MACOMB INTERCEPTOR DRAIN SEPTEMBER 11, 2017 11:00 A.M. AGENDA

		Page
1.	Call of meeting to order and roll call	
2.	Approval of Agenda for September 11, 2017	
3.	Approval of Minutes for August 7, 2017	3
4.	Public participation	
5.	15 Mile Interceptor Repair Project Update – Evans Bantios	
6.	Motion: Approve Change Order No. 5 from Dan's Excavating, Inc. to include 15 Mile Road/Eberlein Drive Restoration for an increase of \$3,426,968.10 – Evans Bantios	5
7.	Motion: Approve Change Order No. 1 for RedZone Robotics, Inc. for re-inspection of the Romeo Arm downstream of the sinkhole, 221 linear feet of the Edison Corridor and 7,578 linear feet of the North Gratiot Interceptor for an increase of \$70,730.30 – Vince Astorino	17
8.	Motion: Approve the Administrative Consent Order with the MDEQ – Vince Astorino	20
9.	Motion: Approve payment of invoices on attached spreadsheet, as presented – Brian Baker	47
10.	MIDD Financial Report – Bruce Manning	5 1
11.	Old Business	51
12.	New Business	
13.	Adjourn	

Next Regular Meeting

October 16, 2017 at the Office of the Macomb County Public Works Commissioner, 21777 Dunham Road, Clinton Township, Michigan 48036 at 11:00 a.m.

MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT RICHMOND TWO LENOX TWP NEW HAVEN WASHINGTON TWP. W BALTIMOR SHELBY TWP. MACOMB TWP. HISTERPIELD TWI UTICA CLINTON TWP. LAKE ST. CLAIR HARRISON TWP.

COLLAPSED

SEWER



FRASER

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LEGEND

PUMP STATION METER WWTP INTERCEPTOR FORCE MAIN An adjourned meeting of the Intra-County Drainage District for the MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham Road, Clinton Township, Michigan, on August 7, 2017 at 11:26 A.M.

PRESENT:

Candice Miller, Chair

Bryan Santo, Member

Robert Mijac, Member

ALSO PRESENT: Brian Baker, Chief Deputy, Karen Czernel, Deputy, Keith Graboske, P.E., Chief Engineer, Vincent Astorino, Engineer II, Evans Bantios, Engineer II, Dan Heaton, Public Relations Manager, Anthony Forlini, Operations Manager, Bruce Manning, Financial Manager, Thomas Stockel, Construction Engineer, Barbara Delecke, Administrative Services, Macomb County Public Works; Don Coddington, Chesterfield Township; Jared Beaudoin, City of Sterling Heights; David Richmond, P.E., Spalding DeDecker Associates

The meeting was called to order by the Chair, Candice Miller. The agenda was approved as presented.

Minutes of the meeting of July 10, 2017 were presented and approved on a motion by Mr. Mijac, supported by Mr. Santo and unanimously carried.

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

Mr. Bantios updated the Board on the sinkhole repair. Dan's Excavating, Inc. is two days from having the old pipe completely removed from the system. Jay Dee Contractors will begin lining the sewer upstream from the sinkhole. Doetsch has been vactoring the sewer and Inland Waters has been grouting voids in the pipe from CS-3 to the sinkhole. There have been resident complaints about odors; however, the meters are not reading dangerous levels. The flow could be restored to the sewer by Labor Day. A restoration plan is being put together by Dan's Excavating to have 15 Mile Road opened up by year's end. The cost to date on the sinkhole is estimated at \$41 million.

On August 4, 2017, a vehicle drove through the job site. One of the backup generators was damaged.

RedZone Robotics is on-hold for the sewer inspections until flow is restored to the pipe. They are about 60 percent complete on the inspections for the MID. A portion of the pipe, east of Garfield Road was repaired in 2010 and is failing again. There are a few suspect areas that will be investigated to ensure there are no voids in the soil surrounding the pipe. The goal is have inspections completed by January 2018 and a full project plan completed by June 2018.

Each year, the two forcemains at the North Gratiot Pump Station, which are 5 miles long and 22-inches in diameter, are cleaned out. Flowmore Services provided the best lowest bid of three companies and performed the same service last year. Mr. Astorino recommended hiring Flowmore Services to perform the cleanout.

A motion to award the contract to Flowmore Services in a not to exceed amount of \$16,435.00 for cleanout of two forcemains at the North Gratiot Pump Station was made by Mr. Mijac, supported by Mr. Santo.

Ayes: Mijac, Santo, Miller

Nays: None

Motion approved.

The Chair presented the invoices totaling \$8,718,384.97 to the board for review and approval.

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

Ayes: Mijac, Santo, Miller

Nays: None

Motion approved.

The financial report given by Mr. Manning was received and filed as submitted.

The next regular meeting will be held on September 11, 2017, 11:00 a.m. at the Macomb County Public Works Office.

The meeting was adjourned at 11:44 a.m. on a motion by Mr. Mijac, seconded by Mr. Santo, and unanimously approved.

Candice S. Miller

Macomb County Public Works Commissioner

STATE OF MICHIGAN COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taken by the Intra-County Drainage District shown on the attached set of minutes, on August 7, 2017, 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

Macomb County Public Works Commissioner

DATED: 8/8/17

8852.bd





Public Works Commissioner Macomb County

September 7, 2017

MEMORANDUM

TO:

Brian Baker, Chief Deputy

FROM:

Evans Bantios, P.E.

Manager of Construction and Maintenance

RE:

15 Mile Road Sinkhole Project

Dan's Excavating Inc.

We negotiated with Dan's Excavating Inc. on unit prices for the restoration of the roadway and associated areas. We compared those prices to other projects that were bid this year. The unit prices are comparable. We request that the Macomb Interceptor Drain Drainage District Board approve Change Order No. 5 for the restoration portion of the 15 Mile Road Shaft Interceptor Repair Contract. Change Order No. 5 is for \$3,426,968.10

Attachments

8891.eb

OFFICE OF THE MACOMB COUNTY PUBLIC WORKS COMMISSIONER CANDICE S. MILLER

Owner:	CHAN Macomb Interceptor Drain Dra	IGE ORDER FORM inage District (MIDD		Change Order No.	FP 0.5 2017	b
· · · · · · · · · · · · · · · · · · ·	21777 Dunham Rd., Clinton Tw	Day Havy Company Company			SEP U.J ZWII	k win
Contractor:	Dan's Excavating, Inc. (DEI)			E 14	WH	k
	12955 23 Mile Road Shelby Twp., MI 48315			ها فيز		
Project:	PCI-12A 15 Mile Road Intercep	tor Repair – Recove	ry Shaft			
The Contract is	modified as follows upon execut	ion of this Change (Order:	Date:	08/31/17	
	Previous Change Orders:	Change Order # 1, 2, 3 and 4		Change from Previous Change Orders:	0	
Contract T	imes Net Change to Substantial Completion this Change Order:	0 Days		Times Net Change to mpletion this Change Order:	0 Days	er er
Subst	antial Completion Date with All Approved Change Orders:	10-30-17		npletion Date with All roved Change Orders:	12-29-17	KANINGARAN MERANGAL (
Description:		MIDDD 1	A PUT	Dale 9	-5.17	5
PCI-12A 15 Mil	e Road Interceptor Recovery Sha	aft	knud	Calef 5 - purty	ini manananan mananan mananan di mananan Talah	engeros estam
Adjustments to	the Recovery Shaft Contract fo	r:		Engiresor(s)Z	(BOOK BOOK BOOK BOOK BOOK BOOK BOOK BOOK	STANDON OF STREET
accommodate	the "15 Mile Road / Eberlein Driv opening 15 Mile Road to traffic awings and DEI unit price cost qu	on or before Decem	k into the been 22, 201	Recovery Shaft" Conti	ract to ched S	

Change Order No. 005 (WCD#5) is issued to DEI to incorporate the 15 Mile Road / Eberlein Drive Restoration work into the "Recovery Shaft" Contract to accommodate opening 15 Mile Road to traffic on or before December 22, 2017. The attached Engineering plan and DEI cost quotation detail the changes to the "Recovery Shaft" contract.

Based upon the attached Engineering drawings DEI has provided a unit price cost quotation including clarifications and exclusions for the Engineer estimated project quantities. These unit prices have been evaluated by the Engineer and found to be in accordance with recent competitively bid projects of similar size and scope. This DEI quotation includes the Item "Open to Traffic – Location 2" which accounts for the cost for cold weather concreting, grade protection and schedule acceleration to guarantee that 15 Mile Road will be restored on or before December 22, 2017. It is understood that DEI will make every concerted effort to complete the entire scope of restoration work on or before the aforementioned date.

The City of Sterling Height has requested additional pavement removal and replacement along 15 Mile Road west of Hayes Road at their expense based on the unit price quotation provided by Dan's Excavating Inc. An agreement for cost and schedule between the MIDDD and the City of Sterling Heights is to be ratified prior to DEI's engagement of the work.

No time extension is being granted with this Change Order as the Owner, Engineer and contractor acknowledge this Change Order includes costs to mitigate any potential impacts on the restoration of 15 Mile Road for which the Contractor is expected to mobilize additional resources as necessary and optimize all available time (including relaxation of work hour constraints if and where necessary) to achieve the aforementioned December 22, 2017 milestone date.

Staff 9.5.17

OFFICE OF THE MACOMB COUNTY PUBLIC WORKS COMMISSIONER CANDICE S. MILLER

CHANGE ORDER FORM	Change Order No.	Five	

This Change Order represents a collaborated effort between the Office of the Macomb County Public Works, and
Dan's Excavating Incorporated for agreement on cost and schedule impacts to the "Recovery Shaft" project
esulting from the proposed "15 Mile Road / Eberlein Drive Restoration" additional work.

The Cost adjustment to the Contract Price for this Change Order No. 5 is as follows:

Total Cost adjustment to the "Recovery Shaft" Contract, per this Change Order 5 is: ADD \$3,426,968.10

The adjustment to the "Recovery Shaft" Contract Time, per this Change Order 5 is: 0 Days

The "Recovery Shaft" Contract Substantial Completion date, remains: October 30, 2017.

The "Recovery Shaft" Contract Final Completion, remains: December 29, 2017

Attachments:

15 Mile Road / Eberlein Drive Restoration drawings WCD No. 004- Pavement Restoration

Contract Price Prior to this Change Order:		\$	35,912,743.1
Net Change of This Change Order:		\$	3,426,968.1
Contract Price Incorporating this Change Order:		\$	39,339,711.2
Lille	8/31/17		
Recommended by Engineer: Louis Urban, PE	Date		
Senior Project Manager, Anderson, Eckstein & Westrick, Inc.	ω 1		
Engels Donto	0/31/17	_	
Accepted by Owner: Evans Bantios, P.E.	Date		
Manager of Construction and Maintenance,			
Macomb County Public Works			
N'A	9-6	-17	
Owner Authorization: Candice S. Miller	Date		- H2 1
Macomb County Public Works Commissioner	2007/08/	/	
Owner Authorization: Candice S. Miller		-17 /	



WORK CHANGE DIRECTIVE FORM SECTION 00 63 49

			8	Work Change Directive No. 004
Date of Issua	ince: Au	ugust 31, 2017	Effective Date:	August 31, 2017
Owner:	Macomb District	o Interceptor Drain Drainage	Owner's Contract No.:	NA
Contractor:	Dan's Ex	cavating, Inc. (DEI)	Contractor's Project No	. :
Engineer:	Anderso	on, Eckstein and Westrick, Inc.	Engineer's Project No.:	0211-0184
Project:	PCI-12A	15 Mile Road Interceptor	Contract Name:	Interceptor Repair Recovery Shaft
Drive Resto based upon	ration Pr the atta	rected to proceed promptly with the oject" Changes to accommodate on the ched Engineering drawings and DE	pening 15 Mile Road to	ncorporate the "15 Mile Road / Eberlein traffic on or before December 22, 2017 n.
work into t	ge Direct he "Reco		date opening 15 Mile Ro	5 Mile Road / Eberlein Drive Restoration and to traffic on or before December 22, to the "Recovery Shaft" contract.
exclusions of found to be the Item "Coschedule a understood the attache. This Change Excavating	for the E in accor open to T cceleration that DE d docum e Order re	Ingineer estimated project quantity redance with recent competitively be a fraffic – Location 2" which account on to guarantee that 15 Mile Reference to a foremention or before the aforemention or before the aforemention of the contract of of th	ties. These unit prices had bid projects of similar size its for the cost for cold wood will be restored of the complete the entire ened date.	ost quotation including clarifications and ave been evaluated by the Engineer and e and scope. This DEI quotation includes reather concreting, grade protection and in or before December 22, 2017. It is scope of restoration Work described in Macomb County Public Works, and Dan's ecovery Shaft" project from the "15 Mile"
Attachmen DEI Itemize	ts: d Cost Qı		ted August 2017	
WCD#5 dire	cts the (nange Directive: Contractor to proceed promptly wontract Time (if any), is issued due		herein, prior to agreeing to changes on the following]
□ No	on-agreei	ment on pricing of proposed chang	ge.	
⊠N	ecessity	to proceed for schedule or other P	roject reasons.	* .
Estimated C	hange in	Contract Price and Contract Time	s (non-binding, prelimin	ary):
Contract Pri	ce \$	3, 426, 968.10 (Unit price Extens	sion) [Increase]	
Contract Tin	ne	Zero (0) days (*)	[No change]	
			*	



