



ST. LOUIS COUNTY BOARD OF ADJUSTMENT STAFF REPORT

INSPECTION DATE: 12/11/2023

REPORT DATE: 2/26/2024

MEETING DATE: 3/14/2024

APPLICANT INFORMATION

APPLICANT NAME: Michael Jones

APPLICANT ADDRESS: 4976 NW ISLAND LAKE RD, DULUTH, MN 55803

OWNER NAME: Allete Inc.
(IF DIFFERENT THAN ABOVE)

SITE ADDRESS: 4978 NW ISLAND LAKE RD, DULUTH, MN 55803

LEGAL DESCRIPTION: SW OF SE LEASE #15-03 MP 660-10-5540, S35, T53N, R15W (Unorganized)

PARCEL IDENTIFICATION NUMBER (PIN): 660-6000-55910 (MN Power Lease)

VARIANCE REQUEST: The applicant is requesting relief from St. Louis County Zoning Ordinance 62, Article III, Section 3.4 to allow a replacement principal dwelling at a reduced shoreline setback.

PROPOSAL DETAILS: The applicant is proposing a replacement principal dwelling at a reduced shoreline setback of 65 feet where 100 feet is required.

PARCEL AND SITE INFORMATION

ROAD ACCESS NAME/NUMBER: Island Lake Rd NW

ROAD FUNCTIONAL CLASS: Local

LAKE NAME: Island Lake Reservoir

LAKE CLASSIFICATION: RD

RIVER NAME: N/A

RIVER CLASSIFICATION: N/A

DESCRIPTION OF DEVELOPMENT ON PARCEL: The property currently contains a principal dwelling, multiple accessory structures, and a private septic system.

ZONE DISTRICT: SMU 7

PARCEL ACREAGE: 1.39 ACRES

LOT WIDTH: 177 FEET

FEET OF ROAD FRONTAGE: 177 FEET

FEET OF SHORELINE FRONTAGE: 177 FEET

PARCEL AND SITE INFORMATION

VEGETATIVE COVER/SCREENING: There is good screening from most sides of the property.

TOPOGRAPHY: There is a gradual slope from the dwelling to the shore with an elevation change of 6 feet.

FLOODPLAIN ISSUES: The lowest floor will be above the Regulatory Flood Protection Elevation.

WETLAND ISSUES: There are wetlands on the north side of the property that will not be impacted by the proposed project.

ADDITIONAL COMMENTS ON PARCEL: The parcel is divided by NW Island Lake Rd.

FACTS AND FINDINGS

A. Official Controls:

1. St. Louis County Zoning Ordinance 62, Article III, Section 3.4, requires a setback of 100 feet from Recreation Development Lakes.
 - a. The applicant is proposing a 65 foot setback from Island Lake Reservoir.
2. Goal LU-3 of the St. Louis County Comprehensive Land Use Plan is to improve the integrity of the county's planning-related regulation by minimizing and improving management of nonconformities.
3. Objective LU-3.1 of the St. Louis County Comprehensive Land Use Plan is to base variance decisions on uniform approval criterion to ensure all applications are treated equitably, that community health and safety is protected, and that the overall character of a given area is preserved.
4. Objective LU-3.3 of the St. Louis County Comprehensive Land Use Plan is to acknowledge why nonconformities are a concern and that variances should be for exceptional circumstances as noted in Minnesota Statute 394.22. Subd.10.

B. Practical Difficulty:

1. The property is a MN Power Lease lot that was recently platted in September of 2023 (Breezy Bay).
 - a. There are no notes from the review of the original plat expressing concerns for conforming buildable area.
2. There are alternatives that do not require a variance:
 - a. Reduction of size and change in configuration of the structure may result in a proposal being at a conforming location that would be allowed through a Land Use Permit.
 - b. Current design is a self created difficulty.
3. The proposal has changed since the January 11, 2024 public hearing.
 - a. The request for a structure width facing the water of 82 feet where 71 feet is required has been removed.
 - b. The proposed shoreline setback request has been increased from 58 feet to 65 feet where 100 feet is required.

C. Essential Character of the Locality:

1. The applicant is not proposing a new use to the area. The Breezy Bay Plat is developed with many seasonal and year-round residential uses.
2. The area consists of developed lakeshore lots with both conforming and nonconforming structures.

D. Other Factor(s):

1. St. Louis County Onsite Wastewater Division did not pass the record review of the proposal.
 - a. If the variance request is approved, the applicant will need to work with St. Louis County Onsite Wastewater Division to meet their requirements before the issuance of a land use permit.

2. Ordinance 62 states that it shall be the burden of the applicant to demonstrate sufficient practical difficulty to sustain the need for a variance. Absent a showing of practical difficulty as provided in Minnesota Statutes and this ordinance, the Board of Adjustment shall not approve any variance.

BOARD OF ADJUSTMENT CRITERIA FOR APPROVAL OF A VARIANCE

1. **Is the variance request in harmony with the general purpose and intent of official controls?**
2. **Has a practical difficulty been demonstrated in complying with the official controls?**
3. **Will the variance alter the essential character of the locality?**
4. **What, if any, other factors should be taken into consideration on this case?**

CONDITIONS

Conditions that may mitigate the variance to allow a replacement principal dwelling at a reduced shoreline line setback as proposed include, but are not limited to:

1. The structure shall be unobtrusive (earth-tone) colors, including siding, trim and roof.
2. The stormwater runoff from the proposed structure shall not directly discharge into the lake or on adjacent lots.
3. St. Louis County Onsite Wastewater SSTS standards shall be followed.



Land Use Permit

APPLICATION St. Louis County, Minnesota

Permit #

Permit #

About: This application is used to apply for a Land Use Permit. Applicants will need to attach the appropriate worksheet(s) in order to process. For more information, see our website at: www.stlouiscountymn.gov/land-use

PROPERTY IDENTIFICATION NUMBER (PIN) PIN is found on your Property Tax Statement

*Primary PIN	660 - 6000 - 55910	Associated PIN	
Associated PIN		Associated PIN	

E.g. 123-1234-12345. Primary PIN: Parcel where Structure/SSTS are located. Associated PIN: Additional and/or adjacent property that you own or that is related to the project.
County Land Explorer: <https://gis.stlouiscountymn.gov/landexplorer/> Property Lookup: <http://apps.stlouiscountymn.gov/auditor/parcelInfo2005Iframe/>

APPLICANT

*Applicant Name <i>Michael Jones</i>	I am a... <input type="checkbox"/> Contractor <input checked="" type="checkbox"/> Homeowner <input type="checkbox"/> Other	*Daytime # <i>218 348 8200</i>	Date <i>01-28-2024</i>
*Applicant Address <small>Where to send permit.</small> <i>4976 NW Island Lake Rd</i>	*City <i>Duluth</i>	*State <i>MN</i>	*ZIP <i>55803</i>
Applicant Email <i>m.jones@northlandsubway.com</i>			
Contact Person <small>If applicable.</small>	Contact Person #		

Mailing Address If different than above.

City

State

ZIP

Email Address Where to email permit. Providing an email address will expedite the time in which a permit is received by an applicant.

SITE INFORMATION

<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	*Is there a site address for this property? (If no, the application will be forwarded to 911/Communications to assign one.)
If yes above, please list site address: <i>4978 NW Island Lake Rd. Duluth MN 55803</i>	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	*Is this leased property? If yes, leased from: <input type="checkbox"/> MN Power <input type="checkbox"/> MN DNR <input type="checkbox"/> US Forest Service <input type="checkbox"/> St Louis County <input type="checkbox"/> Other
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	*Do you have written authorization from the leased property owner? If yes, you must attach written authorization form.
*How is the property accessed? <input type="checkbox"/> Public Road <input checked="" type="checkbox"/> Private Road <input type="checkbox"/> Easement <input type="checkbox"/> Water <input type="checkbox"/> Other	

PROJECT INFORMATION

<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	*Is this project on a parcel less than 2.5 acres?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	*Is this project within 300 feet of a stream/river or 1,000 feet of a lake?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	*Is this project adding a bedroom? Include home, garage, & accessory dwelling.
# <i>3</i>	*Total # of bedrooms on property after project completion. Include home, garage, & accessory dwelling.
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	*Does this project include plumbing or pressurized water in proposed structure? If yes, please explain: <i>Will use existing well. There will be plumbing in new home.</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	*Is the property connected to a municipal or sanitary district system?

If you answered "Yes" to any of the project information questions above, it is required that you submit a copy of a septic permit to construct or certificate of compliance approval or municipal/sanitary district approval when applying for a land use permit.

AGREEMENT

By submitting this application, I certify and agree that I am the owner or the authorized agent of the owner of the above property, and that all uses will conform to the provisions of St. Louis County. I further certify and agree that I will comply with all conditions imposed in connection with the approval of the application. Applicants may be required to submit additional property descriptions, property surveys, site plans, building plans and other information before the application is accepted or approved. **Intentional or unintentional falsification of this application or any attachments thereto will make the application, any approval of the application and any resulting permit invalid.** I authorize St. Louis County staff to inspect the property to review the application and for compliance inspections. Furthermore, by submitting this application, I release St. Louis County and its employees from any and all liability and claims for damages to person or property in any manner or form that may arise from the approval of the application or any related plans, the issuance of any resulting permit or the subsequent location, construction, alteration, repair, extension, operation or maintenance of the subject matter of the application.

*Indicates required field. Incomplete applications will be returned.



Land Use Permit WORKSHEET St. Louis County, Minnesota

About: Land Use Permits are required for most building construction activities. They are also required for a variety of other uses. For more information, check out our website at: www.stlouiscountymn.gov/land-use

WHAT ARE YOU APPLYING FOR Check all that apply to the project. PLEASE MAKE CHECKS TO: ST. LOUIS COUNTY AUDITOR

#1 New Buildings Less than/equal to 1,200 square feet-\$175
Greater than 1,200 square feet-\$345

☐ Dwelling-Home, Mobile Home, Hunting Shack, or Cabin. (Includes attached deck, if applicable.)

☒ Replacement of Existing Dwelling-Home, Mobile Home, Hunting Shack, or Cabin. Will the old dwelling be removed from the property? ☒ Yes ☐ No

If yes, an affidavit must be filled out stating when the old dwelling will be removed.

If this dwelling is a mobile home, there is a special mobile home affidavit to be filled out.

☐ Accessory Dwelling-Guest cottage or bunkhouse. Must follow administrative standards.

☐ Accessory Structure- Garage, Pole Building, shed, sauna, screenhouse or gazebo that either meets lake or river setback or not located in a shoreland area.

☐ Water-oriented Accessory Structure- Boathouse, Sauna, Screenhouse/gazebo on a lake or river located at reduced shoreline setback. Must follow administrative standards.

☐ Commercial Structure

☐ Other Principal Structure

#2 Other Construction/Change in Use-\$90

☐ Addition(s) to Dwelling
Is the dwelling location on a lake or river? ☐ Yes ☐ No
If Yes above, does the structure meet the required shoreline setback? ☐ Yes ☐ No If No, structure does not meet the shoreline setback, a performance standard permit or variance may be required. See box #4 or #7.

☐ Addition(s) to Accessory Structure
☐ New Deck Only or Deck Replacement
☐ Combination Addition(s) & Deck on the same structure
☐ Moving a Structure
☐ Sign
☐ Structure Alteration or Component Replacement
☐ Change in Use (i.e. converting an old cabin to storage)

What will the new use of the structure be?
Explain the current and proposed use.
Current: _____ Proposed: _____

Other-\$65

☐ Permit extension beyond 2 years

#3 Subdivisions/Parcel Reviews
Additional Worksheets Required

☐ Plat-Minor Subdivision-\$685
☐ Conventional or Conservation Plat-Less than or equal to 3 lots-\$685
☐ Conventional or Conservation Plat-Greater than 3 Lots-\$1,375
☐ Lot Line Adjustment-\$90
☐ Parcel Review-\$90
☐ Performance Standard Subdivision-\$410

#4 Performance Standard-\$410

Additional Worksheets Required

☐ Borrow/Gravel Pit
☐ Home Business
☐ Land Alteration
☐ Nonconforming Structure Replacement
☐ Addition to a structure that does not meet shoreline setback
☐ Other

#5 Site Evaluation

☐ Site Visit/Evaluation-\$175

#6 Wetland Reviews

Additional Worksheets Required

☐ No Loss/Exemption/Replacement Plan-\$175
☐ Wetland Delineation Review-\$410
☐ Wetland Banking Plan Review-\$1,340

#7 Public Hearings

Additional Worksheets Required

☐ Administrative Appeal-\$1,350
☐ Environmental Assessment-\$1,200
☐ Conditional Use Permit-\$685
☐ Conditional Use Permit Rehearing-\$220
☐ Interim Use Permit-\$685
☐ Interim Use Permit Rehearing-\$220
☐ General Purpose Borrow Pit-\$685
☐ Variance-\$685
☒ Variance Rehearing-\$220
☐ Multiple Hearing (Variance/conditional use)-\$1,020
☐ Rezoning-\$685

TYPE OF PROPOSED STRUCTURES

Check all that apply to the project.

<input checked="" type="checkbox"/> New Structure(s)	*Structure Type (Same as box #1 or 2 above)	*Foundation Type (Basement, Slab, Pier, etc)	*Maximum Length (Exterior Footprint Only)	*Maximum Width (Exterior Footprint Only)	*Maximum Sq. ft (Exterior footprint only)	*Maximum Height (Ground Level to Roof Peak)
	Home	Slab	82 Feet	71 Feet	3550 Sq. ft.	24 Feet
			Feet	Feet	Sq. ft.	Feet
			Feet	Feet	Sq. ft.	Feet
<input type="checkbox"/> Structure Additions	*Structure Type (Same as box #2 above)	*Foundation Type (Basement, Slab, Pier, etc)	*Maximum Length (Exterior Footprint Only)	*Maximum Width (Exterior Footprint Only)	*Maximum Sq. ft (Exterior footprint only)	*Maximum Height (Ground Level to Roof Peak)
			Feet	Feet	Sq. ft.	Feet
			Feet	Feet	Sq. ft.	Feet
			Feet	Feet	Sq. ft.	Feet

*Indicates required field. Incomplete applications will be returned.

CONTACT: Planning and Zoning Department

Technical Assistance
Toll Free: 1-800-450-9777
Land Use Information
www.stlouiscountymn.gov/land-use

Duluth
Government Services Center
320 West 2nd Street, Suite 301
Duluth, MN 55802
(218) 725-5000

Virginia
Government Services Center
201 South 3rd Avenue West
Virginia, MN 55792
(218) 749-7103

Office Use Only

Receipt # _____

Receipt Date _____

Payment Amount _____

Paid By _____

6. Describe how neighboring properties and the use of those properties will be impacted by the proposed use with the variance.

They are also year round homes. Closer than 100' to lake. This house will fit in. There is another home 3 doors down comparable or larger that's closer to the lake. I am also not taking down trees that would decrease any neighboring privacy or mine back at the road. I did this design to keep the trees and my privacy. I did move house back 7 more feet

7. Describe how negative impact to the local environment and landscape will be avoided.

I am not disturbing any area within foot print (60') of the lake. No fill will be needed, no basement. Re use of septic involves minimal disturbance and less cost. We have to add 7' to the field. We also need to move tank further from lake. New tank will be used. No older growth trees will have to be cut down. I want to keep as many trees and cover as possible.

