



## West Michigan Regional Water Authority

4814 Henry Street

Norton Shores, MI 49441

### Meeting Agenda

**October 15, 2019 – 1:30 p.m.**

**Location: City Hall – City of Norton Shores**

- A) Call to Order by Chair
- B) Adoption of Agenda
- C) Adoption of minutes from the Organizational Meeting of July 10, 2019
- D) Public forum/Public input
- E) Committee Reports
- F) Treasurer's Report
- G) Old/New Business
  - 1. Water Main Break – Henry Street @ Seminole Road – Emergency Repair Approval
  - 2. Airline Road Water Tank – Replacement of Expansion Joint Information: Project Cost and Update
  - 3. Update: Chlorine Residual levels in Fruitport – Conversion of Altitude Valves
  - 4. Update: System controls - SCADA
  - 5. Discussion: Protection of water transmission main on Beach Street
  - 6. Discussion: Payoff of County held Regional Bonds
- H) Comments from the Board
- I) Adjournment

WEST MICHIGAN REGIONAL WATER AUTHORITY  
Minutes of July 10, 2019 Board Meeting

An annual organizational meeting of the West Michigan Regional Water Authority was called to order on Wednesday, July 10, 2019 at 10:02 a.m. in the Large Conference Room, Norton Shores City Hall, 4814 Henry Street.

**Members Present:** Board Members Jerry Bartoszek, Mike Huston, Steve Biesiada and Heidi Tice

**Members Absent:**

**Adoption of Agenda**

The adoption of the agenda was accepted by consensus.

**Adoption of Minutes**

Vice Chair Heidi Tice moved to adopt the minutes from the scheduled meeting of June 18, 2019. The motion was seconded by Chair Jerry Bartoszek. The motion was carried unanimously.

**Old/New Business:**

1. Election of Chair

Vice Chair Heidi Tice moved to elect Chair Jerry Bartoszek to the chair position. The motion was seconded by Treasurer Mike Huston. The motion was carried unanimously.

2. Election of Vice-Chair

Treasurer Mike Huston moved to elect Vice Chair Heidi Tice to the vice chair position. The motion was seconded by Secretary Steve Biesiada. The motion was carried unanimously.

3. Election of Secretary

Chair Jerry Bartoszek moved to elect Steve Biesiada to the secretary position. The motion was seconded by Treasurer Mike Huston. The motion was carried unanimously.

4. Election/Appoint Treasurer

Vice Chair Heidi Tice moved to elect Treasurer Mike Huston to the treasurer position. The motion was seconded by Chair Jerry Bartoszek. The motion was carried unanimously.



## West Michigan Regional Water Authority

4814 Henry Street

Norton Shores, MI 49441

---

### WEST MICHIGAN REGIONAL WATER AUTHORITY - MEETING SCHEDULE

All meetings are scheduled to be held at 1:30 p.m. in the Norton Shores City Hall Conference Room

August 20, 2019

October 15, 2019

December 17, 2019

February 18, 2020

April 21, 2020

June 16, 2020

WMRWA - 12" Water main break  
Henry St & Seminole Rd

		Account Charged
<b>Water Division</b>	\$2,355.43	592-535-705
<b>Streets Division</b>	\$6,465.57	592-535-705
<b>Equipment</b>	\$5,765.44	592-535-705
<b>JMC Contractors</b>	\$8,724.75	592-535-757
<b>API</b>	\$27,892.36	592-535-757
<b>City of Muskegon</b>	\$1,245.91	592-535-757
<b>Material cost:</b>		
Aggregate	\$1,207.60	592-535-757
EJ	\$1,535.74	592-535-757
Port City Redi-Mix	\$816.88	592-535-757
Mr. Scribs	\$42.65	592-535-757
<b>Total: \$56,052.33</b>		

Please refund \$14,586.44 to account 592-535-705

Please refund \$41,465.89 to account 592-535-757

10/7/19  
ma.

