

AGENDA
Cascade Charter Township
Thornapple River SAD Ad-Hoc Committee
Monday, October 13, 2025
4:30 pm
5920 Tahoe Dr. SE

- | | | |
|----------------|-----------|---|
| ARTICLE | 1. | Call the meeting to order |
| ARTICLE | 2. | Approval of the Agenda |
| ARTICLE | 3. | Acknowledge Visitors & Public Comment
(Limited to five minutes per speaker.) |
| ARTICLE | 4. | Approval of the Minutes of the June 9, 2025 Meeting |
| ARTICLE | 5. | Dam Inspection Update (Aric) |
| ARTICLE | 6. | Sediment Study Proposal |
| ARTICLE | 7. | Any Other Business |
| ARTICLE | 8. | Public Comment
(Limited to five minutes per speaker.) |
| ARTICLE | 9. | Adjournment |

MINUTES

Cascade Charter Township
THORNAPPLE RIVER SAD AD-HOC COMMITTEE MEETING
June 9, 2025, at 4:30pm
Cascade Charter Township Office
5920 Tahoe Dr. SE
Grand Rapids, MI 49546

ARTICLE 1. The meeting was called to order at 4:29pm.

Members Present: Scott Rissi, Trustee Shipley, Jeff Carpenter, Michael Wiegand, Thomas Keith, Leann Rowland
Absent: Chuck Whitley
Others Present: Township Manager Jade Smith, Executive Assistant Jessica Stine

ARTICLE 2. Approve the current Agenda

Motion was made by Trustee Liaison Shipley to approve the agenda as written. Supported by Trustee Rissi. Motion carried.

ARTICLE 3. Acknowledge Visitors & Public Comment

There were not any visitors that wanted to speak at that time.

ARTICLE 4. Approve the Minutes of the April 14, 2025 Meeting

Motion was made by Trustee Liaison Shipley to approve the minutes as written. Supported by Member Carpenter. Motion carried.

ARTICLE 5. Sediment Study Discussion with Prein & Newhof

Three representatives from Prein & Newhof (P&N) attended the meeting to discuss what the members of the committee were looking for in a sediment study. They explained that they want to mitigate sedimentation in the river. They explained that in the past they had used Gabion Weirs and taken out truckloads of sand. They know that the depth of the river is reducing, but they don't know if that is inevitable and something they'll always be fighting against. They know this is a long-term project and it will have to carry on for many years to be successful, but that is why they started with weed treatment and navigational markers, for some short-term impact.

P&N explained that natural channel design is currently the preferred method by EGLE; this includes shaping the channel so that the river flows at the correct velocity. They often use buffer strips, rain gardens, and infiltration ditches to reduce sedimentation. They suggested prioritizing where on the river they wanted to focus as it is a large and expensive project to take on. They stated that any dredging that was to occur would require samples from the sediment at the lowest depth they are looking to trench.

P&N will look into creeks, private properties, golf courses, etc. to find out where the sediment is coming from. He suggested selecting seven to nine tributaries to target and investigate them further. There was discussion regarding which drains belong to the

Drain Commission and what the wave mix layer is. Cascade Township will work to draw up a proposal for P&N.

Committee members also discussed the increasing speed and size of boats and their preference toward smaller ones that don't create large amounts of wake.

ARTICLE 6. Staff Updates

Larry's Tree Service came and relocated the floating debris in the river and charged a reasonable price.

ARTICLE 7. Any Other Business

Members shared many positive reviews of the new Safety and Navigational markings. The Township will need to check buoy positions after the winter to determine if they need to be repositioned after the ice melts.

Engineer Thorne has engaged Eagle Creek to discuss the installation of the water depth measuring device but was not able to acquire it yet.

ARTICLE 8. Public Comment

There was no one who wished to comment at that time.

ARTICLE 9. Adjournment

Motion was made by Trustee Liaison Shipley to adjourn. Supported by Trustee Rissi. Motion carried. The meeting was adjourned at 5:22 p.m.

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

July 31, 2025

Mr. Jade Smith, Township Manager
Cascade Township
5920 Tahoe Drive, SE
Grand Rapids, MI 49546-7123

RE: Professional Engineering Services Summary
Sedimentation Control and Mitigation Planning

Dear Mr. Smith:

Thank you for the opportunity to offer our engineering services to prepare a Sedimentation Control and Mitigation Plan for the Thornapple River. We understand the goal is to develop an action plan that manages sedimentation in the river, thereby “improving water quality, navigation, and aquatic habitats.”

