

**CASCADE CHARTER TOWNSHIP**  
THORNAPPLE RIVER SAD AD-HOC COMMITTEE MEETING  
May 15, 2023 at 5:30pm  
Cascade Township Hall  
5920 Tahoe Dr. SE  
Grand Rapids, MI 49546

- ARTICLE 1.** Call the Meeting to Order
- ARTICLE 2.** Approval of the Agenda
- ARTICLE 3.** Acknowledge Visitors & Public Comment
- ARTICLE 4.** Approval of the Minutes of the 04.17.23 Meeting
- ARTICLE 5.** Safety & Navigational Marking Plan RFP Response Review
- ARTICLE 6.** Aquatic Weed Management Plan Update
- ARTICLE 7.** River Measurement Program
- ARTICLE 8.** Roundtable Q&A
- ARTICLE 9.** Public Comment
- ARTICLE 10.** Adjournment

## MINUTES

Cascade Charter Township  
THORNAPPLE RIVER SAD AD-HOC COMMITTEE MEETING  
April 17, 2023 at 5:30pm  
Cascade Charter Township Hall  
5920 Tahoe Dr. SE  
Grand Rapids, MI 49546

- ARTICLE 1.** The meeting was called to order at 5:37pm.
- Members Present: Members Scott Rissi, Chuck Whitley, Thomas Keith, Trustee Shipley, and Jeff Carpenter (via Zoom).
- Members Absent: Michael Wiegand, Leann Rowland
- Others Present: Township Manager (TM) Ben Swayze
- ARTICLE 2. Approve the current Agenda**
- Motion was made by Member Rissi to approve the agenda as written. Supported by Member Keith. Motion carried.**
- ARTICLE 3. Acknowledge Visitors & Public Comment**
- There were not any visitors who wished to comment at this time.
- ARTICLE 4. Approve the Minutes of the March 6, 2023 Meeting**
- Motion was made by Member Rissi to approve the minutes with one change of the word 'price' to 'budget'. Supported by Trustee Shipley. Motion carried.**
- ARTICLE 5. Safety & Navigational Marking Plan RFP**
- TM Swayze explained that the township didn't receive any bids by the deadline but there is a possibility they will be receiving two the coming Friday. Member Rissi was to take representatives from interested companies out on the river the previous Monday but the river was high and the Emergency Manager requested everyone stay off the river that day. TM Swayze will send out the applications, if they are received, on Friday and call a special meeting, if need be, to award the bid. Otherwise, it will be determined at the May 1 meeting.
- Neither of the two interested companies would be options for debris removal as this marking project would be considered a small project compared to the work they regularly perform. The river will likely need debris removal this year but they will first need an access point. Harbor Hawk was used in the past but they are not an option anymore. Some municipalities now use Inline Marine. Harbor Hawk previously cost \$5,000 for 2 barges and 25 workers, over the course of 2 days.
- ARTICLE 6. Aquatic Weed Management Plan Update**

The latest update arrived the day of the meeting. Member Rissi said they should make sure Jamie knows the draw down schedule. The township will attach a cover letter and add a landing page on the website. The communication plan will include eblasts the week before each of the treatments.

The launch on the side of the railroad bridge is the location the committee hopes to use this year. This will be included on the May 1 agenda and will look to push out information on May 2.

**ARTICLE 7. River Measurement Program**

Member Whitley brought up the potential for a river measurement program; there is currently a measuring devise at 84<sup>th</sup> St. This could allow for easy customization of data collection and timely eblasts. It was suggested that it may be prudent to see if the county would put money towards the project rather than the Thornapple River SAD paying the full cost. There was also discussion as to if the Cascade Dam would be willing to share their data such as level, flow rate, and temperature. TM Swayze will touch base with the dam on what type of monitoring they use. Member Whitley will send TM Swayze information from a vendor he knows of to add to the next meeting agenda.

**ARTICLE 8. Roundtable Q & A**

None of the residents that failed to turn off their irrigation systems when the chemicals were being spread for the weed removal last year noticed any damage to their plants.

