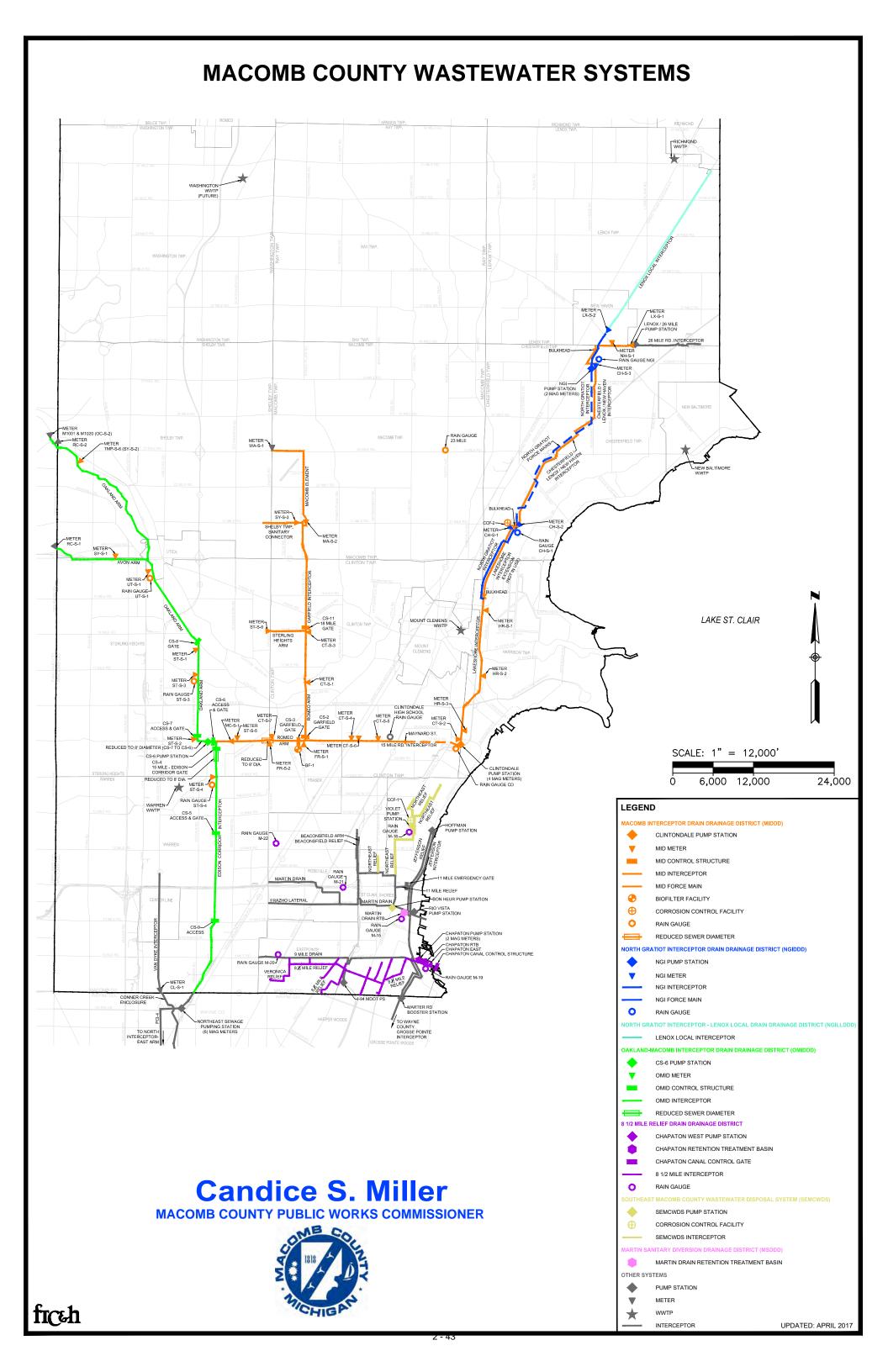
EIGHT AND ONE-HALF MILE RELIEF DRAIN INTRA-COUNTY DRAINAGE BOARD JUNE 8, 2020 10:00 A.M. AGENDA

NOTE: THIS MEETING WILL BE HELD BY TELECONFERENCE

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

		Page
1.	Call of meeting to order and roll call	
2.	Approval of Agenda for June 8, 2020	
3.	Approval of Minutes for May 11, 2020	3
4.	Public Participation	
5.	Canal Expansion Permit – Candice Miller	6
5.	Project Updates - Vince Astorino	
6.	Consideration for approval of invoices (see attached)	17
7.	Financial Report – Bruce Manning	43
8.	Adjourn	



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 May 11, 2020, at 10:01 A.M.

PRESENT: Candice S. Miller, Chair

Veronica Klinefelt, Member

Bryan Santo, Member

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

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 April 13, 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 the disinfection project is moving along well. The pump and screen project is moving forward and should begin work on May 12, 2020. We are working with EGLE on permitting issues with the Chapaton canal expansion.

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

Adopted: YEAS: 3

NAYS: 0

Mr. Astorino updated the board that we have been working on a feasibility study for the in-system storage design. The goal is to utilize the existing infrastructure storage capacity. Currently, we are not filling the pipe during most rain events, so we are looking at ways to maximize the volume within the tunnel. The proposed approach will give an additional 7 million gallons of storage using our own infrastructure.

The first phase of the study included a 3-D scan of 4.2 miles of the tunnel to give pinpoint accuracy of the tunnel depth and alignment. We will then know what depths we can safely go to without causing any flooding when we begin releasing water in the tunnel. We evaluated options for what we could

use for the in-system storage devices and found that inflatable rubber dams would be the best and safest option. The dams could inflate and store water to almost the top of the pipe and when water levels get too high, the dam is deflated to let water pass. There will also be sluice gates on the sides that will allow us to dewater the flow to a regular amount down to the pipe, which is important due to how steep the pipe is to control the flow rate to the pump station. The design will be finalized at the end of 2020 with construction to begin 2021. SRF funding is lined up for the project.

A motion was made by Mr. Santo, approved by Ms. Miller 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.

Adopted: YEAS: 3

NAYS: 0

Mr. Astorino updated the board that while the wet well cleaning is annual project, we held off on this cleaning knowing we were going out to bid on the pump and screen project. We wanted to line both projects up since they have to core through the wet well to put a tap in for the fourth pump that will be installed.

A motion was made by Ms. Klinefelt, supported by Mr. Santo 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.

Adopted: YEAS: 3

NAYS: 0

The Chair presented the invoices totaling \$405,406.63 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 10:37 a.m.

Candice S. Miller, Chair Macomb County Public Works Commissioner

STATE OF MICHIGAN COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taking by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on May 11, 2020 the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.

Candice S. Miller, Chair

andico S. Mille

Macomb County Public Works Commissioner

DATED: 5/11/20





Public Works Commissioner Macomb County

To: Candice S. Miller, Macomb County Public Works Commissioner

CC: Brian Baker

Karen Czernel Dan Heaton

From: Vincent Astorino, Operations & Flow Manager

Date: May 28, 2020

Subject: Chapaton Canal Expansion Project - Odor & Public Health Concerns Response

The purpose of this technical memorandum is to provide a response to the press release by EGLE on May 14, 2020 titled "EGLE proposes to reject Macomb County's plan to acquire Lake St. Clair waters for sewage storage". This article makes statements about the proposed Chapaton Canal Expansion project being an "open-air sewage lagoon". There are also comments from Water Resources Division Director Theresa Seidel stating "Seidel also noted EGLE's concerns about the potential public nuisance created by an open-air sewage lagoon so close to existing residences, boat launches and a marina".

I would like to address these non-scientific based concerns which are essentially political ploys to sway the public into believing EGLE's story. This project, which has been in planning/design for over two years now, has taken every single potential issue into account and has come up with a solution for each and every one.