8. Describe the expected benefits of a variance to use of this property.

House will be back further from lake than existing cabin. Improves value of my property replacing 2 bdrm cabin that needs repairs. Also makes my front yard larger. Energy savings. Allows me to fit house on lot that with set backs and septic requirements may not be worth my investment I have in it already making it harder to sell also!

9. Include additional comments that will clarify your request for the Planning and Zoning staff members and the Board of Adjustment.

43' set back from center of road to septic field - Field is already in and at that requirement 10' wide field on septic. House is 82' deep that leaves 65' to water, with 220' of lot to work with. 20' House to Field set back. Using existing septic saves money. I do meet width requirements 71', Height requirements 24'. This all fits on the lot and is within requirements except 100' setback.

OFFICE USE ONLY

Principal Structures	Principal Structure Additions	Accessory Structures	Accessory Structures Additions	Other
<input type="checkbox"/> Shoreline Setback <input type="checkbox"/> Property Line Setback <input type="checkbox"/> Lot Width <input type="checkbox"/> Height Limit <input type="checkbox"/> 40% of Lot Width <input type="checkbox"/> 55% of Lot Width <input type="checkbox"/> Bluff <input type="checkbox"/> 2nd Principal Structure <input type="checkbox"/> % Lot Coverage <input type="checkbox"/> Road Centerline Setback <input type="checkbox"/> Road Right-of-Way Setback <input type="checkbox"/> Lot width and/or Area	<input type="checkbox"/> Shoreline Setback <input type="checkbox"/> Road Centerline Setback <input type="checkbox"/> Road Right-of-Way Setback <input type="checkbox"/> Property Line Setback <input type="checkbox"/> One Addition Allowed <input type="checkbox"/> Allowable Size Exceeded <input type="checkbox"/> 40% of Lot Width <input type="checkbox"/> 55% of Lot Width <input type="checkbox"/> Height Limit <input type="checkbox"/> Foundation from Lake <input type="checkbox"/> Lot width and/or Area	<input type="checkbox"/> Shoreline Setback <input type="checkbox"/> Road Centerline Setback <input type="checkbox"/> Road Right-of-Way Setback <input type="checkbox"/> Property Line Setback <input type="checkbox"/> Lot Width and/or Area <input type="checkbox"/> Height Limit <input type="checkbox"/> Allowable Size Exceeded <input type="checkbox"/> Bluff	<input type="checkbox"/> Shoreline Setback <input type="checkbox"/> Road Centerline Setback <input type="checkbox"/> Road Right-of-Way Setback <input type="checkbox"/> Property Line Setback <input type="checkbox"/> Allowable Size Exceeded <input type="checkbox"/> Height Limit <input type="checkbox"/> Lot width and/or Area	<input type="checkbox"/> Subdivision Plat <input type="checkbox"/> Exceeding Lot Coverage <input type="checkbox"/> Exceeding Maximum Buildable Area <input type="checkbox"/> Other Standard Not Listed (Explain below)

CONTACT: Planning and Zoning Department

Technical Assistance

Toll Free: 1-800-450-9777

Land Use Information

www.stlouiscountymn.gov/land-use

Duluth

Government Services

Center

320 West 2nd Street,

Suite 301

Duluth, MN 55802

(218) 725-5000

Virginia

Government Services Center

201 South 3rd Avenue West

Virginia, MN 55792

(218) 749-7103

Office Use Only

Receipt # _____

Receipt Date _____

Payment Amount _____

Paid By _____



Variance

Worksheet St. Louis County, Minnesota

About A variance allows the use of property in a manner otherwise forbidden by a zoning ordinance by varying one or more of the performance standards such as lot size, setbacks, etc.

Variances from official zoning controls are defined under Minnesota Statutes 394.27 and require the landowner to prove that the property could not otherwise be used or enjoyed in the proposed way by complying with ordinance requirements and that there will be no negative impact on surrounding properties.

It is advisable that you discuss your request with Planning and Zoning staff prior to submitting the application. Approval or denial of your request is dependent on the justification you provide in answering the questions on this application. For more information, check out our website at:

www.stlouiscountymn.gov/departments-a-z/planning-zoning/land-use/apply-for-a-land-use-permit#la-101571440-variance.

APPLICANT

Applicant Name (Last, First)

Jones, Michael

VARIANCE REQUEST *Complete this form along with the Land Use Permit Application*

1. Describe what you are varying from and the situation that makes it difficult to comply with county ordinances?

Existing 2 bdrm cabin is 55' from shoreline. Lot depth from shoreline to NW Island Lake Rd is 215'-220'. Lot width is 177'. My hard ship is meeting the required setback of 100' due to septic setback from Road of 43' and 20' septic to house. Septic was installed in Oct 2018. I can re-use the Field and move tank back. The field is at 43' setback already. This saves money. Total setback from Rd for SEPTIC is 43'+10' wide field + 20' house setback. 73' back yard setback total. That leaves me with 147' ~~to~~ lake. 100' off that means 47' left

2. Describe the intended/planned use of the property.

This will be our permanent residence where me and my wife will retire. I wanted one level home with attached garage so in winter we can pull and keep cars in for loading and unloading. We will live here year round and have our family here. I will construct a 3 bedroom home, energy efficient. We have been here on the Lake for 15 years and love it.

3. Describe the current use of your property.

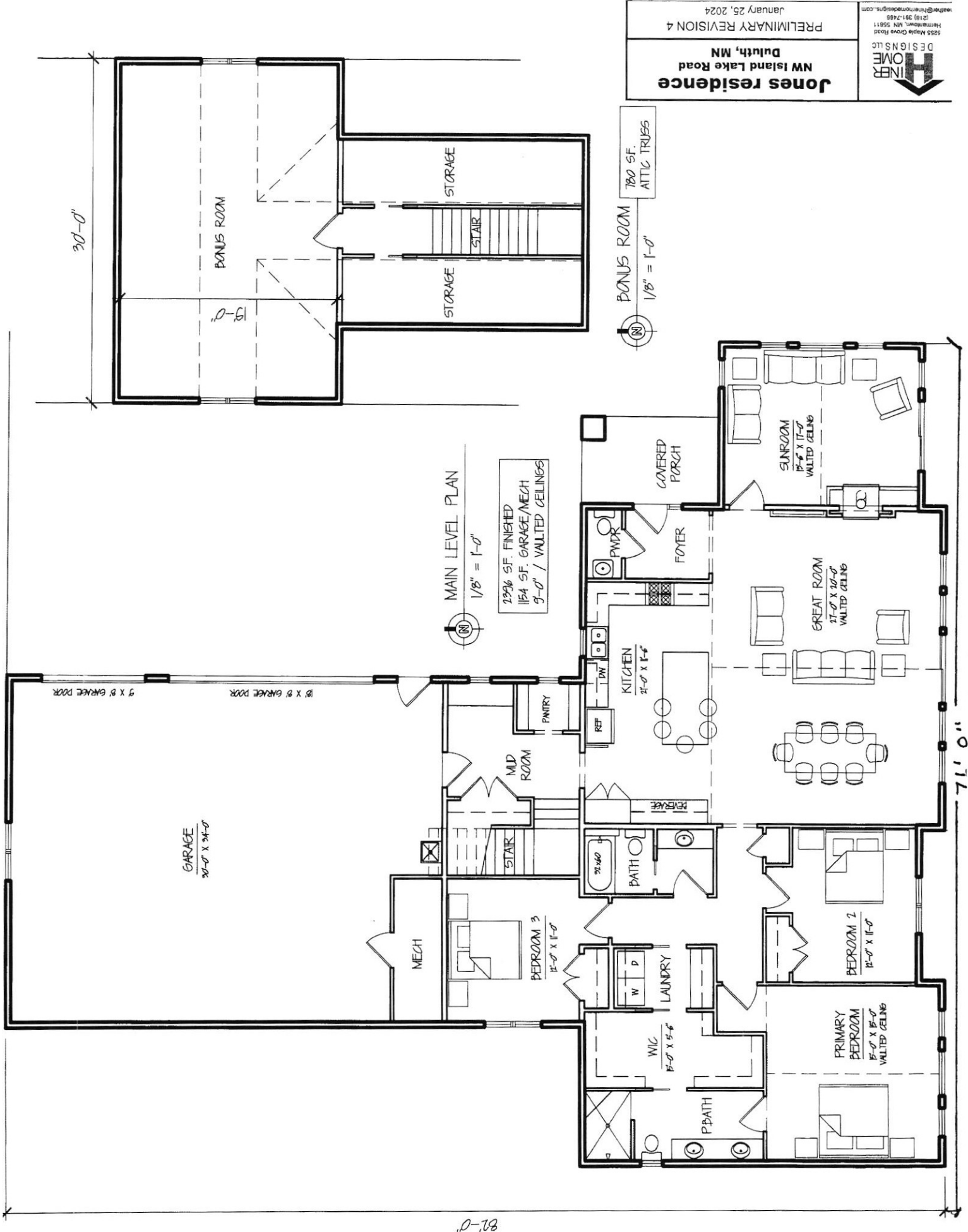
Mostly used in summer. Seasonal 2 bdrm cabin. We have family and gather here quite a lot. Recreation. Fishing, etc.

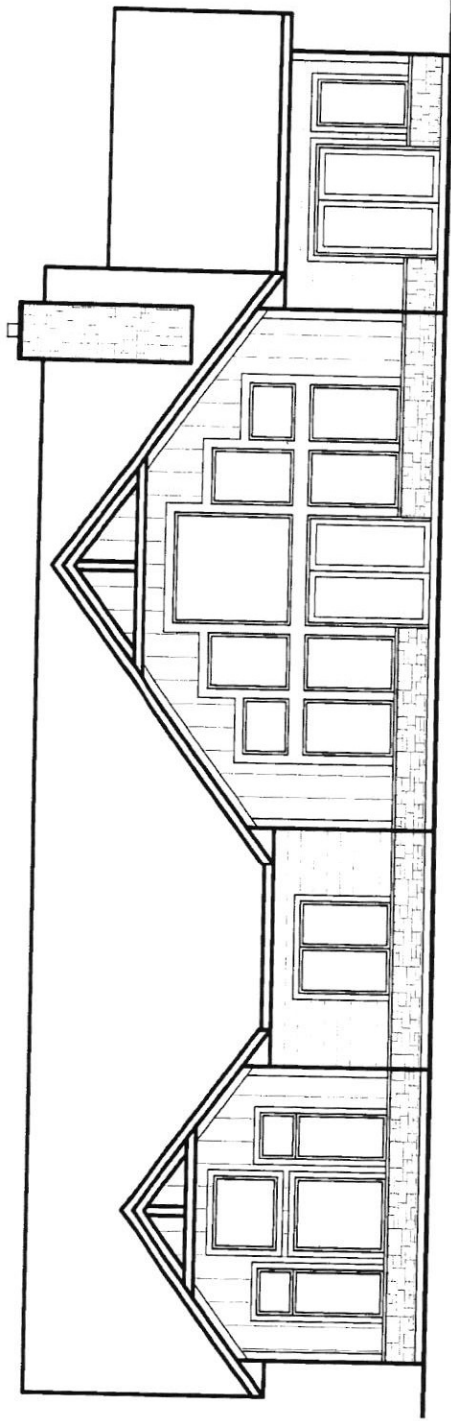
4. Describe other alternatives, if any.

Not most effective alternatives or alternatives where I lose trees, privacy. Moving septic across road adds unnecessary cost. It also eliminates use of that land for building a garage or storage. Only first 60' of that is even usable with pond and low land behind it.

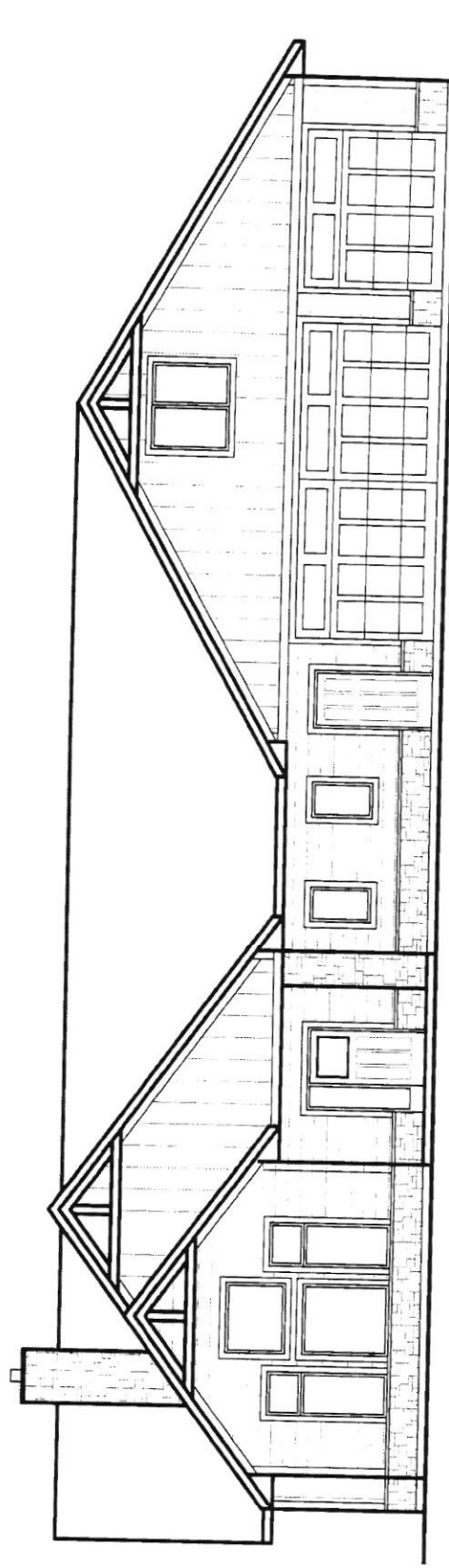
5. If approved, how will the proposed use, with the variance, fit into the character of the neighborhood/area?

Will fit in well with neighboring lots. All are year round homes with similar setbacks from the lake due to lot depths. Setbacks considerably less than 100'. Last meeting it was mentioned avg setback of neighboring lot homes was 77'.





SOUTH EXTERIOR



EAST EXTERIOR



5255 Maple Grove Road
Hermantown, MN 55811
(218) 391-7466
heather@hinerhomedesigns.com

Jones residence
NW Island Lake Road
Duluth, MN

PRELIMINARY REVISION 4
January 25, 2024

**Individual Sewage Treatment System
Certificate of Compliance
Authorization to Use System**

Site: MICHAEL JONES
Address: 4978 NW ISLAND LAKE RD
DULUTH MN 55803

MICHAEL JONES ALLETE INC.
4976 NW ISLAND LAKE RD
DULUTH, MN 55803

Permit Number: 33532
Date of Permit: 08/30/2018
Date of Inspection: 09/12/2018
Parcel Code: 660-6000-
55910
Township: UNORGANIZED TWP (5315)
Designer:
Lakehead Trucking, Inc.
Installer:
Lakehead Trucking, Inc.

