



ST. LOUIS COUNTY BOARD OF ADJUSTMENT STAFF REPORT

Case: 6248

INSPECTION DATE: 3-15-21

REPORT DATE: 2-22-21

MEETING DATE: 4-8-21

APPLICANT INFORMATION

APPLICANT NAME: Joseph Leoni

APPLICANT ADDRESS: 6324 Juniper Ln. Gilbert, MN 55741

OWNER NAME: Same as above

SITE ADDRESS: 6324 Juniper Ln. Gilbert, MN 55741

LEGAL DESCRIPTION: THAT PART OF LOT 5 of Esquagama North Beach Plat LYING ELY OF THE FOLLOWING DESCRIBED LINE BEG AT A PT 75 FT E OF NW COR OF LOT 5 ON N LINE THENCE SLY PARALLEL TO W LINE OF LOT 335 FT THENCE SWLY 22DEG7' 87 FT TO SHORELINE and THAT PART OF LOT 5 of Esquagama North Beach Plat LYING ELY OF THE FOLLOWING DESCRIBED LINE BEG AT A PT 75 FT E OF NW COR OF LOT 5 ON N LINE THENCE SLY PARALLEL TO W LINE OF LOT 335 FT THENCE SWLY 22DEG7' 87 FT TO SHORELINE, S27, T58N, R16W (Biwabik)

PARCEL IDENTIFICATION NUMBER (PIN): 260-0028-00050 and 260-0028-00052

VARIANCE REQUEST: The applicant is requesting relief from St. Louis County Zoning Ordinance 62, Article III, Section 3.4, to allow a nonconforming principal structure to be replaced at a reduced shoreline setback where 75 feet is required.

PROPOSAL DETAILS: The applicant is proposing a replacement dwelling to be located 50 feet from the shoreline of Lake Esquagama where 75 feet is required. There is currently a dwelling on the property that is located approximately 25 feet from the shoreline. The proposed replacement dwelling would be located in a similar location, but at a shoreline setback of 50 feet rather than the current setback of approximately 25 feet.

PARCEL AND SITE INFORMATION

ROAD ACCESS NAME/NUMBER: Juniper Ln.

ROAD FUNCTIONAL CLASS: Local Public Road

LAKE NAME: Esquagama Lake

LAKE CLASSIFICATION: GD

RIVER NAME: N/A

RIVER CLASSIFICATION: N/A

DESCRIPTION OF DEVELOPMENT ON PARCEL: The development on the property consists of a dwelling, several accessory structures, a well, and a septic system that is also propose to be replaced.

ZONE DISTRCT: SMU 11

PARCEL ACREAGE: 2.1 ACRES

LOT WIDTH: 203 FEET

FEET OF ROAD FRONTAGE: 215 FEET

FEET OF SHORELINE FRONTAGE: 425 FEET

PARCEL AND SITE INFORMATION

VEGETATIVE COVER/SCREENING: The majority of the property is well vegetated, but there are some areas near the shoreline that lack screening. The proposed development would be visible from the lake.

TOPOGRAPHY: The property sits on somewhat of a ridge with the east side of the property located near the top of the ridge and the west edge of the property located on the low side to the toe of the slope. The east side of the property is approximately 8-10 feet above the west side of the property.

FLOODPLAIN ISSUES: The southwest portion of the property is fairly low and appears to be at or below the floodplain elevation. FEMA and floodplain ordinance standards will need to be met for redevelopment on the property.

WETLAND ISSUES: The southwest portion of the property that is near the floodplain elevation may contain floodplain type wetlands.

ADDITIONAL COMMENTS ON PARCEL: The property sits on a small point/peninsula on the shoreline.

FACTS AND FINDINGS

A. Official Controls:

1. Zoning Ordinance 62 states that the shoreline setback on a general development lake is 75 feet; the applicant is requesting approval for a reduced shoreline setback of 50 feet.
2. 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.
3. Objective LU-3.3 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 somewhat unique due to the fact that it sits on a point on the shoreline.
 - a. This requires the shoreline setback to be met in multiple directions.
2. The property is located on a ridge with floodplain in the lower portions of the property.
 - a. The floodplain regulations may require development to be located on the higher portion of the property near the east property line.
3. It appears there are locations to meet the shoreline setback and avoid the floodplain.
 - a. These locations may require some excavation and fill to create a suitable building site.
4. The location near the rear of a few accessory structures and parking area on the property may be a suitable location for a replacement dwelling.
 - a. The applicant has stated that these structures would be removed after the proposed dwelling with attached garage are completed.
 - b. This location would allow the shoreline setback to be met and be located above the floodplain elevation.
 - c. This location may require some additional excavation and grading for the proposed structure, which may be necessary regardless of it the new dwelling was constructed in this location.
5. The applicant has started site prep for a garage in a location near the existing accessory structures.

