



# ST. LOUIS COUNTY BOARD OF ADJUSTMENT STAFF REPORT

Case: 6274

**INSPECTION DATES:** 7/12 & 7/20/2021

**REPORT DATE:** 8/18/2021

**MEETING DATE:** 09/09/2021

## APPLICANT INFORMATION

**APPLICANT NAME:** Jim and Carol Nelson

**APPLICANT ADDRESS:** 7000 Bear Island Rd, Duluth MN 55803

**OWNER NAME:**  
(IF DIFFERENT THAN ABOVE)

**SITE ADDRESS:** 7000 Bear Island Rd, Duluth MN 55803

**LEGAL DESCRIPTION:** SW 1/4 OF NE 1/4 LEASE #03-01 MP 365-10-150 S02, T52N, R15W (Fredenberg)

**PARCEL IDENTIFICATION NUMBER (PIN):** 365-0010-00150

**VARIANCE REQUEST:** The applicant is requesting relief from St. Louis County SSTS Ordinance 61 adopted Technical Standards 7080.2150, Subpart 2, Section F, Table VII, to allow a subsurface sewage treatment system installation at a reduced shoreline setback.

**PROPOSAL DETAILS:** Existing building sewer line currently exits the dwelling on the north/lake side to failing drywells located less than 40 feet from the lake. The proposed SSTS replacement design would have a lift station that encroaches on the lake setback and placed at 40 feet, while maintaining building and well setbacks. The lift station will pump the sewage effluent to septic tanks that meet all setbacks and design requirements.

## PARCEL AND SITE INFORMATION

**ROAD ACCESS NAME/NUMBER:** Bear Island Rd

**ROAD FUNCTIONAL CLASS:** Local Public

**LAKE NAME:** Island Lake

**LAKE CLASSIFICATION:** RD

**RIVER NAME:** N/A

**RIVER CLASSIFICATION:** N/A

**DESCRIPTION OF DEVELOPMENT ON PARCEL:** The design is for a year round dwelling with an accessory dwelling and additional accessory structures.

**ZONE DISTRICT:** SMU 7

**PARCEL ACREAGE:** ~2.5

**LOT WIDTH:** 245 feet

**FEET OF ROAD FRONTAGE:** 255 FEET

**FEET OF SHORELINE FRONTAGE:** 285 FEET

## PARCEL AND SITE INFORMATION

**VEGETATIVE COVER/SCREENING:** Lawn and mature tree growth near property lines, shallow line between dwelling and lake, and along driveway / road access.

**TOPOGRAPHY:** Flat lawn (where lift station is requesting to be) to steep slope to lake.

**FLOODPLAIN ISSUES:** Steep slopes along lake – this will not be in the floodplain.

**WETLAND ISSUES:** N/A

**ADDITIONAL COMMENTS ON PARCEL:**

## FACTS AND FINDINGS

### A. Official Controls:

1. Ordinance 61 states that all ISTS components must be setback in accordance with Table VII of the SSTS Technical standards and the setback requirements on the MN Shoreland Rules. The required setbacks are 75 feet from the shoreline for this Recreational Development classification of Lake.
2. The applicant is requesting a reduced setback at 40 feet to lake.

### B. Practical Difficulty:

1. The building sewer line exits on the lake shore site. Behind the building is high soils, the sides have existing deck structures, and the well is also located on one side.
2. The alternative is replumbing the dwelling so the building sewer line exits within setback, however, existing structure would have to be altered/removal of decks. Additionally, the high soils behind the dwelling and to the sides would require extensive digging and terrain alterations that may cause damage to a larger area of soils than the proposed alternative – including the proposed treatment area.

### C. Essential Character of the Locality:

1. The area is characterized by well-established development.

### D. Other Factor(s):

1. The landowner has met the burden of request by having a designer on site to plan the proposal and provided the burdens of alternative plumbing arrangements.

**See 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?**

## **CONDITIONS**

Conditions that may mitigate the variance for a subsurface sewage treatment system installation at a reduced shoreline setback as proposed, include but are not limited to:

1. All other on-site wastewater SSTS standards shall be met.
2. Following system install, the final inspection by Qualified Inspector of St. Louis County Onsite Wastewater Division of Planning and Community development shall ensure the setback of 40 feet from tank to lake was met prior to issuing Certificate of Compliance.
3. All other local, county, state and federal regulations shall be met.

