

LORRAINE DRAIN
INTRA-COUNTY DRAINAGE BOARD
MARCH 11, 2024
10:45 A.M.
AGENDA

**NOTE: THIS MEETING WILL BE HELD IN PERSON WITH TELECONFERENCE
OPTION FOR PUBLIC**

**Call in Number: 1-470-499-2258
Access Code: 415 487 641**

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for March 11, 2024	
3. Approval of Minutes for September 11, 2023	3
4. Public Participation	
5. Emergency Drain Repair – 28870 Gail Drive - Stephen Downing	5
Motion: To receive and file the Lorraine Storm Drain emergency repair report and authorize payment of \$192,915.50 to Robert Clancy Contracting, Inc. for the inspection and repairs.	
6. Consideration for approval of invoices (see attached)	18
7. Financial Report – Bruce Manning	19
8. Adjourn	

LORRAINE STORM - ENCLOSED

CENTERLINE / WARREN - CHAPTER 20



Office of
Public Works



Drain Length (Feet/Miles):
22,710.79 / 4.301

Legend

-  Open Channel
-  Enclosed Gravity

An adjourned meeting of the Intra-County Drainage Board for the **LORRAINE DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham, Clinton Township, Michigan, on September 11, 2023, at 10:50 A.M.

PRESENT: Candice S. Miller, Chair
Vince Viviano, Member
Mai Xiong, Member

ALSO PRESENT: Vince Astorino, Operations & Flow Manager; Brian Baker, Chief Deputy; Stephen Downing, Construction and Maintenance Manager; Norb Franz, Communications Manager; Jennifer Jozwiak, Drain Account Specialist; Bruce Manning, Financial Manager; Pam Sonnenberg, Administrative Assistant; Tom Stockel, Construction Supervisor; Don VanSyckel, Macomb County Board of Commissioners

The meeting was called to order by the Chair, Candice S. Miller. A motion was made by Mr. Viviano, supported by Ms. Xiong to approve the agenda as presented.

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of November 14, 2022, were presented. A motion was made by Ms. Xiong, supported by Mr. Viviano to approve the minutes as presented.

Adopted: YEAS: 3
NAYS: 0

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

Ms. Miller explained to Commissioner Xiong that after being awarded additional drain match funds from the Board of Commissioners, we not only have been using it in the Northern part of the county, but we are using it to do some inspections elsewhere on the drains that we believe inspections are due. Mr. Downing added that there is an enclosed stormwater drain constructed in the 1960's that runs along Lorraine Avenue in the City of Warren and crosses beneath the I-696 expressway and according to our records has not been inspected since it was constructed.

Ms. Xiong asked if there will be any interruption to traffic and Mr. Downing said no, maybe a possible shoulder closure and maybe a temporary service drive closure.

A motion was made by Ms. Xiong, supported by Mr. Viviano to approve the drain inspection proposal from AEW and Doetsch Environmental Services for the total not to exceed cost of \$58,514 and authorize payment.

Adopted: YEAS: 3
NAYS: 0

There being no further business, it was moved by Ms. Xiong, supported by Mr. Viviano, that the meeting of the Lorraine Drain Board be adjourned.

Adopted: YEAS: 3

NAYS: 0

The meeting was adjourned at 11:03 a.m.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

STATE OF MICHIGAN
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taking by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on September 11, 2023, the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

DATED: 09/11/23



Candice S. Miller

Public Works Commissioner
Macomb County

To: Lorraine Storm Drain Drainage District Board Members

From: Stephen Downing, Construction & Maintenance Manager

Date: March 11, 2024

Subject: Lorraine Storm Drain Repair – 28870 Gail Drive

The Macomb County Public Works Office (MCPWO) engineering staff were made aware of a potential issue on the Lorraine Storm Drain by the City of Warren in the rear-yard of 28870 Gail Drive. The MCPWO engaged Clancy Contracting, a pre-qualified contractor with the office, to investigate this potential issue.

The investigation initially revealed that several joints in the pipe had failed, resulting in the infiltration of water, as evidenced by the dye testing. While the joints did not appear visibly compromised, the dye testing revealed that infiltration was occurring. The initial plan of action was to inject chemical grout to seal the leaks at approximately 10 joints, then patch the joints with hydraulic cement. However, during the chemical grouting operation high quantities of grout were being injected without hitting the desired pressure, indicating a larger issue. A hole was drilled thorough the crown of the pipe to install a grout injection port when a significant void was observed. This revealed that a significant loss of soil around the pipe had occurred, creating the high potential for collapse, resulting in a sinkhole and damage to the surrounding area. Once this void was discovered, chemical grouting operations were stopped. A subsequent dye test was performed, which revealed a total of 18 joints that were leaking. Next, the Contractor repaired each of the joints with hydraulic cement to create a water tight pipe. Then flowable fill was pumped into the void from the surface to stabilize the pipe. Lastly, the site was restored with topsoil, seed, and straw.

