

Miller
Santo
Klinefelt

LAKE ST. CLAIR CLEAN WATER INITIATIVE DRAIN
INTRA-COUNTY DRAINAGE BOARD
AUGUST 13, 2018
10:45 A.M.
AGENDA

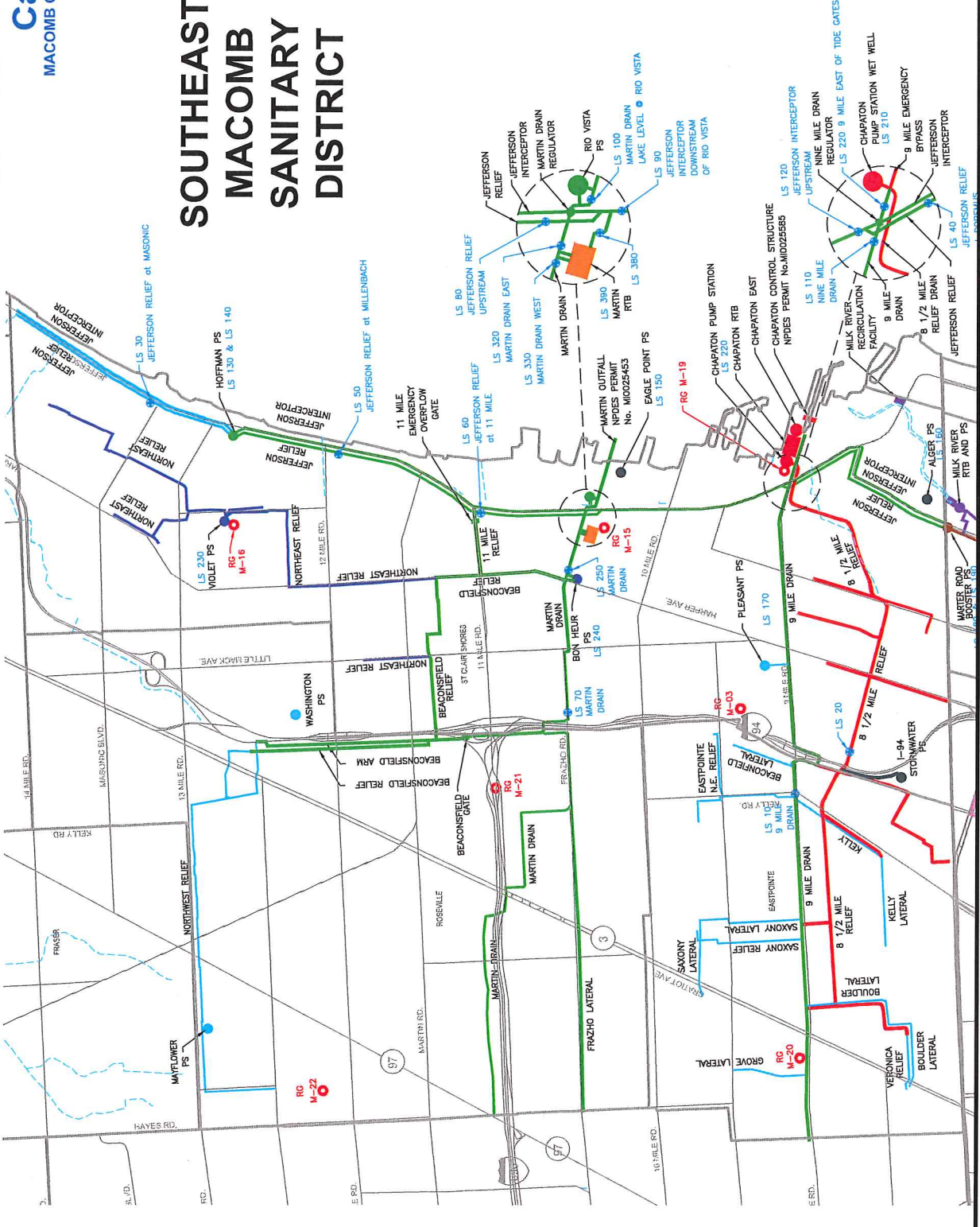
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1. Call of meeting to order and roll call	
2. Approval of Agenda for August 13, 2018	
3. Approval of Minutes for October 16, 2017	3
4. Public participation	
5. Martin Drain Sewer Separation Study – Vince Astorino	5
Motion: To transfer \$100,000 of surplus Lake St. Clair Clean Water Initiative Funds to the MIDDD to fund contract Change Order No. 2 with Fishbeck, Thompson, Carr & Huber, Inc. to perform a study and conceptual design to provide a storm sewer outlet for the combined sewer areas tributary to the Martin Drain	
6. Financial Report – Bruce Manning	8
7. Adjourn	



SOUTHEAST MACOMB SANITARY DISTRICT

- JURISDICTION LEGEND**
(AS OF DATE OF PUBLICATION)
- 8 1/2 MILE RELIEF DRAIN DRAINAGE DISTRICT
 - SOUTHEAST MACOMB COUNTY WASTEWATER DISPOSAL SYSTEM
 - MARTIN SANITARY DIVERSION DISTRICT
 - SOUTHEAST MACOMB SANITARY DISTRICT
 - LOCAL MUNICIPALITY
 - OTHER

- LEGEND**
- PUMP STATION
 - FLOW CONTROL STRUCTURE
 - RTB
 - GRAVITY INTERCEPTOR
 - LEVEL SENSOR
 - RAIN GAUGE



An adjourned meeting of the Intra-County Drainage Board for the **LAKE ST. CLAIR CLEAN WATER INITIATIVE DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham, Clinton Township, Michigan, on October 16, 2017, at 10:05 A.M.