I would like to start off with a definition of a sewage lagoon. A sewage lagoon is a large pond into which sewage or effluent from the sewage system flows. Sewage lagoons are also called effluent ponds. The sewage and effluent are broken down by germs that are introduced into the lagoon. Lagoons are designed to have continuous wastewater present. Our project is a storage and combined sewer overflow (CSO) facility which will only be used on average 7 times per year. The goal is to capture CSO preventing discharge to the lake. It is also worth noting that history of the facility data collection indicates that the CSO being captured is approximately 95-98% stormwater. Classifying this proposed expansion as an "open-air sewage lagoon" is an egregiously false statement.

In 2002, an open-air canal was constructed at the Chapaton facility which is adjacent to the proposed expansion. This canal consists of approximately 700 feet of open-air canal which is used for additional treatment time to improve dissolved oxygen numbers and storage. During large wet weather events this canal stores approximately 3.6 million gallons of treated combined sewage. This canal has been in place for 18 years now and has operated without creating any public nuisances to existing residents, boat launches, and marinas. This proposed project is a replica of what was built and has been operational since 2002. Through the design of the proposed project our staff has taken lessons learned from that project and have made significant design improvements.

Although we have the operational knowledge from our operators and engineers which all feel there have been no odor issues coming from that open-air canal, we did not feel that was good enough. As part of the design for the new project, the Macomb County Public Works Office (MCPWO) hired Odor experts Jacobs which is a global consulting firm and experts in this particular field. They were tasked with evaluating from a scientific level the odor conditions of the existing canal, basin, and proposed canal expansion. As part of their evaluation, Jacobs visited the Chapaton facility during a treated discharge event to record their findings. They also created an air-dispersion model from historical data that has been documented from the Chapaton treated discharges. This air-dispersion model allowed Jacobs to build in the existing facility and the proposed expansion along with the surrounding properties. For their analysis they evaluated the modeled odors on a dilution-to-threshold (D/T) rating which is the standard odor units in scientific studies. The higher the number the stronger the relative odor is. Jacobs evaluated the three areas using worst case scenarios and an excerpt of their conclusions is below:

"The odor analysis for both the existing and expanded canal demonstrates that the likelihood of odors over 7 D/T 99% threshold is very low. The odor emission estimates used for this effort are conservative and represent worst-case odor scenario, which is a scenario only anticipated to occur during large wet weather events. These wet weather events occur infrequently, and it is not likely that the worst-case meteorological conditions for odor impacts will also consistently occur during the same times."

Nuisance odor complaints typically occur when there are very high odor impacts, higher than 20 D/T, a condition that is not indicated in this modeling. Nuisance odor complaints also occur when there are frequent lower level odors. For all scenarios modeled, odor impacts over the 7 D/T threshold more than 99% of the year cover a small area typically very close to the ambient air boundary surrounding the canal and basin. These scenarios would only occur if both the worst-case odor impacts and worst-case meteorological conditions occur during the same hours for the entire year".

As you can see, we now have scientific proof that odors will not be a concern with the proposed expansion project. This canal on average will be used 7 times per year which is something that does not qualify it to be categorized as something that is used continuously for the entire year. This information was provided to EGLE as part of the Part 41 Supplemental Permitting Information package that was sent on April 20, 2020. There were no questions asked from EGLE about this submission so it is clear that scientific data does not fit into their stance on this project.

There have also been concerns of decreased property values and attractiveness for resident's properties in the area. One of our top goals during the design of this project was to make this expansion as aesthetically pleasing as possible which our belief would increase property values. Below you will find two pictures labeled Figure 1 and Figure 2. You will see in those pictures that everything that we were designing was to increase the aesthetic appeal of the area. The 100% design drawings have a nonfunctioning lighthouse which was going to be the centerpiece of the project and blend in with the St. Clair Shores Nautical Mile theme. There were also plans to bring in fishing piers, boardwalks, and walking paths with seating areas. The boardwalks would have created an excellent educational opportunity for nearby schools. The area would also receive all new plantings not only in the canal but also on the banks.

Figure 1 - Current Layout

Figure 2 - Proposed 50% Design Layout





Another design consideration that has been developed to address a potential concern is that we have designed a water intake system in the control gates. The concern was that the canal might not be used for long periods of time which could cause stagnant water within the wetland pools that were being created. This new water intake system would be tied into the MCPWO supervisory control and data acquisition (SCADA) system and would allow operators to bring in fresh water to flush the pools. It would also allow for flushing of the canal, if required.

In conclusion, I strongly disagree with EGLE's comments regarding this being an open-air sewage lagoon and creating issues for the neighboring public. If this was such a concern then why did they permit the existing open-air canal back in 2002? The proposed project is larger replica of that project and the existing canal has been functioning for 18 years with no issues.

RESOLUTION NO. R19-3209

Official Resolution of the Board of Commissioners Macomb County, Michigan

RESOLUTION SUPPORTING PROPOSALS BY THE MACOMB COUNTY PUBLIC WORKS OFFICE TO SUBSTANTIALLY REDUCE POLLUTION OF LAKE ST. CLAIR

Commissioners Robert Leonetti, Leon Drolet, Veronica Klinefelt and Phil Kraft, on Behalf of the Board of Commissioners, Offer the Following Resolution:

WHEREAS, Lake St. Clair is vital to the environmental quality, human health, economic vitality, and quality of life of Macomb County and all of Southeast Michigan and the Great Lakes; and

WHEREAS, discharges of human waste into Lake St. Clair due to combined sewage and storm water underground infrastructure has long been a major source of pollution of Lake St. Clair, including E.coli contamination; and

WHEREAS, physical separation of combined sewage and storm water infrastructure or installation of separated systems have been undertaken by many Macomb County municipalities at extreme cost and time and separation of remaining combined sewage and storm water infrastructure will take decades to address at a very high cost; and

WHEREAS, sewage discharges due to remaining combined sewage and storm water infrastructure continues to be a primary source of pollution threatening the human, environmental, and economic health of Lake St. Clair; and

WHEREAS, eliminating discharge of partially treated sewage into Lake St. Clair as soon as possible is a top priority of the Macomb County Board of Commissioners and would benefit residents of Macomb County, Southeast Michigan, and all citizens of the United States and Canada who value the Great Lakes and; Whereas the Macomb County Public Works Office (MCPWO) has developed two innovative and cost-effective proposals (Proposals) that would greatly reduce discharge of combined sewage overflows from the Chapaton Pump Station in St. Clair Shores into Lake St. Clair from Macomb County; and

WHEREAS, the MCPWO Proposals would modify existing infrastructure by:

- Using the surplus capacity of existing sewer pipes to retain effluent during extreme rainfall events, thereby reducing discharges until that effluent can be re-diverted to a sewage treatment plant.
- Extending the existing capacity of the canal at the Chapaton Pump Station to substantially increase holding capacity of effluent during significant rain events, further reducing discharges and allowing the stored flows to be properly and safely treated; and

WHEREAS, the Proposals by the Macomb County Public Works Office would cost approximately \$30 million and can be completed quickly and more cost effectively compared to the cost of over \$340 million to physically separate remaining sewer and storm water pipelines in the affected municipalities; and

WHEREAS, the Proposals would reduce sewage discharge from Chapaton into Lake St. Clair by 75% and provide the greatest reduction in pollution at the lowest cost among available options; and

NOW THEREFORE BE IT RESOLVED, that the Macomb County Board of Commissioners supports implementing the MCPWO proposals as quickly as possible and urges state and federal lawmakers to prioritize and financially support the proposals for the benefit of all Southeast Michigan citizens.

