NORTHPORT/LEELANAU TOWNSHIP UTILITIES AUTHORITY

NORTHPORT/LEELANAU TOWNSHIP UTILITIES AUTHORITY
April 8, 2025
9:30 a.m.
ANNUAL BOARD MEETING

AGENDA

1. Vice Chair Calls the Annual Meeting to order
2. Roll Call of Members
3. Public Comment/Correspondence
4. Motion for Election of Officers
    A. Chair, Vice Chair, Secretary, and Treasurer
5. Adjournment of Annual Meeting, (Regular Meeting to Follow)

NORTHPORT/LEELANAU TOWNSHIP UTILITIES AUTHORITY

NORTHPORT/LEELANAU TOWNSHIP UTILITIES AUTHORITY
April 8, 2025
9:30 a.m.
REGULAR BOARD MEETING

AGENDA

1. Adjourn the annual meeting and begin the regular meeting

2. Additions or Corrections to the Agenda

3. Approval of Minutes of the February 4, 2025, meeting

4. Public Comment/Correspondence

5. Payment of the Bills: (Feb-April)

6. Staff Reports
   A. Clerk's Report
   B. Deputy Treasurer Report
   C. Superintendent's Report
   D. JACOBS Monthly Report

7. Discussion/ Potential Action Items:

   - Capacity/sludge handling proposal presentation- Stephen Robers, Jacobs
   - Capital Asset Policy
   - Grinder Pump Procurement Policy
   - Reconciliation Policy

8. Public Comment

9. Member Comment

10. Adjournment

Northport/Leelanau Township Utilities Authority

116 W. Nagonaba, PO Box 158 Northport, MI 49670

Draft Minutes

February 4, 2025

Regular Meeting

I. CALL TO ORDER The meeting was called to order by Vice Chair McCann at 9:30 a.m.

II. ROLL CALL Board Members Present: Chris Holton, Barbara Conley, James Root, Chris McCann

Absent: Mike McMillan

Staff Present: Joni Scott, Clerk

III. ADDITIONS OR CORRECTIONS TO THE AGENDA

The Board agreed to add the Prein and Newhof invoice to the agenda for discussion.

Barbara Conley Moved, Supported by Chris Holton, to approve the agenda as amended. Motion Carried.

IV. APPROVAL OF MINUTES

Chris McCann **Moved, Supported by** Chris Holton to approve the December 10, 2024, Regular meeting minutes as presented. **Motion Carried.**

V. PUBLIC COMMENT/CORRESPONDENCE

ArcGIS- retiring ArcGIS Desktop, by March 2026

VI. PAYMENT OF BILLS

Barbara Conley **Moved, Supported by** Chris McCann to approve the bills to be paid for the months of December-February in the amount of $95,008.31
Roll Call Vote: Yeas (4) Nays (0) Absent (1) **Motion Carried.**

VII. STAFF REPORTS

A. Clerk Report:

Clerk Joni Scott reported that she had coordinated with Michael Cool from UHY auditing firm, scheduling the audit for the week of April 28. She provided the board with a memo regarding an invoice from Prein and Newhof, which would be discussed later in the agenda. Scott also noted a 4.3% increase in the insurance and bonds expense compared to the previous year and offered to provide more details at the next meeting. Additionally, Scott mentioned that delinquent utility accounts are sent to the township for collection on the winter tax bill, with around 20-25 accounts typically six months or more overdue. The Clerk also provided a trial balance and a revenue expenditure report outlining the current budget status.

Deputy Treasurer:

None

B. Superintendent Report:

Superintendent Chris Holton's report included updates on new sewer connections at South Shore Drive, and Fifth Street. He also noted a demolition at 12660 Woolsey Lake Road involving a grinder pump and an addition at 8634 Down Haven Road that may require relocating a grinder pump. Holton reported assisting Jacobs with service calls, replacing a pump on Vince 452 for Way, and addressing ongoing issues with residents flushing wipes down the sewer, which can cause problems with grinder pumps. Clerk Scott offered to see if information on what not to put in a grinder pump could be added to the billing postcard, suggesting that a QR code might be a helpful addition.

C. Treatment Plant Operator Report:

Justin Straub, the Treatment Plant Operator, reported that the new grinder pump model from Myers is both more effective and less expensive than the current model, offering an improved ability to grind up rags and wipes along with higher discharge pressure. The conversion cost per pump is $106, which includes $50 for new capacitors and about an hour of labor. Straub recommended purchasing nine pumps at a time to take advantage of bulk pricing and tax exemption savings, which could reduce costs by approximately $260 per pump. He also suggested keeping some of the old pumps on hand for refurbishment and continued use until full replacement with the new model is necessary.

Grinder Pump replacement approval:

Chris McCann Moved, Supported by Barbara Conley to approve the purchase of six additional grinder pumps, with a total cost not to exceed $19,000.
Roll Call Vote: Yeas (4) Nays (0) Absent (1) **Motion Carried.**

VII. DISCUSSION/ACTION ITEMS

- **Adoption of 2025-26 Fiscal Year Budget**

  Clerk Scott presented the 2025-2026 fiscal year budget, reviewing key expenditures such as operations and maintenance charges, bio-solids disposal costs, generator maintenance, and detailed contractual services expenses.

  Chris McCann **Moved, Supported by** Barbara Conley to adopt the resolution 1-2025 to adopt the budget as presented.
  Roll Call Vote: Yeas (4) Nays (0) Absent (1) **Motion Carried.**

- **Invoice from Prein and Newhof**

  The board discussed an invoice from Prien and Newhof for $4,342.90, which Clerk Scott explained was unexpected and incurred without prior communication or approval, contrary to their agreement. The board debated options, including disputing the charge or negotiating a reduced fee. The consensus was that Prien and Newhof should have communicated the expense beforehand.