- a. This area may be located below the floodplain elevation, but could be a suitable location for a dwelling as long as floodplain standards are met.
6. The property has plenty of depth to allow a dwelling and detached accessory structure to meet the required shoreline setback.
7. It does not appear that the proposed septic system would prevent the development from meeting the shoreline setback.

C. Essential Character of the Locality:

1. The majority of the development in the area appears to meet the shoreline setback, but there are a few structures that are located approximately 50 feet from the shoreline.
2. There were variances approved on two properties within this plat. The variances on one property did not include shoreline setback variances.
3. The other property had two variances approved on the property for two separate dwellings to be located at a reduced shoreline setback.
 - a. One was approved at 59 feet from the shoreline, the other was allowed at 50 feet from the shoreline.
 - b. This property consists of three platted lots.
 - c. At the time of the approval the practical difficulty indicated that there was limited area to meet the required shoreline setback.

D. Other Factor(s):

1. Although there may be some challenges with site prep, there does appear to be area on the property where a replacement dwelling could meet all requirements and setbacks.
2. St. Louis County Zoning Ordinance 62 states that it shall be the burden of the applicant to demonstrate sufficient practical difficulty to sustain the need for variance. Absent a showing of practical difficulty as provided in Minnesota Statutes and this ordinance, the Board of Adjustment shall not approve any variance.

NOTE TO PLANNERS-Add as attachments: 1. Zoning/location map 2. Air photo 3. Site sketch 4. Project picture (if applicable) 5. Other pertinent pictures or maps

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?**

RECOMMENDED CONDITIONS, IF APPROVED

In the event that the Board of Adjustment determines that the proposal meets the criteria for granting a variance to allow a nonconforming principal structure to be replaced at a reduced shoreline setback where 75 feet is required, the following conditions shall apply:

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 directly into the lake or on adjacent lots.
3. A plan to enhance vegetation and protect the shore impact zone shall be submitted, approved and implemented by the property owner prior to the issuance of a land use permit.
4. Waste shall be disposed of in a manner acceptable to St. Louis County Solid Waste Ordinance 45.
5. The requirements of the Minnesota Wetland Conservation Act shall be followed.
6. The requirements of St. Louis County Floodplain Management Ordinance 43 and FEMA floodplain standards shall be met.
7. The proposal shall adhere to all county, state and federal regulations.

**ST. LOUIS COUNTY, MN
PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT**

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

VARIANCE REQUEST PERMIT APPLICATION

General - This application is used to apply for a Land Use Permit. Applicants will need to attach the appropriate worksheet(s) in order to process. Incomplete applications will be returned. Note that the 'clock' does not begin until after payment has been processed for the application. For more information, see our website at:

www.stlouiscountymn.gov/BuildingStructures

Enter the Primary PIN and Associated PIN (if applicable) of the property to be reviewed.

PIN is found on your Property Tax Statement. For example, 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://www.stlouiscountymn.gov/explorer>

Property Lookup: <http://apps.stlouiscountymn.gov/auditor/parcelInfo2005Iframe>

Primary PIN **260-0028-00050**

Associated PINs

PIN # **260-0028-00052**

Is this application being submitted for a Rehearing?

If this application is being submitted because a previous Variance Permit application was denied or disapproved, please select Yes.

No

Enter Applicant Information

I am a: **Landowner**
Applicant Name: **Joseph Leoni**
Address Line 1: **6324 Juniper Lane**
Address Line 2: **--**
City: **Gilbert**
State: **MN**
Zip: **55741**
Primary Phone: **(218)780-5756**
Cell Phone: **--**
Fax: **--**
Email: **jleoni@trentilaw.com**
Contact Person Name: **--**
Contact Person Phone: **--**

Mailing Address Information.

This address can default from the address you selected. If the values defaulted are not correct, please enter the correct information.

Same as Applicant address? **No**

Name: **Joseph Leoni**

Address: **6324 Juniper Lane**
City: **Gilbert**
State/Province: **MN**
Zip: **55741**
Primary Phone: **--**
Cell Phone: **--**
Fax: **--**
Email: **jleoni@trentilaw.com**

Site Information

If there is no site address, the application will be forwarded to 911/Communications to assign one.