Bob SMITH

Chair, Macomb County Commission

LEON DROLET

Macomb County Commissioner, District 13

PHIL KRAFT

Macomb County Commissioner, District 8

miller

FRED MILLER Clerk/Register of Deeds

Adopted: April 18, 2019

ROBERT LEONETTI

Macomb County Commissioner, District 10

VERONICA KLINEFELT

Macomb County Commissioner, District 3

City of St. Clair Shores

27600 Jefferson Avenue, St. Clair Shores, MI 48081-2075 Phone: (586) 447-3303 Fax: (586) 445-0469 <u>www.scsmi.net</u>

Mayor

Kip C. Walby

Mayor Pro-Tem

Peter A. Accica

City Manager Matthew W. Coppler Council Members: John D. Caron Ronald J. Frederick Candice B. Rusie Chris M. Vitale



June 3, 2020

At the Regular City Council Meeting of the St. Clair Shores City Council held on June 1, 2020, the following resolution was offered:

Moved by Council Member Caron, and supported by Council Member Accica to adopt the following Resolution:

RESOLUTION REQUESTING THE GOVERNOR TO INTERVENE AND REVIEW MCPWO PERMIT FOR CONSIDERATION

WHEREAS, on September 16, 2019, the Macomb County Public Works Commissioner presented to St. Clair Shores Mayor and Council Proposals to Substantially Reduce Pollution of Lake St. Clair; and

WHEREAS, Lake St. Clair is vital to the environmental quality, human health, economic vitality, and quality of life of Macomb County and all of Southeast Michigan and the Great Lakes and discharges of human waste into Lake St. Clair due to combined sewage and storm water underground infrastructure has long been a major source of pollution of Lake St. Clair, including E.coli contamination; and

WHEREAS, the Chapaton basin includes a 28-million-gallon underground storage basin and during heavy rain falls area storm and sanitary sewer lines become overwhelmed and the combined sewage is stored in the basin; and

WHEREAS, the Chapaton basin currently includes an open-air storage that is being used in the same way as the proposed additional capacity and that many times this area saves a Lake St. Clair discharge during moderate events, and then when demand drops its pumped back into the Detroit system; and

WHEREAS, as the basin fills, the sewage is treated with a commercial bleach solution and once full during heavy rain events, the combined sewage overflows into the manmade canal and out to Lake St. Clair; and

WHEREAS, the Macomb County Public Works Office (MCPWO) proposed a plan in which the existing open-air canal through which that sewage flows into the lake will be expanded into additional storage space, adding another 17 million gallons-plus of storage capacity to the system – a move that could reduce such overflows in a typical year by as much as 70 percent; and

WHEREAS, local, county, state and federal elected officials worked in a bipartisan fashion to move this project forward; and

WHEREAS, the MCPWO submitted a permit for this plan, which was recommended for rejection by the Michigan Department of Environment, Great Lakes & Energy;

NOW THEREFORE BE IT RESOLVED that the St. Clair Shores Mayor and Council requests the Governor intervene in this matter, on behalf of the residents of the State of Michigan and the County of Macomb and the City of St. Clair Shores and review this issue for reconsideration.

BE IT FURTHER RESOLVED, that this resolution be forwarded to the Michigan Department of Environmental Great Lakes and Energy (EGLE), the Governor of the State of Michigan and the Macomb County Public Works Commissioner.

Ayes: All - 6

I, Mary A. Kotowski, City Clerk of the City of St. Clair Shores, Michigan, do hereby certify that the foregoing is a true and complete copy of the resolution adopted by the City of St. Clair Shores, Macomb County, State of Michigan, at a public meeting held on June 1, 2020; the original thereof is on file in the records of my office, the meeting was conducted and public notice of said meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1976, as amended, and minutes of this meeting are kept and will be made available as required.

Mary A. Kotowski, MiPMC, CMMC

City Clerk

PERMIT NO. MI0025585

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

DECISION REGARDING NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM APPLICATION FOR PERMIT MODIFICATION FOR

8 1/2 Mile Relief Drain Drainage District

PO Box 806 Mount Clemens, MI 48046

and

South Macomb Sanitary District

2001 Pleasant Street St. Clair Shores, Michigan 48080

for the Chapaton Retention Treatment Basin facility located at

23001 East Nine Mile Road Saint Clair Shores, MI 48080

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD), proposes to deny the application for modification of National Pollutant Discharge Elimination System (NPDES) Permit to 8 1/2 Mile Relief Drain Drainage District, and South Macomb Sanitary District (permittees). The applicants discharge treated combined sewer overflow (CSO) wastewater from this retention treatment basin (RTB) to the Chapaton Canal of Lake St. Clair. The permittees are requesting a modification to the NPDES Permit No. MI0025585 for the acquisition of the Chapaton Canal of Lake St. Clair, a water of the state, to use as an open storage area for treated CSO wastewater.

The current NPDES permit for the Chapaton RTB authorizes the discharge of adequately treated combined sewage from the RTB to the Chapaton Canal to Lake St. Clair when the RTB is full and wastewater flows exceed downstream interceptor capacity. The proposed project involves adding 17 million gallons of open-air storage to reduce the volume and frequency of treated wastewater from the RTB to Lake St. Clair. The proposed project estimates reducing annual discharges from the RTB from seven discharges to three to four discharges per year. The space for the additional storage requires taking approximately 1,400 feet of the Chapaton Canal and converting it to a structure to hold treated wastewater from the RTB until it can flow back to the basin. The WRD has determined that the Chapaton RTB is in compliance with state and federal permit requirements and adequately treats CSO wastewater to meet water quality

standards at the time of discharge. The modification request for an open-air storage structure represents a voluntary action from the permittee.

This proposed project is designed as an end-of-pipe storage structure requiring acquisition and use waters of the state. The use of these waters for wastewater storage will permanently remove public use and access. All surface waters are protected under the designated uses outlined in the Part 4 Rules, Water Quality Standards, promulgated under Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). In addition, WRD has determined that the open-air storage structure will not provide the tertiary treatment benefits claimed by the permittee.

Based upon the technical review of the information provided and consistent with Rule 2115(1) of the Part 21 Rules, Wastewater Discharge Permits, promulgated under Part 31 of the NREPA, the WRD is proposing to deny the application to modify the existing NPDES permit. The existing NPDES permit MI0025585, issued September 27, 2018, effective October 1, 2018 remains in effect.

Any person who is aggrieved by this permit may file a sworn petition with the Michigan Administrative Hearing System within the Michigan Department of Licensing and Regulatory Affairs, c/o the Michigan Department of Environment, Great Lakes, and Energy, setting forth the conditions of the permit which are being challenged and specifying the grounds for the challenge. The Department of Licensing and Regulatory Affairs may reject any petition filed more than 60 days after issuance as being untimely.

DATE: draft May 15, 2020.

Teresa Seidel, Director
Water Resources Division

PUBLIC NOTICE

OF

PUBLIC MEETING and HEARING

Date: June 18, 2020
Permit No.: MI0025585
Designated Site Name: Chapaton RTB

A virtual Public Meeting followed by a Public Hearing with the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD), is being held to seek additional public input on the proposed denial of the modification of a National Pollutant Discharge Elimination System (NPDES) permit to 8 1/2 Mile Relief Drain Drainage District, and South Macomb Sanitary District (permittees). This virtual meeting and hearing will be held on Thursday, June 18, 2020. The Public Meeting will be held from 6:00 p.m. – 6:45 p.m., and the Public Hearing will start at 7:00 p.m. Due to the ongoing Covid-19 crisis, the meeting and hearing will be held remotely using an internet platform.

EGLE proposes to deny the NPDES permit modification request for the Chapaton Retention Treatment Basin (RTB) located at 23001 East Nine Mile Road, Saint Clair Shores, MI 48080. The applicant discharge treated combined sewer overflow (CSO) wastewater from this RTB to the Chapaton Canal of Lake St. Clair.

The permittees are requesting a modification to the NPDES Permit No. MI0025585 for the acquisition of the Chapaton Canal of Lake St. Clair, a water of the state, to use as an open storage area for treated CSO wastewater.