Legal Description:

SW OF SE LEASE #15-03 MP 660-10-5540

The system was sized for a Single Family Dwelling with 3 Bedrooms.

The permit was granted for:

A Replacement Standard System

ONE 1,000 Gallon Septic Tank(s) ONE 500 Gallon Pump Chamber(s)

System consists of 30 Feet of 10 Foot wide Seepagebed with a total of 12 Inches of Rock


AUTHORIZATION TO USE THIS SYSTEM IS:

- ☒ Approved upon completion of the final cover.
☐ Approved upon completion of the following items as noted in comments.
☐ Denied
☐ Allowed because of the following items as noted in comments.

Comments:

DISCLAIMER: St. Louis County issues Certificates of Compliance as part of its discretionary activities on behalf of the public. St. Louis County disavows and assumes no liability for damages to person or property in any manner or form resulting from the issuance of this Certificate of Compliance. St. Louis County cannot and does not guarantee the successful operation of the system.

This Certificate of Compliance is valid for five years unless the system fails and becomes a public health hazard or nuisance.

By: 
JASON WALSH 218-725-5251
Environmental Specialist

St. Louis County Environmental Services Department
Government Services Center
320 W 2nd St., Suite 301
Duluth, MN 55802

Form:11420317P



SSTS Final Drawing
Subsurface Sewage Treatment System
St. Louis County, Minnesota

Site Address: 4978 Island Lake Road NW

Parcel ID: 660-6000-55910

Designer: Lakehead Trucking

Drawing Date: 9/20/2018

Sand: Boulder

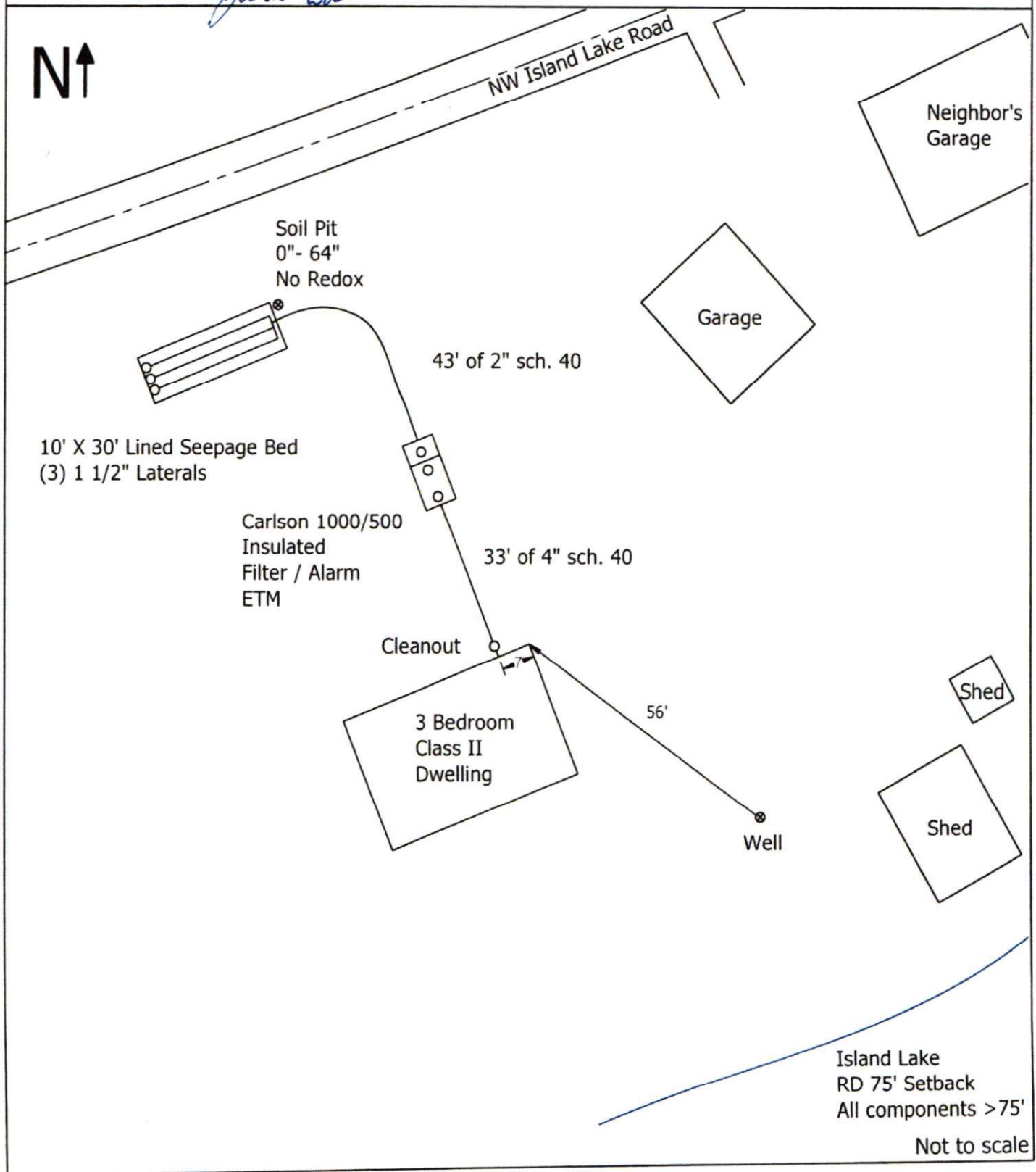
Installer: Lakehead Trucking

Inspection Date: 9/12/18

Rock: Coons

By ES Staff Inspector:

Handwritten signature



**Individual Sewage Treatment System
Permit to Construct**

Site: MICHAEL JONES
Address: 4978 NW ISLAND LAKE RD
DULUTH MN 55803

MICHAEL JONES ALLETE INC,
4976 NW ISLAND LAKE RD
DULUTH, MN 55803

Permit Number: 33532
Date of Permit: 08/30/2018
Permit expires on: 08/30/2020
Parcel Code: 660 - 6000 - 55910
Township: UNORGANIZED TWP (5315)
Designer: Lakehead Trucking, Inc.

Legal Description:

SW OF SE LEASE #15-03 MP 660-10-5540

Sewage Treatment System plans for the following system meet the minimum standards of St. Louis County Ordinance No: 61. All sewage treatment system construction must be done in accordance with St. Louis County Ordinance No: 61.

The system was sized for a Single Family Dwelling with 3 Bedrooms.

The permit was granted for:

A Replacement Standard System

ONE 1,000 Gallon Septic Tank(s) ONE 500 Gallon Pump Chamber(s)

System consists of 30 Feet of 10 Foot wide Seepagebed with a total of 12 Inches of Rock

Comments: System designed for a 3 bedroom, class II dwelling, <2401 sq. ft. 300 gpd max flows, 201 gpd average flows.

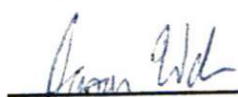
IF YOU ENCOUNTER ANY UNFORSEEN PROBLEM SUCH AS HIGH WATER TABLE, LEDGE ROCK, CHANGE IN SOIL CONDITIONS, OR CHANGES TO THE SYSTEM OR ITS LOCATION, YOU MUST OBTAIN APPROVAL FROM THE DEPARTMENT BEFORE CONTINUING WITH THE CONSTRUCTION OF THE SYSTEM.

FINAL INSPECTION: A final inspection must be made prior to backfilling and must be scheduled a minimum of 48 hours in advance, excluding weekends and holidays. Office hours are 8 a.m. to 4:30 p.m.

DISCLAIMER: St. Louis County issues sewage treatment system permits as part of its discretionary activities on behalf of the public. St. Louis County disavows and assumes no liability for damages to person or property in any manner or form resulting from the issuance of this permit or subsequent authorization to use the system. St. Louis County cannot and does not guarantee successful operation of the system.

****THIS PERMIT IS NOT TRANSFERABLE****

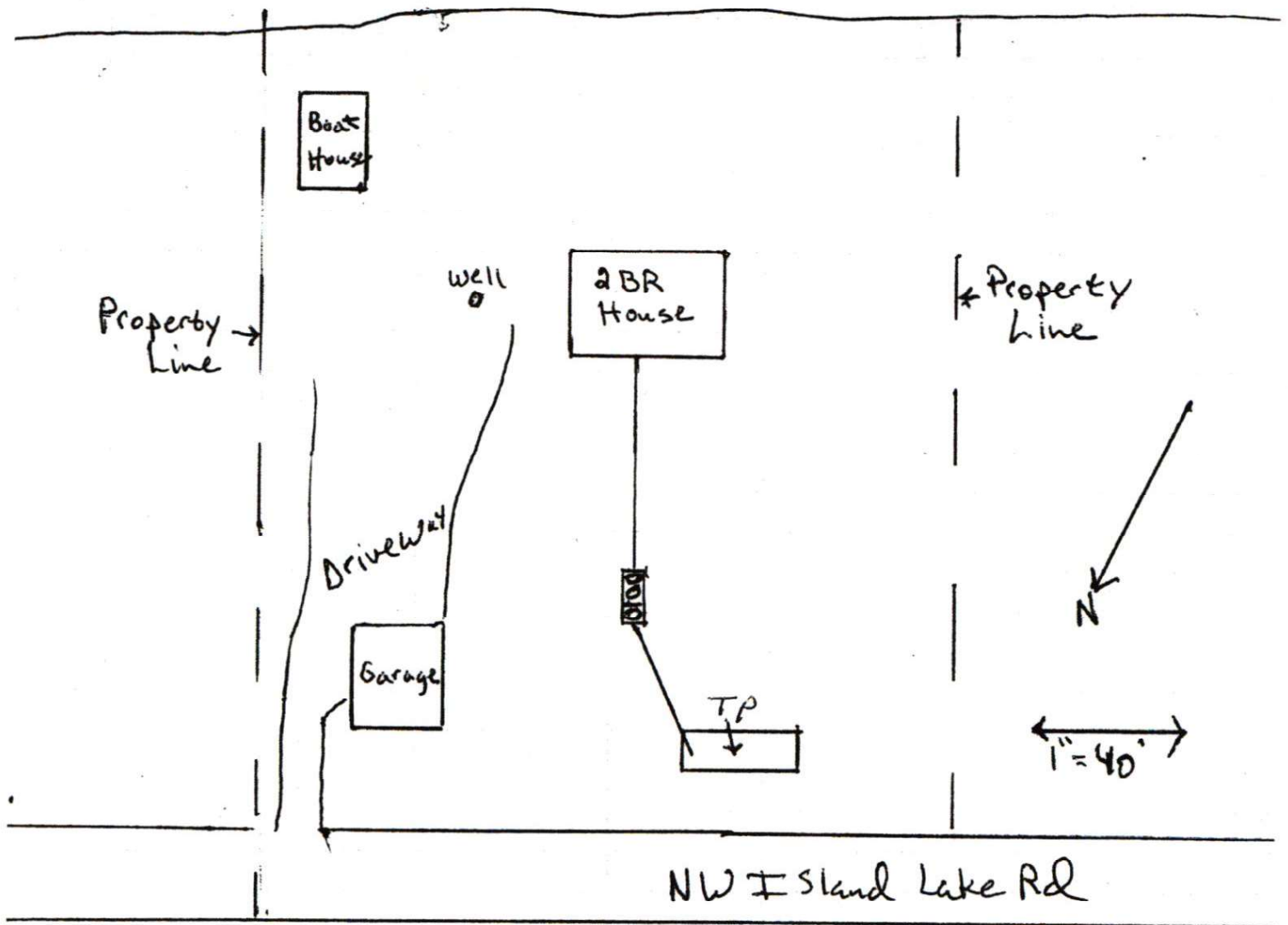
By:



JASON WALSH 218-725-5251
Environmental Specialist

St. Louis County Environmental Services Department
Government Services Center
320 W 2nd St., Suite 301
Duluth, MN 55802

Island Lake



SSTS Design Summary

Environmental Services Onsite Wastewater Div., St. Louis County, MN

To be completed by SSTS licensed designer for review & approval by SLC EHS



Design Date: 8/24/18		SSTS Designer: Tom Rovinsky				
Site Address: 4978 NW Island Lake Road		Township: Unorganized				
Dwelling: <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Seasonal/Recreational Other (identify):						
Commercial System: <input type="checkbox"/> Describe business type:						
If commercial, provide: FOG: Estimated BOD: TSS:						
Design Flow Dwelling Classification (As per 7080.1860): <input type="checkbox"/> Class I <input checked="" type="checkbox"/> Class II <input type="checkbox"/> Class III <input type="checkbox"/> Class IV <input type="checkbox"/>						
Total Finished Floor Area Sq Ft (if Class. II, III, IV): 1080		Total Bedrooms (include all dwellings): 3				
No. of people using the SSTS:	Max Flow (gals/day): 300	Design Flow: 300	Avg Flow (gals/day): 200			
Contour Loading Rate (gpd/ft):		Soil Loading Rate (gpd/ft ²): 1				
Predominate Soil Type: sand		Inches to Redox. or Restrictive layer: >65				
Water Meter (Y or N): no		Buried Sewer Line Pressure Test Required (Y or N): no				
SSTS Flow Description: gravity from house to a 1500 gallon 2 compartment tank pump to a 10x30 sand lined pressure bed						
MPCA SYSTEM TYPE: <input checked="" type="checkbox"/> Type 1 <input type="checkbox"/> Type II <input type="checkbox"/> Type III <input type="checkbox"/> Type IV <input type="checkbox"/> Type V						
TANK DESCRIPTION (ex: Septic Tank, Holding Tank, Pump Tank, Septic/Pump Combo, or other)						
Tank Size Gallons (ex: 1000/500)		Tank(s) (New or Existing)		Tank Material (Precast, plastic, Fiberglass, etc)	Alarm (Yes or No)	
septic/pump		1000/500		<input checked="" type="checkbox"/> New <input type="checkbox"/> Exist	concrete	yes
				<input type="checkbox"/> New <input type="checkbox"/> Exist		
				<input type="checkbox"/> New <input type="checkbox"/> Exist		
				<input type="checkbox"/> New <input type="checkbox"/> Exist		
Sand/Rock Bedded (Y or N):		Insulated (Y or N):				
DISTRIBUTION TO DRAINFIELD						
<input type="checkbox"/> Gravity: <input type="checkbox"/> Drop Box <input type="checkbox"/> Distribution Box						
<input checked="" type="checkbox"/> Pressure: Pump model & size: ME 40						
Gallons/minute: 25.8 with Ft of Head: 17.5 Pump to field line diameter (inches): 2						
Manifold diameter (inches): 2		Manifold location: Center Feed		End feed: x		
Number of laterals: 3		Diameter of laterals: 1.5in		Lateral flush ports (Y or N): yes		
Orifice size (inches): 1/4		Spacing (inches): 48		Orifice Shields (Y or N): no		
Dose Volume to network (gal): 83		Drainback (gal): 8.7		Event Counter (Y or N): yes		
Elapsed Time Meter (Y or N): no		Time Dose Panel (Y or N): no		Specify type:		

