

STERLING RELIEF DRAIN  
INTRA-COUNTY DRAINAGE BOARD  
APRIL 10, 2023  
10:45 A.M.  
AGENDA

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

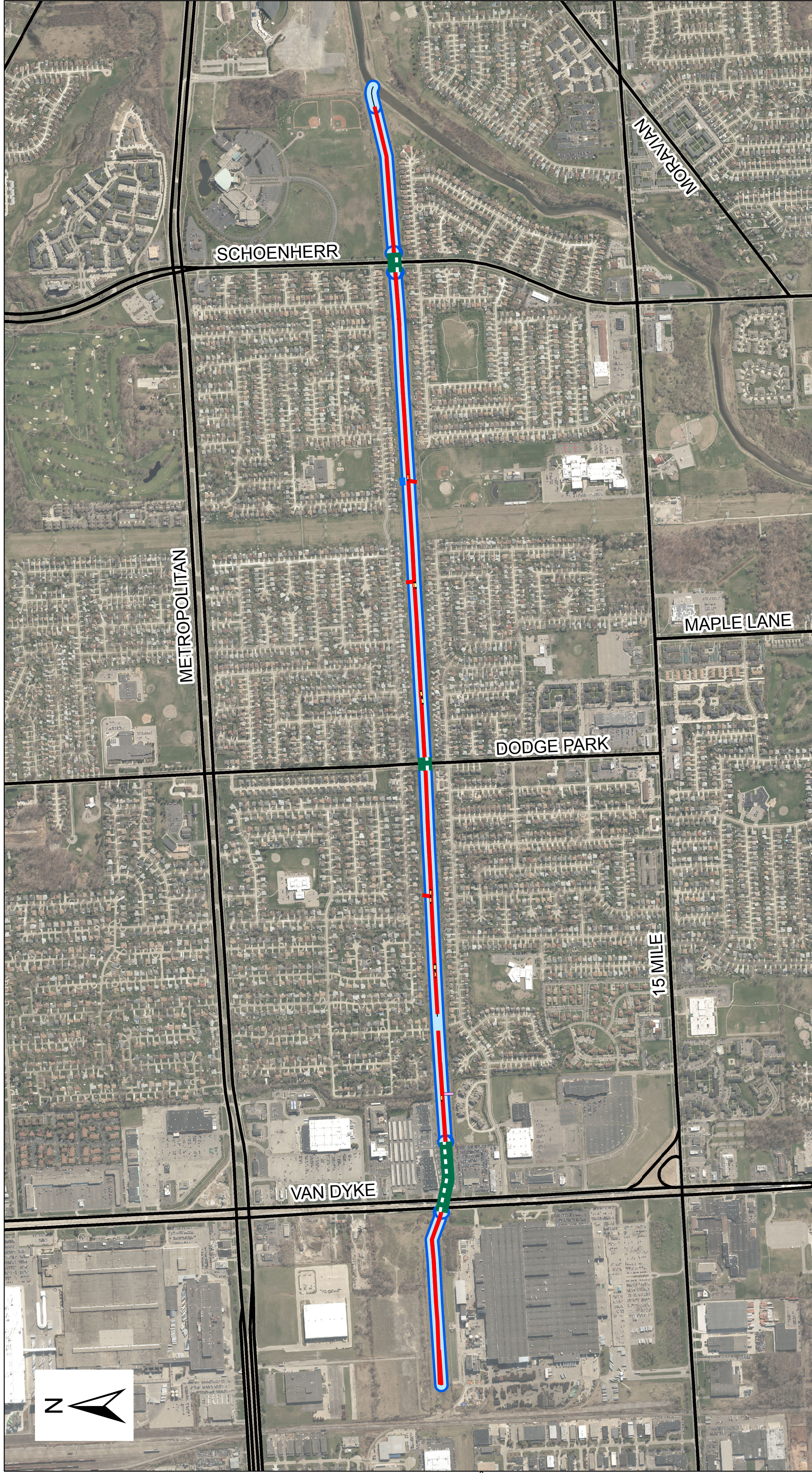
**Call in Number: 1-224-990-0182**

**Access Code: 927 405 823**

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for April 10, 2023	
3. Approval of Minutes for March 13, 2023	3
4. Public Participation	
5. Pipeline Article – Sterling Relief/Red Run Drain Project	6
6. Sterling Relief Daylighting & Green Infrastructure Project Phase 2 - SOGL Grant Application – Jeff Bednar	9
Motion: To authorize staff to submit the Sustain Our Great Lakes (SOGL) grant application for Phase 2 of the Sterling Relief Daylighting and Green Infrastructure Project and authorize up to \$50,000 of grant match funds from the Sterling Relief Drainage District.	
7. Consideration for approval of invoice (see attached)	12
8. Financial Report – Bruce Manning	13
9. Adjourn	

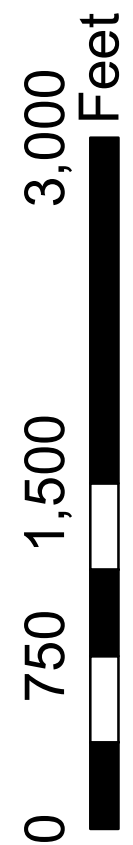
# STERLING RELIEF

## STERLING HEIGHTS



### Legend

- Enclosed Gravity**
  - < 60" Dia (Red line)
  - >= 60" Dia (Blue line)
  - Multiple Pipes (Purple line)
  - Lateral Connection (Yellow line)
- Open Channel**
  - Ditch (Blue outline)
  - Pond (Blue dashed line)
- Culvert (Green rectangle)



Drain Length (Feet/Miles):  
15,747.52 / 2.98



An adjourned meeting of the Intra-County Drainage Board for the **STERLING RELIEF DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham Clinton Township, Michigan, on March 13, 2023, at 10:42 A.M.

PRESENT: Candice S. Miller, Chair  
Joseph Romano, Member  
Bryan Santo, Member