**ST. LOUIS COUNTY, MN  
PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT  
(On-Site Wastewater Division)**

**Duluth**

Government Services Center

320 West 2nd Street, Suite 301

Duluth, MN 55802

Phone (218) 725-5200

Toll Free (800) 450-9278

**Virginia**

Government Services  
Center

201 South 3rd Avenue West

Virginia, MN 55792

Phone (218) 749-0625

Toll Free (800) 450-9278

**Permit Construction Application Subsurface Sewage Treatment System**

## General

- This permit application form is used to apply for a Permit to Construct. Additional information:

[www.stlouiscountymn.gov/septic](http://www.stlouiscountymn.gov/septic)

**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

**365-6000-01900**

Associated PINs

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## Enter Applicant Information

I am a:

**Landowner**

Are you an LLC  
Business?

**No**

Applicant Name:

**Jim & Carol Nelson**

Address:

**7000 Bear Island Rd**

--

City:

**Duluth**

State:

**MN**

Zip:

**55803**

Primary Phone:

--

Mobile Phone:

--

Email:

--

Preferred Contact

**Any**

Method:

Contact Person Name:

--

Contact Person Phone:

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## Property Owner Name and Contact Information.

If the property owner information we have on file is not correct, please enter the current owner information.

Property Owner Name: **Jim & Carol Nelson**



Site Address:	<b>7000 Bear Island Rd</b>
	--
City:	<b>Duluth</b>
State/Province:	<b>MN</b>
Zip:	<b>55803</b>
Primary Phone:	--
Mobile Phone:	--
Email:	--
Preferred Contact Method:	<b>Any</b>
Contact Person Name	--
Contact Person Phone	--

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## 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 Property address?	<b>No</b>
Same as Applicant address?	<b>No</b>
Name:	<b>Jim &amp; Carol Nelson</b>
Address:	<b>7000 Bear Island Rd</b>
	--
City:	<b>Duluth</b>
State/Province:	<b>MN</b>
Zip:	<b>55803</b>
Primary Phone:	--
Mobile Phone:	--
Email:	--

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## SITE INFORMATION

Enter Site information

Do you need to request a 911 address number and sign?	<b>No</b>
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Is this a leased property?	<b>Yes</b>
Leased From?	<b>MN Power</b>

Reference the Land Use Permit to list this information, 6 addresses below:

<b>US Forest Service</b>	US Forest Service Superior National Forest 8901 Grand Avenue Place Duluth, MN 55808
<b>MN Power</b>	Shore Land Traditions 30 West Superior Street Duluth, MN 55802
<b>MN DNR, Area Hydrologist</b>	MN DNR, Area Hydrologist 7979 Highway 37 Eveleth, MN 55734

<b>MN DNR Land and Minerals</b>	MN DNR, Land and Minerals 1201 East Highway 2 Grand Rapids, MN 55744
<b>St Louis County Land &amp; Minerals - Duluth</b>	320 West 2nd Street Suite 302 Duluth, MN 55802 Phone: (218) 726-2606
<b>St. Louis County Land &amp; Minerals - Virginia</b>	7820 Highway 135 Virginia, MN 55792 Phone: (218) 742-9898

**Do you have written authorization from the lease property owner?**

**Yes**

**Is this for Residential or Commercial?**

**Residential**

**Is the property used year round or used seasonally?**

**Year round**

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

**Yes**

River/Lake Name **Island Lake**

**Is this property connected to a Common Interest Community?**

**No**

**Is this serving multiple dwellings sharing a SSTS component?**

**No**

**Is this related to a Point of Sale Requirement?**

**No**

**Is the SSTS located in a floodplain?**

**No**

## **APPLICATION REASON**

What are you applying for? **New SSTS**

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## **RESIDENTIAL WORKSHEET**

**Select the System Type**

### **Type I System**

"Type I System" means an ISTS that follows a standard trench, bed, at-grade, mound, or graywater system design in accordance with MPCA rules, Minnesota Rules, Chapter 7080.2200 through 7080.2240.

**Yes**

System Type **Mound**

### **Type II System**

"Type II System" means an ISTS with acceptable modifications or sewage containment system that may be permitted for

use on a site not meeting the conditions acceptable for a standard Type I system. These include systems on lots with rapidly permeable soils or lots in floodplains and privies or holding tanks.