SSTS Design Summary Continued

Site Address: **4978 NW Island Lake Road**

DRAINFIELD INFORMATION

In Ground

Seepagebed: ☒ ☒ Rock ☐ Gravelless ☐ Chambered ☐ Poly. Aggregate

Trench: ☐ ☐ Rock ☐ Gravelless ☐ Chambered ☐ Poly. Aggregate

Trench Width (ft): Total Trench Length (ft): Number of Trenches:

Bed Dimensions (ft): **10** Width by **30** Length Total Treatment Area (sq ft): **300**

Depth of Rock (inches): **12** Depth of Cover (inches): **12-18**

At Grade

Rock Cell Size (ft): Width by Length Downhill berm width (ft):

Mound

Number of Rock Beds: Bed Size (ft): W by L Total Dimension (ft): W by L

Uphill Fill Depth (in) : Downhill Fill Depth (in) :

Uphill Berm Width (ft): Downhill Berm Width (ft): Adjusted Sand Volume (cubic yards):

Registered Pretreatment Filter System

Filter Class: ☐ Intermittent/Single Pass ☐ Recirculating ☐ Subsurface Flow ☐ Other

Media Type: ☐ Sand ☐ Peat ☐ Gravel ☐ Textile/Synthetic ☐ Constructed Wetlands

No. of Filters: Rock Bed Dims (ft): W x L Bed Media Depth (in):

Mfr. & Design:

Aerobic Treatment System

Type: ☐ Suspended Growth ☐ Fixed Film ☐ Sequencing Batch ☐ Other:

Gallons/day: Number of Units: Manufacturer:

Disinfection (Y or N): If yes, chemical or UV:

Designer's comments regarding this SSTS design:



SSTS Construction Permit Application

Subsurface Sewage Treatment System

St. Louis County, MN

Find your Parcel ID #(s) on your Property Tax Statement in the upper right corner (Property ID). Or at www.stlouiscountymn.gov and click on County Land Explorer					
Parcel ID #(s): 660 - 6000 - 55910		#:	-	-	#:
Parcel ID #(s):		#:	-	-	#:
<input type="checkbox"/> Check here to request a 911 address number and sign for this site. See www.stlouiscountymn.gov/landproperty for addressing information.					
Applicant Name (property owner) Michael Jones			Applicant Name (if other than owner)		
Site Address 4978 NW Island Lake Road		City Duluth	MN	Zip 55803	
Acreage:	Lot Size:	Township Name: Unorganized	Sec 35	Twn 53	Rge 15
Legal Description or Plat Name/Block #/Lot # Minnesota Power Parcel No. 3 In that portion of SWE1/4 of SE1/4, Sec 35, Township 53 North, Range 15 West, Island Lake Reservoir, Minnesota					
CONTACT INFORMATION:					
Send the Permit by: <input checked="" type="checkbox"/> Mail; or by <input type="checkbox"/> Email address:				Other:	
Name (if different than above):		Primary Phone:		Secondary Phone:	
Mailing Address (if different than above):		Superior		ST	Zip
PERMIT APPLICATION IS FOR:					
<input type="checkbox"/> New SSTS		<input checked="" type="checkbox"/> Replacing the Existing SSTS. Why: Old System not working correctly		Point of Sale Requirement	
<input type="checkbox"/> Holding Tank	<input type="checkbox"/> Component Addition or Replacement	<input type="checkbox"/> Greywater <u>without</u> Pressure		<input type="checkbox"/> Greywater <u>with</u> Pressure	
<input type="checkbox"/> Privy (Outhouse)	<input type="checkbox"/> Privy & Greywater <u>without</u> Pressure	<input type="checkbox"/> SSTS Variance		<input type="checkbox"/> Commercial SSTS	
SITE INFORMATION: (Check all that apply)					
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Has this parcel been divided recently? Or in the process of being divided? When:					
<input checked="" type="checkbox"/> Yes No Is this project within 1,000 ft of a lake or 300 ft of a river? Lake/River Name: Island Lake					
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the property connected to a CIC (Common Interest Community)? If yes, include the Associated PIN on this Application.					
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is this serving multiple dwellings sharing a SSTS component? If yes, explain:					
<input checked="" type="checkbox"/> Yes No Is this leased property? If yes, you must obtain & attach the Lessor's written authorization for this project.					
Leased From: <input checked="" type="checkbox"/> MN Power <input type="checkbox"/> SLC Land & Minerals Dept. <input type="checkbox"/> MN DNR <input type="checkbox"/> US Forest Service <input type="checkbox"/> Other					
COMPLETE PAGE 2 NEXT: (Be sure to sign and date, then submit this form with the permit fee and design paperwork).					

Office Use Only Fees are payable to St. Louis County Auditor

Permit # **33532**

Amt Paid **520.00** Paid by **Owner**

Date RIO

Rev Code Cash Check #:

RECEIVED

Recd By **JW** ☐ Mail ☒ IP

AUG 29 2018



SSTS Construction Permit Application

Subsurface Sewage Treatment System

St. Louis County, MN

Page 2

Licensed Business or Certified Individual Name: Lakehead Trucking						Lic. # 1540		Cert. # 1063			
(Privies do not require a licensed designer)											
Designer's comments to Environmental Services Staff regarding this permit application:											
Water Source <input type="checkbox"/> Proposed Well <input checked="" type="checkbox"/> Existing Well <input type="checkbox"/> Hand Carried <input type="checkbox"/> Surface/Lake Water <input type="checkbox"/> Municipal											
Well Type <input type="checkbox"/> Sandpoint <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Dug Well Depth Ft: Unknown Cased Depth Ft: Unique Well #:											
The number of people who will be using this system:											
Building Type and Water Uses Check all that apply	# of Bdrms	Seasonal Use Only	PLBG	Bsmt PLBG	Garb Disp	Clothes Wshr	Dish Wshr	Water Condr	Furnace w/Hum	Bathtub > 40 gal	GSP
<input checked="" type="checkbox"/> Single Family	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Multi-Family		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Cabin or RV		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Garage with Bedroom(s) <input type="checkbox"/> Sink <input type="checkbox"/> Shower <input type="checkbox"/> Toilet		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Guest House		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Bunk House		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sauna		<input type="checkbox"/>	<input type="checkbox"/>								
Bdrms = bedrooms PLBG = plumbing Bsmt PLBG = basement plumbing Garb Disp = garbage disposal Wshr = washing machine Condr = water conditioner Furn w/Hum = self-cleaning humidifier in furnace GSP = sewage grinder pump OWD=onsite wastewater division											
Other information to be considered for this application:											

APPLICANT SIGNATURE: *M. H. Jones*

FEE: 520.00

DATE: 8/28/18

APPLICANT AGREEMENT: By submitting this application, I certify and agree that I am the owner or the authorized agent of the owner of the above property, and that all uses will conform to the provisions of St. Louis County. I further certify and agree that I will comply with all conditions imposed in connection with the approval of the application. Applicants may be required to submit additional property descriptions, property surveys, site plans, building plans and other information before the application is accepted or approved. **Intentional or unintentional falsification of this application or any attachments thereto will make the application, any approval of the application and any resulting permit invalid.** I authorize St. Louis County staff to inspect the property to review the application and for compliance inspections. Furthermore, by submitting this application, I release St. Louis County and its employees from any and all liability and claims for damages to person or property in any manner or form that may arise from the approval of the application or any related plans, the issuance of any resulting permit or the subsequent location, construction, alteration, repair, extension, operation or maintenance of the subject matter of the application.

Duluth Office:

Environmental Services OWD
Government Services Center
320 W 2nd Street, Suite 301
Duluth, MN 55802

218-725-5200

Onsite Wastewater Dept. Toll Free 1-800-450-9278

www.stlouiscountymn.gov/septic

Virginia Office:

Environmental Services OWD
Northland Office Center
307 First Street S, Suite 115
Virginia, MN 55792

218-749-0625

Saint Louis County

Environmental Services Department

Onsite Wastewater Division 1-800-450-9278

Duluth: 325 W. First St., Suite 300, Duluth, MN 55802, (218) 725-5200

Virginia: 307 First St., So., East Wing 2R, Virginia, MN 55792, (218) 749-0625

Tank Worksheet

Applicant name: _____ Address of site: _____

System designer: Lakehead Trucking Date: _____

What type of use are these tanks servicing? Residential

Feed into septic tanks: Gravity X Pressure _____ Both _____

What is the design flow for the treatment system? 300 gallons per day

Describe flow train (order) of tanks: Gravity From House To A 1500 Gallon 2 Compartment Tank

Garbage disposal NO Bath > 75 gallons NO

Septic tanks for project

Proposed number of septic tanks 1 Depth of cover 12 inches Septic tank alarm NO

Anchoring requirements NO If yes, specify _____

Septic Tank # 1

Size of septic tank 1st compartment 1000 gals. 2nd compartment _____ gals.

Proposed tank material Concrete Existing _____ or new tank X

Seam locations on tank _____ Lid _____

Elevation of seams above seasonal high water table 12 inches

Risers cast into lid? Yes If no method of attachment? _____

Filter supplied? Yes Method of tank bedding Sand

Is tank to be insulated? Yes If yes, how 2 Inches Over Top Of Tank

Recirculation tanks

Size of tank _____ gallons	New _____	or existing _____
Tank construction material _____		
Are risers cast into lid? _____	If no, method of attachment _____	
Is riser lid insulated.? Y / N		
Are there anchoring requirements for this tank? Y / N		
Method of tank bedding? _____		

Time dose control panel Y / N Event counter Y / N Elapsed time meter Y / N		

General:

Tank installation access: _____ Through Yard _____

Drainage details: _____ Berm Dirt Around Tank To Keep Water Away _____

Pumping access route: _____ Driveway _____

General Comments:



Saint Louis County

Environmental Services Department - Onsite Wastewater Division 1-800-450-9278

Duluth: 227 W First St., Suite 100, Duluth, MN 55802 (218) 725-5200

Virginia: 307 First St. So., Suite 115, Virginia, MN 55792 (218) 749-0625

PHASE I SOILS WORKSHEET

Sheet 1 of 1

Applicant Name: Michael Jones Parcel ID: 660-6000-55910

Address of property: 4978 NW Island Lake Road Duluth Mn 55803

Evaluator: Lakehead Trucking Date: 8/24/18 Time: 4:30 PM

Excavation type: Backhoe Excavation number and location: 1 In System Area

Site conditions: Dry

Vegetation: Wooded

Landscape position: _____ Slope: 1 %

Depth Inches	Texture	Structure Unstructured Structured Platy	Consistence Loose Friable Firm	Color Munsell	Confining Layer Y/N	Mottles Y/N	Roots Y/N	Comments
0-4	Sandy Loam	structur ed	friable	7.5YR 3/2	no	no	yes	
4-6	loamy coarse sand	structur ed	friable	5YR 4/4	no	no	yes	
6-13	loamy coarse sand	structured	friable	7.5YR 4/3	no	no	yes	E Layer broken wavy
13-27	coarse sand	structur ed	friable	7.5yr 4/4	no	no	yes	
27-65	coarse sand	structur ed	loose	7.5yr 3/4	no	no	yes	

Seasonal High Water Conditions: >65 Inches from surface

Soil Wastewater Loading Rate: 1 Gallons per square foot per day

Hydraulic Linear Loading Rate: _____ Gallons per linear foot

IN GROUND CALCULATIONS (Spreadsheet)

Name of Applicant: _____



1. SITE CONDITIONS

Evaluate the site and soils report for the following:

- > Surface water movement
- > Measure Elevations and distances on the site so that slope, contours and available areas can be determined.
- > Description of several soil profiles where the system will be located.
- > Determine the limiting conditions such as bedrock, high groundwater level, soil permeability, and setbacks.

(Note: shaded boxes to be filled in by designer)

Slope = %

Occupancy: One or two family dwelling # of bedrooms =

Public facility (I.e. non-residential). Daily wastewater flow GPD
(provide particulars on separate sheet)

Wastewater: Typical residential BOD5 Y/N =
Or other: BOD5= mg/L

Suitable area: Cross slope distance = Feet
Width = Feet

Soil limiting factor= Depth to limiting factor = Inches

In-situ soil application rate used gal/sf/day

2. DESIGN WASTEWATER FLOW (DWF)

One or two-family dwelling:

DWF = gal/day/bedroom (generally 150) x # of bedrooms

DWF = gal/day/bedroom x # of bedrooms

DWF = gal/day

Public Facilities

DWF = Sum of each wastewater flow per source per day x 1.5

DWF = gal/day x 1.5

DWF = gal/day

3. WIDTH AND LENGTH OF THE DISTRIBUTION CELL

1. Determine the design loading rate (DLR) for the site

Select the effluent application rate for the most restrictive soil horizon in contact with the distribution cell that matches the soil conditions. The effluent application rate selected is the design loading rate (DLR) for the site.

$$\text{DLR} = \boxed{1} \text{ gpd/sf}$$

2. Determine the distribution cell area.

Calculate the distribution cell area by dividing the daily design wastewater flow (DWF) by the design loading rate (DLR).

Distribution cell area = DWF/DLR

$$\begin{array}{l} \text{Distribution cell area} = \boxed{300} \text{ gpd divided by } \boxed{1} \text{ gpd/sf} \\ \text{Distribution cell area} = \boxed{300} \text{ sf} \end{array}$$

3. Select a width (A) for the distribution cell. (Usually 3 feet)

$$A = \boxed{10} \text{ ft}$$

4. Determine the distribution cell length.

Calculate the distribution cell length (B) by dividing the required distribution area by the distribution cell width (A).

B = Distribution cell area divided by A

$$\begin{array}{l} B = \boxed{300} \text{ sf divided by } \boxed{10} \text{ ft} \\ B = \boxed{30} \text{ ft} \end{array}$$

Pump Selection for a Pressurized System - Single Family Residence Project

Parameters

Discharge Assembly Size	2.00	inches
Transport Length	50	feet
Transport Pipe Class	40	
Transport Line Size	2.00	inches
Distributing Valve Model	None	
Max Elevation Lift	8	feet
Manifold Length	5	feet
Manifold Pipe Class	40	
Manifold Pipe Size	2.00	inches
Number of Laterals per Cell	3	
Lateral Length	26	feet
Lateral Pipe Class	40	
Lateral Pipe Size	1.50	inches
Orifice Size	1/4	inches
Orifice Spacing	4	feet
Residual Head	2.5	feet
Flow Meter	None	inches
'Add-on' Friction Losses	5	feet

Calculations

Minimum Flow Rate per Orifice	1.23	gpm
Number of Orifices per Zone	21	
Total Flow Rate per Zone	25.8	gpm
Number of Laterals per Zone	3	
% Flow Differential 1st/Last Orifice	0.8	%
Transport Velocity	2.5	fps

Frictional Head Losses

Loss through Discharge	1.3	feet
Loss in Transport	0.6	feet
Loss through Valve	0.0	feet
Loss in Manifold	0.0	feet
Loss in Laterals	0.1	feet
Loss through Flowmeter	0.0	feet
'Add-on' Friction Losses	5.0	feet

Pipe Volumes

Vol of Transport Line	8.7	gals
Vol of Manifold	0.9	gals
Vol of Laterals per Zone	8.2	gals
Total Volume	17.8	gals

Minimum Pump Requirements

Design Flow Rate	25.8	gpm
Total Dynamic Head	17.5	feet

PumpData

Legend

System Curve:
Pump Curve:
Pump Optimal Range:
Operating Point:
Design Point:



Orencia Systems
Incorporated

Changing the Way the
World Uses Water

Septic System Management Plan for Below Grade Systems



The goal of a septic system is to protect human health and the environment by properly treating wastewater before returning it to the environment. Your septic system is designed to kill harmful organisms and remove pollutants before the water is recycled back into our lakes, streams and groundwater.