ALSO PRESENT: Vince Astorino, Operations & Flow Manager; Brian Baker, Chief Deputy; Danielle Devlin, Environmental Specialist; Steve Downing, Construction & Maintenance Manager; Norb Franz, Communications Manager; Bruce Manning, Financial Manager; Pamela Sonnenberg, Administrative Assistant; Tom Stockel, Construction Supervisor; Don VanSyckel, Macomb County Board of Commissioners

PRESENT VIA TELECONFERENCE: Jeff Bednar, Environmental Resources Manager; Mary Shepherd, Environmental and Safety Services Supervisor City of Sterling Heights

The meeting was called to order by the Chair, Candice Miller. A motion was made by Mr. Romano, supported by Mr. Santo to approve the agenda as presented.

Adopted: YEAS: 3  
NAYS: 0

Minutes of the meeting of February 14, 2022 were presented. A motion was made by Mr. Santo, supported by Mr. Romano 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.

Mr. Bednar presented a request for approval of a U.S. Fish & Wildlife Service Grant Agreement for the western portion of the Sterling Relief drain. This section of the drain is an enclosed pipe. We have been approached by the U.S. Fish and Wildlife Service with the idea of converting that turf grass area into a native pollinator prairie. It is similar to the concept of what we've planted vegetation wise on the east end of the Sterling Relief, but it will be in the upland because we have an enclosed pipe there. The total cost to the district is a little more than \$1,000, plus our time for mowing. We are already currently mowing the turf grass. The City is excited about the initiative and there has been discussions about extending a pathway from Nelson Park up into this area. There are no firm plans of that yet. This portion is just to convert the turf grass to prairie grass.

Ms. Miller said that we met with the City of Sterling Heights officials and they are excited about the project and extending their existing bike path from Nelson Park.