The Lorraine Storm Drain does not have funds available, as previous repairs have exhausted all funds. The MCPWO has selected this project to be part of the Macomb County Drain Match Program, where the County will contribute 50% of the repair costs. The remaining costs will be allocated to the respective contributors to the drain per the current apportionment as summarized in Table 1.

The repair was observed by a MCPWO Construction Inspector and performed at the direction of the MCPWO engineering staff. The total cost for the repair is \$192,915.50. The cost have been verified by MCPWO personnel. The cost allocation is summarized in Table 2. MCPWO personnel are working with each of the drain contributors to collect their share of the repair costs.

OFFICE LOCATION: 21777 Dunham Road, Clinton Township, Michigan 48036 • Phone: 586-469-5325 • Fax: 586-469-5933

MAILING ADDRESS: P. O. Box 806, Mt. Clemens, Michigan 48046-0806

ENGINEERING • Phone: 586-469-5910 • Fax: 586-469-7693 ♦ **SOIL EROSION** • Phone: 586-469-5327 • Fax 586-307-8264

Drain Contributors	Apportionment
City of Warren	84%
City of Centerline	12%
County of Macomb	3%
State of Michigan	1%
Total	100%

Table 1 - Drain Contributors & Apportionment

Funding Source	Cost Allocation
City of Warren	\$81,024.51
City of Centerline	\$11,574.93
County of Macomb	\$2,893.73
State of Michigan	\$964.58
County Drain Match	\$96,457.75
Total	\$192,915.50

Table 2 - Funding Source & Allocation

The recommendation is that the Lorraine Storm Drain Drainage District Board authorize the MCPWO to pay Robert Clancy Contracting, Inc. for the repairs and inspection for the total amount of \$192,915.50.

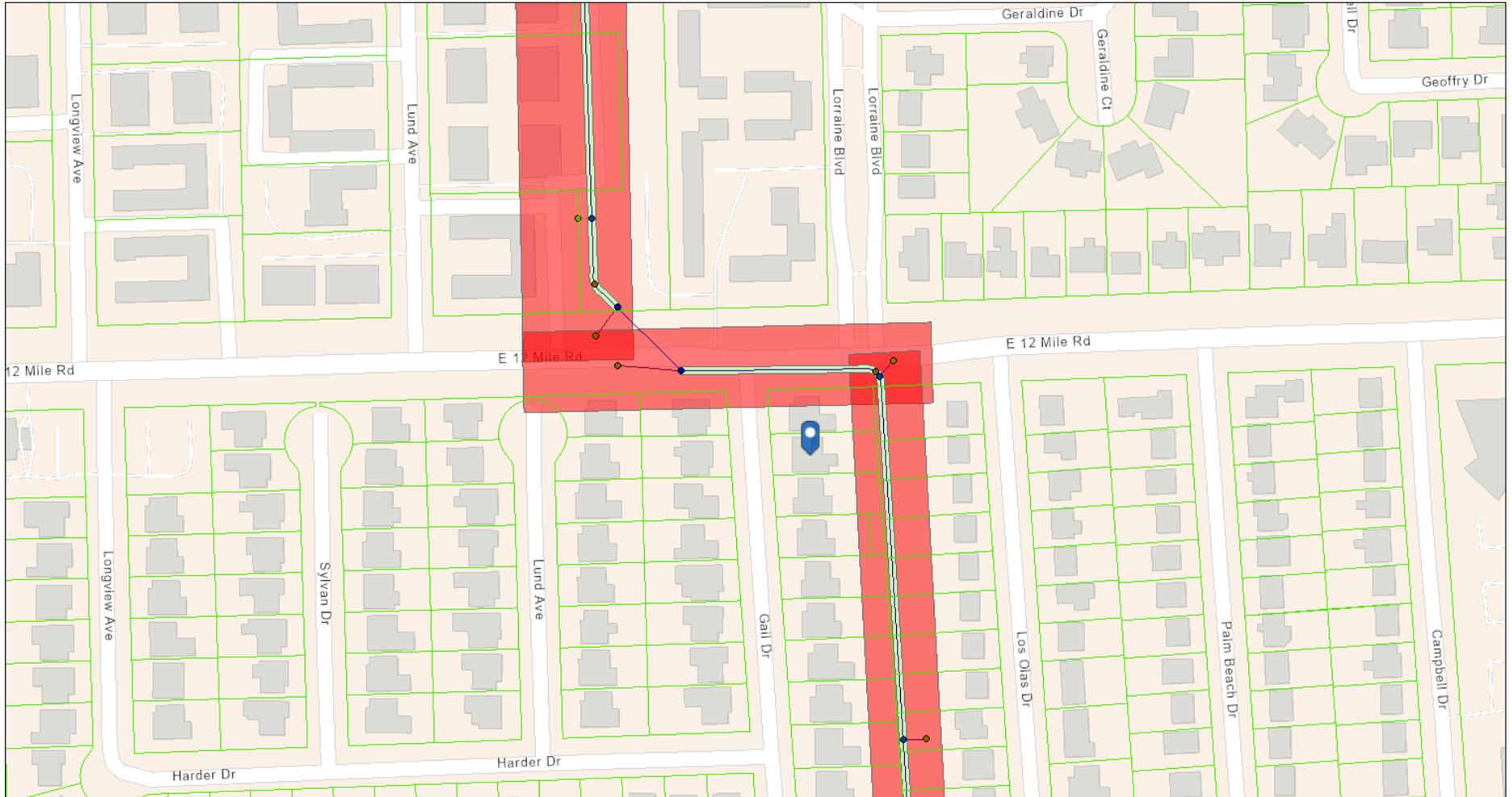
- Attachments:
- Location Map
 - Drain Sketch
 - Robert Clancy Contracting Invoice
 - Repair Photographs