  Ultimately, on a motion by Chris McCann, and **Supported by** Barbara Conley to refuse the charge and directed Clerk Scott to reach out to Prien and Newhof to address the issue. **Motion Carried.**

VIII. PUBLIC COMMENT

None

IX. MEMBER COMMENTS

None

X. ADJOURNMENT

Vice Chairman McCann adjourned the meeting at 10:43 am.

Respectfully Submitted by:

Joni L. Scott, NLTUA Clerk

Check Register Report

Date: 04/03/2025
Time: 4:06 pm
Page: 1

NLTUA

BANK: HUNTINGTON BANK

Check Number	Check Date	Status	Void/Stop Date	Reconcile Date	Vendor Number	Vendor Name	Check Description	Amount
HUNTINGTON BANK Checks								
4901	02/07/25	Printed			AF	AF GROUP	WORKMANS COMP	291.00
4902	02/07/25	Printed			AFFINITY	AFFINITY TECH	new computer	1,962.04
4903	02/07/25	Printed			CONSUMERS	CONSUMERS ENERGY	electric	7,512.11
4904	02/07/25	Printed			MILAN	MILAN SUPPLY COMPANY	grinder pumps	6,617.70
4905	02/26/25	Printed			DTE	DTE ENERGY	gas	58.11
4906	02/26/25	Printed			GFK	GFL ENVIRONMENTAL	TRASH	70.00
4907	02/26/25	Printed			LINGO	LINGO COMMUNICATIONS	TELEPHONE	345.41
4908	02/26/25	Printed			PREIN	PREIN & NEWHOF	WOOLSEY LAKE	1,252.50
4909	02/26/25	Printed			VILLAGE	VILLAGE OF NORTHPORT	LAST QUARTER OF AGREEMENT	10,481.67
4912	03/17/25	Printed			CONSUMERS	CONSUMERS ENERGY	ELECTRIC	6,965.99
4913	03/17/25	Printed			DTE	DTE ENERGY	GAS	58.11
4914	03/17/25	Printed			GFK	GFL ENVIRONMENTAL	TRASH SERVICES	140.00
4915	03/17/25	Printed			LCE	LEELANAU COMMUNITY ENERGY,LLC	ELECTRIC	73.70
4916	03/17/25	Printed			LINGO	LINGO COMMUNICATIONS	TELEPHONE	353.08

Total Checks: 14 **Checks Total (excluding void checks): 36,181.42**

Total Payments: 14 **Bank Total (excluding void checks): 36,181.42**

Total Payments: 14 **Grand Total (excluding void checks): 36,181.42**

NLTUA

As of: 4/30/2025		YTD Debits	YTD Credits
Fund: 590 - SEWER FUND			
Assets			
001.000	NLTUA CASH-CHECKING	276,041.75	0.00
001.001	CASH-NORTHPORT VILLAGE	51,784.01	0.00
001.002	CASH-LEELANAU TOWNSHIP	8,419.68	0.00
028.000	UTILITY BILLS RECEIVABLE	38,201.08	0.00
029.000	UTILITIES PENALTY RECEIVABLE	2,245.96	0.00
142.000	LAND IMPROVEMENTS	241,647.40	0.00
144.000	PLANT EQUIPMENT	350,835.17	0.00
146.000	OFFICE EQUIPMENT & FURNITURE	15,337.29	0.00
147.000	ACCUM DEP-OFFICE EQUIP & FURN	0.00	176,668.79
	Assets	984,512.34	176,668.79
Liabilities			
226.000	DUE TO TOWNSHIPS-LEELANAU	0.00	11,884.44
227.000	DUE TO VILLAGES-NORTHPORT	0.00	62,195.46
230.000	DUE TO VILLAGE OF NPT. LOAN	0.00	118,620.79
	Liabilities	0.00	192,700.69
Reserves/Balances			
390.000	Fund Balance	0.00	622,646.59
	Reserves/Balances	0.00	622,646.59
Revenues			
Dept: 000			
669.000	MISC. REVENUE	0.00	87.15
	Dept: 000	0.00	87.15
	Revenues	0.00	87.15
Expenditures			
Dept: 102	WASTEWATER TREATMENT PLANT		
850.000	TELEPHONE	131.99	0.00
920.000	UTILITIES/ ELECTRIC	5,513.81	0.00
921.000	UTILITIES/ GAS	58.11	0.00
925.000	CONTRACTUAL SERVICES	140.00	0.00
	Dept: 102 WASTEWATER TREATMENT PLANT	5,843.91	0.00
Dept: 103	WASTEWATER COLLECTION SYSTEM		
850.000	TELEPHONE	221.09	0.00
920.000	UTILITIES/ ELECTRIC	1,525.88	0.00
	Dept: 103 WASTEWATER COLLECTION SYSTEM	1,746.97	0.00
	Expenditures	7,590.88	0.00
	Fund: 590 - SEWER FUND	992,103.22	992,103.22