This **management plan** will identify the operation and maintenance activities necessary to ensure long-term performance of your septic system. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic maintainer or service provider. However, it is YOUR responsibility to make sure all tasks get accomplished in a timely manner.

The University of Minnesota's *Septic System Owner's Guide* contains additional tips and recommendations designed to extend the effective life of your system and save you money over time.

Proper septic system design, installation, operation and maintenance means safe and clean water!

Property Owner **Michael Jones**

Property Address **4978 NW Island Lake Road**

Property ID **660-6000-55910**

System Designer **Lakehead Trucking**

Phone **391-2425**

System Installer **Lakehead Trucking**

Phone **391-2425**

Service Provider/Maintainer

Phone

Permitting Authority **St Louis County**

Phone **725-5200**

Permit #

Date Inspected

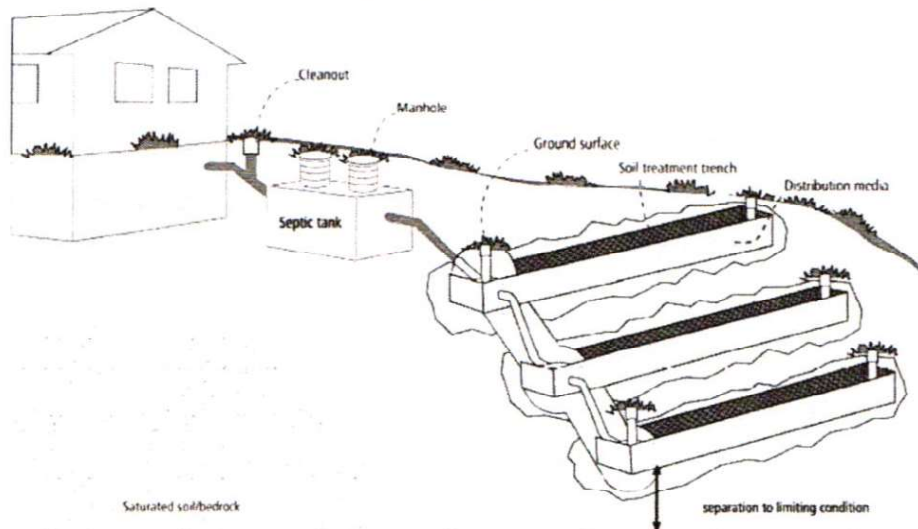
Keep this Management Plan with your Septic System Owner's Guide. The Septic System Owner's Guide includes a folder to hold maintenance records including pumping, inspection and evaluation reports. Ask your septic professional to also:

- Attach permit information, designer drawings and as-builts of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product use, activities, or water-use appliances.

For a copy of the *Septic System Owner's Guide*, call 1-800-876-8636 or go to <http://shop.extension.umn.edu/>

<http://septic.umn.edu>

Your Septic System



Septic System Specifics	
System Type: <input checked="" type="radio"/> I <input type="radio"/> II <input type="radio"/> III <input type="radio"/> IV* <input type="radio"/> V* <i>(Based on MN Rules Chapter 7080.2200 – 2400)</i>	<input type="checkbox"/> System is subject to operating permit* <input type="checkbox"/> System uses UV disinfection unit* Type of advanced treatment unit _____ *Additional Management Plan required

Dwelling Type	Well Construction
Number of bedrooms: <u>3</u> System capacity/ design flow (gpd): <u>300</u> Anticipated average daily flow (gpd): <u>200</u> Comments _____ Business? <input type="checkbox"/> What type? <u>Residential</u>	Well depth (ft): <u>Unknown</u> <input checked="" type="checkbox"/> Cased well Casing depth: _____ <input type="checkbox"/> Other (specify): _____ Distance from septic (ft): <u>>100</u> Is the well on the design drawing? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N

Septic Tank	
<input checked="" type="checkbox"/> One tank Tank volume: <u>1000</u> gallons Does tank have two compartments? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Two tanks Tank volume: _____ gallons <input type="checkbox"/> Tank is constructed of <u>concrete</u> <input type="checkbox"/> Effluent Screen type: <u>Zabel</u>	<input checked="" type="checkbox"/> Pump Tank (if one) <u>500</u> gallons <input checked="" type="checkbox"/> Effluent Pump make/model: <u>ME 40</u> Pump capacity <u>25.8</u> GPM TDH <u>17.5</u> Feet of head <input type="checkbox"/> Alarm location <u>Inside</u>

Soil Treatment Area (STA)	
Trenches: _____ total lineal feet Number of trenches: _____ at _____ feet each STA size (width x length): <u>10</u> ft x <u>30</u> ft Location of additional STA: _____	<input type="checkbox"/> Gravity distribution <input checked="" type="checkbox"/> Pressure distribution <input checked="" type="checkbox"/> Inspection ports <input type="checkbox"/> Cleanouts <input type="checkbox"/> Additional STA not available



Homeowner Management Tasks

These *operation and maintenance* activities are your responsibility. Use the chart on page 6 to track your activities.

Identify the service intervals recommended by your system designer and your local government. The tank assessment for your system will be the **shortest interval of these three intervals**. Your pumper/maintainer will determine if your tank needs to be pumped.

System Designer: check every _____ months
Local Government: check every _____ months
State Requirement: check every 36 months

<p>My tank needs to be checked every _____ months</p>

Seasonally or several times per year

- *Leaks*. Check (listen, look) for leaks in toilets and dripping faucets. Repair leaks promptly.
- *Surfacing sewage*. Regularly check for wet or spongy soil around your soil treatment area. If surfaced sewage or strong odors are not corrected by pumping the tank or fixing broken caps and leaks, call your service professional. *Untreated sewage may make humans and animals sick.*
- *Alarms*. Alarms signal when there is a problem; contact your maintainer any time the alarm signals.
- *Lint filter*. If you have a lint filter, check for lint buildup and clean when necessary. Consider adding one after washing machine.
- *Effluent screen*. If you do not have one, consider having one installed the next time the tank is cleaned.

Annually

- *Water usage rate*. A water meter can be used to monitor your average daily water use. Compare your water usage rate to the design flow of your system (listed on the next page). Contact your septic professional if your average daily flow over the course of a month exceeds 70% of the design flow for your system.
- *Caps*. Make sure that all caps and lids are intact and in place. Inspect for damaged caps at least every fall. Fix or replace damaged caps before winter to help prevent freezing issues.
- *Water conditioning devices*. See Page 5 for a list of devices. When possible, program the recharge frequency based on *water demand (gallons)* rather than *time (days)*. Recharging too frequently may negatively impact your septic system.
- *Review your water usage rate*. Review the Water Use Appliance chart on Page 5. Discuss any major changes with your pumper/maintainer.

During each visit by a pumper/maintainer

- Ask if your pumper/maintainer is licensed in Minnesota.
- Make sure that your pumper/maintainer services the tank through the manhole. (NOT through a 4" or 6" diameter inspection port.)
- Ask your pumper/maintainer to accomplish the tasks listed on the Professional Tasks on Page 4.



Professional Management Tasks

These are the operation and maintenance activities that a pumper/maintainer performs to help ensure long-term performance of your system. Professionals should refer to the O/M Manual for detailed checklists for tanks, pumps, alarms and other components. Call 800-322-8642 for more details.

- Written record provided to homeowner after each visit.

Plumbing/Source of Wastewater

- Review the Water Use Appliance Chart on Page 5 with homeowner. Discuss any changes in water use and the impact those changes may have on the septic system.
- Review water usage rates (if available) with homeowner.

Septic Tank/Pump Tanks

- *Manhole lid.* A riser is recommended if the lid is not accessible from the ground surface. Insulate the riser cover for frost protection.
- *Liquid level.* Check to make sure the tank is not leaking. The liquid level should be level with the bottom of the outlet pipe. (If the water level is below the bottom of the outlet pipe, the tank may not be watertight. If the water level is higher than the bottom of the outlet pipe of the tank, the effluent screen may need cleaning, or there may be ponding in the drainfield.)
- *Inspection pipes.* Replace damaged caps.
- *Baffles.* Check to make sure they are in place and attached, and that inlet/outlet baffles are clear of buildup or obstructions.
- *Effluent screen.* Check to make sure it is in place; clean per manufacturer recommendation. Recommend retrofitted installation if one is not present.
- *Alarm.* Verify that the alarm works.
- *Scum and sludge.* Measure scum and sludge in each compartment of each septic and pump tank, pump if needed.

Pump

- *Pump and controls.* Check to make sure the pump and controls are operating correctly.
- *Pump vault.* Check to make sure it is in place; clean per manufacturer recommendations.
- *Alarm.* Verify that the alarm works.
- *Drainback.* Check to make sure it is operating properly.
- *Event counter or run time.* Check to see if there is an event counter or run time log for the pump. If there is one, calculate the water usage rate and compare to the anticipated average daily flow listed on Page 2.

Soil Treatment Area

- *Inspection pipes.* Check to make sure they are properly capped. Replace caps that are damaged.
- *Surfacing of effluent.* Check for surfaced effluent or other signs of problems.
- *Gravity trenches and beds.* Check the number of gravity trenches with ponded effluent. Identify the percentage of the system in use. Determine if action is needed.
- *Pressure trenches and beds - Lateral flushing.* Check lateral distribution; if cleanouts exist, flush and clean as needed.

All other components – inspect as listed here:



Water-Use Appliances and Equipment in the Home

Appliance	Impacts on System	Management Tips
Garbage disposal	<ul style="list-style-type: none"> • Uses additional water. • Adds solids to the tank. • Finely-ground solids may not settle. Unsettled solids can exit the tank and enter the soil treatment area. 	<ul style="list-style-type: none"> • Use of a garbage disposal is not recommended. • Minimize garbage disposal use. Compost instead. • To prevent solids from exiting the tank, have your tank pumped more frequently. • Add an effluent screen to your tank.
Washing machine	<ul style="list-style-type: none"> • Washing several loads on one day uses a lot of water and may overload your system. • Overloading your system may prevent solids from settling out in the tank. Unsettled solids can exit the tank and enter the soil treatment area. 	<ul style="list-style-type: none"> • Choose a front-loader or water-saving top-loader, these units use less water than older models. • Limit the addition of extra solids to your tank by using liquid or easily biodegradable detergents. • Install a lint filter after the washer and an effluent screen to your tank • Wash only full loads. • Limit use of bleach-based detergents. • Think even – spread your laundry loads throughout the week.
2 nd floor laundry	<ul style="list-style-type: none"> • The rapid speed of water entering the tank may reduce performance. 	<ul style="list-style-type: none"> • Install an effluent screen in the septic tank to prevent the release of excessive solids to the soil treatment area. • Be sure that you have adequate tank capacity.
Dishwasher	<ul style="list-style-type: none"> • Powdered and/or high-phosphorus detergents can negatively impact the performance of your tank and soil treatment area. • New models promote “no scraping”. They have a garbage disposal inside. 	<ul style="list-style-type: none"> • Use gel detergents. Powdered detergents may add solids to the tank. • Use detergents that are low or no-phosphorus. • Wash only full loads. • Scrape your dishes anyways to keep undigested solids out of your septic system.
Grinder pump (in home)	<ul style="list-style-type: none"> • Finely-ground solids may not settle. Unsettled solids can exit the tank and enter the soil treatment area. 	<ul style="list-style-type: none"> • Expand septic tank capacity by a factor of 1.5. • Include pump monitoring in your maintenance schedule to ensure that it is working properly. • Add an effluent screen.
Large bathtub (whirlpool)	<ul style="list-style-type: none"> • Large volume of water may overload your system. • Heavy use of bath oils and soaps can impact biological activity in your tank and soil treatment area. 	<ul style="list-style-type: none"> • Avoid using other water-use appliances at the same time. For example, don’t wash clothes and take a bath at the same time. • Use oils, soaps, and cleaners in the bath or shower sparingly.
Clean Water Uses	Impacts on System	Management Tips
High-efficiency furnace	<ul style="list-style-type: none"> • Drip may result in frozen pipes during cold weather. 	<ul style="list-style-type: none"> • Re-route water into a sump pump or directly out of the house. Do not route furnace recharge to your septic system.
Water softener Iron filter Reverse osmosis	<ul style="list-style-type: none"> • Salt in recharge water may affect system performance. • Recharge water may hydraulically overload the system. 	<ul style="list-style-type: none"> • These sources produce water that is not sewage and should not go into your septic system. • Reroute water from these sources to another outlet, such as a dry well, drain tile or old drainfield.
Surface drainage Footing drains	<ul style="list-style-type: none"> • Water from these sources will likely overload the system. 	<ul style="list-style-type: none"> • When replacing, consider using a demand-based recharge vs. a time-based recharge. • Check valves to ensure proper operation; have unit serviced per manufacturer directions



Maintenance Log

Track maintenance activities here for easy reference. See list of management tasks on pages 3 and 4.

Activity	Date accomplished									
Check frequently:										
Leaks: check for plumbing leaks										
Soil treatment area check for surfacing										
Lint filter: check, clean if needed										
Effluent screen: if owner-maintained										
Check annually:										
Water usage rate (monitor frequency____)										
Caps: inspect, replace if needed										
Water use appliances – review use										
Other:										

Notes: _____

Mitigation/corrective action plan: Replace As Needed

"As the owner of this SSTS, I understand it is my responsibility to properly operate and maintain the sewage treatment system on this property, utilizing the Management Plan. If requirements in this Management Plan are not met, I will promptly notify the permitting authority and take necessary corrective actions. If I have a new system, I agree to adequately protect the reserve area for future use as a soil treatment system."

Property Owner Signature: Michael J. Jones

Date 8/28/18

Management Plan Prepared By: Tom Roylinsky

Certification # 1063

Permitting Authority: St Louis County

Construction & Earthwork Request Form

Rent Due: \$1,387.50
Taxes Due: \$0.00

You should note that completion of this form and your proposed construction request are both governed by the terms of your Lease.

*In the event Minnesota Power grants approval for construction and/or earthwork, the responsibility remains with the applicant/leaseholder to obtain local, State, and/or Federal, authorizations or permits as required by law and to comply with building codes and ordinances.

CONSTRUCTION & EARTHWORK REQUEST UPON MINNESOTA POWER LEASED PROPERTY

MP Lot No.: STLO05315351503

County Parcel No.: 660600055910

Account No.: 1860810000

MP Map Number: MB-15803

Site Address: 4978 NW Island Lake Rd.

Township: Unog 710

Michael D. Jones
4976 NW Island Lake Rd.
Duluth, MN 55803

Telephone : Home: (218) 728-3045

Work:

Cell: (218) 348-8200

Email: mjones@northlandsubway.com

Minnesota Power Parcel Number 03, in that portion of SW/SE, Section 35,
Township 053 North, Range 15 West, Island Lake Reservoir, St Louis County,
Minnesota.

1. Requested by:

Michael D. Jones
Jones Michael D.

