

Engineering Presentation
Brian J. Cenci, P.E. – Sr. Project Mngr.
Director of MI County Drain Services
GEI Consultants of Michigan, P.C.

# **Elmwood Township #1 Drain Board of Determination**

7:00 p.m.

Leelanau County Board Mtg. Room 8527 E. Government Center Drive Suttons Bay, MI 49682

Leelanau County Drain Commissioner
Steve Christiansen



#### **PURPOSE OF ENGINEERING REVIEW:**

- A Municipal Township Board (Elmwood Township) filed an Application and then a Petition to the Leelanau County Drain Commissioner for the improvement of the existing County Drain to provide flooding and drainage relief.
- Drain Commissioner required to hire a Licensed Professional Engineer to Review the existing District Boundary (i.e. the drainage area / watershed) and determine the proposed District Boundary, if changes were necessary.
- Field Review the existing Elmwood Township Drain #1 drainage system and existing drain routes.
- Identify any potential drainage problems or issues that may necessitate maintenance and improvement of the existing County Drain.
- Present a Preliminary Engineering Summary of findings at a Board of Determination
- WHAT IS NOT REVIEWED TO THIS POINT: No preliminary design, no scope, no proposed "solutions" or "options, no estimated costs, etc....WHY? There is no 'project' until petition is necessary as determined by the BOD



Township Board for the Charter Township of Elmwood

RESOLUTION AUTHORIZING A PETITION FOR THE MAINTENANCE AND

#### ET MWOOD TOWNSHIP DRAIN

At the regularly scheduled meeting of the Township Board for the Charter Township of Elmwoo County of Leclanau, State of Michigan, held on the day of September, 2024

PRESENT: Chris Mikowski, Terrylauther, Kyle Toevas, Jeff Shaw

BSENT: None

The following resolution was offered by Board member <u>Cannie Peestura</u> and seconded by Board member <u>Dave Davaga</u>

municipal entity and the Township is acting through its legislative body, the Elmwood Township Box and

wHEREAS, the Elmenod Township Dmin #1 ("Dmin") is an existing county dmin located in oth Elmenod Township and Traverse City, County of Leelannu, and has been established pursuant to be Michigan Dmin Code, Public Act 40 of 1956, as amended (the "Dmin Code"); and

HERRAD, Section 1914 of the Drain Code authorizes a musicipal township board to file a perition with the County Drain Commissioner if the maintenance and improvement of an existing county drain is necessary for the publis health, convenience or welfare of such musicipality and the musicipality will be liable for an assessment alt-sugge for a procreating of the costs for the maintenance and improvement of the proposed drain project, pursuass to Chapter 8 of Public Act 40 of 1956, as amended; and

WHEREAS, the maintenance and improvement of the Drain is necessary to address: Flooding and drainage issues near Carter Rd. & M-22, locations along Carter Rd. and subsequent drainage issues within areas of the proposed drainage district.

NOW, THEREFORE BE IT RESOVLED THAT, the Township Board of Elmwood does unthorize that a petition for maintenance and improvement be made in the name of the Township for the Elmwood Township Drain #1 to the Leelanus County Drain Commissioner.

BE IT FURTHER RESOLVED THAT, the Township Clerk or Board Secretary shall forware the Leclenau County Drain Commissioner a copy of this Resolution and will forward a Petition for Maintenance and Improvement of the Elemond Township Drain #1.

ADOPTED: YEAS: Trevas, Lautner, Mikowski, Prestur, Balloghe, Darga, and Snov NAYS: None.

The Resolution was declared and adopted.

TOWNSHIP BOARD FOR THE CHARTER TOWNSHIP OF ELMW

Dated: Sept 9, 2024

By: Jeff Shaw

As Authorized by its governing body on:

September 9 , 2024





#### **WORK PERFORMED:**

- Obtain & analyze existing record information (County maps, building records, aerials, topographic contour information, LiDar data, County Road Commission records, MDOT records, existing land use information, soils info, wetland data, etc.)
- Determine the Elmwood Township Drain #1 Drainage District boundary through 1-foot interval data for County topographic contour information, site inspections and survey work to understand stormwater inputs into the drain system and analyze direction of flow for stormwater runoff
- Reviewed the on-site flooding and drainage issues near Carter Rd. & M-22, locations along Carter Rd. and subsequent drainage issues within areas of the proposed drainage district necessitating the petition.
- Present preliminary findings at a Board of Determination