For the Period: 3/1/2025 to 4/30/2025	Original Bud.	Amended Bud.	YTD Actual	CURR MTH	Encumb. YTD	UnencBal	% Bud
Fund: 590 - SEWER FUND							
Revenues							
Dept: 000							
452.000 HOOK UP APPLICATION/PERMIT FEE	600.00	600.00	0.00	0.00	0.00	600.00	0.0
642.000 OPERATION/MAINTENANCE FEES	731,741.00	731,741.00	0.00	0.00	0.00	731,741.00	0.0
655.000 LATE CHARGES INTEREST	5,200.00	5,200.00	0.00	0.00	0.00	5,200.00	0.0
669.000 MISC. REVENUE	0.00	0.00	87.15	0.00	0.00	-87.15	0.0
678.000 REIMBURSEMENTS	600.00	600.00	0.00	0.00	0.00	600.00	0.0
Dept: 000	738,141.00	738,141.00	87.15	0.00	0.00	738,053.85	0.0
Revenues	738,141.00	738,141.00	87.15	0.00	0.00	738,053.85	0.0
Expenditures							
Dept: 101 UTILITY AUTHORITY BOARD							
726.000 OFFICE SUPPLIES	350.00	350.00	0.00	0.00	0.00	350.00	0.0
727.000 OPERATING SUPPLIES	800.00	800.00	0.00	0.00	0.00	800.00	0.0
740.000 POSTAGE	2,000.00	2,000.00	0.00	0.00	0.00	2,000.00	0.0
800.000 CONTRACTUAL SERVICE	48,481.00	48,481.00	0.00	0.00	0.00	48,481.00	0.0
801.000 LEGAL SERVICES	2,000.00	2,000.00	0.00	0.00	0.00	2,000.00	0.0
802.000 CPA SERVICES	3,000.00	3,000.00	0.00	0.00	0.00	3,000.00	0.0
845.000 EDUCATION & TRAINING	250.00	250.00	0.00	0.00	0.00	250.00	0.0
860.000 MILEAGE	100.00	100.00	0.00	0.00	0.00	100.00	0.0
900.000 PRINTING AND PUBLISHING	500.00	500.00	0.00	0.00	0.00	500.00	0.0
960.000 INSURANCE & BONDS	16,000.00	16,000.00	0.00	0.00	0.00	16,000.00	0.0
991.000 DEBT SERVICE/ PRINCIPAL	75,000.00	75,000.00	0.00	0.00	0.00	75,000.00	0.0
992.000 DEBT SERVICE / INTEREST	3,540.00	3,540.00	0.00	0.00	0.00	3,540.00	0.0
UTILITY AUTHORITY BOARD	152,021.00	152,021.00	0.00	0.00	0.00	152,021.00	0.0
Dept: 102 WASTEWATER TREATMENT PLANT							
727.000 OPERATING SUPPLIES	4,500.00	4,500.00	0.00	0.00	0.00	4,500.00	0.0
850.000 TELEPHONE	3,000.00	3,000.00	131.99	0.00	0.00	2,868.01	4.4
920.000 UTILITIES/ ELECTRIC	64,500.00	64,500.00	5,513.81	0.00	0.00	58,986.19	8.5
921.000 UTILITIES/ GAS	150.00	150.00	58.11	0.00	0.00	91.89	38.7
925.000 CONTRACTUAL SERVICES	267,286.00	267,286.00	140.00	0.00	0.00	267,146.00	0.1
927.000 UTILITIES/WATER	1,500.00	1,500.00	0.00	0.00	0.00	1,500.00	0.0
957.000 PERMITS	7,500.00	7,500.00	0.00	0.00	0.00	7,500.00	0.0
WASTEWATER TREATMENT PLANT	348,436.00	348,436.00	5,843.91	0.00	0.00	342,592.09	1.7
Dept: 103 WASTEWATER COLLECTION SYSTEM							
727.000 OPERATING SUPPLIES	8,500.00	8,500.00	0.00	0.00	0.00	8,500.00	0.0
850.000 TELEPHONE	2,700.00	2,700.00	221.09	0.00	0.00	2,478.91	8.2
920.000 UTILITIES/ ELECTRIC	13,550.00	13,550.00	1,525.88	0.00	0.00	12,024.12	11.3
921.000 UTILITIES/ GAS	450.00	450.00	0.00	0.00	0.00	450.00	0.0
925.000 CONTRACTUAL SERVICES	188,000.00	188,000.00	0.00	0.00	0.00	188,000.00	0.0
WASTEWATER COLLECTION SYSTEM	213,200.00	213,200.00	1,746.97	0.00	0.00	211,453.03	0.8
Expenditures	713,657.00	713,657.00	7,590.88	0.00	0.00	706,066.12	1.1
Grand Total Net Effect:	24,484.00	24,484.00	-7,503.73	0.00	0.00	31,987.73	

NLTUA February Meeting Updates

From the NLTUA Clerk, Joni Scott

1. **Insurance Expenses for FY 2024-25**

A Board member inquired about exceeding the budget for insurance expenses in the 2024-25 fiscal year. The reason for this is that the insurance bill was received and paid in October, but it covers a full year of service. Since the NLTUA's fiscal year runs from March to February, the insurance bill was paid during the fourth quarter of the current fiscal year. As a result, $3,825.50 was expensed in the 2024-25 budget, and $11,476.50 will be expensed in the 2025-26 budget to cover the remaining three-quarters of the cost.

2. **Dispute on Prein and Newhof Invoice**

There was a dispute regarding an invoice from Prein and Newhof, which included a charge of $4,342.90 for a proposal for services. This charge did not align with the current agreement between the NLTUA and Prein and Newhof. Following the NLTUA Board's direction after our February meeting, I disputed the charges. Prein and Newhof acknowledged the issue, valued our relationship, and removed the charges. However, they mentioned that if the Board saw any value in the charge, they would be open to accepting any payment the Board deemed appropriate.

3. **QR Code for Grinder Pump Information on Utility Billing Cards**

The Board asked me to look into adding a QR code to the utility billing cards, linking to specific information about grinder pumps. I have confirmed with our printers that this can be done, and the QR code can be linked to a dedicated webpage with relevant details. The QR code will be included on the billing cards that are sent out quarterly.