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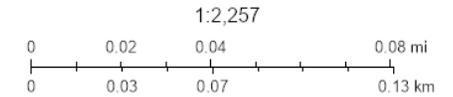
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Drains Explorer Map All Features



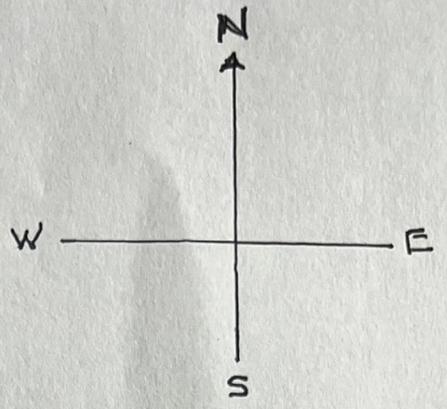
March 6, 2024



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

LORRAINE DRAIN

LORRAINE AVE



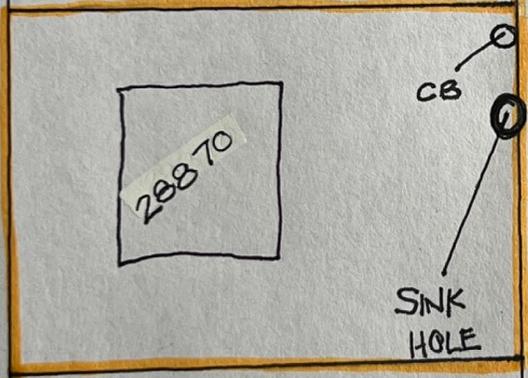
12 MILE RD

LORRAINE DRAIN

28882

28881

CB



28870

CB
SINK HOLE

POOL

28867

GAIL DRIVE

LORRAINE DRAIN

LOS OLAS DRIVE



ROBERT CLANCY CONTRACTING, INC.

Invoice

Date 2/5/2024
Invoice # 11720

Bill To

Macomb County Public Works
 21777 Dunham Rd.
 Clinton Twp., MI. 48036

Terms	Due Date	Project
Net 30	3/6/2024	Lorain Drain Sinkhole #2 28882 Gall Dr

Description	Qty.	U of M	Rate	Amount
Job: Lorain Drain Site location: 28882 Gall Drive, Warren				
REVISION # 1				
Repair Sinkhole				
January 22 - 31, 2024				
Repair joints	18	EA	1,650.00	29,700.00
Grout	1,750	GAL	85.00	148,750.00
Vac Truck - Pump down water in void in backyard easement	4	HRS	236.50	946.00
Concrete pump trailer supply, set-up and tear-down	1	LS	8,250.00	8,250.00
Flowable fill	1	LS	269.50	269.50
RCC Oversite	1	LS	5,000.00	5,000.00

