BOARD OF ADJUSTMENT
GOODHUE COUNTY, MN
September 23rd, 2024, MEETING MINUTES
DRAFT

The meeting of the Goodhue County Board of Adjustment was called to order at 5:00 PM by Chair Daniel Knott at the Goodhue County Government Center Board Room.

Roll Call

Commissioners Present: Daniel Knott, Randy Rechtzigel, Scott Breuer, Dennis Tebbe, Darwin Fox, and Keith Allen

Commissioners Absent: None

Staff Present: Zoning Administrator Samantha Pierret and Zoning Assistant William Lenzen

1. Approval of Agenda
[1]Motion by Commissioner Fox and seconded by Commissioner Tebbe to approve the meeting agenda.

Motion carried 6:0

2. Approval of Minutes
[2]Motion by Commissioner Allen and seconded by Commissioner Breuer to approve the previous month's meeting minutes.

Motion carried 6:0

3. Conflict/Disclosure of Interest
There were no reported conflicts/disclosures of interest.

4. Public Hearings:

PUBLIC HEARING: Request for Variance to Minimum Setback Standards
Request for Variance, submitted by Emery Maher (Authorized Agent) on behalf of Bradley Anderson (Owner) to A-1 Zoning District standards to allow an attached garage to be constructed less than 30 feet from a side yard property line.

Lenzen presented the staff report and attachments.

Chair Knott opened the Public Hearing

No one spoke for or against the request.

[3]After Chair Knott asked three times for comments, it was moved by Commissioner Fox and seconded by Commissioner Tebbe to close the Public Hearing.

Motion carried 6:0

Commissioner Tebbe stated it is straightforward to place the garage in that location.

[4]Motion by Commissioner Tebbe, seconded by Commissioner Fox for the Board of Adjustment to:

- adopt the staff report into the record;
- adopt the findings of fact;
- accept the application, testimony, exhibits, and other evidence presented into the record; and

APPROVE the Request for Variance, submitted by Emery Maher (Authorized Agent) on behalf of Bradley Anderson (Owner) to A-1 Zoning District standards to allow an attached garage to be constructed 11 feet from a side yard property line.

Motion carried 6:0

PUBLIC HEARING: Request for Variance to Bluff Land Standards

Request for Variance, submitted by Moggie Brady (Owner) to Article 12 (Bluff Land Standards) to allow construction of an in-ground pool less than 30 feet from the top of a bluff.

Lenzen presented the staff report and attachments.

Chair Knott opened the Public Hearing.

No one spoke for or against the request.

[5]**After Chair Knott asked three times for comments, it was moved by Commissioner Rechtzigel and seconded by Commissioner Fox to close the Public Hearing.**

Motion carried 6:0

Commissioner Tebbe stated that it makes sense to put the pool where they have proposed it.

Commissioner Fox stated this is a unique parcel that shows that when you try to design an ordinance to fit the county you get some like this one that requires a variance, and that's what variances are for.

[6]**Motion by Commissioner Fox, seconded by Commissioner Allen for the Board of Adjustment to:**

- adopt the staff report into the record;
- adopt the findings of fact;
- accept the application, testimony, exhibits, and other evidence presented into the record; and

APPROVE the Request for Variance, submitted by Moggie Brady (Owner) to Article 12 (Bluff Land Standards) to allow the construction of an in-ground pool 14 feet from the top of a bluff.

Motion carried 6:0

PUBLIC HEARING: Request for Variance to Minimum Setback Standards

Request for Variance, submitted by Timothy and Challis Voth (Owners) to A-3 Zoning District standards to allow an accessory building to be constructed less than 30 feet from a side yard property line.

Lenzen presented the staff report and attachments.

Chair Knott asked about the setback location proposed by staff.

Lenzen stated that the shed could move 30 feet to the east and meet the setback requirements.

Challis Voth (Applicant) presented staff with the Township Zoning Application.

Timothy Voth (Applicant) mentioned that there used to be a barn in the same location as the proposed shed. The barn has been gone for about 50 years. Mr. Voth presented a photograph of the original barn to the board (Exhibit A).

Commissioner Allen asked when the dwelling was constructed.

Timothy Voth stated it was built in 1965.

Chair Knott opened the Public Hearing

No one spoke for or against the request.

[7]**After Chair Knott asked three times for comments, it was moved by Commissioner Tebbe and seconded by Commissioner Breuer to close the Public Hearing.**

Motion carried 6:0

Commissioner Tebbe stated that he agrees that a zero-foot setback would be okay.

Commissioner Fox asked staff if the property was ever sold. Would the applicant need to have it platted to be

sold together?

Pierret stated that at the time of sale, the owners typically would have to stipulate that both parcels would have to be sold together.

Commissioner Rechtzigel stated that moving the shed back would put it in cropland.

[8]Motion by Commissioner Rechtzigel, seconded by Commissioner Fox for the Board of Adjustment to:

- adopt the staff report into the record;
- adopt the findings of fact;
- accept the application, testimony, exhibits, and other evidence presented into the record; and

APPROVE the Request for Variance, submitted by Timothy and Challis Voth (Owners) to A-3 Zoning District standards to allow an accessory building to be constructed 0 feet from a side yard property line.

Chair Knott asked staff if Featherstone Township made any comments on the Township Zoning Application.

Lenzen stated that Featherstone Township had made no comments.

Motion carried 6:0

PUBLIC HEARING: Request for Variance to Access Drive Standards

Request for Variance, submitted by Kyle Ayres (Owner) to access drive standards to use a driveway to a principal structure (dwelling) that is over 14% grade.

Pierret presented the staff report and attachments.

Chair Knott asked what fire district this is in.

Pierret was unsure however the audience commented it may be the Nerstrand fire department.

Chair Knott opened the Public Hearing

John Lindbeck (38475 53rd Ave Way Dennison MN 55018) asked how this road was constructed. How much erosion would happen within one year? When was it last maintained by the Township? How do old, non-maintained Township roads get left when they are no longer maintained? How could this road have been constructed without a permit?

Chair Knott stated that the Board of Adjustment can only look at information pertaining to the variance request.

Leah Lindbeck (38475 53rd Ave Way Dennison MN 55018) provided maps and soil data to the Commissioners (Exhibit B). *She stated that her concerns are with the 14% slope that is stated to be safe. Some sections of the driveway are very steep and not safe and should be considered highly erodible based on the slope and soil type. The home site is also situated on highly erodible soil. A different site is available for a dwelling that wouldn't be as highly erodible and not on the top of a bluff. There is a risk of flooding, erosion, and groundwater impacts. The drive is in shoreland, and no permits were pulled to construct the driveway. The dwelling at the top of the bluff will change the essential character of the locality. All these standards aren't being followed.*

Mary Murry (4050 Sogn Valley Trail, Dennison MN 55018) Stated that they should have considered a different dwelling location that wouldn't impact the bluff. The road at one time did come through her property and connect with Sogn Valley Trail. Concerned that building a dwelling on top of the bluff contributes to pollution such as light, chemical, soil erosion, etc. Was also concerned that the dwelling location would take away tillable land.