4. **Follow-Up on the ArcGIS System**

Board member James Root looked into GIS software options and provided the following insight:

*"The consensus is that ArcInfo remains the most widespread platform for municipal GIS. The alternative suggested is a purpose-built GIS based on mostly public domain components, similar to the system our company uses to maintain shopping center data. Unless Northport has specialized needs beyond the usual parcels and pipes, ESRI offers solid software and strong support.

Should customization be required, modern GIS systems can accommodate this easily. Many clients have proprietary systems that incorporate forecasting and optimization algorithms specific to their needs. In my experience, the support system is the most important consideration."*

This feedback highlights the importance of a reliable support system when choosing GIS software. Additionally, there needs to be either more training for staff or the Board should consider hiring an engineer on a contract basis to assist with necessary updates to the system.

Jacobs

Challenging today.
Reinventing tomorrow.

Jacobs Engineering
606 Hannah Ave.
Traverse City, MI 49686
T 231-922-4922

March 10th, 2025

Attn: Joni Scott/Clerk
Northport Leelanau Township Utility Authority, NLTUA

Project name: Northport
Project no: 378107CH

Subject: Monthly Operations Report

Dear Mrs. Joni Scott

This report covers our operations and maintenance activities for February 2025.

Yours sincerely,

Justin Straub
Operations Supervisor
231-922-4922
Justin.Straub@jacobs.com

Mark J Huggard

Mark Huggard
Project Manager
231-313-5592
Mark.huggard@jacobs.com

Copies to: NLTUA Board
Jacobs Staff

Contents

Executive Summary 3

Treatment Plant Operations and Maintenance 4

Collection System Operations and Maintenance 4

- Collection System 5
- Lift Stations 5
- Grinder Pump Responses 5

On The Horizon 6

Financial Report 7

Executive Summary

This month's operations report highlights several key activities at the NLTUA facility.

- Submitted January's DMR, meeting all compliance requirements.
- Adjusting/Monitoring air controls to decrease elevated Nitrate levels.
- Blower set to AUTO to regulate D.O. after new probe installed 8/6/24.
- 1 Call Out for Liftstations - Northport Point Alarm Auto Dialer failure.
- 3 Residential Grinder Call outs are listed in Table below.
- To Date, 3 residentials have received "new style" grinder pumps.

Upcoming activities include:

- Submittal of February 2025 DMR.

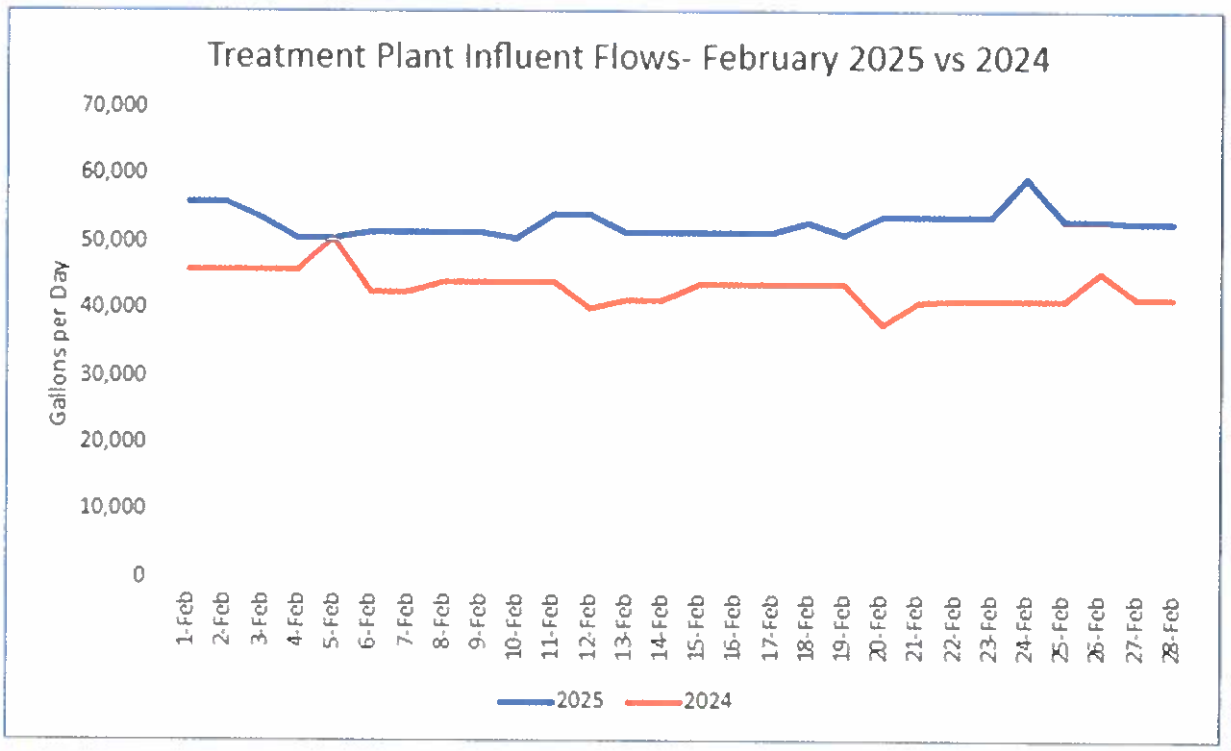
If there is anything you would like added to the monthly reports, please let us know.

Treatment Plant Operations and Maintenance

	Current Month	Last Month	Last Year
Influent flow daily average, GPD	53,363	57,556	43,515
Monthly electrical usage, Kw Hrs*	33,021	35,520	24,474

We submitted the monthly Discharge Monitoring Report (DMR) for January 2025. The facility complied with all permit parameters.