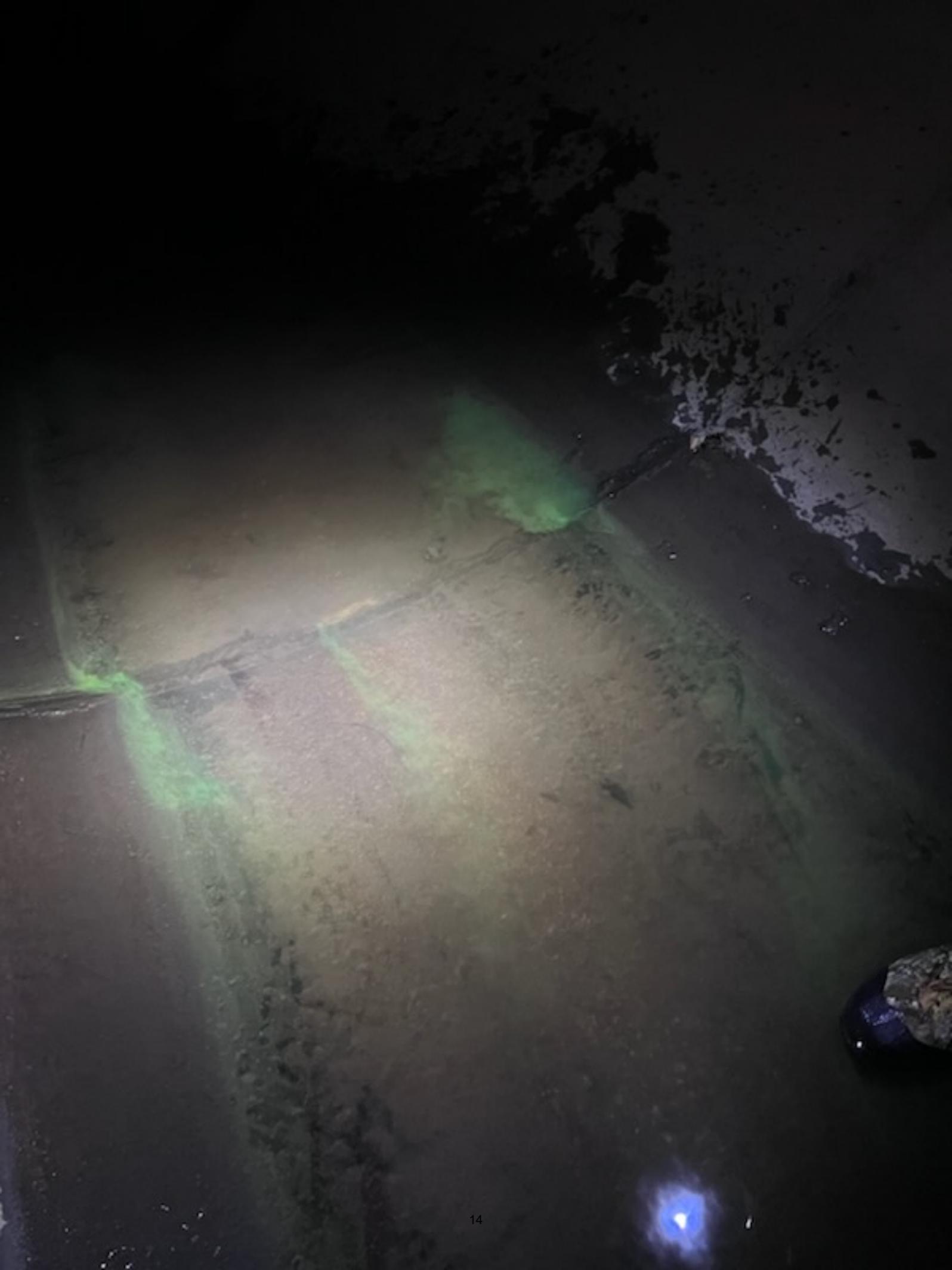
Total \$192,915.50

















LORRAINE DRAIN
01/16/2024 - 02/06/2024

<u>Funding Source</u>	<u>Apportionment</u>	<u>Manager</u>	<u>Vendor</u>	<u>Amount</u>	<u>Invoice Detail</u>	<u>Project Summary</u>	<u>Project Balance</u>
Lorraine Storm	Chapter 20 Warren						
		Downing	Anderson, Eckstein & Westrick	\$ 942.00	Invoice #147278 - 11.13.23	Engineering Inspection - Match	\$ 35,387.70
		Downing	Anderson, Eckstein & Westrick	\$ 2,081.60	Invoice #147740 - 12.07.23	Engineering Inspection - Match	\$ 23,848.80
		Downing	Anderson, Eckstein & Westrick	\$ 1,174.80	Invoice #147840 - 01.03.24	Engineering Inspection - Match	\$ 21,786.70
		Downing	Anderson, Eckstein & Westrick	\$ 1,234.60	Invoice #148566 - 01.26.24	Engineering Inspection - Match	\$ 19,629.30
		Downing	Doetsch	\$ 4,800.00	Invoice #72619 - 12.29.23	Drain Maintenance - Match	\$ 2,500.00
		Stockel	Robert Clancy Contracting	\$ 192,915.50	Invoice #11720 - 02.05.24	Drain Maintenance - Match - (Admin to Prepay)	
Total			\$ 203,148.50				

YTD Trial Balance

Lorraine Storm

As of Fiscal Period: Oct 1, 2023-Feb 29, 2024

	O&M Balance 9/30/2023	O&M	Total 2/29/2024
Cash - Operating	5	(4,800)	(4,795)
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues			0
Expenditures		4,800	4,800
Equity	5		(4,795)