The proposed denial of the NPDES permit modification is on public notice from May 19, 2020, through June 23, 2020.

All interested parties are invited to submit comments on the proposed denial of the NPDES permit modification. Persons unable to participate in the virtual Public Meeting or Hearing may submit written comments by <u>June 23, 2020</u>. All comments received will be considered prior to taking action on the denial of the permit modification. Persons wishing to submit comments should go to https://miwaters.deq.state.mi.us, select 'Public Notice Search,' search for this public notice, click 'View,' click 'Add Comment,' enter information into the fields, and then click 'Submit.' Inquiries should be directed to Matt Staron, Permits Section, WRD, EGLE, P.O. Box 30458, Lansing, Michigan 48909-7958; telephone: 517-284-5589; or e-mail: staronm@michigan.gov.

Individuals needing accommodations for effective participation at the meeting and/or hearing should call 517-284-5593 at least one (1) week in advance of the start date of the meeting/hearing to request mobility, visual, hearing or other assistance.

Copies of the permit application, public notice, and proposed denial document may be obtained via the Internet at https://miwaters.deq.state.mi.us (select 'Public Notice Search,' enter the permit number in the search field, and then click 'Search').

How to attend the Online Meeting or Hearing:

To attend the online public meeting and/or hearing with both video and audio go to https://attendee.gotowebinar.com/register/4593396049407348748 to register. After registering, you will receive a confirmation email containing information about joining. If you do not have internet access and would like to call in to listen only, you may call 415-930-5321, use access code 532-218-268. Note that those joining by phone only will only be able to listen to the proceedings and will not be able to make a verbal comment during the hearing. Those on the phone wishing to provide comments may do so in writing following the instructions above.

Pre-registration is not required to attend either the meeting or hearing. Individuals interested in participating can click the hearing link above at the start of the event (6:00 p.m.). Individuals concerned about remaining anonymous can click on the above link at the start of the event (6:00 p.m.) and enter first name and last name initial. If you do not want to enter your email address, enter eglemeeting@mi.gov in the email field.

Funding Source	<u>Apportionment</u>	Manager	<u>Vendor</u>	Amount	<u>Invoice Detail</u>	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%						
			N. O. A. C. D. D. G.	#2 000 50		L L CL CL F	
		Astorino	Aloia & Associates, P.C.	\$2,099.50	Invoice #19891 - 5.1.20	Legal - Shore Club Easement	
		Astorino	DTE Energy	\$6,534.74	Invoice #20-261 - 5.7.20	Monthly Electric - 4.8.20 - 5.7.20	
		Astorino	Fishbeck	\$5,930.35	Invoice #392035 - 5.26.20	Basin Structural Integrity Study	\$111,569.76
		Astorino	Hubbell, Roth & Clark, Inc.	\$2,738.33	Invoice #178929 - 4.30.20	Chapaton Pump and Screen - Contract Admin	\$85,307.93
		Astorino	JCI Jones Chemical, Inc.	\$4,037.90	Invoice #821337 - 5.19.20	Hypochlorite Solution - 4,466 gallons	
		Astorino	Swan Analytical	\$2,140.00	Invoice #IN-US20-1304 - 5.8.20	Reagent Set - TRC Units	
		Astorino	Transformer Inspection Retrofill Corp.	\$520.00	Invoice #28328 - 5.21.20	Inspect/Test Transformer	
		Astorino	Wyatt Performance & Fab	\$975.00	Invoice #10018 - 5.8.20	Dump Truck Repairs - Truck Box	

Total \$ 24,975.82



29. Coordinator:

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	5/19/20

4. SET ID	5. POST DATE	
AMPIZOSSAM		

23. Total: \$

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
Aloia & Associates, P.C.	V25733	01	19891	5/1/2020	\$	2,099.50

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Line	12. Org Key	13. Object	Cost Center (CCNT)	15. Object	Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep C
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	REV 09/201
2,099.50	

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES: 25. Finance Officer: 30. Drain: 8 1/2 Mile Relief 26. Chief Deputy: 31. Project Balance: N/A 27. Engineers: 6/2/2020 32. Staff Date: 28. Managers: 6/8/2020

33. Board Date:

34. Select For Pay Date:

ALOIA & ASSOCIATES, P.C.

48 South Main Street, Suite 3 Mount Clemens, MI 48043 (586) 783-3300

Invoice submitted to:

8 1/2 Mile Drain Drainage District Macomb County Department of Public

Works

Attn: Brian Baker 21777 Dunham Road

Clinton Township, MI 48036

Invoice Date	Invoice Number	Last Bill Date
May 1, 2020	19891	April 1, 2020

In Reference To:

File No. 1000-25

8 1/2 Mile Drain Drainage District

Professional Services

	4	Hours	Amount
4/7/2020 BJA	Re: Chapaton - Follow up with Scott Bliss regarding easement legal descriptions.	0.25	47.50
4/10/2020 BJA	Re: Chapaton - Review and analysis of project information; phone conference with Scott Bliss to review legal descriptions and surveys.	0.75	142.50
4/13/2020 BJA	Review and analysis of EGLE standards and processes for leasing bottomlands; re-analysis of Shore Club EGLE lease; review and editing of easements with Shore Club in light of legal descriptions.	2.30	437.00
4/14/2020 BJA	Re: Chapaton - Draft Letter of Intent with Shore Club for easement, improvements and lease with State of Michigan; send to Vincent Astorino.	3.90	741.00
4/15/2020 BJA	Draft and send detailed communications to Marie Racine; gather documents necessary to send to Shore Club for transmission; communications with Vince Astorino regarding same.	2.25	427.50
4/17/2020 BJA	Re: Chapaton - Receive and review updated legal description from Bliss; request other modifications.	0.30	57.00
4/21/2020 ALF	Re: Shore Club Apartments - Review of Grant of Permanent Easement and Wade Trim survey; revise Grant of Permanent Easement into recordable form	0.40	38.00

2

				Hours	Amount
		and forward same to Attorney Aloia.			
4/21/2020	ВЈА	Re: Chapaton - Reach out to Marie Racine regarding her review of documents.		0.25	47.50
4/22/2020	BJA	Re: Chapaton - Telephone call with Marie Racine regarding Chapaton and transaction documents.	project	0.60	114.00
4/23/2020	ВЈА	Re: Chapaton - Receive and review updated legal descriptions and sur sketches from Wade Trim.	vey	0.25	47.50
	For p	rofessional services rendered		11.25	\$2,099.50
	Previo	ous balance			\$1,477.25
	Accou	unts receivable transactions			
		ent - Thank You. Check No. 4193 ent - Thank You. Check No. 4193			(\$1,453.50 (\$23.75
	Total	payments and adjustments			(\$1,477.25
	Balan	ace due		- 1 (-	\$2,099.50
Nome		Timekeeper Summary	Hours	Rate	Amount
Name Benjamin J. A Amy L. Fede			10.85	190.00 95.00	\$2,061.50 \$38.00



24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	5/27/20

4. SET ID	5. POST DATE
AUMTESOOGAL	

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								
DTE Energy	V01270	08	20-261	5/7/2020	\$	6,534.74		

						CHILD RECORD DETAIL I	NFORMATION				
	Genera	Ledger	Job L	edger	16.	OPTIONAL				U	¥
Line	12. Org Key	13. Object	Cost Center (CCNT)	15. Object	Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep (
А	8210017M	92101	: CC0004	92101	: WO18006	8 1/2 Mile Relief	Acct #9100-0005-3785, 4/8-5/7	\$ 6,534.74	GEN		J 1
В			:		:						
С			:		:						
D			:				-				
E			:								
F			:								
G			:								

REV	09/2018

23. Total: \$ 6,534.74

25. Finance Officer:	BHIMA	30. Drain:	8 1/2 Mile Relief
25. Chief Deputy:	15	31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	6/2/2020
28. Managers:		33. Board Date:	6/8/2020
29. Coordinator:		34. Select For Pay Date:	

00000653474 B



Payment Coupon

 Account Number
 91000053785

 Due Date:
 June 09, 2020

 Total Due:
 \$6,534.74

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

20.261

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

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

Account Number 9100-0005-3785

DTE-Energy Federal ID No.

