

# Goodhue County Land Use Management

Goodhue County Government Center | 509 West Fifth Street | Red Wing, Minnesota 55066



Building | Planning | Zoning  
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Environmental Health | Land Surveying | GIS  
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**To:** Board of Adjustment  
**From:** Land Use Management  
**Report Date:** October 14, 2016  
**Meeting Date:** October 24, 2016

## **Application Information:**

Applicant: Noah Knudsen  
Address of Zoning request: 29013 Westervelt Ave., Frontenac MN 55026  
Zoning district: R1  
Township Information: the Township has not signed the application and has no comments.

## **Attachments:**

Site Map  
Applicant Statement  
Goodhue County Zoning Ordinance: MN Rules 7080  
Applicant note  
Drawn site map

**Notice:** Variance request from the MN Rules 7080 Front Yard setback requirement of 10 feet from the property line, to place a septic system up to the lot line at 29013 Westervelt Ave.; Lot 1 Block 69 & Northerly 25 feet of lot 2 Town of Frontenac in Florence Township.

**Background:** The purpose of this variance is to allow the replacement of the septic system on parcel 32.130.2020. Parcels under MN Rules 7080 are required to maintain a 10 foot minimum setback from the lot line. The Applicant is requesting to go up to the rear and side lot lines to place the drain field.

**Well and Septic Inspector comments:** Environmental Health supports the variance pending approval of the septic design.

## **Findings of Fact:**

Before any such variance may be granted, the Board of Adjustment shall specify in their findings, the facts in each case. Variances shall only be permitted when:

- 1) They are in harmony with the general purposes and intent of the official control;  
**The intent of the MN Rules 7080 is to protect the Applicant's and neighboring dwellings' from being compromised by the septic drain field. Allowing the variance for the septic to be place as shown on the attached deign will protect the Applicant's and the neighbors' because**

**this placement keeps the drain field away from the Applicant's home and the neighboring homes are far enough away to the proposed site.**

- 2) The variances are consistent with the comprehensive plan;  
**The proposed variance that would allow the applicant to conform with State and County Wastewater Treatment Rules would be consistent with the intent of the 2016 Comprehensive Plan.**
- 3) There are practical difficulties in complying with the official control. "Practical difficulties," as used in connection with the granting of a variance, means that the property owner proposes to use the property in a reasonable manner, not permitted by an official control. Economic considerations alone do not constitute practical difficulties.  
**The intent of the provision is to allow the safe construction and placement of septic systems within the properties Goodhue County. A denial of the variance would result in the loss of occupancy for the Applicant's dwelling or requiring a financially infeasible septic design.**
- 4) The plight of the landowner is due to circumstances unique to the property not created by the landowner; and  
**The Applicant purchased a normal lot typical of the Old Frontenac neighborhood in Florence Township and the existing septic system is at the end of its natural usage. Many lots Old Frontenac are substandard and improvements to bring existing wastewater treatment system into compliance may require encroachment into the MN Rule 7080 side and rear yard setbacks.**
- 5) The variance, if granted, will not alter the essential character of the locality.  
**The surrounding neighborhood's character will not change. There will only be minor disruption to the soils.**
- 6) No variance may be granted that would allow any use that is not allowed in the zoning district in which the subject property is located.  
**There is no use change.**
- 7) The Board of Adjustment may impose conditions in the granting of variances. A condition must be directly related to and must bear a rough proportionality to the impact created by the variance.  
**If the variance is approved than, in accordance with this provision, the Board of Adjustment will include five conditions to ensure implementation of the proposed variance is completed consistent with the Board's action and other applicable rules and regulations.**

*The following should be edited to reflect any concerns raised at the October 24, 2016 BOA meeting and public hearing:*

**Staff Recommendation:**

Staff recommends the Board of Adjustment

- Adopt the staff report into the record (dated October 14, 2016);
- Adopt the findings of fact; and
- Based on the application, testimony, exhibits, and other evidence presented:

APPROVE the variance request Noah Knudsen from the MN Rules 7080 Front Yard setback requirement of 10 feet from the property line, to place a septic system up to the lot line at 29013 Westervelt Ave.; Lot 1 Block 69 & Northerly 25 feet of lot 2 Town of Frontenac in Florence Township;