Is there a site address for this property? **Yes**

Site Address: **6324 Juniper Lane Gilbert, MN**

Is this leased property? **No**

Leased From? **--**

US Forest Service

US Forest Service
Superior National Forest
8901 Grand Avenue Place
Duluth, MN 55808

MN Power

MN Power
Shore Land Traditions
30 West Superior Street
Duluth, MN 55802

MN DNR, Area Hydrologist

MN DNR, Area Hydrologist
7979 Highway 37
Eveleth, MN 55734

MN DNR Land and Minerals

MN DNR Land and Minerals
1201 East Highway 2
Grand Rapids, MN 55744

St. Louis County - Duluth

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

St. Louis County - Virginia

St. Louis County - Virginia
Land and Minerals
7820 Highway 135
Virginia, MN 55792
(218) 749-7103

Do you have written authorization from the leased property owner?

If Yes, you must attach written authorization form.

--

How is the property accessed?

Public Road

No

No

No

No

Enter Project Information.

If you answered 'Yes' to any of the questions below, 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.

Is this project on a parcel less than 2.5 acres?

No

Is this project within 300 feet of a stream/river or 1,000 feet of a lake?

Yes

Is this project adding a bedroom?

Include home, garage, and accessory dwelling.

Yes

Total # of bedrooms on property after project completion.

4

Does this project include plumbing or pressurized water in proposed structure?

Yes

If Yes, please explain:

Well is planned

Is this project connected to a municipal or sanitary district system?

No

VARIANCE REQUEST WORKSHEET

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 Community Development 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, please check our website at: www.stlouiscountymn.gov/VarianceRequired

VARIANCE REQUEST INFORMATION

Complete this form along with the Land Use Permit Application

What kind of variance request is this?

If this is a Variance After the Fact, you must answer additional questions below.

Variance Request

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

If your proposal includes a structure, please also list the length, width and height of the structure.

When we purchased the property we believed we could remodel the existing home. It probably is not possible, so we want to tear it down and build new. The most desirable part of the property is on the point

and we want to build on the point. The remaining property is hilly and swamp.

Describe the intended/planned use of the property.

Family home.

Describe the current use of your property.

Family home.

Describe other alternatives, if any.

We have attached the other alternatives. They are to remodel the existing home, build on the existing home and this proposed plan. We had the property surveyed so it would not encroach on the 50 foot setback.

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

Excellent. There are family homes on both sides. The home will be set back from the original structure.

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

No impact. The new home will be set back.

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

The home will be outside the 50 foot setback. The original home was 25 feet from the lake.

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

A new home with a new septic will not be on the property.

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

We surveyed the property to be within the 50 foot setback. The remaining property is hilly or subject to flooding. This was confirmed by the previous owner and neighbors. This is the best and possibly only place to build a home.

IF YOU ARE RESPONDING TO A PERMIT VIOLATION, PLEASE ANSWER THESE ADDITIONAL QUESTIONS

Describe your reasons county zoning ordinance requirements were not followed.

--

Describe your effort to comply with the ordinance and to obtain a land use permit and/or other required permits.

--

Describe any substantial investments, construction and/or repairs made to the property before you discovered you needed a variance.

--

If there was construction or repair, on what date did it begin? What date did it end?

Start Date --

End Date --

Who performed the construction or repair work?

--

Was a survey of your property boundaries obtained?

--

Prior to the construction or repair work, did you speak with anyone from the Planning and Community Development Department?

--

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 result 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.

If your name, contact information or email address have changed, you should update your contact information in the portal by selecting 'Maintain Contact Information' at the top of this page.

Submitted By: --

Address: --

City: --

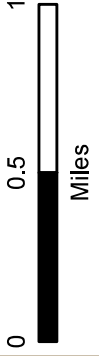
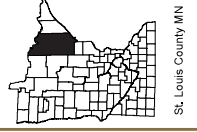
State: --

Postal Code: --

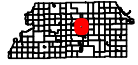
Email Address: --

I have read and agree to the statement above.

No



Joe Leoni
Location Map
PIN:260-0028-00050, 260-0028-00052



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St. Louis County

April BOA Meeting



Prepared By: **Planning & Community Development**
(216) 725-3000
www.stlouiscountymn.gov

Source: St. Louis County

Map Created: 3/15/2021

Disclaimer: This is a compilation of records as they appear in the St. Louis County Offices affecting the area shown. This drawing is to be used only for reference purposes and the County is not responsible for any inaccuracies herein contained.