8/24/18
Date

2. Preliminary Approval* to Seek
Governmental Permits:

Minnesota Power

8-27-18
Date

3. Approved by:

County, Township, MN DNR or other Agency

8/30/18
Date

4. Final Construction Approval*:

Minnesota Power

Date

5. Authorization for Work Under this Permit Expires On:

Date

OFFICE USE ONLY

Project

Septic

Initial

AB

Date Received

8-27-18

Archaeology Check

PROCEED

Initial

AB

Notes

Site sketch requirements

Purpose, description and dimensions of project

Describe whether your project will involve any of the following:

- ▶ Construction of structure(s), dumping, filling or removing of earthen material, drilling, draining, excavating, install or repair.
- ▶ Excavating, dredging or discharging (placing fill material) into a wetland or other water body (including the temporary placement of material). If so, explain the specific purpose of the placement of the material (such as erosion control) and indicate how it will be done (such as with a backhoe or dragline). If dredged material is to be discharged on an upland site, identify the location of the site.
- ▶ Construction of an access path, bridge, culvert, dam, ditch, dock, driveway, riprap, road, sand blanket, or shore protection.
- ▶ If requesting permission for pole building construction, please include height and color of building, in addition to the length and width dimensions.

Include the following in a sketch of project

1. Draw lot boundaries with all dimensions
2. Draw roads with names and any lakes/rivers etc.
3. Draw and identify existing structures and structure dimensions (if any)
4. Draw and identify location of proposed construction including dimensions
5. Draw and identify driveways and all property accesses
6. Identify distances of existing and proposed construction/structures from the shoreline, side yard far, side yard near, and road center line
7. Draw and identify existing or proposed septic location and future expansion area
8. Draw and name any drinking water well locations and dimensions from any septic systems (including neighbors)
9. Identify existing power poles, overhead power lines and the name of the utility provider that said power poles and lines belong to
10. Identify existing and proposed fencing, berms or other natural barriers
11. Identify setbacks for all structures (sides, rear and shore)
12. Show erosion/sediment control measures (if any)

Contractor contact information

If you are working with a contractor on this project, please provide their contact information.

Contractor (company) name Lakehead Contact (person) name Tom Rovinsky
Business phone _____ Cell phone 218-391-2425 Email tomsseptic@gmail.com

Detailed explanation of construction plans

State what you propose to do and why it is needed.

Install new septic system to replace old non compliant
septic system

St. Louis County

March BOA Meeting



Prepared By: **Planning & Community Development**
(218) 725-5000
www.stlouiscountymn.gov

Source: St. Louis County

Map Created: 12/12/2023

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Michael Jones
Location Map
660-6000-55910

0 0.75 1.5
Miles

St. Louis County

March BOA Meeting

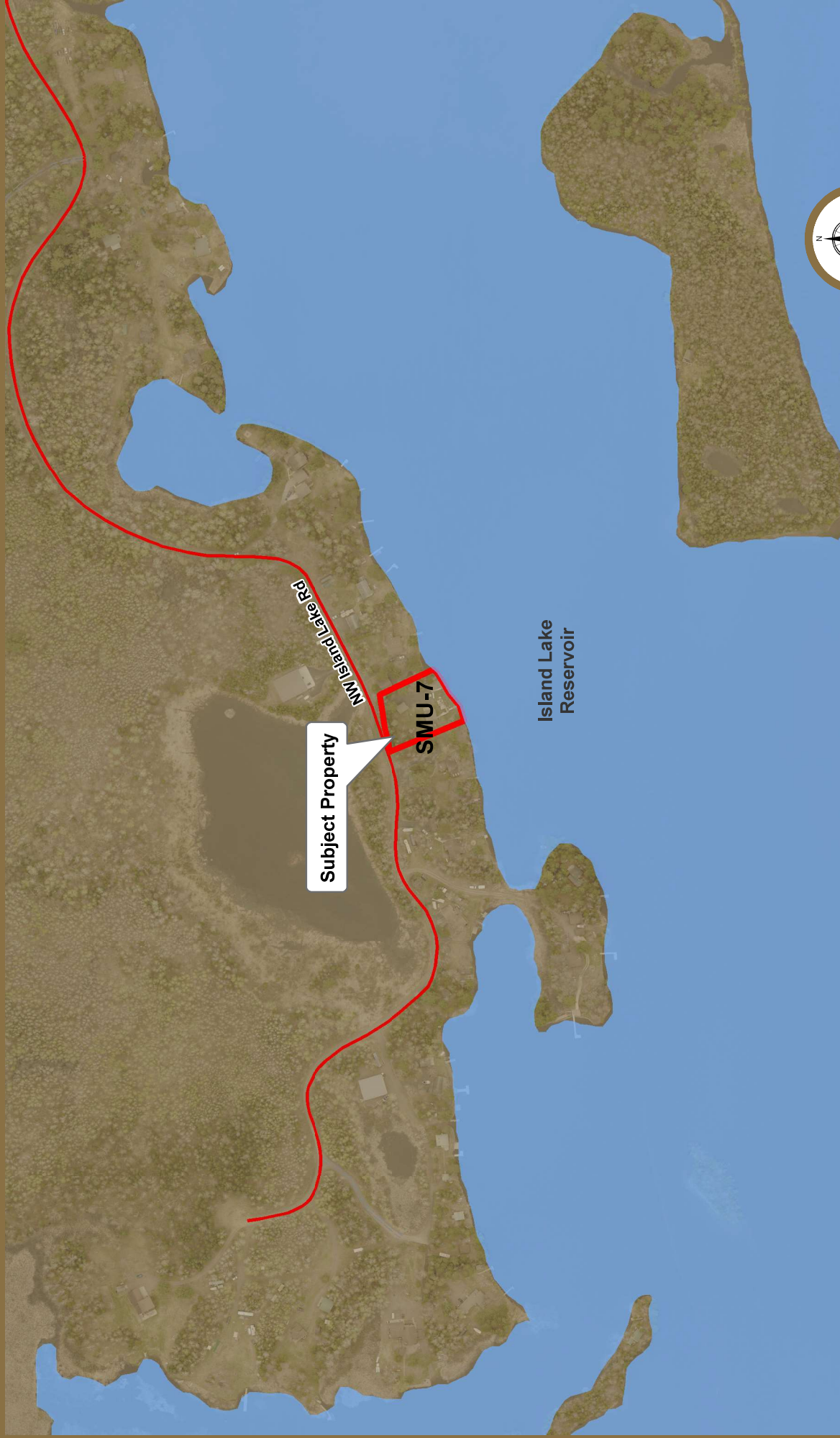


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Source: St. Louis County			
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Location Map
660-6000-55910

St. Louis County

March BOA Meeting



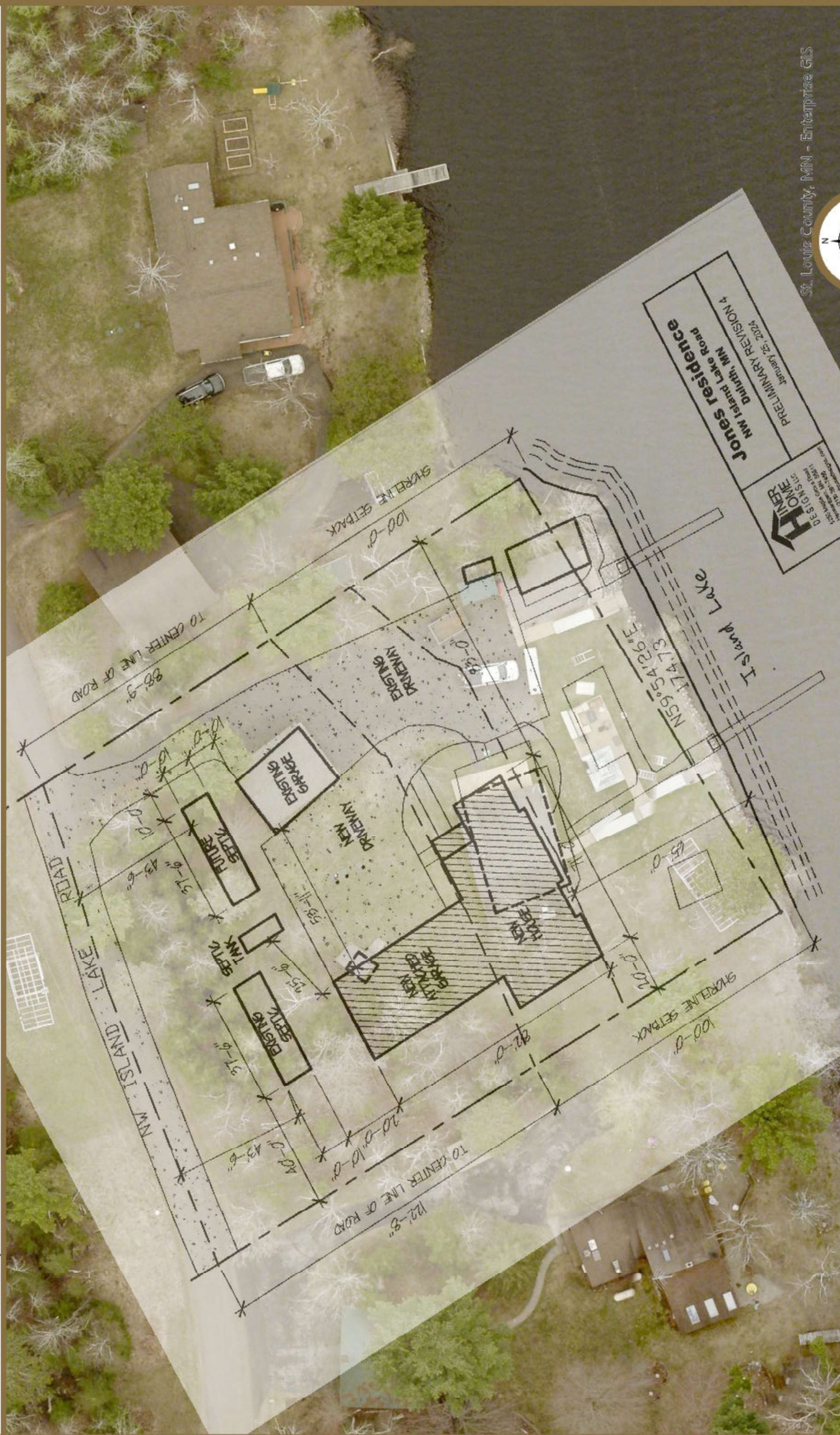
Prepared By: Planning & Community Development (218) 725-5000 www.stlouiscountymn.gov		Michael Jones Zoning Map 660-6000-55910		
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St. Louis County

March BOA Meeting

St. Louis County MN

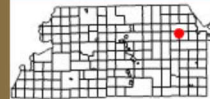


St. Louis County, MN - Enterprise GIS



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Michael Jones
Sketch Overlay
660-6000-55910



Prepared By: **Planning & Zoning Department**
(218) 725-5000
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Team Credits: Planning, Land, Public Works, 911

Source: St Louis County DNR

Map Created: 2/16/2024

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St. Louis County

March BOA Meeting



Prepared By: Planning & Community Development

(218) 725-5000

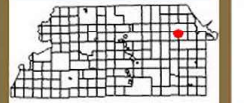
www.stlouiscountymn.gov

Team Credits: Planning, Land, Public Works, 911

Source: St. Louis County, DNR

Map Created: 12/21/2023

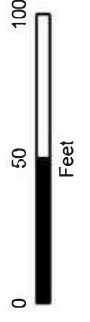
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Michael Jones Setback Map

100' Shoreline Setback

Principal Structure
Setback



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St. Louis County MN

St. Louis County

March BOA Meeting



Prepared By: Planning & Community Development

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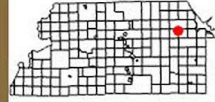
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Team Credits: Planning, Land, Public Works, 911

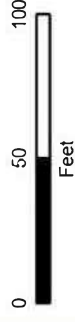
Source: St. Louis County, DNR

Map Created: 12/20/2023

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Michael Jones
Plat Overlay
660-0029-00160