[9]After Chair Knott asked three times for additional comments, it was moved by Commissioner Fox and seconded by Commissioner Tebbe to close the Public Hearing.

Motion carried 6:0

Commissioner Tebbe asked Ben Dvorak (Goodhue County Soil and Water Conservation District) to explain more

about the erosion and driveway.

Ben Dvorak stated the Decorah shale layer is present in the area with 16-18% slopes. This layer tends to seep water horizontally. At this point on the driveway, the water has been seeping for some time and has created a well-developed ditch that the excavation company has left in hopes that this keeps the existing driveway from eroding and deteriorating. With best management practices (BMPs) the road shouldn't erode. The drive has been there for some time.

Chair Knott stated that excavation would have to happen if the variance were denied. To achieve a 14% overall slope.

Commissioner Breuer stated that a good point was made earlier about the fire department being able to access the driveway at those percent grades.

Commissioner Rechtzigel asked if there is farming continuing on the parcel and how the owners get up there.

Kyle Ayres (Applicant) stated that the field where the house is going is not being farmed. It is planted to grass currently. The driveway was used when the field was actively being farmed.

Chair Knott asked how long the applicant has owned the property.

Applicant stated about a year.

Corey Stephans from DeCook Excavating presented Commissioners with a video of the road construction. He stated he wanted to make sure the driveway looked and was installed as if it was put there by nature. He mentioned that he has served on fire departments for many years. The trees that were cut down were to allow the trucks to access the dwelling site without hitting the mirrors. Geotextile fabric was placed under the drive. The 18% slope is only at the very top of the drive. Keeping the steep slope would allow the snow to blow off the driveway. Digging the drive down to meet the 14% slope would require elongating the top of the drive thus causing the drive to enter the neighbor's property or impacting the bluff land and the snow would drift onto the driveway. The north side of the driveway already has an established swale that creates a nice ditch for water to run without eroding the driveway. Wants to put rip rap near the Decorah shale layer to reduce the erosion from water.

Commissioner Breuer asked based on Mr. Stephans's opinion if the fire department could get up to the dwelling site.

Mr. Stephans stated that 9 months out of the year they would be able to access the site but for the other 3 months even with 3 inches of snow, the applicant wouldn't even be able to make it up the drive without proper maintenance.

Commissioner Allen asked how many property owners there have been over the last 3 years.

Pierret stated that her best guess is about 3 owners since 2019.

Commissioner Tebbe stated that his driveway is 17-18% slope and you do have to maintain it. With the driveway facing the southwest and being surrounded by deciduous trees, in the winter it should get good exposure to the sun which should help in maintaining it. Being that this road was an existing Township road at one point and has established ditches he doesn't have a problem with it if the applicant is following the BMPs recommended by SWCD. This will mitigate possible impacts on water quality and erosion near the site.

Commissioner Allen stated that the slope of the driveway would be reflected in the homeowner's insurance policy. He also agreed that he doesn't have a problem with this drive being greater than 14% because at some point it was an established road.

Commissioner Fox stated that most of the driveway length is at or less than 14% slope. Just a small distance is greater than 14%.

Chair Knott asked the staff why the road doesn't count as a bluff.

Pierret stated that bluffs are anything 30% slope and more. The road was already established and it's not a bluff because it was impacted by humans some time ago. Bluff land impact refers to new disturbances to the bluff impact zone. The shoreland area is buildable and may be disturbed when following the Shoreland ordinance. She worked with the Applicant to determine whether to apply for a variance to the 14% slope or to do grading and excavation work to achieve the 14% slope which may have required a variance to impact bluffs. Warsaw Township requires 1,000 feet between dwellings. The Applicant could have applied for a variance with the Township to dwelling distances, but he opted to situate the dwelling on the top of the bluff. When the neighbors built their houses, this boxed the Applicant in leaving the only option to build on the top of the bluff in compliance with Township rules.

Commissioner Tebbe stated that if they had excavated the steep part to bring it into compliance, it would have required a lot of fill to be brought in and that would have caused issues at the top.

Commissioner Fox stated that when the neighbors built their dwellings it created a hardship for the Applicant's property causing them to look elsewhere on their parcel to build a dwelling.

[10]Motion by Commissioner Fox, seconded by Commissioner Tebbe for the Board of Adjustment to:

- adopt the staff report into the record;
- adopt the findings of fact;
- accept the application, testimony, exhibits, and other evidence presented into the record; and

APPROVE the Request for Variance, submitted by Kyle Ayres (Owner) to access drive standards to allow the use of a driveway with a 63-foot segment no greater than 16.1% slope and a 61-foot segment no greater than 18.2% slope. Subject to the following conditions:

1. Applicant shall work with the Goodhue SWCD to install culverts, rock checks, and berms; and
2. The Goodhue SWCD and Zoning Administrator shall verify driveway grades prior to the issuance of a Certificate of Occupancy for the new dwelling.

Motion carried 6:0

Other-Discussion

There was no other discussion.

[11]Motion by Commissioner Fox, seconded by Commissioner Rechtzigel to adjourn the BOA meeting at 6:33 PM.

Motion carried 6:0

Respectfully submitted:

William Lenzen, Zoning Assistant
MOTIONS

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[1] Motion to approve Agenda
Motion carried 6:0
[2] Motion to approve the previous month's meeting minutes
Motion carried *6*:0
[3] Motion to close the Public Hearing
Motion carried 6:0
[4] APPROVE the Variance to Accessory Minimum Setback Standards
Motion carried 6:0
[5] Motion to close the Public Hearing
Motion carried 6:0
[6] APPROVE the Variance to Bluff Land Standards

Motion carried 6:

[7] **Motion to close the Public Hearing**
Motion carried 6:0

[8] **APPROVE the Variance to Minimum Setback Standards**
Motion carried 6:0

[9] **Motion to close the Public Hearing**
Motion carried 6:0

[10] **APPROVE the Variance to Access Drive Standards**
Motion carried 6:0

[11] **Motion to adjourn**
Motion carried 6:0

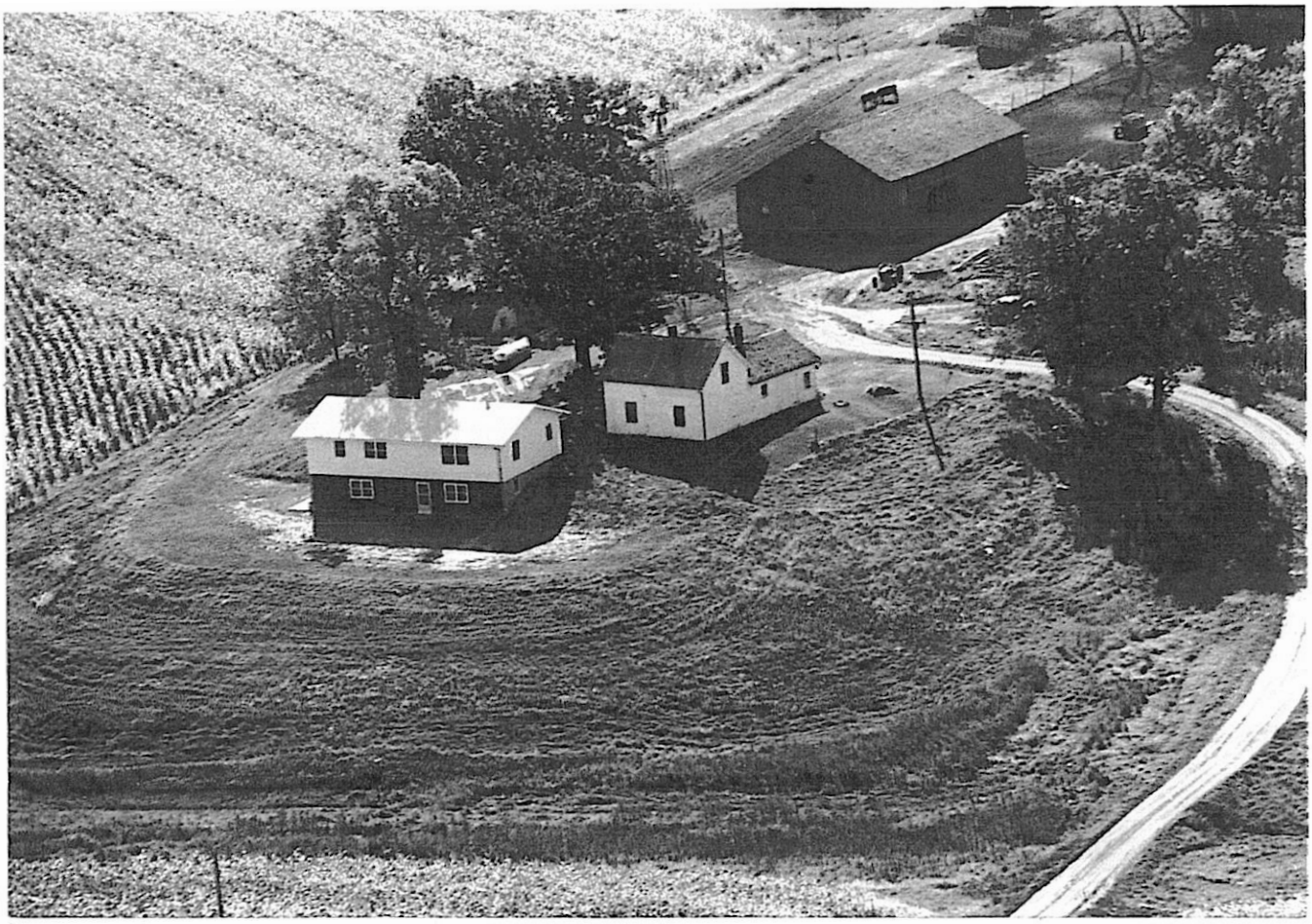


Exhibit A

Exhibit B

38629 53rd ave way
Driveway Variance County Meeting

Item #1: Harmony with the general purposes and intent of the official control.

A.) Safety: A maximum grade of 14% is essential for the safety of a driveway, and for the ability of emergency vehicles and utilities to be able to access the property in a safe manor. We are concerned regarding the potential safety of this driveway, particularly in the winter and with washouts/erosion. This is not a small portion of the driveway that is at this grade, it involves a turn at the top, and the drop off on the SW side of the driveway is significant. Approving anything greater than the ordinance maximum of 14% is a safety concern and a liability for the county, residents and any other users of the driveway.

B.) Erosion and Washout: A grade steeper than 14% is highly susceptible to erosion and washout.

1) The soils in which the driveway is located are classified in the Goodhue County ordinances Article 12 section 3 as "Bluff Land Protection Area" as determined by the Goodhue County Soil Survey. See Appendix A.

2) Article 12, Section 4 explicitly regulates bluff land protection areas and bluff impact zones with the following:

3) This land is also noted to be "highly erodible" by the USDA soil survey in the location of the driveway and the location of the home site. See Printout.

SECTION 4. GENERAL REGULATIONS

Subd. 1. Developments and other land disturbing activities including: structures, accessory facilities, driveways, and parking areas shall not be placed within bluff impact zones except the following:

A. Stairways and landings subject to provisions set forth in Subd. 6, of this Section.

B. Facilities such as ramps, lifts, or mobility paths subject to provisions set forth in Subd. 6, of this Section.

C. Uses identified in Article 30; Section 3; Subd. 6, Subd. 12, and Subd. 1

Subd. 2. Setback from top or toe of the bluff to any structure in any district shall be no less than thirty (30) feet. Exceptions may include structures allowed under Article 30, Section 3, Subdivisions 6, 12, and 13.

Item #2: The variance request is consistent with the adopted comprehensive plan.

A) Element 2 of the Goodhue County Comprehensive Plan outlines Natural Resources as a priority. Within this priority, there are several instances in which approving the driveway would directly go against the comprehensive plan priorities. The following is a list of objectives as outlined in the comprehensive plan that the approval and issuance of a variance would negatively impact:

Water Resource Objectives, pg 35 of Comprehensive Plan:

1. "Provide guidance for the responsible development of shoreland of public waters and thus preserve and enhance the quality of surface waters."
3. "Provide for the responsible use of water and related land resources of the state."
4. "Encourage floodplain stabilization."
5. "Guide responsible development of the flood plains to reduce human and property losses due to flooding."

Across the street is a tributary of a state designated trout stream. This is mapped on pg 33. See Appendix B. **There was significant flooding at the driveway entrance to this property, the driveway across the road and both downstream and upstream flooding this spring. This required significant repair of the culvert across the street on 53rd ave way (postlewaite driveway) and bridge area on Sogn Valley Trail. We are concerned regarding the potential run off and erosion impacts leading to flooding on our property.**

8. "Integrate land use planning with water planning to achieve optimal management and quality of ground and surface water resources."

This area is in an area marked as HIGH to VERY HIGH groundwater sensitivity. This is mapped on page 30. See Appendix C. **Furthermore, the importance of this is also outlined and administered in the Goodhue County Comprehensive Water Management Plan that further outlines the importance of protecting our ground water due to the known nitrate levels throughout the county. Due to area being high risk for erosion, high risk for ground water sensitivity, along with current farming ongoing at the top of the bluff, we are concerned regarding groundwater effects to our drinking water and that of our neighbors.**

Land Resource Objectives and implementation strategies, pg 44-45

2. "Plan and implement reasonable land management of shoreland areas within Goodhue County as established by the state of Minnesota."
3. "Protect, preserve and promote responsible management of Goodhue County's Blufflands."
9. "Maintain and administer bluff land zoning regulations."
10. "Establish and administer permitting requirements for any allowable grading or excavation within bluff lands to minimize impacts such as erosion and sedimentation or loss of area and endangered species."