**No**

### **Type III System**

"Type III System" means a custom designed ISTS having acceptable flow restriction devices to allow its use on a lot that cannot accommodate a standard Type I soil treatment and dispersal system.

**No**

### **Type IV System**

"Type IV System" means an ISTS, having an MPCA registered pretreatment device and incorporating pressure distribution and dosing, that is capable of providing suitable treatment for use where the separation distance to a shallow saturated zone is less than the minimum allowed.

**No**

### **Type V System**

"Type V System" means an ISTS, which is a custom engineered design to accommodate the site taking into account pretreatment effluent quality, loading rates, loading methods, groundwater mounding, and other soil and other relevant soil, site, and wastewater characteristics such that groundwater contamination by viable fecal coliforms is prevented.

**No**

## **WELL INFORMATION**

Enter information about the well.

**Do you have a proposed water source?**

**No**

**Enter # of existing water sources on the property**

**1**

After completing the following information for the 1st water source, please use the Add Another Water Source button to add the additional water source(s) information.

Water Source Type	<b>Well</b>
Well #	--
Well Depth (Feet)	--
Case Depth (Feet)	--
Well Type	--

## **DESIGNER & INSTALLER INFORMATION**

**Select the Designer**

Licensed Business Name or Designer Name	<b>Lakehead Trucking, Inc.</b>
License #	<b>1540</b>
Certification #	--

Designer's Comments    --  
(To On-Site Wastewater  
Staff)

**Select the Installer (if known)**

Licensed Business    --  
Name or Installer Name  
License #    --  
Certification #    --  
Installer's Comments    --  
(To On-Site Wastewater  
Staff)

## STRUCTURE - RESIDENTIAL

Enter Building Type and Water Uses  
Home, mobile home, hunting shack, cabin, RV  
Dwelling    **Yes**

Dwelling  
# of Bedrooms    **3**  
Plumbing    **Yes**  
Basement Plumbing    **Yes**  
Garbage Disposal    **No**  
Clothes Washer    **Yes**  
Dishwasher    **Yes**  
Water Conditioning Unit    **No**  
Furnace w/Humidifier    **No**  
Bathtub > 40 gal.    **No**  
Sewer Grinder Pump    **No**  
Multi-Family    **No**  
Accessory Dwelling    **No**  
Accessory Structure    --  
w/water  
Other    **No**

**Other information to be considered for this application**

--

**Will this project require a Septic Variance?**  
**Yes**

## VARIANCE WORKSHEET

Enter Variance information. About SSTs Variances Pursuant to Ordinance 61, Article V, Section 3.0 A property owner may request a variance from the standards specified in the Ordinance pursuant to county policies and procedures. Variances shall only be permitted when they are in harmony with the general purposes and intent of this Ordinance where there are practical difficulties or particular hardship in meeting the strict letter of this Ordinance, excluding the technical standards. Certain deviations may require the approval of the MPCA or the MN Department of Health.

Describe the specific provision(s) in the ordinance from which the variance is requested.

**Septic tank can't meet 75' setback from lake**

Describe the practical difficulty that prevents compliance with the rule.

### **Sewer pipe exits house under basement towards lake**

Describe the alternative measures that will be taken to achieve a comparable degree of compliance with the purposes and intent of the applicable provisions.

**Install lift station and pump to tanks >75' from lake. We will maximize setback with lift station >40' from lake.**

Identify cost considerations preventing reasonable use of the property under the terms of this ordinance

**In order to meet setback, floor would need to be removed in basement and house would need to be replumbed.**

## **OFFICE USE ONLY**

ES Area	<b>JW</b>
Office	<b>Duluth</b>
Section	<b>2</b>
Township	<b>52</b>
Range	<b>15</b>
Variance Department Recommendation	<b>--</b>

### **Specify reasons for recommendation:**

Hint: (Reference pertinent sections of the Ordinance and ISTS Construction Standards)

	<b>--</b>
Hearing Info. and Outcome	<b>--</b>
Board of Adjustment Hearing Date	<b>9/9/2021</b>
Permit #	<b>--</b>
Variance Granted	<b>--</b>
Case #	<b>6274</b>