Subject to the following conditions:

1. Conformance with the application submitted to Goodhue County Land Use Management Office dated September 14, 2016,
2. Compliance with all necessary State and Federal permits and licensing,
3. Compliance with the Environmental Health Inspectors expectations for a septic system site design
4. To encroach on the rear and side yard lot lines as least as possible
5. Retaining the service of a Registered Land Surveyor to stake the corners of the lot so not to cross over the lot line onto the neighbor's yard

APPLICATION FOR

# Variance



VARIANCE NUMBER:  
For Staff Use only

\$350 RECEIPT# 15537 DATE 9/14/2016

### 1. Owner/Applicant Information

PROPERTY OWNER'S NAME:

Noah Knudsen

PROPERTY OWNER'S ADDRESS:

29013 Westervelt Ave.  
Frontenac, MN 55026

TELEPHONE:

EMAIL:

APPLICANT OR AUTHORIZED AGENT'S NAME:

Same as Above

APPLICANT'S ADDRESS:

TELEPHONE:

( )

EMAIL:

CONTACT FOR PROJECT INFORMATION:

Same as Above

ADDRESS:

TELEPHONE:

( )

EMAIL:

### 2. Location and Classification

STREET ADDRESS OF PROJECT:

SAME AS ABOVE

ZIP CODE:

LEGAL DESCRIPTION:

Attached

PID#: \_\_\_\_\_ IF YOU ARE NOT SURE OF THE EVENTUAL SIZE OF THE FINAL PROJECT, PROVIDE THE MAXIMUM ESTIMATES  
ZONING DISTRICT \_\_\_\_\_ LOT AREA (SQ FT): \_\_\_\_\_ LOT DIMENSIONS \_\_\_\_\_ STRUCTURE DIMENSIONS (if applicable): \_\_\_\_\_

( Please check all that apply )

ADDITIONS TO BUILDING:

PRESENT OR PREVIOUS USE:

- New Building on vacant land
- New Addition to existing building
- Animal Building
- Storage building
- Rear
- Front
- Side
- Other Please clarify

PROPOSED USE:

BUILDING APPLICATION PERMIT NO.: (if filed)

DATE FILED:

TOWNSHIP:

By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the variance request.

Attached

TOWNSHIP OFFICAL'S PRINTED NAME AND TITLE

TOWNSHIP OFFICAL'S SIGNATURE

DATE

### 3. Applicant's Affidavit

Under penalty of perjury the following declarations are made:

1. The undersigned is the owner or authorized agent of the owner of this property.
2. The information presented is true and correct to the best of my knowledge.
3. If I am unable to be present at the meeting where my request is decided, I agree to accept the Notice of Decision by certified USPS.
4. Other information or applications may be required.

Signature: \_\_\_\_\_

Date: 9-14-16

Print name: Noah Knudsen

owner or authorized agent (circle one)

Project Summary (Attach a separate sheet if more space is needed)

Please state which section(s) of the Ordinance from which you are requesting a variance.

setback for Drainfield

### Variance Findings

Pursuant to Goodhue County Zoning Ordinance Article 5, before approving a variance application, the Board of Adjustment needs to find that the facts presented are such to establish the findings stated below. In the space below and on separate paper, if necessary, please present facts sufficient to establish each finding. The Board of Adjustment may grant a variance only if the variance request complies with each and every one of these findings in full. The responsibility for completing the variance questionnaire rests solely with the applicant. If the description of how the project meets all of the criteria are not fully supported with written information and appropriate drawings or pictures, the Board may find the information insufficient and the criteria are not satisfied.

Please state how the project is consistent or inconsistent with each policy. Each statement should refer to specific circumstances or conditions applicable to the property. Each policy must have a response. IF A GIVEN POLICY DOES NOT APPLY TO YOUR PROJECT, EXPLAIN WHY IT DOES NOT.

1. What are the special circumstances of the proposal site which distinguish it from nearby properties with the same zoning? (relating to size, shape, topography, location, surroundings and features of the subject property).

Small lot size with very little room to install drain field on margin ground.

2. Who or What created the circumstances?

failed system

3. What is the character of the area (ie- rural, residential, agricultural, commercial, etc. ) and how is the request consistent with this character?