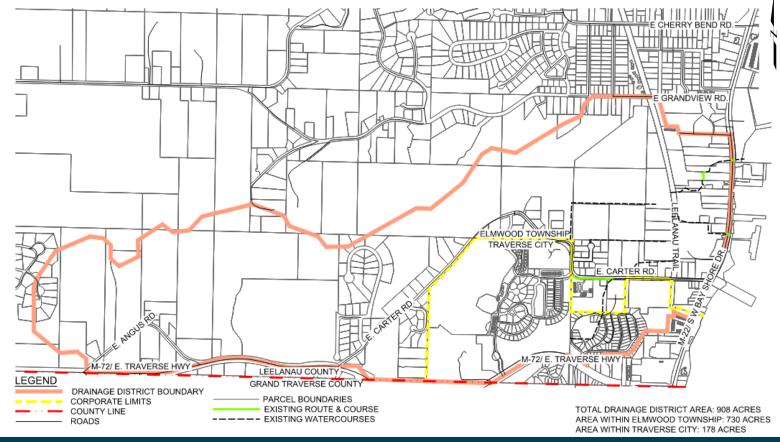


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#### **PROPOSED DRAINAGE DISTRICT BOUNDARY:**

- Proposed Drainage District
   Boundary is determined based
   on topographic contour
   information and field
   observations
- Total Size = 908 acres
- # properties = +/- 500
- Acres in City = 178 acres
- Acres in Twp. = 730 acres
- At-Large Entities (3):

Elmwood Twp, County for County Roads, MDOT







#### **EXISTING DRAIN ROUTE & COURSE:**

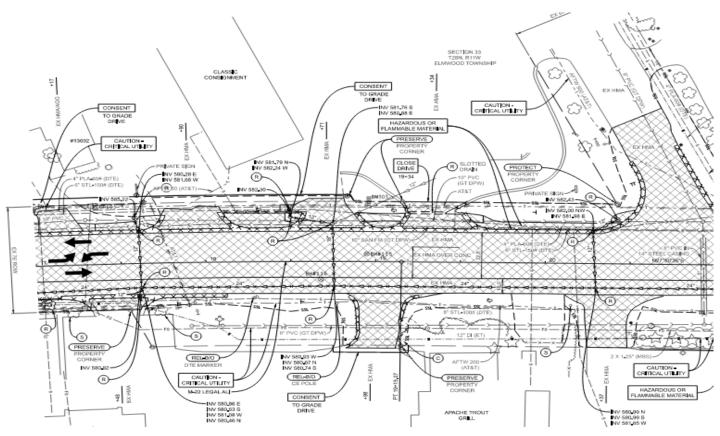
- Drain route in petition is existing drain branches in ROW or easement areas.
- Drain route can change and will be determined through engineering analysis and scope of work determined by the Drain Commissioner (if Drain project proceeds)
- Initial Drain Route = 1,225 feet +/-





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### **EXISTING INFRASTRUCTURE:**

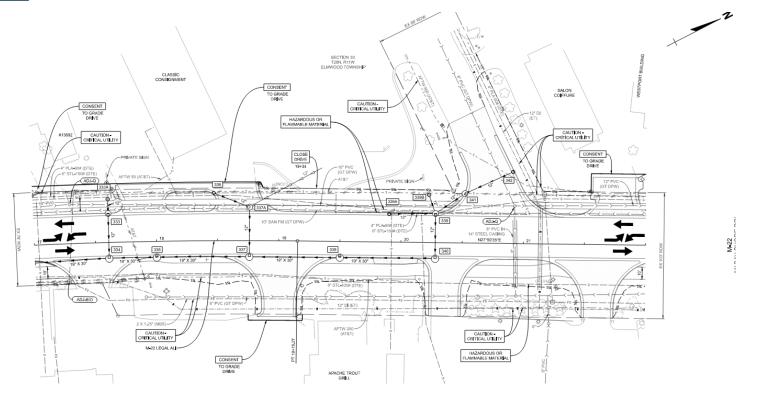






### **PROPOSED MDOT INFRASTRUCTURE:**

 Proposed 24" storm sewer would run on the east side of M-22 with catch basins along the east and west curb lines. All sewer is in ROW of M-22 with no drains or drainage in area of concerns.





## **DRAINAGE ISSUE, PURPOSE OF PETITION:**

 Flooding in parking lots and buildings south of Carter Rd and east of M-22 (Bay Shore Dr) specifically at the Glendale Burger Shop/ Silver Swan parking lot and Classic Consignment.













## **DRAINAGE ISSUE, PURPOSE OF PETITION:**

• Low-lying areas near Glendale Burger Shop/ Silver Swan parking lot and Classic Consignment.













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QUESTIONS ?????