The bottom portion of the driveway is within designated shoreland buffer, there were no permits pulled to work within this area as stated are needed within the Goodhue County ordinances prior to work beginning. See Appendix D for map.

As established in Item 1B, the soil in which this driveway is located is designated bluff land protection area and permits should have been required. Since they weren't this driveway should not be allowed as it is, and no further damage to the bluff should be allowed.

Item #3: The are "practical difficulties" in complying with the official control (the applicant proposes to use the property in a reasonable Manner not permitted by an official control, the plight of the landowner is due to circumstances unique to the property not created by the landowner, and the variance, if granted will not alter the essential character of the locality):

1. The property owner had the opportunity to purchase the original property listing which included 10 acres of land off of Sogn Valley Trail which would have been an acceptable location for a driveway to the top of the hill which is where the "eligible building site" is located. They decided not to purchase this parcel.

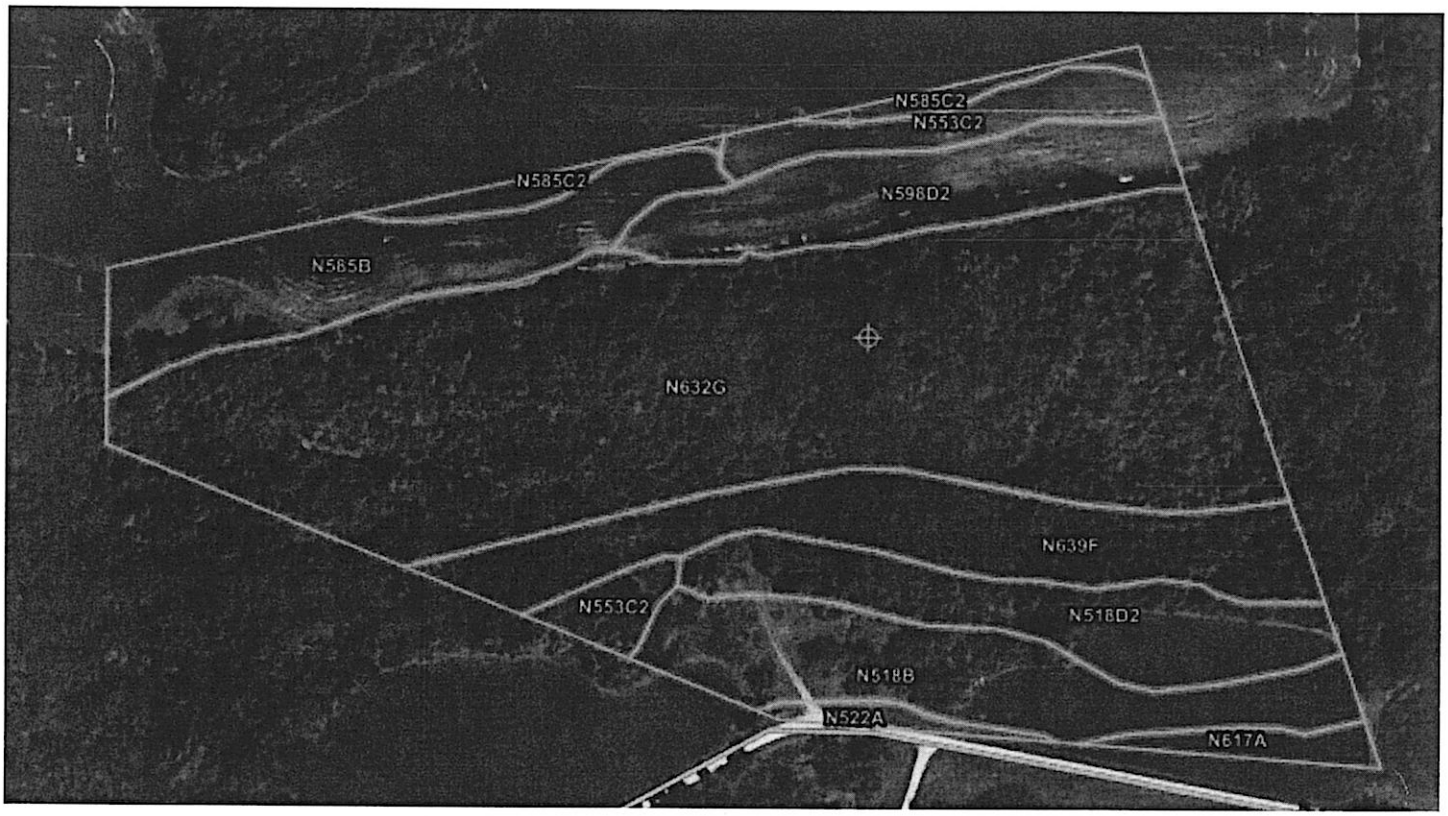
2. Prior to purchasing the property, they did not do any due diligence to discuss with the county or township to confirm that this property was appropriate to build a driveway and home, or where an appropriate home or driveway could be located. As an owner who recently went through this process, we had multiple communications with both the township and county to ensure location and acceptability of driveway and building sites (2) which were located on our property.

3. Having a home at the top of the bluff will alter the essential character of the locality as there are currently no homes built on top of this bluff. As a resident of 38475 5r3rd ave way who recently built within the past 2 years, we had the opportunity to build up top on the bluff. We chose not to due to all the above stated concerns, and to comply with ordinances. There are currently three new homes built within the last 2 years along this road, and one on Sogn Valley Trail, and all did their due diligence to confirm with the county and township prior to purchase of the land and prior to permits being pulled that their proposed home and driveway followed the county and township ordinances not requiring any variances. Allowing this driveway variance at 38629 53rd ave way on top of the bluff, is blatant disregard for the established ordinances.

4. We have been in their shoes very recently, and have experienced the "Not in my backyard" mentality when trying to build. This is not the message we are trying to relay. The owner has a suitable building site at the bottom of the bluff that would meet all county ordinances, and they have the opportunity to apply for a

variance to the townships 1000 ft rule to continue their plans to build a home on 53rd ave way, at the bottom of the bluff where there will not be the impacts of safety, bluff land alteration, erosion concerns, groundwater concerns, and will fit better with the character of the locality.