Residential

4. Describe how the rules in the zoning ordinance deprive you of rights commonly enjoyed by other properties in the same zoning district.

extra room needed

5. Indicate why the requested variance will not result in your receiving any special privileges that are denied by the zoning ordinance to others in the same zoning district.

others in old frontenac have same issues / small lot

6. Is the proposed variance the minimum amount necessary to allow a reasonable use of the property? Please, explain.

0' setback on property line

7. Is the sole reason for the proposed variance based on a desire of the owner, occupant, or applicant for increased financial gain or reduced financial hardship? Please explain.

no financial reason, just space needed for drain field

Dear Board of Adjustment,

We are writing to share with you the details of our current situation in order to request that you would grant a variance to reduce the property line setback to zero feet for our proposed new septic drain field. Our home is in Old Frontenac. We have a small lot, as is common in our village. Currently, the failed drain field runs through the center of our backyard. Approving a zero property line setback for the new drain field would allow us to run the new system in an L shape around the exterior of the yard, therefore avoiding disruption of the old drain field. The new system would be placed between the property line and the failed drain field as seen in the attached design drawing of our current/proposed layout. If you have any further questions feel free to contact Noah via mobile phone at [REDACTED] Thank you for your consideration!

Noah & Stephanie Knudsen and family  
29013 Westervelt Ave. Way W.  
Old Frontenac, MN 55026



# INDIVIDUAL SEWAGE TREATMENT SYSTEM

## Goodhue County Environmental Health Department

509 W 5th Street - Red Wing, MN 55066  
(651) 385-6132

### LOCATION:

Owner's Name: Noah Knudsen Photo: [Redacted]

Mailing Address: 29013 Westerveltway City: Frontenac Zip: 55026

Siteloation: same

PARCEL#: 32 130 2020 Is this property a split:  Yes  No

### Construction Proposed:

New Construction  Replacement System  Repair  
 House  Other \_\_\_\_\_ \*Number of Bedrooms 3

\*See Minnesota Rules Chapter 7080.110 Subpart 9.

Washing Machine  Garbage Disposal\*  Whirlpool Tub  
 Water Softener  Dishwasher  Self Cleaning Humidifier

\*If garbage disposal is installed a two compartment septic tank or two septic tanks must be used

### Tank And Treatment System:

The capacity of each septic tank is 1000 and \_\_\_\_\_ Lift Tank: 750

### Type of Treatment System Used (check the system & the type):

Trench  Mound  Holding Tank only  Other Establishment  
 Chamber  Bed  Other  New Technology

Total square footage to be installed: \_\_\_\_\_ Attach worksheets.

Rock under pipe: 6 inches. Lineal feet of 3' wide trenches \_\_\_\_\_

### SITE INFORMATION:

Date of Site Evaluation: 8-29-16

Slope % 1 Vegetation Type: lawn Landscape Position: \_\_\_\_\_

Depth of Restricting Layer: 48 Maximum Depth of Soil Penetration: 12

Disturbed or Compacted?  Yes  No Access for Tank Maintenance Provided:  Yes  No

Flood Plain?  Yes  No Shoreland?  Yes  No

### Soil Type:

Coarse Sand  Fine Sand 1.67  Loam 1.67  Clay Loam 2.20  
 Sand 0.83  Sandy Loam 1.27  Silt Loam 2.00

### Well Information:

New Well: \_\_\_\_\_ Existing Well: \_\_\_\_\_ Distance to Tank & Drainfield: 50+

Water test submitted  yes  No (Existing Dwelling only)

\*Attach all worksheets, drawings and soil boring logs

### Notice and Signature:

This information will be used to determine conformity to adopted construction requirements and to facilitate storage and retrieval of records. Failure to provide all requested information may result in the denial of a permit. All information submitted as part of this application is deemed public information and is available to anyone upon request.

Pipe Layer Certification Number: [Redacted]

Installer's Name: Trenton Witmer MPCA# C9510 Phone #: [Redacted]

Address: 39523 240<sup>th</sup> ave City: Goodhue MN Zip: 55027

Designer's Name: Trenton Witmer MPCA# C9510 Date: 9-6-16

### FOR OFFICE USE ONLY

ISTS Permit # \_\_\_\_\_

Approved by: \_\_\_\_\_

\*\*Date: \_\_\_\_\_

Receipt # \_\_\_\_\_ Amount \$ \_\_\_\_\_

Comments: \_\_\_\_\_

Variance?  Yes  No

\*\* permit is valid for 1 year from date of issue.  
\*\*this permit is non-transferable.