The next meeting will be held on May 1<sup>st</sup> at 5:30pm and the committee will review the RFP.

**ARTICLE 9. Public Comment**

There were not any visitors who wished to comment at this time.

**ARTICLE 10. Adjournment**

**Motion was made by Member Keith to adjourn. Supported by Member Rissi. Motion carried. The meeting was adjourned at 6:14 p.m.**

**Approved by the Thornapple River SAD Ad-Hoc Committee - TBD**



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April 21, 2023

Ben Swayze  
Township Manager  
5920 Tahoe Dr. SE  
Grand Rapids, MI 49546

Mr. Swayze,

Below you will find our proposal for FY2023 Thornapple River Safety & Navigation Marking Plan.

#### **4.1 Business Organization**

Viking Marine Construction LLC  
6223 140<sup>th</sup> Avenue  
Holland, Michigan – 49423  
(616) 294-3597 | [www.vikingmarineco.com](http://www.vikingmarineco.com)

#### **4.2 Executive Summary**

At Viking Marine Construction, our key personnel has over 80 years of experience in the Marine Construction Industry. Our President and Vice President account for 34+ years of experience, alone. Daily, we deal with Dredging, Dock/Pier installation, steel and rock sea walls, Pilings, Crane Services, Custom Fabrication, and several other aspects in the Marine Construction Industry. Our President and Vice President have personally been responsible for surveying, installing and/or, relocating channel markers on the Illinois Waterway for the United States Army Corps of Engineers and the United States Coast Guard. The Illinois Waterway is a Federal Navigable Channel. This job was performed under a different corporation, but personnel remains the same.

#### **4.3 Project Proposal – Please see attachments/images at the end of this proposal.**

##### **Phase I:**

Our plan will first consist of applying for all applicable permits. We use a 3<sup>rd</sup> party company for our permitting process. That company is Peterson & VandenBerg located in Spring Lake,



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Michigan. We have used Zach VandenBerg for all our permitting processes since establishing the company. Duration – approximately 90-180 days.

**Phase II:**

A Hydrographic Survey of the entire Navigable Channel of the Thornapple River within the project scope. – **See Figure 1. Duration – Two days.**

**Phase III:**

Installation of channel markers and orange caution markers. We will use a small barge like work boat to place the channel markers in the water, a mini excavator on shore to load them onto the small barge, and four (4) crew members on the barge to place them in the water. By using smaller equipment and more personnel, we eliminate the challenges of navigation under the extremely low railroad bridge. – **See Figure 2.**

**Process:**

We will offload a mini excavator on tracks from a gooseneck trailer at the Maricaibo Shores private boat launch. We will then back a trailer full of the assembled channel markers down to the mini excavator and use it to load them onto the barge/workboat. Upon loading the channel markers, the barge will follow the survey boat out to proper locations and place them in the water. The survey boat will be loaded with target files based off the hydrographic survey which will designate the proper area to place the channel markers in the water. We will then mark all designated caution areas with the orange and white “danger” buoys. The Buoys will be held in place with 5/16” marine grade chains and 150-pound blocks of concrete. **Duration - 1-2 days.**

**Phase IV:**

Remove all equipment from the area and clean the proposed staging location (Maricaibo Shores). **Duration – 1 day. Completion date unknown due to permitting process. Proposed completion by September 15<sup>th</sup>, 2023, or sooner, permit dependent.**

**4.4 Project Staffing**

Vice President – Jeremy Burch – Project Management, Engineering, and on-site instruction and supervision.

Four (4) employees who can not be designated at this time.

The employees will include an equipment operator, a boatman, and 2 deckhands.



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#### 4.5 Pricing Methodology

##### **Engineering, consultation, and permitting:**

Includes: Applying for permitting and costs, performing hydrographic surveying – processing of survey – engineering controls for the placement of the channel markers and caution buoys.