38-3217752

Programs you are enrolled in:

How to contact us:

Power Outage Billing Inquiry See Detail Charges 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

The Michigan Public Service Commission recently approved the following price changes on your bill: This month the electric power supply and distribution prices were updated to align with the true cost of business to serve our customers. There was also a slight increase in the Nuclear Surcharge.



Detail Charges

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

Outage Contact Number: 1-313-235-1300

Invoice: 210001364505 Billing Period: 04/08/2020 through 05/07/2020 Days Billed: 30

Metering Information

7.00	Start	Start	Stop	Stop	Read	Units	Usage	
Meter Number	Date	Read	Date	Read	Difference	Multiplier	Used	Type
6321448	04/08	406.5A	05/07	410.6A	4.1	6,400.0000	26,240.0	P - In-V
6321448	04/08	520.4A	05/07	525.5A	5.1	6,400.0000	32,640.0	P - In-W
6321449	04/08	0.0A	05/07	1.5A	0.1	- 6400.000	640.0	P - Out-V
6321449	04/08	0.0A	05/07	0.0A	0.0	- 6400.000	0.0	P - Out-W
6321451	04/08	0.0A	05/07	0.5A	0.0	6,400.0000	0.0	P - In-V
6321451	04/08	0.0A	05/07	0.5A	0.0	6,400.0000	0.0	P - In-W
				Total KV	ARH		26,880.00	
The state of the s				Total KV	VH		32,640.00	

Invoice: 210001364505 Service Name: Chapaton Pumping Station Item: 7004376662 General Service Municipal Pumping-Net Metering Cat1 Cycle: 05

Billing Status Information						
1 On-peak Billing Demand		706	KW	ESTABLISHE	D 05/06/2	2020 12:30
3 65% High OP Bill Dmd June-Oct prec 11 mths	3	1105	KW	ESTABLISHE	D 09/17/2	2019 18:00
8 Highest Single Billing Demand		706	KW	ESTABLISHE	D 05/06/2	2020 12:30
A Current PV High Monthly Demand		706	KW	ESTABLISHE	D 05/06/2	2020 12:30
B 50% of the Contract Capacity for PV		0	KW			
C Primary Voltage Maximum Demand		4838	KW	ESTABLISHE	D 01/11/2	2020 11:30
Contract Capacity for Location		6738	KW	ESTABLISHE	D 08/16/2	2016 05:00
Power Factor (ratio) for all voltages		78	PCT			
Total Number of days in the Billing Period		30	DAYS			
Avg Kilowatthours Used Per Day This Period		1088	KWH			
Avg Kilowatthours Used Per Day A Year Ago		3285	KWH			
kWh percentage change from a year ago		-67	PCT			
Metered outflow		0	KWH			
Net Delivery Billed (inflow)		32640	KWH			
Net Inflow (In - Out)		32640	KWH			
Charges for 04/08/2020 through 05/07/20	20					X.
Power Supply Charges:						
Power Supply Energy:						
Power Supply Capacity Charge	32,640	KWH	@\$	0.0329700	Per Total KWH	1,076.14
Power Supply Non Capacity Charge	32,640		@\$	0.0464000	Per Total KWH	1,514.50
Surcharges:						
Power Supply Cost Recovery Factor	32,640	KWH	@\$	0.0015600	Per Total KWH	50.92
	Total:	131412	0 +	231518355	_	2,641.56
Delivery Charges:						1000
Service Charge						11.25
Distribution:						
Distribution Energy	32,640	KWH	@\$	0.0386600	Per Total KWH	1,261.86
Surcharges:	7.5	347.523	•	914327333	0.00 0.000 0.000 0.000	1,000
Nuclear Surcharge	32,640	KWH	@\$	0.0008270	Per Total KWH	26.99
Energy Waste Reduction	2		@\$	45.6200000		91.24
LIEAF Factor	2		@\$	0.9200000		1.84
Sub	Total:	0.01.3	C +	0.020000	-	1,393.18
Special Facilities Charge	3 2 7771					2,500.00
Invoice Subtotal						6,534.74
Michigan State Sales Tax On Taxable Portion						0.00
						0.00



\$6,534.74

Invoice Total

Summary Of Charges

Account Number 9100-0005-3785

Previous Balance as of 04/13/2020		9,155.01
Payment(s) and Credit(s)	and print Druke Druke	- 9,155.01
Remaining Balance	75 4016 700	\$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	04/08 - 05/07/20	6,534.74
		Taxes			0.00
		Miscellaneous Charges		a laterate la la	0.00
		Current Bill			\$6,534.74
Amount Due on or	before Due Da	te of 06/09/2020			\$6,534.74

Your current charges are due on June 9, 2020. A 2% late payment charge will be applied if paid after the due date.





ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	5/26/20

4. SET ID 5. POST DATE

NP200527MA

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		
Fishbeck	V44063	01	392035	5/26/2020	\$	5,930.35		

					200	CHILD RECORD DETAIL	INFORMATION				
	Genera	Ledger	Job L	edger	16.	OPTIONAL				O	¥
Line	12. Org Key	13. Object	Cost Center (CCNT)	15. Object	Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep C
А	8210017M	80138	: CC0004	80138	: WO19005	8 1/2 Mile Relief	: Pjt #190051 through 5/15/2020	\$ 5,848.35	GEN		
В	8210017M	80138	: CC0004	80138	: WO19105	8 1/2 Mile Relief	: Pjt #190051 (Task 1B) through 5[15]2	\$ 82.00	GEN		- 0
С			:		:						
D			:		:		:				
E			:		:						
F	= =1,		:				:				
G			:		:		:				

REV 09/2018

23. Total: \$

5,930.35

*			
5. Finance Officer:	BMIMA	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:	145	31. Project Balance:	\$111,569.76
27. Engineers:	1.00	32. Staff Date:	6/2/2020
28. Managers:		33. Board Date:	6/8/2020
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 5/25/2020

INVOICE START DATE 4/18/2020

INVOICE END DATE 5/15/2020

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 \$ 109,418.89

TOTAL AMOUNT DUE THIS INVOICE \$ 5,930.35

TOTAL BUDGET REMAINING \$ 111,569.76

(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: 392035 Invoice Date: 5/26/2020

Project: 190051

Project Name: Macomb Co PW/8.5 As-needed

Rillings

Engineering

Bill Term: 1

For Professional Services Rendered Through 5/15/2020

WO19005

					Billings	
		Fee	Available	To Date	Previous	Current
1 - Task 1 - Genral As Ne	eded	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	40,846.59	37,866.24	2,980.35
Rate Labor	82.00					
Expenses	2,898.35					
1.B - Task 1b - 9 Mile Pip	oe Repair (WO19105)	26,256.00	5,521.85	20,816.15	20,734.15	82.00
Rate Labor	82.00					
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 Im	provements	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 S	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 Hydraulic Isolation	Bar Screen	2,976.75	0.00	2,976.75	2,976.75	0.00
1.1 - Task 1i - Chapaton E	invironmental Study	9,730.00	1,208.41	8,521.59	8,521.59	0.00
1.j - Task 1j - Chapaton F	low Meter Drawings	3,000.00	320.00	2,680.00	2,680.00	0.00
1.k - Task 1k - Chapaton Protection	High Water	14,175.00	14,175.00	0.00	0.00	0.00
1.I - Task 1I - Chapaton 3	BD Animation	4,000.00	443.00	3,557.00	3,557.00	0.00
1.M - Task 1m - Chapato Penetrating Radar	n Ground	4,600.00	2,742.00	4,589.00	1,858.00	2,731.00
Rate Labor	631.00					
Expenses	2,100.00					
1.N - Task 1n - Chapator	Div 01 Specs	3,500.00	1,640.00	1,997.00	1,860.00	137.00
Rate Labor	137.00					

