#### BEAR CREEK INTER-COUNTY DRAINAGE BOARD DECEMBER 15, 2021 9:00 A.M. AGENDA

#### NOTE: THIS MEETING WILL BE HELD BY TELECONFERENCE

Call in Number: 1-484-469-5381 Access Code: 644 438 513

		Page
1.	Call of meeting to order and roll call	
2.	Approval of Agenda	
3.	Approval of Minutes of meeting of July 15, 2020	3
4.	Public Participation	
5.	General Motors Bear Creek Daylighting & Green Infrastructure Project Presentation – Jeff Bednar	5
6.	2022 Macomb hosted Chapter 21 Meeting Dates	20
7.	Consideration for approval of invoices (see attached)	21
8.	Financial Update – Bruce Manning	22
9.	Other Business	
10.	. 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
>= 60" Dia
Pond
Culvert

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A meeting of the Inter-County Drainage Board for the **BEAR CREEK DRAIN** was held via telephone conference per the State of Michigan Executive Order due to the COVID-19 pandemic, on July 15, 2020.

PRESENT: Michael Gregg, Chairman

Michigan Department of Agriculture & Rural Development

Candice Miller, Secretary

Macomb County Public Works Commissioner

Anne Vaara, Member

Oakland County Water Resources Chief Deputy

ALSO PRESENT: Steve Korth, P.E., Manager, 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, Kellie Kource, Drain Account Specialist, Stephen Downing, Construction & Maintenance Manager, Karen Czernel, Deputy, Macomb County Public Works

The Chairman called the meeting to order at 10:03 a.m.

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

Adopted: YEAS: 3

NAYS: 0

The minutes of the meeting of June 23, 2020 were presented. A motion was made by Ms. Miller, supported by Ms. Vaara 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 we received a proposal from Lou Urban from Anderson, Eckstein and Westrick to continue providing project oversight for the General Motors and Detroit Arsenal projects. We have asked for a revised proposal from Lou Urban which we will bring to the board in August.

Mr. Stockel updated the board that the BP station final assessment report was due July 14, 2020 and we are awaiting the results.

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

Adopted: YEAS: 3

NAYS: 0

Mr. Bednar updated the board that we have a proposal from Spicer Group to provide Stacy Hissong assistance in order to finish the route and course. This will complete the work that was started under the SAW Grant.

A motion was made by Ms. Miller, supported by Ms. Vaara to approve the proposal from Spicer Group to help determine the Bear Creek Drain and branches established route and course at a not to exceed cost of \$8,200.

Adopted: YEAS: 3

NAYS: 0

A motion was made by Ms. Vaara, 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 Ms. Miller, supported by Ms. Vaara that the meeting of the Bear Creek Inter-County Drainage Board be adjourned.

Adopted: YEAS: 3

NAYS: 0

The meeting was adjourned at approximately 10:20 a.m.

Candice Miller, Secretary

Bear Creek Inter-County Drainage Board

ardico S. Miller

#### 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 15, 2020. The original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.