**Cost: \$13,258.68**

##### **Materials, mobilization and demobilization of equipment, performing work/labor:**

**Cost: \$31,631.22**

**Total Cost: \$ 44,889.90**

#### 4.6 Authorized Negotiations

**Barry King – President (616) 886-0245**

**Jeremy Burch – Vice President (251) 363-9791**

#### 4.7 References

**Chris Reger – United States Army Corps of Engineers – Rock Island District, Rock Island, Illinois. (309) 737-5485. [Chris.A.Reger@usace.army.mil](mailto:Chris.A.Reger@usace.army.mil)**

**Channel marker placement was included in the Dredging portion of the Illinois River over a 5-year contract. Total Cost – \$28,000,000.00**

**Dean King – Founder of The King Company – (616) 836-1047**

**Ben Burnham – Former Vice President of The King Company (616) 566-7743**

**[bdb1211@me.com](mailto:bdb1211@me.com)**



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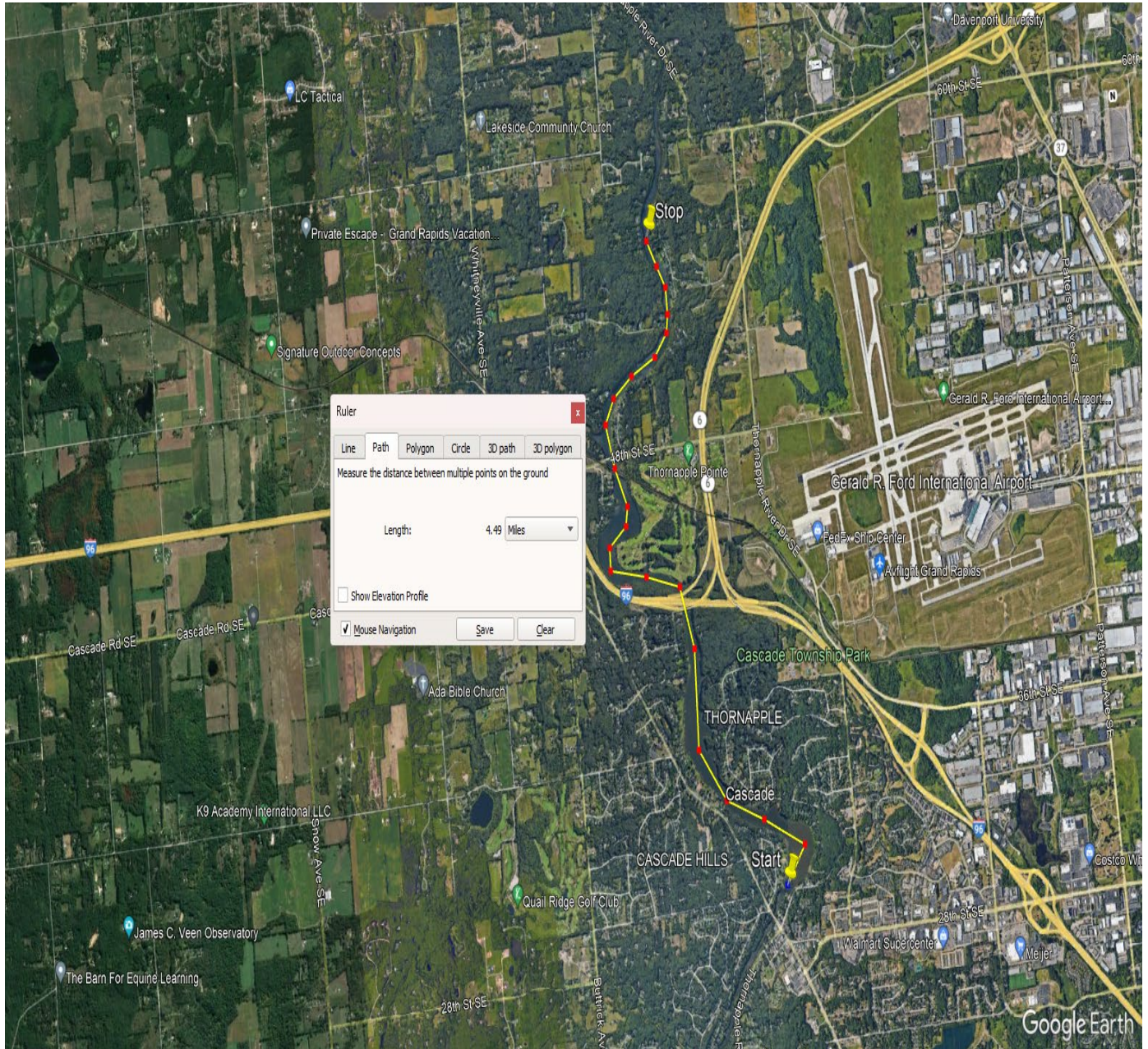


Figure 1.