WORK CHANGE DIRECTIVE FORM SECTION 00 63 49

Directiv expecte constra	e includes costs to mitigate any d to mobilize additional resourc	potenti es as ne chieve t	al impacts on the restoration of	15 Mile e time (and contractor acknowledge this Road for which the Contractor is including relaxation of work hour nilestone date.
basis of	estimated change in Contract i	riice.			1
□ Lu	mp Sum		□ Unit Price		1
-	st of the Work		Other (See At	tached)	8
	RECOMMENDED:		AUTHORIZED BY:		RECEIVED:
1	RECOMMENDED.		AOTHORIZED 91.	i.	RECEIVED.
	~7////				1111
Ву:	Tour	By:	(-018/7 GaM)	By:	
	Engineer (Authorized Signature)		Owner (Authorized Signature)		Contractor (Authorized Signature)
Title:	Project Manager, AEW	Title:	Manager of Construction, MCPW	Title:	Project Manager
Date:	August 31, 2017	Date:	August 31, 2017	Date:	August 31, 2017



Phone: 586-254-2040 • Fax: 586-254-5840

12955 23 Mile Road • Shelby Township, Michigan 48315

August 28, 2017

Anderson, Eckstein, and Westrick, Inc. 51301 Schoenherr Road Shelby Township, Michigan 48315

DEI/AEW-009

Attn: Mr. Lou Urban

Re:

Pavement Restoration Quote - Revised 8/28/2017

AEW Project 0211-0183

PCI-12A 15 Mile Road Interceptor Repair Recovery Shaft

Mr. Urban,

Dan's Excavating appreciates the opportunity to provide a revised quote for the pavement restoration on the above reference project.

Our quote is based on the quantity breakdowns provided by AEW dated 08/21/2017 and plans dated August 2017.

For scheduling purposes, we are requesting a written response to our quote no later than September 8, 2017.

Should you have any questions please contact me at your earliest convenience.

Sincerely, DAN'S EXCAVATING, INC.

Dennis

Rozanski

Dennis Rozanski

Vice-President

Restoration Quote Clarifications / Exclusions

- Quote based upon reaching a mutual agreeable schedule with the owner.
- We do not include layout, permits, inspection cost, testing of any kind and disposal of contaminate material.
- We do not include any electrical and traffic signal repairs of any kind except what is specifically shown on the plans.
- We do not include any temp modifications to traffic signals to maintain traffic except what is specifically shown on the plans.
- Quote does not include cold weather protection of any kind except for concrete paving as outlined on AEW's breakdown labelled "Engineers Estimate 15 Mile Interceptor Repair Sta.
 46+83 to 57+38.8". This cost is included in the contact pay item "Open to Traffic Incentive / Winter Conditions".
- Depending on weather conditions, work completed between November 1, 2017 and April 15, 2018 may require an additional cost for cold weather protection if work requested by the owner.
- Quote includes beginning work at "Open to Traffic Incentive / Winter Conditions" location on or before October 30, 2017.
- Quote includes completing items highlighted yellow on the breakdown labeled "Open to Traffic

 — Incentive / Winter Conditions" safely to vehicle traffic on or before December 22, 2017
 including winter conditions.
- Any Work completed in 2018 would require a 7% add for DEI items and 10% for paving items.
- Prices based on 2012 MDOT Standard Specifications for Construction.
- Structure Cover, Adj, Case 2 of any kind does not include a new casting.
- Structure Cover, Adj, Case 2 includes adjustment with brick of block only. Replacement of precast sections is not included.
- Quote based on completing the Utica Road base course concrete with a full weekend closure and utilizing full depth concrete and steel plates on or before October 22.
- Quote based on completing the Utica Road asphalt paving with a full weekend closure on or before November 4, 2017 if County requires this intersection to be capped with asphalt.
- Unit prices cover work shown on the plans dated August 2017 from AEW. We reserve our rights to requote items of work added at "other" locations on the project.
- Site grading and station grading does not include topsoil placement or restoration.
- "Reset Fence, Modified" includes an average of "Fence, Wood Privacy, Double Faced, 6 FT, Modified" with Wolmanized material and "6 Ft Aluminum Fence"
- Reset Light pole includes pouring a new foundation and resetting existing parking lot light pole.
 Price also includes tieing into existing wire and conduit within 5 feet of foundation.
- "TS, Bag, Rem" includes removing bag only.
- Quote does not include furnishing any new traffic signals.



ANDERSON, ECKSTEIN & WESTRICK, INC. 51301 Schoenherr Road Shelby Township, MI 48315 Phone: 586-726-1234 Fax No: 586-726-8780

DEI Proposal 15 Mile Interceptor Repair

AEW PROJECT NO. 0211-0186

PROJECT (S): 15 Mile Paving Replacement and Restoration

OWNER:

Office of Macomb County Public Works

WORK ITEM	QUANTITY U	INIT	UNIT PRICE		AMOUNT
Mobilization, 8% Max.	1.00 LSU			\$	271,000.00
Pavt, Rem, Modified	15,495.00 Syd			\$	98,703.15
Curb and Gutter, Rem	201.00 Ft	_\$		\$	1,925.58
Cold Milling HMA Surface	5,155.00 Syd	d _\$	4.26	\$	21,960.30
Sidewalk, Rem	1,486.00 Syd		5.15	\$	7,652.90
Driveway, Rem	927.00 Syd		9.50	\$	8,806.50
Station Grading	37.80 Sta	\$	9,400.00	\$	355,320.00
Site Grading	6.10 Acr	re \$	4,500.00	\$	27,450.00
Subgrade Undercutting	3,390.00 Cyc	re \$ d	22.00	\$	74,580.00
Aggregate Base, 6 inch	173.00 Syd	d _\$	16.00	\$	2,768.00
Aggregate Base, 8 inch	19,522.00 Syd	d _\$, 19.00	\$	370,918.00
Maintenance Aggregate	995.00 Tor	n _\$	10.00	\$	9,950.00
Dr Structure Cover, Adj, Case 2	18.00 Ea	\$	450.00	\$	8,100.00
San Structure Cover, Adj, Case 2	11.00 Ea	\$	450.00	\$	4,950.00
Water Structure Cover, Adj, Case 2	4.00 Ea	\$	450.00	\$	1,800.00
External Structure Wrap, 18 inch	33.00 Ea	\$	300.00	\$	9,900.00
Underdrain, Subgrade, 6 inch	3,799.00 Ft	\$	12.82	\$	48,703.18
HMA, 13A	1,011.00 Tor	n \$	91.00	\$	92,001.00
HMA, 3C	136.00 Tor	n \$	150.00	\$	20,400.00
HMA, 2C	30.00 Tor		180.00	\$	5,400.00
HMA Approach, 13A	28.00 Ton	n \$	240.00	\$	6,720.00
HMA Approach, 3C	28.00 Ton	n \$	240.00	\$	6,720.00
HMA Approach, 2C	26.00 Ton	n \$	180.00	\$	4,680.00
Conc Pavt with Integral Curb, Nonreinf, 8 inch	1,039.00 Syd	1 \$	50.50	\$	52,469.50
Conc Pavt with Integral Curb, Nonreinf, 9 inch	11,541.00 Syd	1 \$	55.20	\$	637,063.20
Conc Base Cse, Nonreinf, 9 inch	2,070.00 Syd	s	60.50	\$	125,235.00
Joint, Plane-of-Weakness, W	8,152.00 Ft	\$	2.40	\$	19,564.80
Lane Tie, Epoxy Anchored	1,631.00 Ea	\$	7.00	\$	11,417.00
Driveway, Nonreinf Conc, 6 inch, Modified	144.00 Syd		48.50	\$	6,984.00
Driveway, Nonreinf Conc, 8 inch, Modified	2,015.00 Syd	1 \$	50.50	\$	101,757.50
Curb and Gutter, Conc, Det F4	571.00 Ft	\$	24.50	\$	13,989.50
Curb and Gutter, Conc, Det F6	480.00 Ft	\$ \$ \$	25.00	\$ \$ \$	12,000.00
Driveway Opening, Conc, Det M	1,302.00 Ft	\$	27.50	\$	35,805.00
Detectable Warning Surface	59.00 Ft	\$	35.00	\$	2,065.00
Sidewalk, Conc, 4 inch	15,163.00 Sft	\$	5.50	\$	83,396.50
Sidewalk, Conc, 6 inch	178.00 Sft	\$	6.50	\$	1,157.00
Sidewalk Ramp, Conc, 4 inch	390.00 Sft	\$	7.01	\$	2,733.90
Sidewalk Ramp, Conc, 6 inch	1,870.00 Sft	\$ \$	7.49	\$	14,006.30
Sidewalk, Conc, 4 inch, Modified (with Curb Face)	427.00 Sft		10.51	\$	4,487.77
Surface Restoration, Sodding	6,370.00 Syd	\$	4.34	\$	27,645.80
Seeding	1,785.00 Lb	\$	4.45	\$	7,943.25
Mulch	38,981.00 Syd	1 \$	0.35	\$	13,643.35
Topsoil Surface, Furn, 3 inch	45,351.00 Syd	\$	3.89	\$	176,415.39
Water, Sodding/Seeding	4,035.00 Uni	it \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2.32	\$	9,361.20
Irrigation System, Furn and Install	4,600.00 Ft	\$	3.25	\$	14,950.00
Sprinkler Head, Adj	205.00 Ea	\$	40.00	\$	8,200.00
Sprinkler Head, Furn and Install	225.00 Ea	\$	55.00	\$	12,375.00
Tree, Replace	48.00 Ea	\$	674.00	\$	32,352.00
Erosion Control, Inlet Protection, Fabric Drop	37.00 Ea	\$	36.83	\$	1,362.71
Erosion Control, Inlet Filter	2.00 Ea	\$	36.83	\$	73.66
Sign, Type III, Rem	9.00 Ea	\$	40.00	\$	360.00



ANDERSON, ECKSTEIN & WESTRICK, INC. 51301 Schoenherr Road
Shelby Township, MI 48315
Phone: 586-726-1234
Fax No: 586-726-8780

DEI Proposal

15 Mile Interceptor Repair

PROJECT (S): 15 Mile Paving Replacement and Restoration

OWNER:

Office of Macomb County Public Works

AEW PROJECT NO. 0211-0186

WORK ITEM	QUANTITY UNIT	. (JNIT PRICE		AMOUNT
Sign, Type IIIA	2.00 Sft	\$	153.00	\$	306.00
Sign, Type IIIB	9.00 Sft	\$	155.25	\$	1,397.25
Sign, Type VB	2.00 Sft	\$	288.00	\$	576.00
Post, Steel, 3 lb	98.00 Ft		7.50	\$	735.00
Post, Wood, 6 inch by 8 inch	56.00 Ft	\$	26.85	\$	1,503.60
Pavt Mrkg, Longit, 6 inch or Less Width, Rem	11,726.00 Ft	\$	0.55	\$	6,449.30
Recessing Pavement Markings, Longit	15,151.00 Ft	\$	0.55	\$	8,333.05
Recessing Pavement Markings, Transv	1,721.00 Sft	\$	2.95	\$	5,076.95
Pavt Mrkg, Polyurea, 4 inch, Yellow	11,001.00 Ft	\$	0.65	\$	7,150.65
Pavt Mrkg, Polyurea, 4 inch, White	4,150.00 Ft	\$	0.65	\$	2,697.50
Pavt Mrkg, Waterborne, 4 inch, White	504.00 Ft	\$	0.55	\$	277.20
Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	3.00 Ea	\$	165.00	\$	495.00
Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	5.00 Ea	\$	165.00	\$	825.00
Pavt Mrkg, Polyurea, 12 inch, Crosswalk	709.00 Ft	\$	5.95	\$	4,218.55
Pavt Mrkg, Polyurea, 24 inch, Stop Bar	190.00 Ft	\$	12.50	\$	2,375.00
Minor Traf Devices	1.00 LSUM	\$	15,000.00	\$	15,000.00
Traf Regulator Control	1.00 LSUM	\$	5,000.00	\$	5,000.00
Traffic Control Equipment	1.00 LSUM	\$	0.01	\$	0.01
Project Cleanup	1.00 LSUM	\$	17,500.00	\$	17,500.00
Open to Traffic - Incentive / Winter Conditions	1.00 LSUM	\$	239,560.00	\$	239,560.00
Project Supervision	1.00 LSUM	\$	65,000.00	\$.	65,000.00
Bonds	1.00 LSUM	\$	34,000.00	\$	34,000.00
Temp Gravel Drive, Rem	428.00 Syd	\$	10.60	\$	4,536.80
Reset Fence, Modified	352.00 Ft	\$	35.00	\$	12,320.00
Reset Light Pole	1.00 Ea	\$	7,452.00	\$	7,452.00
Barricade, Type III, High Intensity, Lighted, Furn	66.00 Ea	\$	80.00	\$	5,280.00
Barricade, Type III, High Intensity, Lighted, Oper	66.00 Ea	\$	0.01	\$	0.66
Lighted Arrow, Type C, Furn	3.00 Ea	\$	850.00	\$	2,550.00
Lighted Arrow, Type C, Oper	3.00 Ea	\$	0.01	\$	0.03
Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, White, Temp	737.00 Ft	\$	1.65	\$	1,216.05
Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp	13,490.00 Ft	\$	1.65		22,258.50
Plastic Drum, High Intensity, Furn	207.00 Ea	\$	20.00	\$	4,140.00
Plastic Drum, High Intensity, Oper	207.00 Ea	\$	0.01	\$	2.07
Sign, Type B, Temp, Prismatic, Furn	1,173.00 Sft	\$	6.00	\$	7,038.00
Sign, Type B, Temp, Prismatic, Oper	1,173.00 Sft	\$	0.01	\$	11.73
Pedestrian Type II Barricade, Temp	14.00 Ea	\$	200.00	\$	2,800.00
TS, Bag, Rem	6.00 Ea	\$	538.72	\$	3,232.32
TS, Span Wire Mtd, Rem	2.00 Ea	\$	858.09	\$	1,716.18
Geotextile, Separator	16,201.00 Syd	\$	2.76	\$	44,714.76
	TOTAL ESTIMATED CO	NSTRU	ICTION COST	\$	3,426,968.10
CONTINGENCIES (10%)					
	TOTAL	. ESTI	MATED COST		\$3,426,968.10