Appendix A: Soil Composition Map and Bluff Land soil designations, as noted by the USDA soil survey



O. N632G: Brodale, flaggy-schapville complex

L. N639F: Frontenac-Lacrescent complex

SECTION 3. BOUNDARIES

Subd. 1. The bluff land protection area shall include all areas with the following soil types as determined by the Goodhue County Soil Survey:

A. N634E - Massbach-Schapville complex,18-35% slopes

B. N598E - Winneshiek-Waucoma complex, 18-35% slopes

C. N594E - Chelsea loamy sand, 12-35% slopes

D. N553E - Frankville-Nasset-Mt. Carroll complex, 18-35% slopes

E. N635E - Frankville-Nasset-Downs complex, 18-35% slopes

F. N642E - Frankville-Nasset complex, Oneota formation, 18-35% slopes

G. N609E - Hawick sandy loam, 18-45% slopes

H. M516E - Wangs-Wagen Prairie complex, 18-35% slopes

I. M537E - Meridian-Bassett complex, 18-35% slopes

J. N526F - Gale-Oak Center complex, 18-45% slopes

K. M540F - Frontenac-Bellechester complex, 18-45% slopes

L. N639F - Frontenac-Lacrescent complex, 20-45% slopes

M. N631E - Schapville silt loam, 18-35% slopes

N. N580G - Brodale, very flaggy-Bellechester-Rock outcrop complex, 45-90% slopes

O. N632G - Brodale, flaggy-Schapville complex, 18-80% slopes

P. N638G - Brodale, flaggy-Bellechester complex, 30-70% slopes

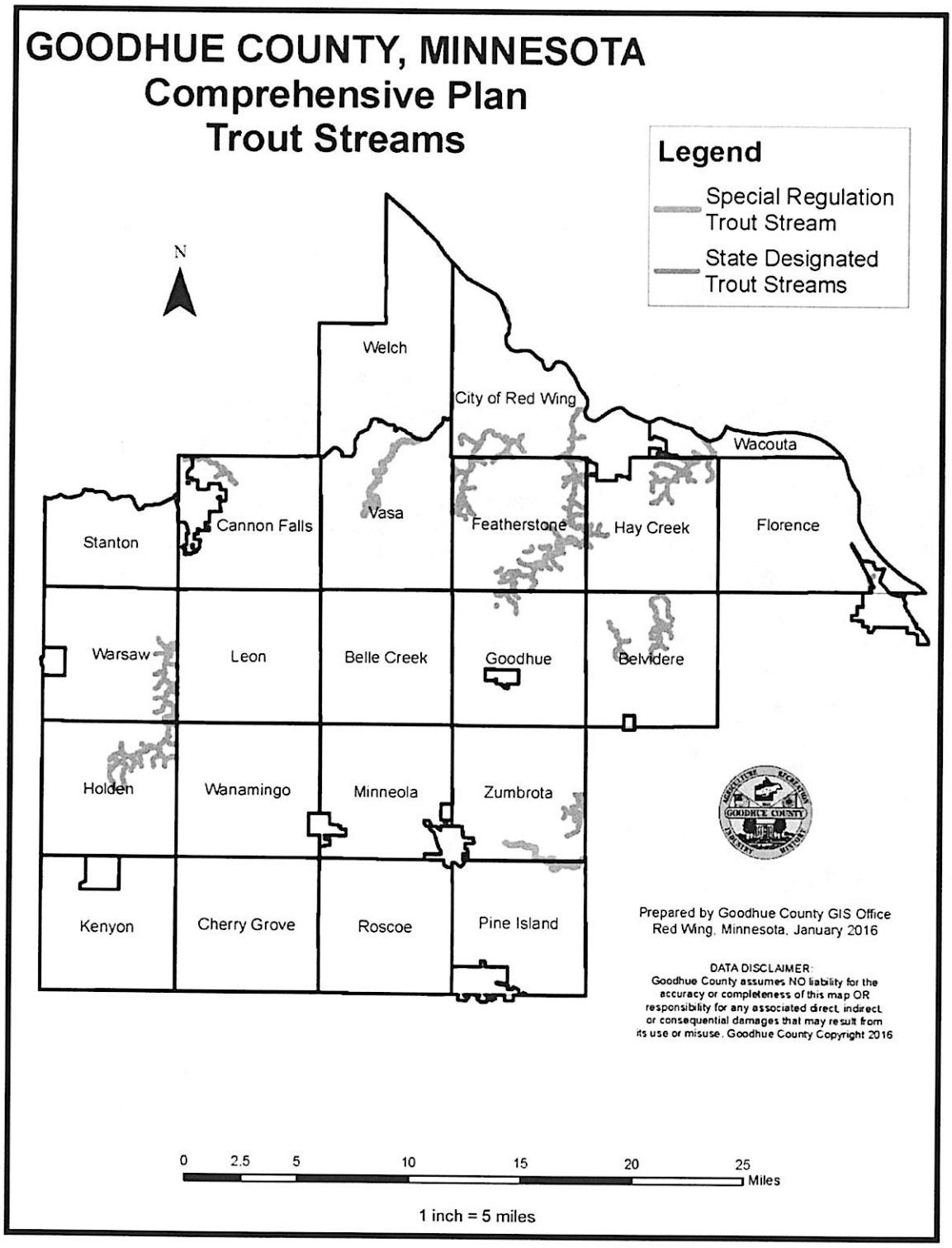
Q. N640G - Lacrescent, flaggy-Frontenac-Rock outcrop complex, 45-90% slopes

R. N641F - Brodale channery loam, 20-45% slopes, flaggy

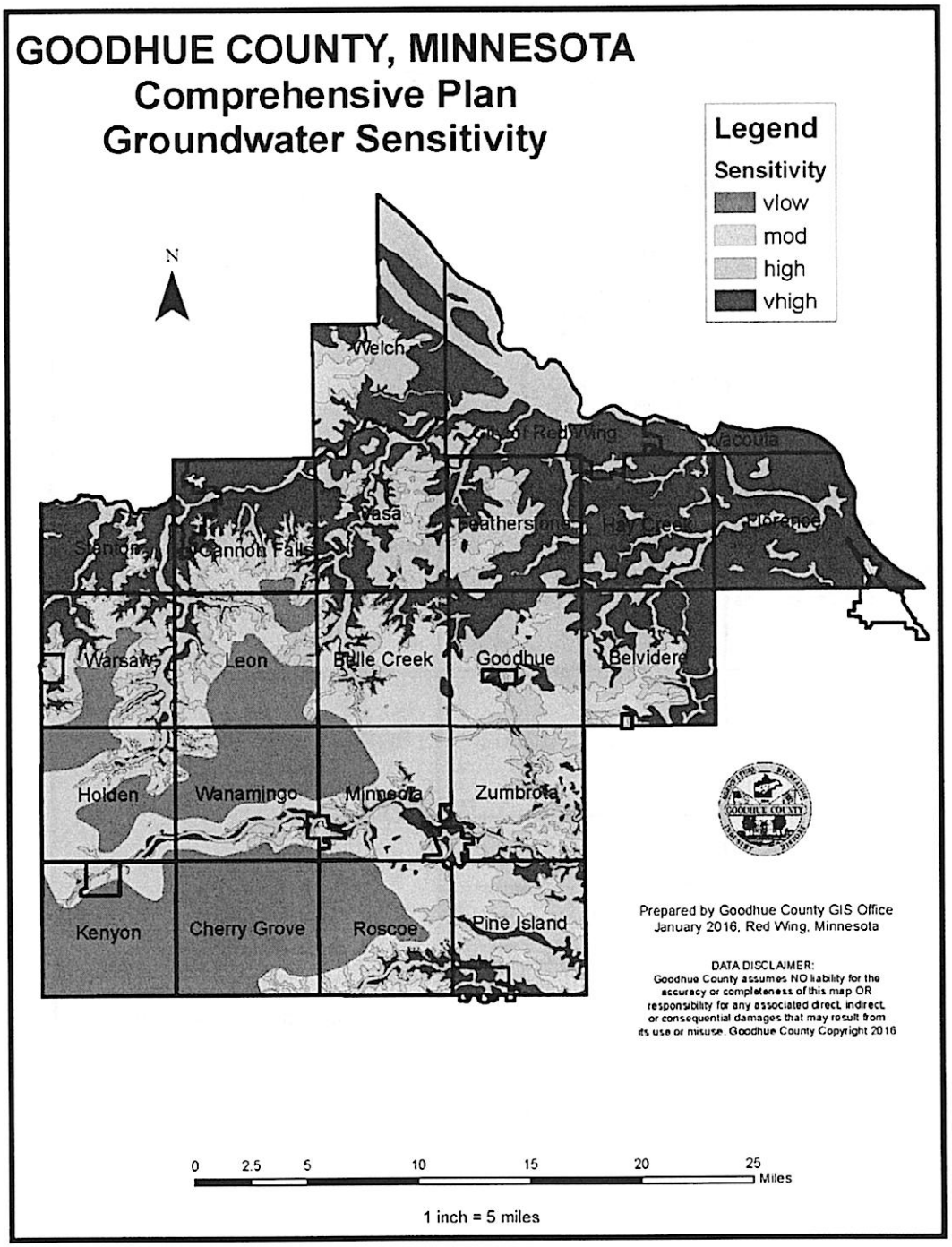
S. N639G - Frontenac-Lacrescent complex, 30-70% slopes