Invoice: 392035

Current Billings Amount Due This Bill 5,930.35

5,930.35

1.A - Task 1a - Chapaton Structural Study					
Rate Labor					
Class		Hours		Rate	Amount
Senior Engineer		0.50		164.0000	82.00
	Total Rate Labor				82.00
Expenses					
Account / Vendor			Cost	Multiplier	Amount
Subconsultant			276222	4.05	2 000 25
NTH Consultants Ltd			2,760.33	1.05	2,898.35
	Total Expenses				2,898.35
Total Bill Task: 1.A - Task 1a - Chapaton Structura	Study				2,980.35
1.B - Task 1b - 9 Mile Pipe Repair (WO19105)					
Rate Labor					
Class		Hours		Rate	Amount
Senior Engineer		0.50		164.0000	82.00
	Total Rate Labor				82.00
1 M. Tack 1m. Chanatan Ground Beneficiting Pa	dar				
1.M - Task 1m - Chapaton Ground Penetrating Rate Labor	dar				
1.M - Task 1m - Chapaton Ground Penetrating Rac Rate Labor Class	dar	Hours		Rate	Amount
Rate Labor Class	dar	Hours 2.50		Rate	Amount 342.50
Rate Labor	dar				
Rate Labor Class Engineer Senior Architect	dar 	2.50		137.0000	342.50
Rate Labor Class Engineer	Y 	2.50 1.00		137.0000 155.0000	342.50 155.00 133.50
Rate Labor Class Engineer Senior Architect Staff Architect	dar Total Rate Labor	2.50 1.00		137.0000 155.0000	342.50 155.00
Rate Labor Class Engineer Senior Architect	Y 	2.50 1.00	Cost	137.0000 155.0000	342.50 155.00 133.50
Rate Labor Class Engineer Senior Architect Staff Architect Expenses	Y 	2.50 1.00	Cost	137.0000 155.0000 89.0000	342.50 155.00 133.50 631.00
Rate Labor Class Engineer Senior Architect Staff Architect Expenses Account / Vendor	Y 	2.50 1.00		137.0000 155.0000 89.0000	342.50 155.00 133.50 631.00 Amount
Rate Labor Class Engineer Senior Architect Staff Architect Expenses Account / Vendor Subconsultant	Y 	2.50 1.00	1/1/11	137.0000 155.0000 89.0000 <i>Multiplier</i>	342.50 155.00 133.50 631.00
Rate Labor Class Engineer Senior Architect Staff Architect Expenses Account / Vendor Subconsultant	Total Rate Labor Total Expenses	2.50 1.00	1/1/11	137.0000 155.0000 89.0000 <i>Multiplier</i>	342.50 155.00 133.50 631.00 Amount
Rate Labor Class Engineer Senior Architect Staff Architect Expenses Account / Vendor Subconsultant Materials Testing Consultants Total Bill Task: 1.M - Task 1m - Chapaton Ground	Total Rate Labor Total Expenses	2.50 1.00	1/1/11	137.0000 155.0000 89.0000 <i>Multiplier</i>	342.50 155.00 133.50 631.00 Amount 2,100.00
Rate Labor Class Engineer Senior Architect Staff Architect Expenses Account / Vendor Subconsultant Materials Testing Consultants Total Bill Task: 1.M - Task 1m - Chapaton Ground 1.N - Task 1n - Chapaton Div 01 Specs	Total Rate Labor Total Expenses	2.50 1.00	1/1/11	137.0000 155.0000 89.0000 <i>Multiplier</i>	342.50 155.00 133.50 631.00 Amount 2,100.00
Rate Labor Class Engineer Senior Architect Staff Architect Expenses Account / Vendor Subconsultant Materials Testing Consultants Total Bill Task: 1.M - Task 1m - Chapaton Ground	Total Rate Labor Total Expenses	2.50 1.00	1/1/11	137.0000 155.0000 89.0000 <i>Multiplier</i>	342.50 155.00 133.50 631.00 Amount 2,100.00 2,100.00 2,731.00
Rate Labor Class Engineer Senior Architect Staff Architect Expenses Account / Vendor Subconsultant Materials Testing Consultants Total Bill Task: 1.M - Task 1m - Chapaton Ground 1.N - Task 1n - Chapaton Div 01 Specs Rate Labor	Total Rate Labor Total Expenses	2.50 1.00 1.50	1/1/11	137.0000 155.0000 89.0000 <i>Multiplier</i> 1.05	342.50 155.00 133.50 631.00 Amount 2,100.00

5,930.35

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



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

2. PHONE #	3. DATE
95966	5/7/20

4. SETID	5. PUST DATE
VP200511MA	

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			
Hubbell, Roth & Clark, Inc	V09517	01	178929	4/30/2020	\$ 2,37	78.33		

						CHILD RECORD DETAIL I	NFORMATION				
	Genera	Ledger	Job L	.edger	16.	OPTIONAL				0	S S
Line	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep C
А	8210017M	80138	: CC0004	80138	: WO18350	8 1/2 Mile Relief	Pjt#20180363.13, through 4/18/20	\$ 2,378.33	GEN		
В			:								
С			:				(4)				
D			:		:						
E					:						
F										-	
G			:		:						

REV 09/2018

2,378.33 23. Total: \$

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:			
Chapaton Dry Weather and Pump Screen Improvements			
25. Finance Officer:	30. D	rain: 8 1/2 Mile R	elief
26. Chief Deputy:	31. Project Bala	nce: \$85,307.9	3
27. Engineers:	32. Staff D	Date: 5/19/2020)
28. Managers:	33. Board D	Date: 6/8/2020	
29. Coordinator:	34. Select For Pay D	Date:	
	30 - 43		



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	5/7/20

VP 2005 II MA

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		
Hubbell, Roth & Clark, Inc	V09517	01	178929	4/30/2020	\$	2,738.33		

						CHILD RECORD DETAIL I	NFORMATION			-	
	Genera	Ledger	Job L	edger	16.	OPTIONAL				O	S S
Line	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep C
А	8210017M	80138	: CC0004	80138	: WO18350 :	8 1/2 Mile Relief	Pjt#20180363.13, through 4/18/20	\$ 2,738.33	GEN		
В			:		:			2378.33			
С			:		:						
D					:						
E			:		:						
F			:								
G			:		:						

23. Total: \$ 2,738.33

REV 09/2018

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES: Chapaton Dry Weather and Pump Screen Improvements

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

26. Chief Deputy: 31. Project Balance: \$85,307.93

27. Engineers: 32. Staff Date: 5/19/2020

28. Managers: 33. Board Date: 6/8/2020

29. Coordinator: 34. Select For Pay Date:

MACOME	S COUNTY PUBLIC WO	ORKS OFFICE	
ENGIN	EERING INVOICE COV	ER SHEET	
WORK ORDER NUMBER	18350		
PROJECT NUMBER	MCPWO-WWS-2018-RFI	P-008	
PROJECT NAME	CHAPATON DRY WEATHER	PUMP AND SCREEN IMI	PROVEMENTS
DRAINAGE DISTRICT	EIGHT AND ONE-HALF M	IILE RELIF DRAIN	
CONSULTANT NAME	HUBBELL, ROTH & CLAR	K, INC	
INVOICE DATE	4/2/2020		
INVOICE START DATE	3/22/2020		
INVOICE END DATE	4/18/2020		
ORIGINAL CONT	TRACT AMOUNT	\$	110,908.0
CHANGE OF	RDER TOTAL	\$	97,860.0
Change Order No. 1		\$	97,860.0
Change Order No. 2			
Change Order No. 3			
Change Order No. 4			
TOTAL REVISED CO	ONTRACT AMOUNT	\$	208,768.00
(includes all approve	d change orders only)		
TOTAL AMOUNT PR	EVIOUSLY INVOICED	\$	121,081.74
TOTAL AMOUNT	DUE THIS INVOICE	\$	2,378.33
TOTAL BUDGE	T REMAINING	T\$	85,307.93
	Amount Less Total Invoiced Pr		