ANDERSON, ECKSTEIN & WESTRICK, INC. 51301 Schoenherr Road
Shelby Township, MI 48315
Phone: 586-726-1234
Fax No: 586-726-8780

ENGINEERS QUANTITIES

15 mile Interceptor Repair Sta. 46+83.0 to 57+38.8

AEW PROJECT NO. 0211-0186

PROJECT (S): 15 Mile Paving Replacement and Repairs

OWNER:

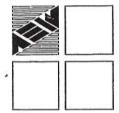
Macomb County Public Works

PREPARED BY:

Dan's Excavating 08/04/17

Items of work included in "Open to Traffic Incentive / Winter Conditions"

WORK ITEM	QUANTITY UNIT	UNIT PRICE	AMOU	NT
Mobilization (5% Max.)	1,00 LS	-		
Pavt, Rem, Modified	10,316.00 SY			
Cold Milling HMA Surface	1,752.00 SY		d-10	
Sidewalk, Rem	362.00 SY			
Driveway, Rem	28.00 SY			
Station Grading	15.21 Sta			
Aggregate Base, 6 inch	1,174.00 SY			
Aggregate Base, 8 inch	11,544.00 SY		Vienne -	
Dr Structure Cover, Adj, Case 2	13.00 EA			
San Structure Cover, Adj, Case 2	7.00 EA		Personal Company of the Company of t	
Water Structure Cover, Adj, Case 2	2.00 EA			
External Structure Wrap, 18 inch	22.00 EA		NAME OF THE OWNER OWNER OF THE OWNER	
Underdrain, Subgrade, 6 inch, Modified	2,099.00 LF			
HMA, 13A	132.00 Ton			
нма, зс	132.00 Ton			
HMA, 2C	22.00 Ton			
Conc Pavt with Integral Curb, Nonreinf, 7 inch	593.00 SY			
Conc Pavt with Integral Curb, Nonreinf, 8 inch	219.00 SY			
Conc Pavt with Integral Curb, Nonreinf, 9 inch	7,729.00 SY		Market Control	
Conc Base Cse, Nonreinf, 9 inch	1,663.00 SY		1-7-3-5	
Joint, Plane-of-Weakness, W	5,808.00 FT			
Lane Tie, Epoxy Anchored	723.00 EA		,———	
Driveway, Nonreinf Conc, 6 inch, Modified	26.00 SY			
Driveway, Nonreinf Conc, 8 inch, Modified	529.00 SY			
Curb and Gutter, Conc, Det F4	338.00 LF			
Curb and Gutter, Conc, Det F6	297.00 LF			
Driveway Opening, Conc. Det M	623.00 LF			
Detectable Warning Surface	76.00 FT			
Sidewalk, Conc, 4 inch	6,719.00 Sft		,	
Sidewalk, Conc, 6 inch	128.00 Sft			
Sidewalk Ramp, Conc, 4 inch	302.00 Sft			
Sidewalk Ramp, Conc, 6 inch	777.00 Sft			
Sidewalk, Conc, 4 inch, Modified (with Curb Face)	357.00 Sft			
Erosion Control, Inlet Protection, Fabric Drop	22.00 EA			
Sign, Type III, Rem	3.00 EA			700
Sign, Type IIIA	2.00 EA			
Sign, Type IIIB	8.00 EA			
Sign, Type VB	1.00 EA			
Post, Steel, 3 lb	112.00 FT		0	
Post, Wood, 6 Inch by 8 inch	28.00 FT			
Pavt Mrkg, Waterbourne, 4 inch, White	769.00 FT			
Pavt Mrkg, Waterbourne, 4 inch, Yellow	2,408.00 FT	1000		
Pavt Mrkg, Waterbourne, 12 inch, White	442.00 FT			William Cont
Minor Traffic Devices	1.00 LS			
Traffic Regulator Control	1.00 LS			
Traffic Control Equipment	1.00 LS			
Project Cleanup	1.00 LS			
Open to Traffic - Incentive / Winter Conditions	1.00 LS		-	
Project Supervision	1.00 LS			
Bonds	1.00 LS			
	TOTAL ESTIMATED CONSTR	UCTION COST	\$	-
CONTINGENCIES (10%)			\$	
	TOTAL EST	IMATED COST		\$0.00



ANDERSON, ECKSTEIN AND WESTRICK, INC.

51301 Schoenherr Road, Shelby Township, Michigan 48315 Civil Engineers • Surveyors • Architects 586-726-1234

MEMORANDUM

Macomb Interceptor Drain Drainage District (MIDDD) PCI-12A 15 Mile Road Interceptor Repair Recovery Shaft – Pavement Restoration August 31, 2017

The purpose of this memorandum is to provide a synopsis for the assignment of the "Pavement Restoration" project to Dan's Excavating Inc. as part of the "Recovery Shaft" scope of work.

The collapse of the 11-foot diameter, 64-foot deep Romeo Arm Interceptor Sewer on December 24, 2016 resulted in an intensive effort to bypass flows, stabilize soils and remediate community impacts under the "Emergency Contract". The Engineers developed "Recovery Shaft" contract documents, solicited bids, and through the competitive bidding process recommended award to Dan's Excavating Inc. (DEI) for the "Recovery Shaft".

After award to Dan's Excavating Inc. for the "Recovery Shaft", the investigation of the interceptor between Control Structure 3 (CS-3) and the collapse revealed that the compromised interceptor required the expansion of the Temporary Earth Retention System (TERS) an additional 20 lineal feet and also resulted in the Engineer's recommendation for "Slip Lining" the upstream interceptor continuous to CS-3. The Engineers developed "Slip Lining" contract documents and solicited bids. The competitive bidding process resulted in award to Jay Dee Contractors, Inc. for construction of 3,700 lineal feet of 9'2" diameter Glass Fiber Reinforced Polymer Mortar Pipe between the Repair Shaft and Control Structure 3. After negotiations between the Owner, Engineer, DEI and JDC the "Slip Lining" sub-contract was assigned under Change Order No. 4 to Dan's Excavating Inc. to perform the lining work within the "Recovery Shaft" contract.

As detailed above, the process for the interceptor repairs has been dictated by the progression of acquiring information on the extent of interceptor damage, preparing contract documents, bidding, contractor selection and then execution of the Contract work. As you are aware preparations for the "Pavement Restoration" work are also underway with the acquisition of cost quotations and engineering plan preparation. Due to schedule and cost considerations, the Engineering group, with the Owners concurrence, did not pursue the competitive bidding process, but alternatively negotiated with Dan's Excavating Inc. for the additional assignment of the "Pavement Restoration" project.

Schedule Considerations

Implementing a competitively bid "Pavement Restoration" contract following the completion of the "Recovery Shaft" would guarantee a delay of the restoration project into winter conditions. Bidding of the "Pavement Restoration" would also likely result in a third contractor working within the same footprint, or optionally, delaying the start of the restoration work based on the finish of the "Recovery Shaft" and demobilization of the Long Term Bypass Pumping (LTBP) system. Assignment of the "Pavement Restoration" work to DEI would allow for the engagement of portions of the restoration work prior to the completion of the recovery shaft and demobilization of the (LTBP) system, thus improving the ability to maintain schedule.



The "Recovery Shaft" contract includes cleaning and grouting of the interceptor. These activities were precursors to the "Slip Lining" work and initially had unknown durations. Implementing the "Slip Lining" work moved the cleaning and grouting activities into parallel critical paths with the excavation of the "Recovery Shaft". DEI accepted the Jay Dee Contractors "Slip Lining" sub-contract with a 30 day schedule extension concession due to the aforementioned unknown activity durations. This moved the substantial completion date from September 30, 2017 to October 30, 2017 and the final completion date from December 1, 2017 to December 29, 2017. The Engineering group working with Dan's Excavating, Inc. was able to decrease the durations of the pre and post activities to the "Slip Lining" work to compensate for some of the schedule slippage. Therefore, the 30 day extension may not be realized thereby increasing the probability of completing the entire scope of the "Pavement Restoration" project prior to the end of 2017.

Cost Considerations

There were also concerns associated with bidding the "Pavement Restoration" contract late in the construction season. As you are aware, the purpose of the bidding process is to ensure that the Owner receives the best pricing due to the competitive environment among contractors. Typically, paving projects are bid late winter or early spring, resulting in contractors being fully engaged with projects until the end of the construction season in late November. With the majority of the contractors already engaged in projects, the risk of receiving higher bids to compensate for the contractor's lack of resources or limitations in their availability is great. In short, the cost benefits from bidding the work out to ensure competitive pricing would likely be negated due to limited contractor availability.

Anticipating the potential schedule and cost concerns, the Engineering group prepared preliminary draft drawings and entered into discussions with DEI regarding pricing and interest to perform the "Pavement Restoration" work. DEI confirmed their interest, and using pricing from recent competitively bid projects, the Engineering group negotiated unit price costs. This approach ensured that the "Pavement Restoration" project is cost effective, is comparable to recent competitively bid projects, and safeguards contractor availability. In addition, the current demonstrated performance of DEI on the Recovery Shaft work as well as their recognized industry-wide reputation for completing difficult highway improvement projects on (or often ahead of) schedule suggests that their involvement with the pavement restoration work would likely result in a favorable completion of this task.

Conclusion

Aside from the initial "Emergency Contract", the phased approach to the interceptor rehabilitation overall scope of work has been dictated by the progression of acquiring information on the extent of interceptor damage, preparing contract documents, bidding, contractor selection and then executing the contract work. This is the preferred process, but due to the aforementioned reasons would result in higher costs and delays to the schedule for the "Pavement Restoration" work. DEI has provided a unit price cost quotation including clarifications and exclusions for the Engineer estimated project quantities. These unit prices have been evaluated by the Engineer and found to be in accord with recent competitively bid projects of similar size and scope. The DEI quotation includes the Item "Open to Traffic – Location 2" which accounts for the cost for cold weather concreting, grade protection, and schedule acceleration to guarantee that 15 Mile Road will be restored to an open to traffic condition on or before December 22, 2017. Therefore, the Engineering group, with the Owners concurrence, did not recommend and did not pursue the competitive bidding process, but optionally negotiated with Dan's Excavating Inc. for the assignment of the "Pavement Restoration" project.





Public Works Commissioner Macomb County

To: Candice Miller, Macomb County Public Works Commissioner

From: Vincent Astorino, Operations & Flow Manager

Date: September 6, 2017

Subject: SAW Grant 1128-01 Change Order No. 1 Recommendation

The current MID inspection and condition assessment that is under way as part of SAW grant 1128-01 and being performed by RedZone Robotics, Inc. with engineering support from Giffels Webster is in need of a change order to the base contract. Change Order No. 1 is for the amount of \$70,730.30 and includes re-inspection of the Romeo Arm downstream of the interceptor collapse, 221 linear feet of the Edison Corridor just downstream from the Romeo Arm/Oakland Arm convergence, and 7,578 linear feet of the North Gratiot interceptor.