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## **VARIANCE AGREEMENT**

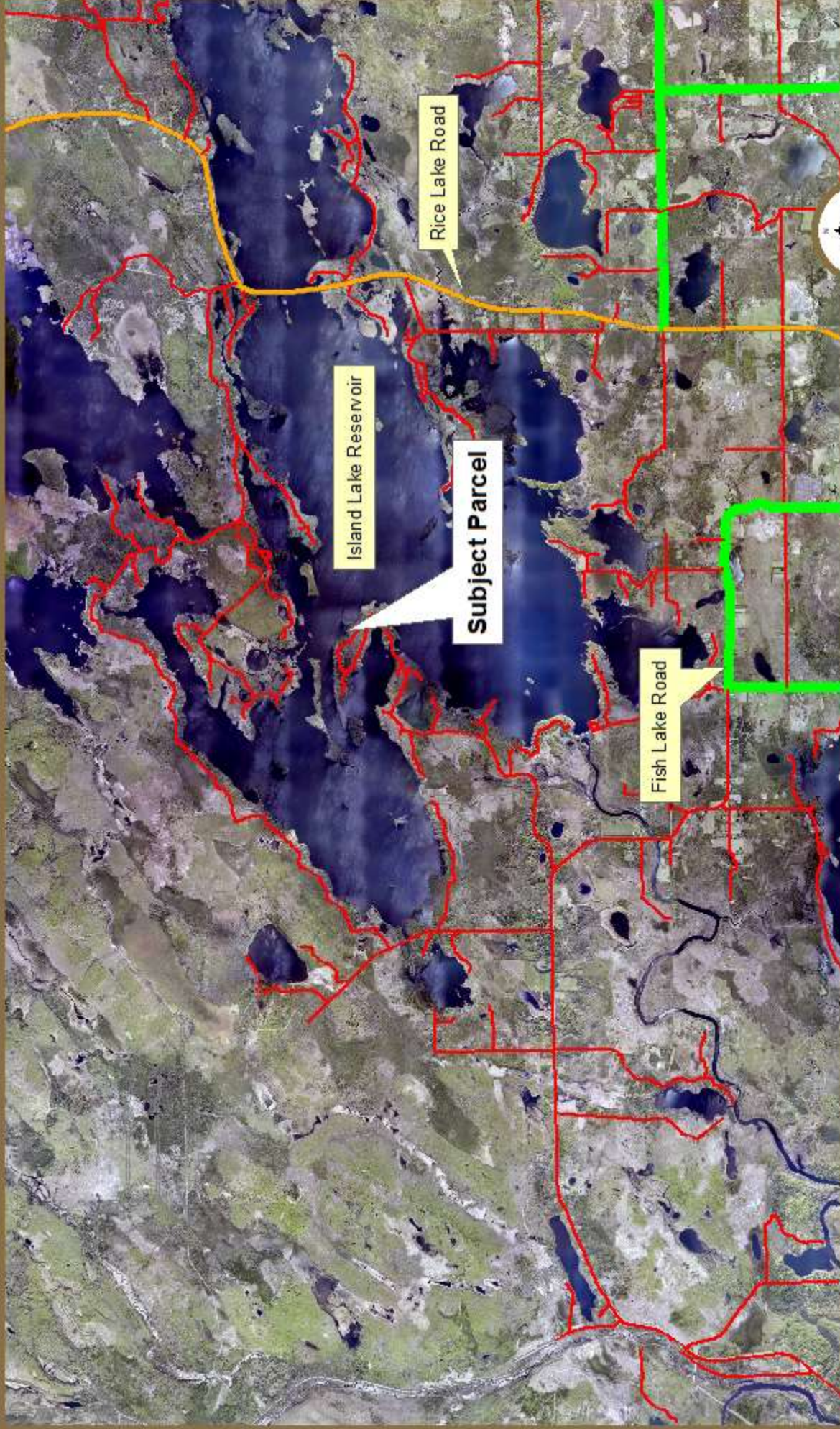
By submitting this request for variance from the Ordinance and the Construction Standards, I certify and agree that no substantial health hazard is likely to occur therefrom and an unnecessary hardship might result in strict compliance with the Ordinance and Standards.

I further agree to install a sewage treatment system in accordance with the permit application, plans, and specification that are made as part of this variance request, in addition to paying the Variance Fee associated with this request.

