers: _____

28. Managers: _____

29. Coordinator: _____

30. Drain: 8 1/2 Mile Relief

31. Project Balance: N/A

32. Staff Date: 4/21/2020

33. Board Date: 5/11/2020

34. Select For Pay Date: _____



225 LARKIN DR, UNIT 4 · WHEELING, IL 60090 · www.swan-analytical-usa.com · PHONE 847 229 1290 · FAX 847 229 1320

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

Delivery address

Macomb County Public Works
23001 9 Mile Road
St Clair Shores, MI 48080

Invoice No. IN-US20-0066

IL 60090 Wheeling, 01/10/2020

Page1/1

Your Order No: PW000060
Your Contact: Kris Benda
Customer No: 625052
Date: 01/09/2020

Payment Condition: net 30 days
Prices VAT: Sales Tax not included
Delivery Terms: ex works

Pos.	Part-No.	Items	Quant.	Price	TOTAL USD
10	A-85.419.200	Reagent set Oxycon On-line KI, 8 sets. Reagent set for the determination of total residual chlorine, monochloramines and ozone.	2	246.00	492.00
20	A-85.410.120	Reagent set Oxycon On-line DPD, 8 sets For the determination of free chlorines, chlorine dioxide and bromine. 8 sets. For air transport according to IATA classified as "dangerous goods"!	2	405.00	810.00

Total order value \$1,302.00

Freight and Insurance 67.25

TOTAL USD \$1,369.25

UPS TRACKING
1ZA154F50351124317

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

WORK ORDER NUMBER	WO19085	
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	4/30/2020 (Invoice 51583201)	
INVOICE START DATE	3/28/2020	
INVOICE END DATE	4/24/2020	
ORIGINAL CONTRACT AMOUNT	\$	481,098.00
CHANGE ORDER TOTAL	\$	-
Change Order No. 1		
Change Order No. 2		
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	481,098.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	369,651.72
TOTAL AMOUNT DUE THIS INVOICE	\$	17,286.00
TOTAL BUDGET REMAINING	\$	94,160.28
(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: 51583201
INVOICE DATE: 04/30/2020
SERVICES THROUGH: 04/24/2020
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	01AS	Project Management Subcontractors			
SUBCONTRACTOR	TYPE		CURRENT AMOUNT		
FISHBECK THOMPSON CARR & HUBER INC	Subcontractor-External		\$175.00		
TOTAL SUBCONTRACTOR CHARGES			\$175.00		
			SUBTOTAL		\$175.00
			Total Top Task# 01AS		\$175.00
Top Task	01D	Basis of Design			
EMPLOYEE	TITLE		CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Fortier, Véronique	Sr Modeler		3.50	\$210.00	\$735.00
Geerlings, Eric P.	Project Engineer 1		29.00	\$155.00	\$4,495.00
Hufnagel, Carol L.	Program Manager		4.00	\$225.00	\$900.00
Lortz, Thomas J.	CAD Designer		2.00	\$140.00	\$280.00
Robitaille, Luc	Engineer 3		1.00	\$250.00	\$250.00
Rubel, Brian M.	Program Manager		30.00	\$225.00	\$6,750.00
Tao, Qing D.	Sr Project Manager		1.00	\$250.00	\$250.00
TOTAL LABOR			70.50		\$13,660.00
			SUBTOTAL		\$13,660.00
			Total Top Task# 01D		\$13,660.00
Top Task	01DS	Basis of Design Subcontractors			
SUBCONTRACTOR	TYPE		CURRENT AMOUNT		
ENVIRONMENTAL CONSULTING & TECHNOLOGY INC	Subcontractor-External		\$2,650.00		
FISHBECK THOMPSON CARR & HUBER INC	Subcontractor-External		\$801.00		
TOTAL SUBCONTRACTOR CHARGES			\$3,451.00		
			SUBTOTAL		\$3,451.00
			Total Top Task# 01DS		\$3,451.00
			Total Project# 200-16347-19001		\$17,286.00

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

INVOICE NUMBER: 51583201
INVOICE DATE: 04/30/2020
SERVICES THROUGH: 04/24/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

TOTAL AMOUNT DUE THIS INVOICE: \$17,286.00

Gross Contract Summary	
Contract Amount	\$481,098.00
Previously Billed	\$369,651.72
Current Billing	\$17,286.00
Total Billed to Date	\$386,937.72
Contract Balance Remaining	\$94,160.28

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.

PLP



Environmental Consulting & Technology, Inc.

ACH

3701 Northwest 98th Street
Gainesville, FL 32606 - 352-332-0444

P.O. 1166619:1

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

Invoice #: 201710
Invoice Date: 4/10/2020
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

For Professional Services Rendered through: 3/27/2020
EMAIL INVOICE TO BRIAN.RUBEL@TETRATECH.COM

Phase Code / Name	Phase Fee	Previous Amount	Current Amount	% Complete	Total Fee Earned
0100 -- STUDY	23,068.00	2,275.00	2,650.00	21.35	4,925.00
Total Fee:	23,068.00				

Total Fee Earned To Date	4,925.00
Less Previous Billings	2,275.00
Amount Due this Invoice	2,650.00

Project Manager: PATRICK J. JUDD
Billings: 000596

129566

200 - 16347 - 19001. OIDS
SUB - EXT
200 FEW AA

OK to Pay - 04/10/2020

Brian M. Rubel



PLP



fishbeck

Engineers | Architects | Scientists | Constructors

ACH

Payment Options

Remit Wire/ACH payments to Acct: 100094457 ABA: 072413829
Remit checks to: 1515 Arborum 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: 390558
Invoice Date: 3/30/2020
Project: 190884
Project Name: Macomb Co PW/In-system Storage
Bill Term: 1

For Professional Services Rendered Through 3/20/2020

P.O. 1166522: X

	Fee	Available	Billings		
			To Date	Previous	Current
1.A - Task 1A - 8.5 Mile Project Management	5,000.00	681.15	4,493.85	4,318.85	0.00 175.00 (3)
Rate Labor					175.00
1.B - Task 1B - 8.5 Mile Infrastructure Survey	66,655.00	716.60	65,938.40	65,938.40	0.00
1.C - Task 1C - 8.5 Mile Utility Survey	16,964.00	572.00	16,392.00	16,392.00	0.00
1.D - Task 1D - 8.5 Mile BOD/Addit Survey	23,248.00	17,122.50	6,926.50	6,125.50	0.00 801.00 (1)
Rate Labor					801.00
Current Billings					<u>976.00</u>
Amount Due This Bill					<u>976.00</u>

#103976

200-16347-19001.XXX

SUB-EXT

200 NEW AA

OK
B Rubel
4/27/20



1.A - Task 1A - 8.5 Mile Project Management

Rate Labor

<u>Class</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Senior Engineer	1.00	175.0000	175.00
Total Rate Labor			175.00

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 Engineer	3.00	137.0000	411.00
Senior Surveyor	3.00	130.0000	390.00
Total Rate Labor			801.00

Total Bill Task: 1.D - Task 1D - 8.5 Mile BOD/Addit Survey

801.00

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

976.00



PROJECT STATUS COMMUNICATION

DATE: April 30, 2020

PREPARED BY: Brian Rubel / Eric Geerlings

PROJECT: Macomb Co. In-System Storage Devices

Tt PROJECT NO: 200-16347-19001 CONTACT: Mr. Vince Astorino
(INVOICE 51583201)

Tasks completed or in-progress since last status communication.

- Participated in April 15th a conference call to discuss MCPWO's comments on the Draft Feasibility Study report.
- Addressed MCPWO comments as well as internal Tetra Tech QA/QC comments on the draft report.
- Uploaded Final Feasibility Study report was uploaded to DropBox and 2 hard copies were shipped to MCPWO.

Opportunities for cost avoidance or added value.

Tetra Tech is projecting to finish the study under budget.

Impediments, roadblocks, assistance needed.

None.

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

Allocated the remaining Fishbeck budget for this study phase to a new task: bringing the 8 1/2 Mile Drain survey data into the BIM Model. Performed topographic survey at Beaconsfield site

Schedule:

Based on guidance from MCPWO, coordination with EGLE regarding the scope of the project will not occur until the final design phase.

Next task or action items.

1. Begin design upon authorization of Macomb County.

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

ITC
Green Macomb

WASH
PLA

Thank You For Shopping At
STONES ACE OF ROMEO
222 E ST CLAIR
ROMEO MI 48065
(586) 752-9944

We Do Lawnmower Sharpening Here At Ace!
Store Hours Mon-Sat 8-7, Sun 9-5

04/22/20 12:26PM SLB 593 SALE

4027546	3 EA	\$1.99 EA
TUBE VINYL 1ID X 1-1/4OD		\$5.97
43912	4 EA	\$1.79 EA
CLAMP 3/4 TO 1-3/4"SS		\$7.16
41145	4 EA	\$1.79 EA
CLAMP 11/16 TO 1-1/2"SS		\$7.16
24328	1 EA	\$17.99 EA
SAW HOLE 3-1/4"W ARB ACE		\$17.99
41760	1 EA	\$3.99 EA
ADAPTR GALV 1" BARBXMP		\$3.99
49023	1 EA	\$7.99 EA
NIPPLE 3/4"X1-1/2"RBRS		\$7.99
4505483	1 EA	\$9.99 EA
ELBOW 90DEG 3/4"FPT LF		\$9.99
4338604	1 EA	\$6.99 EA
COUPLNG 1/2"FPT BRS LL		\$6.99
4505657	1 EA	\$9.99 EA
PIPE ELBOW 45 1/2"FPT LF		\$9.99

SUB-TOTAL:\$ 77.23 TAX: \$ 4.53
TOTAL: \$ 81.86
BC AMT: \$ 81.86

BK CARD#: XXXXXXXXXXXX7672
MID:*****3688 TID:***1944
AUTH: 781056 AMT: \$ 81.86
Host reference #:561404 Bat#