6223 140<sup>th</sup> Avenue Holland, MI 49423 | (616)294-3597 | vikingmarineco@yahoo.com



Figure 2.



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950400



950410

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Channel Markers to be used.



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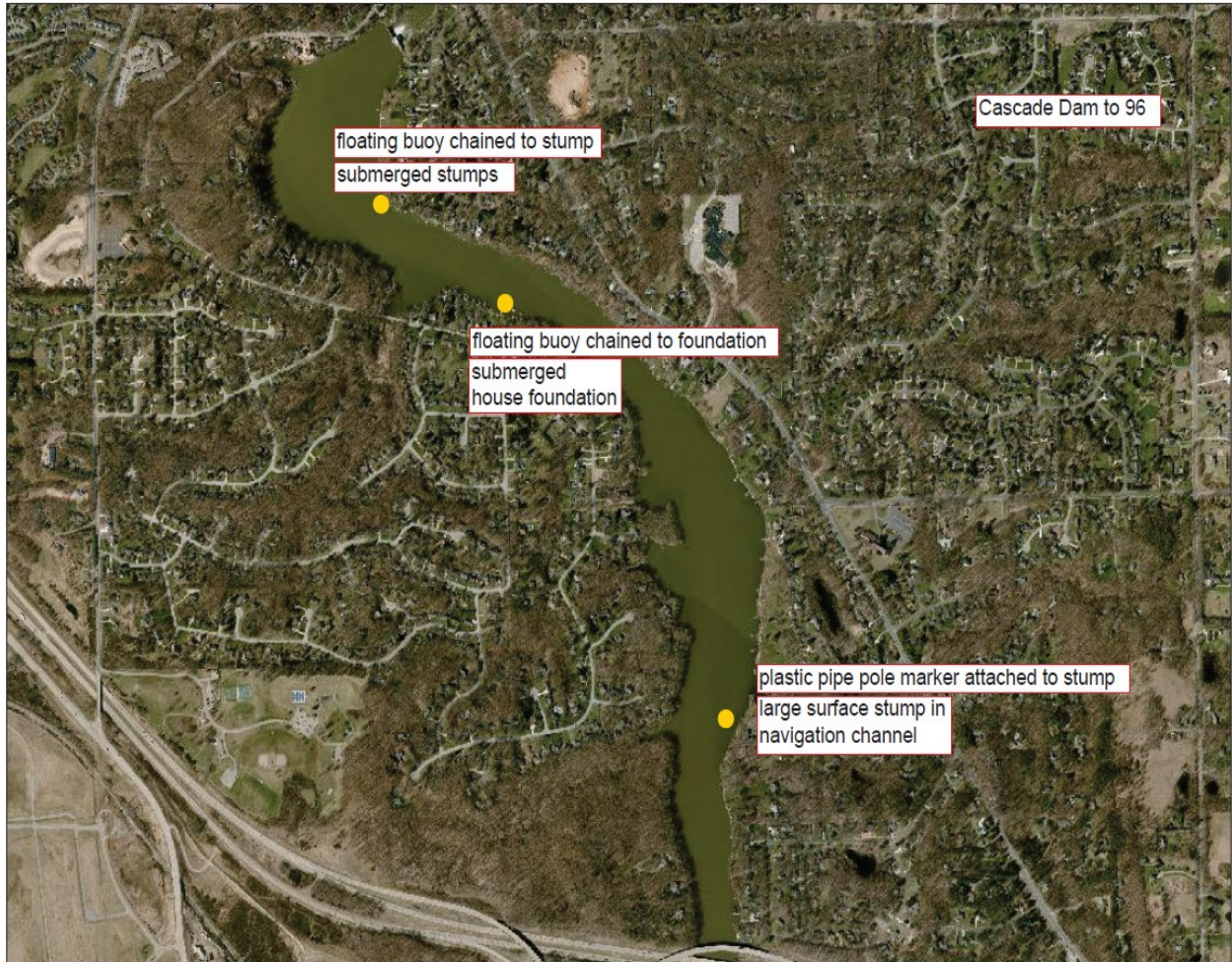
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Caution buoys to be used, or similar.