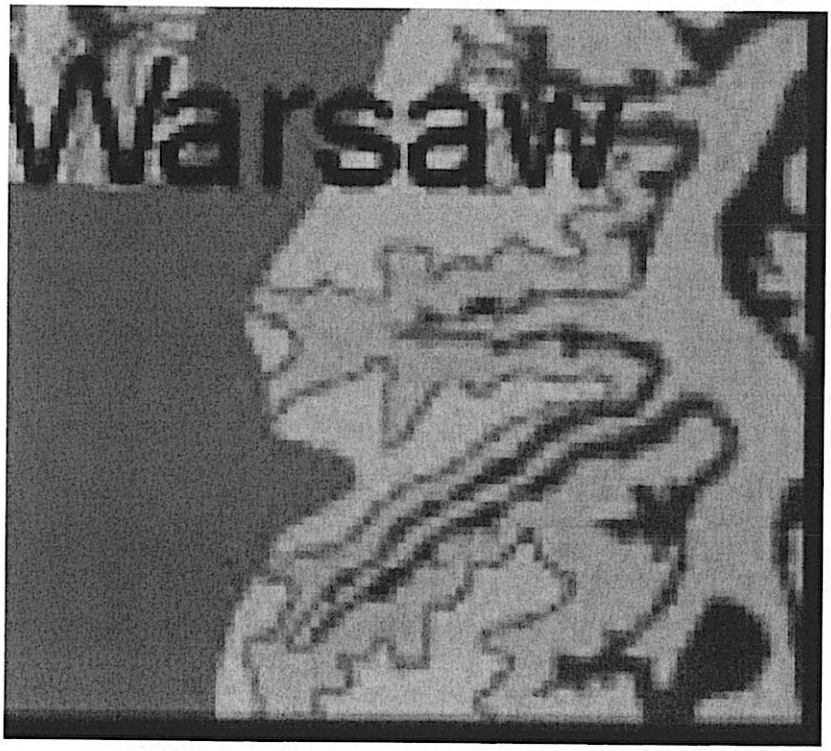
T. M539F - Bellechester loamy sand, 18-45% slopes

Appendix B: State Designated Trout Stream

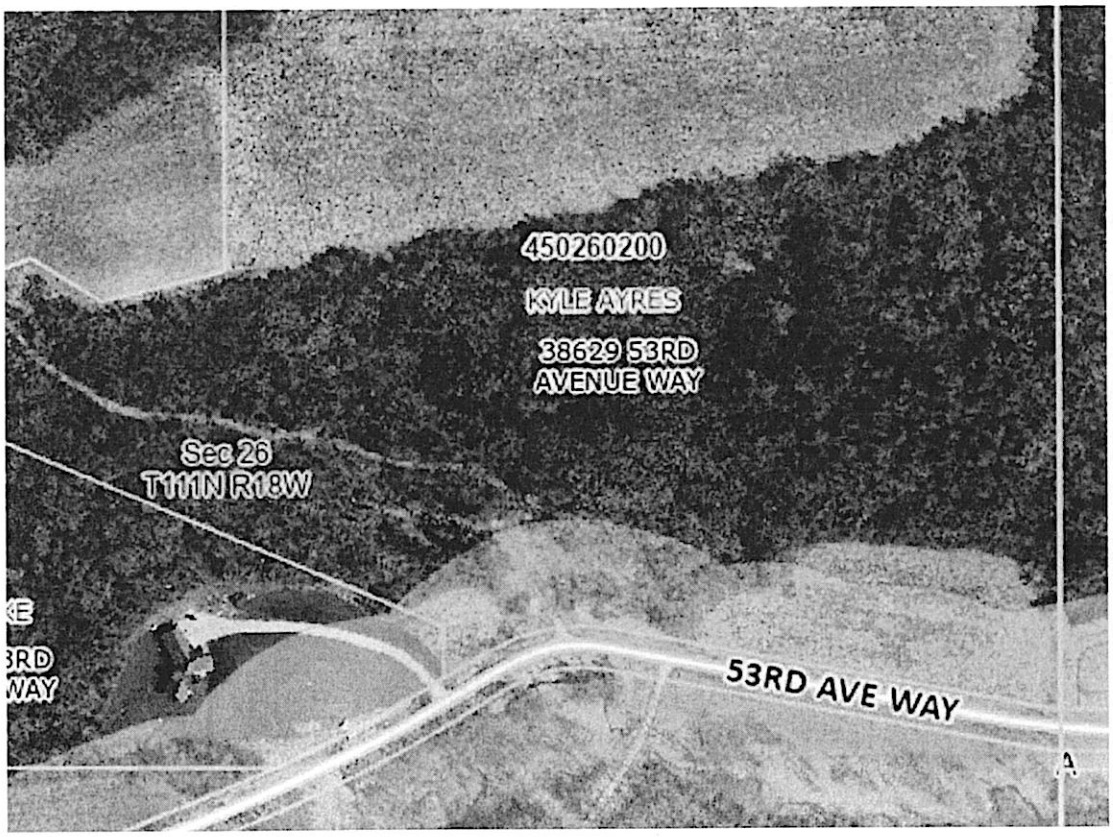


Appendix C: Groundwater sensitivity map




Warsaw

Appendix D: Shoreland (In green)