Mr. Bednar then updated on the existing EPA Grant that we have for establishment as well as a preproposal that we submitted to Sustain our Great Lakes for another section of the drain. The EPA section from Van Dyke to Schoenherr has been replanted with bio retention filter as well as native grasses. We didn't have great growing conditions last year and have talked to our ecological services partners. They recommend doing two plantings, one in the Spring and one in the Fall. The grants

expire at the end of June, so that would require us to extend the grants until the end of October. So we will apply for that extension.

We also submitted for a Sustain our Great Lakes grant for similar bio retention system work from Mound, West to the end of the drain. We included in that as match the Fish and Wildlife Service grant and we have also included as match a potential trail with Sterling Heights. We would be most competitive if we had a 50% match or more on the grant. In order to do that we would ask this board for about \$50,000 towards the project. The total project cost is approximately \$765,000. We are using a lot of other matching funds. If we are asked to submit a proposal, we will need the board's approval.

Mr. Romano asked if we have a full time grant writer and Mr. Bednar said that he, Ms. Devlin and the Macomb County Planning and Development staff assists to write the grants.

Mr. VanSyckel asked if the prairie grass needs to be mowed. Mr. Bednar said that it need to be maintained. Once the grass is established, it needs to be mowed once a year.

A motion was made by Mr. Romano, supported by Mr. Santo to approve the U.S. Fish & Wildlife Service Habitat Grant Agreement for \$14,140 with a local cash and in-kind match of \$2,890.

Adopted: YEAS: 3  
NAYS: 0

The Chair presented the invoices totaling \$65,890.38 to the board for review and approval.

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

Adopted: YEAS: 3  
NAYS: 0

A motion to receive and file the financial report given by Mr. Manning was made by Mr. Romano and supported by Mr. Santo.

Adopted: YEAS: 3  
NAYS: 0

There being no further business, it was moved by Mr. Romano, supported by Mr. Santo, that the meeting of the Sterling Relief Drain Board be adjourned.

Adopted: YEAS: 3  
NAYS: 0

The meeting was adjourned at 10:58 A.M.

  
\_\_\_\_\_  
Candice 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 March 13, 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 Miller, Chair  
Macomb County Public Works Commissioner

DATED: 03/13/23

# Intercounty drain project creates new hike/bike path

By: Norb Franz, Communications Manager, Macomb County Public Works Office

Walkers, joggers and bicyclists have a new scenic route to enjoy in Macomb County as part of a recently completed intercounty drain project to halt erosion near a closed landfill.

The new 1.35-mile hike/bike trail is located along the Red Run Drain and the Sterling Relief Drain in the city of Sterling Heights. It branches south from the popular Freedom Trail hike/bike path on Metropolitan Parkway, curves behind Freedom Hill County Park and continues west to Schoenherr Road. The 100-acre park, opened in 1974 on a site that includes a closed 40-acre landfill, is best known as the home of the Michigan Lottery Amphitheatre.

“The trail makes a beautiful area accessible to the public. It’s a suburban area but you feel like you’re up north,” Macomb County Public Works Commissioner Candice S. Miller said.

The Red Run drains much of southeast Oakland County and carries flow through part of the City of Warren and crosses into neighboring Sterling Heights. Before connecting with the Clinton River – which flows into Lake St. Clair – the Red Run Drain is met by a tributary, the Sterling Relief Drain.

Unfortunately, the banks of the Red Run eroded significantly over the years behind Freedom Hill County Park, particularly on the north side. In some spots, the erosion crept to within 10 feet of the closed landfill.

The idea for a non-motorized trail in that location was added during plans to stabilize the north bank of the Red Run Drain.

As part of the drainage work in the open channel drain, excavation contractor L.J. Construction, based in Clifford, Mich., started work in spring 2022 by removing sediment from the Red Run. The company also painstakingly built three new “J-hook” peninsulas just beyond where the Sterling Relief Drain flows into the Red Run. Known as “J-hooks” because of their shape, each is made of thousands of limestone boulders, and they work in unison to direct strong flow – particularly after heavy rain events – toward the center of the open channel for a long-term improvement away from the banks.