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Danger Buoy Location 1.



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Danger Buoy Location 2.



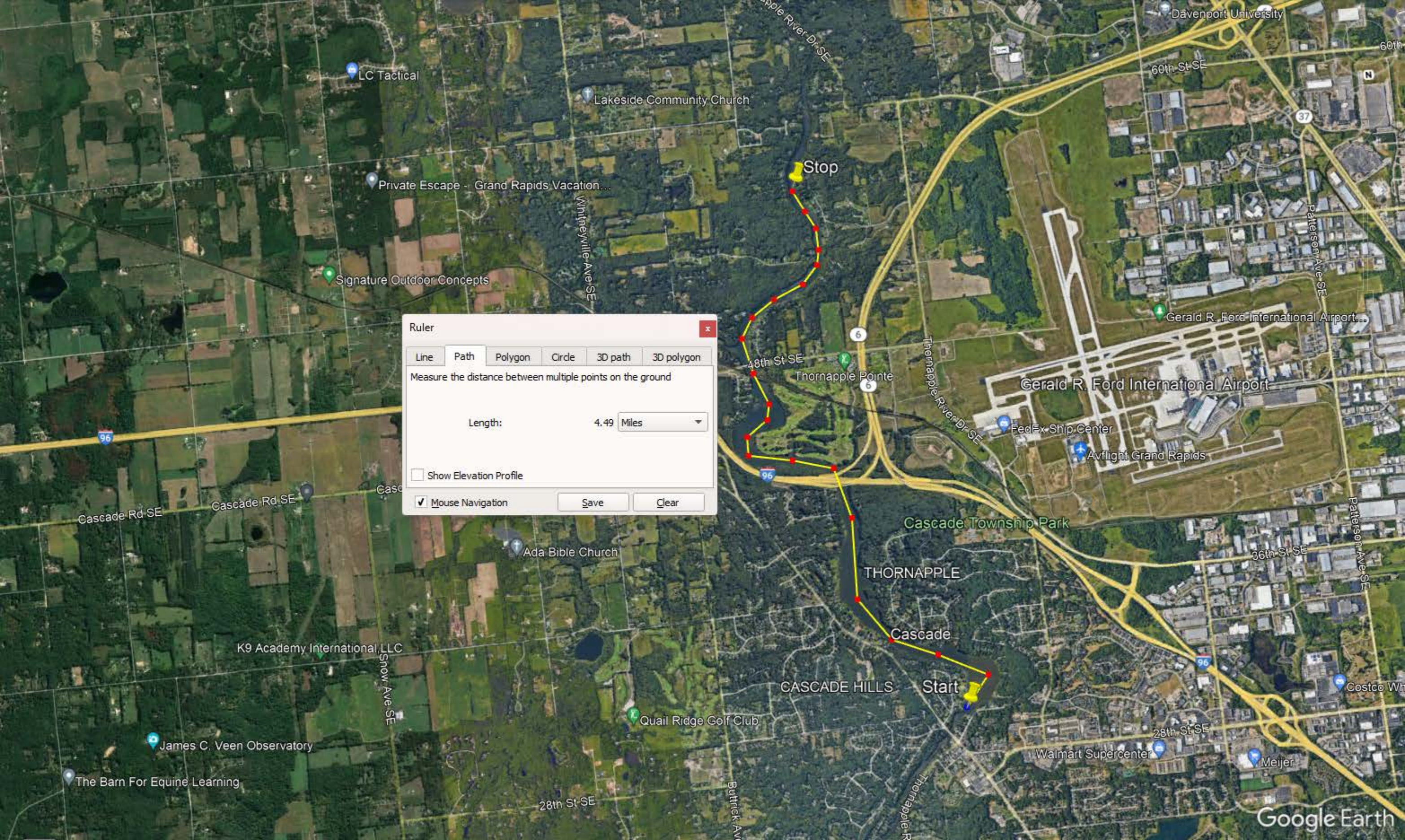
6223 140<sup>th</sup> Avenue Holland, MI 49423 | (616)294-3597 | vikingmarineco@yahoo.com



Danger Buoy Location 3.