Candice Miller, Secretary

Bear Creek Inter-County Drainage Board

andico S. Mille

DATED: 7/15/2020

## MACOMB COUNTY PUBLIC WORKS

IN PARTNERSHIP WITH

## GENERAL MOTORS LLC



**PRESENTS** 



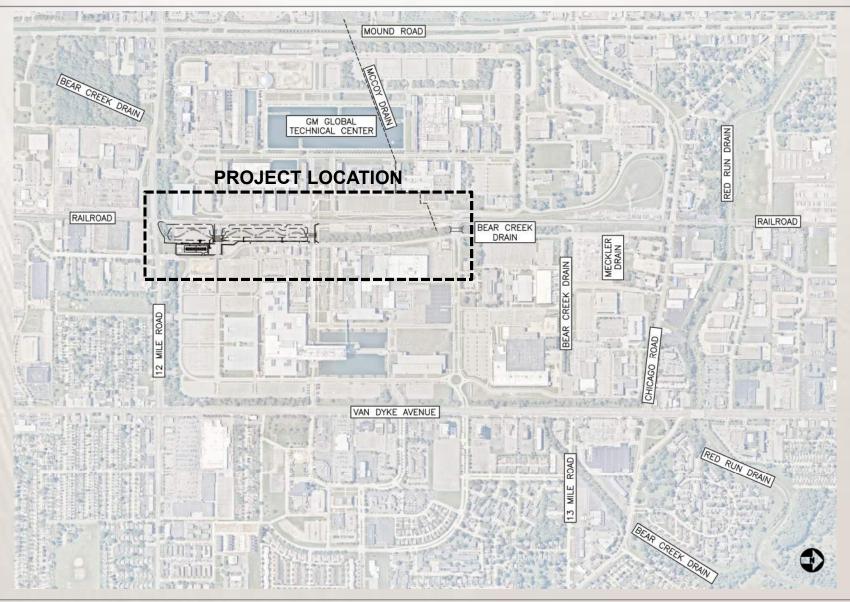
## THE BEAR CREEK DRAIN

DAYLIGHTING

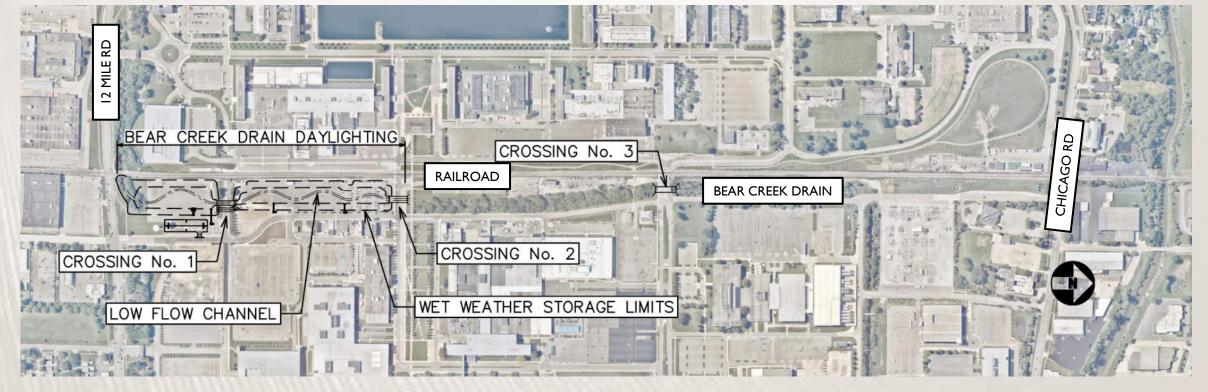
AND

GREEN INFRASTRUCTURE PROJECT

## PROPOSED OVERALL AREA PLAN

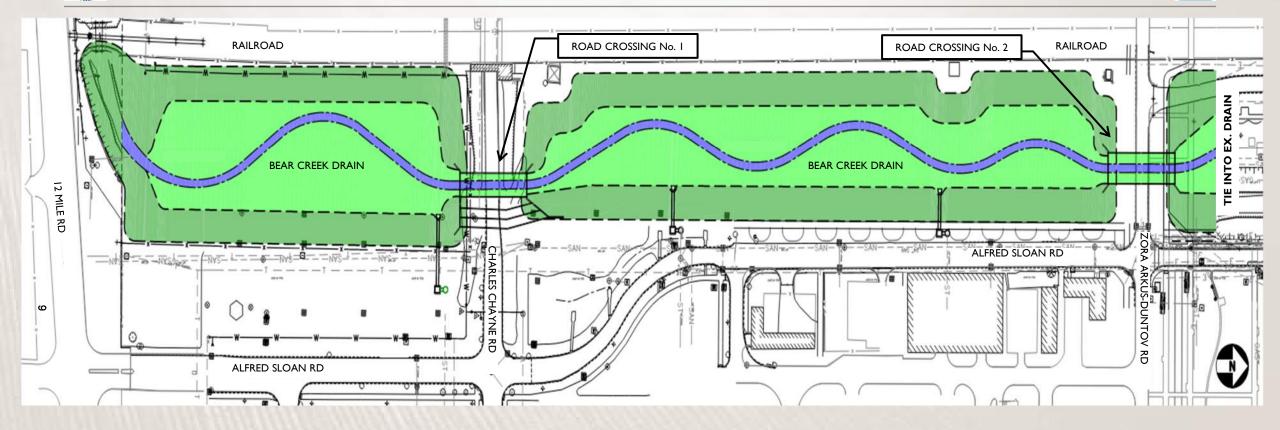


#### PROPOSED FLOOD MITIGATION PLAN



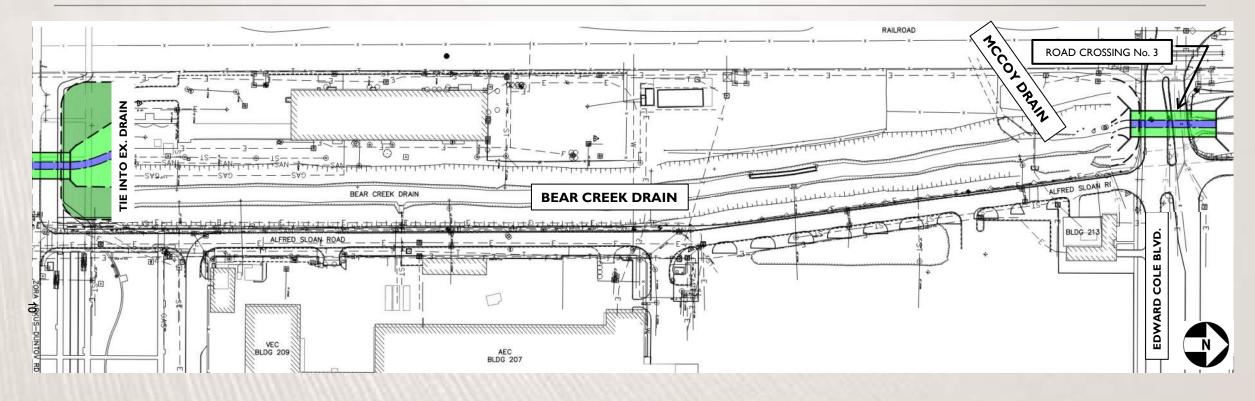
- Project scope:
  - Removal / abandonment of the existing  $12^{\circ}W \times 12^{\circ}H$  double box culvert and associated parking lots above.
  - Creation of a new low-flow drain, flood storage area, and culvert crossing improvements.

#### BEAR CREEK DRAIN DAYLIGHTING



- Construction of new 32'W x 9'H three-sided arch culvert at Crossing No. 1.