Authorizing Network: ACCEL

Chip Read
CARD TYPE:MASTERCARD EXPR: XXXX
AID : A0000000042203
TVR : 8000048000
IAD : 01106010012200000000000000000000
TSI : 6800
ARC : 00
MODE : Issuer
CVM : Verified by PIN
Name : US DEBIT
ATC :003B
AC : B05FE9706946D112
TxnID/ValCode: 241233

Bank card USD\$ 81.86

Store Hours Mon-Sat 8-7, Sun 9-5

2

04/22/20 12:26PM SLB 593 SALE

4027546	3 EA	\$1.99 EA
TUBE VINYL 1ID X 1-1/4OD		\$5.97
43912	4 EA	\$1.79 EA
CLAMP 3/4 TO 1-3/4"SS		\$7.16
41145	4 EA	\$1.79 EA
CLAMP 11/16 TO 1-1/2"SS		\$7.16
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ADAPTR GALV 1" BARBXMP		\$3.99
49023	1 EA	\$7.99 EA
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4505483	1 EA	\$9.99 EA
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4338604	1 EA	\$6.99 EA
COUPLNG 1/2"FPT BRS LL		\$6.99
4505657	1 EA	\$9.99 EA
PIPE ELBOW 45 1/2"FPT LF		\$9.99

SUB-TOTAL:\$ 77.23 TAX:\$ 4.63
TOTAL:\$ 81.86
BC AMT:\$ 81.86

EK CARD#: XXXXXXXXXXXX7672
MID:*****3886 TID:***1944
AUTH: 781056 AMT:\$ 81.86
Host reference #:561404 Bat#

Authorizing Network: ACCEL

Chip Read
CARD TYPE:MASTERCARD EXPR: XXXX
AID : A0000000042203
TVR : 800048000
IAD : 01106010012200000000000000000000
TSI : 6800
ARC : 00
MODE : Issuer
CVM : Verified by PIN
Name : US DEBIT
ATC :003B
AC : B05FE97C69460112
TxnID/ValCode: 241233

Bank card USD\$ 81.86

Total Items: 17



==>> JRNL#F61404 <<==
CUST NO:442

THANK YOU KENNETH GOIKE
FOR YOUR PATRONAGE

Acct: CASH CUSTOMER ST4

Customer Copy

Wash

Thank You For Shopping At
STONES ACE OF ROMEO
222 E ST CLAIR
ROMEO MI 48065
(586) 752-9944

ITC
Green Macomb

We Do Lawnmower Sharpening Here At Ace!
Store Hours Mon-Sat 8-7, Sun 9-5

04/22/20 12:29PM SLB 593 SALE

56	4	EA	\$2.59	EA
BULK FASTENERS				\$10.36
SUB-TOTAL:\$		10.36	TAX: \$.62
			TOTAL: \$	10.98
		BC AMT:	\$	10.98

EK CARD#: XXXXXXXXXXXX7672
MID:*****3888 TID:***1944
AUTH: 861349 AMT: \$ 10.98
Host reference #:561407 Bat#

Authorizing Network: ACCEL

Chip Read
CARD TYPE:MASTERCARD EXPR: XXXX
AID : A0000000042203
TVR : 8000048000
IAD : 011060100122000000000000000000
TSI : 6800
ARC : 00
MODE : Issuer
CVM : Verified by PIN
Name : US DEBIT
ATC :003C
AC : CCC492A8944D78F1
TxnID/ValCode: 241246

Bank card USD\$ 10.98

Total Items: 4



==>> JRNL#F61407 <<==
CUST NO:*77215

THANK YOU KENNETH GOIKE
FOR YOUR PATRONAGE
ACE REWARDS ID # 1924212755

Acct: KEN GOIKE

Customer Copy

Returns Require Original Receipt
No Returns After 30 Days

ITC
Green Macomb

WASH



57155 GRATIOT AVE
NEW HAVEN, MI 48048
586-749-6162

Ticket: 816937
Date: 4/23/20 Time: 1:30 PM
Store: 341 Register: 2
Cashier: Samantha

Business Customer: MACOMB COUNTY PUBLIC WOR
21777 DUNHAM RD
CLINTON TOWNSHIP, MI 48036-1005
586-469-5325

Item	Qty	Price	Amount
3/4 IN PP BULKHEAD FITTING 2125602	1	8.99	8.99 E

Subtotal 8.99
Tax 0.00
Total 8.99

pay

TSC Business Account - SALE 8.99
*****5896 - Undefined
Authorization #: 023131
Terminal ID : 001790341000200
CVM : DEFAULT
PO #: drain maintience

Change 0.00
I agree to pay the above amount according to
my card issuer agreement.

Tax Exempt Information

Name: MACOMB COUNTY PUBLIC WOR
Address: 21777 DUNHAM RD
City/St: CLINTON TOWNSHIP, MI
Zip Code: 48036-1005
Phone: 586-469-5325

Tax Exempt Reason: Government Agencies
Expiration Date:
Tax Exempt Holder:

This transaction consists of one or more
items identified as exempt from state sales
or use tax. By signing below, and under

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

WORK ORDER NUMBER	19004
PROJECT NUMBER	WWS-2019-002
PROJECT NAME	Chapaton RTB Canal Upgrades
DRAINAGE DISTRICT	Eight and One-Half Mile
CONSULTANT NAME	Wade Trim Associates, Inc.
INVOICE DATE	3/27/2020
INVOICE START DATE	2/22/2020
INVOICE END DATE	3/20/2020
ORIGINAL CONTRACT AMOUNT	\$ 977,611.00
CHANGE ORDER TOTAL	\$ 410,263.00
Change Order No. 1	\$ 75,000.00
Change Order No. 2	\$ 335,263.00
Change Order No. 3	
Change Order No. 4	
TOTAL REVISED CONTRACT AMOUNT	\$ 1,387,874.00
(includes all approved change orders only)	
TOTAL AMOUNT PREVIOUSLY INVOICED	\$ 1,080,837.35
TOTAL AMOUNT DUE THIS INVOICE	\$ 100,077.90
TOTAL BUDGET REMAINING	\$ 206,958.75
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)	



25251 Northline Road • Taylor, MI 48180
734.947.9700 • www.wadetrim.com

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 : 2017671
Invoice Date : 3/27/2020
Project : MCW200501T
Project Name : Chapaton RTB Canal Upgrades

For Professional Services Rendered For 2/22/2020 Through 3/20/2020

** All subconsultant invoices marked up 5% **

		<u>Billings</u>				
		<u>Fee</u>	<u>Available</u>	<u>To Date</u>	<u>Previous</u>	<u>Current</u>
<i>Rate Labor</i>	62,820.00	1,387,874.00	307,036.65	1,180,915.25	1,080,837.35	100,077.90
<i>Expenses</i>	37,131.90					
<i>Unit Rate Expense</i>	126.00					
<i>Total Expense</i>	37,257.90					

Current Billings 100,077.90
Amount Due This Bill 100,077.90

Total Fee : 1,387,874.00
To Date Billings : 1,180,915.25
Total Remaining : 206,958.75

Outstanding Receivables	<u>Invoice Number</u>	<u>Date</u>	<u>Amount</u>	<u>Balance Due</u>
	2017374	2/28/2020	120,258.91	<u>120,258.91</u>
				120,258.91

1A1 - Project Management

Rate Labor

Class / Employee

Senior Professional

John Arvai

Date	Hours	Rate	Amount
2/25/2020	2.00	215.0000	430.00
2/26/2020	1.50	215.0000	322.50
2/28/2020	0.50	215.0000	107.50
3/2/2020	0.50	215.0000	107.50
3/4/2020	2.00	215.0000	430.00
3/6/2020	2.00	215.0000	430.00
3/9/2020	1.00	215.0000	215.00
3/10/2020	1.00	215.0000	215.00
3/11/2020	2.00	215.0000	430.00
3/12/2020	1.00	215.0000	215.00
3/16/2020	1.00	215.0000	215.00
3/18/2020	2.00	215.0000	430.00
3/19/2020	1.00	215.0000	215.00
3/20/2020	0.50	215.0000	107.50
Total Senior Professional	18.00		3,870.00

Total Rate Labor 3,870.00

Total Bill Task: 1A1 - Project Management 3,870.00

1A2 - Project Management Support

Rate Labor

Class / Employee

Engineer I

Jason Obrycki-Smith

Date	Hours	Rate	Amount
2/25/2020	2.00	100.0000	200.00
2/27/2020	1.00	100.0000	100.00
3/3/2020	2.00	100.0000	200.00
3/4/2020	2.00	100.0000	200.00
3/5/2020	2.00	100.0000	200.00
3/6/2020	3.00	100.0000	300.00
3/10/2020	4.00	100.0000	400.00
3/11/2020	4.50	100.0000	450.00
3/12/2020	2.00	100.0000	200.00
Total Engineer I	22.50		2,250.00

Professional Engineer IV

Oskar E Nordstrom

2/24/2020	0.50	190.0000	95.00
2/25/2020	3.00	190.0000	570.00
2/28/2020	2.00	190.0000	380.00
Total Professional Engineer IV	5.50		1,045.00

Total Rate Labor 3,295.00

Total Bill Task: 1A2 - Project Management Support 3,295.00

3E10 - 90% Constructability Review

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Project Aide II				
Jack R Simmons	2/28/2020	1.50	95.0000	142.50
Total Rate Labor				142.50

3E11 - 90% Construction Schedule Update

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Senior Professional				
John Arvai	2/28/2020	1.50	215.0000	322.50
Total Rate Labor				322.50

3E12 - 90% Engineer's Cost Estimate

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Professional LA III				
Scot Lautzenheiser	2/24/2020	0.25	150.0000	37.50
	2/28/2020	0.25	150.0000	37.50
Total Professional LA III		0.50		75.00
Senior Professional				
John Arvai	2/28/2020	2.00	215.0000	430.00
Total Rate Labor				505.00
Total Bill Task: 3E12 - 90% Engineer's Cost Estimate				505.00