3580 Henry Street  
Water Main Break  
8/15/2019

ACCT #: 592-535-705

DATE	EMPLOYEE	HRS.	RATE	FRINGES	FRINGES	LABOR W/ FRINGES	EQUIP.	HRS.	RATE	TOTAL EQUIP. COST
8/15/2019	Jeff Rhodea	3.5	\$23.66	\$12.53	\$36.19	\$126.67	217	2	\$11.05	\$22.10
	Kevin Reames	3	\$20.64	\$13.82	\$34.46	\$103.38	225	2	\$52.27	\$104.54
							310	2	\$20.63	\$41.26
Set up road closure for main break										
8/16/2019	Jeff Rhodea	10.5	\$23.66	\$12.53	\$36.19	\$380.00	264	4	\$61.22	\$244.88
	Hank Carpenter	10.75	\$23.66	\$17.03	\$40.69	\$437.42	265	4	\$61.22	\$244.88
	Jordan Klein	9	\$24.85	\$13.91	\$38.76	\$348.84	266	4	\$61.22	\$244.88
	Drew Galdeen	9	\$22.07	\$14.78	\$36.85	\$331.65	280	4	\$64.87	\$259.48
	Kevin Reames	9	\$20.64	\$13.82	\$34.46	\$310.14	287	4	\$72.28	\$289.12
Removed asphalt, curb										
8/17/2019	Jeff Rhodea	8.5	\$23.66	\$12.53	\$36.19	\$307.62	264	4	\$61.22	\$244.88
	Hank Carpenter	8.5	\$23.66	\$17.03	\$40.69	\$345.87	265	4	\$61.22	\$244.88
	Jordan Klein	8.5	\$24.85	\$13.91	\$38.76	\$329.46	266	4	\$61.22	\$244.88
	Drew Galdeen	8.5	\$22.07	\$14.78	\$36.85	\$313.23	270	4	\$70.10	\$280.40
	Kevin Reames	8.5	\$20.64	\$13.82	\$34.46	\$292.91	280	2	\$64.87	\$129.74
Added gravel to water main break										
8/19/2019	Jeff Rhodea	3	\$23.66	\$12.53	\$36.19	\$108.57	221	1	\$12.41	\$12.41
	Hank Carpenter	3	\$23.66	\$17.03	\$40.69	\$122.07	264	1	\$61.22	\$61.22
	Jordan Klein	3	\$24.85	\$13.91	\$38.76	\$116.28	270	1	\$70.10	\$70.10
	Drew Galdeen	3	\$22.07	\$14.78	\$36.85	\$110.55	280	1	\$64.87	\$64.87
Prepped patch										
8/20/2019	Jeff Rhodea	8	\$23.66	\$12.53	\$36.19	\$289.52	221	4	\$12.41	\$49.64
	Hank Carpenter	8	\$23.66	\$17.03	\$40.69	\$325.52	264	2	\$61.22	\$122.44
	Jordan Klein	8	\$24.85	\$13.91	\$38.76	\$310.08	265	2	\$61.22	\$122.44
	Drew Galdeen	10	\$22.07	\$14.78	\$36.85	\$368.50	266	2	\$61.22	\$122.44
Added slag & gravel										
8/21/2019	Jordan Klein	8	\$24.85	\$13.91	\$38.76	\$310.08	207	2	\$12.41	\$24.82
	Drew Galdeen	8	\$22.07	\$14.78	\$36.85	\$294.80	221	2	\$12.41	\$24.82
	Mark Vilneff	3	\$20.64	\$13.82	\$34.46	\$103.38	225	2	\$52.27	\$104.54
	Kevin Reames	8	\$20.64	\$13.82	\$34.46	\$275.68	240	2	\$99.94	\$199.88
	Zach Muskovin	3	\$20.64	\$13.82	\$34.46	\$103.38				
Water main patch										

MATERIAL:

LABOR: \$6,465.57

TOTAL EQUIP: \$3,994.40

3580 Henry Street  
 Water Main Break  
 8/15/2019

8/17/2019	23A Gravel	88 yds \$7.60 /yd	<u>\$668.80</u>
8/20/2019	22A Slag	30 yds \$8.76 /yd	<u>\$262.80</u>
8/20/2019	23A Gravel	30 yds \$7.60 /yd	<u>\$228.00</u>
8/20/2019	Topsoil	4.00 yds \$12.00 /yd	<u>\$48.00</u>

TOTAL MATERIALS: \$1,207.60

PROJECT GRAND TOTAL \$53,171.77

\*\*Billed out to 592-535-705 \$11,667.67

Mr. Scribs	\$42.65
Port City Redi-Mix	\$816.88
Asphalt Paving	\$27,892.36
E.J. USA	\$1,535.74
Jackson Merkey Equipment:	\$5,557.50
Jackson Merkey Labor:	\$3,167.25
City of Muskegon	\$1,245.91
** Billed out to 592-535-757	<u>\$40,258.29</u>

Streets Dept pd for 1/2 of the  
 concrete repair cost bill from  
 City of Muskegon.

\*\*Billed out to 401-441.976.006 \$1,245.91

**City of Norton Shores  
Water and Sewer Department  
Emergency cost form**

**Date Quoted:**  
**Date Ordered:** 8/15/2019  
**Total Cost:**  
**Date Finished:**  
**Date Paid:**

**Charge To:** Regional Water (labor and equip. only for W&S)  
**Address:** Henry St. and Seminole Rd. NE corner  
**Reason:** Repair 12" WMB

**Labor**

Name	Wage	Fringe	OT Rate	Double Time	Standard Hours	OT Hours	Double Time Hours	Total Cost
Josh Connell	\$23.66	\$10.66	\$46.15	\$57.98	5	6		\$448.50
Scott Hannahs	\$24.85	\$18.30	\$55.58	\$68.00	4			\$172.60
Jason Halter	\$20.64	\$16.78	\$47.74	\$58.06	4.5			\$168.39
Craig Lehan	\$23.66	\$18.22	\$53.71	\$65.54	5	6		\$531.66
Eric Mattson	\$24.85	\$14.34	\$51.62	\$64.04				\$0.00
Dustin Vanderputte	\$23.66	\$10.66	\$46.15	\$57.98	9	6		\$585.78
Brandon Wilburn	\$23.66	\$10.66	\$46.15	\$57.98	5	6		\$448.50
Todd Fowler	\$19.29	\$10.66	\$39.60	\$49.24				\$0.00
Eric Beishuizen	\$23.66	\$10.66	\$46.15	\$57.98				\$0.00

Material	Price	Qty	Total Cost	Equipment	Rate	Hours	Total Cost
12" Class 52 Ductile Iron Pipe			\$0.00	219	\$31.00	3	\$93.00
12' MJ Full Sleeves			\$0.00	266	\$61.89	8	\$495.12
Cold patch/ton	\$106.22		\$0.00	211	\$9.74	4.5	\$43.83
Final street patch (Esitmate)	\$1,100.00		\$0.00	212	\$19.24	5	\$96.20
Complete roadway box	\$164.87		\$0.00	213	\$10.35		\$0.00
6" LHO RW valve	\$449.84		\$0.00	220	\$36.21	10	\$362.10
6" Ductile iron pipe per foot	\$14.98		\$0.00	222	\$9.40		\$0.00
Dewatering stone per ton	\$14.00		\$0.00	264	\$61.89	11	\$680.79
Paint hydrant	\$130.00		\$0.00	268	\$99.35		\$0.00
Hydrant flag	\$25.00		\$0.00	283	\$47.60		\$0.00
1.5" Omni T2 - Domestic Meter	\$1,560.00		\$0.00	306	\$15.48		\$0.00
1.5" Brass Meter Flanges	\$60.00		\$0.00	307	\$11.42		\$0.00
2" Omni T2 - Domestic Meter	\$1,800.00		\$0.00	327	\$49.53		\$0.00
2" Brass Meter Flanges	\$65.00		\$0.00	329	\$17.12		\$0.00
7' sign post	\$11.00		\$0.00	332	\$12.62		\$0.00
Remote wire/ft	\$0.45		\$0.00	371	\$16.57		\$0.00
Radio Read	\$170.00		\$0.00	375	\$1.12		\$0.00
0.5" PVC Conduit/ft	\$0.25		\$0.00	630	\$5.75		\$0.00
6" MJ sleeve	\$87.48		\$0.00	631	\$11.92		\$0.00
6" MJ mega lugs	\$20.14		\$0.00	379	\$15.55		\$0.00
6" mega lug kits	\$9.86		\$0.00	<b>Labor Total</b>			\$2,355.43
3 sections of side walk (75 sq. ft.)	\$2.75		\$0.00	<b>Material Total</b>			\$0.00
Top soil	\$12.00		\$0.00	<b>Equipment Total</b>			\$1,771.04
8" repair clamp	\$258.77		\$0.00	<b>10% Admin</b>			<del>\$412.65</del>
			\$0.00	<b>Total Cost</b>			<del>\$4,539.12</del>
			\$0.00	Prepared by: SH			\$4,126.47