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Joe Leoni
Zoning Map
PIN:260-0028-00050, 260-0028-00052

St. Louis County



Approximate
Shoreline
Setback

Approximate
Floodplain
Elevation

Site Map

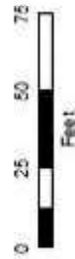
Prepared By: Planning & Community
Development
0181 725-5000
www.stlouiscounty-mo.gov

Source: St. Louis County

Map Created: 3/17/2021

Disclaimer: This is a compilation of records and maps, original to the St. Louis County Office. It is not a legal document. This drawing is for the county only for informational purposes and the County does not represent the any third-party records or maps.

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Site Map

Prepared By: Planning & Community Development
 (218) 725-5000
 www.ci.brookings.sd.us

Source: St. Louis County

Mapa Created: 3/17/2021

On October 1, 1991, a compilation of records on drug abuse in the St. Louis County Office indicated the same events. This document is to be used only for police action programs and the County is not responsible for any misinterpretation of the records.

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Site Map



Prepared By:
Planning & Community
Development
G181 725-5000
www.ci.ROSELAND.NJ.us

Source:	St. Louis County
Map Created:	3/17/2021

Declines: There is a misperception of records as they appear in the Nevada County Office, affecting the audit history. This appears to be the reason why our rate on open programs and fees. Closely to our employees, as any misperception is harmful to the unit.

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0 25 50 75
Feet





PETERSON SEPTIC DESIGN & INSPECTION LLC

PO BOX 547
BIWABIK MN 55708
218-290-6532

LICENSE # L2367

Date: 8/12/2020
INVOICE # 26

Joe Leonl
BILL TO

Date	Description	Balance	Amount
8/11/20	Holding Tank Design for 6324 Juniper Lane Gilbert MN 55741		\$ 400.00

Current	1-30 Days Past Due	31-60 Days Past Due	61-90 Days Past Due	Over 90 Days Past Due	Amount Due
					\$ 400.00

Remittance

Invoice # 26

Date

Amount Due \$ 400.00

Amount Enclosed

THANK YOU FOR YOUR BUSINESS!!

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: 8/11/20 SSTS Designer: Mark Peterson

Site Address: 6324 Juniper Lane Gilbert MN 55741 Township: Biwabik

Dwelling: ☐ Residential ☒ Seasonal/Recreational Other (identify):

Commercial System: ☐ Describe business type:

If commercial, provide: FOG: Estimated BOD: TSS:

Design Flow Dwelling

Classification (As per 7080.1860): ☒ Class I ☐ Class II ☐ Class III ☐ Class IV ☐

Total Finished Floor Area Sq Ft (if Class. II, III, IV): Total Bedrooms (include all dwellings): 2

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/ft²):

Predominate Soil Type: Inches to Redox. or Restrictive layer:

Water Meter (Y or N): Yes Buried Sewer Line Pressure Test Required (Y or N): N

SSTS Flow Description: 3000 gallon septic/pump combo tank (2000/1000)

MPCA SYSTEM TYPE: ☐ Type 1 ☒ Type II ☐ Type III ☐ Type IV ☐ 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)

Holding Tank

2000/1000

☒ New ☐ Exist

precast

YES

☐ New ☐ Exist

☐ New ☐ Exist

☐ New ☐ Exist

Sand/Rock Bedded (Y or N): Yes

Insulated (Y or N): Yes

DISTRIBUTION TO DRAINFIELD

☐ Gravity: ☐ Drop Box ☐ Distribution Box

☐ Pressure: Pump model & size:

Gallons/minute: with Ft of Head: Pump to field line diameter (inches):

Manifold diameter (inches): Manifold location: Center Feed End feed:

Number of laterals: Diameter of laterals: Lateral flush ports (Y or N):

Orifice size (inches): Spacing (inches): Orifice Shields (Y or N):

Dose Volume to network (gal): Drainback (gal): Event Counter (Y or N):

Elapsed Time Meter (Y or N): Time Dose Panel (Y or N): Specify type:

SSTS Design Summary Continued

Site Address:

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): Width by Length Total Treatment Area (sq ft):

Depth of Rock (inches): Depth of Cover (inches):

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:

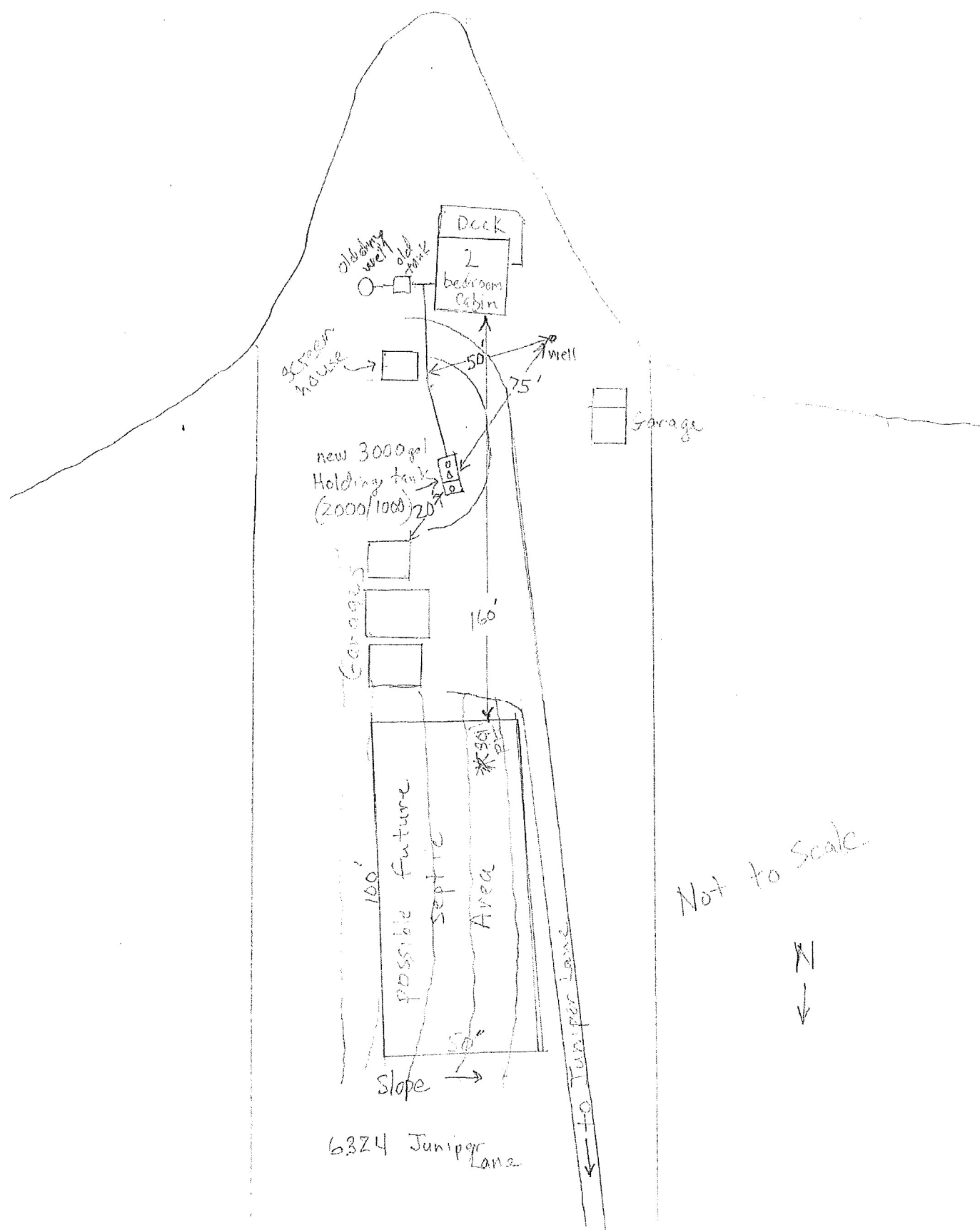
Gallons/day: Number of Units: Manufacturer:

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

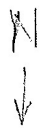
Designer's comments regarding this SSTS design: **Tank will be used temporarily until future construction is completed and then will be used as a component for a standard septic system for future home.**