The following graph compares the plant influent flows of the reporting month last year to that of 2025.



Collection System Operations and Maintenance

Collection System

No Collection System callouts for the month of February.

Lift Stations

Northport Point Liftstation – Alarm Auto Dialer failed. Temporary fix in place, unit to be replaced.

Grinder Pump Responses

As part of our due diligence to reduce repeat call out repairs to residential grinders, we perform the following checks at each visit.

- ✓ Tighten all control connections within the control cabinet.
- ✓ Remove grease and debris from grinder tank.
- ✓ Remove all grease buildup from float switches.
- ✓ Verify all float switches operate properly and are positioned properly.
- ✓ Confirm proper pump operation.
- ✓ Verify alarm light is operational and audible alarm, if applicable.
- ✓ Inspect wet well components.
- ✓ Replace both the start and run capacitor.
- ✓ Inform homeowner of findings and what not to put in their sewer.

The following table summarizes our grinder pump responses. More details can be provided upon request.

Date	Location	Alarm/Issue	Resolution
2/2/2025	344 Nagonaba Street	Alarm light on/Pump Failure	Replaced pump with new style Grinder
2/4/2025	603 South Short Drive	High Level/Pump Overload	Cleared clog from wet wipe and grease chunks
2/11/2025	13303 Paradesia Road	Pump Failed to Stop	Replaced capacitors, motor contactor and 3 floats

On The Horizon

Task	Update	Estimated time of completion
ARV Inspections	Scheduled for Jacobs completion	Completed
Semi-Annual Mixer PMs	Scheduled for Jacobs completion	Completed
Solids Settling Basin Cleanout	Scheduled for Jacobs completion	Completed
Annual manhole inspections	Scheduled for Jacobs Completion	Spring 2025
Quarterly Monitoring Well Sampling	Scheduled for Jacobs Completion	Spring 2025
Settling basin engineering evaluation	Jacobs to provide proposal	2025
Ferric chloride room day tank assessment	Jacobs to provide proposal	2025
Capacity Study	Jacobs to provide proposal	2025

Financial Report

Line Item	Feb-25	Comments
Repair Spending Treatment Plant Current month	$636.00	Electrical seal, Ferric room sump crock repair
Repair Spending Treatment Plant Year to Date	$791.66	
Repair Spending Residential Grinder Pumps Current Month	$171.09	Pump Run Capacitors
Repair Spending Residential Grinder Pumps Year to Date	$171.09	
Repair Spending Collection System (Lift stations /sewer) Current Month	$0.00	
Repair Spending Collection System (Lift stations /sewer) Year to Date	$0.00	
Repair Hours Treatment Plant Current Month	9.5	
Repair Hours Treatment Plant Year to Date	25.5	
Repair Hours Residential Grinder Pumps Current Month	13.5	
Repair Hours Residential Grinder Pumps Year to Date	41.5	
Repair Hours Collection System (Lift stations / sewer) Current Month	14.5	
Repair Hours Collection System (Lift stations / sewer) Year to Date	25	
Total Repair Hours Current Month	37.5	
Total Repair Hours Year to Date	92	
Repair Hours Budget Remaining (Limit 300 Hours)	208	
Total Repair Spending Current Month	$807.09	
Total Repair Spending Year to Date	$962.75	
Repair Spending Budget Remaining (Limit $8,000)	$7,037.25	
Total Repair Hours 2024	628.9	
Total Repair Spending 2024	$27,383.02	

MEMORANDUM
To: NLTUA Board Members
From: Joni Scott, Village Clerk
Date: April 1, 2025
Subject: Wastewater System Capacity Evaluation & Consultant Proposal

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Purpose

As interest in new sewer connections and lot subdivisions grows, understanding our wastewater system's capacity is increasingly important. This evaluation would provide:

- **A Roadmap for NLTUA's Future** – Establish a data-driven plan for system sustainability.
- **Risk Mitigation** – Identify potential capacity constraints before they impact service reliability.
- **Regulatory Compliance** – Ensure we meet current and future state permit requirements.
- **Operational Efficiency** – Address solids handling and infrastructure limitations proactively.
- **Threshold & Growth Management** – Define realistic service limits while balancing system longevity and overhead costs.

This assessment is not solely focused on future development but is essential for responsible system management, regulatory planning, and long-term financial sustainability.

Proposal by Jacobs

Jacobs is an engineering firm that oversees our Treatment Plant and Collections system and has served as NLTUA's wastewater system operator for 18 years and possesses in-depth knowledge of our infrastructure. Their proposed evaluation provides:

- **Accuracy & Efficiency** – Utilizing existing models and records reduces cost and time.
- **Seamless Integration** – Familiarity with our system prevents learning curve delays.
- **Long-Term Value** – Data and models can be leveraged for future planning.

This proposal includes not only a comprehensive capacity study, but also a **sludge handling evaluation**, which is an identified Capital Improvement Plan (CIP) project. Jacobs' engineer, Stephen Roberts, can provide further explanation and technical details regarding this component.

Project Timeline & Budgeting Considerations

The evaluation is structured over approximately **seven months**, divided into the following phases:

1. **Data Collection & Gap Analysis** – 6 weeks
2. **Capacity Analysis** – 6 weeks
3. **Solids Handling Evaluation** – 6 weeks
4. **Growth Impact Study** – 4 weeks
5. **Capital Plan & Final Report** – 8 weeks

To manage budget constraints, Jacobs has structured payments by task, allowing phased funding. The total estimated cost is **$131,967**, but expenses can be distributed over time for budgetary flexibility.

