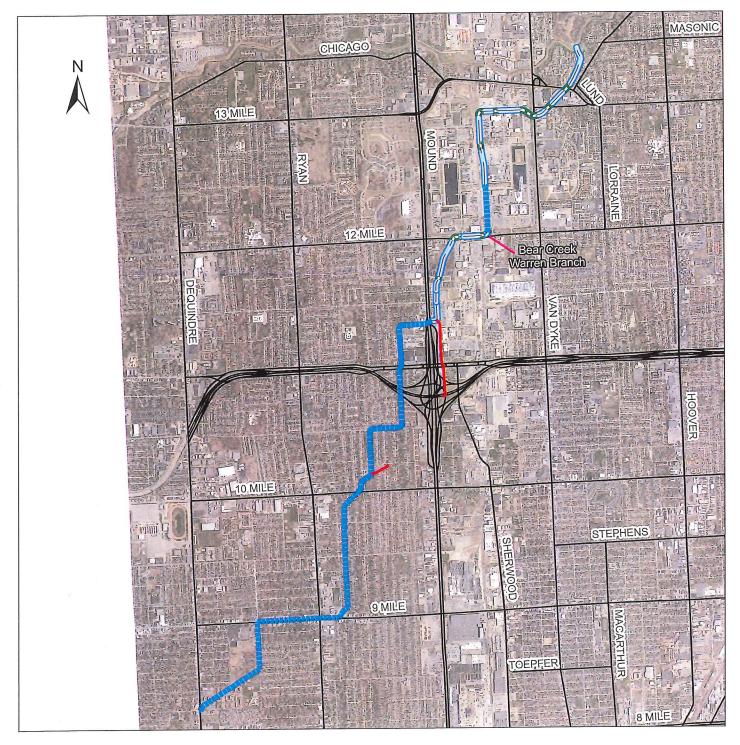
Gregg Miller Nash

BEAR CREEK INTER-COUNTY DRAINAGE BOARD AUGUST 21, 2019 10:00 A.M. AGENDA

		Page
1.	Call of meeting to order and roll call	
2.	Approval of Agenda	
3.	Approval of Minutes of meeting of July 24, 2019	3
4.	Public Participation	
5.	Project Update Memo – Jeff Bednar / Tom Stockel	6
6.	Bear Creek Warren Branch #2 Sinkhole Photos – Tom Stockel	7
7.	Consideration for approval of invoices (see attached)	16
8.	Financial Update – Bruce Manning	17
9.	Old Business	
10. New Business		
11	Adjourn	

BEAR CREEK DRAIN (INTER COUNTY)

CENTERLINE/WARREN/OAKLAND COUNTY







Drain Length (Feet/Miles): 54,012.44 / 10.23

Legend

Enclosed Gravity Open Channel

< 60" Dia</p>
Ditch
Pond
Culvert

A meeting of the Inter-County Drainage Board for the **BEAR CREEK DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham Road, Clinton Township, Michigan on July 24, 2019.

PRESENT: Michael Gregg, Chairman

Michigan Department of Agriculture & Rural Development

Candice S. Miller, Secretary

Macomb County Public Works Commissioner

Jim Nash, Member

Office of Oakland County Water Resources Commissioner

ALSO PRESENT: Anne Vaara, Chief Deputy, Steve Korth, P.E., Manager, Megan Koss, Staff Assistant, George Nichols, Civil Engineer III, Office of Oakland County Water Resources Commissioner; Brian Baker, Chief Deputy, Jeff Bednar P.E., Environmental Resources Manager, Bruce Manning, Financial Manager, Tom Stockel, Construction Engineer, Stephen Downing, Construction & Maintenance Manager, Macomb County Public Works; Tony Tersigell, Macomb County Department of Roads; James Burton, Hubbell, Roth & Clark; Brady Harrington, Michigan Department of Agriculture & Rural Development

The Chairman called the meeting to order at 11:29 a.m.