This project focuses on the bayous and areas impacting the Thornapple River between 60th Street and the Cascade Dam. This planning document follows the initiative outlined in the Thornapple River Special Assessment District Ten Year Strategic Plan and Roadmap and will comply with all relevant local, state, and federal regulations.

Key Principles

- **Minimize Soil Disturbance:** Reducing the extent and duration of disturbed soil areas for effective erosion and sediment control.
- **Prevent Runoff Interaction with Bare Soil:** Diverting or controlling stormwater runoff, especially from offsite areas, and prevent it from flowing across exposed soil.
- **Slow Down Runoff:** Reduce runoff velocity to allow sediment to settle out and minimize erosion potential.
- **Remove Sediment Before Leaving the Site:** Identify measures such as sediment traps and basins to ensure that sediment is captured on-site before reaching drainage systems or water bodies.
- **Meet or Exceed Regulatory Requirements:** Activities must comply with local, state, and federal regulations for erosion and sediment control.

Scope of Services

Between 60th Street and the Cascade Dam, there are approximately 13 significant waterway connections to the Thornapple River. These waterways total approximately 26 miles in length and collect stormwater from the southern half of the Township. Each of these may be contributing sediment loading to the river. Although some of these waterways extend beyond the Township boundaries, as does the river itself, we will be stopping our investigations at the Township boundary. Additionally, there may be significant sediment load coming from upriver, outside of the township boundary. Although our current project scope does not extend beyond the Township boundary, we will review existing county aerial information for evidence of upriver contributing factors.

Existing Erosion Conditions:

- To understand existing soil conditions, vegetative covers, and potential/existing erosion areas, we will take advantage of the typical dry weather conditions in August to walk each of the 13 waterways, from the river to either their terminus or the Township boundary (approximately 26 miles). We will review conditions such as soil exposure, soil types, steep slopes, and vegetative cover to identify areas of existing erosion and areas with high erosion potential. These areas will be mapped in a Geographic Information System (GIS) which will then be used to map action requirements. This activity will require 2 staff members (1 for waterway inspection and 1 for transportation support) and 5 days of field work.
- In areas where the waterways extend beyond the Township boundary, we will assess the amount of baseload sediment at the boundary for potential sediment sourcing from outside the Township.
- As noted above, we will review existing county aerial information for evidence of upriver contributing factors.
- We will make recommendations for:
 - Controls in active erosion areas to reduce/prevent additional erosion.
 - Note areas with high erosion potential so the Township may communicate and educate the property owners on Best Management Practices.
- To understand existing deposition areas in the river, we proposed to conduct aerial drone flights along each bank of the river and into the bayous during the weekend of the fall drawdown in October. Because some residents may be concerned when seeing drone flights near their property and a drone pilot in a boat, we offer the following:
 - We will work with the Township to get information concerning the drone flight and dates to the residents via the Township website and through the river association.
 - We have spoken with the Township Fire Chief and confirmed that the fire department can participate in the drone flights with a staff person and water access equipment. This can provide an official presence during the drone flight and include emergency services in the process in case residents begin calling.

- We will provide the drone and drone pilot for the anticipated full day Saturday work. Examination of the Federal Aviation Administration Unmanned Aircraft System altitude limitations indicates that we can achieve a satisfactory flight altitude to get the desired video and remain below the required FAA altitude ceilings.
- Soil sampling in sediment deposition areas may provide information on the type of soil being deposited in each location which may point towards particular source locations. We will determine locations and sampling details for site where sedimentation has occurred and review these with the Township before proposing any sampling.

Erosion and Sediment Control Measures (BMPs):

We propose specific BMPs tailored to various site conditions and project activities. These may include, but are not limited to:

- Erosion Prevention: Examples/Locations:
 - Preserving existing vegetation where possible.
 - Identifying locations for Natural Channel Design.
 - Minimizing the extent and duration of disturbed areas.
 - Implementing temporary stabilization measures (mulching, seeding) on inactive areas.
 - Employing erosion control blankets on steep slopes.
- Sediment Control: Examples/Locations:
 - Installing sediment controls to prevent sediment from leaving specific sites.
 - Protecting drain inlets to prevent sediment from entering the drainage system.
 - Utilizing sediment traps or basins to capture sediment from runoff.

Regulatory Compliance:

- Confirm compliance with relevant state and local regulations for erosion and sediment control, including information about any required permits or certifications.