\$4,126.47  
MA.



CITY OF MUSKEGON  
 CITY TREASURER'S OFFICE  
 P.O. BOX 536  
 MUSKEGON, MI 49443-0536

# INVOICE

INVOICE NUMBER: 19-0006404  
 INVOICE DATE: 09/19/2019  
 DUE DATE: 10/19/2019  
 CUSTOMER #: 35804  
 AMOUNT DUE: 2,491.82

AMOUNT PAID: \$ \_\_\_\_\_



CITY OF NORTON SHORES

4814 HENRY STREET  
 MUSKEGON, MI 49441

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT. MAKE CHECKS PAYABLE TO: CITY OF MUSKEGON  
 PAYMENT MUST BE RECEIVED BY DUE DATE TO AVOID ADDITIONAL PENALTY.

DETACH HERE - RETAIN BOTTOM PORTION FOR YOUR RECORDS

DATE	DESCRIPTION	AMOUNT
09/19/2019	STREETS-MAJOR	2,491.82

*\* STREETS + WATER split 50/50.  
 sidewalk + curb work.  
 \$1,245.91 charge to WMB.*



CHARGES FROM CITY OF MUSKEGON FOR CONCRETE REPAIRS ON HENRY ST ON AUGUST 19 & 20, 2019.

QUESTIONS: CONTACT TEAIRRA 231-724-6909.

THANK YOU.

Total Invoice: 2,491.82  
 Credits Applied: 0.00  
 Payments Applied: 0.00  
 Invoice Balance: 2,491.82

UNPAID INVOICES MAY BE ADDED TO PROPERTY TAX BILL WITH A 20% FEE (MINIMUM OF \$25.00)

INVOICE NUMBER 19-0006404  
 CUSTOMER # 35804

**\*\*Invoices may be sent to collections after 90 days and a late fee of 1% per month on the past due balance may be imposed.\*\***

PLEASE NOTE INVOICE NUMBER ON YOUR CHECK.

No. 608318

Date 8/30/19

Name Hubby Kuchick Marcinski

ACCT #:

6978M Bill N. N. Shores

DO NOT WRITE IN THESE SPACES

LOCATION	DESCRIPTION OF WORK	TIME		HOURS WORKED	EQUIPMENT
		FROM	TO		
1- Henry	Concrete Repairs			5	30116
2-					30572
3-					30116A
4-					30116B
5-					
6-					

Kil

608318 REQUISITION				608318 REQUISITION			
QTY.	PART NAME	CODE	PRICE	QTY	PART NAME	CODE	PRICE
AUTHORITY		Rec'd by:		AUTHORITY		Rec'd by:	