In recent years, maintenance vehicles created a rough path in some areas near the north bank behind the park and along the Sterling Relief Drain. However, it was not open to the public and was being washed away by erosion.

The Public Works Office and the Macomb County Department of Planning and Economic Development explored the idea of developing a hike/bike trail that could be shared with the public behind Freedom Hill and west to



Macomb County Public Works Commissioner Candice S. Miller discusses the Red Run Drain bank restoration and hike/bike trail project in Sterling Heights.

## BIKE PATH CONT.



Construction of “j-hooks” in the red run drain

Schoenherr Road. The Red Run Intercounty Drain Board and the Sterling Relief Drain Board approved the plan, and Sterling Heights officials endorsed it.

The 1.35-mile path along the north bank was carved, and top soil was used to make the trail. The planting of 475 trees, 2,500 shrubs and 4,000 native pollinator plants along the north side of the Red Run Drain and within the Sterling Relief Drain began this year and will be completed in spring 2023. Once fully established, the plantings help prevent erosion and act as green infrastructure to capture and filter an estimated 200,000 gallons of storm water runoff per year to remove phosphorus and nitrogen. It’s also part of the Green Macomb Urban Forest Partnership and will increase habitat biodiversity.



During strong or higher flow, especially after heavy rain, the three completed “J-hooks” at the Red Run Drain work in unison to prevent erosion of the drain bank by directing the flow toward the center of the channel.

The \$1.3 million drain restoration was funded by the 22 communities in the Red Run Intercounty Drainage District. The trail development and plantings were funded with a \$300,000 grant

from the National Fish and Wildlife Foundation, and \$260,000 in state highway funds to Macomb County.

Other partners in the project included: Macomb County Department of Roads; Lake St. Clair CISMA; Clinton River Watershed Council; Oakland County Water Resource Commissioner’s Office; South Macomb Disposal Authority; Consumers Energy; and engineering consultants Hubbell, Roth & Clark.

County and city officials touted the combined environmental, recreational and storm water management aspects of the project.

Macomb County Executive Mark Hackel said the project also has economic benefits. Noting that the Red Run Drain connects to the Clinton River, which flows into Lake St. Clair, Hackel said clean lake water is important.

“Leveraging the natural beauty of Macomb County and the creativity of our environmental champions, we are developing transformational, recreational and environmental projects. This trail and restoration plan has helped us reimagine an underutilized area that is quickly becoming a celebrated community asset. Whether you are an avid runner or someone who loves nature, we welcome you to come and explore,” Hackel said.

“This trail project, born out of need for an access road along the Sterling Relief and Red Run drains, is a gift to our community in a lot of ways,” said Sterling Heights Mayor Michael Taylor. “The trail creates yet another non-motorized asset for our community, provides an appealing option for walking, running and biking and aligns well with Sterling Heights’ commitment to sustainability. We’re grateful for the intergovernmental collaboration we have that allow projects like this to happen.”

The Red Run Drain Board includes Miller, Oakland County Water Resources Commissioner Jim Nash and Chairman Michael Gregg, intercounty drain program manager at the Michigan Department of Agriculture & Rural Development.

“In addition to the collaboration of the community and county stakeholders, on behalf of the Red Run Board I want to acknowledge HRC for their engineering design, perseverance through the protracted EGLE/U.S. Army Corps permitting

process and overall construction management that made this project possible,” Gregg said.

“This project brings all the aspects of our commitment to improving our infrastructure. We are ensuring the long-term sustainability of our storm water system while using green infrastructure and community collaboration to create a truly enjoyable natural atmosphere and recreational experience,” said Nash.

The Sterling Relief Drainage District Board includes Miller, Macomb County Commissioner Joseph Romano and Macomb County Department of Roads Director Bryan Santo.