Lake

Esquagama



Not to Scale



6324 Juniper Lane



Soil Observation Log

Project ID: v 04.01.2019

Client: Leoni		Location / Address: 6324 Juniper Lane Gilbert							
Soil parent material(s): (Check all that apply) <input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter									
Landscape Position: (check one) <input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input checked="" type="checkbox"/> Back/Side Slope <input type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope Slope shape									
Vegetation: Forest		Soil survey map units: Slope %: Elevation:							
Weather Conditions/Time of Day: sunny/1100		Date 08/11/20							
Observation #/Location:									
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Shape	Grade	Consistence
0-6	Loam	<35%	10YR 2/2				Granular	Weak	Loose
6-14	sand/gravel rock	35-50%	10YR 3/4				Single grain	Structureless	Loose
14-20	Silt	<35%	2.5Y 4/3	5YR 5/6	Concentrations		Prismatic	Moderate	Firm
Comments									
I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.									
(Designer/Inspector)							(Signature)		(Date)



Saint Louis County

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

Duluth: 320 W 2nd St, Suite 301, Duluth, MN 55802 (218) 725-5200

Virginia: 201 S 3rd Ave W, Virginia, MN 55792 (218) 749-0625

OPERATING PERMIT WORKSHEET

APPLICANT: Joe Leoni

DATE: 8/11/20

SITE ADDRESS: 6324 Juniper Lane Gilbert MN 55741

SYSTEM DESIGNER: Mark Peterson

Reason for Operating Permit Application:

- ☒ Holding Tank
☐ Operation and maintenance requirements
☐ Lack of expansion area
☐ Sub-standard or limited flow requirements
☐ Previous failure
☐ Commercial establishment/High Waste strength
☐ Other _____

System description:

3000 gallon 2 compartment tank (2000/1000)

Proposed maintenance requirements:

pumping as needed by a licensed pumping contractor

Frequency

as needed

Proposed monitoring requirements:

(Check all that apply)

- ☒ Incoming flows
☐ Pump run times
☐ Event counter
☐ Surface failure/noxious odors inspection
☐ Alarms

Frequency

during pumpout by service provider

Limits

End of pipe inspections

- ☐ BOD⁵
☐ TSS
☐ Fecal Coliform
☐ FOG
☐ Total Nitrogen
☐ Total Phosphorous

- ☐ General system operating condition
☐ External pumping records
☐ Other _____

OPERATING PERMIT WORKSHEET

Proposed management option:

☐ Homeowner
☐ ISTS Construction contractor: Name: _____ License # _____
☐ O&M Contractor: Name: _____ License # _____

Proposed reporting method:

☐ Internet
☒ Written report
☐ Other (specify) _____

Proposed reporting frequency:

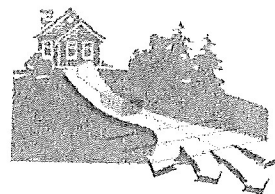
☐ Monthly
☐ Yearly
☐ Biannually
☒ Length of permit
☐ No report required

Proposed contingency plan:

Comments: _____ A signed contract with a licensed service provider required. A visual alarm
will be installed in tank and set to alarm at 75% tank capacity. A water meter will need to be installed prior to the holding
tank

Signatures:

Designer: *Mark S. Peterson* Date: 8/12/20
Homeowner: _____ Date: _____



Septic System Management Plan for Holding Tank 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 holding tank system is designed to store your used water before it is recycled back into our lakes, streams and groundwater.

This **management plan** will identify the operation and maintenance activities necessary to ensure compliance with applicable rules and regulations. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic maintainer. 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: Joseph and Terrance Leoni

Property Address: 6324 Juniper Lane Gilbert MN 55741

Property ID: 260-0028-00050

System Designer: Mark Peterson

License #: 2367

System Installer:

License #:

Service Provider/Maintainer: TBD

Phone:

Permitting Authority: St. Louis Co

Phone: 218-749-0625

Permit #:

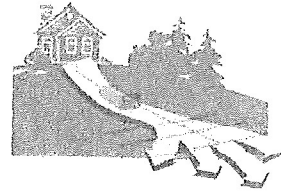
Date Inspected:

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:

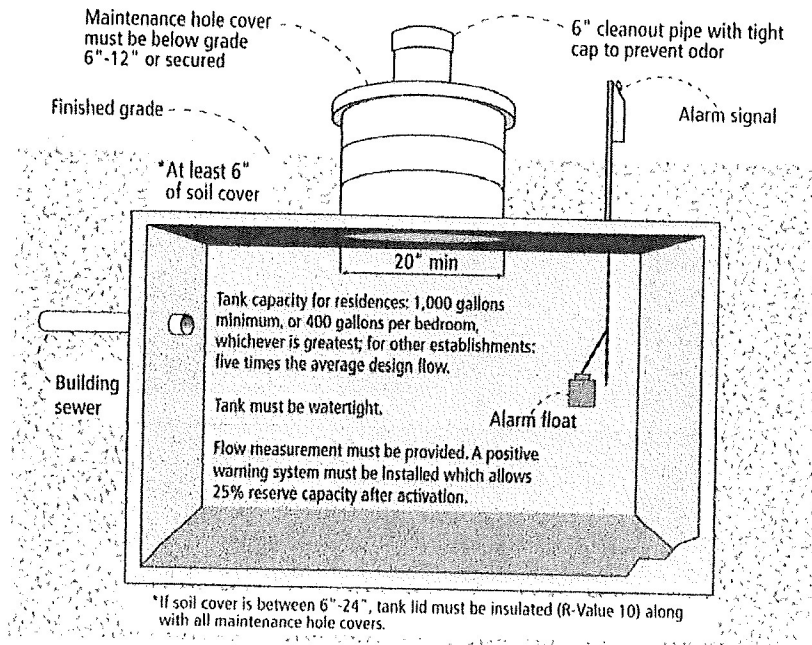
- Attach permit information, designer drawings and as-builts of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product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



Dwelling Type	Well Construction
Number of bedrooms: <u>2</u>	Well depth (ft): <u>unknown</u>
System capacity/ design flow (gpd): <u>300</u>	<input type="checkbox"/> Cased well Casing depth: _____
Anticipated average daily flow (gpd): <u>200</u>	<input type="checkbox"/> Other (specify): _____
Comments _____	Distance from septic (ft): <u>75</u>
In-home business? <u> </u> What type? <u> </u>	Is the well on the design drawing? <input checked="" type="radio"/> Y <input type="radio"/> N
Number of occupants _____	

Holding Tank	
<input checked="" type="radio"/> One tank: Tank volume: <u>3000</u> gallons	<input type="checkbox"/> Flow measurement device: <u>water meter</u>
<input type="radio"/> Two tanks: Tank volume: _____ gallons	<input type="checkbox"/> Location: <u>pedestal at tank</u>
<input type="checkbox"/> Tank is constructed of <u>concrete</u>	<input type="checkbox"/> Alarm <input checked="" type="checkbox"/> visual <input type="checkbox"/> audible
	<input type="checkbox"/> Reserve %: <u>75</u>
<input type="checkbox"/> Service contract held by: <u>TBD</u>	
<input type="checkbox"/> Service contract is attached to this management plan	



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.

Tank capacity ÷ (# of occupants X 50 Gallons/day) = # of days between cleaning

OR

Within 24 hours of alarm signal

System Designer: check every _____ days

Local Government: check every _____ days

My tank needs to be emptied
every _____ days

Seasonally

- ☐ *Monitor alarm daily* – make sure the alarm has not signaled. Alarms signal when your holding tank is nearly full; contact your maintainer.
- ☐ *Measure* and note your average daily water usage on page 5. Conserving water saves you money!
- ☐ *Leaks*. Check (listen, look) for leaks in toilets and dripping faucets. Repair leaks promptly.

Annually

- ☐ Establish a contract for tank cleaning services with a state licensed maintenance business.
- ☐ *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, discharge clear water sources to another location. Program the recharge frequency based on *water demand (gallons)* rather than *time (days)*. Recharging too frequently will result in increased pumping costs.
- ☐ *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 has clear access to the holding tank and completely empties the tank
- ☐ 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.

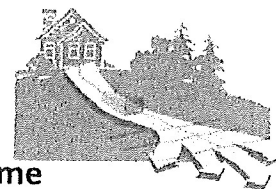
Plumbing/Source of Wastewater

- ☐ 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 frequency of maintenance.
- ☐ Review and document water usage rates with homeowner.

Holding Tanks

- ☐ *Maintenance hole 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.
- ☐ *Inspection pipes.* Replace damaged caps.
- ☐ *Alarm.* Verify that the alarm works and that there is at least 25% reserve capacity.
- ☐ *End of year seasonal property pumping.* Remind homeowner of most frequent causes of tank and building sewer freeze-ups. Ensure that there are no "micro-sources" of water such as a high efficiency furnace or other dripping devices. Determine a logical winter water use plan that will not result in need for emergency visit(s).