CITY OF MUSKEGON

CITY OF MUSKEGON



**JACKSON-MERKEY  
CONTRACTORS, INC.**

Jackson-Merkey Contractor, Inc  
3430 Lund Avenue  
Muskegon, MI 49442-6300

# INVOICE

Invoice No: 19-100

Date: 8/30/2019

Due Date: 9/13/2019

CITY OF NORTON SHORES  
4814 HENRY ST.  
NORTON SHORES, MI 49441

Date	Description	Quantity	Unit of Measure	Unit Price	Extended Price
	Provide equipment and labor for 12" watermain repair, asphalt roadway removal and aggregate grading, compaction and fine grading: Henry Street, North of Seminole Road.				
	Equipment:				
	Volvo EC-210 Excavator	19.00	HRS	95.00	1,805.00
	Cat 289D Multi-terrain Loader	6.50	HRS	55.00	357.50
	IR SD-100 Drum Roller	2.00	DAYS	475.00	950.00
	Gehl 690 Grader	5.50	HRS	65.00	357.50
	Wacher 5045 Diesel Compactor	1.00	DAY	175.00	175.00
	Semi-tractor with 4 axle demo lead includes driver	6.25	HRS	125.00	781.25
	Semi-tractor with 60 ton lowboy includes driver	2.75	HRS	135.00	371.25
	Tri-axle dump with tag trailer includes driver	5.00	HRS	115.00	575.00
	1 ton truck with tilt bed trailer	1.00	DAY	185.00	185.00
	Labor:				
	Supervisor/Operator	10.00	HRS	90.00	900.00
	Supervisor/Operator: OT	11.25	HRS	111.00	1,248.75
	Operator	8.00	HRS	60.00	480.00
	Operator: OT	3.00	HRS	77.00	231.00
	Laborer	3.00	HRS	50.00	150.00
	Laborer: OT	2.50	HRS	63.00	157.50

592-535-757

9/5/19 MA

Henry / Seminole WMB.

WMBWA.

P.O. 85045

Thank You For Your Business!  
Jackson-Merkey Contractor, Inc  
(231) 728-9344

Amount Now Due: 8,724.75

NET 15

# INVOICE

## ASPHALT PAVING, INC.

1000 E. SHERMAN BLVD., P.O. BOX 4190  
MUSKEGON, MI 49444  
231-733-1409  
FAX 231-733-4256

INVOICE # 161-19  
DATE: 08/29/2019

TO:  
CITY OF NORTON SHORES  
4814 HENRY  
NORTON SHORES, MI 49441

HENRY STREET PATCH  
WATER LINE BREAK

		CUSTOMER P.O. #	TERMS	
161			30 DAYS NET	
UNIT	ITEM NUMBER/DESCRIPTION	UNIT PRICE	EXTENDED PRICE	

186.29	TONS	ASPHALT BASE COURSE	\$ 82.80	\$ 15,424.81
140.94	TONS	ASPHALT TOP COURSE	\$ 88.46	\$ 12,467.55
			\$	*
			\$	*
			\$	*
			\$	*
			\$	*
			\$	*
			\$	*
			\$	*

**RECEIVED**  
SEP 03 2019  
BY: *[Signature]*

592-535-757  
9/5/19 ma po. 85044

Henry/Scrimie WMB. WMEWA

TOTAL AMOUNT DUE INCLUDING TAXES	\$ 27,892.36
----------------------------------	--------------

THANK YOU FOR YOUR BUSINESS



EJ USA, Inc.  
PO Box 644873  
Pittsburgh, PA 15264-4873  
800 826 4653

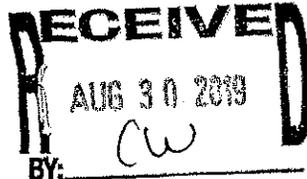
# Invoice

## 110190070559

Invoice Date 08/28/19  
Due Date 09/27/19  
Order No. 0001349918  
Customer No. 20061925  
Customer PO STOCK  
Job Name  
Job Number S1