A motion was made by Mr. Nash, supported by Ms. Miller to approve the agenda as presented.

Adopted:

YEAS: 3

NAYS: 0

The minutes of the meeting of July 1, 2019 were presented. A motion was made by Ms. Miller, supported by Mr. Nash to approve the minutes as presented.

Adopted:

YEAS: 3

NAYS: 0

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

Mr. Bednar updated the Board that they met with Lou Urban and Karen Ridgeway about the hydraulic modeling results. They have a fully calibrated model of our drain network. They need a month to compile the results and present it to the Board. They are going to run a "what if" analysis on if our proposed storm water standards are applied to just 20% of the available parcels and what kind of impacts that may have in the reliability of this drain.

Mr. Stockel updated the Board on the 10 ½ Mile and Mound sinkhole that was discovered last week. We believe it occurred on the July 5, 2019 when there was a big rain. There is a chamber there with a steel plate on top of the chamber and it appears it was leaking before, and this storm blew the plate and stone rushed up and out. They did some grouting under the road, repaired the structure, paved it, and put a large catch basin cover on.

Detroit Arsenal has flushed their system and we took photos and that drain is all clean again. BP has their phase 2 plan in for approval. They want to put a recovery trench in. They want a license to use to keep the recovery trench in for 5 years. In a week or so we should have all approved plans and they will get their contractors out to get to work.

A motion was made by Mr. Nash, supported by Ms. Miller to receive and file the project update by Mr. Bednar and Mr. Stockel.

Adopted:

YEAS: 3

NAYS: 0

The Chairman presented the invoices totaling \$1,373.50 as provided to the Board for review and approval.

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

Adopted:

YEAS: 3

NAYS: 0

A motion was made by Mr. Nash, supported by Ms. Miller to receive and file the financial report presented by Mr. Manning.

Adopted:

YEAS: 3

NAYS: 0

There being no further business, it was moved by Mr. Nash, supported by Ms. Miller that the meeting of the Bear Creek Inter-County Drainage Board be adjourned.

Adopted:

YEAS: 3

NAYS: 0

The meeting was adjourned at approximately 11:50 a.m.

Candice S. Miller, Secretary

Bear Creek Inter-County Drainage Board

STATE OF MICHIGAN

COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taken by the Inter-County Drainage Board for the Drainage District shown on the attached set of Minutes, on July 24, 2019. 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, Secretary

Bear Creek Inter-County Drainage Board

DATED: 7/24/19



ANDERSON, ECKSTEIN & WESTRICK, INC. CIVIL ENGINEERS SURVEYORS ARCHITECTS

51301 SCHOENHERR RD. SHELBY TOWNSHIP, MI 48315 p(586)726-1234 www.aewinc.com

Bear Creek Hydraulic Study **Invoicing Summary Memo** July 29, 2019

AEW Project No. 0211-0187-3

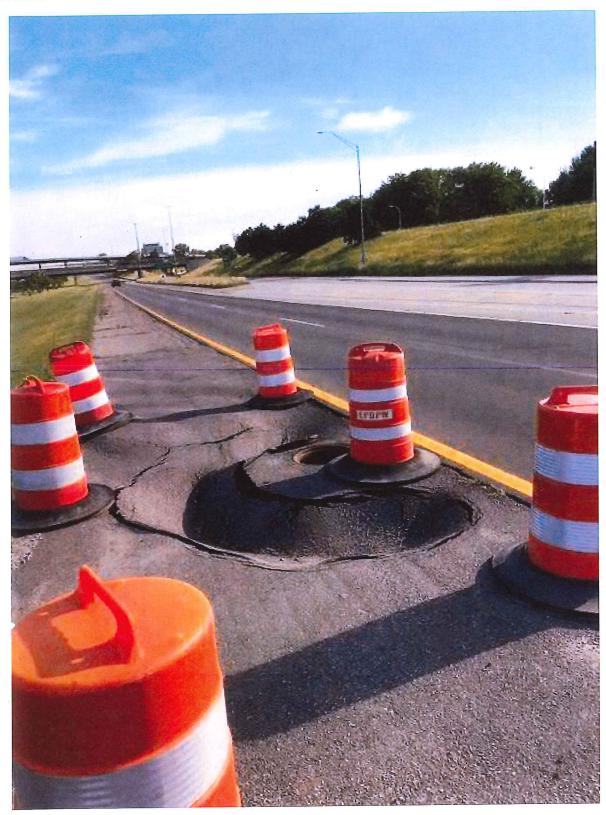
The following is a synopsis of the events leading up to the authorization for a hydraulic study and work performed for invoicing between June 24, 2019 and July 21, 2019.