PRESENT: Candice S. Miller, Chair
Bryan Santo, Member
Veronica Klinefelt, Member

ALSO PRESENT: Robert Smith, Macomb County Board of Commissioners; Brian Baker, Chief Deputy, Karen Czernel, Deputy, Keith Graboske, P.E., Chief Engineer, Vincent Astorino, Operations & Flow Manager, Evans Bantios, P.E., Construction and Maintenance Manager, Jeff Bednar, P.E., Environmental Engineer II, Tom Stockel, Construction Engineer, Bruce Manning, Financial Manager, Stephen Downing, Engineer II, Steven Rozycki, Engineer II, Tamara Keskeny, Property Manager, Barbara Delecke, Administrative Services, Macomb County Public Works; Ben Aloia, Aloia & Associates; Jared Beaudoin, City of Sterling Heights

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

Minutes of the meeting of September 11, 2017 were presented and approved on a motion by Mr. Santo, supported by Ms. Klinefelt and unanimously carried.

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

There is approximately \$900,000 in unused bond funds remaining that can be used for drain projects in St. Clair Shores. Approximately \$180,000 has been used to clean-out the Hetchler Drain. The City of St. Clair Shores has been made aware of the surplus monies.

The Chair presented the invoices totaling \$2,598,187.50 to the board for review and approval.

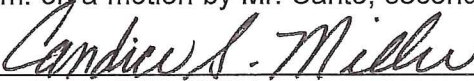
A motion was made by Mr. Santo, supported by Ms. Klinefelt to approve the invoices as presented.

Ayes: Santo, Klinefelt, Miller
Nays: None

Motion approved.

A motion to receive and file the financial report given by Mr. Manning was made by Ms. Klinefelt, supported by Mr. Santo and unanimously carried.

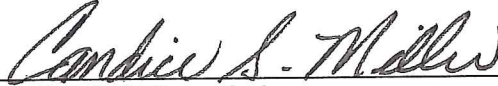
The meeting was adjourned at 10:11 a.m. on a motion by Mr. Santo, seconded by Ms. Klinefelt, and unanimously approved.



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 taken by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on October 16, 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, Chair
Macomb County Public Works Commissioner

DATED: 10/17/17

8959.bd



Candice S. Miller

Public Works Commissioner
Macomb County

To: Candice Miller, Macomb County Public Works Commissioner

CC: Brian Baker, Chief Deputy

From: Vincent Astorino, Operations & Flow Manager

Date: August 6, 2018

Subject: Wastewater Master Plan Change Order No. 2

In recent discussions with the City of St. Clair Shores, it has come to my attention that they are proposing a sewer separation plan that includes construction of a new outlet storm sewer for the combined sewer areas tributary to the Martin Drain. The proposed sewer separation plan will directly affect the combined sewer flow that enters the Martin Retention Treatment Basin (RTB) that is operated by the Macomb County Public Works Office (MCPWO).

As you are aware, the MCPWO is currently under contract with Fishbeck, Thompson, Carr & Huber, Inc. (FTCH), where FTCH is preparing a Wastewater Master Plan (WWMP) for the Southeast Macomb entities. Since the proposed sewer separation in St. Clair Shores has the potential to impact the conclusion of the WWMP, it was recommended that a study of the separation impacts be done prior to any separation. This \$100,000 study will be paid for through the Lake St. Clair Clean Water Initiative, as there are funds available and it directly impacts St. Clair Shores and Roseville.

Since the FTCH team is currently looking at all options for this region, it is recommended that this study be performed by the FTCH team. This will ensure that the masterplan has one concise vision that is feasible through all parties. The FTCH team is currently looking at various community needs and community projects, including St. Clair Shores. Much of the same information will also need to be looked at in the sewer separation study. Since there will be some overlap in these efforts, there is a potential cost savings.

I am recommending that the proposed changes are made to the FTCH WWMP contract through change order 2, creating a Task 3 in the contract for St. Clair Shores sewer separation study. Since MIDD is overseeing both tasks of the contract (MIDD and SEMSD) the final approval will need to come from the MIDD board. The project NTE total for Task 3 – St. Clair Shores sewer separation study is \$100,000. No changes are being made to Task 1 – MIDD or Task 2 – SEMSD as part of this change order.