This project has a contingency of 6% which equals \$89,914.42 so this change order will not put us over budget. We have also shifted other work around in the system including the work from CS-3 to downstream of the interceptor which currently totals a \$47,638.69. Once all of the other items such as pavement removal, manhole deconstruction, and platform removal that is no longer needed for certain portions of the interceptors we will be closer to a total deduct of \$100,000.00

This project remains on time and I fully expect to stay under budget even with this change order. It is my recommendation that we move forward with Change Order No. 1 on this project in the amount \$70,730.00.

Office of the Macomb County Public Works Commissioner

CHANGE ORDER FORM

7 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	CHA	ANGE ORDER FOI	RM	Change Order No	N 00 63 63	
			[cnange order No		
Owner:	Office of the Macomb County		mmissioner	Date	9-5-17	
	21777 Dunham Rd., Clinton T	wp., MI 48036		Chief Der	outy 13	•
Contractor:	RedZone Robotics, Inc.			Engineer		Date of the last o
	94 43 rd Street, Pittsburg, PA	15201		9	(0)	A CONTROL POR S
Project:	MID Interceptor Condition As	sessments - SAW	Grant No. 11	28-01	(5)	
				Coartina	OF (S) DO	en more recommendate
				Firan Bate	e: fic 9/1/2017	yw
	Previous Change Orders:		Net Cl	ange-from-Previou	ıs	-
		NA	2	Change Order		. *
	nes Net Change to Substantial			limes Net Change t opletion this Chang		
(Completion this Change Order:	NA	i iliai con	Orde		
Substa	ntial Completion Date with All		Final Com	pletion Date with A		
*	Approved Change Orders:	9/4/2017	Appro	ved Change Orders	s: <u>10/4/2017</u>	2
ha Cantuant :	- w diff- d E-II					o U
ne Contract i	s modified as follows upon exe	cution of this Char	ige Order:			
of the North G	CCTV of the North Gratiot Interdirection interdirection interceptor Phase 1 (NG	:eptor Phase 1 (NG	oll): NGI1-M	H-013 through LSI-	BLIND-TAP; MSI	
Corridor Inter	ceptor (ECI): ECI-MH-7-111 to E	CI-MH-7-110: Eng	tnrougn NGI incor may di	1-MH-023; MSI of t	he Edison	
ontinue MSI	past finish manholes depending	on sewer condition	on Access m	iect Contractor to a	abandon or	
vith OMID, in	cluding but not limited to subm	ittal of a Sewer Er	try and Shut	down Request An	v evceeded	
uantities, on	this change order or the origin	al Contract, shall b	e paid on a f	uture change order	r.	
Attachments:	Request for Contract Modifica	tion and Price She	et, Historical	Record Drawings o	of NGI1 and ECI.	
rcGIS Online	screenshot of NGI / LSI			and which is the color of the mineral property of the second of the seco		
					30, 410, 271, 411	
	e Prior to this Change Order:			\$	1,498,573.70	
	f This Change Order:			\$	70,730.30	
Contract Price	e Incorporating this Change Ore	der:		\$	1,569,304.00	
1	0 0 110					
Koren 1	1 Sendelle		9	11/2017		
Recommend	led by Engineer: Steve Siklich, P	E	Date	1/2011		
	ct Manager, Giffels Webster		Date			
0/20			9	15/17		
Accepted by	Owner: Vince Astorino			2617		
	Wastewater Service OMCPWC		Date			
rugineer ii	A I A					
	12/2					
	orization: Candice S. Miller		Date			
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	unty Public Works Commissione	3F		1977 - 1937		
Will.	HR		9	11/2017		
	Acceptance (Authorized Signat	ure):	Date			
RedZone Rob	otics, Inc.	on our office.				
150.00	050	Change Order Fra				
14a++	4-2.11	Change Order Form 00 63 63-1				
Doard	9-11-17	18				





To:

William Summerville, Project Manager

RedZone Robotics, Inc.

Date:

September 1, 2017

Project:

MID Interceptor Condition Assessments

RE: Contract Modification Price Sheet

Project Number:

18395.03

ltem Number	Item	Estimated Quantity	Unit	Unit Price	Increase in Bid	Price
	NGI1 Inspections (LSI-BLIND-TAP - NGI1-	-MH-013, NGI1-MH-02	1 - NGI1-M	IH-023)		
1	San Swr, ML, 66", Inspect, Manage Data, CCTV	7,578	LF	\$ 6.00	\$ 45	,468.00
2	San Swr, ML, 66", Inspect, Manage Data, Laser	972	LF	\$ 1.50	\$ 1	,458.00
3	San Swr, ML, 66", Inspect, Manage Data, Sonar	972	LF	\$ 0.50	\$	486.00
4	San Swr, ML, 66", Inspect, Manage Data, Gas	. 972	LF	\$ 0.10	\$	97.20
			'	Sub-total	\$ 47	,509.20
	ECI Inspections	(Interceptors)	v			
5	San Swr, ML, 153", Inspect, Manage Data, CCTV	221	LF	\$ 7.00	\$ 1	,547.00
6	San Swr, ML, 153", Inspect, Manage Data, Laser	221	LF	\$ 1.50	\$	331.50
7	San Swr, ML, 153", Inspect, Manage Data, Sonar	221	LF	\$ 0.50	\$	110.50
8	San Swr, ML, 153", Inspect, Manage Data, Gas	221	LF	\$ 0.10	\$	22.10
				Sub-total	\$ 2	,011.10
	Romeo Arm Re-inspections	(RA-MH-002-RA-MH-	004)			
9	San Swr, ML, 132", Inspect, Manage Data, CCTV, Re-Inspection	2,828	EA	\$ 7.00	\$ 19	,796.00
10	San Swr, ML, 132", Inspect, Manage Data, Sonar, Re-Inspection	2,828	EA	\$ 0.50	\$ 1	,414.00
- T				Sub-total	\$ 21	,210.00
			Total Inci	rease in Bid Price	\$ 70	,730.30

Contractor Comments:

Any additional documented costs including but not limited to traffic control, access, erosion and sediment control, as well as restoration shall be paid on a future change order.

Candice S. Miller



Public Works Commissioner Macomb County

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

From: Vincent Astorino, Operations & Flow Manager

Date: September 7, 2017

Subject: Administrative Consent Order

Under the Michigan Natural Resources and Environmental Protection Act, whenever there is a sewage discharge like the one that occurred in connection with the December 24, 2016 sinkhole, the Michigan Department of Environmental Quality takes enforcement action designed to prevent future discharges. This includes (a) statutorily mandated fines and (b) DEQ review, approval, and oversight of the proposed repairs and plans for future maintenance and operation of the system.

The MIDDD and the MDEQ have had a very cooperative relationship throughout this process, and DEQ staff have been extremely complimentary regarding the MIDDD's efforts to address the sinkhole emergency. This has resulted in a negotiated Administrative Consent Order ("ACO") that resolves the enforcement action without any admission of fault by the MIDDD and is further notable for the following:

- 1. In recognition of the MIDDD's efforts to date, the ACO contains a fine of only \$40,000. This is on the extreme low end of possible fines related to similar discharges.
- By agreeing to the ACO now, the MIDDD receives 300 points of credit from the MDEQ, which will preserve the MIDDD's high priority position with respect to low interest, SRF funding. If the MIDDD does not agree to the ACO, it will place its priority position in jeopardy
- 3. The MIDDD had already planned to do the things specified in the ACO (such as complete the sinkhole repair, inspect the system, and come up with a long-term plan). The ACO essentially consists of DEQ oversight over action items the MIDDD was going to do anyway.
- 4. The ACO will terminate when the MIDDD completes the action items.



STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



August 15, 2017

TO:

Fiscal Year 2018 Clean Water State Revolving Fund and

Strategic Water Quality Initiatives Fund Applicants

FROM:STD

Sonya T. Butler, Section Manager, Revolving Loan Section

Office of Drinking Water and Municipal Assistance

SUBJECT:

Clean Water State Revolving Fund (CWSRF) and Strategic Water Quality Initiatives Fund (SWQIF)

Fiscal Year 2018 Draft Project Priority Lists and Draft Intended Use Plan (IUP)

Attached are the draft Fiscal Year (FY) 2018 Project Priority Lists (PPL), and draft FY 2018 IUP, which will be used by the Department of Environmental Quality (DEQ) to distribute CWSRF and SWQIF funds. Explanatory materials for these documents, a Public Hearing Notice, and the FY 2018 Financing Schedule are also attached.

Please be aware that project-ranking criteria are established in Public Act 451 of 1994, the Natural Resources and Environmental Protection Act, Parts 52 and 53, and are not an issue for debate at the hearing. The hearing's purpose is to receive requests for re-evaluation of calculation factors used to assign priority points to projects on the draft PPLs, and to receive comments on the draft IUP.

Requests for changes to PPL point calculation data, project scope, binding commitment date, or costs may be submitted during the public hearing comment period on the attached Project Re-evaluation Request Form. The IUP provides information relating to FY 2018 funding projections. Any changes in priority calculations made as a result of the public hearing may impact project ranking on the final PPLs. Applicants will be notified when the PPLs are final and the fundable ranges are established. The interest rate for FY 2018 will be established and announced at the public hearing for both the CWSRF and SWQIF.

All FY 2017 4th Quarter projects are listed on the draft PPLs. If final loan closings occur before October 1, 2017, as scheduled, they will not appear on the final PPLs. However, if final loan closings do not occur, those projects will be ranked on the final PPLs to be considered for FY 2018 funding.

An SRF fundable range of \$130 million has been established with \$125 million in projects seeking assistance in FY 2018. It should also be noted that the DEQ has approximately \$9 million in principal forgiveness to distribute.

There are no projects requesting SWQIF funding for FY 2018.

If you have any questions regarding this material, please feel free to contact the Revolving Loan Section at 517-284-5433.

Attachments

cc: Consulting Engineers for Applicants
Ms. Laura Cossa, U.S. EPA - Region 5
Ms. C. Heidi Grether, Director, DEQ
Mr. Eric Oswald, DEQ
DEQ, WRD District Office Supervisors