3E16 - 90% Easement Assistance

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Principal				
Steven A Kalinowski	3/5/2020	1.00	230.0000	230.00
	3/6/2020	1.00	230.0000	230.00
	3/10/2020	1.00	230.0000	230.00
	3/11/2020	2.00	230.0000	460.00
Total Principal		5.00		1,150.00
Professional Surveyor III				
Scott Bliss	2/24/2020	1.50	140.0000	210.00
	2/25/2020	1.50	140.0000	210.00
	3/5/2020	1.00	140.0000	140.00
	3/6/2020	1.50	140.0000	210.00
	3/11/2020	2.00	140.0000	280.00
	3/16/2020	1.00	140.0000	140.00
Total Professional Surveyor III		8.50		1,190.00
Project Specialist III				
Nicholas L Grim	3/4/2020	0.25	175.0000	43.75
	3/5/2020	0.25	175.0000	43.75
Total Project Specialist III		0.50		87.50
Total Rate Labor				2,427.50

Total Bill Task: 3E16 - 90% Easement Assistance

2,427.50

3E7 - 90% QA/QC

Rate Labor

Class / Employee

Principal

Steven A Kalinowski

Date	Hours	Rate	Amount
2/27/2020	1.00	230.0000	230.00
2/28/2020	1.00	230.0000	230.00
	----- 2.00		----- 460.00

Total Principal

Project Aide II

Joseph G Muzyczka

2/28/2020	1.00	95.0000	95.00
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Project Specialist III

Daniel T DiPonio

2/24/2020	1.00	175.0000	175.00
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Total Rate Labor

730.00

Total Bill Task: 3E7 - 90% QA/QC

730.00

3E9 - 90% Permit Assistance

Rate Labor

Class / Employee

Principal

Steven A Kalinowski

Date	Hours	Rate	Amount
2/25/2020	1.00	230.0000	230.00
2/28/2020	1.00	230.0000	230.00
3/2/2020	1.00	230.0000	230.00
3/3/2020	1.00	230.0000	230.00
3/4/2020	2.00	230.0000	460.00
3/12/2020	1.00	230.0000	230.00
3/13/2020	2.00	230.0000	460.00
3/18/2020	1.00	230.0000	230.00
3/20/2020	2.00	230.0000	460.00

Anthony C Igwe

2/25/2020	1.00	230.0000	230.00
2/27/2020	1.00	230.0000	230.00
2/28/2020	5.00	230.0000	1,150.00
3/4/2020	4.00	230.0000	920.00
3/5/2020	3.00	230.0000	690.00
3/9/2020	3.00	230.0000	690.00
3/11/2020	2.00	230.0000	460.00
3/13/2020	3.00	230.0000	690.00
3/16/2020	3.00	230.0000	690.00
3/17/2020	1.00	230.0000	230.00
3/20/2020	2.00	230.0000	460.00
	----- 40.00		----- 9,200.00

Total Principal

Project Aide II

Jack R Simmons

3/9/2020	1.50	95.0000	142.50
3/11/2020	0.50	95.0000	47.50
3/12/2020	1.00	95.0000	95.00
3/9/2020	1.00 OT	142.5000	142.50

3E9 - 90% Permit Assistance

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Project Aide II				
Total Jack R Simmons		4.00		427.50
Total Project Aide II		4.00		427.50
Senior Professional				
John Arvai	3/20/2020	0.50	215.0000	107.50
Total Rate Labor				9,735.00
Unit Rate Expenses				
<i>Account / Unit / Vendor</i>			<i>Rate</i>	<i>Amount</i>
Equipment Usage Charges				
Oce Printer				
Jack R Simmons		90.00	1.4000	126.00
Total Unit Rate Expenses				126.00
Total Bill Task: 3E9 - 90% Permit Assistance				9,861.00

3F1 - 100% Process

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineering Specialist II				
Robert J Marker	3/2/2020	1.50	170.0000	255.00
	3/5/2020	0.50	170.0000	85.00
	3/6/2020	1.50	170.0000	255.00
	3/17/2020	0.50	170.0000	85.00
	3/19/2020	0.50	170.0000	85.00
Total Engineering Specialist II		4.50		765.00
Principal				
Steven A Kalinowski	3/18/2020	1.00	230.0000	230.00
Project Specialist II				
John K Golden	3/4/2020	2.00	150.0000	300.00
Total Rate Labor				1,295.00
Total Bill Task: 3F1 - 100% Process				1,295.00

3F13 - 100% Meetings

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineer I				
Jason Obrycki-Smith	2/26/2020	3.00	100.0000	300.00
	2/27/2020	3.00	100.0000	300.00
Total Engineer I		6.00		600.00
Engineer IV				
Tyler Barkho	2/27/2020	2.00	150.0000	300.00
Principal				
Steven A Kalinowski	2/26/2020	1.00	230.0000	230.00
	2/27/2020	1.50	230.0000	345.00
Total Principal		2.50		575.00
Senior Professional				
John Arvai	2/27/2020	2.00	215.0000	430.00

3F13 - 100% Meetings

Total Rate Labor 1,905.00

Total Bill Task: 3F13 - 100% Meetings 1,905.00

3F2 - 100% Electrical & I&C

Rate Labor

Class / Employee Date Hours Rate Amount

Engineer III

Thomas J Stark

Date	Hours	Rate	Amount
2/24/2020	8.00	130.0000	1,040.00
2/25/2020	8.00	130.0000	1,040.00
2/26/2020	8.00	130.0000	1,040.00
2/27/2020	8.00	130.0000	1,040.00
2/28/2020	8.00	130.0000	1,040.00
	40.00		5,200.00

Total Engineer III

Engineering Specialist II

Robert J Marker

Date	Hours	Rate	Amount
3/2/2020	1.50	170.0000	255.00
3/5/2020	0.50	170.0000	85.00
3/6/2020	2.00	170.0000	340.00
3/10/2020	1.00	170.0000	170.00
	5.00		850.00

Total Engineering Specialist II

Total Rate Labor 6,050.00

Total Bill Task: 3F2 - 100% Electrical & I&C 6,050.00

3F3 - 100% Landscape/Green Infrastructure

Rate Labor

Class / Employee Date Hours Rate Amount

Engineering Specialist II

Robert J Marker

Date	Hours	Rate	Amount
3/2/2020	1.50	170.0000	255.00
3/3/2020	1.00	170.0000	170.00
3/5/2020	0.50	170.0000	85.00
3/6/2020	1.00	170.0000	170.00
3/10/2020	0.50	170.0000	85.00
3/11/2020	0.50	170.0000	85.00
	5.00		850.00

Total Engineering Specialist II

LA Staff

Catherine A Dennis

Date	Hours	Rate	Amount
2/24/2020	0.25	100.0000	25.00
2/26/2020	0.50	100.0000	50.00
2/28/2020	1.25	100.0000	125.00
3/5/2020	5.50	100.0000	550.00
3/6/2020	1.25	100.0000	125.00
3/11/2020	0.75	100.0000	75.00
3/12/2020	0.50	100.0000	50.00
	10.00		1,000.00

Total LA Staff

Principal

Steven A Kalinowski

Date	Hours	Rate	Amount
3/4/2020	1.00	230.0000	230.00

3F3 - 100% Landscape/Green Infrastructure

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Professional LA III				
Scot Lautzenheiser				
	3/5/2020	1.00	150.0000	150.00
	3/9/2020	0.25	150.0000	37.50
	3/12/2020	0.25	150.0000	37.50
	3/16/2020	0.25	150.0000	37.50
		-----		-----
Total Professional LA III		1.75		262.50
Total Rate Labor				2,342.50
Total Bill Task: 3F3 - 100% Landscape/Green Infrastructure				2,342.50

3F4 - 100% Structural

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineer IV				
Tyler Barkho				
	2/28/2020	2.00	150.0000	300.00
	3/2/2020	4.00	150.0000	600.00
	3/3/2020	4.50	150.0000	675.00
	3/4/2020	4.00	150.0000	600.00
	3/5/2020	2.00	150.0000	300.00
	3/6/2020	1.00	150.0000	150.00
		-----		-----
Total Engineer IV		17.50		2,625.00
Engineering Specialist II				
Robert J Marker				
	3/2/2020	1.00	170.0000	170.00
	3/3/2020	0.50	170.0000	85.00
	3/4/2020	1.00	170.0000	170.00
	3/5/2020	0.50	170.0000	85.00
	3/6/2020	1.00	170.0000	170.00
	3/11/2020	0.50	170.0000	85.00
	3/17/2020	1.00	170.0000	170.00
		-----		-----
Total Engineering Specialist II		5.50		935.00
Senior Professional				
James K White				
	2/26/2020	4.00	215.0000	860.00
	3/5/2020	3.00	215.0000	645.00
	3/6/2020	3.00	215.0000	645.00
John Arvai	3/11/2020	1.00	215.0000	215.00
		-----		-----
Total Senior Professional		11.00		2,365.00
Total Rate Labor				5,925.00
Total Bill Task: 3F4 - 100% Structural				5,925.00

3F5 - 100% Mechanical

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineer I				
Jason Obrycki-Smith				
	2/25/2020	1.00	100.0000	100.00

3F5 - 100% Mechanical

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineer I				
Jason Obrycki-Smith	3/2/2020	4.00	100.0000	400.00
	3/3/2020	6.00	100.0000	600.00
	3/4/2020	5.00	100.0000	500.00
	3/5/2020	6.00	100.0000	600.00
	3/6/2020	1.00	100.0000	100.00
	3/17/2020	2.00	100.0000	200.00
Total Engineer I		25.00		2,500.00
Engineering Specialist II				
Robert J Marker	3/3/2020	1.50	170.0000	255.00
	3/4/2020	1.00	170.0000	170.00
	3/5/2020	0.50	170.0000	85.00
	3/6/2020	1.00	170.0000	170.00
	3/11/2020	0.50	170.0000	85.00
Total Engineering Specialist II		4.50		765.00
			Total Rate Labor	3,265.00
Total Bill Task: 3F5 - 100% Mechanical				3,265.00