All other components – inspect as listed here:



Water-Use Appliances and Equipment in the Home

Appliance	Impacts on Holding Tank	Management Tips
Garbage disposal	<ul style="list-style-type: none"> Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> Use of a garbage disposal is not recommended. Minimize garbage disposal use. Compost instead.
Washing machine	<ul style="list-style-type: none"> Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> Choose a front-loader or water-saving top-loader, these units use less water than older models. Wash only full loads. Do laundry off site.
Dishwasher	<ul style="list-style-type: none"> Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> Wash only full loads.
Large bathtub (whirlpool)	<ul style="list-style-type: none"> Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> Take short showers to conserve water.
Clear Water Uses	Impacts on Holding Tank	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 holding tank.
Water softener Iron filter Reverse osmosis	<ul style="list-style-type: none"> Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> These sources produce water that is not sewage and should not go into your holding tank. Reroute water from these sources to another outlet, such as a dry well, drain tile or old drainfield. 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
Surface drainage Footing drains	<ul style="list-style-type: none"> Uses water and increases pumping frequency and expense. 	

Maintenance Log

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

Activity	Date accomplished/measured water usage									
<i>Check daily for a period of time and weekly once average use is determined:</i>										
Water usage rate (gallons per day)										
Leaks: check for plumbing leaks										
<i>Annually:</i>										
Establish and maintain contract for holding tank pumping services										
Water use appliances – review use										



Water Meter Reading and Tank Evacuation Schedule			
Date	Water Meter Reading (in gallons)	Tank Contents Removed?	Total Gallons Removed

Notes:

Mitigation/corrective action plan:

"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."

Property Owner Signature:

Date

Management Plan Prepared By: **Mark Peterson**

Certification # 6536

Permitting Authority: **St. Louis Co**



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): **260 - 0028 - 00050**

#:

- -

#:

- -

Parcel ID #(s): - -

#:

- -

#:

- -

☐ Check here to request a 911 address number and sign for this site. Information at: www.stlouiscountymn.gov/departments-a-z/sheriff/emergency

Applicant Name (property owner)

Applicant Name (if other than owner)

Site Address

City

MN Zip

Acreage:

Lot Size:

Township
Name:

Sec

Tw

Rge

Legal Description or Plat Name/Block #/Lot #:

OWNER'S CONTACT INFORMATION:

Send the Permit by: ☐ Mail; or ☐ Email address:

Other:

Name (if different than above):

Primary Phone:

Secondary Phone:

Mailing Address (if different than above)

City

ST Zip

PERMIT APPLICATION IS FOR:

☐ New SSTS

☒ Replacing the Existing SSTS. Why: **def. failure**

☒ Point of Sale Requirement

☒ Holding Tank

☐ Component Addition or Replacement

☐ Greywater without Pressure

☐ Greywater with Pressure

☐ Privy (Outhouse)

☐ Privy & Greywater without Pressure

☐ SSTS Variance

☐ Commercial SSTS

SITE INFORMATION: (Check all that apply)

☐ Yes ☒ No Has this parcel been divided recently? Or in the process of being divided? When:

☒ Yes ☐ No Is this project within 1,000 ft of a lake or 300 ft of a river? **Lake/River Name: Esquagama**

☐ Yes ☒ No Is the property connected to a CIC (Common Interest Community)? If yes, include the Associated PIN on this Application.

☐ Yes ☒ No Is this serving multiple dwellings sharing a SSTS component? If yes, explain:

☐ Yes ☒ No Is this leased property? If yes, you must obtain & attach the Lessor's written authorization for this project.

Leased From: ☐ MN Power ☐ SLC Land & Minerals Dept. ☐ MN DNR ☐ US Forest Service ☐ Other

COMPLETE NEXT PAGE: (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 #

Amt Paid

Paid by

Date RIO

Rev Code

Cash

Check #:

Recd By

☐ Mail

☐ IP



SSTS Construction Permit Application

Subsurface Sewage Treatment System

St. Louis County, MN

Licensed Business or Certified Individual Name: Peterson Septic Design and Inspection LLC		Lic. # 2367	Cert. # 6536								
(Privies do not require a licensed designer)											
Designer's comments to Onsite Wastewater 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: 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 type="checkbox"/> Single 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"/> 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 checked="" type="checkbox"/> Cabin or RV	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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:

FEE:

DATE:

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:

Planning & Community Development
Onsite Wastewater Division
Duluth Government Services Center
320 W 2nd St, Suite 301
Duluth, MN 55802
Phone 218-725-5200

www.stlouiscountymn.gov/septic

Virginia Office:

Planning & Community Development
Onsite Wastewater Division
Virginia Government Services Center
201 So 3rd Ave W
Virginia, MN 55792
Phone 218-749-0625

www.stlouiscountymn.gov/septic