Department of Environmental Quality Current PPL

SRF

Sank	Project #	Sank Drainet # Drainet Name London and Description	December 2		Wate	r Qual	Water Quality Severity Pts	事品	<u> </u>			ž									
	i islockii	rejectivanie, Lucaud	n anu Descripuon		DIN OU	ттох	MICR	NUT TOX MICR GWD Tot		OSSS Rec	1 Kg	3 H	Population Pts		Exist Disch	Rec Waters	Ragio 7	草岩	三岩	Date	Bind. Com Amour
ROJ	ECTS WI	ROJECTS WITH PRIOR YEAR SEGMENTS	MENTS																		
-	5642-02	F	Pontiac	WWTP-Aubum & East Facilities) [23]	0 0	0	0	23	0	0 300	20	61,055	98	27.27	7.5	7.5 > 6000 100	100	999	Future	\$22,825,00
2	5647-02	5647-02 City of St Joseph	Berrien County	CSO improv	0	0 0	12	0	27	0	0 300	0	8,625	80	0.674	2,440	2,440 0.0003	8	447	Future	\$8,970,00
8	5611-02	5611-02 Kinross Township	Chippewa County	Combined heat & power improvemen	0	0 0	0	0	0	0	0 0	20	7,276	8	0.62	0.7	0.7 >.6000 100	190	230	08/23/2017	\$4,885.00
6	5611-03	5611-03 Kinross Township	Chippewa County	Food Processing	0	0 0	0	0	0	0	0 0	20	7,276	88	0.62	0.7	0.7 >.6000 100	8	230	230 03/14/2018	\$3.050.00
4	5602-99	5602-99 City of South Haven	Van Buren County	CS & WWTP Improv	0	0 0	12	0	77	0	0		10,425	85	0.12	120	120 0.0010	40	200	Future	\$14 000 00
ROJ	ECTS WI	ROJECTS WITHOUT PRIOR YEAR SEGMENTS	SEGMENTS																Ī		
w	5005-23	5005-23 City of Lansing	Ingham County	Subarea 034C CSO Separation	7 100	0 0	37	0 1	144	0	0 300	0	62,301	95	1.27	48	0.0265	707	609	609 03/14/2018	\$10,250,00
9	5659-01	5659-01 Macomb Interceptor	Macomb County	Recovery Shaft Inter Rehab Seg 3	100	8 0	27	0	135	0	0 0	0	500,437	100	42,1033	86.7667	0.4852	88	320	06/01/2018	\$22,720,00
9	5659-02	5659-02 Macomb Interceptor	Macomb County	Recovery Shaft Inter Rehab Seg 4	100	8 0	22	0	135	0	0 0	0	500,437	100	42.1033	86.7667	0.4852	88	320	Future	\$18,110,00
9	5659-03	5659-03 Macomb Interceptor	Macomb County	Recovery Shaft Inter Rehab Seg 5	100	8 0	27	0	135	0	0 0	0	500,437	100	42.1033	86.7667	0.4852	88	320	Future	\$25,430,00
- 3	5643-01	5643-01 City of Hudson	Lenawee County	Rehab CS & TR Plant upgrades) 0	0 50	0	0	20	0	0 0	0	2,483	65	0.467	3.6	0.1297	88	200	11/17/2017	\$5,100,00
22	5632-01	5632-01 East Lansing	Ingham Co	WW System Improv (future)	0	0 0	0	0	0	0	0 0	0	88,267	88	0		0	199	195	Future	\$17,480,00
6	5650-01	5650-01 Gun Lake Area SWA	Allegan/Barry Countile WWTP improv	WWTP improv	0	0 0	0	0	0	0	0 0	0	6,191	88	0.412	-	>,6000	100	180	Future	\$3,010,00
9	5660-01	5660-01 City of Saline	Washtenaw County	WWTP improve, Pump Station equip	0 0	0 0	0	0	0	0	0 0	0	8,810	8	1.108	4.8	0.2308	82	165	03/14/2018	\$2,765,00
=	5638-01	5638-01 City of Otsego	Allegan County	WWTP Rehab & I/I removal	0	0 0	0	0	0	0	0 0	20	3,934	22	0.338	360	360 0.0009	49	160	08/23/2017	\$2,185,00
12	5645-01	5645-01 Armada Village	Macomb County	Sewer & manhole rehab, Colonial	0	0 0	0	0	0.	0	0 0	0	1,730	18	0.644	=	>.6000	100	155 (08/23/2018	\$2,175,00
	5657-01	5657-01 City of Tecumseh	Lenawee County	swr rehab, pump sta, & sldg pump	0	0 0	0	0	0	0	0 0	0	8,393	88	0.713	13	13 0.0548	2	150	150 11/17/2017	\$1,170,00
	5658-01	5658-01 City of Tecumseh	Lenawee County	WWTP transf, actuator, swr rehab	0	0 0	0	0	0	0	0 0	0	8,393	8	0.713	13	13 0.0548	20	150	Future	\$3,130,00
15	5421-01	5421-01 Wayne County	Downriver WWTF	Interceptor System Improv	0	0 0	0	0	0	0	0 0	0	270,051	100	52.54	38,700 0.0014	0.0014	40	140	Future	\$5,000,00
16	5424-01	5424-01 Wayne County	Downriver WWTF	Biosolids Drying & Beneficial Re	0	0 0	0	0	0	0	0 0	0	270,051	100	52.54	38,700 0.0014	3.0014	9	140	Future	\$47,355,00
	5655-01	5655-01 Great Lakes Water A Detroit	Detroit	Detroit River Intcp Rehab	0	0 0	0	0	0	0	0 0	0	3,100,000	100	609	686'666'66	<,0002	25	125 0	08/23/2018	\$33,350,00
8	5656-01	Great Lakes Water A	Detroit WRRF	Central Offload Fac Rehab	0	0 0	0	0	0	0	0 0	0	3,100,000 100	100	609	666'666'66	<,0002	25	125 0	08/23/2018	\$13,975,00
-	5652-01	5652-01 Monroe County Drain Bedford WWTP	Bedford WWTP	WWTP upgrades, pump stations, co	0	0 0	0	0	0	0	0 0	0	28,426	06	2.974	99,999,999 <.0002	<.0002	52	115	03/14/2018	\$11,000,00
-	5662-01	5662-01 Monroe County Drain Bedford WWTP	Bedford WWTP	Sewer rehab	0	0 0	0	0	0	0	0 0	0	28,426	8	2.974	99,999,999 <.0002	20005	25	115	Future	\$700,00
21	5644-01	5644-01 City of Rochester	Oakland County	Rehab of sewer system, SCIPP, FC	0	0 0	0	0	0	0	0 0	0	13,455	88	1.675	130,000 <.0002	20005	53	110	110 08/23/2017	\$5,935,00
																	1	1			

'roject Type: SRF Loan Fiscal Year: 2018 Include 4th Quarter From Previous FY: Yes

uesday, August 08, 2017 2:36 PM

Department of Environmental Quality

Current PPL

Sewer rehab & PS replac

22 5661-01 South Rockwood, Vill Monroe County

otal 25 Projects

SRF

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STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY WATER RESOURCES DIVISION

In the matter of:	ACO-004875 Date Entered:	
Macomb Interceptor Drain Drainage District 21777 Dunham Road		
Clinton Township, Michigan 48036	×	

ADMINISTRATIVE CONSENT ORDER

This document results from allegations by the Department of Environmental Quality (DEQ), Water Resources Division (WRD). The DEQ alleges that the Macomb Interceptor Drain Drainage District (MIDDD), located at 21777 Dunham Road, Clinton Township, Michigan, Macomb County, is in violation of Part 31, Water Resources Protection, and Part 41, Sewerage Systems, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.3101 et seq. and MCL 324.4101 et seq., respectively, and the Part 21, Wastewater Discharge Permits, administrative rules promulgated pursuant to Part 31 of the NREPA, being Mich Admin Code, R 323.2101 et seq. and the administrative rules promulgated pursuant to Part 41, being Mich Admin Code, R 299.2901 et seq.. The MIDDD is a "Local Unit of Government," as defined by Section 301 of the NREPA, MCL 324.301. The MIDDD and the DEQ agree to resolve the violations set forth herein through entry of this Administrative Consent Order (Consent Order).

I. STIPULATIONS

The MIDDD and the DEQ stipulate as follows:

- 1.1 The NREPA is an act that controls pollution to protect the environment and natural resources in the state.
- 1.2 Part 31, Water Resources Protection, of the NREPA (Part 31) and the rules promulgated pursuant thereto provide for the protection, conservation, and the control of pollution of the water resources of the state.

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- 1.3 Part 41, Sewerage Systems, of the NREPA (Part 41) and the rules promulgated pursuant thereto provide for the proper planning, construction and operation of sewerage facilities to prevent unlawful pollution of the water resources of the state.
- 1.4 The DEQ is authorized by Section 3112(4) of Part 31, MCL 324.3112(4), and Section 4111 of Part 41 of the NREPA, MCL 324.4111, to enter orders requiring persons to abate pollution or otherwise cease or correct activities in violation of a specific part. The director of the DEQ may delegate this authority to a designee under Section 301(b) of the NREPA, MCL 324.301(b).
- 1.5 The MIDDD consents to the issuance and entry of this Consent Order and stipulates that the entry of this Consent Order constitutes a final order of the DEQ and is enforceable as such under Section 3112(4) of Part 31 and Section 4111 of Part 41. The MIDDD agrees not to contest the issuance of this Consent Order and that the resolution of this matter by the entry of this Consent Order is appropriate and acceptable. It is also agreed that this Consent Order shall become effective on the date it is signed by the division director of the WRD, delegate of the director, pursuant to Section 301(b) of the NREPA.
- 1.6 The MIDDD and the DEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the MIDDD that the law has been violated.
- 1.7 The signatory to this Consent Order certifies that it is fully authorized by the MIDDD to enter into the terms and conditions of this Consent Order and to execute and legally bind the MIDDD to this document. The MIDDD hereby agrees to comply with the requirements of this Consent Order to resolve the violations, identified by the DEQ, stated in Section II of this Consent Order and agrees to ensure compliance with Parts 31 and 41 of the NREPA by fulfilling the terms of Section III of this Consent Order.

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II. FINDINGS

- 2.1 The MIDDD was established on May 21, 2010, pursuant to Chapter 20 of Act 40 of 1956, as amended, (the Drain Code), MCL 280.461 et seq.
- 2.2 The MIDDD approved the purchase of the Macomb Interceptor Drain (MID) from the City of Detroit on June 15, 2010.
- 2.3 On December 24, 2016, the MIDDD notified the DEQ that a portion of the MID in the City of Fraser collapsed.
- 2.4 On December 26, 2016, and through December 27, 2016, the MIDDD, reported a total of 12.6 million gallons (MG) of untreated sanitary wastewater was discharged to the Clinton River and associated wetlands at three locations via a sanitary sewer overflow (SSO) as a result of prolonged rainfall and snowmelt.
- 2.5 On December 27, 2017, DEQ and MIDDD staff met at the MID collapse location to observe discharge impacts to the Clinton River and wetland area and to discuss construction of a temporary road through wetland that would allow access to the south of Eberlein Drive to provide access to homes for residents.
- On December 29, 2016, the MIDDD submitted a MID repair status outlining current operations, locations and pump capacities for bypass pumping (in the immediate collapse area) and emergency bypass pumping (at 6 satellite locations upstream of the collapse area), a description of the means to mitigate the SSO impacts to the Clinton River if needed for emergency bypass pumping, and a proposed plan for future operations.
- 2.7 On January 1, 2017, one of two locations for intermediate bypass pumps were placed into service at Station 97 upstream of the interceptor collapse.

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- On January 2, 2017, the MIDDD notified the DEQ that disinfection systems and boom/skimming points were in place in the Clinton River for emergency releases. The MIDDD also notified residents near the proposed discharge locations by flyer and posted that information on the County website. The MIDDD proposed disinfection protocol for the Clinton River was found to be inadequate and a new protocol was approved on January 27, 2017 by the DEQ.
- 2.9 On January 3, 2017, the second bypass pump location was placed into service at Station 110 upstream of the interceptor collapse.
- 2.10 On January 5, 2017, the DEQ sent a Violation Notice (VN-006972) to the MIDDD outlining the violation of Part 31 of the NREPA and the immediate actions the MIDDD needed to take to maintain compliance with the statutory requirements of Part 31 of the NREPA.
- 2.11 On January 21, 2017, the MIDDD submitted an SSO mitigation plan to the DEQ. The plan addressed dry and wet weather flows, considering emergency bypass pumping locations.
- 2.12 In a letter dated January 22, 2017, the MIDDD provided the DEQ a response to VN-006972.
- 2.13 In a letter dated January 30, 2017, the DEQ provided a response to the MIDDD to address the MIDDD's concerns identified in its January 22, 2017 letter.
- 2.14 On February 3, 2017, the MIDDD met with the City of Mt. Clemens to discuss the feasibility of diverting sanitary wastewater flow from the MID to the City of Mt. Clemens' Waste Water Treatment Plant (WWTP).
- 2.15 On February 3, 2017, the DEQ sent the MIDDD a letter requiring a Dewatering Monitoring Plan to monitor groundwater being discharged, due to construction activities, to the Crooked Brook Drain.

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- 2.16 On February 13, 2017, the DEQ issued a Part 41 construction permit (P41000680) to the MIDDD for the connection of the Fraser sewer collection system to the Clinton Township sewer collection system to divert the flow of sanitary wastewater in order to accommodate the long-term interceptor repair.
- 2.17 On February 16, 2017, the MIDDD submitted to the DEQ a Basis of Design report for the long-term bypass pumping station.
- 2.18 On February 27, 2017, the DEQ issued a Part 41 construction permit (P41000698) for the long-term bypass pumping station.
- 2.19 On March 1, 2017, the long-term bypass pumping station was placed into service. This station consisted of 7 pumps with expected 132 cfs firm capacity. However, testing proved that the station was not capable to meet the firm capacity requirement.
- 2.20 On March 2, 2017, the DEQ sent an Enforcement Notice to Macomb County requiring that the violations of Parts 31 and 41 of the NREPA, identified by the DEQ, be formally resolved through the entry of a legally enforceable document.
- 2.21 On March 31, 2017, the DEQ issued a Part 41 construction permit (P41000762) for recovery shaft work including the cleaning, ground stabilization, replacement of the interceptor pipe, and shaft construction.
- 2.22 On April 9, 2017, an eighth long-term bypass pump was added, bringing the station to full capacity to address predicted dry and wet weather flowrates.
- 2.23 On April 25, 2017, DEQ sent a Dewatering Monitoring Plan Long term Monitoring approval to the MIDDD.

III. COMPLIANCE PROGRAM

IT IS THEREFORE AGREED AND ORDERED THAT the MIDDD shall take the following actions to comply with and prevent further violations of Parts 31 and 41 of the NREPA:

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- 3.1 Within 30 days after the effective date of this Consent Order, the MIDDD shall submit to the DEQ for review and approval a comprehensive operation plan during construction of the MID repair project. If any changes to the operation plan are expected to occur after approval, the MIDDD shall submit an updated plan to the DEQ for review and approval not later than five days prior to the planned implementation. Implementation of a revised plan shall not occur without DEQ approval. The operation plan shall include but not be limited to:
 - a. Capacity and operational protocol of the long-term bypass pump stations.
 - b. Location(s) of all emergency bypass pumping stations.
 - c. Provisions to provide and manage disinfection and a description how the disinfectant will be applied if a discharge from the emergency bypass pump stations is initiated.
 - d. Provisions to conduct total residual chlorine (TRC) testing, as a result of a discharge from the emergency bypass pumping stations, to ensure adequate microbial kill for protection of public health while minimizing in-stream TRC concentrations.
 - e. Critical elevations of sanitary wastewater within the MID that will be used for starting/stopping of any emergency bypass pumping station.
 - f. Provisions to maximize storage within the MID concerning wet weather system management.
- 3.2 The MIDDD shall conduct the following activities to repair and restore the capacity of the collapsed section of the MID.
 - a. Within 30 days after the effective date of this Consent Order, the MIDDD shall submit to the DEQ for review and approval a Part 41 permit application including

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complete plans and specifications for all proposed repairs of the collapsed MID section.