**With any questions, please contact:**

**Jeremy Burch**  
**Vice President**  
**Viking Marine Construction**  
**(251) 363-9791 | jeremyb@vikingmarineco.com**



**Ruler** [Close]

Line Path Polygon Circle 3D path 3D polygon

Measure the distance between multiple points on the ground

Length: 4.49 Miles

Show Elevation Profile

Mouse Navigation [Save] [Clear]

Stop

Start

Gerald R. Ford International Airport

THORNAPPLE

Cascade

CASCADE HILLS

Cascade Township Park

Thornapple Point

48th St SE

28th St SE

36th St SE

60th St SE

Davenport University

Lakeside Community Church

LC Tactical

Private Escape - Grand Rapids Vacation...

Signature Outdoor Concepts

Whitneyville Ave SE

Thornapple River Dr SE

Patterson Ave SE

Patterson Ave SE

Walmart Supercenter

Meijer

Costco Wh

FedEx Ship Center

Avflight Grand Rapids

Ada Bible Church

K9 Academy International, LLC

James C. Veen Observatory

Quail Ridge Golf Club

The Barn For Equine Learning

Google Earth

**Please Note: The location of the channel markers on this drawing are not to scale. They are located in an approximate area. Final channel marker placement will be based off of a hydrographic survey and GPS positioning.**





950400



950410



Cascade Dam to 96

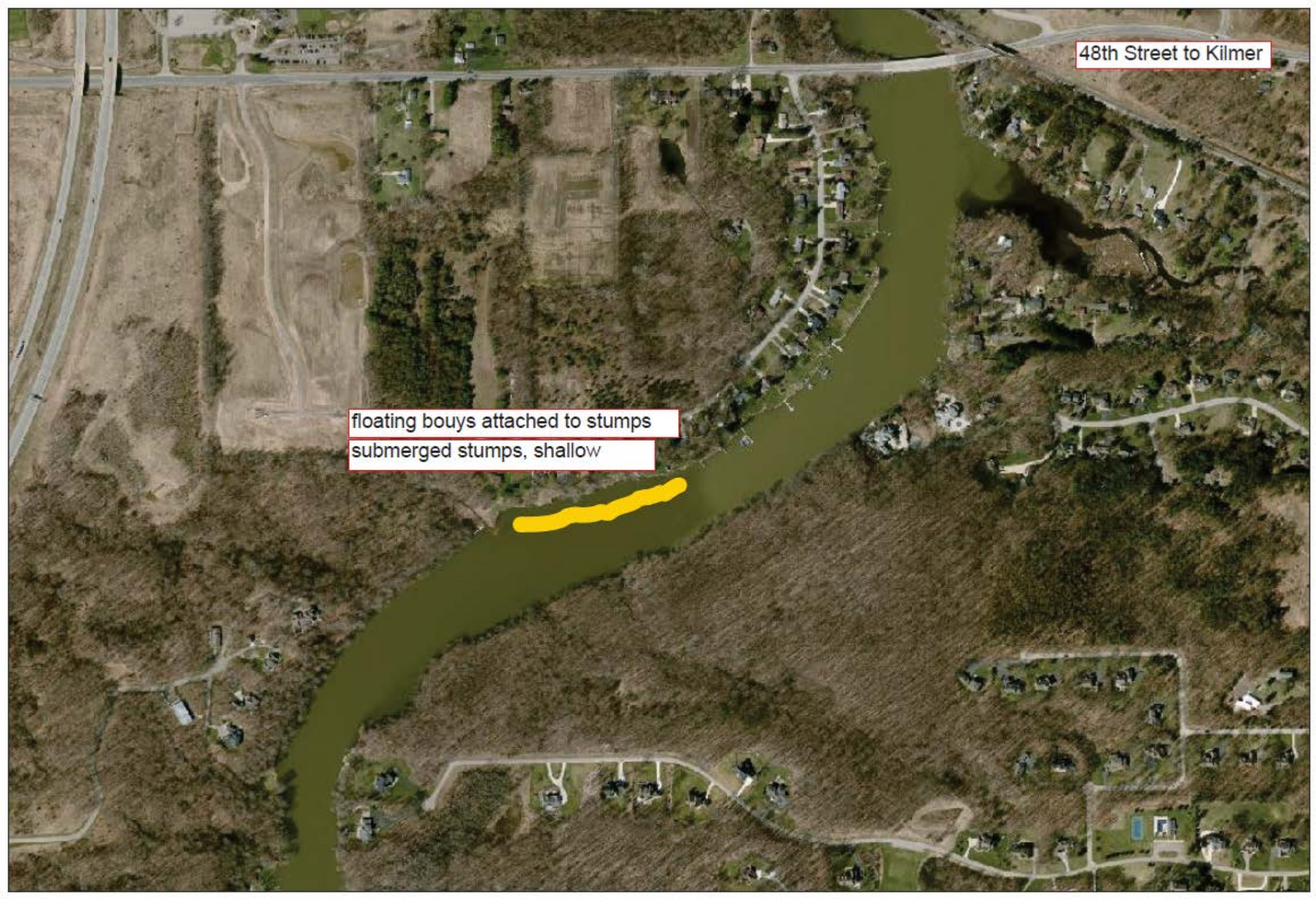
floating buoy chained to stump  
submerged stumps