HUBBELL, ROTH & CLARK, INC. CONSULTING ENGINEERS PO BOX 824

BLOOMFIELD HILLS, MICHIGAN 48303-0824 (248) 454-6300

April 30, 2020

Project No:

20180363.13

Invoice No:

0178929

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 April 18, 2020

PROJECT 20180363.13 CONSTRUCTION ADMINISTRATION

Professional Personnel

Totals

Total Labor

Hours 3.00 Amount

468.24

100 A 100

468.24

Total this Project \$468.24

PROJECT 20180363.12 SHOP DRAWINGS

Professional Personnel

Totals

Total Labor

Hours

13.50

Amount

1,910.09

1,910.09

Total this Project

\$1,910.09

Billing Limits

Total Billings Limit

Remaining

Current

2,378.33

Prior 10,173.74 To-Date

12,552.07 97,860.00

85,307.93

Total Due this Invoice

\$2,378.33

Project	20180363.13	CONTRACT AD	MIN CHAPATON D	DRY WEATHER F	PUMP Invoice	0178929
Billin	g Backup				Thursday	April 30, 2020
	, ROTH & CLARK, INC.	16	voice 0178929 Da		muisuay,	
HUBBELI	, KOTH & GLAKK, INC.	101	Ivoice 0176929 Da	led 4/30/2020		12:51:26 PM
Project 2	0180363.13					
			Hours		Amount	
01773	CRIST, CHRISTA	4/18/2020	1.00	133.14	133.14	
01727	SULLIVAN, TIMOTHY	4/4/2020	1.00	186.60	186.60	
02270	URANGA, AARON	4/4/2020	.50	148.50	74.25	
02270	URANGA, AARON	4/4/2020	.50	148.50	74.25	
	Totals		3.00		468.24	
	Total Labor					468.24
				Total this P	roiect	\$468.24
Control Control	A.batka F.V.					
Project 2	0180363.12					
17.57.14	47.54.60 Bullet 40		Hours		Amount	
01773	CRIST, CHRISTA	4/4/2020	1.50	125.67	188.51	
01773	CRIST, CHRISTA	4/18/2020	.50	133.14	66.57	
02275	ROSKELLEY, MICHAEL	4/18/2020	1.50	113.34	170.01	
02270	URANGA, AARON	4/4/2020	2.00	148.50	297.00	
02270	URANGA, AARON	4/4/2020	5.00	148.50	742.50	
02270	URANGA, AARON	4/18/2020	1.00	148.50	148.50	
02270	URANGA, AARON	4/18/2020	2.00	148.50	297.00	
	Totals		13.50		1,910.09	
	Total Labor					1,910.09
				Total this P	roject	\$1,910.09
				Total this R	Report	\$2,378.33



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE	
Michelle Houvener	95966	5/26/20	

4. SET ID	5. POST DATE
NPADOSATMUA	

PARENT RECORD INFORMATION								
6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date		11. Invoice Amount		
JCI JONES CHEMICALS INC	V65297	01	821337	5/19/2020	\$	4,037.90		

						CHILD RECORD DETAIL II	NFORMATION				
	General Ledger Job Ledger		edger	16.	OPTIONAL				0	×5	
Line	12. Org Key	13. Object	Cost Center (CCNT)	15. Object	Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep C
А	8210017M	72650	: CC0004	72650	: WO18006	8 1/2 Mile Relief :	Order #608087, 5/19/20	\$ 4,037.90	GEN		
В			:		:	:					
С			:		:	:	*				
D			:		:	:					
E			:		:	:					
F			:								
G											

23. Total: \$ 4,037.90

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	BM/mh	30. Drain:	Martin
26. Chief Deputy:		31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	6/2/2020
28. Managers:		33. Board Date:	6/8/2020
29. Coordinator:		34. Select For Pay Date:	



Customer Number 21543215

s MACOMB COUNTY

O ATTN: ACCTS PAYABLE

23001 9 MILE ROAD

Saint Clair Shores , MI 48080-

T USA

0

www.jcichemicals.com

*** ORIGINAL ***

JCI JONES CHEMICALS, INC..
RIVERVIEW BRANCH LOCATION

18000 PAYNE AVENUE RIVERVIEW, MI 48192

Phone: (734) 283-0677

Fax: (734) 283-0979

email: cs@jcichem.com

INVOICE

Inv Date Invoice #

05/19/2020 821337

Date Shipped Order/BOL #

05/19/2020 608087

S ID#:1

. CHAPATON PUMPING STATION

P 23001 NINE MILE RD

ST CLAIR SHORES, MI 48080-

T USA

0

	Customer	PO#	FOB Remark	Freight	Terms	Sales ID	
	VBL-PETE TRO	MBLEY	Destination		ered	NORTH	
	Release #		Ship Via	Terms	Due Date	Discount Due Date	
			Harold Marcu	N 30	06/18/2020	6/18/2020	
Units	Package		Product Name	Total Quantity	Unit Price	Amount	
4,466.00	1 Gal Bulk		HYPOCHLORITE SOLUTION, SS150 1201-001 BULK (\$85 Stop Fee) (+ fsc)	4,466.0000/GaI	0.9000 /Gal	4,019.40	
General F	Remarks:		CE TO: michelle.houvener@macombgov.org <> ER: HAROLD MARCUS 140				

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Total:

4,037.90

JCI Jones Chemicals, Inc.

MSC# 729 PO BOX 830674

Remit To:

Birmingham, AL 35283-0674 USA

PLEASE PAY THIS AMOUNT





24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	5/15/20

4. SET ID 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 Intruments	V67870	01	IN-US20-1304	5/8/2020	\$	2,140.00		

	General	Ledger	Job L	edger	16. Work	OPTIONAL					Ų	×
	12. Org Key	13. Object	Cost Center (CCNT)	15. Object	Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)		19. Amount	20. DIV	21. MISC	22. Sep (
	8210017M	93002	: CC0004	93002	: do0810W:	8 1/2 Mile Relief :	Cust No 625061, Reagent set	\$	774.90	GEN		
	8200017M	93002	: CC0004	93002	20031au	8 1/2 Mile Relief :	Cust No 625061, Reagent set	\$	1,275.90	GEN		0
	8200017M	72901	: CC0004	72901	: Molton	8 1/2 Mile Relief :	Shipping/Insurance	\$	89.20	GEN		0
1			:		: :			-				_
			:		:	:		-				_
			:			:		-				-
			:		: :							V 09/20

23. Total: \$ 2,140.00

25. Finance Officer:	BM/mh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:	133	31. Project Balance:	N/A
27. Engineers:	7	32. Staff Date:	5/19/2020
28. Managers:		33. Board Date:	6/8/2020
29. Coordinator:		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 PW 23001 E. 9 Mile Rd St Clair Shores, MI 48080 Delivery address

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

Invoice No. IN-US20-1304

IL 60090 Wheeling, 05/13/2020

Page1/1

Your Order No:

Email Kristofer 050720

Your Contact:

Kristofer Benda

Customer No:

Date:

625061 05/08/2020 Payment Condition:

net 30 days

Prices VAT:

Sales Tax not included

Delivery Terms: ex works

Pos	Part-No.	Items	Quant.	Price	TOTAL USD
	, 4, 1, 1, 1, 1	TO TO THE TOTAL PROPERTY OF THE TOTAL PROPER	Quant	1 1100	101712 000
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.	3	258.30	774.90
20	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"!	3	425.30	1,275.90
		Total order value			\$2,050.80
		Freight and Insurance			89.20
		TOTAL USD			\$2,140.00
		UPS TRACKING 1ZA154F50351042138			