HIGHLY ERODIBLE SOIL MAP UNIT LIST-GOODHUE COUNTY, MN
C=.09
R=150

This data is only to be used for HEL determinations. This is the "frozen data" based on 01/01/1990 information Values other than 'HELC' should only be used for PHEL

areasym	musym	muname	HELC	T	K	I	slope_%	slope_l	LS
MN049	1003	Udorthents, loamy (cut and fill land)	NHEL	5	0.24	86	1	130	0.14
MN049	1007	Udorthents, shallow (sanitary landfill)	NHEL	-	-	-	-	-	-
MN049	1010	Pits, quarry	NHEL	-	-	-	-	-	-
MN049	1027A	Coland-Spillville complex, 0 to 2 percent slopes, flooded	NHEL	5	0.2	86	1	250	0.17
MN049	1033A	Spillville loam, 0 to 2 percent slopes, occasionally flooded	NHEL	5	0.32	48	1	250	0.17
MN049	1036A	Udipsamments, 0 to 2 percent slopes, frequently flooded	NHEL	5	0.15	310	1	250	0.17
MN049	1038	Udorthents, earthen dam	NHEL	-	-	-	-	-	-
MN049	1051C	Udorthents, loamy (abandoned clay pits), 2 to 45 percent slopes	PHEL	5	0.28	48	8	100	0.99
MN049	L171A	Merton silt loam, 1 to 3 percent slopes	NHEL	5	0.28	48	1	250	0.17
MN049	L177B	Moland silt loam, 2 to 6 percent slopes	NHEL	5	0.32	48	4	200	0.53
MN049	L180A	Maxcreek silty clay loam, 0 to 2 percent slopes	NHEL	5	0.28	86	1	250	0.17
MN049	M505A	Klinger silt loam, 1 to 3 percent slopes	NHEL	5	0.28	48	1	250	0.17
MN049	M506B	Kasson silt loam, 1 to 6 percent slopes	NHEL	5	0.32	48	4	200	0.53
MN049	M507A	Marquis silt loam, 1 to 3 percent slopes	NHEL	5	0.32	48	2	250	0.33
MN049	M507B	Marquis silt loam, 2 to 6 percent slopes	NHEL	5	0.37	48	4	200	0.67
MN049	M508A	Oran silt loam, 1 to 3 percent slopes	NHEL	5	0.32	48	2	250	0.33
MN049	M509A	Mantorville loam, 0 to 2 percent slopes	NHEL	4	0.28	56	1	250	0.17
MN049	M509B	Mantorville loam, 2 to 6 percent slopes	NHEL	4	0.28	56	4	200	0.67
MN049	M509C2	Mantorville loam, 6 to 12 percent slopes, moderately eroded	PHEL	4	0.2	56	8	125	1.11
MN049	M510A	Maxfield silty clay loam, 0 to 2 percent slopes	NHEL	5	0.28	48	1	250	0.17
MN049	M511A	Readlyn silt loam, 1 to 3 percent slopes	NHEL	5	0.32	48	2	250	0.33
MN049	M516C2	Wangs-Wagen Prairie complex, 6 to 12 percent slopes, moderately eroded	HEL	3	0.43	48	8	125	1.11
MN049	M516D2	Wangs-Wagen Prairie complex, 12 to 18 percent slopes, moderately eroded	HEL	2	0.28	56	20	100	4.08
MN049	M516E	Wangs-Wagen Prairie complex, 18 to 35 percent slopes	HEL	4	0.32	38	25	100	5.89
MN049	M518B	Clyde-Floyd complex, 1 to 4 percent slopes	NHEL	5	0.28	48	1	200	0.16
MN049	M520B	Rasset sandy loam, 0 to 6 percent slopes	NHEL	4	0.2	86	3	200	0.48
MN049	M520C2	Rasset sandy loam, 6 to 12 percent slopes, moderately eroded	PHEL	4	0.2	56	8	125	1.11
MN049	M521C2	Kenyon silt loam, 6 to 12 percent slopes, moderately eroded	HEL	5	0.28	48	8	100	0.99
MN049	M522D2	Bassett-Racine complex, 12 to 18 percent slopes, moderately eroded	HEL	5	0.32	48	15	100	2.56
MN049	M522E	Bassett-Racine complex, 18 to 25 percent slopes	HEL	5	0.32	48	25	100	5.89
MN049	M523C2	Bassett-Kasson complex, 6 to 12 percent slopes, moderately eroded	HEL	5	0.32	48	8	100	0.99
MN049	M525A	Dakota silt loam, 0 to 3 percent slopes	NHEL	4	0.32	56	1	250	0.17
MN049	M526B	Winneshiek silt loam, 2 to 6 percent slopes	NHEL	4	0.32	48	4	200	0.53
MN049	M526C2	Winneshiek silt loam, 6 to 12 percent slopes, moderately eroded	HEL	4	0.32	48	8	125	1.11
MN049	M527D2	Nasset-Winneshiek complex, 12 to 18 percent slopes, moderately eroded	HEL	3	0.32	48	14	125	2.56
MN049	M532A	Maxfield silty clay loam, 0 to 2 percent slopes, occasionally flooded	NHEL	5	0.28	48	1	250	0.17
MN049	M534B	Estherville-Ridgeport complex, 0 to 6 percent slopes	NHEL	3	0.2	56	3	300	0.46
MN049	M535B	Wagen Prairie silt loam, 2 to 6 percent slopes	NHEL	2	0.28	56	4	200	0.53
MN049	M536C2	Meridian, till substratum-Bassett complex, 6 to 12 percent slopes, moderately eroded	HEL	3	0.2	86	15	100	2.56
MN049	M536D2	Meridian, till substratum-Bassett complex, 12 to 18 percent slopes, moderately eroded	HEL	3	0.2	86	15	100	2.56
MN049	M537E	Meridian-Bassett complex, 18 to 35 percent slopes	HEL	3	0.2	86	15	100	2.56
MN049	M538A	Waukegan silt loam, 0 to 2 percent slopes	NHEL	4	0.32	48	1	250	0.17
MN049	M539F	Bellechester loamy sand, 18 to 45 percent slopes	HEL	5	0.15	310	25	150	7.21