3F6 - 100% Civil / Site

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
CADD Technician I				
Rachelle Setser	3/2/2020	1.00	70.0000	70.00
	3/5/2020	3.00	70.0000	210.00
	3/6/2020	2.00	70.0000	140.00
Total CADD Technician I		6.00		420.00
Engineer I				
Jason Obrycki-Smith	2/24/2020	2.00	100.0000	200.00
	2/25/2020	2.00	100.0000	200.00
Total Engineer I		4.00		400.00
Engineer IV				
Tyler Barkho	2/27/2020	5.00	150.0000	750.00
	2/28/2020	4.00	150.0000	600.00
	3/2/2020	4.00	150.0000	600.00
	3/3/2020	3.00	150.0000	450.00
	3/4/2020	4.00	150.0000	600.00
	3/5/2020	6.00	150.0000	900.00
	3/6/2020	7.00	150.0000	1,050.00
	3/10/2020	1.00	150.0000	150.00
	3/11/2020	1.50	150.0000	225.00
	3/17/2020	3.50	150.0000	525.00
	3/18/2020	3.00	150.0000	450.00

7A1 - Flushing System Study

Rate Labor

Class / Employee	Date	Hours	Rate	Amount
Engineer I				
Tyler S Davidek	2/24/2020	1.00	100.0000	100.00
	2/26/2020	4.00	100.0000	400.00
	2/27/2020	1.00	100.0000	100.00
	2/28/2020	1.00	100.0000	100.00
	3/2/2020	2.00	100.0000	200.00
	3/3/2020	4.00	100.0000	400.00
	3/4/2020	3.00	100.0000	300.00
	3/5/2020	6.00	100.0000	600.00
	3/6/2020	2.00	100.0000	200.00
	3/10/2020	4.00	100.0000	400.00
	3/11/2020	6.00	100.0000	600.00
	3/12/2020	4.00	100.0000	400.00
Total Engineer I		38.00		3,800.00
Professional Engineer IV				
David J Delia	3/3/2020	5.50	190.0000	1,045.00
Project Specialist II				
John K Golden	3/16/2020	2.00	150.0000	300.00
Senior Professional				
John Arvai	2/26/2020	1.00	215.0000	215.00
	2/27/2020	1.00	215.0000	215.00
	3/2/2020	1.00	215.0000	215.00
	3/5/2020	0.25	215.0000	53.75
	3/6/2020	1.00	215.0000	215.00
	3/11/2020	1.50	215.0000	322.50
	3/12/2020	0.25	215.0000	53.75
Jeffrey W Reynhout	2/24/2020	4.00	215.0000	860.00
	2/25/2020	4.00	215.0000	860.00
	2/28/2020	4.00	215.0000	860.00
	3/2/2020	3.00	215.0000	645.00
	3/9/2020	2.00	215.0000	430.00
	3/10/2020	1.00	215.0000	215.00
	3/13/2020	1.00	215.0000	215.00
Total Senior Professional		25.00		5,375.00
Total Rate Labor				10,520.00
Total Bill Task: 7A1 - Flushing System Study				10,520.00

Total Project: MCW200501T - Chapaton RTB Canal Upgrades

100,077.90

Work Description for Chapaton RTB Canal Upgrade:
 Project management and coordination of design activities, staff and team meetings. Prepared monthly invoice and progress report. Attended Progress meeting on February 26, 2020. Sent 90% SRF draft plans and specifications to EGLE on March 12, 2020. Updating documents and progressing design documents to 100%. Continued assistance with EGLE response and additional permitting efforts. Continued assistance with shore club property boundary, survey and easement. Provided MCPWO with draft Chapaton RTB flushing system study technical memorandum for review and comment.



NTH Consultants, Ltd.

Infrastructure Engineering and Environmental Services

INVOICE

Wade-Trim Associates, Inc.
25251 Northline
Taylor MI 48180

Invoice # : 621907
Project : 62190022
Invoice Group : **
Invoice Date : 03/23/2020

Attention: Accounts Payable

For Professional Services Rendered through: 3/20/2020

P.O./Ref #: Authorization per NTH/Wade Trim Standard Subconsultant Agreement dated February 28, 2019.

Engineering services related tot he expansion of the Chapaton Basin

Phase Name	Maximum Budget	Previous Billings	Current Charges	Remaining Budget
10 -- Project Management	28,890.00	15,050.83	462.50	13,376.67
20 -- *C* - Preliminary Design	99,060.00	99,031.49	0.00	28.51
30 -- Final Design	91,200.00	61,303.52	23,175.00	6,721.48
40 -- Bidding Assistance	9,360.00	0.00	0.00	9,360.00
Project Total	228,510.00	175,385.84	23,637.50	29,486.66

Amount Due This Invoice : \$ 23,637.50

REMIT TO: NTH Consultants, Ltd. – 41780 Six Mile Road – Suite 200 – Northville MI – 48168-3459
Please include Project No. and Invoice No. on remittance.

TERMS: Due upon receipt. One percent (1%) interest per month charged on invoices over 30 days old.

Payment for all invoices is expected as per contract terms. All retainers are held and applied to final invoice for a project. Checks will be issued for any amounts collected as retainers that exceed the final invoice. Call 248-553-6300 with questions.



Project : 62190022 -- MCO - Chapaton RTB Canal Upgrades

Invoice # : 621907

Phase : 10 -- Project Management

<u>Rate Schedule Labor</u>	<u>Date</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Senior Officer				
Roarty, Charles	02/17/2020	0.50	215.00	107.50
	02/18/2020	0.50	215.00	107.50
	03/11/2020	0.50	215.00	107.50
	03/19/2020	0.50	215.00	107.50
Word Processor				
McKiever, Marguerite A.	02/27/2020	0.50	65.00	32.50
Rate Schedule Labor		2.50		462.50
Total Phase : 10 -- Project Management				Labor : 462.50
				Expense : 0.00

Phase : 30 -- Final Design

<u>Rate Schedule Labor</u>	<u>Date</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Cadd Operator				
Bryan, Stephen H.	02/25/2020	1.50	85.00	127.50
	02/26/2020	1.00	85.00	85.00
	02/28/2020	1.25 Overtime	85.00	106.25
	02/28/2020	5.00	85.00	425.00
	03/03/2020	1.00	85.00	85.00
	03/04/2020	1.00	85.00	85.00
	03/05/2020	5.00	85.00	425.00
	03/06/2020	2.00	85.00	170.00
	03/10/2020	0.75	85.00	63.75
Project Professional				
Lobbestael, Adam	02/18/2020	3.00	120.00	360.00
	02/19/2020	5.00	120.00	600.00
	02/20/2020	6.00	120.00	720.00
	02/21/2020	5.00	120.00	600.00
	02/24/2020	5.00	120.00	600.00
	02/25/2020	5.75	120.00	690.00
	02/26/2020	5.00	120.00	600.00
	02/27/2020	7.50	120.00	900.00
	03/02/2020	3.00	120.00	360.00
	03/03/2020	7.00	120.00	840.00
	03/04/2020	5.50	120.00	660.00
	03/05/2020	4.50	120.00	540.00
	03/09/2020	0.50	120.00	60.00

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Project : 62190022 -- MCO - Chapaton RTB Canal Upgrades

Invoice # : 621907

Phase : 30 -- Final Design

<u>Rate Schedule Labor</u>	<u>Date</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Project Professional				
Lobbestael, Adam	03/10/2020	3.00	120.00	360.00
	03/11/2020	2.00	120.00	240.00
	03/12/2020	2.00	120.00	240.00
Hassan, Samer	02/18/2020	5.00	120.00	600.00
	02/19/2020	1.00	120.00	120.00
	02/25/2020	3.00	120.00	360.00
	02/26/2020	3.00	120.00	360.00
	02/27/2020	5.50	120.00	660.00
	02/28/2020	8.00	120.00	960.00
	03/01/2020	3.00	120.00	360.00
	03/02/2020	6.00	120.00	720.00
	03/03/2020	6.00	120.00	720.00
	03/04/2020	3.00	120.00	360.00
	03/05/2020	1.00	120.00	120.00
Senior Officer				
Roarty, Charles	02/17/2020	0.50	215.00	107.50
	02/25/2020	0.50	215.00	107.50
	02/27/2020	1.00	215.00	215.00
	02/28/2020	1.50	215.00	322.50
	03/02/2020	1.00	215.00	215.00
	03/03/2020	1.00	215.00	215.00
	03/04/2020	1.00	215.00	215.00
	03/05/2020	1.50	215.00	322.50
	03/06/2020	1.00	215.00	215.00
	03/09/2020	0.50	215.00	107.50
	03/11/2020	1.00	215.00	215.00
	03/12/2020	1.00	215.00	215.00
	03/13/2020	1.00	215.00	215.00
	03/20/2020	1.00	215.00	215.00
Sr Proj Professional				
Almadhoun, Abdalnasser Y.	02/18/2020	1.00	145.00	145.00
	02/19/2020	0.50	145.00	72.50
	02/21/2020	0.50	145.00	72.50
	02/24/2020	0.50	145.00	72.50
Sr Staff Professional				
Granger, Lauren	02/19/2020	3.00	100.00	300.00
	02/24/2020	5.00	100.00	500.00
	02/25/2020	6.00	100.00	600.00

REMIT TO: NTH Consultants, Ltd. – 41780 Six Mile Road – Suite 200 – Northville MI – 48168-3459
Please include Project No. and Invoice No. on remittance.

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Payment for all invoices is expected as per contract terms. All retainers are held and applied to final invoice for a project. Checks will be issued for any amounts collected as retainers that exceed the final invoice. Call 248-553-6300 with questions.



NTH Consultants, Ltd.

Infrastructure Engineering and Environmental Services

INVOICE

Project : 62190022 -- MCO - Chapaton RTB Canal Upgrades

Invoice # : 621907

Phase : 30 -- Final Design

<u>Rate Schedule Labor</u>	<u>Date</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Sr Staff Professional				
Granger, Lauren	02/26/2020	3.00	100.00	300.00
	02/27/2020	5.50	100.00	550.00
	02/28/2020	5.50	100.00	550.00
	03/02/2020	7.00	100.00	700.00
	03/03/2020	3.00	100.00	300.00
	03/04/2020	2.00	100.00	200.00
	03/05/2020	5.00	100.00	500.00
Rate Schedule Labor		193.75		23,047.50

<u>Regular Expenses</u>	<u>Date</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
Travel & Lodging				
Lobbestael, Adam	03/03/2020	15.00	1.10	16.50
				16.50

<u>Unit Pricing Expenses</u>	<u>Units</u>	<u>Rate</u>	<u>Amount</u>
Per Unit Expenses			
CADD Supplies	18.50 HOUR(S) @	6.00	111.00
			111.00

Total Phase : 30 -- Final Design

Labor : 23,047.50
Expense : 127.50

Total Project : 62190022 -- MCO - Chapaton RTB Canal Upgrades

23,637.50

REMIT TO: NTH Consultants, Ltd. - 41780 Six Mile Road - Suite 200 - Northville MI - 48168-3459
Please include Project No. and Invoice No. on remittance.