- b. If additional repairs to the collapsed MID section are necessary, in addition to the work permitted in 3.2 (a), the MIDDD shall expeditiously submit a Part 41 permit application prior to commencing construction, in accordance with Rule 42 of Part 41 of the NREPA, Mich Admin Code, Rule 299.2942.
- c. Within 30 days after the effective date of this Consent Order, the MIDDD shall commence construction of the repairs to the collapsed MID section, consistent with the approved Part 41 permit referenced in Paragraph 3.2 (a) above.
- d. On or before <u>January 1, 2018</u>, the MIDDD shall complete construction of all permitted construction activities referenced in Paragraph 3.2 (a) and (b).
- 3.3 The MIDDD shall ensure that the Dewatering Monitoring Plan contained in the DEQ's letters dated February 3, 2017, and April 25, 2017, letters are complied with. The MIDDD shall immediately contact the DEQ, by phone in accordance with paragraph 6.2 herein, if any monitoring data supports a decline in the quality of discharge. The MIDDD is advised that if dewatering monitoring data indicates that sanitary sewage, as identified by the presence of Escherichia coliform (E. coli) in the samples, is present in the discharge effluent to the Crooked Brook Drain, the DEQ will require that the MIDDD obtain an NPDES permit for the discharge.
- 3.4 The MIDDD shall conduct a detailed inspection of the entire MID to document and repair structural integrity defects within the collection system in accordance with the following schedule:
 - a. On or before <u>January 1, 2018</u>, the MIDDD shall complete a detailed inspection of the entire MID.

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- b. On or before <u>June 1, 2018</u>, the MIDDD shall submit to the DEQ a report for review and approval that documents the detailed inspection of the entire MID referenced in 3.4 (a). The report shall also document any repair work, with schedule, that is necessary as a result of the inspections. The MIDDD is advised that implementation of repairs to the collection system may require Part 41 wastewater construction permits or may require other DEQ approvals.
- c. The MIDDD shall complete all repair work identified in the report referenced in section 3.4 (b) by July 1, 2021.
- 3.5 The MIDDD shall comply with all future and current Part 41 permits, Part 327 permits and/or Part 31 permits.
- 3.6 The MIDDD shall at all times properly operate and maintain all facilities and control systems installed or used by the MIDDD to operate the MID and ensure compliance with Part 41, and/or any future NPDES collection system permit.
- 3.7 The requirements of an Asset Management Program function to achieve the goals of effective performance, adequate funding, and adequate operator staffing and training. Asset management is a planning process for ensuring that optimum value is gained for each asset and that financial resources are available to rehabilitate and replace those assets when necessary. Asset management is centered on a framework of five (5) core elements: the current state of the assets; the required sustainable level of service; the assets critical to sustained performance; the minimum life-cycle costs; and the best long-term funding strategy.
 - a. On or before <u>January 1, 2018</u>, the MIDDD shall submit to the DEQ an Asset Management Plan for review and approval. An approvable Asset Management Plan shall contain a schedule for the development and implementation of an Asset Management Program that meets the requirements outlined below. Upon

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DEQ approval the Asset Management Plan schedule shall be incorporated by reference into this Consent Order.

- i. Maintenance Staff. The MIDDD shall employ adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with Part 41. The level of staffing needed shall be determined by considering the work involved in operating the sewer system and planning for and conducting maintenance.
- ii. Collection System Map. The MIDDD shall complete a map of the sewer collection system of the MID. The map shall be of sufficient detail and at a scale to allow easy interpretation. The collection system information shown on the map shall be based on current conditions and shall be kept up-to-date and available for review by the DEQ. Such map(s) shall include but not be limited to the following:
 - (1) All sanitary sewer lines/interceptors and related manholes.
 - (2) All known or suspected connections between the sanitary sewer and storm drain systems.
 - (3) All pump stations and force mains.
 - (4) All surface waters (labeled).
 - (5) Other major appurtenances such as inverted siphons and air release valves.
 - (6) A numbering system which uniquely identifies manholes.
 - (7) The scale and a north arrow.
 - (8) The pipe diameter, date of installation, type of material, distance

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between manholes, and the direction of flow.

- (9) The manhole interior material, rim elevation (optional), and invert elevations.
- iii. Inventory and assessment of fixed assets. The MIDDD shall complete an inventory and assessment of operations-related fixed assets. Fixed assets are assets that are normally stationary. The inventory and assessment shall be based on current conditions and shall be kept up-to-date and available for review by the DEQ.
 - (1) The fixed asset inventory shall include the following:
 - (a) A brief description of the fixed asset, its design capacity (e.g., pump: 120 gallons per minute), its level of redundancy, and its tag number if applicable.
 - (b) The location of the fixed asset.
 - (c) The year the fixed asset was installed.
 - (d) The present condition of the fixed asset (e.g., excellent, good, fair, poor).
 - (e) The current fixed asset (replacement) cost in dollars for year specified in accordance with approved schedules.
 - (2) The fixed asset assessment shall include a "Business Risk Evaluation" that combines the probability of failure of the fixed asset and the criticality of the fixed asset, as follows:
 - (a) Rate the probability of failure of the fixed asset on a scale of 1-10 (low to high) using criteria such as maintenance

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- history, failure history, and remaining percentage of useful life (or years remaining).
- (b) Rate the criticality of the fixed asset on a scale of 1-10 (low to high) based on the consequence of failure versus the desired level of service for the MID.
- (c) Compute the Business Risk Factor of the fixed asset by multiplying the failure rating from (1) by the criticality rating from (2).
- iv. Operation, Maintenance & Replacement (OM&R) Budget and Rate Sufficiency for the Sewer System. The MIDDD shall complete an assessment of its user rates and replacement fund, including the following:
 - (1) Beginning and end dates of the fiscal year.
 - (2) Name of the department, committee, board, or other organization that sets rates for the operation of the sewer system;
 - (3) Amount in the MIDDD's replacement fund in dollars for the year specified in accordance with approved schedules.
 - (4) Replacement fund strategy of all assets with a useful life of 20 years or less.
 - (5) Expenditures for maintenance, corrective action and capital improvement taken during the fiscal year.
 - (6) OM&R budget for the fiscal year.
 - (7) Rate calculation demonstrating sufficient revenues to cover

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OM&R expenses. If the rate calculation shows there are insufficient revenues to cover OM&R expenses, the MIDDD shall document, that there will be sufficient funds no later than <u>July 1</u>, <u>2021</u>. The ultimate goal of the Asset Management Program is to ensure sufficient revenues to cover OM&R expenses.

- b. Following DEQ approval of the MIDDD's Asset Management Plan, the MIDDD shall develop a written report that summarizes asset management activities completed during the previous fiscal year and planned for the upcoming year. The written report shall be submitted to the DEQ on or before <u>July 1st of each</u> year. The written report shall include:
 - i. A description of the staffing levels maintained during the year
 - A description of inspections and maintenance activities conducted and corrective actions taken during the previous year.
 - iii. Expenditures for collection system maintenance activities, corrective actions, and capital improvement during the previous year.
 - iv. A summary of assets/areas identified for inspection/action (including capital improvement) in the upcoming year based on the five (5) core elements and the Business Risk Factors.
 - v. A maintenance budget and capital improvement budget for the upcoming year that take into account implementation of an effective Asset Management Program that meets the five (5) core elements.
 - vi. An updated asset inventory based on the original submission.
 - vii. An updated OM&R budget with an updated rate schedule that includes the amount of insufficient revenues, if any.

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3.7 The MIDDD shall submit all reports, work plans, specifications, schedules, or any other writing required by this section to its MiWaters account and, if required, to the WRD's Southeast Michigan District Supervisor, Public Wastewater Unit, 27700 Donald Court, Warren, Michigan 48092. The cover letter with each submittal shall identify the specific paragraph and requirement of this Consent Order that the submittal is intended to satisfy.

IV. DEQ APPROVAL OF SUBMITTALS

- 4.1 For any work plan, proposal, or other document, excluding applications for permits or licenses, that are required by this Consent Order to be submitted to the DEQ by the MIDDD, the following process and terms of approval shall apply.
- 4.2 All work plans, proposals, and other documents required to be submitted by this Consent Order shall include all of the information required by the applicable statute and/or rule, and all of the information required by the applicable paragraph(s) of this Consent Order.
- 4.3 In the event the DEQ disapproves a work plan, proposal, or other document, it will notify the MIDDD, in writing, specifying the reasons for such disapproval. The MIDDD shall submit, within 30 days of receipt of such disapproval, a revised work plan, proposal, or other document which adequately addresses the reasons for the DEQ's disapproval. If the revised work plan, proposal, or other document is still not acceptable to the DEQ, the DEQ will notify the MIDDD of this disapproval.
- 4.4 In the event the DEQ approves with specific modifications a work plan, proposal, or other document, it will notify the MIDDD, in writing, specifying the modifications required to be made to such work plan, proposal, or other document prior to its implementation and the specific reasons for such modifications. The DEQ may require the MIDDD to

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submit, prior to implementation and within 30 days of receipt of such approval with specific modifications, a revised work plan, proposal, or other document which adequately addresses such modifications. If the revised work plan, proposal, or other document is still not acceptable to the DEQ, the DEQ will notify the MIDDD of this disapproval.

- 4.5 Upon DEQ approval, or approval with modifications, of a work plan, proposal, or other document, such work plan, proposal, or other document shall be incorporated by reference into this Consent Order and shall be enforceable in accordance with the provisions of this Consent Order.
- 4.6 Failure by the MIDDD to submit an approvable work plan, proposal, or other document, within the applicable time periods specified above, constitutes a violation of this Consent Order and shall subject the MIDDD to the enforcement provisions of this Consent Order, including the stipulated penalty provisions specified in Paragraph 9.3.
- 4.7 Any delays caused by the MIDDD's failure to submit an approvable work plan, proposal, or other document when due shall in no way affect or alter the MIDDD's responsibility to comply with any other deadline(s) specified in this Consent Order.
- 4.8 No informal advice, guidance, suggestions, or comments by the DEQ regarding reports, work plans, plans, specifications, schedules or any other writing submitted by the MIDDD will be construed as relieving the MIDDD of its obligation to obtain written approval, if and when required by this Consent Order.

V. EXTENSIONS

5.1 The MIDDD and the DEQ agree that the DEQ may grant the MIDDD a reasonable extension of the specified deadlines set forth in this Consent Order. Any extension shall be preceded by a written request in duplicate to the DEQ, WRD, Enforcement Unit Supervisor, P.O. Box 30458, Lansing, Michigan 48909-7958, and the Southeast

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Michigan District Supervisor, Public Wastewater Unit, at the address in Paragraph 3.7, no later than ten business days prior to the pertinent deadline, and shall include:

- a. Identification of the specific deadline(s) of this Consent Order that will not be met.
- A detailed description of the circumstances that will prevent the MIDDD from meeting the deadline(s).
- c. A description of the measures the MIDDD has taken and/or intends to take to meet the required deadline.
- d. The length of the extension requested and the specific date on which the obligation will be met.

The Southeast Michigan District Supervisor or a designee, in consultation with the Enforcement Unit Supervisor, shall respond in writing to such requests. No change or modification to this Consent Order shall be valid unless in writing from the DEQ, and if applicable, signed by both parties.

VI. REPORTING

- 6.1 The MIDDD shall verbally report any violation(s) of the terms and conditions of this Consent Order to the Southeast Michigan District Supervisor, Public Wastewater Unit, in accordance with Paragraph 6.2 herein, by no later than the close of the next business day following detection of such violation(s) and shall follow such notification with a written report within five business days following detection of such violation(s). The written report shall include a detailed description of the violation(s), as well as a description of any actions proposed or taken to correct the violation(s). The MIDDD shall report any anticipated violation(s) of this Consent Order to the above-referenced individual in advance of the relevant deadlines whenever possible.
- 6.2 For the purposes of this Consent Order, the addresses of the Parties shall, until changed

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as hereinafter provided, be as follows:

If to Southeast Michigan

If to MIDDD, to:

District Supervisor, to:

Ms. Laura Verona

Ms. Candice Miller

27700 Donald Street

21777 Dunham Road

Warren, Michigan 48092

Clinton Township, Michigan 48036

Email: VeronaL@Michigan.gov

Email: Candice.miller@macombgov.org

Telephone: 586-601-7693

Telephone: 586-469-5325

Each Party shall have the right from time to time and at any time to change their respective addresses and each shall have the right to specify as its address any other address by at least fifteen (15) days written notice to each other Party.