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Dwelling- Lake View



West Shoreline



East Shoreline

Dwelling- Lake View



Dwelling- Side View



Dwelling- Side View



Dwelling- Rear View



Dwelling- Rear View



Current Garage &
Septic Area



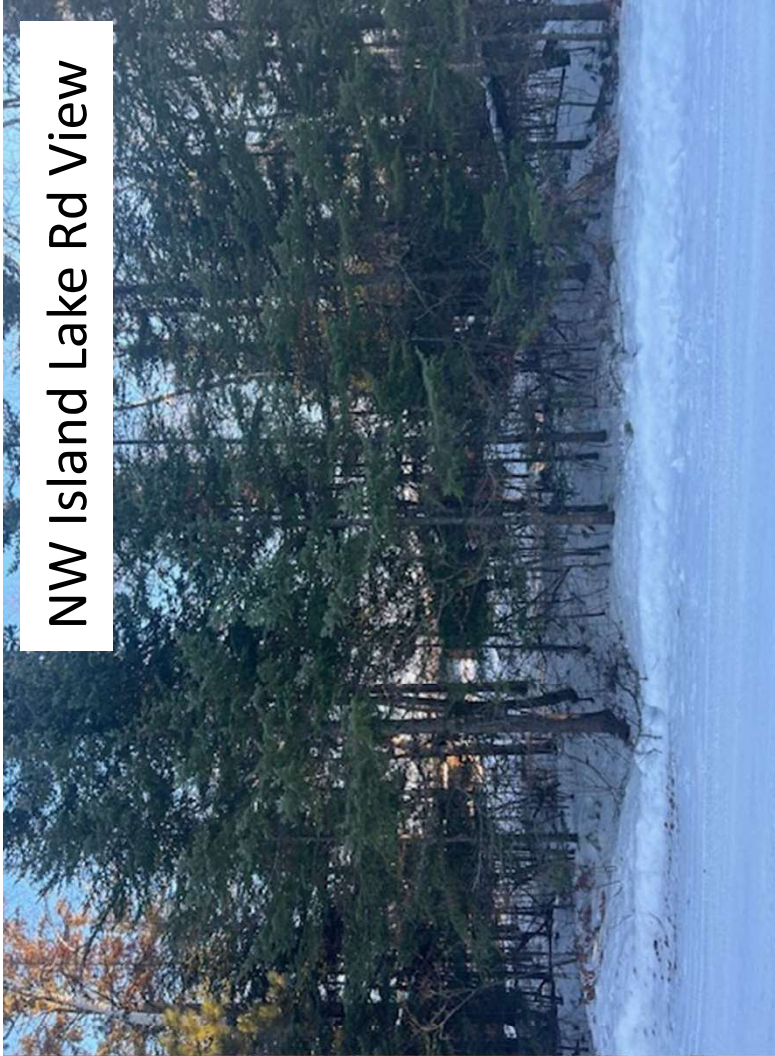
Dwelling- Side View



Dwelling- Side View



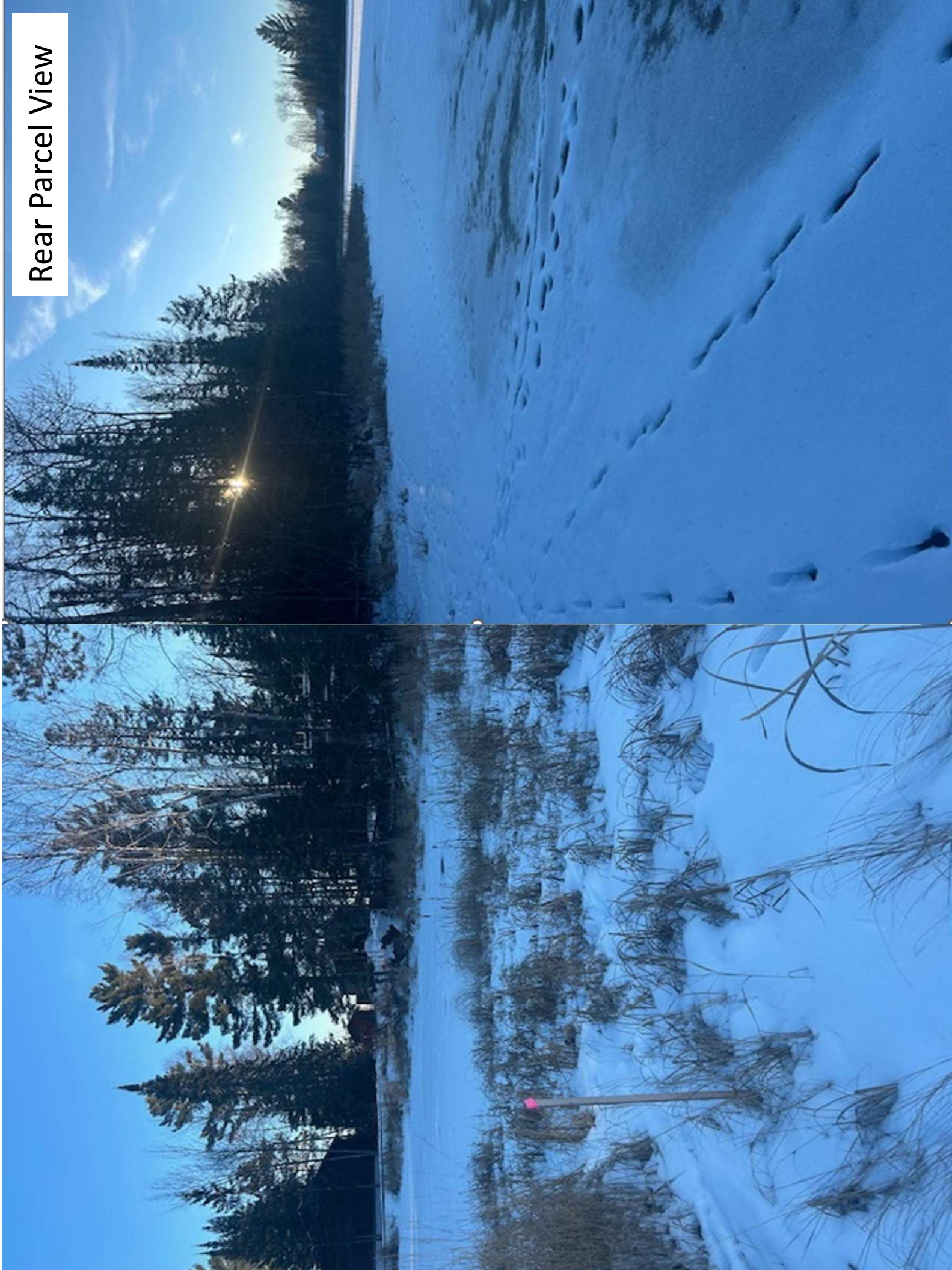
NW Island Lake Rd View



Rear Parcel View



Rear Parcel View



**ST. LOUIS COUNTY BOARD OF ADJUSTMENT
FINDINGS OF FACT, CONCLUSIONS AND DECISION**

Meeting Date: 1-11-2024

APPLICANT: Michael Jones
4976 NW Island Lake Road
Duluth, MN 55803

LEGAL DESCRIPTION: SW 1/4 OF SE 1/4, LEASE #15-03 MP 660-10-5540, S35, T53N, R15W (Unorganized).

TESTIMONY AT THE JANUARY 11, 2024 HEARING:

The applicant is requesting relief from St. Louis County Zoning Ordinance 62, Article III, Section 3.4 and Article IV, Section 4.3 D., to allow a replacement principal dwelling at a reduced shoreline setback and to exceed allowed structure width facing the water. *LaShawn Rush*, St. Louis County Planner, reviewed the staff report as follows:

- A. The applicant is proposing a replacement principal dwelling at a reduced shoreline setback of 58 feet where 100 feet is required.
- B. The proposed replacement principal dwelling has a structure width facing the water of 82 feet where 71 feet is allowed.
- C. The property currently contains a principal dwelling, multiple accessory structures, and a private septic system.
- D. There is good screening from most sides of the property.
- E. There is a gradual slope from the dwelling to the shore with an elevation change of six feet.
- F. The lowest floor will be above the Regulatory Flood Protection Elevation.
- G. There are wetlands on the north side of the property that will not be impacted by the proposed project.
- H. The parcel is divided by NW Island Lake Road.

LaShawn Rush reviewed staff facts and findings as follows:

- A. Official Controls:
 - 1. Zoning Ordinance 62, Article III, Section 3.4, requires a setback of 100 feet from Recreation Development lakes.
 - a. The applicant is proposing a 58 foot setback from Island Lake Reservoir.
 - 2. Zoning Ordinance 62, Article IV, Section 4.3 D., allows a nonconforming structure to have a width facing the shoreline of 40 percent of the lot width if located within the shoreline setback.
 - a. The applicant is proposing 82 feet of the structure to face the shoreline (46 percent) where 71 feet is allowed (40 percent).
 - 3. Goal LU-3 of the St. Louis County Comprehensive Land Use Plan is to improve the integrity of the county's planning-related regulation by minimizing and improving management of nonconformities.
 - 4. Objective LU-3.1 of the St. Louis County Comprehensive Land Use Plan is to base variance decisions on uniform approval criterion to ensure all applications are treated

equitably, that community health and safety is protected, and that the overall character of a given area is preserved.

5. Objective LU-3.3 of the St. Louis County Comprehensive Land Use Plan is to acknowledge why nonconformities are a concern and that variances should be for exceptional circumstances as noted in Minnesota Statute 394.22. Subd.10.

B. Practical Difficulty:

1. The property is part of an official plat (Breezy Bay) that was platted in September of 2023.
 - a. There are no notes on the original plat expressing concerns for conforming buildable area.
2. There are alternatives that may reduce the number of variance requests:
 - a. Reduction of size and change in configuration of the structure may result in a proposal being at a conforming location that would be allowed through a Land Use Permit.
3. No practical difficulty has been presented for exceeding lot width requirements.

C. Essential Character of the Locality:

1. The applicant is not proposing a new use to the area. The Breezy Bay Plat is developed with many seasonal and year-round residential uses.
2. The area consists of developed lakeshore lots with both conforming and nonconforming structures.
3. There have been seven approved variance cases in the area to allow for a reduced shoreline setback.

D. Other Factors:

1. St. Louis County Onsite Wastewater Division did not pass the record review of the proposal.
 - a. If the variance request is approved, the applicant will need to work with St. Louis County Onsite Wastewater Division to meet their requirements before the issuance of a land use permit.
2. Ordinance 62 states that it shall be the burden of the applicant to demonstrate sufficient practical difficulty to sustain the need for a variance. Absent a showing of practical difficulty as provided in Minnesota Statutes and this ordinance, the Board of Adjustment shall not approve any variance.

LaShawn Rush noted no items of correspondence.

RECOMMENDED CONDITIONS

Conditions that may mitigate the variance to allow a replacement principal dwelling at a reduced shoreline setback and to exceed the allowed structure width facing the water as proposed include, but are not limited to:

1. The structure shall be unobtrusive (earth-tone) colors, including siding, trim and roof.
2. The stormwater runoff from the proposed structure shall not directly discharge into the lake or on adjacent lots.

3. The lowest floor of the structure shall be at or above the Regulatory Flood Protection Elevation.
4. St. Louis County Onsite Wastewater SSTS standards shall be followed.

Michael Jones, 4976 NW Island Lake Road, the applicant, stated he owns both properties. He lives at 4976 NW Island Lake Road and the subject property is 4978 NW Island Lake Road. He purchased this cabin property in 2009. His wife and he decided to build a new home as their current home, while a year-round residence, was built in 1993 and he does not want to deal with a crawlspace as he ages. They intend to sell that property and build a new dwelling on the cabin property. The existing dwelling is 40 feet from the shoreline. He purchased this property from the original owner and the cabin is about 26 feet by 40 feet. The cabin is 58 feet from the shoreline.

He worked with Minnesota Power to get approval for steps down to the lake. It was then he discovered his lot was 200 feet wide when Minnesota Power provided a map for the work. When he installed the septic in 2018, his lot width was at 190 feet. He asked Minnesota Power what had happened, and they said the lot width was 190 feet, not 200 feet like the map had indicated. During the platting process, he received a packet in the mail that said his lot was 175 feet wide. Minnesota Power had to make the lots more conforming and lot lines were adjusted. When the lot was squared off, he lost some of the lot width. He did acquire land behind the road which is mostly a swamp.

He has been working with Tom Rovinsky, a septic designer, who was on this site and installed the septic in 2018. They intend to replace the current tank with a larger tank. The tank will be relocated behind the proposed garage.

He is asking for a shoreline setback variance because he would be unable to fit the septic system behind the staff alternative location.

The garage may be a luxury, but it is a necessity to gain interior storage. He does not want to clear cut his lot so he can park everything outside.

No audience members spoke.

The *Board of Adjustment* discussed the following:

- A. Board member *Filipovich* asked when other variances were approved around the subject property, noting that this area was platted in September 2023. *LaShawn Rush* stated some of these variances were approved prior to platting.
- B. Board member *Filipovich* asked if lot sizes were changed during the platting process. *Donald Rigney*, Acting Secretary, stated that during the platting process, lots are not added, and the process tries to maintain a lot of record where the lot is at. Some property lines were adjusted slightly to create a more conforming lot. Some acreage was added to lots, such as adding to backlots. The applicant can answer to if they have more acreage now through the platting process. In most cases, these lots did not get smaller.
- C. Board member *Pollock* asked about the staff's alternative building site and if there were anything that would limit building at that location. *LaShawn Rush* stated there is not. Board member *Pollock* asked if the alternative location is 100 feet from the shoreline. *LaShawn Rush* stated it is. Board member *Pollock* asked what the structure width facing the water

would be at the alternative location. *Donald Rigney* stated it would be 55 percent. *LaShawn Rush* added the current proposal is 46 percent of the structure width facing the water. Board member *Pollock* stated at the conforming location, the applicant could have a land use permit. The applicant may need to reconfigure the design.

- D. Board member *Coombe* asked if by moving the proposed structure back to the 100 foot shoreline setback, the applicants' neighbors would all have structures in front of them. Board member *Pollock* stated the neighboring cabins would not obstruct the applicant's view.
- E. Board member *McKenzie* asked about the address of the property as both 4978 and 4976 NW Island Lake Road were used. *LaShawn Rush* stated the applicant owns both properties.
- F. Board member *McKenzie* asked about the proposed building height and if the allowed height at this setback would be 25 feet. *LaShawn Rush* stated the applicant noted 24 feet in the application.
- G. Board member *McKenzie* asked about the garage dimensions. Board member *Manick* stated the site sketch showed a 28 foot by 30 foot garage.
- H. Board member *McKenzie* asked where the septic was located. *LaShawn Rush* stated the septic tank will be located north of the proposed structure. The applicant will need to work with a designer and an environmental specialist if they wanted to move the septic.
- I. Board member *Manick* stated in the staff report the practical difficulty noted that the proposed structure is too wide and too close to the shoreline. This proposal is what the applicant would like to do. The applicant has a garage on the property. The applicant may not need an attached garage. Without the attached garage the structure could be moved back to meet the shoreline setback. The garage could be rebuilt and expanded. Removing a little square footage from the side would also comply with the structure width facing the lake requirement. *Michael Jones* stated the existing garage is 22 foot by 26 foot and they cannot fit more than a single vehicle in that garage. He has boats and other gear like Jet-skis that need to be stored. When he moves to this property, he will have no storage area. He could build across NW Island Lake Road as an alternative, but the area across the road is swampy. It would be nice to have an attached garage in the winter and be able to get into his house. Board member *Manick* stated this property may not allow for an attached garage.
- J. Board member *Pollock* stated this proposal is a wish list. The sunroom could be a deck with sliding doors going outside. The size of the attached garage could be reduced to move the structure back. They need justification for variances and not what is convenient for the applicant. There is a lot that could be done to make this request easier to grant a variance for. Board member *Coombe* stated the applicant is before them stating what they want. This proposed house is out of the shore impact zone and will meet other setback requirements. There might be an issue with the septic system if the house is moved back. The applicant may not be able to get a replacement area for their septic system. This house could be moved back a few feet, but what will anyone gain by doing that? It will not protect the lake or neighborhood anymore, it will not be a new use to the area, and there has always been something on this property since the 1960s. This structure is just bigger. Bigger is not always bad.
- K. Board member *McKenzie* stated practical difficulty is something not caused by the landowner. In this case, the applicant's architect designed a house that is too big for this lot. The garage could be what is causing the setback issue with this lot. If the shoreline setback could be met, the structure width would not be a problem. This is not a practical

difficulty because the structure is too big for the lot. *Michael Jones* stated he does not know how to reduce the size of the structure because even with two bedrooms and a two-stall garage, he would still exceed the structure width facing the lake requirement. He does not know how he could build his dwelling at the 100 foot shoreline setback and still be able to install a septic. Board member *McKenzie* stated a reduced shoreline setback could be amended if the septic could be moved. The size and scale of this building compared to either adjoining neighbor is large. He does not see a practical difficulty not created by the landowner. *Michael Jones* stated he is building what he wants because he wants interior storage. He has two cars and both he and his wife work. Board member *McKenzie* stated that a desire to store things inside is not a practical difficulty. The applicant can control what they need or what they have.