TERMS: Due upon receipt. One percent (1%) interest per month charged on invoices over 30 days old.

Payment for all invoices is expected as per contract terms. All retainers are held and applied to final invoice for a project. Checks will be issued for any amounts collected as retainers that exceed the final invoice. Call 248-553-6300 with questions.



462 South Ludlow Alley
 Columbus, OH 43215
 614-621-2796

Wade Trim Associates
 John Arvai
 jarvai@wadetrim.com
 25251 Northline Road
 Taylor, MI 48180

Invoice number 2200283
 Date 03/20/2020
 Project **k18101 St Clair Shores, Chapaton CSO Basin**

Professional Services for the Period ended February 29, 2020:

****Service Summary****

Professional Fees

Additional Open Space Design Efforts

	Hours	Rate	Billed Amount
Associate	0.50	150.00	75.00
Landscape Architect II	33.00	115.00	3,795.00
Additional Open Space Design Efforts subtotal			3,870.00
Professional Fees subtotal	33.50		3,870.00

Reimbursable Expenses

Additional Open Space Design Efforts

	Units	Cost Amount	Rate	Billed Amount
Mileage	42.10	24.21	0.575	24.21
Additional Open Space Design Efforts subtotal				24.21

Invoice total **3,894.21**



Wade Trim Associates
 Project **k18101 St Clair Shores, Chapaton CSO Basin**

Invoice number 2200283
 Date 03/20/2020

Invoice Summary

Description	Contract Amount	Prior Billed	Total Billed	Current Billed
Preliminary - Final Design	24,380.00	24,380.00	24,380.00	0.00
Additional Open Space Design Efforts	14,500.00	5,279.80	9,174.01	3,894.21
Total	38,880.00	29,659.80	33,554.01	3,894.21

Aging Summary

Invoice Number	Invoice Date	Outstanding	Current	Over 30	Over 60	Over 90	Over 120
2191654	01/17/2020	4,963.26			4,963.26		
2200145	02/28/2020	5,279.80	5,279.80				
2200283	03/20/2020	3,894.21	3,894.21				
	Total	14,137.27	9,174.01	0.00	4,963.26	0.00	0.00

Approved by:

Christopher E. Hostettler, C.P.A.
 C.F.O.

Professional Services for the Period ended February 29, 2020:

Service Summary:

- 90% submittal documentation
- 100% submittal documentation
- Screen planting exhibit for Macomb County
- 90% workshop with County
- Coordination with Structural engineers



ANDERSON, ECKSTEIN & WESTRICK, INC.
CIVIL ENGINEERS SURVEYORS ARCHITECTS
 51301 SCHOENHERR RD. SHELBY TOWNSHIP, MI 48315
 www.aewinc.com p(586)726-1234

INVOICE

WADE TRIM
 ATTN: JOHN ARVAI, PE
 25251 NORTHLINE ROAD
 TAYLOR, MI 48180

March 9, 2020
 Project No: 0211-0206-0
 Invoice No: 0125417

Project 0211-0206-0 CHAPATON RTB CANAL UPGRADE - GATE BLDG

Professional Services from February 3, 2020 to March 1, 2020

Phase 01 DESIGN

Professional Personnel

	Hours	Rate	Amount
ARCHITECT			
SENIOR PROJECT ARCHITECT	27.00	161.00	4,347.00
DESIGN DEVELOPMENT			
GRADUATE ENG/SUR/ARC	7.70	120.50	927.85
CONSTRUCTION DOCUMENTS			
ENGINEERING AIDE III	18.50	99.50	1,840.75
ENGINEERING AIDE TRAINEE	7.20	99.50	716.40
Totals	60.40		7,832.00
Total Labor			7,832.00

Billing Limits	Current	Prior	To-Date
Total Billings	7,832.00	7,785.50	15,617.50
Limit			24,000.00
Remaining			8,382.50

Total this Phase \$7,832.00

Total this Invoice \$7,832.00

Outstanding Invoices

Number	Date	Balance
0124870	1/14/2020	1,413.00
Total		1,413.00

Please include the project number and invoice number on your check.

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

WORK ORDER NUMBER	19004
PROJECT NUMBER	WWS-2019-002
PROJECT NAME	Chapaton RTB Canal Upgrades
DRAINAGE DISTRICT	Eight and One-Half Mile
CONSULTANT NAME	Wade Trim Associates, Inc.
INVOICE DATE	4/29/2020
INVOICE START DATE	3/21/2020
INVOICE END DATE	4/24/2020

ORIGINAL CONTRACT AMOUNT	\$	977,611.00
CHANGE ORDER TOTAL		
	\$	410,263.00
Change Order No. 1	\$	75,000.00
Change Order No. 2	\$	335,263.00
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	1,387,874.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	1,180,915.25
TOTAL AMOUNT DUE THIS INVOICE		
	\$	58,377.75
TOTAL BUDGET REMAINING	\$	148,581.00
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)		



25251 Northline Road • Taylor, MI 48180
734.947.9700 • www.wadetrim.com

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 : 2017951
Invoice Date : 4/29/2020
Project : MCW200501T
Project Name : Chapaton RTB Canal Upgrades

For Professional Services Rendered For 3/21/2020 Through 4/24/2020

** All subconsultant invoices marked up 5% **

		<u>Billings</u>				
		<u>Fee</u>	<u>Available</u>	<u>To Date</u>	<u>Previous</u>	<u>Current</u>
		1,387,874.00	206,958.75	1,239,293.00	1,180,915.25	58,377.75
<i>Rate Labor</i>	40,497.50					
<i>Expenses</i>	17,865.43					
<i>Unit Rate Expense</i>	14.82					
<i>Total Expense</i>	17,880.25					

Current Billings 58,377.75
Amount Due This Bill 58,377.75

Total Fee : 1,387,874.00
To Date Billings : 1,239,293.00
Total Remaining : 148,581.00

Outstanding Receivables	<u>Invoice Number</u>	<u>Date</u>	<u>Amount</u>	<u>Balance Due</u>
	2017374	2/28/2020	120,258.91	120,258.91
	2017671	3/27/2020	100,077.90	100,077.90
				<u>220,336.81</u>

1A1 - Project Management

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Senior Professional				
John Arvai				
	3/25/2020	2.00	215.0000	430.00
	3/26/2020	3.00	215.0000	645.00
	3/27/2020	2.00	215.0000	430.00
	3/30/2020	3.00	215.0000	645.00
	3/31/2020	2.50	215.0000	537.50
	4/1/2020	1.00	215.0000	215.00
	4/2/2020	0.50	215.0000	107.50
	4/7/2020	1.50	215.0000	322.50
	4/8/2020	0.50	215.0000	107.50
	4/13/2020	1.00	215.0000	215.00
	4/17/2020	1.00	215.0000	215.00
	4/22/2020	0.25	215.0000	53.75
	4/23/2020	0.25	215.0000	53.75
Total Senior Professional		18.50		3,977.50
Total Rate Labor				3,977.50
Total Bill Task: 1A1 - Project Management				3,977.50

1A2 - Project Management Support

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineer I				
Jason Obrycki-Smith				
	3/24/2020	2.00	100.0000	200.00
	3/25/2020	2.50	100.0000	250.00
	3/26/2020	3.00	100.0000	300.00
	3/27/2020	3.00	100.0000	300.00
	3/30/2020	2.00	100.0000	200.00
	3/31/2020	2.00	100.0000	200.00
	4/1/2020	1.00	100.0000	100.00
Total Engineer I		15.50		1,550.00
Project Aide II				
Melanie A Phillips				
	3/23/2020	0.50	95.0000	47.50
	4/6/2020	0.50	95.0000	47.50
Total Project Aide II		1.00		95.00
Total Rate Labor				1,645.00
Total Bill Task: 1A2 - Project Management Support				1,645.00

1EXP - Project Management Expenses

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					
	ER000153774	1/14/2020	11.99	1.100	13.19
	ER000153776	2/14/2020	11.99	1.100	13.19
Total John Arvai			23.98		26.38

1EXP - Project Management Expenses

Expenses

<u>Account / Vendor</u>	<u>Doc Number</u>	<u>Date</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
Architectural/Engineering Supplies					
Jason Obrycki-Smith	ER000153619	3/29/2020	11.99	1.100	13.19
Total Architectural/Engineering Supplies			35.97		39.57

Total Expenses 39.57

Unit Rate Expenses

<u>Account / Unit / Vendor</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
Employee Mileage - Regular Rate			
Employee Mileage			
Scot Lautzenheiser	26.00	0.5700	14.82

Total Unit Rate Expenses 14.82

Total Bill Task: 1EXP - Project Management Expenses 54.39

3E9 - 90% Permit Assistance

Rate Labor

<u>Class / Employee</u>	<u>Date</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Principal				
Steven A Kalinowski	3/25/2020	1.00	230.0000	230.00
	3/26/2020	1.00	230.0000	230.00
	3/27/2020	2.00	230.0000	460.00
Anthony C Igwe	3/24/2020	2.00	230.0000	460.00
	3/27/2020	2.00	230.0000	460.00
	Total Principal		8.00	

Project Aide II

Therese A Colosimo 3/24/2020 2.50 95.0000 237.50

Senior Professional

John Arvai 3/27/2020 0.50 215.0000 107.50

Total Rate Labor 2,185.00

Total Bill Task: 3E9 - 90% Permit Assistance 2,185.00

3F1 - 100% Process

Rate Labor

<u>Class / Employee</u>	<u>Date</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Engineering Specialist II				
Robert J Marker	3/25/2020	0.50	170.0000	85.00
	3/26/2020	0.50	170.0000	85.00
	3/27/2020	0.50	170.0000	85.00
Total Engineering Specialist II		1.50		255.00