Summary Report/Plan

- Describe the site features
- Describe various BMPs and their potential
- Develop a plan identifying locations of various BMP Activities. This include prioritization and recommendations for projects
- Prepare associated maps
- Provide Conclusions/Recommendations

Mr. Jade Smith
July 31, 2025
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Meetings

We have included 2 in-person meetings for this project which will be a kickoff meeting and a final presentation. We will also be available to discuss any issues encountered throughout the study.

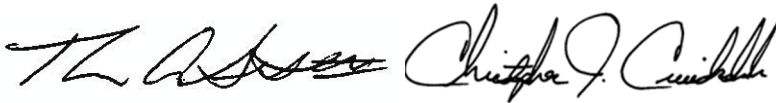
Fees and Schedule

We propose to perform the services described above for a not-to-exceed fee of \$29,600. We can complete the plan by December 5, 2025. If you are in agreement with this proposal, we will forward a Professional Services Agreement for your execution.

Prein&Newhof appreciates the opportunity work with you on this project. Please contact us if you have any questions or would like to modify the proposed project approach.

Sincerely,

Prein&Newhof



Thomas A. Smith, P.E.

Christopher J. Cruickshank, P.E.

Kevin Koster, P.E.

TS/cjc

Enclosures: Professional Services Agreement

Standard Terms & Conditions

- A. General** - As used in this Prein&Newhof Standard Terms and Conditions for Professional Services (hereinafter “Terms and Conditions”), unless the context otherwise indicates: the term “Agreement” means the Professional Services Agreement inclusive of all documents incorporated by reference including but not limited to this P&N Standard Terms and Conditions for Professional Services; the term “Engineer” refers to Prein & Newhof, Inc.; and the term “Client” refers to the other party to the Professional Services Agreement.

These Terms and Conditions shall be governed in all respects by the laws of the United States of America and by the laws of the State of Michigan.

- B. Standard of Care** - The standard of care for all professional and related services performed or furnished by Engineer under the Agreement will be the care and skill ordinarily used by members of Engineer’s profession of ordinary learning, judgment or skill practicing under the same or similar circumstances in the same or similar community, at the time the services are provided.
- C. Disclaimer of Warranties** - Engineer makes no warranties, expressed or implied, under the Agreement or otherwise.
- D. Construction/Field Observation** - If Client elects to have Engineer provide construction/field observation, client understands that construction/field observation is conducted to reduce, not eliminate the risk of problems arising during construction, and that provision of the service does not create a warranty or guarantee of any type. In all cases, the contractors, subcontractors, and/or any other persons performing any of the construction work, shall retain responsibility for the quality and completeness of the construction work and for adhering to the plans, specifications and other contract documents.
- E. Construction Means and Methods** - Engineer shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for any safety precautions and programs in connection with the construction work, for the acts or omissions of the Contractor, Subcontractors, or any other persons performing any of the construction work, or for the failure of any of them to carry out the construction work in accordance with the plans, specifications or other contract documents.
- F. Opinions of Probable Costs** - Client acknowledges that Engineer has no control over market or contracting conditions and that Engineer’s opinions of costs are based on experience, judgment, and information available at a specific period of time. Client agrees that Engineer makes no guarantees or warranties, express or implied, that costs will not vary from such opinions.
- G. Client Responsibilities**
1. Client shall provide all criteria, Client Standards, and full information as to the requirements necessary for Engineer to provide the professional services. Client shall designate in writing a person with authority to act on Client’s behalf on all matters related to the Engineer’s services. Client shall assume all responsibility for interpretation of contract documents and construction observation/field observation during times when Engineer has not been contracted to provide such services and shall waive any and all claims against Engineer that may be connected thereto.
 2. In the event the project site is not owned by the Client, the Client must obtain all necessary permission for Engineer to enter and conduct investigations on the project site. It is assumed that the Client possesses all necessary permits and licenses required for conducting the scope of services. Access negotiations may be performed at additional costs. Engineer will take reasonable precaution to minimize damage to land and structures with field equipment. Client assumes responsibility for all costs associated with protection and restoration of project site to conditions existing prior to Engineer’s performance of services.
 3. The Client, on behalf of all owners of the subject project site, hereby grants permission to the Engineer to utilize a small unmanned aerial system (sUAS) for purposes of aerial mapping data acquisition. The Client is responsible to provide required notifications to the property owners of the subject project site and affected properties where the sUAS services will be performed. The Engineer will operate the sUAS in accordance with applicable State and Federal Laws.