Alternative Approaches

A simplified REU capacity estimate could be performed using historical data and standard flow ratios. However, this approach does not account for peak demand, pipe constraints, or solids handling challenges. Jacobs' proposed evaluation provides:

✓ **Detailed Hydraulic Modeling** – Identifies bottlenecks before failures occur.
✓ **Regulatory Compliance** – Ensures adherence to future permit requirements.
✓ **Reliable Growth Planning** – Prevents system overload from new developments.

Next Steps

Staff recognizes the value of this evaluation and its potential long-term benefits. However, we recommend that the Board review and discuss this proposal at either the next NLTUA meeting or a special meeting in May. This will allow further consideration of the scope, costs, and implementation timeline.

Jacobs

1050 Wilshire Drive
Suite 155
Troy, MI 48084

www.jacobs.com

March 6, 2025

Attention: Joni Scott, in care of NLTUA Board
NLTUA BOARD
116 W. Nagonaba St.
PO Box 158
Northport, MI 49670

Project Name: NLTUA Capacity Evaluation

Subject: NLTUA Project Proposal – EXHIBIT A

Dear Ms. Scott,

It is our understanding that Northport/Leelanau Township Utilities Authority (NLTUA) is seeking an analysis of the existing collection system and wastewater treatment plant (WWTP) to allow for NLTUA to plan for new growth in the service area. NLTUA has received interest in new connections and subdividing existing lots that would represent an increase in the overall number of residential equivalent units (REUs) in the service area but also the density of REUs in specific areas. With this potential growth NLTUA has expressed concern that elements of the existing collection system, conveyance and pumping, may not have adequate capacity to convey new flows. In addition, aspects of the WWTP capacity and current sludge handling operations are also a concern. This analysis would be used to plan future upgrades, evaluate requests for new sewer connections, evaluate and identify needed improvements to the solids handling system, and address the potential for future changes to effluent permit conditions. Specifically, the work under this project will seek to:

- Identify historical flow patterns to the WWTP
- Evaluate capability of existing infrastructure to convey and treat wastewater
- Evaluate and identify needed improvements to the solids handling system
- Review potential development projects (provided by NLTUA) and impact on the collection and treatment system
- Review and update capital improvement plan to better align with future growth projections

This project offers an exciting opportunity to better define the plant and collection system capabilities, and to remove uncertainty around managing growth in the region. Given our history of

operations and maintenance service for NLTUA, our existing WWTP process model, and familiarity with the financial constraints and potential with leveraging plant capacity, we have prepared this scope of work to accomplish your objectives.

Scope of Work

Jacobs proposes the following tasks to accomplish your objectives:

Task 1: Data Gap Analysis, Data Collection, Data Synthesis
Task 2: Existing Capacity Analysis
Task 3: Solids Handling System Evaluation
Task 4: Growth Opportunities Evaluation
Task 5: Capital Improvement Plan (CIP) Evaluation and Executive Summary

These tasks are defined further below.

Task 1: Data Gap Analysis, Data Collection, Data Synthesis

This task will include a kickoff meeting with NLTUA to review the overall goals and objectives of the project, communication between parties, schedule, and deliverables; and define the factors for success. In the kickoff meeting, initial discussions will be held to determine a draft list of initial data that will be required for analysis. Examples of data to be requested include:

- Drawings/Maps (e.g. collection system, pump stations, treatment plant, etc.)
- Past engineering reports
- Capital improvement plans
- Growth projection reports and known future development projects
- Flow and loading data
- Collection system model (Excel)
- Hydraulic model of the WWTP facility (Replica)
- GIS Data
- Solids loadings and handling/settling basin evaluation documents

Deliverables

- Kickoff meeting summary
- Data request
- Data Gap Analysis

Task 2: Existing Capacity Analysis

Jacobs will evaluate the current capacity of key components of the collection system and verify the treatment capacity of the WWTP. This task will set the baseline for further evaluation of growth opportunities in subsequent tasks.

For the collection system, Jacobs will prepare a hydraulic model in PCSWMM software, using available drawings to model average and peak conditions to determine hydraulic capacity of key segments of the system. We will also identify potential hydraulic limitations in pipe segments and pump stations.

For the wastewater treatment plant, Jacobs will utilize the existing whole-plant process model to confirm the design treatment plant capacity and quantify how much additional capacity remains underutilized in accordance with the design requirement of the regulatory authority. A focus on unit process treatment capacity and redundancy will allow for future planning should upgrades be required to accommodate future growth.

Updates to the existing Pro2D2 model will be completed in coordination with Jacobs Operations and Maintenance staff. The treatment process and collection system models that are prepared under this task can be used for future evaluations of projects at minimal cost to NLTUA.

Jacobs will conduct a workshop to present the results of the capacity analysis task. All key stakeholders will be invited to participate. Jacobs and NLTUA will collaboratively decide if continuing with Tasks 4 and 5 are warranted.

Deliverables

- Workshop summary will be issued within 2 weeks after the completion of the event
- Hydraulic model files in PCSWMM Software
- Technical memorandum summarizing the details of the capacity analysis and regulatory review

Task 3: Solids Handling System Evaluation

WWTP Operations and Maintenance staff report the solids removal system is not functioning as intended. There are issues removing solids using the floating mats, including cavitation air flotation equipment which does not work properly. Jacobs will evaluate the current system including any modifications that have been implemented since startup and identify alternatives for treatment improvements or mechanical improvements for solids handling.

Deliverables

Jacobs will summarize the evaluation in a technical memorandum, including:

- Condition assessment of current solids handling system,
- List of potential upgrades and recommendation for next steps.

Task 4: Growth Opportunities Evaluation

Using information provided by NLTUA, Jacobs will compile a list of potential development projects, including timeline of growth (if known), the number of REUs, and the resulting flow and loading impact on the system. We will compare these growth projections with industry benchmarks for similar systems.