- Construction of new 42'W x 12'H three-sided arch culvert at Crossing No. 2.
- Removal of parking lots south of Crossing No. 2 and south of Crossing No. 1.
- Excavate for flood mitigation areas south of Crossing No. 1 and south of Crossing No. 2.
- Remove existing double box culvert from southern to the northern headwall (±1,920 ft).

#### CROSSING No. 3 CONSTRUCTION

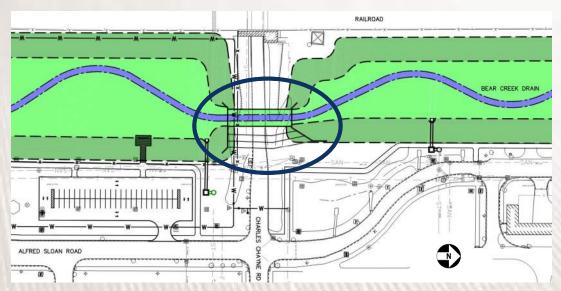


- Construct new 42'W x 14'H culvert Crossing No. 3 at Edward Cole Blvd.
- Replaces existing 12'H x 12'W double box culvert.

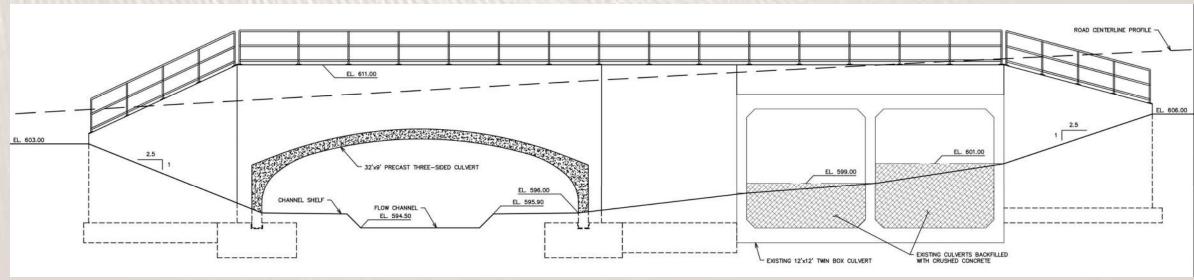
## CROSSING No. I - CHARLES CHAYNE ROAD GLOBAL TECHNICAL CENTER





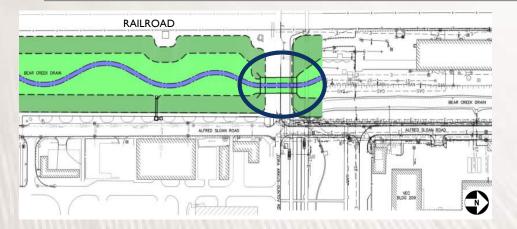


- Install new 32'W x 9'H precast three-sided arch culvert.
- Re-use portions of existing 12'W x12'H double box culvert for high-flow volume transport.
- Provides +/- 32% increase in flow area