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# St. Louis County



Prepared By: Planning & Community Development

(216) 725-3000

[www.stlouiscountytn.gov](http://www.stlouiscountytn.gov)

Source: St. Louis County

Map Created: 8/23/2021

Disclaimer: This is a compilation of records as they appear in the St. Louis County Office's official records. 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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## Jim & Carol Nelson

### Location Map

PIN: 365-6000-01900





# St. Louis County



**Jim & Carol Nelson**

Zoning Map

PIN: 365-6000-01900



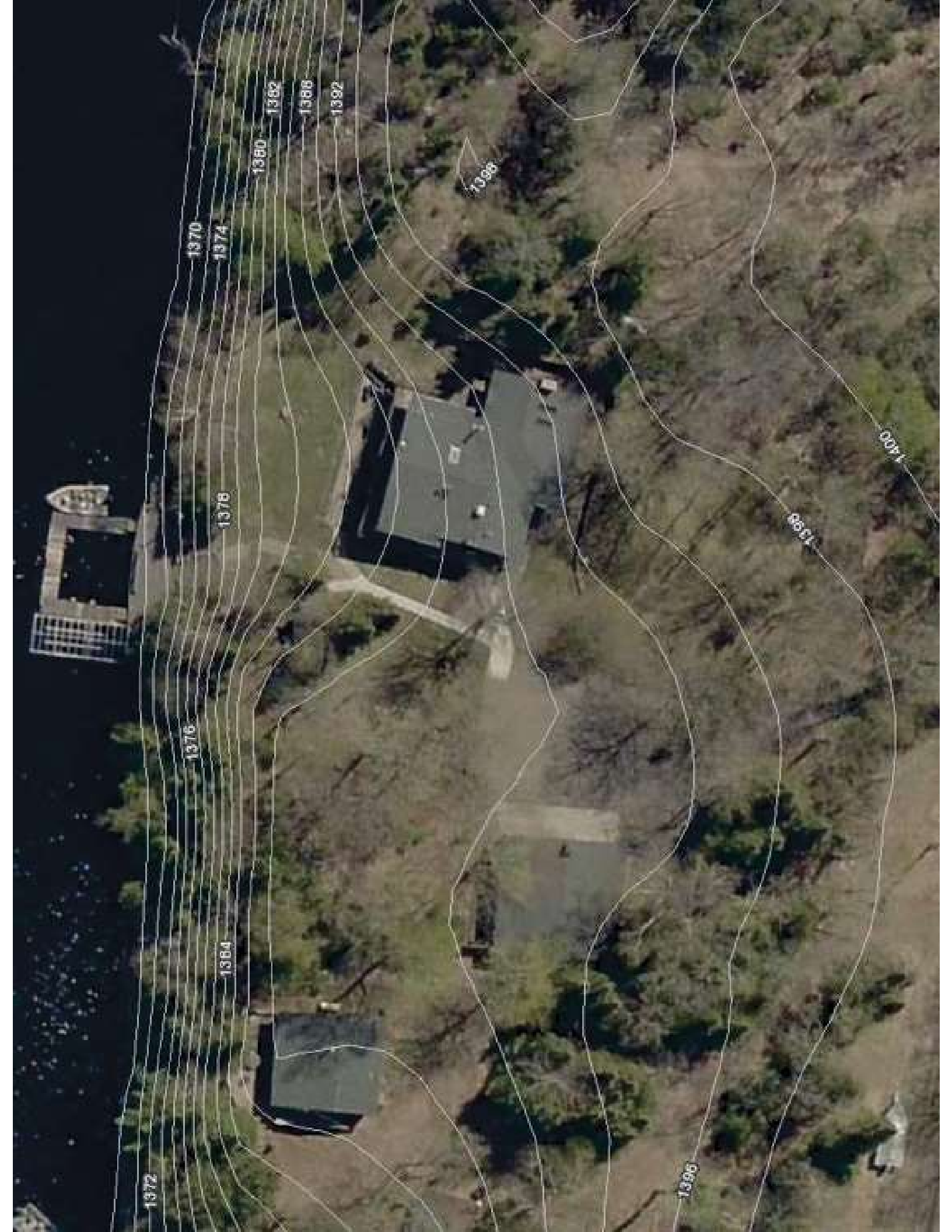
Prepared By: Planning & Community Development  
2161 725-3000  
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Sewage Tank location







Sewage Tank

Septic Tank

Pump Tank

Well

Drainfield