Synopsis of the Work Performed

AEW has continued the investigation of drain improvement locations and coordination with public and private entities.

Rodney Elnick property 13-16-101-019 & 020, 26800 Mound Road, Warren MI 48092.

- o The viability of drain improvements on this property is directly related to the hydraulic benefits. A drain cleanout can be accomplished within the existing easement limits. A drain relocation/expansion to the east property line for donation of additional property would be considered if the hydraulic benefits justified the expense. The hydraulic model is currently being refined to determine if property acquisition benefits the community.
- Detroit Arsenal property at 6501 East Eleven Mile Road, Warren, MI. 48397.
 - Detroit arsenal has responded to AEW request for information on the Centerline Gardens Area considered for reginal detention with as built drawings.
 - o The time required to process real-estate/environmental documentation to transfer property to the MCPWO is approximately 2 years.
 - Army land being used for flood control will require review by the USACE servicing office.
 - The hydraulic model indicates that the construction of the regional detention facility at this location will lower the hydraulic grade line significantly resulting in less flood risk to the community.
- General Motors property at 30001 Van Dyke Avenue, Warren, MI. 48397.
 - AEW has continued communications coordinating for master plans, existing utility drawings, easement documents and long lead time scheduling items.
- AEW and ASI continue to develop existing and proposed hydraulic modeling.
 - o ADS installed flow meters April 2, 2019 based on the locations determined by the MCPWO and ASI. Significant rain events have provided adequate data for existing model calibration. The meters are scheduled to be removed after May 31, 2019.
 - MDOT provided the MCPWO and AEW the MDOT I-696 sewer system historical drawings. MDOT does not have a pump station discharging flow from the ROW to the Bear Creek at Mound Road.



















Funding Source	Apportionment	Manager	Vendor	Amount	Invoice Detail	Project Summary	Project Balance
ear Creek	Chapter 21 Warren - 78.65256% State of MI - 2.68187% County of Macomb - 4.00528% County of Oakland - 0.97372% Center Line - 0.29307% Madison Heights - 5.70188% Hazel Park - 7.63162%						
		Bednar	Anderson, Eckstein & Westrick	\$ 1,844.00	1,844.00 Invoice #122598 - 07.10.19	Hydraulic Study	\$ 51,257.50
		Bednar	Anderson, Eckstein & Westrick	\$ 1,660.15	1,660.15 Invoice #122736 - 07.29.19	Hydraulic Study	\$ 49,597.35
			Total	3 504 15			

YTD Trial Balance

Fund: Bear Creek Combined

As of Fiscal Period: Oct 1, 2018-July 31, 2019

	O&M Balance		Total
	9/30/2018	O&M	7/31/2019
Cash - Operating	1,274,888	(66,376)	1,208,512
Accounts Receivable ⁽¹⁾	75,534		75,534
Assets			0
Liabilities ⁽¹⁾	98,929		98,929
Revenues		22,905	22,905
Expenditures		89,281	89,281
Equity	1,251,493		1,185,117
		1	

NOTES

1) Net amount of \$23,394 due to AEW for final invoices relating to SAW 1407. Final request is going under MS4 review at state level