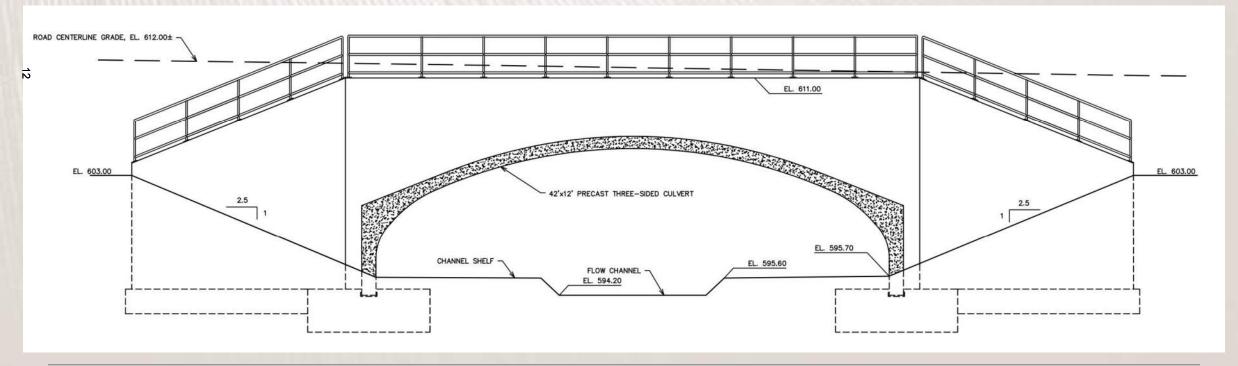


#### CROSSING No. 2 - ZORA ARKUS-DUNTOV RD

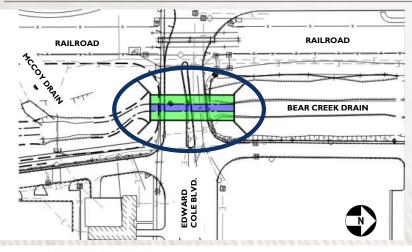




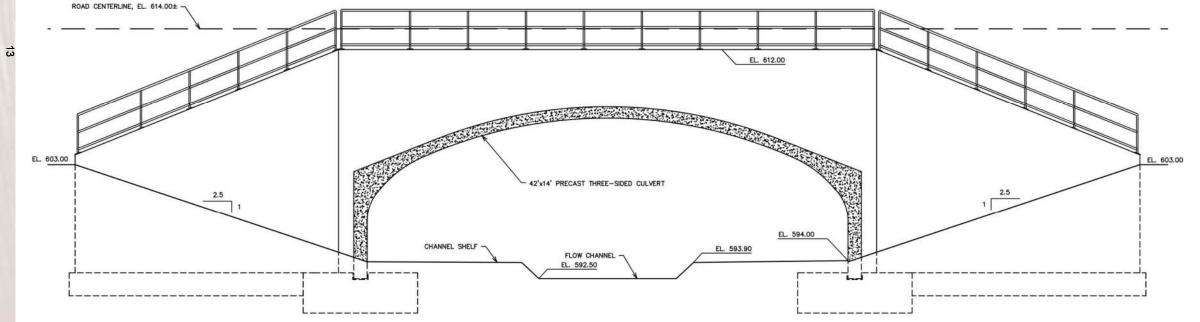
- Remove existing I2'W x I2'H double box culvert.
- Install new 42'W x 12'H precast three-sided arch culvert.
- Provides +/- 32% increase in flow area.



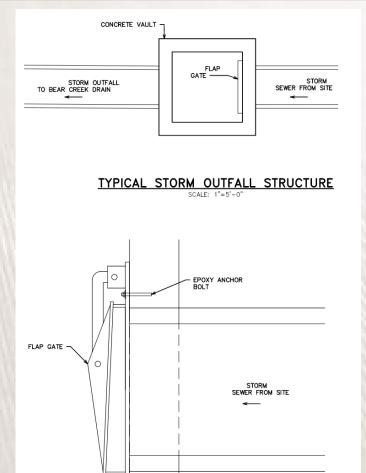
#### CROSSING No. 3 - EDWARD COLE BLVD.



- Remove existing 12'Wx 12'H double box culvert crossing.
- Install new 42'W x 14'H precast three-sided arch culvert.
- Receives flow from Bear Creek Drain and McCoy Drain.
- Provides +/- 61% increase in flow area.



#### FLOOD PREVENTION TIDE GATES



18" TYP.

TYPICAL FLAP GATE SECTION

- Tide gates are proposed to be installed at the main storm outfalls to the Bear Creek Drain within the Project area.
- Storm sewer within the Project area will be routed through the proposed storm outfall structures.
- Prevents flood waters from backflowing into the campus storm system from the Bear Creek Drain during high-flow events.
- Tide gates are on GM storm sewer system.
- GM owned, operated, and maintained.