Using the capacities determined in Task 2, Jacobs will evaluate each potential development project's feasibility in the context of their capacity and the timeline for growth. If the system is predicted to exceed its capacity based on the projected developments, Jacobs will identify the limiting component, quantify the limitation, and identify a potential upgrade.

Deliverables

Jacobs will summarize the evaluation in a technical memorandum, including:

- The development projects list,
- Timeline of growth, and
- List of potential collection system or WWTP upgrades.

Task 5: Capital Improvement Plan (CIP) Evaluation and Executive Summary

Based on Task 4 outcomes, Jacobs will review and suggest modifications to the existing capital improvements plan (CIP). Because Jacobs is the current O&M service provider, we have developed a deep understanding of the facility's current maintenance and capital needs. Armed with this knowledge, Jacobs will suggest changes to the CIP to better align the plan with the future growth that is identified in previous tasks.

Jacobs will also review the prioritization of projects in the current CIP to ensure that the plan aligns with operational needs, current asset condition, and future growth requirements.

Finally, Jacobs will review the current budgetary values of projects in the CIP to ensure that they represent realistic opinion of capital cost based on the American Association of Construction Cost Estimates (AACE) Class 5 level estimates.

Deliverables

- Jacobs will summarize the suggested modifications to the CIP and budgetary information in a technical memorandum.
- Jacobs will provide an executive summary for the entirety of the project and package all previous technical memorandums into a final submittal.

Project Schedule

Jacobs estimates that if each task were performed consecutively without stopping, the project would require a total duration of 7 months (including client review time) from notice-to-proceed. However, Jacobs recognizes that more time may be desired between tasks to reassess the path that

NLTUA would like to take. Should NLTUA decide to spread this work out over a longer period, the pricing presented in the following section will still be valid. While each task is intended to build on the previous tasks, the work has been structured that after each task a summary of the work completed will be performed such that if the project is suspended there will be documentation of the work completed up to that point.

Task	Duration
Task 1: Data Gap Analysis, Data Collection, Data Synthesis	6 Weeks
Task 2: Existing Capacity Analysis	6 Weeks
Task 3: Solids Handling System Evaluation	6 Weeks
Task 4: Growth Opportunities Evaluation	4 Weeks
Task 5: CIP Evaluation	8 weeks

Fee

These professional engineering services will be tracked and invoiced on a time-and-materials basis according to a budgeted total fee of **$131,967.00**. Should NLTUA desire to take a progressive approach to this analysis, a breakdown of the costs for each task is summarized below.

Task 1 (Data Gap Analysis, Data Collection, Data Synthesis)	$17,089
Task 2 (Existing Capacity Analysis)	$53,254
Task 3 (Solids Handling System Evaluation)	$19,352
Task 4 (Growth Opportunities)	$14,951
Task 5 (Capital Improvement Plan (CIP) Evaluation and Executive Summary)	$27,321
TOTAL	**$131,967**

Assumptions

- Items identified in the data gap analysis will be provided by NLTUA.
- Additional scenario modeling or modified assumptions not already included in this scope of work may require additional fees to complete, depending on the complexity of the changes requested, and are not included in this project.
- Plant Process and Collection system Hydraulic model assumptions and outputs will be provided. However, Jacobs uses some proprietary process modeling software (Pro2D2) that cannot be released to NLTUA. The collection system hydraulic modeling software used to analyze the collection system will be PCSWMM.
- GIS is completely attributed with info needed for model development (manhole rim and invert elevations; pipe diameter, length, upstream and downstream invert, material, age)
- Pump station wet well dimensions, pump info (curves, on/off level, operational info) is available and provided to modeling team
- Sufficient data is available to develop model flows (WWTP influent data, pump station flow data, etc.)
- Assume even allocation of dry weather flow based on population (if available), if not available assume even allocation of dry weather flow based on model manhole/subcatchment area
- Assume even allocation of wet weather flow based on model manhole/subcatchment drainage area
- Flows associated with average and peak conditions will be provided to the modeling team (i.e., average flows, what storm event are peak flows associated with/design storm, level of service)
- Existing system capacity analysis will be performed for 2 conditions (average and peak, as defined by the client)
- Capacity analysis will identify sewer surcharge related to sewer capacity issues (pipe and/or pump station capacity concerns), flooding manholes/SSOs
- NLTUA will provide information on potential development projects, including timeline of growth (if known) and the number of REUs associated with each project.
- Jacobs will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by NLTUA or from other third parties when data is not available directly from the WWTP Operation.

Jacobs

March 6, 2025
Subject: NLTUA Project Proposal – EXHIBIT A

We appreciate the opportunity to propose on this important task and look forward to moving forward at your convenience. If you should have any questions, please do not hesitate to contact Steve Roberts at 317.752.0330.

Yours sincerely

Steve Roberts
Project Manager

Copies to: Kevin Dahl / Jacobs
Mark Huggard / Jacobs
Liie Hill / Jacobs
Chad Roby / Jacobs
Jason Matteo / Jacobs

NORTHPORT/LEELANAU TOWNSHIP
UTILITIES AUTHORITY

Northport/Leelanau Township Utilities Authority (NLTUA) Capital Asset Policy

Purpose and Objectives The purpose of this Capital Asset Policy is to establish guidelines for maintaining accurate records of capital assets owned, purchased, replaced, or disposed of by the NLTUA. The objectives are:

- To manage and maintain the capital assets of the NLTUA, which include sewer treatment facilities, lift stations, sewer mains, and related infrastructure.
- To ensure compliance with the Governmental Accounting Standards Board (GASB) for financial reporting and depreciation.
- To determine the appropriate depreciation method to use in accordance with Generally Accepted Accounting Principles (GAAP).
- To provide accurate record-keeping for inventory and financial reporting.