Soils Verified  Yes  No

### Water Usage Per Day

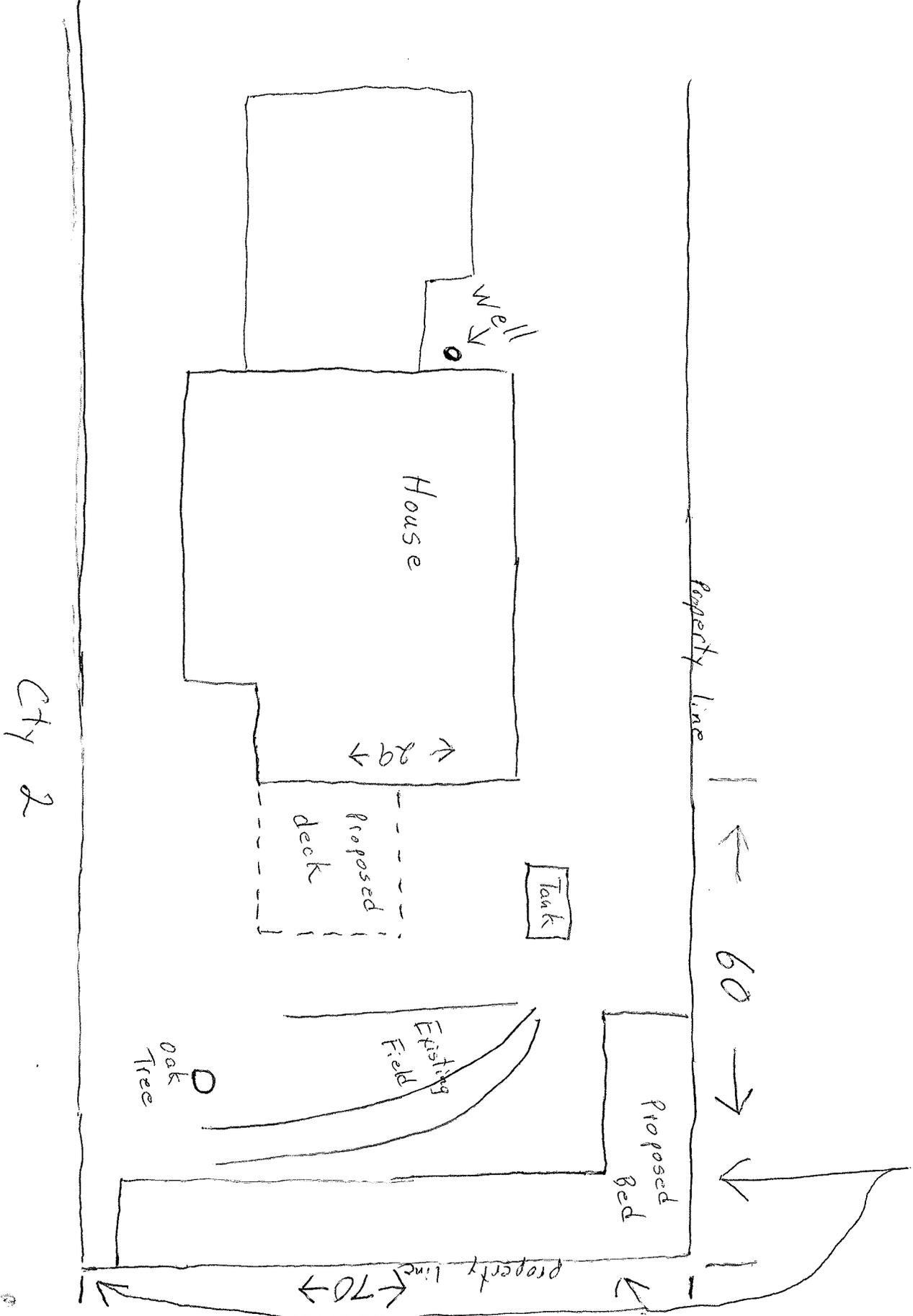
| Number of Bedrooms | I   | II  |
|--------------------|-----|-----|
| 2                  | 300 | 225 |
| 3                  | 450 | 300 |
| 4                  | 600 | 375 |
| 5                  | 750 | 450 |
| 6                  | 900 | 525 |