H. Hazardous or Contaminated Materials/Conditions

1. Client will advise Engineer, in writing and prior to the commencement of its services, of all known or suspected Hazardous or Contaminated Materials/Conditions present at the site.
2. Engineer and Client agree that the discovery of unknown or unconfirmed Hazardous or Contaminated Materials/Conditions constitutes a changed condition that may require Engineer to renegotiate the scope of or terminate its services. Engineer and Client also agree that the discovery of said Materials/Conditions may make it necessary for Engineer to take immediate measures to protect health, safety, and welfare of those performing Engineer’s services. Client agrees to compensate Engineer for any costs incident to the discovery of said Materials/Conditions.
3. Client acknowledges that Engineer cannot guarantee that contaminants do not exist at a project site. Similarly, a site

which is in fact unaffected by contaminants at the time of Engineer's surface or subsurface exploration may later, due to natural phenomena or human intervention, become contaminated. The Client waives any claim against Engineer, and agrees to defend, indemnify and hold Engineer harmless from any claims or liability for injury or loss in the event that Engineer does not detect the presence of contaminants through techniques commonly employed.

4. The Client recognizes that although Engineer is required by the nature of the services to have an understanding of the laws pertaining to environmental issues, Engineer cannot offer legal advice to the Client. Engineer urges that the Client seek legal assistance from a qualified attorney when such assistance is required. Furthermore, the Client is cautioned to not construe or assume that any representations made by Engineer in written or conversational settings constitute a legal representation of environmental law or practice.
5. Unless otherwise agreed to in writing, the scope of services does not include the analysis, characterization or disposal of wastes generated during investigation procedures. Should such wastes be generated during this investigation, the Client will contract directly with a qualified waste hauler and disposal facility.

I. Underground Utilities – To the extent that the Engineer, in performing its services, may impact underground utilities, Engineer shall make a reasonable effort to contact the owners of identified underground utilities that may be affected by the services for which Engineer has been contracted, including contacting the appropriate underground utility locating entities and reviewing utility drawings provided by others. Engineer will take reasonable precautions to avoid damage or injury to **underground** utilities and other underground structures. Client agrees to hold Engineer harmless for any damages to below ground utilities and structures not brought to Engineers attention and/or accurately shown or described on documents provided to Engineer.

J. Insurance

1. Engineer will maintain insurance for professional liability, general liability, worker's compensation, auto liability, and property damage in the amounts deemed appropriate by Engineer. Client will maintain insurance for general liability, worker's compensation, auto liability, and property damage in the amounts deemed appropriate by Client. Upon request, Client and Engineer shall each deliver certificates of insurance to the other evidencing their coverages.
2. Client shall require Contractors to purchase and maintain commercial general liability insurance and other insurance as specified in project contract documents. Client shall cause Engineer, Engineer's consultants, employees, and agents to be listed as additional insureds with respect to any Client or Contractor insurances related to projects for which Engineer provides services. Client agrees and must have Contractors agree to have their insurers endorse these policies to reflect that, in the event of payment of any loss or damages, subrogation rights under these Terms and Conditions are hereby waived by the insurer with respect to claims against Engineer.

K. Limitation of Liability - The total liability, in the aggregate, of Engineer and Engineer's officers, directors, partners, employees, agents, and consultants, whether jointly, severally or individually, to Client and anyone claiming by, through, or under Client, for any and all injuries, losses, damages and expenses, whatsoever, arising out of, resulting from, or in any way related to the Project or the Agreement, including but not limited to the performance of services under the Agreement, from any cause or causes whatsoever, including but not limited to the negligence, professional errors or omissions, strict liability or breach of contract or warranty, expressed or implied, of Engineer or Engineer's officers, directors, partners, employees, agents, consultants, or any of them, shall not exceed the amount of the compensation paid to Engineer under this Agreement, or the sum of fifty thousand dollars and no cents (\$50,000.00), whichever is less. Recoverable damages shall be limited to those that are direct damages. Engineer shall not be responsible for or held liable for special, indirect or consequential losses or damages, including but not limited to loss of use of equipment or facility, and loss of profits or revenue.

Client acknowledges that Engineer is a corporation and agrees that any claim made by Client arising out of any act or omission of any director, officer, or employee of Engineer, in the execution or performance of the Agreement, shall be made against Engineer and not against such director, officer, or employee.

L. Documents and Data

1. All documents prepared or furnished by Engineer under the Agreement are Engineer's instruments of service, and are and shall remain the property of Engineer.
2. Hard copies of any documents provided by Engineer shall control over documents furnished in electronic format. Client recognizes that data provided in electronic format can be corrupted or modified by the Client or others, unintentionally or otherwise. Consequently, the use of any data, conclusions or information obtained or derived from electronic media provided by Engineer will be at the Client's sole risk and without any liability, risk or legal exposure to Engineer, its employees, officers or consultants.
3. Any extrapolations, conclusions or assumptions derived by the Client or others from the data provided to the Client, either in hard copy or electronic format, will be at the Client's sole risk and full legal responsibility.