VII. RETENTION OF RECORDS

7.1 Upon request by an authorized representative of the DEQ, the MIDDD shall make available to the DEQ all records, plans, logs, and other documents required to be maintained under this Consent Order or pursuant to the NREPA or its rules. All such documents shall be retained by the MIDDD for at least a period of five years from the date of generation of the record unless a longer period of record retention is required by the NREPA or its rules.

VIII. RIGHT OF ENTRY

8.1 The MIDDD shall allow any authorized representative or contractor of the DEQ, upon presentation of proper credentials, to enter upon the premises of the MID at all reasonable times for the purpose of monitoring compliance with the provisions of this Consent Order. This paragraph in no way limits the authority of the DEQ to conduct

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tests and inspections pursuant to the NREPA and the rules promulgated thereunder, or any other applicable statutory provision.

IX. PENALTIES

- 9.1 Subject to Section 1.6 herein, within 30 days after the effective date of this Consent Order, the MIDDD shall pay to the State of Michigan \$6,800 DOLLARS as partial compensation for the cost of investigations and enforcement activities arising from the violations, identified by the DEQ, specified in Section II of this Consent Order. Payment shall be made in accordance with Paragraph 9.5.
- 9.2 Subject to Section 1.6 herein, within 30 days after the effective date of this Consent Order, the MIDDD shall pay to the State of Michigan a civil fine of \$33,200 DOLLARS for the violations, identified by the DEQ, specified in Section II of this Consent Order. Payment shall be made in accordance with Paragraph 9.5.
- 9.3 For each failure to comply with a specific deadline contained in Section III of this Consent Order, the MIDDD shall pay a stipulated penalty of \$5,000. If, after 30 days from the original deadline, the MIDDD has not fully corrected the violation, stipulated penalties shall begin to accrue in accordance with Paragraph 9.4 of this Consent Order. Payments shall be made in accordance with Paragraph 9.5.
- 9.4 Except as provided for in Paragraph 9.3, for each failure to comply with any other provision of this Consent Order, the MIDDD shall pay stipulated penalties of \$200 per violation per day for 1 to 7 days of violation, \$300 per violation per day for 8 to 14 days of violation, and \$500 per violation per day for each day of violation thereafter. Payments shall be made in accordance with Paragraph 9.5.
- 9.5 The MIDDD shall pay all stipulated penalties within 30 days after receipt of an invoice from the DEQ. The MIDDD agrees to pay all funds due pursuant to this Consent Order by check made payable to the State of Michigan and delivered to the Accounting Services Division, Cashier's Office for the DEQ, P.O. Box 30657, Lansing, Michigan

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489098157, or hand delivered to the Accounting Services Division, Cashier's Office for the DEQ, 425 West Ottawa Street, Lansing, Michigan 48933. To ensure proper credit, all payments made pursuant to this Consent Order must include the **Payment Identification**No. WRD60035.

- 9.6 The MIDDD agrees not to contest the legality of the civil fine or costs paid pursuant to Paragraphs 9.1, and 9.2, above. The MIDDD further agrees not to contest the legality of any stipulated penalties assessed pursuant to Paragraphs 9.3 or 9.4, above, but reserves the right to dispute the factual basis upon which a demand by the DEQ for stipulated penalties is made.
- 9.7 The DEQ reserves its rights to seek interest on any unpaid sums due pursuant to the terms of the Consent Order. Subject to the other provisions of this Section IX, the DEQ may waive, in its unreviewable discretion, any portion of stipulated penalties and interest that has accrued pursuant to this Consent Order. This interest penalty shall be based on the rate set forth at MCL 600.6013(8), using the full increment of amount due as principal, and calculated from the due date for the payment until the delinquent payment is finally made in full.

X. FORCE MAJEURE

- 10.1 The MIDDD shall perform the requirements of this Consent Order within the time limits established herein, unless performance is prevented or delayed by events that constitute a "Force Majeure." Any delay in the performance attributable to a "Force Majeure" shall not be deemed a violation of the MIDDD's obligations under this Consent Order in accordance with this section.
- 10.2 For the purpose of this Consent Order, "Force Majeure" means an occurrence or nonoccurrence arising from causes not foreseeable, beyond the control of, and without the fault of the MIDDD, such as: an Act of God, untimely review of permit applications or submissions by the DEQ or other applicable authority, and acts or omissions of third

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parties that could not have been avoided or overcome by the MIDDD's diligence and that delay the performance of an obligation under this Consent Order. "Force Majeure" does not include, among other things, unanticipated or increased costs, changed financial circumstances, or failure to obtain a permit or license as a result of the MIDDD's actions or omissions.

- The MIDDD shall notify the DEQ, by telephone, within 48 hours of discovering any event that may cause a delay in its compliance with any provision of this Consent Order. Verbal notice shall be followed by written notice within ten calendar days and shall describe, in detail, the anticipated length of delay, the precise cause or causes of delay, the measures taken by the MIDDD to prevent or minimize the delay, and the timetable by which those measures shall be implemented. The MIDDD shall adopt all reasonable measures to avoid or minimize any such delay. Nothing in this paragraph obviates the need to report violations as required by Paragraph 6.1 of this Consent Order.
- 10.4 Failure of the MIDDD to comply with the notice requirements and time provisions under Paragraph 10.3 shall render this Section X void and of no force and effect as to the particular incident involved. The DEQ may, at its sole discretion and in appropriate circumstances, waive in writing the notice requirements of Paragraph 10.3, above.
- 10.5 If the parties agree that the delay or anticipated delay was beyond the control of the MIDDD, this may be so stipulated, and the parties to this Consent Order may agree upon an appropriate modification of this Consent Order. However, the DEQ is the final decision-maker on whether or not the matter at issue constitutes a force majeure. The burden of proving that any delay was beyond the reasonable control of the MIDDD, and that all the requirements of this Section X have been met by the MIDDD, rests with the MIDDD.
- 10.6 An extension of one compliance date based upon a particular incident does not necessarily mean that the MIDDD qualifies for an extension of a subsequent compliance

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date without providing proof regarding each incremental step or other requirement for which an extension is sought.

XI. GENERAL PROVISIONS

- 11.1 With respect to any violations not specifically addressed and resolved by this Consent Order, the DEQ reserves the right to pursue any remedies to which it is entitled for any failure on the part of the MIDDD to comply with the requirements of the NREPA and its rules.
- 11.2 The DEQ and the MIDDD consent to enforcement of this Consent Order in the same manner and by the same procedures for all final orders entered pursuant to Parts 31 and 41 of the NREPA.
- 11.3 This Consent Order in no way affects the MIDDD's responsibility to comply with any other applicable state, federal, or local laws or regulations.
- 11.4 The WRD reserves its right to pursue appropriate action, including injunctive relief to enforce the provisions of this Consent Order, and at its discretion, may also seek stipulated fines or statutory fines for any violation of this Consent Order. However, the WRD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.
- 11.5 The parties agree to diligently and in good faith pursue informal negotiations to resolve any disputes arising out of this Consent Order prior to resorting to judicial enforcement. Such negotiations shall proceed in a timely manner.
- 11.6 Nothing in this Consent Order is or shall be considered to affect any liability the MIDDD may have for natural resource damages caused by the MIDDD's ownership and/or operation of the MID. The State of Michigan does not waive any rights to bring an appropriate action to recover such damages to the natural resources.

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- In the event the MIDDD sells or transfers the MID or any portion thereof, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within 30 calendar days, the MIDDD shall also notify the WRD Southeast Michigan District Supervisor, Public Wastewater Unit, in writing in accordance with Paragraph 6.2 herein, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. The purchaser and/or transferee of this Consent Order must agree, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the WRD Southeast Michigan District Supervisor, Public Wastewater Unit, in accordance with Paragraph 6.2 herein, within 30 days of assuming the obligations of this Consent Order.
- 11.8 The provisions of this Consent Order shall apply to and be binding upon the parties to this action, and their successors and assigns.
- 11.9 This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.
- 11.10 The effective date of this Consent Order is the date it is signed by the WRD division director.

XII. TERMINATION

12.1 This Consent Order shall remain in full force and effect until terminated by a written Termination Notice (TN) issued by the DEQ. Prior to issuance of a written TN, the MIDDD shall submit a request consisting of a written certification that the MIDDD has fully complied with the requirements of this Consent Order and has made payment of any fines, including stipulated penalties, required in this Consent Order, no earlier than July 1, 2021. Termination shall be deemed appropriate when the MIDDD has completed all compliance actions outlined in Section III of this document to the reasonable

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satisfaction of the DEQ and had made all monetary payments required in Section IX herein. A suggested form for providing the required written certification is appended as Exhibit A. Specifically, an acceptable certification shall include:

- a. The date of compliance with each provision of the compliance program in Section III, and the date any fines or penalties were paid.
- b. A statement that all required information has been reported to the Southeast Michigan District Supervisor, Public Wastewater Unit.
- c. Confirmation that all records required to be maintained pursuant to this Consent Order are being maintained by the MIDDD.

The DEQ may also request additional relevant information. The DEQ shall not unreasonably withhold issuance of a TN.

Signatories

The undersigned CERTIFY they are fully authorized by the party they represent to enter into this Consent Order to comply by consent and to EXECUTE and LEGALLY BIND that party to it.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Teresa Seidel, Division Director Water Resources Division	-
Date	
MACOMB INTERCEPTOR DRAIN DRAINA	GE DISTRICT
By: Candice Miller	

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Title: Macomb Interceptor Drain Drainage District Chair	
Date	
APPROVED AS TO FORM:	
By: Neil Gordon, Assistant Attorney General For: S. Peter Manning, Chief Environment, Natural Resources, and Agriculture Division Michigan Department of Attorney General	
Date	

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	Project balance)(599	523,6	13,6									
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	Project Summary			Sterling Heights vs. MIDDD	Sterling Heights vs. MIDDD	Monitors for Command Center	As-needed engineering services	SAW Grant Oversight	GLWA Assistance	Inspection Program & Grant Management MID Sewer Inspection Work - Red Zone	Inspection Program & Grant Management MID Sewer Inspection Work - Red Zone	Conversion of MCMARS to Bluewater		Meter CT-S-5 level sensor installation TO BE REIMBURSED BY CLINTON TWP.	Configured Replacement DIGI for NEPS; communication losses; radio malfunction, weatherproof radio cable, security upgrades	Resolve SCADA issues	Bluewater access to SCADA, resolve issues with trending and WIN-911, Sonicwall, communication and radio issues	Wonderware renewal	Sewage Flow Billing - 6/17/17 - 7/21/17	NEXGEN license maintenance & support	Monthly cell phone service
	Invoice Detail			Invoice #16242 - 7/1/17 Legal Services - ending 6/14/17	Invoice #19135 - 8/3/17 Legal Services - ending 7/31/17	Invoice #JNC8492 - 7/19/17	Invoice #369156 - 8/22/17 Engineering Services - ending 8/11/17	Invoice #369180 - 8/22/17 Engineering Services - ending 8/11/17	Invoice #369206 - 8/22/17 Engineering Services - ending 8/11/17	Invoice #114155 - 6/29/17 Engineering Services - ending 6/17/17	Invoice #114305 - 7/26/17 Engineering Services - ending 7/15/17	Invoice #40741 - 8/14/17 Engineering Services - ending 7/29/17	Debt Service Payment	Invoice #34172 - 2/27/17	Invoice #90876 - 3/1/17	Invoice #90877 - 2/28/17	Invoice #91057 - 6/15/17	Invoice #91059 - 7/5/17	Invoice #11823 - 6/30/17	Invoice #1803	Invoice #578736375-070 - 6/24/17 - 7/23/17
	Amount			4,081.75	10,632.20	2,760.00	693.50	1,305.00	1,946.00	109,379.65	141,394.10	665.00	179,818.51	14,495.00	4,798.64	970.00	2,858.00	1,420.24	21,363.78	2,500.00	838.42
	An			s,	s	S	~	s	s	89	S	S	49	69	s	S	49	S	S	S	S
	Vendor			Aloia & Associates, P.C.	Viviano Law	CDW Government	Fishbeck, Thompson, Carr & Huber, Inc.	Fishbeck, Thompson, Carr & Huber, Inc.	Fishbeck, Thompson, Carr & Huber, Inc.	Giffels Webster	Giffels Webster	Johnson & Anderson	Michigan Finance Authority	Motor City Electric Technologies	Motor City Electric Technologies	Motor City Electric Technologies	Motor City Electric Technologies	Motor City Electric Technologies	City of Mount Clemens	NEXGEN Utility Management	Sprint
	Manager			Baker	Baker	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Manning	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino
	Apportionment	Chapter 20 Chesterfield – 7.06912% Clinton – 21.19453% Fraser – 4.20779% Harrison – 5.83288% Lenox – .76183% Macomb – 13.78561%	New Haven – .80870% Shelby – 9.87770% Sterling Heights – 31.74642%							SAW Grant 1128-01	SAW Grant 1128-01		SRF 5624-01								
((3) APQ 5(3)	Funding Source	Prain Administration Chapter 20 Chesterfiel Clinton - 2 Fraser - 4. Harrison - Lenox - 74 Macomb -								47											