Responsibility and Authority The NLTUA Clerk shall be responsible for ensuring compliance with this policy, maintaining accurate records, and ensuring that all capital asset transactions align with financial policies set forth by the NLTUA Board.

Criteria for Capitalization A "capital asset" must be recorded and depreciated if it meets the following criteria:

- The expected useful life exceeds one year.
- The asset has a unit cost of $10,000 or more.
- Expenditures that significantly add to the value or extend the useful life of existing infrastructure will be considered capital assets.

Capital Asset Categories The following asset categories apply to NLTUA's operations:

- **Land** (All land acquisitions are capitalized regardless of cost.)
- **Sewer Infrastructure** (Sewer mains, lift stations, manholes, treatment plant components)
- **Equipment** (Pumps, generators, SCADA systems, and other operational machinery)

- **Buildings and Improvements** (Structures and modifications to existing facilities)

Depreciation and Record-Keeping

- Capital assets will be recorded at historical cost and depreciated using the straight-line method over their estimated useful life.
- Donated capital assets will be recorded at fair market value at the time of acquisition.
- The NLTUA Clerk will ensure proper tracking and reporting of capital assets in financial statements.

Construction in Progress (CIP)

- Projects extending beyond a single fiscal year will be recorded as Construction in Progress until completion, at which point they will be capitalized.

Capital Leases

- Lease purchases meeting the $10,000 capitalization threshold will be recorded as capital assets by Generally Accepted Accounting Principles (GAAP).
- The NLTUA Board must approve all capital leases.

Adopted on _____ , of _____.

Northport/Leelanau Township Utilities Authority (NLTUA)
Grinder Pump Procurement Policy

Purpose

The purpose of this policy is to establish a clear and efficient process for the procurement of grinder pumps for the NLTUA sewer system. Given the essential role of grinder pumps in maintaining uninterrupted sewer service for residential properties, this policy ensures a structured purchasing process that guarantees availability while maintaining fiscal responsibility.

Policy Statement

To ensure uninterrupted service, the NLTUA authorizes the purchase of grinder pumps as needed, without requiring prior board approval. The procurement process will follow the outlined procedure, ensuring accountability while allowing for timely purchases.

Procedure

1. **Inventory Monitoring & Notification**
    - Jacobs Engineering, the treatment plant/collection system operators, will regularly monitor the grinder pump inventory and assess current and projected needs.
    - **When the available grinder pump inventory falls to four (4) or fewer units**, Jacobs Engineering will notify the NLTUA Clerk of the need to replenish stock.
    - The Clerk will then initiate the standard purchase authorization process.

2. **Standard Purchase Authorization**
    - Upon notification, the NLTUA Clerk will prepare a purchase order specifying the number of pumps required **based on operational needs**.
    - The purchase order will be submitted to the NLTUA Chair for approval and signature.
    - Once signed, the Clerk will proceed with the purchase and ensure proper documentation.
    - All purchases will be reported at the next NLTUA Board meeting, but board approval is not required before procurement.
3. **Emergency Procurement**
    - An emergency purchase is permitted when an immediate replacement is necessary to maintain service, and standard approval processes cannot be followed. Emergency situations include, but are not limited to:
        - After office hours, weekends, and holidays.
        - System failures that pose an immediate risk to public health or property.
        - Severe weather events or unforeseen mechanical failures that prevent normal operations.
    - In these situations, Jacobs Engineering may proceed with purchasing the necessary grinder pumps without prior approval.
    - The NLTUA Clerk will follow up with the Chair as soon as possible, providing details of the emergency purchase.
    - All emergency purchases will be documented and presented at the next scheduled NLTUA Board meeting.

4. **Financial Oversight**
    - As of **April 3, 2025**, the current price per grinder pump is **$2,205.90**, but pricing is subject to change based on vendor costs and market conditions. The NLTUA Clerk will verify current pricing before each purchase.
    - The total cost per order will depend on the **current unit price and the number of pumps purchased based on operational needs**.
    - All purchases will be recorded in the NLTUA financial records and included in financial reports presented at the bi-monthly Board meetings.

Review and Amendments

This policy will be reviewed annually or as needed to ensure it continues to meet operational needs. Amendments may be made with the approval of the NLTUA Board.

Adopted by the NLTUA Board on: [Insert Date]
Approved by: [Signature]
Chair, NLTUA

Northport/Leelanau Township Utilities Authority (NLTUA)
Monthly Reconciliation Policy

Purpose:
To ensure accurate financial reporting and maintain fiscal responsibility, NLTUA will conduct a monthly reconciliation of financial statements and records.

Policy:

1. **Bank Reconciliation:** The NLTUA Clerk and Deputy Treasurer shall reconcile all NLTUA bank statements to the general ledger each month. Any discrepancies must be documented and resolved promptly.
2. **Accounts Receivable & Payable:** The Clerk and Deputy Treasurer will conduct a monthly review and reconciliation of outstanding receivables and payables to ensure accuracy and timely payments.
3. **Utility Billing Reconciliation:** The Clerk and Deputy Treasurer will compare utility billing records against revenue reports to confirm accuracy in billing and collections.
4. **Financial Report Review:** The Clerk and Deputy Treasurer will update and provide the reconciliation of financial statements and records in the bimonthly Trial Balances and Revenue Expenditure Reports to the Board.
5. **Documentation & Record Keeping:** All reconciliations shall be documented and retained for audit and compliance purposes. Any adjustments must be documented and signed by the Chair.

Effective Date: [Insert Date]
Approved By: [Insert Name/Title]