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



SEMSD WWMP Authorization for Additional Services

Date: 8/3/18

Project: Martin Drain Sewer Separation Study and Schematic Design
Project Number 18-007B

Understanding the Additional Services

On July 24, 2018 we were requested by the Macomb County Public Works Office (MCPWO) to provide the cost of engineering services for a study and conceptual design to construct an outlet storm sewer for the combined sewer areas tributary to the Martin Drain.

The Martin Drain flows from west to east through the cities of Roseville and St. Clair Shores along Frazho Road and Bon Heur Street and conveys sanitary and combined sewer flows. At Jefferson Avenue the Martin Drain connects to the Jefferson Interceptor and flows south, ultimately to the Great Lake Water Authority Water Resource Recovery Facility (WRRF) in Detroit.

During wet weather events when flows exceeds the capacity of the sewer infrastructure and/or the contract capacity of 102 cfs at Marter Road Booster Station the wet weather flow is diverted to the Martin Retention Treatment Basin (RTB). During certain larger wet weather events, flow from the Martin RTB is discharged into Lake St. Clair under NPDES Permit MI0025453.

Attached is the Sanitary/Combined Sewer Drainage District Map for the Martin Drain, dated January 2013. This map details the known combined sewer areas tributary to the Martin Drain. In summary there is approximately 543.5 acres of combined sewer area in the City of Roseville and 206.8 acres of combined sewer area in the City of St. Clair Shores. In total this District has approximately 750.3 acres of combined sewer area. It is also noted that most of the foundation footing drains in the City of Roseville and St. Clair Shores are connected to the sanitary sewer. Separation of footing drains is not part of this project.

The scope of this project is to develop a study and conceptual design to provide a storm sewer outlet for the combined sewer areas tributary to the Martin Drain. Per our discussion with MCPWO and Mayor Wahby of St. Clair Shores the future separation of the local sewers would be completed by each community, when determined appropriate. This study and conceptual design would only provide a storm sewer outlet for future local city storm sewer connections.

Description of Service (Limited)

As part of this project we would complete the following services.

1. Meet with the Michigan Department of Environmental Quality (MDEQ) to go over the concept of the project to determine potential impacts to the existing NPDES permit for the Martin Drain and discuss requirements for a new storm water discharge to Lake St. Clair.
2. Review the existing GIS, local storm sewer plans and County Drain maps to confirm the delineated combined sewer areas detailed in the January 2013 Combined Sewer District Map.



3. As part of the SAW Grant, hydraulic models are being developed for the 11 ½ Mile Relief Drain and Stephens Relief Drain. We will evaluate these models to determine if any additional capacity may be present within these County Drains. If capacity is available, we will utilize these existing County Drains to collect some or all of the separated storm flow within the Martin Drain District.
4. Survey the rims and inverts of existing catch basins at critical tie in and outlet locations to assist with the conceptual design.
5. Research existing utilities and field survey invert elevations of water main, storm sewer, sanitary sewer and other found utilizes to determine conflicts along the route of the proposed storm sewer(s).
6. Complete a conceptual design of the proposed storm sewer(s) to collect drainage from the known combined sewer areas. The conceptual design would be developed in XPSWMM using the 10-year storm and include a plan showing the storm sewer district and sub district areas, pipe sizing, invert grades, existing known utilities, manhole locations, connection locations to future separated storm sewers and the outlet connections to Lake St. Clair. Additionally, a profile of the proposed storm sewer would be included, showing the proposed storm sewer inverts, sizes, slopes, manholes, existing known utility crossings and outlet connection to Lake St. Clair.
7. Coordinate the conceptual design and study with the MDEQ and determine the impacts on the NPDES permit for the Martin RTB.
8. Complete a report documenting the findings of the selected conceptual design. This report would describe the options considered, requirements of the MDEQ, summary of the recommended alternative and justification for the selection, engineer estimates of potential engineering and construction costs, summary of the hydraulic analysis, evaluation of the impacts to sewer treatment expenses as a result of the proposed separation, modifications necessary at the Martin RTB to treat the higher concentrated sanitary flows and a final recommendation for the separation of the Martin Drain.

Estimated Breakdown of Cost of Services

Project Communication & Coordination with County/MDEQ	\$10,000
Confirm Existing Martin Combined Sewer Areas	\$10,000
Capacity Analysis on Existing County Drains.....	\$15,000
Utility Research and Field Survey	\$15,000
Conceptual Design and Profiles.....	\$30,000
Final Report.....	\$20,000
Total Estimated Cost of Additional Services	\$100,000

NOTE: Actual charges may differ from this estimate. Actual charges will be based upon time and individual charge rates required to complete the task(s).



 Maria Sedki, PE



 Kyle M. Seidel, PE, CFM

YTD Trial Balance

Fund: LSCCWI 2004 B

As of Fiscal Period: Oct 1, 2017-July 31, 2018

	O&M Balance 9/30/2017	O&M	Total 7/31/2018
Cash - Operating	810,876	4,403	815,279
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		4,403	4,403
Expenditures			0
Equity	810,876		815,279