Project Aide II

Jack R Simmons 3/27/2020 4.00 95.0000 380.00

Total Rate Labor 635.00

Total Bill Task: 3F1 - 100% Process 635.00

3F13 - 100% Meetings

Rate Labor

Class / Employee

Date

Hours

Rate

Amount

Engineer I

Jason Obrycki-Smith

3/23/2020

1.00

100.0000

100.00

3/25/2020

0.50

100.0000

50.00

Total Engineer I

1.50

150.00

Senior Professional

John Arvai

3/23/2020

1.00

215.0000

215.00

3/25/2020

0.50

215.0000

107.50

3/26/2020

0.50

215.0000

107.50

3/27/2020

1.00

215.0000

215.00

Jeffrey W Reynhout

3/23/2020

1.00

215.0000

215.00

Total Senior Professional

4.00

860.00

Total Rate Labor

1,010.00

Total Bill Task: 3F13 - 100% Meetings

1,010.00

3F2 - 100% Electrical & I&C

Rate Labor

Class / Employee

Date

Hours

Rate

Amount

Engineering Specialist II

Robert J Marker

3/26/2020

1.00

170.0000

170.00

3/27/2020

0.50

170.0000

85.00

Total Engineering Specialist II

1.50

255.00

Total Rate Labor

255.00

Total Bill Task: 3F2 - 100% Electrical & I&C

255.00

3F3 - 100% Landscape/Green Infrastructure

Rate Labor

Class / Employee

Date

Hours

Rate

Amount

Engineering Specialist II

Robert J Marker

3/26/2020

1.00

170.0000

170.00

3/27/2020

0.50

170.0000

85.00

Total Engineering Specialist II

1.50

255.00

LA Staff

Catherine A Dennis

3/23/2020

1.50

100.0000

150.00

3/24/2020

3.50

100.0000

350.00

3/25/2020

6.00

100.0000

600.00

3/26/2020

8.00

100.0000

800.00

3/27/2020

6.00

100.0000

600.00

Melissa O Hernandez

3/26/2020

1.00

100.0000

100.00

3/27/2020

2.50

100.0000

250.00

Total LA Staff

28.50

2,850.00

3F3 - 100% Landscape/Green Infrastructure

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Principal				
Steven A Kalinowski	3/24/2020	1.00	230.0000	230.00
	3/26/2020	1.00	230.0000	230.00
Total Principal		2.00		460.00
Professional LA III				
Scot Lautzenheiser	3/23/2020	3.25	150.0000	487.50
	3/24/2020	1.00	150.0000	150.00
	3/25/2020	1.50	150.0000	225.00
	3/26/2020	3.25	150.0000	487.50
	3/27/2020	1.50	150.0000	225.00
Total Professional LA III		10.50		1,575.00
Total Rate Labor				5,140.00
Total Bill Task: 3F3 - 100% Landscape/Green Infrastructure				5,140.00

3F4 - 100% Structural

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineer IV				
Tyler Barkho	3/26/2020	2.00	150.0000	300.00
	3/27/2020	4.00	150.0000	600.00
	3/30/2020	5.00	150.0000	750.00
	3/30/2020	1.50	150.0000	225.00
Total Engineer IV		12.50		1,875.00
Engineering Specialist II				
Robert J Marker	3/24/2020	0.50	170.0000	85.00
	3/26/2020	0.50	170.0000	85.00
	3/27/2020	0.50	170.0000	85.00
Total Engineering Specialist II		1.50		255.00
Senior Professional				
James K White	3/23/2020	4.00	215.0000	860.00
	3/24/2020	4.00	215.0000	860.00
	3/25/2020	8.00	215.0000	1,720.00
	3/26/2020	2.00	215.0000	430.00
	3/27/2020	6.00	215.0000	1,290.00
Total Senior Professional		24.00		5,160.00
Total Rate Labor				7,290.00
Total Bill Task: 3F4 - 100% Structural				7,290.00

3F5 - 100% Mechanical

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Engineer I				
Jason Obrycki-Smith	3/23/2020	0.50	100.0000	50.00

3F5 - 100% Mechanical

Rate Labor

Class / Employee

Date

Hours

Rate

Amount

Engineering Specialist II

Robert J Marker

3/26/2020

1.00

170.0000

170.00

3/27/2020

0.50

170.0000

85.00

Total Engineering Specialist II

1.50

255.00

Total Rate Labor

305.00

Total Bill Task: 3F5 - 100% Mechanical

305.00

3F6 - 100% Civil / Site

Rate Labor

Class / Employee

Date

Hours

Rate

Amount

Engineer IV

Tyler Barkho

3/23/2020

4.00

150.0000

600.00

3/24/2020

7.00

150.0000

1,050.00

3/25/2020

4.00

150.0000

600.00

3/26/2020

2.00

150.0000

300.00

3/27/2020

4.00

150.0000

600.00

Total Engineer IV

21.00

3,150.00

Engineering Specialist II

Robert J Marker

3/26/2020

1.00

170.0000

170.00

3/27/2020

0.50

170.0000

85.00

Total Engineering Specialist II

1.50

255.00

Principal

Steven A Kalinowski

3/23/2020

1.00

230.0000

230.00

3/25/2020

2.00

230.0000

460.00

3/26/2020

2.00

230.0000

460.00

Total Principal

5.00

1,150.00

Total Rate Labor

4,555.00

Total Bill Task: 3F6 - 100% Civil / Site

4,555.00

3F9 - 100% Permit Assistance

Rate Labor

Class / Employee

Date

Hours

Rate

Amount

Principal

Steven A Kalinowski

4/1/2020

1.00

230.0000

230.00

4/2/2020

1.00

230.0000

230.00

4/6/2020

2.00

230.0000

460.00

4/7/2020

2.00

230.0000

460.00

4/8/2020

2.00

230.0000

460.00

4/15/2020

1.00

230.0000

230.00

4/16/2020

1.00

230.0000

230.00

4/17/2020

1.00

230.0000

230.00

Anthony C Igwe

3/31/2020

1.00

230.0000

230.00

3F9 - 100% Permit Assistance

Rate Labor

<i>Class / Employee</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Amount</i>
Principal				
Anthony C Igwe	4/6/2020	1.00	230.0000	230.00
	4/8/2020	2.00	230.0000	460.00
	4/16/2020	1.00	230.0000	230.00
	4/17/2020	1.00	230.0000	230.00
Total Principal		17.00		3,910.00
Project Specialist I				
Elna Faye Amos	4/23/2020	0.75	110.0000	82.50
Senior Professional				
John Arvai	3/30/2020	0.50	215.0000	107.50
	3/31/2020	1.00	215.0000	215.00
	4/15/2020	0.50	215.0000	107.50
Total Senior Professional		2.00		430.00
Total Rate Labor				4,422.50
Total Bill Task: 3F9 - 100% Permit Assistance				4,422.50

6A2 - NTH Consultants

Expenses

<i>Account / Vendor</i>	<i>Doc Number</i>	<i>Date</i>	<i>Cost</i>	<i>Multiplier</i>	<i>Amount</i>
Subconsultants					
NTH Consultants LTD	0020017903	4/17/2020	4,007.00	1.050	4,207.35
Total Expenses					4,207.35

6A3 - MKSK

Expenses

<i>Account / Vendor</i>	<i>Doc Number</i>	<i>Date</i>	<i>Cost</i>	<i>Multiplier</i>	<i>Amount</i>
Subconsultants					
MKSK INC	0020017900	3/31/2020	2,587.50	1.050	2,716.88
Total Expenses					2,716.88

6A4 - ASTI

Expenses

<i>Account / Vendor</i>	<i>Doc Number</i>	<i>Date</i>	<i>Cost</i>	<i>Multiplier</i>	<i>Amount</i>
Subconsultants					
ASTI Environmental Services	0020017935	4/4/2020	2,000.00	1.050	2,100.00
Total Expenses					2,100.00

6A5 - AEW

Expenses

<i>Account / Vendor</i>	<i>Doc Number</i>	<i>Date</i>	<i>Cost</i>	<i>Multiplier</i>	<i>Amount</i>
Subconsultants					
Anderson, Eckstein & Westrick Inc	0020017852	3/29/2020	8,382.50	1.050	8,801.63
Total Expenses					8,801.63

7A1 - Flushing System Study

Rate Labor

Class / Employee

Date

Hours

Rate

Amount

Engineer I

Tyler S Davidek

4/6/2020	3.00	100.0000	300.00
4/8/2020	2.00	100.0000	200.00
4/9/2020	1.00	100.0000	100.00
4/10/2020	1.00	100.0000	100.00
4/13/2020	3.00	100.0000	300.00
4/14/2020	4.00	100.0000	400.00
4/15/2020	3.00	100.0000	300.00
4/17/2020	1.00	100.0000	100.00
4/22/2020	2.00	100.0000	200.00
4/23/2020	4.00	100.0000	400.00
4/24/2020	4.00	100.0000	400.00

Total Engineer I

28.00 2,800.00

Project Specialist II

John K Golden

3/26/2020	1.00	150.0000	150.00
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Senior Professional

John Arvai

3/26/2020	0.50	215.0000	107.50
3/30/2020	1.00	215.0000	215.00
4/2/2020	0.50	215.0000	107.50
4/7/2020	1.00	215.0000	215.00
4/8/2020	2.50	215.0000	537.50
4/9/2020	2.50	215.0000	537.50
4/10/2020	1.00	215.0000	215.00
4/13/2020	1.00	215.0000	215.00
4/17/2020	1.00	215.0000	215.00
4/23/2020	1.00	215.0000	215.00
4/24/2020	3.50	215.0000	752.50

Jeffrey W Reynhout

3/30/2020	2.00	215.0000	430.00
4/8/2020	1.00	215.0000	215.00
4/9/2020	1.00	215.0000	215.00
4/10/2020	1.00	215.0000	215.00
4/13/2020	2.00	215.0000	430.00
4/14/2020	2.00	215.0000	430.00
4/15/2020	1.00	215.0000	215.00
4/21/2020	2.00	215.0000	430.00
4/22/2020	1.00	215.0000	215.00

Total Senior Professional

28.50 6,127.50

Total Rate Labor

9,077.50

Total Bill Task: 7A1 - Flushing System Study

9,077.50

Total Project: MCW200501T - Chapaton RTB Canal Upgrades

58,377.75

Work Description for Chapaton RTB Canal Upgrade:

Project management and coordination of design activities, staff and team meetings. Prepared monthly invoice and progress report. Updated documents and progressed design documents to 100%. Submitted 100% documents to MCPWO for review. Continued assistance with EGLE response and additional permitting efforts. Part 41 CSO program addendum response. Continued assistance with shore club property boundary, survey and easement. Attended Flushing Study technical memorandum review meeting on April 13, 2020. Updated flushing study with comments received and commenced inclusion of new flushing option.