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Project Balance																															_
Project Summary	Monthly cell phone service	Sonicwall renewal	Maintenance	Annual alarm system inspection	Generator issues	Complete repairs to generator system	Backflow testing and repair	Air Relief Valve maintenance	Clintondale P.S.	NAS installation, including drives, PCI cards, SFPs, etc.	DTE power failure	Diesel fuel for generator	Sinkhole	Flyers	Sinkhole repair	Sewer lining	Recovery shaft	Paving restoration	Recovery Shaft		Sinkhole	Manhole covers and frames	Lease payment - George & Lillian Raimondi	15 Mile & Eberlein slip line pipe	servery of the Late of the prince						
Invoice Detail	Invoice #5787363-071 - 7/24/17 - 8/23/17	Invoice #PB67986 - 8/9/17	Invoice #WO17000852 - 8/24/17	Invoice #OD26549141 - 6/22/17	Invoice #006-46829 - 8/2/17	Invoice #006-47943 - 8/15/17	Invoice #WO17390171 - 7/26/17	Invoice #WO17380911 - 8/24/17	Monthly Electric - 7/5/17 - 8/1/17	Invoice #91055 - 5/30/17	Invoice #90156 - 6/22/17	Invoice #539338 - 7/25/17	Invoice #16240 - 6/1/17 Legal Services - ending 6/30/17	Invoice #079212A - 8/4/17	Invoice #0114669 - 7/20/17 Engineering Services - 5/29/17 - 6/25/17	Invoice #0114670 - 7/20/17 Engineering Services - 5/29/17 - 6/25/17	Invoice #0114672 - 7/20/17 Engineering Services - 5/29/17 - 6/25/17	Invoice #0114673 - 7/20/17 Engineering Services - 5/29/17 - 6/25/17	Construction Estimate #5	Monthly Electric- 6/24/17 - 7/25/17	Monthly Electrical - 7/26/17 - 8/23/17	3,558.44 Invoice #110170065235 - 8/8/17	Invoice #7484-2017 - 9/1/17	Invoice #2041011628 - 7/21/17	Invoice #2041011640 - 7/24/17	Invoice #2041011648 - 7/25/17	Invoice #2041011657 - 7/26/17	Invoice #2041011666 - 7/27/17	Invoice #2041011679 - 7/28/17		The state of the s
Amount	4.81	8,732.40	\$ 866.00	\$ 527.00	\$ 918.50	\$ 6,542.88	\$ 1,406.95	\$ 2,418.00		\$ 3,867.62	\$ 1,935.00	\$ 997.21	\$ 9,711.25	\$ 585.00	\$ 52,616.18	\$ 12,030.87	\$ 403,362.02	\$ 15,140.65	\$ 2,886,272.66	\$ 6,735.14	\$ 6,139,55	\$ 3,558.44	\$ 635.00	\$ 77,209.06	\$ 77,996.84	\$ 51,649.24	\$ 25,321.50	\$ 52,225.18	\$ 77,195.82	\$ 102,451.12	
Vendor		erware	DE-CAL, Inc.	Cintas	Cummins Bridgeway	Cummins Bridgeway, LLC	1000	72.00		Motor City Electric Technologies	Motor City Electric Technologies	Spencer Oil Company	Aloia & Associates, P.C.	American Graphics Printing Co.	Anderson, Eckstein & Westrick, Inc.	Dan's Excavating, Inc.	DTE Energy	DTE Energy	EJ USA, Inc.	Fraser Senior Housing (City of Fraser)	Hobas Pipe, USA										
Manager	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Astorino	Baker	Heaton	Bantios	Bantios	Bantios	Bantios	Bantios	Astorino	Astorino	Bantios	Astorino	Bantios							
Apportionment																															
Funding Source			Biofilter	Clintondale P.S.									15 Mile Sinkhole				48														

11/17
Drain - 9/
Interceptor
Macomb

Funding Source	Apportionment	Manager	Vendor	Amc	Amount		Project Summary	Project Balance
15 Mile Sinkhole		Bantios	Hobas Pipe, USA	5 7	76,911.16 Inv	76,911.16 Invoice #2041011715 - 8/2/17	15 Mile & Eberlein slip line pipe	
(Continued)			4					
		Bantios	Hobas Pipe, USA	\$ 5	52,264.90 Invi	Invoice #2041011726 - 8/3/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	\$ 10	102,941.00 Inv	Invoice #2041011735 - 8/4/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	\$ 10	102,941.00 Inv	Invoice #2041011735 - 8/4/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	5 7	76,573.54 Inv	Invoice #2041011748 - 8/7/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	\$ 10	103,371,30 Inv	Invoice #2041011765 - 8/8/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	\$ 10	103,689.06 Inv	Invoice #2041011782 - 8/9/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA		103,510.32 Inv	Invoice #2041011790 - 8/10/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	s	65,451.94 Inv	Invoice #2041011801 - 8/11/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	\$ 15	155,536.90 Inv	Invoice #2041011810 - 8/14/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	\$ 13	131,678.42 Inv	Invoice #2041011819 - 8/15/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	\$ 15	157,039.64 Inv	Invoice #2041011833 - 8/16/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	s	25,738.56 Inv	Invoice #2041011836 - 8/17/17	15 Mile & Eberlein slip line pipe	
		Bantios	Hobas Pipe, USA	\$ 10	103,364.68 Inv	Invoice #2041011850 - 8/18/17	15 Mile & Eberlein slip line pipe	
		Astorino	IDEXX Laboratories	S	809.33 Inv	Invoice #3020407478 - 8/22/17	Lab Supplies used in analysis of water samples	
		Astorino	Macomb Township Water/Sewer Dept.	69	560.00 Inv	Invoice #0000000089 - 7/19/17	Reimbursement for flyers	
		Astorino	Omar Malik	S	1,950.00 Inv	Invoice #7282-2017 - 9/1/17	Lease payment - Tammetrice Smith & Salam Tobiva	
4		201	TAC maridage	v	7 800 00 Inv	Invoice #ER7776868 - 8/4/17	Generator Rental	
9		Dailtius	Michigan Co.	, (200000		Profitting for simplified a Horrington Drain	
Ñ.		Forlini	Minute Men Staffing Services	S	526.13 Inv	Invoice #50324 - 7/30/17	Statting for sinkhole - Harrington Drain Cleanout	
		Forlini	Minute Men Staffing Services	69	642.06 Inv	Invoice #50475 - 8/6/17	Staffing for sinkhole - Harrington Drain Cleanout	
		Astorino	Motor City Electric Technologies, Inc.	9	801.00 Inv	Invoice #91128 - 8/15/17	Communication loss; setup laptop for AEW to view SCADA	
		Bantios	Ric-Man Construction	5 7.	736,261.88 Fir	Final Payment	Emergency Response	
		Heaton	Soar Beyond	s	600.00 Im	Invoice #17-019 - 8/11/17	Sinkhole Update	
		Baker	Viviano Law	s	4,891.14 Inv	Invoice #19134 - 8/3/17 Legal Services - ending 7/31/17	Sinkhole	
Lenox/26 Mile Road		Baker	Viviano Law	69	2,938.86 Inv	Invoice #19136 - 8/3/17 Legal Services - ending 7/31/17	Lenox Township/26 Mile Road	
Macomb Element & SRF 5624-01 Sterling Heights Arm Interceptor	SRF 5624-01	Bantios	Giffels Webster	s	7,222.50 Inv	Invoice #114346 - 7/28/17 Engineering Services - ending 7/15/17	MID Lining	Project Complete
Meters	SRF 5487-01	Bantios	Hubbell, Roth & Clark, Inc.	69	4,927.70 In	Invoice #0153923 - 7/29/17 Engineering Services - ending 7/15/17	Meter Pit Evaluation - Construction Services	\$ 184,267.80
		Astorino	Martin Control Services	S	9,850.00 In		MID Meter Repair	
		Astorino	Martin Control Services	S	14,820.00 Aş		MID Meter Maintenance	
		Astorino	MacAllister Rentals	S	2,863.01 In	-7/24/17	LX-S-1 meter replacement	
		Astorino	Motor City Electric Technologies, Inc.	v3	1,059.50 In	Invoice #91128 - 8/15/17	Communication loss; radio down; flow meter installation	
				-	08			

Funding Source	Apportionment	Manager	Vendor	Amount	Invoice Detail	Project Summary	Project Balance
NG	NGI SAW Grant 1406-01	Astorino	Anderson, Eckstein & Westrick, Inc.	\$ 13,362.05	13,362.05 Invoice #0114624 - 7/19/17 Engineering Services - 5/29/17 - 6/25/17	Condition Assessment	
	SAW 1406-01	Astorino	Anderson, Eckstein & Westrick, Inc.	\$ 12,049.80	12,049.80 Invoice #0114968 - 8/21/17 Engineering Services - 6/26/17 - 7/23/17	Condition Assessment	\$ 274,928.00
		Astorino	DE-CAL, Inc.	\$ 20,569.00	20,569.00 Invoice #WO17000846 - 8/16/17	Quarterly Maintenance/Repair air relief valves	
	5	Astorino	DTE Energy	\$ 6,115.53	6,115.53 Monthly Electrical - 3/1/17 - 6/29/17	NGI P.S Adjusted Bill	
		Astorino	Fishbeck, Thompson, Carr & Huber, Inc.	\$ 1,561.00	1,561.00 Invoice #369193 - 8/22/17 Engineering Services - ending 8/11/17	SAW Grant Oversight	
		Astorino	Galloup	1,060.00	1,060.00 Invoice #S106130730.001 - 8/22/17	Pressure gauge certification	
		Astorino	Giffels Webster	\$ 3,170.00	Invoice #114114 - 6/28/17 Engineering Services - ending 6/17/17	21 Mile & Sugarbush - Conceptual Design & Permitting	Project Complete
		Astorino	Kennedy Industries, Inc.	\$ 22,857.75	22,857.75 Invoice #578755-95 - 7/28/17	Repair Flygt Pump	
	£	Astorino	Motor City Electric Technologies	\$ 1,068.00	1,068.00 Invoice #91057 - 6/15/17	Bluewater access to SCADA, resolve issues with trending and WIN-911, Sonicwall, communication and radio issues	
		Astorino	Motor City Electric Technologies, Inc.	\$ 1,402.00	1,402.00 Invoice #91128 - 8/15/17	Configure new Juniper switch	
		Slanec	Ultimate Lawn Services	\$ 1,840.00	1,840.00 Invoice #3759 - 7/28/17	Mowing of ARV sites	
OMIO	Q	Astorino	Fishbeck, Thompson, Carr & Huber, Inc.	\$ 2,088.00	2,088.00 Invoice #369178 - 8/22/17 Engineering Services - ending 8/11/17	Flow Metering Work Group	
50		Astorino	Oakland County Treasurer	\$ 40,539.64	40,539.64 Invoice #SDS0005195 - 8/1/17	Debt Service Payment	
Ĭ		Astorino	Oakland County Treasurer	\$ 268,993.32	268,993.32 Invoice #SDS0005203 - 8/1/17	Debt Service Payment	
		Astorino	Oakland County Treasurer	\$ 4,331,353.33	4,331,353.33 Invoice #SDS00000056 - 8/1/17	Sewage Disposal Charges - July 2017	
		Manning	Oakland County Treasurer	\$ 2,536,724.50	2,536,724.50 Invoice #SDS0005235 - 8/11/17	Debt Service	

\$ 13,933,588.87

Total

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Income Statement MIDDD As of August 31, 2017

	30-Jun-17	7-1-17 to 8-31-17		
	Total Fund	O&M*		
Revenues		740,051		
Expenditures		2,688,637		
Equity	31,041,699			
NOTES				:#
Projected reserve at 6/30/2017 is		8,600,000		
* Includes following Projects:		_	70,000,000	2017A Bond
Dec 2016 Sinkhole	Revenue Expenditures	73,131,735~45,954,933	3,000,000	State Grant Clinton Twp share of AEW invoice
	Net	27,176,802		
4 SAW Grants	Revenue	887,228		
1	Expenditures	1,798,308		
ŭ	Net	(911,080)		
Sewage Metering(SRF 5487-01)	Revenue	1,158,091		
	Expenditures	1,027,404		
×	Net	130,687		
Corrosion Control(Project on Hold)	Revenue			
	Expenditures	120,024		
	Net	(120,024)		