1ZA154F50351337347



6. VENDOR NAME (Check to be issued to)

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

7. VENDOR NUMBER

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

4. SET ID 5. POST DATE

AMPSZOOGAN

-1						C. T. D. D. C. C. D. D.	01 111101001	to (mist to other other)	to, ilitoloc buto	_	11, 1114010	C Amount		
	Transform	mer Inspection	on Retrofill	V70	0438	01		28328	5/21/2020	\$			52	20.00
						CHILD RECO	RD DETAIL II	NFORMATION						
Line	Genera	Ledger 13. Object	Job L 14. Cost Center (CCNT)	edger 15. Object	16. Work Order Number	OPTION 17. Secondary (MAX = 16 CHA	Reference	18. Description (MAX = 3	30 CHARACTERS)	19.	Amount	20. DIV	21. MISC	22. Sep CK
A	8210017M	93002	: CC0004	93002	: WO18006	: 8 1/2 Mile	Relief :	Ac#MAC230, Orde	er #00019110	\$	520.00	GEN		
В			:		:	:	:							
С			:		:	:	:							
D			:		:	:				-				
E			:		:	:	:							
-										1				

PARENT RECORD INFORMATION

9. Invoice No (MAX = 16 CHARACTERS)

8. ADDR CODE

REV 09/2018

23. Total: \$

520.00

11. Invoice Amount

t/test transformer		
25. Finance Officer: BM Mh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:	31. Project Balance:	N/A
27. Engineers:	32. Staff Date:	6/2/2020
28. Managers:	33. Board Date:	6/8/2020
29. Coordinator:	34. Select For Pay Date:	



PAGE

INVOICE DATE INVOICE NO

5/21/2020 28328

MAC230 Macomb County Public Works Accounts Payable L 23001 East 9 Mile Road D St. Clair Shores, MI 48080 T

MAC230

Macomb County Pump Station Chapaton Pump Station

23001 Nine Mile Road

St. Clair Shores, MI 48081

T

0

TOTAL DUE

520.00

SLS1	SLS2	DUE DATE	DISC DU	E DATE	ORDER NO	ORDER DA	TE SHIP N	10	
DC		6/20/2020	5/21/202	0	00019110	5/7/2020			
TERMS	DESCRIP	TION	CUSTOMER PO	ONO		SHIP VI	4		SHIP DATE
n/30			Chapaton-Verba	al					5/19/2020
ITEM ID	1		TX CL	UNITS	ORD	ERED	SHIPPED	UNIT PRICE	EXTENSION
zz01000	02		1	EA		1.0000	1.0000	520.0000	520.00

inspect/test/ir oil filled

0

Furnish equipment, material, and labor to inspect and sample transformer, and perform a thermographic inspection of the transformer.

JOB ID: 20200502

Phase ID: 001

Dissolved Gas test on Chap. W. Transformer

We appreciate your business.

-	TAXABLE	NONTAXABLE	FREIGHT	SALES TAX	MISC	TOTAL
-	0.00	520.00	0.00	0.00	0.00	520.00
-					TOTAL DUE	520.00

40 - 43



6. VENDOR NAME (Check to be issued to)

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

7. VENDOR NUMBER

2. PHONE #	3. DATE
95966	5/12/20

11. Invoice Amount

975.00

REV 09/2018

4. SET ID 5. POST DATE

10. Invoice Date

23. Total: \$

PARENT RECORD INFORMATION

9. Invoice No (MAX = 16 CHARACTERS)

	Wyatt	Peformance	& Fab	V72	2892	02 10018 5/8/2020 \$		\$ \$		975.00			
Ī						CHILD RECO	RD DETAIL II	NFORMATION					
١.	Genera	Ledger	Job L	edger	16. Work	ОРТІОІ	VAL					MISC	× ×
Line	12. Org Key	13. Object	Cost Center (CCNT)	15. Object	Order Number	17. Secondary (MAX = 16 CHA		18. Description (MAX =	30 CHARACTERS)	19. Amount	20. DIV	21. MI	22. Sep
А	8210017M	93003	: CC0004	93003	: WO18006	8 1/2 1	Mile :	Repairs to Du	ump Truck	\$ 731.25	GEN		
В	8210072M	93003			:	Mart	in :	Repairs to Di	ımp Truck	\$ 146.25	GEN		0
С	8713018M	93003	:		:	SECWI	WDS :	Repairs to Di	ump Truck	\$ 97.50	GEN		0
D			:		:		:						
E			:		: •								
F			:										
G			:		:		:	2					

8. ADDR CODE

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:		*	

25. Finance Officer:	Bulmh	30. Drain:	8 1/2; Martin; SEMCWWDS
26. Chief Deputy:	B	31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	5/19/2020
28. Managers:		33. Board Date:	6/8/2020
29. Coordinator:		34. Select For Pay Date:	

Wyatt Performance & Fab, LLC.

28069 Amada Ridge Rd Richmond, MI 48062 586-473-6373 wyattperfomance@yahoo.com

INVOICE

BILL TO DPWK Finance Department 21777 Dunham Rd. Clinton Township, MI 48036
 INVOICE
 10018

 DATE
 05/08/2020

 TERMS
 Net 30

 DUE DATE
 06/07/2020

P.O. NUMBER 2510

DESCRIPTION	QTY	RATE	AMOUNT
First Repair: Left rear mud flap mount. Second Repair: Truck box, remove aprx 6' material per side of box.	1	975.00	975.00

BALANCE DUE	\$975.00
Estimate Summary	
Estimate 1007	975.00
This invoice 10018	\$975.00
Total invoiced	975.00

	2020			REMAINING	
DESCRIPTION	FINAL BUDGET	ENCUMBERED	ACTUAL	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		10,976	5,488	66.7%
Total Revenue Accounts	7,479,282	-	8,228,272	(748,990)	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		33,762	41,238	45.0%
Chapaton Improvements-Office Space	500,000		12,647	487,353	2.5%
Disinfection system upgrade (Design and Construction)	1,000,000		48,375	951,625	4.8%
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		287,707	912,293	24.0%
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		28,380	46,220	38.0%
Other Professional Srycs	46,800		36,864	9,936	78.8%
Personnel Services	979,953		224,658	755,295	22.9%
Repair & Maintenance	148,500		94,761	53,739	63.8%
Pumping and screening improvements	1,150,000		104,268	1,045,732	9.1%
SRF Replacement Reserve	259,215			259,215	0.0%
Scada System	243,839		118,793	125,046	48.7%
Utilities	273,125	** **.	184,227	88,898	67.5%
Total Expense Accounts	7,479,282	 	1,930,345	5,548,937	25.8%

	O&M Balance 9/30/2019	O&M	Total 5/31/2020
Cash - Operating	8,846,231	6,297,927	15,144,158
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		8,228,272	8,228,272
Expenditures		1,930,345	1,930,345
			0
Equity*	8,846,231		15,144,158

	Detail	of	2019	Equity*
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Detail of 2013 Equity							
Disinfection system upgrade (Design and Construction)	100,000 I	Basin Expansion Design	450,000				
RTB/PS Ventilation Design	120,000 I	Pumping and screening improvements	1,215,000				
Chapaton Improvements-Office Space	228,000 l	PLC Replacements at Chapaton East	40,000				
In-System Storage Design (Gates on 8.5 Tunnel) 4	425,000	SRF Replacement Reserve	1,814,505				
9 Mile & 8 1/2 Mile Rehab	67,800 I	Expansion Reserve (From State)	3,000,000				
Scada Reserve 1	109,025 (Capital Reserve	936,901				
Phase 1 TRC Basin Equipment**	100,000 E	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