NTH Consultants, Ltd.

Infrastructure Engineering and Environmental Services

INVOICE

Wade-Trim Associates, Inc.
25251 Northline
Taylor MI 48180

Invoice #: 622263
Project: 62190022
Invoice Group: **
Invoice Date: 04/23/2020

Attention: Accounts Payable

For Professional Services Rendered through: 4/17/2020

P.O./Ref #: Authorization per NTH/Wade Trim Standard Subconsultant Agreement dated February 28, 2019.

Engineering services related to the expansion of the Chapaton Basin

Phase Name	Maximum Budget	Previous Billings	Current Charges	Remaining Budget
10 -- Project Management	28,890.00	15,513.33	322.50	13,054.17
20 -- *C* - Preliminary Design	99,060.00	99,031.49	0.00	28.51
30 -- Final Design	91,200.00	84,478.52	3,684.50	3,036.98
40 -- Bidding Assistance	9,360.00	0.00	0.00	9,360.00
Project Total	228,510.00	199,023.34	4,007.00	25,479.66

Amount Due This Invoice : \$ 4,007.00

REMIT TO: NTH Consultants, Ltd. - 41780 Six Mile Road - Suite 200 - Northville MI - 48168-3459
Please include Project No. and Invoice No. on remittance.

TERMS: Due upon receipt. One percent (1%) interest per month charged on invoices over 30 days old.

Payment for all invoices is expected as per contract terms. All retainers are held and applied to final invoice for a project. Checks will be issued for any amounts collected as retainers that exceed the final invoice. Call 248-553-6300 with questions.



Project : 62190022 -- MCO - Chapaton RTB Canal Upgrades

Invoice # : 622263

Phase : 10 -- Project Management

Rate Schedule Labor	Date	Hours	Rate	Amount
Senior Officer				
Roarty, Charles	03/23/2020	0.50	215.00	107.50
	04/15/2020	1.00	215.00	215.00
Rate Schedule Labor		1.50		322.50
Total Phase : 10 -- Project Management				Labor : 322.50
				Expense : 0.00

Phase : 30 -- Final Design

Rate Schedule Labor	Date	Hours	Rate	Amount
Cadd Operator				
Bryan, Stephen H.	03/23/2020	1.00	85.00	85.00
	03/24/2020	0.50	85.00	42.50
	03/27/2020	3.00	85.00	255.00
Project Professional				
Lobbestael, Adam	03/23/2020	0.50	120.00	60.00
	03/24/2020	0.50	120.00	60.00
	03/25/2020	0.50	120.00	60.00
	03/26/2020	7.50	120.00	900.00
	03/27/2020	4.50	120.00	540.00
Senior Officer				
Roarty, Charles	03/23/2020	0.50	215.00	107.50
	03/24/2020	0.50	215.00	107.50
	03/26/2020	1.00	215.00	215.00
	03/27/2020	3.50	215.00	752.50
	03/28/2020	1.00	215.00	215.00
	03/30/2020	0.50	215.00	107.50
Sr Staff Professional				
Brehmer, Anthony	03/23/2020	0.50	100.00	50.00
	03/27/2020	1.00	100.00	100.00
Rate Schedule Labor		26.50		3,657.50

Unit Pricing Expenses	Units	Rate	Amount
Per Unit Expenses			
CADD Supplies	4.50 HOUR(S) @	6.00	27.00
Unit Pricing			27.00

REMIT TO: NTH Consultants, Ltd. - 41780 Six Mile Road - Suite 200 - Northville MI - 48168-3459
Please include Project No. and Invoice No. on remittance.

TERMS: Due upon receipt. One percent (1%) interest per month charged on invoices over 30 days old.

Payment for all invoices is expected as per contract terms. All retainers are held and applied to final invoice for a project. Checks will be issued for any amounts collected as retainers that exceed the final invoice. Call 248-553-6300 with questions.



NTH Consultants, Ltd.

Infrastructure Engineering and
Environmental Services

INVOICE

Project : 62190022 -- MCO - Chapaton RTB Canal Upgrades

Invoice # : 622263

Total Phase : 30 -- Final Design

Labor : 3,657.50
Expense : 27.00

Total Project : 62190022 -- MCO - Chapaton RTB Canal Upgrades

4,007.00

REMIT TO: NTH Consultants, Ltd. -- 41780 Six Mile Road -- Suite 200 -- Northville MI -- 48168-3459
Please include Project No. and Invoice No. on remittance.

TERMS: Due upon receipt. One percent (1%) interest per month charged on invoices over 30 days old.

Payment for all invoices is expected as per contract terms. All retainers are held and applied to final invoice for a project. Checks will be issued for any amounts collected as retainers that exceed the final invoice. Call 248-553-6300 with questions.



462 South Ludlow Alley
 Columbus, OH 43215
 614-621-2796

Wade Trim Associates
 John Arvai
 jarvai@wadetrim.com
 25251 Northline Road
 Taylor, MI 48180

Invoice number 2200407
 Date 04/17/2020

Project **k18101 St Clair Shores, Chapaton CSO Basin**

Professional Services for the Period ended March 31, 2020:

****Service Summary****

Professional Fees

Additional Open Space Design Efforts

	Hours	Rate	Billed Amount
Landscape Architect II	22.50	115.00	<u>2,587.50</u>
Additional Open Space Design Efforts subtotal			2,587.50
		Invoice total	<u><u>2,587.50</u></u>



Wade Trim Associates
Project k18101 St Clair Shores, Chapaton CSO Basin

Invoice number 2200407
Date 04/17/2020

Invoice Summary

Description	Contract Amount	Prior Billed	Total Billed	Current Billed
Preliminary - Final Design	24,380.00	24,380.00	24,380.00	0.00
Additional Open Space Design Efforts	14,500.00	9,174.01	11,761.51	2,587.50
Total	38,880.00	33,554.01	36,141.51	2,587.50

Aging Summary

Invoice Number	Invoice Date	Outstanding	Current	Over 30	Over 60	Over 90	Over 120
2191654	01/17/2020	4,963.26				4,963.26	
2200145	02/28/2020	5,279.80		5,279.80			
2200283	03/20/2020	3,894.21	3,894.21				
2200407	04/17/2020	2,587.50	2,587.50				
	Total	16,724.77	6,481.71	5,279.80	0.00	4,963.26	0.00

Approved by:

Christopher E. Hostettler, C.P.A.
C.F.O.

Professional Services for the Period ended March 31, 2020:

- Documentation & coordination
- Specifications



Environmental Services
Since 1985

ASTI Environmental
P.O. Box 2160
Brighton, MI 48116-2160
810-225-2800
Fax 810-225-3800

INVOICE

WADE TRIM
25251 NORTHLINE ROAD
TAYLOR, MI 48180
ATTN: JOHN ARVAI, PE

INV. DATE: 04/17/20
INVOICE # : 035842
PROJECT # : 19-0101-0556
PERIOD END: 04/04/20
CLIENT REF:

CHAPATON CANAL BIOLOGICAL CHARACTER

NOTE: 2% DISCOUNT FOR NET 10 DAYS
TERMS: NET 15 DAYS

REVIEWED AND EDITED SUBMITTAL DOCUMENTS PER EGLE REVIEW COMMENTS.
CONFERENCE CALLS AND EMAIL CORRESPONDENCE TO FINALIZE REVISIONS. FINAL
COMMENTS SUBMITTED TO WADE TRIM FEBRUARY 11, 2020.

AMOUNT DUE THIS INVOICE: 2,000.00

A Monthly Service Charge of 1.5% Will Be Applied to Delinquent Accounts



ANDERSON, ECKSTEIN & WESTRICK, INC.
CIVIL ENGINEERS SURVEYORS ARCHITECTS
 51301 SCHOENHERR RD. SHELBY TOWNSHIP, MI 48315
 www.aewinc.com p(586)726-1234

INVOICE

WADE TRIM
 ATTN: JOHN ARVAI, PE
 25251 NORTHLINE ROAD
 TAYLOR, MI 48180

April 7, 2020
 Project No: 0211-0206-0
 Invoice No: 0125836

Project 0211-0206-0 CHAPATON RTB CANAL UPGRADE - GATE BLDG

Professional Services from March 2, 2020 to March 29, 2020

Phase 01 DESIGN

Professional Personnel

	Hours	Rate	Amount
ARCHITECT			
SENIOR PROJECT ARCHITECT	20.00	161.00	3,220.00
CONSTRUCTION DOCUMENTS			
ENGINEERING AIDE III	63.00	99.50	6,268.50
STRUCTURAL			
SENIOR PROJECT ENGINEER	10.00	161.00	1,610.00
Totals	93.00		11,098.50
Total Labor			11,098.50

Billing Limits

	Current	Prior	To-Date
Total Billings	11,098.50	15,617.50	26,716.00
Limit			24,000.00
Adjustment			(2,716.00)

Total this Phase \$8,382.50

Total this Invoice \$8,382.50

Outstanding Invoices

Number	Date	Balance
0124870	1/14/2020	1,413.00
0125417	3/9/2020	7,832.00
Total		9,245.00