Bill To:

City of Norton Shores  
Attention Accounts Payable  
4814 Henry Street  
Norton Shores MI 49441



Ship To:

City of Norton Shores  
1174 E Mt Garfield  
Attn Matt Anderson  
Norton Shores MI 49441

Line	Item No	Description	Sales Price	Inv Qty	Amount
	Tracking Info:	PRO#			
10	P21210521111	12 CL 52 TY & PE DIP STD CL AC	36.19	18	651.42
20	00905065	12"X12 MJ SSB SOLID SLV W/O	272.16	2	544.32
30	00879156	12" MJ MEGALUG #1112 ACCS F/DI SET	85.00	4	340.00
30	00878056	12" MJ MEGA LUG #1112 F/DI PIP		4	
30	00878402	12" MJ GKT 3/4 X 4 BOLT NU		4	

*8/30/19 MA Henry/semule  
PO. 85039 LMB.*

**In order to ensure accurate application of your payments, please include the invoice number on all check or electronic payment remittance information.**

**For electronic payments, please send all remittance information to:**

**americas.ar@ejco.com.**

Ordered By:  
City of Norton Shores  
Attention Accounts Payable  
4814 Henry Street  
Norton Shores MI 49441

Payment Terms Net 30 Days  
Delivery Terms Ex-Works  
Delivery Date 08/28/19  
Delivery Ticket 2312486  
Delivery Method EJ Truck

Order Total	\$1,535.74
Tax	
Charges	

Thank you for your business. We are driven to deliver unparalleled customer service.

Pay this amount:  
**\$1,535.74 USD**

A monthly finance charge will be added to any unpaid balance which is not paid when due. The finance charges are computed by a periodic rate of 1.5% per month (from and after the due date), which is an annual percentage rate of 18% applied to the unpaid balances after deducting payments made before the due dates and/or credits. Payments received on account are applied against the amounts first due.

We hereby certify that these goods were produced in compliance with all applicable requirements of Sec. 6, 7, & 12 of the Fair Labor Standards Act, as amended, and of regulations and orders of the United States Department of Labor Issued under Sec. 14 thereof.

Current Terms and Conditions are available at [ejco.com](http://ejco.com)

**Please Remit To:**  
**ACH Payment**  
PNC Bank  
Routing Number: 021052053  
Account Number: 45487629  
[americas.ar@ejco.com](mailto:americas.ar@ejco.com)

**Check Payment**  
EJ USA, Inc.  
PO Box 644873  
Pittsburgh, PA 15264-4873

# PORT CITY REDI MIX COMPANY

1780 S. SHERIDAN DR • MUSKEGON, MI 49442  
 PH: (231) 777-2777 • FAX: (231) 777-1197

## INVOICE

CUSTOMER NO	DATE	INVOICE NO	PAGE
6164	08/24/2019	200189	1

CITY OF NORTON SHORES  
 1174 E MOUNT GARFIELD RD  
 NORTON SHORES, MI 49441

TERMS: NET EOM PROX  
 A FINANCE CHARGE WILL BE IMPOSED ON PAST DUE ACCOUNTS. THE FINANCE CHARGE IS COMPUTED BY A 'PERIODIC RATE' OF 1 1/4% PER MONTH, WHICH IS AN ANNUAL PERCENTAGE RATE OF 18% OR A MINIMUM SERVICE CHARGE OF \$5.00 WHICHEVER IS GREATER.

DATE	TICKET NO	QUANTITY	UNIT	DESCRIPTION	PRICE	PER UNIT	TAX	TOTAL
000251 VARIOUS LOCATIONS								
PO NUMBER: HENRY & SEMINOL								
08/19	025-190128	2.50	CY	6.0 SK LIME AE	107.000			267.50
08/19	025-190128	1.00	EA	MINIMUM LOAD 2-3 YARDS	100.000			100.00
08/20	025-190219	3.25	CY	6.0 SK LIME AE	107.000			347.75
08/20	025-190219	1.00	EA	MINIMUM LOAD 2-3 YARDS	100.000			100.00
08/20	025-190219	3.25	CY	3.25% 1/4% CHLORIDE	0.500			1.63
JOB TOTAL LINE								816.88

592-535-757  
 8/30/19 mt.