A video of the partnership/project can be seen on the Macomb County Public Works Office YouTube channel at [https://youtu.be/DWH\\_OPQzo-Q](https://youtu.be/DWH_OPQzo-Q)



*The completed hike/bike trail along the Red Run Drain portion of the 1.35-mile path*



*The completed hike/bike trail along the Sterling Relief Drain portion of the 1.35-mile path*



ej

## Keep your covers where they belong.



Find out how the STORMSURGE® access assembly protects you from missing manhole covers after a major rain event.

Learn more at [ejco.com/stormsurge](http://ejco.com/stormsurge)

Or call 800 626 4653

Made in the USA





**Candice S. Miller**

Public Works Commissioner  
Macomb County

**To:** Sterling Relief Drain Drainage Board  
**From:** Jeffrey H. Bednar, PE  
Environmental Resources Manager  
**Date:** April 5, 2023  
**Re:** SOGL Grant Application for Sterling Relief Daylighting and Green Infrastructure Project Phase 2

In response to a pre-proposal submitted to the National Fish and Wildlife Foundation (NFWF) for the Sustain Our Great Lakes program (SOGL), Macomb County Public Works has been invited to submit a full proposal for grant funds for Phase 2 of the Sterling Relief Daylighting and Green Infrastructure Retrofit Project.

This second phase of the project continues the redesign and retrofit of the Sterling Relief Drain corridor by creating an additional 1.5 miles of diverse native habitat from the upstream end of the drain at Nelson Park to west of Mound Road. This created habitat will help to reduce, slow and filter stormwater from the 1,610 acre drainshed served by this section of drain. This project adds to the 2.5 miles of drain retrofit completed in 2020 east of Van Dyke Avenue.

The project is estimated to cost \$765,000. The amount requested from SOGL is \$382,500. The most competitive applications have 50% match, which may come from cash and in-kind contributions. Staff recommends the Sterling Relief Drain Drainage Board pledge \$50,000 towards the project. This pledge will be included with the full proposal which is due April 25, 2023.

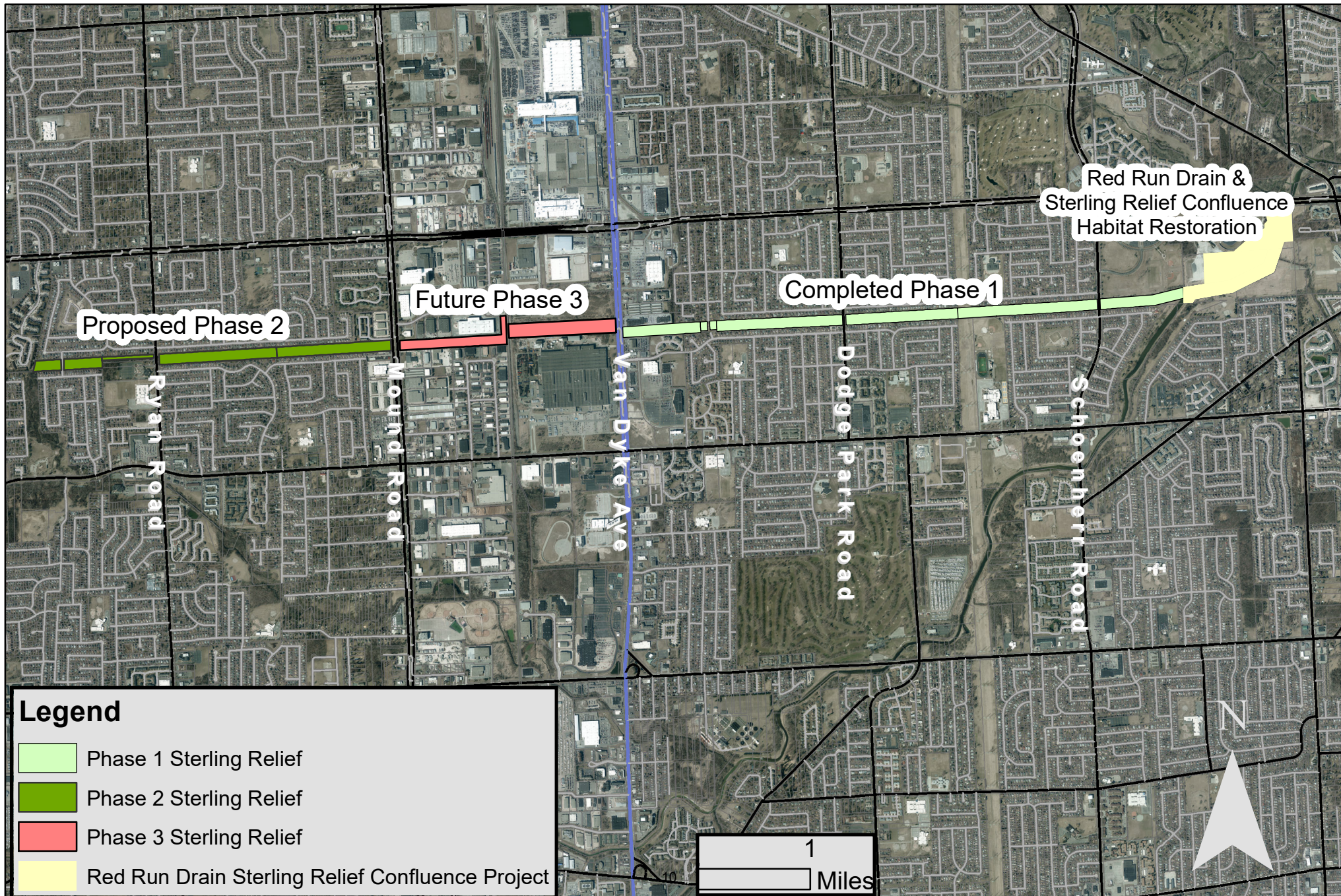
Other potential partners and sources of match include:

Macomb County Planning & Economic Development	\$45,000	Cash for planting trees and native plants
City of Sterling Heights	\$232,500	Maintenance/recreation trail construction connecting to Nelson Park
Consumer's Energy Planet Award	\$30,000	Trees and native plants
US Fish and Wildlife Service	\$11,250	Prairie restoration project at upstream 0.8 miles of drain
MCPWO cash & staff services (in kind)	\$13,750	Project administration and cash portion of FWS project

The US Fish and Wildlife Service are in support of the proposal and will tailor the prairie restoration project on the west 0.8 miles of drain to complement the Phase 2 activities and outcomes.

Awards are expected to be announced in late summer 2023, which will allow a fall start to the proposed project.

# Sterling Relief Drain Redesign & Retrofit Project Phasing





# Sterling Relief Daylighting & Green Infrastructure Phase 2



Boundary of FWS  
Prairie Restoration



Initial extent of access  
path/trail from Nelson Park

-  Phase 2 Sterling Relief Retrofit & Green Infrastructure Project Area
-  Conceptual Sketch of Proposed Crushed Limestone Access/Maintenance Path

<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>
<b>Sterling Relief</b>	Chapter 20 State of MI - 3.29% Macomb County - 7.79% Sterling Heights - 88.93%						
		Acciavatti	Cross Brothers Excavating	\$ 755.00	Invoice #6467 - 03.09.23	Drain Cleanout	
			<b>Total</b>	\$ 755.00			

**YTD Trial Balance**

**Fund: Sterling Relief**

**As of Fiscal Period: Oct 1, 2022-Mar 31, 2023**

	<b>O&amp;M Balance 9/30/2022</b>	<b>O&amp;M</b>	<b>Total 3/31/2023</b>
<b>Cash - Operating</b>	225,090	14,056	239,146
<b>Accounts Receivable</b>			0
<b>Assets</b>			0
<b>Liabilities</b>			0
<b>Revenues</b>		25,803	25,803
<b>Expenditures</b>		11,747	11,747
<b>Equity</b>	225,090		239,146