White - Office Copy

Yellow - Contractor Copy

Pink - Homeowner

Variance Requested:  
for the 10' from property  
line set back to be  
reduced to 0'



City 2

perforations for dwellings. The minimum average head must be 2.0 feet for other establishments with 3/16- to 1/4-inch perforations and 5.0 feet of head for 1/8-inch perforations. Perforation discharge is determined by the following formula:

$$Q = 19.65 cd^2h^{1/2}$$

where: Q = discharge in gallons per minute

c = 0.60 = coefficient of discharge

d = perforation diameter in inches

h = head in feet.

- C. The pump discharge head must be at least five feet greater than the head required to overcome pipe friction losses and the elevation difference between the pump and the distribution device.
- D. The quantity of effluent delivered for each pump cycle must be no greater than 25 percent of the design flow and at least four times the volume of the distribution pipes plus the volume of the supply pipe.

### 7080.2150 Final Treatment and Dispersal.

Subpart 1. **General.** Treatment and dispersal of all sewage for new construction or replacement ISTS must be in compliance with this part and parts 7080.2200 to 7080.2400 as adopted into local ordinances.

Subp. 2. **General technical requirements for all systems.** All new construction or replacement ISTS must be designed to meet or exceed the provisions in items A to F.

- A. All treatment and dispersal methods must be designed to conform to all applicable federal, state, and local regulations.
- B. Treatment and dispersal processes must prevent sewage or sewage effluent contact with humans, insects, or vermin.
- C. Treatment and dispersal of sewage or sewage effluent must be in a safe manner that adequately protects from physical injury or harm.
- D. An unsaturated zone in the soil must be maintained between the bottom of the soil treatment and dispersal system and the periodically saturated soil or bedrock during loading of effluent.
- E. Soil treatment and dispersal systems must not be designed in floodways. Soil treatment and dispersal systems installed in

flood fringes must meet the requirements in part 7080.2270. All soil treatment systems located in areas subject to excessive run-on must have a diversion constructed upslope from the system.

- F. ISTS components must be set back in accordance with Table VII.

**Table VII: Minimum setback distances (feet)**

| Feature                                    | Sewage tank, holding tank, or sealed privy | Absorption area or unsealed privy | Building sewer or supply pipes |
|--|--|-----------------------------------|--------------------------------|
| Water supply wells                         | *  | *                                 | *                              |
| Buried water lines                         | *  | *                                 | *                              |
| Structures                                 | 10   | 20                                |                                |
| Property lines***                          | 10   | 10                                |                                |
| Ordinary high water level of public waters | ***  | ***                               |                                |

\* Setbacks from buried water lines and water supply wells are governed by chapters 4715 and 4725, respectively.

\*\* Infringement on property line setbacks must be made through accepted local procedures

\*\*\* Setbacks from lakes, rivers, and streams are governed by chapters 6105 and 6120.

Subp. 3. **Other technical requirements for systems.** Items A to M are required for specific designs as determined in parts 7080.2200 to 7080.2400.

- A. Employ components registered under parts 7083.4070 and 7083.4080 that are installed, used, and operated according to the conditions placed on registration.
- B. Employ structural components and joint sealants that meet or exceed the system's expected design life.
- C. For acceptable treatment of septic tank effluent by soil,

**PUBLIC HEARING: Noah Knudsen -**  
 Variance request from the MN Rules 7080  
 Front Yard setback requirement of 10 feet  
 from the property line, to place a septic  
 system up to the lot line at 29013 Westervelt  
 Ave. Frontinac in Florence Township.



**Legend**

- Subgrid Boundary
- Parcel
- Setback Line
- Cliff Impact
- % Slope
  - 0
  - 20
  - 30
- To Parcel
- To Parcel
- Special Flood Hazard Areas
- FUD ZONE
  - 0.5 FT ANNUAL CHANCE FLOOD HAZARD
  - 1
  - 2
  - 50
  - 100



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