- M. Differing Site Conditions** - Client recognizes that actual site conditions may vary from the assumed site conditions or test locations used by Engineer as the basis of its design. Consequently, Engineer does not guarantee or warrant that actual site conditions will not vary from those used as the basis of Engineer's design, interpretations and recommendations. Engineer is not responsible for any costs or delays attributable to differing site conditions. .
- N. Terms of Payment** - Unless alternate terms are included in the Agreement, Client will be invoiced on a monthly basis until the completion of the **Project**. All monthly invoices are payable within 30 days of the date of the invoice. Should full payment of any invoice not be received within 30 days, the amount due shall bear a service charge of 1.5 percent per month or 18 percent per year plus the cost of collection, including reasonable attorney's fees. If Client has any objections to any invoice submitted by Engineer, Client must so advise Engineer in writing within fourteen (14) days of receipt of the invoice. Unless otherwise agreed, Engineer shall invoice Client based on hourly billing rates and direct costs current at the time of service performance. Outside costs such as, but not limited to, equipment, meals, lodging, fees, and subconsultants shall be actual costs plus 10 percent. In addition to any other remedies Engineer may have, Engineer shall have the absolute right to cease performing any services in the event payment has not been made on a current basis.
- O. Termination** - Either party may terminate services, either in part or in whole, by providing 10 calendar days written notice thereof to the other party. In such an event, Client shall pay Engineer for all services performed prior to receipt of such notice of **termination**, including reimbursable expenses, and for any shut-down costs incurred. Shut-down costs may, at Engineer's discretion, include expenses incurred for completion of analysis and records necessary to document Engineer's files and to protect its professional reputation.
- P. Severability and Waiver of Provisions** - Any provision or part of the Agreement held to be void or unenforceable under any laws or regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Client and P&N, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable **provision** that comes as close as possible to expressing the intention of the stricken provision. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of the Agreement.
- Q. Dispute Resolution** - If a dispute arises between the parties relating to the Agreement, the parties agree to use the following procedure prior to either party pursuing other available remedies:
1. Prior to commencing a lawsuit, the parties must attempt mediation to resolve any dispute. The parties will jointly appoint a mutually acceptable person not affiliated with either of the parties to act as mediator. If the parties are unable to agree on the mediator within twenty (20) calendar days, they shall seek assistance in such regard from the Circuit Court of the State and County wherein the Project is located, who shall appoint a mediator. Each party shall be responsible for paying all costs and expenses incurred by it, but shall split equally the fees and expenses of the mediator. The mediation shall proceed in accordance with the procedures established by the mediator.
 2. The parties shall pursue mediation in good faith and in a timely manner. In the event the mediation does not result in resolution of the dispute within thirty (30) calendar days, then, upon seven (7) calendar days' written notice to the other party, either party may pursue any other available remedy.
 3. In the event of any litigation arising from the Agreement, including without limitation any action to enforce or interpret any terms or conditions or performance of services under the Agreement, Engineer and Client agree that such action will be brought in the District or Circuit Court for the County of Kent, State of Michigan (or, if the federal courts have exclusive jurisdiction over the subject matter of the dispute, in the U.S. District Court for the Western District of Michigan), and the parties hereby submit to the exclusive jurisdiction of said court.
- R. Force Majeure** - Engineer shall not be liable for any loss or damage due to failure or delay in rendering any services called for under the Agreement resulting from any cause beyond Engineer's reasonable control.
- S. Assignment** - Neither party shall assign its rights, interests or obligations under this Agreement without the express written consent of the other party.
- T. Modification** - The Agreement may not be modified except in writing signed by the party against whom a modification is sought to be enforced.
- U. Survival** - All express representations, indemnifications, or limitations of liability included in the Agreement shall survive its completion or termination for any reason.
- V. Third-Party Beneficiary** - Client and Engineer agree that it is not intended that any provision of this Agreement establishes a third-party beneficiary giving or allowing any claim or right of action whatsoever by a third party.
- W. Fee Escalation** - Engineer's fees are based on its billing rates, which are adjusted annually. For multi-year projects, Engineer's fees incorporate an estimate of future billing rates. If inflation causes actual billing rates to exceed these estimates, Engineer reserves the right to adjust its fees accordingly.