#### IMPERVIOUS SURFACE REDUCTION



#### Pavement Area Analysis:

• Pavement Removed - ±46,989 SYD

• Pavement Added - ±4,550 SYD

Net Removal - ±42,439 SYD

#### Parking Space Analysis:

Spaces Removed - 1,284 spaces

Spaces Added -

48 spaces

Net Removal -

1,236 spaces

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#### STAGE I DRAIN RESTORATION



- Install Drain bottom features
- Install Environmental Plantings along banks of new drain bottom.
- Install Floodplain Plantings

#### STAGE 2 ENVIRONMENTAL PLANTINGS

GENERAL MOTORS LLC
GLOBAL TECHNICAL CENTER





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- Tree plantings
- Install boardwalk and lookout area.
- Install parking area for lookout.
- Install 42-inch ornamental fencing.
- Install bike/walk path along eastern top of bank.

Environmental and Floodplain Plantings

#### **SUMMARY OF BENEFITS**

- Reduction of impervious surfaces.
- Creation of an additional ±1.8M cft of storage for storm events.
- Control of storm water backup into campus.
- Creates Natural habitat for wildlife.
- Scenic walking/biking pathways for GM on-site personnel.
- Anticipated GM Project Cost: \$31 Million
  - \$26 Million in Design, Construction & Administrative Costs
  - \$5 Million in Hazardous Material Disposal Allowance
- Bear Creek Drainage District Project Cost: \$0.00

12/15/2021

#### **NEXT STEPS**

- Obtain authorization from the Bear Creek Intercounty Drainage Board for MCPW to negotiate
   425 Agreement on behalf of District
- Develop 425 Agreement including Exhibits
  - Easements
  - Maintenance Agreement
- GM hires Engineer for design of project.
- MCPW permits project through Drain Code for GM to construct.
- GM hires Contractor for construction of project.
- GM Project construction timeline anticipated May 2022 2025

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# 2022 MEETING SCHEDULE CHAPTER 21 DRAIN BOARD 10:00 AM MACOMB COUNTY PUBLIC WORKS OFFICE

#### 4th Tuesday of the Month

- January 25, 2022
- February 22, 2022
  - March 22, 2022
  - April 26, 2022
  - May 24, 2022
  - June 28, 2022

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#### 3<sup>rd</sup> Wednesday of the Month

- July 20, 2022
- August 17, 2022
- September 21, 2022
  - October 19, 2022
- November 9, 2022 (2<sup>nd</sup> Wednesday)
- December 14, 2022 (2<sup>nd</sup> Wednesday)

Funding Source	<u>Apportionment</u>	Manager	<u>Vendor</u>	Amount	Invoice Detail	Project Summary	Project Balance
Bear 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 - 5.76188%						
	Hazel Park - 7.63162%						
		Baker	Aloia & Associates, P.C.	\$ 617.50	Invoice #21453 - 2.1.21	Redevelopment Easement Review	
		Gapshes	Aloia & Associates, P.C.	,	Invoice #22180 - 6.1.21	Encroachment Agreement	
		Slanec	Cross Brothers Excavating	,	Invoice #5644 - 9.16.20	Drain Cleanout - Resetting Structure	
		Stockel	Doetsch	,	Invoice #71758 - 8.31.21	Emergency Oil Spill Cleanup (Work in Red Run)	
		Stockel	Doetsch	\$ 1,020.00	Invoice #71760 - 8.31.21	Emergency Oil Spill Cleanup - BP Booms	
		Bednar	Fahey Schultz Burzych Rhodes	\$ 7,630.25	Invoice #57407 - 2.9.21	District Delineation/Legal Review	
		Baker	Nickel & Saph	\$ 26,544.74	Invoice #20636PP - 6.23.20	Insurance Renewal - 6.28.20 - 6.28.21	
		Baker	Nickel & Saph	\$ 8,848.23	Invoice #20636 - 6.23.20	Insurance Renewal - 6.28.20 - 6.28.21	
		Baker	Nickel & Saph	\$ 23,677.00	Invoice #21-418 - 6.22.21	Insurance Renewal - 6.29.21 - 6.29.22	

**Total** \$ 92,647.22

#### **YTD Trial Balance**

**Fund: Bear Creek Combined** 

As of Fiscal Period: Oct 1, 2021-November 30, 2021

	O&M Balance 9/30/2021	O&M	Total 11/30/2021
Cash - Operating	1,033,376	421	1,033,797
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		421	421
Expenditures			0
Equity	1,033,376		1,033,797