floating buoy chained to foundation  
submerged  
house foundation

plastic pipe pole marker attached to stump  
large surface stump in  
navigation channel

48th Street to Kilmer

floating bouys attached to stumps  
submerged stumps, shallow



Kilmer

floating bouy - chain wrapped around rock

large submerged rock, end  
of deep water navigation,  
very shallow and rocky to  
the south





# NOTICE 2023

PLM Lake and Land Management Corp  
 8865 100th St. SE, Alto, MI 49302  
 (616) 891-1294(o) (616) 891-0371(f)  
 www.plmcorp.net



Thornapple River Cascade Twp has been scheduled for the **week** of:

WEEK OF	DESCRIPTION	WEEK OF	DESCRIPTION
5/1/2023	Spring Water Quality Testing	7/10/2023	Weed & Algae Treatment, E.coli Testing
5/29/2023	Pre-Treatment Vegetation Survey	7/31/2023	Mechanical Harvesting (if needed)
6/5/2023	Weed & Algae Treatment	8/14/2023	Weed & Algae Treatment, AVAS Survey, WQ Testing

EGLE permitting restrictions, national holidays, and/or weather conditions may influence the timing of treatments throughout the 2023 season. PLM treats each lake according to a schedule or season plan, established with the cooperation of your lake association, lake board or residents on the lake. The treatment schedule is approximate. Please watch your shoreline for the posting of the 8.5x11 inch, yellow or green signs. The signs will indicate the date of the treatment, the products used, and any restrictions on the use of treated water for swimming, watering lawns, etc. The property owners in this area are planning to have the waters chemically treated to control lake weeds and/or algae. This notice is being circulated in accordance with Department of Environment, Great Lakes and Energy (EGLE) procedures. Below is a list of herbicides that **may** be applied to the lake and the associated use restrictions. On the day of treatment, signs will be posted along the shoreline within 100 feet of treatment areas that indicate what products were used and specific water use restrictions that apply:

Chemical product/active ingredient	Chemical trade name	Do Not Use this water for swimming or bathing until	Do Not Use this water for ornamentals or turf irrigation until	Do Not Use this water for domestic purposes or agriculture irrigation until	Do Not Use this water for livestock watering or similar purposes until	Do Not Use this water for swimming or bathing until	Do Not Use this water for livestock watering or similar purposes until
Endothall Diquat Dibromide	Aqua Strike	1 Day(s)	3 Day(s)	5 Day(s)	14 Day(s)	1 Day(s)	14 Day(s)
Endothall	Aquathol K, Hydrothol 191	1 Day(s)	N/A	14 Day(s)	14 Day(s)	1 Day(s)	14 Day(s)
Flumioxazin	Clipper, Propeller, Schooner	1 Day(s)	3 Day(s)	5 Day(s)	N/A	1 Day(s)	N/A
Chelated Copper Herbicide	Nautique	1 Day(s)	N/A	N/A	N/A	1 Day(s)	N/A
Florpyrauxifen-Benzyl	ProcellaCOR	1 Day(s)	Site-specific recommendation* No restriction for established turf/grasses	N/A on domestic; assay indicates no detect at the water intake	N/A	1 Day(s)	N/A
Triclopyr liquid	Renovate 3	1 Day(s)	120 Day(s) or until approved assay indicates 1ppb or less; No restriction for established turf/grasses	120 Day(s) or until assay indicates 1ppb or less. N/A on domestic	N/A	1 Day(s)	N/A
Triclopyr granular	Renovate OTF	1 Day(s)	Site-specific recommendation* No restriction for established turf/grasses	120 Day(s) or until assay indicates 1ppb or less. N/A on domestic	N/A	1 Day(s)	N/A
Diquat Dibromide	Tribune	1 Day(s)	3 Day(s)	5 Day(s)	1 Day(s)	1 Day(s)	1 Day(s)
<b>PLM Blue, Cygnet Select, Aqua Shadow Black:</b> water dye (tracer), <b>Copper Sulfate, Cutrine Plus-Ultra, Captain-XTR, Earthtec, SeClear and SeClear G, Formula F-30, K-Tea:</b> chelated copper, <b>Cygnet Plus, PolyAn:</b> Adjuvant, <b>Pak 27, AquaSticker, Green Clean L and Green Clean 5.0:</b> oxidizer, <b>AquaPrep:</b> enzymes & non-ionic surfactants, <b>M.D. pellets, Muck Biotics:</b> gram negative, naturally occurring bacteria. <b>PLM Enzyme:</b> enzymes, <b>Phoslock:</b> phosphorus locking technology, <b>EutroSORB</b> phosphorus binding media.						<b>No Restrictions</b> on swimming, bathing, irrigation, domestic purposes or livestock watering.	

For a complete listing of all product labels, please see our website.

N/A= Not Applicable INDEF= Indefinite

\*Site-Specific recommendations to limit ornamental irrigation with ProcellaCOR, Renovate & Sculpin granular treated water will typically last 2-14 days. Contact PLM for further information.

The chemicals used for Aquatic Nuisance Control are registered by the U.S. Environmental Protection Agency and the Department of Environment, Great Lakes and Energy. The potential for damage to fish and other non-target organisms is minimal provided that the product is used as directed on the product label and the permit. To minimize the possible effects on health and the environment, the treated water is restricted for the above purposes.

**Method of Application:** Chemical application will be made via boat, back pack, and/or land vehicle applying liquid surface products by surface spray and/or injection. Granular product application will be surface broadcast.

**PLM Lake & Land Management Corp. Certified Applicators:** Salvatore Adams, Preston Adgate, Jason Broekstra, William Conklin, Hannah Cornell, Jaimee Desjardins, William Ducham, Holden Elsner, Jeff Fischer, BreAnne Grabill, Dustin Grabill, Christian Halquist, Noah Hanson, Steve Hanson, Kyle Heath, Jake Hunt, Garrett Johnson, Blake Mallory, Michael Pichla, Elijah Quinn, Reese Ransom, Eric Reed, Colton Risner, Raquelle Robbins, Eric Roberts, Cory Robinett, James Scherer, Alison Schermerhorn, Sophia Scott, Casey Shoaff, Lucas Slagel, Keith terHorst, Jeff Tolan, Andy Tomaszewski, Dennis Vangessel, Andrew Weinberg