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	4/30/20
4. SET ID		5. POST DATE
VP200501MA		

PARENT RECORD INFORMATION			
6. VENDOR NAME (Check to be issued to)	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date
Wade Trim	02	2017956	4/30/2020
7. VENDOR NUMBER	11. Invoice Amount		
V09446	\$ 11,920.00		

CHILD RECORD DETAIL INFORMATION								
General Ledger	Job Ledger	OPTIONAL		18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
		14. Cost Center (CCNT)	15. Object					
A	8210017M	80138	80138	Pjt #MCW200601T, thru 4/24/20	\$ 11,920.00	GEN		
B								
C								
D								
E								
F								
G								

23. Total: \$ 11,920.00

REV 09/2018

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

25. Finance Officer:	BM/MLH	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:	/40	31. Project Balance:	\$59,405.13
27. Engineers:		32. Staff Date:	5/5/2020
28. Managers:		33. Board Date:	5/11/2020
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	4/30/2020
INVOICE START DATE	3/21/2020
INVOICE END DATE	4/24/2020
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	\$ 36,454.87
TOTAL AMOUNT DUE THIS INVOICE	\$ 11,920.00
TOTAL BUDGET REMAINING	\$ 59,405.13
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)	



25251 Northline Road • Taylor, MI 48180
734.947.9700 • www.wadetrim.com

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 : 2017956
Invoice Date : 4/30/2020
Project : MCW200601T
Project Name : Chapaton RTB Disinfection
Improvements

For Professional Services Rendered For 3/21/2020 Through 4/24/2020

		Billings				
		Fee	Available	To Date	Previous	Current
Rate Labor	11,920.00	107,780.00	71,325.13	48,374.87	36,454.87	11,920.00

Current Billings	<u>11,920.00</u>
Amount Due This Bill	<u>11,920.00</u>

Total Fee : 107,780.00
To Date Billings : 48,374.87
Total Remaining : 59,405.13

Outstanding Receivables	Invoice Number	Date	Amount	Balance Due
	2017376	2/28/2020	10,406.12	10,406.12
	2017673	3/27/2020	22,643.75	<u>22,643.75</u>
				33,049.87

100 - Project Management

Rate Labor

Class / Employee

Senior Professional

John Arvai

Date	Hours	Rate	Amount
3/25/2020	0.25	260.0000	65.00
3/26/2020	1.00	260.0000	260.00
3/27/2020	1.00	260.0000	260.00
3/31/2020	0.25	260.0000	65.00
4/2/2020	0.50	260.0000	130.00
4/8/2020	0.50	260.0000	130.00
4/16/2020	1.00	260.0000	260.00
4/22/2020	0.25	260.0000	65.00
	4.75		1,235.00

Total Senior Professional

Total Rate Labor

1,235.00

Total Bill Task: 100 - Project Management

1,235.00

300 - 60% Design

Rate Labor

Class / Employee

CADD Technician I

Rachelle Setser

Date	Hours	Rate	Amount
3/24/2020	1.00	65.0000	65.00
3/26/2020	1.00	65.0000	65.00
3/27/2020	1.00	65.0000	65.00
	3.00		195.00

Total CADD Technician I

Engineer I

Jason Obrycki-Smith

3/23/2020	3.00	90.0000	270.00
3/24/2020	3.00	90.0000	270.00
3/25/2020	2.00	90.0000	180.00
3/26/2020	3.00	90.0000	270.00
3/27/2020	3.00	90.0000	270.00
4/6/2020	2.00	90.0000	180.00
4/9/2020	1.00	90.0000	90.00
4/10/2020	4.00	90.0000	360.00
4/13/2020	3.00	90.0000	270.00
4/14/2020	2.00	90.0000	180.00
4/16/2020	2.00	90.0000	180.00
4/17/2020	4.00	90.0000	360.00
4/20/2020	4.00	90.0000	360.00
4/21/2020	2.00	90.0000	180.00
4/22/2020	2.00	90.0000	180.00
4/24/2020	2.00	90.0000	180.00
	42.00		3,780.00

Total Engineer I

Engineer III

Thomas J Stark

3/21/2020	4.00	125.0000	500.00
3/23/2020	4.00	125.0000	500.00
	8.00		1,000.00

Total Engineer III

300 - 60% Design

Rate Labor

Class / Employee

	Date	Hours	Rate	Amount
Professional Engineer IV				
David J Delia	4/7/2020	3.00	185.0000	555.00
Project Aide III				
John K Golden	3/24/2020	1.00	125.0000	125.00
Melanie A Phillips	3/25/2020	1.00	125.0000	125.00
	3/23/2020	0.50	125.0000	62.50
	4/6/2020	0.50	125.0000	62.50
Total Project Aide III		3.00		375.00
Senior Professional				
John Arvai	3/27/2020	0.50	260.0000	130.00
	4/10/2020	0.75	260.0000	195.00
	4/13/2020	1.25	260.0000	325.00
	4/17/2020	0.25	260.0000	65.00
Jeffrey W Reynhout	4/24/2020	0.25	260.0000	65.00
	3/23/2020	2.00	260.0000	520.00
	3/24/2020	1.00	260.0000	260.00
	3/31/2020	1.00	260.0000	260.00
	4/1/2020	1.00	260.0000	260.00
	4/8/2020	1.00	260.0000	260.00
	4/10/2020	1.00	260.0000	260.00
	4/15/2020	3.00	260.0000	780.00
	4/16/2020	1.00	260.0000	260.00
	4/22/2020	2.00	260.0000	520.00
	4/23/2020	1.00	260.0000	260.00
Total Senior Professional		17.00		4,420.00
			Total Rate Labor	10,325.00
Total Bill Task: 300 - 60% Design				10,325.00

400 - Final Design

Rate Labor

Class / Employee

	Date	Hours	Rate	Amount
Engineer I				
Jason Obrycki-Smith	4/2/2020	2.00	90.0000	180.00
	4/3/2020	2.00	90.0000	180.00
Total Engineer I		4.00		360.00
			Total Rate Labor	360.00
Total Bill Task: 400 - Final Design				360.00

Total Project: MCW200601T - Chapaton RTB Disinfection Improvements

11,920.00

Work Description: Chapaton RTB Disinfection Improvements

Project management and coordination of design activities, staff and team meetings.

Prepared monthly invoice and progress report. Conference call workshop on April 13, 2020 to review comments and confirm design drawings with MCPWO. Automatic valve options discussion and estimate. Progressing design drawings and specifications.



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	4/17/20
4. SET ID		5. POST DATE
VP200417MA		

PARENT RECORD INFORMATION			
6. VENDOR NAME (Check to be issued to)	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date
Wyatt Performance & Fab	02	2506	4/9/2020
			11. Invoice Amount
			675.00

CHILD RECORD DETAIL INFORMATION												
Line	General Ledger		16. Work Order Number	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	17. Secondary Reference (MAX = 16 CHARACTERS)	
A	8210017M	93002	CC0004	93002	8 1/2 Mile Relief	WO18006	PW000070; Drain Cover	675.00	GEN			
B												
C												
D												
E												
F												
G												

23. Total: \$ 675.00

REV 09/2018

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	<i>ghm</i>	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:	<i>AB</i>	31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	4/21/2020
28. Managers:		33. Board Date:	5/11/2020
29. Coordinator:		34. Select For Pay Date:	

Wyatt Performance & Fab

INVOICE

28069 Armada Ridge Rd
 Richmond, MI, 48062
 Phone: (586) 473-6373

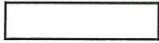
DATE	9/Apr/2020
INVOICE #	2506
PO#	PW000070

BILL TO:

Macomb county public works
 Chapaton pump station
 586-772-3425

SHIP TO:

Macomb county public works
 Chapaton pump station
 586-772-3425



QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1	Drain cover		\$675.00
		SUBTOTAL	675.00
		TAX	0.00
		FREIGHT	
			\$675.00
		PAY THIS AMOUNT	

DIRECT ALL INQUIRIES TO:
 Wyatt Performance & Fab
 Phone: (586) 473-6373
 email: wyattperformance@yahoo.com

THANK YOU FOR YOUR BUSINESS!

Budget to Actual
8.5 Mile Relief
As of April 30, 2020 = 58%

DESCRIPTION	2020 FINAL BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
Interest Earned	80,000		139,950	(59,950)	174.9%
Canal Expansion(SMSD and Macomb County)	-		3,000,000	(3,000,000)	0.0%
Other Revenue	5,000		1,376	3,624	27.5%
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		8,232	8,232	50.0%
Total Revenue Accounts	7,479,282	-	8,225,528	(746,246)	110.0%
EXPENSE ACCOUNTS					
Application/Permit Fee	3,000		6,000	(3,000)	200.0%
Dues, Training, Conf, Subs.	5,750		86	5,664	1.5%
Engineering					
As needed Engineering	75,000		30,044	44,956	40.1%
Chapaton Improvements-Office Space	500,000		12,647	487,353	2.5%
Disinfection system upgrade (Design and Construction)	1,000,000		36,455	963,545	3.6%
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		270,421	929,579	22.5%
9 Mile & 8 1/2 Mile Rehab	75,000		10,809	64,191	14.4%
New Equipment	23,500		12,236	11,264	52.1%
Office Supplies	1,000		362	638	36.2%
Operating Supplies	74,600		26,236	48,364	35.2%
Other Professional Svcs	46,800		34,764	12,036	74.3%
Personnel Services	979,953		224,658	755,295	22.9%
Repair & Maintenance	148,500		88,416	60,084	59.5%
Pumping and screening improvements	1,150,000		101,890	1,048,110	8.9%
SRF Replacement Reserve	259,215			259,215	0.0%
Scada System	243,839		114,639	129,200	47.0%
Utilities	273,125		181,803	91,322	66.6%
Total Expense Accounts	7,479,282	-	1,877,876	5,601,406	25.1%

	O&M Balance 9/30/2019	O&M	Total 4/30/2020
Cash - Operating	8,846,231	6,347,652	15,193,883
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		8,225,528	8,225,528
Expenditures		1,877,876	1,877,876
			0
Equity*	8,846,231		15,193,883

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