PO. 25038

HENRY ST / SEMINOLE RD WMB

W.M.R.W.A

MAILING ADDRESS: PO BOX 9160 GRAND RAPIDS MI 49509-0160

816.88

AMOUNT DUE ▶

MR SCRIBS INC  
6670 WINDFLOWER WAY  
NORTON SHORES, MI 49441  
(231) 733-1857

Merchant ID: 6371  
Term #: 4501

Store #: 0001  
Ref #: 0018

### Sale

XXXXXXXXXXXX8324

MASTERCARD

Entry Method: Manual

Amount: \$	42.65
Tax: \$	0.00
Total: \$	<u>42.65</u>

08/15/19

19:22:56

Inv #: 000018

Appr Code: 004837

Trade Ref ID: WMB  
AUG 19 2 0 2 0

Apprvd: Online

Batch#: 000018

AUG 19

STREET & DRAINAGE  
THANK YOU FOR YOUR BUSINESS!

#592-535-757

8/26/19 MA.

Henry / Seminde WMB.

**West Michigan Regional Water Authority  
Fruitport Township  
500,000 Gallon Spheroid  
Specification – Expansion Joint Replacement**

**Scope of Work:**

- A. Remove the expansion joint in the pit, install a spool piece and install a new expansion joint above the top platform.
- B. The new expansion joint is to be a flanged Bellows-Type/Unaflex Style 44 with a pressure rating of 150 psi, flanged ends, stainless bellows, minimum axial movement of 1 in. and minimum lateral movement of 0.1 in. Flanges are to be AWWA Class D C207. Unaflex Inc. Pompano Beach, FL. 1-800-327-1286.
- C. Weld new bolted flanges on the pipe above the top platform per AWWA C207.
- D. Remove the existing expansion joint located in the pit in the basebell. Expansion joint to become property of the contractor for proper disposal. Install a flanged spool section in place of the removed expansion joint. Spool to be STD size the flanges are to match the existing, install new galvanized steel bolts and nuts. The bolt and nut size are to match the existing flanges.
- E. The fill pipe diameter is 20 inches. The contractor is to field verify fill pipe size, contractor is responsible for any existing pipe alterations required for new joint and spool fitting.
- F. Install gasket between the existing flanges and the new expansion joint and at the new spool section per AWWA C207 with a full face and a minimal thickness of 1/16 inch.
- G. Use galvanized bolts for all of the connection, size to fit the flange holes.
- H. Power tool clean the new spool section, the existing flanges in the pit (include 2 inches above and below the flanges), weld, and weld burn areas to a SSPC-SP11 standard. Apply two (2) coats of epoxy using Tnemec series 66 at 3.0 to 5.0 mils.
- F. All coatings and products to be installed per manufacturers recommendations.
- I. Reinstall or replace existing insulation over the entire joint.
- J. See Drawing 01a-01b.
- K. Contractor insurance requirements are as follows: The West Michigan Regional Water Authority and Dixon Engineering Inc. needs to be named additional insured on the contractor's liability insurance. A minimum of \$3,000,000 per occurrence for personal injury, bodily injury and property damage.
- L. The work is to be performed from September 5, 2019 to September 27, 2019. The tank can be out-of-service a maximum of 10 days in that timeframe.

Price for all repair work including painting:

RAY'S WELDING Co, INC. \$ 16,800.<sup>00</sup>

Fax proposal to Dixon Engineering, Inc. at 616-374-7116 attention to Eric Binkowski or email to [eric.binkowski@dixonengineering.net](mailto:eric.binkowski@dixonengineering.net) by 5:00PM July 26, 2019.