- L. Board member *Manick* asked about the future replacement septic area. *Michael Jones* stated there is an existing septic field and a septic tank. The tank will be moved into a new area with the new dwelling. The existing septic field will be extended to meet code. There is an area behind the detached garage that could be utilized as a replacement area. Board member *Manick* asked if the applicant is keeping or removing the detached garage. *Michael Jones* stated he would like to keep the detached garage.
- M. Board member *Pollock* asked if the applicant has a new design sketch for the septic. *Michael Jones* stated he does not. Board member *Pollock* asked if this design is based on where the new proposed dwelling will be located. *Michael Jones* stated yes. Board member *Pollock* asked if the applicant asked that the septic be moved as far back as possible. *Michael Jones* stated Tom Rovinsky moved it back as far as it could go. Board member *Pollock* stated he has no design showing this. The septic could be moved back further. *Michael Jones* stated this was designed by Tom Rovinsky who is a professional that knows the rules. This area was picked out by him for the septic area. They may not gain much if the septic is moved. There is a road setback they need to follow. This proposal makes the most sense. Board member *McKenzie* asked if there is an existing septic field. *Michael Jones* stated there is. The septic was installed in 2018.
- N. Board member *McKenzie* stated having the 22 foot by 26 foot detached garage stand in the way of this new dwelling seems impractical. *Michael Jones* stated he wants to keep any storage they can get. They might not be able to build across the road because it is all swamp.
- O. Board member *Manick* stated he is not opposed to the size of the living quarters. His issue is the attached garage. They have to take into consideration practical difficulty. There is an area with the same elevation across the road to store the boats, etc. Without the attached garage, the structure could almost meet the required setback.
- P. Board member *Werschay* stated the cabin is located 54 feet from the shoreline and asked if the applicant could get a permit to expand the existing structure. *Donald Rigney* stated the cabin is located outside of the shore impact zone and the applicant could potentially get a performance standard permit for an addition up to 400 square feet in size. Board member *Werschay* stated the applicant is not asking that much more to stay where the current structure is at. Neighboring properties have cabins around the same distance from the shoreline. There would be no soil disturbance. There will be no fill. There will be no basement. If the structure is moved around, the soil could be disturbed. The septic system is already there and installed.
- Q. Board member *Manick* stated the application said the applicant is installing a new septic system to replace a noncompliant system. *Michael Jones* stated they found out the system

is noncompliant by 12 square feet. With the second story bonus room above the garage counted as a bedroom, the septic system needed to be sized for four bedrooms. The noncompliant system is for what he is building, not for what already exists there. They can reuse some of the existing septic but would need to expand. Not having to remove and replace the entire septic system is cost saving. Board member *Manick* stated that without an attached garage and bonus room, the septic would be fine. This would be a problem solved by not attaching a garage. Board member *Werschay* stated she supports an attached garage. Board member *Coombe* stated he called staff to ask why the septic was noncompliant. It was not just about the additional bonus room that could be considered a bedroom, but the square footage of the entire structure. *Donald Rigney* stated the square footage of the structure changed the classification of the dwelling which is how they size a septic system.

- R. Board member *Pollock* stated this request is a wish list by the applicant. There is also reasonable use of the property. A wish list does not mean the applicant does not have reasonable use of the property. Board member *Werschay* stated the applicant did not have control over the fact Minnesota Power adjusted the property lines and reduced the lot width of this property. Board member *McKenzie* stated the applicant has control over the design of the new house. Board member *Werschay* stated the applicant could remove square footage in order to conform to the lot width. Board member *Pollock* stated that 11 feet could be removed and that would better conform to the structure width facing the lake requirement. *Michael Jones* stated if he removed the sunroom to make the structure not as wide, he could still add a sunroom/gazebo elsewhere which would take up lot width on the property and would gain nothing. He would need to remove a number of trees which is where his vegetative buffer is. Board member *Manick* stated the applicant is already removing trees to fit a new dwelling in this location. *Michael Jones* stated there are birch trees that need to be removed as they are leaning on the cabin.
- S. Board member *McKenzie* asked if the architect knew what the requirements were and what property the applicant had to work with. The architect designed a structure too big for the lot. *Michael Jones* stated one might expect the architect to know everything. However, he did not realize they had lost lot width. He has been asking what he can take off the structure. He does not want to shorten the bedrooms by any square footage because they are already small. Board member *McKenzie* stated that what the applicant can have and what they will have is not necessarily the same thing. The architect should have known the dwelling is too big for this lot. The attached garage pushes the structure towards the lake. This design is what they like. Board member *McKenzie* stated in discussing this plan with the architect, the applicant might ask what they can get away with? *Michael Jones* stated he did not do that. He wanted a house designed for this property. He wanted to pull straight into a garage, which he was unable to do because then the structure would be too wide.
- T. Board member *Pollock* stated a redesign might be necessary in order to make this better for the Board to decide on. The septic designer can redesign the system to better fit and the dwelling could be redesigned to better configure the lot. The applicant needs to work with this to make it more compatible. Wishes do not take over the rules and regulations. *Michael Jones* stated he is restricted by the size of the lot, the trees, setbacks, etc. Board member *Pollock* stated the applicant is being restricted by the size and design of the proposed dwelling. *Michael Jones* asked if the issue is with the shoreline setback or with the size of the structure. It would cause more difficulty moving the septic back toward the road.

Everyone wants a little privacy. He does not want a lot of trees taken out so his property is more visible. Board member *Manick* stated he has no issue with the structure width. He does have an issue with the attached garage. There is room across the road for storage. There are alternatives here. Board member *Pollock* stated the shoreline setback, and the structure width are both against rules and regulations. A redesign should be done so the applicant can come back with something more palatable.

- U. Board member *Filipovich* stated the applicant should get some credit because the structure is moving further from the lake. The applicant did a good job putting this design together. Board member *Manick* stated the applicant could redesign the structure in order to better meet the shoreline setback. It may not be at 100 feet, but it could be better than what is already there. Board member *Werschay* stated the Board cannot really determine if there is room across the road to build anything. How would the Board know without visiting the site? *LaShawn Rush* stated there was one picture of the property across the road in the presentation. The pond on that part of the property is visible. Board member *Werschay* stated the attached garage will not be visible from the shore because it will be located behind the house. Board member *Filipovich* stated these are two separate lots because the road divides them. *Michael Jones* stated he is not sure he would call the land across the road usable land.
- V. Board member *Manick* asked why storage units are all over the place? It is because people do not have the room for storage on their property.
- W. Board member *Coombe* asked what the shoreline averaging would be for this property. *Donald Rigney* stated he did not run those numbers, but shoreline averaging is taking the shoreline setbacks of all principal dwellings within 150 feet of the subject property and adding 25 feet. Board member *Coombe* stated he calculated 75 to 77 feet. If the structure is moved back 15 feet, what has that accomplished? Does this protect the lake? The measures the applicant takes to direct rainwater away from the lake would do that. He would not tear down a 22 foot by 26 foot detached garage. The applicant needs room for a septic system and replacement area. The applicant is not asking for anything out of the ordinary. Board member *Manick* stated they are not singling out this applicant. If any of their neighbors wanted a variance to rebuild a structure, they would have the same questions. It is not as though the applicant's cabin burned down which would be a different circumstance. Board member *Werschay* stated if everyone had to build according to the Ordinance, there would be no Board of Adjustment. This applicant has done everything they can. Board member *Pollock* stated the Board still has to justify granting a variance.

FIRST MOTION

Motion by McKenzie/Pollock to deny a variance to allow a replacement principal dwelling at a reduced shoreline line setback and to exceed the allowed structure width facing the water, based on the following facts and findings:

A. Official Controls:

1. Zoning Ordinance 62, Article III, Section 3.4, requires a setback of 100 feet from Recreation Development lakes.
 - a. The applicant is proposing a 58 foot setback from Island Lake Reservoir.
2. Zoning Ordinance 62, Article IV, Section 4.3 D., allows a nonconforming structure to have a width facing the shoreline of 40 percent of the lot width if located within the shoreline setback.

- a. The applicant is proposing 82 feet of the structure to face the shoreline (46 percent) where 71 feet is allowed (40 percent).
3. The applicant is requesting to place a structure on a parcel that is not large enough to accommodate the proposed design. The proposed design includes a large, attached garage at the rear of the residence. The placement of the septic system may prevent the garage on the designed structure from moving back where the proposed structure could meet the required setback. If this is the case, the proposed garage is too large, the proposed residence is too large, or the garage design is wrong for the circumstances. The parcel could continue to be used in a reasonable manner without approval of a variance.
4. The variance request is not in harmony with the general purpose and intent of official controls.

B. Practical Difficulty:

1. Practical difficulty under the Ordinance in connection with granting a variance means the property cannot be put to reasonable use under conditions allowed by the Ordinance.
2. The plight of the landowner is due to circumstances on the property not created by the landowner.
3. The applicant is requesting to build a structure that is designed to not fit the parcel. The property is not unique and is of adequate size and any circumstance or difficulty by the applicant is self-created.
4. Practical difficulty has not been demonstrated in complying with the official controls.

C. Essential Character of the Locality:

1. The Ordinance says judging the essential character of the locality should be as done by regulations that existed at the time the area was developed.
2. In a practical matter, granting this variance request will alter the essential character of the locality.
3. The proposal, in looking at various structures in a one-quarter mile vicinity in either direction, there are no neighboring properties (with the exception of maybe one) that approach the size or scale of the proposed structure size of 3,600 square feet.

D. Other Factor:

1. There was no correspondence received in this case.

In Favor: Manick, McKenzie, Pollock - 3

Opposed: Coombe, Filipovich, Werschay - 3

Motion failed 3-3

The *Board of Adjustment* discussed the following after the first motion:

- A. *Donald Rigney* informed the Board that if the second motion were to fail again in a split vote, the variance would be denied.

- B. Board member *Coombe* stated he will not make a motion because this Board operates under Robert's Rules of Order. They may not enforce that, but they do use it. A failed motion is no motion at all. If there is no second motion and there is no decision made within 60 days, the variance would be automatically approved. Board member *Pollock* asked if the staff agrees. *Donald Rigney* stated that the Board needs to act on this application with a motion to approve or deny without prejudice. Board member *Pollock* stated there could be a denial without prejudice to allow for a redesign.

SECOND MOTION

Motion by Pollock/Manick to deny a variance to allow a replacement principal dwelling at a reduced shoreline line setback and to exceed the allowed structure width facing the water without prejudice. The applicant will work with their architect and their septic designer in order to fit rules and regulations of St. Louis County, including the 100 foot shoreline setback and the size and amount of coverage. The applicant will have the opportunity to present something more palatable. This is based on the following facts and findings:

- A. Official Controls:
1. The variance request is not in harmony with the general purpose and intent of official controls as the request does not meet rules or regulations.
- B. Practical Difficulty:
1. Work can be done to make this property compliant.
 2. Practical difficulty has not been demonstrated in complying with the official controls.
- C. Essential Character of the Locality:
1. The variance request will alter the essential character of the locality.
- D. Other Factor:
1. The Board wants to see work done by the applicant with those that did the septic and architect where it can be compliant because it can be compliant.

The *Board of Adjustment* discussed the following after the second motion:

- A. Board member *Werschay* asked if this motion makes sense because the applicant is being denied without prejudice and is being told they have to comply with all Ordinance requirements. *Donald Rigney* stated there needs to be some clarity. Board member *Werschay* stated if the applicant complies with all Ordinance requirements, the applicant will not need a variance. Board member *Pollock* stated the applicant can work with the designer and architect to make this fit. Maybe it will not need a variance if designed correctly. Board member *Manick* stated maybe the structure will meet all setbacks.
- B. *Donald Rigney* asked what would happen if the applicant cannot meet all requirements. Board member *Pollock* stated the applicant can work with staff to maximize the shoreline setback and on lot coverage. If there is something that reduces the shoreline setback, the Board can believe that the applicant worked this out. Board member *Manick* stated they have a problem with the architect not doing the applicant justice. *Donald Rigney* stated things need to be listed on what the Board expects the applicant to bring back. Board member *Pollock* stated the applicant needs to meet the rules and regulations. If the architect

determines the design is limited, that can be presented to the Board. The applicant can maximize the setback to the greatest extent or minimize the structure width facing the lake to what is allowed. *Donald Rigney* stated if the applicant cannot meet the 100 foot shoreline setback, the applicant has to come back and explain why. Board member *Pollock* agreed and added that would include the structure width facing the lake.

- C. Board member *Coombe* asked what type of road NW Island Lake Road is. *Donald Rigney* stated the road is a local road. Board member *Coombe* asked what road setbacks are. *Donald Rigney* stated the rights-of-way in Minnesota Power plats are considered easements. Although this is designated a local road, the County would consider this a private road and therefore the road setback is 15 feet from the edge of the road. Board member *Coombe* stated that the setback question is to make sure that the structures and septic could meet the road setback.
- D. Board member *Manick* asked what the small structure is down by the lake. *Michael Jones* stated this is his workshop and stores his boat gas, life jackets, fishing gear, etc. There was a door on the shop with boat rails going down. This structure is not wide enough to store a boat.
- E. Board member *Pollock* asked if this vote comes out in a tie what is this notion that the variance could be approved in 60 days? Board member *Coombe* stated a tied vote is the same as a “no” vote. Board member *Pollock* asked if there are two failed votes on denials, could the variance be approved after 60 days. Board member *McKenzie* asked if there are two failed votes, could the variance be denied?
- F. *Donald Rigney* stated there could be a condition added to any motion for approval that the setback could be maximized to the greatest extent possible and no closer than x number of feet from the shoreline. The dwelling was marked at 27 feet from the septic area. The dwelling could be located 20 feet from a septic drainfield. There is an option.
- G. Board member *Pollock* stated his motion is for the dwelling to meet the 100 foot setback and be compliant. The applicant, architect, and designer will have to work together to meet the rules and regulations. The motion was reworded to maximize the setbacks. The applicant needs to work on this and not just come back with the same request without working on this.
- H. Board member *Coombe* stated there is seven feet of wiggle room to move the structure back while keeping the setback between an occupied dwelling and the septic drainfield at 20 feet. The applicant should not have to dig up and move the mound because that would be expensive. Would it hurt the Board to have an occupied structure located 60 feet from the shoreline? Board member *Pollock* stated there is a motion on the floor. He does not want to tell the applicant this is what they have to meet. Board member *Werschay* stated that is not true and the motion maker is telling the applicant what to do. Board member *Pollock* stated he did not; he was telling the applicant to work with the architect and designer to come up with a design that maximizes setbacks that would satisfy the Board.
- I. *Donald Rigney* set a small recess to contact the St. Louis County Attorney’s Office to interpret what will happen after two failed votes on denials. Upon returning, *Donald Rigney* relayed from *Tom Stanley*, St. Louis County Attorney’s Office, that the burden of proof for a variance lies on the applicant. If there were multiple motions that did not approve the variance, then it would be considered a denial. From MN Statute 15.99, Subd. 2 (c): “When a vote on a resolution or properly made motion to approve a request fails for any reason, the failure shall constitute a denial of the request provided that those voting against the

motion state on the record the reasons why they oppose the request. A denial of a request because of a failure to approve a resolution or motion does not preclude an immediate submission of a same or similar request.”

- J. Board member *Coombe* stated this makes no sense when the motion is to deny.
- K. Board member *Werschay* stated the Board has two options. They can withdraw the motion, table the decision for another month, and extend the variance application from 60 days to 120 days. The other option is to clarify the existing motion on the table and vote on that motion. Board member *Pollock* elected to not withdraw his motion.

DECISION

Motion by Pollock/Manick to deny a variance to allow a replacement principal dwelling at a reduced shoreline line setback and to exceed the allowed structure width facing the water without prejudice in order for the applicant to design a structure to maximize the shoreline setback to the greatest extent and minimize the structure width facing the water to meet current Ordinance standards. If the applicant cannot meet the required shoreline setback or reduce the width of the structure facing the water, the applicant would have to come back with justifiable criteria from the septic designer and building architect as to why these requirements cannot be met.

In Favor: Filipovich, Manick, McKenzie, Pollock, Werschay - 5

Opposed: Coombe - 1

Motion carried 5-1