MN049	M540F	Frontenac-Bellechester complex, 18 to 45 percent slopes	HEL	5	0.15	310	25	150	7.21
MN049	M541C2	Copaston loam, 6 to 12 percent slopes, moderately eroded	HEL	2	0.28	56	8	150	1.21
MN049	M541D	Copaston loam, 12 to 18 percent slopes	HEL	1	0.24	56	20	100	4.08
MN049	N501B	Downs silt loam, 2 to 6 percent slopes	NHEL	5	0.32	48	4	250	0.57
MN049	N501C2	Downs silt loam, 6 to 12 percent slopes, moderately eroded	HEL	5	0.32	48	8	175	1.31
MN049	N501D2	Downs silt loam, 12 to 18 percent slopes, moderately eroded	HEL	5	0.37	56	14	100	2.29
MN049	N507B	Timula-Mt. Carroll complex, 2 to 6 percent slopes	NHEL	5	0.37	56	4	150	0.47
MN049	N507C2	Timula-Mt. Carroll complex, 6 to 12 percent slopes, moderately eroded	HEL	5	0.37	56	8	100	0.99
MN049	N507D2	Timula-Mt. Carroll complex, 12 to 18 percent slopes, moderately eroded	HEL	5	0.37	56	16	100	2.84
MN049	N507E	Timula-Mt. Carroll complex, 18 to 25 percent slopes	HEL	5	0.37	56	16	100	2.84
MN049	N508E	Seaton silt loam, 18 to 25 percent slopes	HEL	5	0.37	56	22	100	4.77
MN049	N514B	Joy-Ossian, occasionally flooded, complex, 1 to 5 percent slopes	NHEL	5	0.32	56	4	200	0.67
MN049	N517A	Oak Center-Mt. Carroll complex, 0 to 2 percent slopes	NHEL	5	0.32	56	1	250	0.17
MN049	N518B	Lindstrom silt loam, 2 to 6 percent slopes	NHEL	5	0.28	56	4	200	0.67
MN049	N518C2	Lindstrom silt loam, 6 to 12 percent slopes, moderately eroded	PHEL	5	0.28	56	8	225	1.49
MN049	N518D2	Lindstrom silt loam, 12 to 18 percent slopes, moderately eroded	HEL	5	0.28	56	15	200	3.62
MN049	N519B	Vasa silt loam, 1 to 4 percent slopes	NHEL	5	0.32	56	3	200	0.48
MN049	N521B	Mt. Carroll silt loam, 2 to 6 percent slopes	NHEL	5	0.32	48	4	250	0.57
MN049	N521C2	Mt. Carroll silt loam, 6 to 12 percent slopes, moderately eroded	HEL	5	0.37	56	8	125	1.11
MN049	N521D2	Mt. Carroll silt loam, 12 to 18 percent slopes, moderately eroded	HEL	5	0.37	56	14	100	2.29
MN049	N522A	Otter silt loam, channeled upland, 0 to 2 percent slopes, frequently flooded	NHEL	5	0.28	56	2	250	0.33
MN049	N526B	Gale-Oak Center complex, 1 to 6 percent slopes	NHEL	3	0.32	56	3	200	0.48
MN049	N526F	Gale-Oak Center complex, 18 to 45 percent slopes	HEL	5	0.15	310	25	150	7.21
MN049	N534E	Downs-Nasset complex, 18 to 25 percent slopes	HEL	3	0.32	48	25	125	6.59
MN049	N535B	Hesch-Rasset complex, 1 to 6 percent slopes	NHEL	4	0.24	86	4	150	0.47
MN049	N537E2	Fayette-Hersey, bedrock substratum, complex, 18 to 25 percent slopes, moderately eroded	HEL	5	0.37	56	22	100	4.77
MN049	N538C2	Waubeek and Massbach soils, 6 to 12 percent slopes, moderately eroded	PHEL	4	0.32	38	8	200	1.4
MN049	N552B	Schapville-Winneshiek complex, 2 to 6 percent slopes	NHEL	3	0.37	56	2	200	0.31
MN049	N553B	Frankville-Nasset-Mt. Carroll complex, 2 to 6 percent slopes	NHEL	4	0.37	48	4	200	0.53
MN049	N553C2	Frankville-Nasset-Mt. Carroll complex, 6 to 12 percent slopes, moderately eroded	HEL	4	0.37	56	8	100	0.99
MN049	N553D2	Frankville-Nasset-Mt. Carroll complex, 12 to 18 percent slopes, moderately eroded	HEL	4	0.37	48	14	125	2.57
MN049	N553E	Frankville-Nasset-Mt. Carroll complex, 18 to 35 percent slopes	HEL	4	0.37	48	20	125	4.56
MN049	N555B	Tama-Dinsmore complex, 2 to 6 percent slopes	NHEL	5	0.32	48	4	200	0.53
MN049	N572B	Downs-Hersey, bedrock substratum, complex, 2 to 6 percent slopes	NHEL	5	0.37	56	4	200	0.53
MN049	N572C2	Downs-Hersey, bedrock substratum, complex, 6 to 12 percent slopes, moderately eroded	HEL	5	0.37	56	8	125	1.11
MN049	N572D2	Downs-Hersey, bedrock substratum, complex, 12 to 18 percent slopes, moderately eroded	HEL	5	0.37	56	14	100	2.29
MN049	N574B	Downs-Hersey complex, 2 to 6 percent slopes	NHEL	5	0.32	56	2	250	0.33
MN049	N574C2	Downs-Hersey complex, 6 to 12 percent slopes, moderately eroded	HEL	5	0.32	48	8	175	1.31
MN049	N574D2	Downs-Hersey complex, 12 to 18 percent slopes, moderately eroded	HEL	5	0.37	56	14	100	2.29
MN049	N576B	Rasset fine sandy loam, 0 to 6 percent slopes	NHEL	4	0.24	86	3	200	0.48
MN049	N577A	Shandep-Cylinder complex, 0 to 2 percent slopes	NHEL	4	0.24	48	1	250	0.17
MN049	N578B	Barremills silt loam, drainageway, 1 to 5 percent slopes, occasionally flooded	NHEL	5	0.32	56	3	200	0.48
MN049	N579A	Dakota silt loam, 0 to 3 percent slopes	NHEL	4	0.32	56	1	250	0.17
MN049	N580G	Brodale, very flaggy-Bellechester-Rock outcrop complex, 45 to 90 percent slopes	HEL	5	0.17	56	60	200	32.7
MN049	N581B	Rockton-Atkinson complex, strath terrace, 0 to 6 percent slopes	NHEL	2	0.28	56	4	200	0.53
MN049	N581C2	Rockton-Atkinson complex, strath terrace, 6 to 12 percent slopes, moderately eroded	HEL	2	0.28	56	8	150	1.21
MN049	N582B	Newhouse-Valton complex, 2 to 6 percent slopes	NHEL	4	0.37	48	4	200	0.53
MN049	N582C2	Newhouse-Valton complex, 6 to 12 percent slopes, moderately eroded	HEL	4	0.37	56	8	100	0.99
MN049	N582D2	Newhouse-Valton complex, 12 to 18 percent slopes, moderately eroded	HEL	4	0.37	48	14	125	2.57

Alternate → home site

MN049	N584E	Downs silt loam, valleys, 18 to 25 percent slopes	HEL	5	0.37	56	22	150	5.84
MN049	N585B	Mt. Carroll-Hersey complex, 2 to 6 percent slopes	NHEL	5	0.37	56	4	200	0.53
MN049	N585C2	Mt. Carroll-Hersey complex, 6 to 12 percent slopes, moderately eroded	HEL	5	0.37	56	8	125	1.11
MN049	N585D2	Mt. Carroll-Hersey complex, 12 to 18 percent slopes, moderately eroded	HEL	5	0.37	56	14	100	2.29
MN049	N586C2	Ridgeton, sandy substratum-Eden Prairie complex, 6 to 12 percent slopes, moderately erod	PHEL	5	0.2	86	8	100	0.99
MN049	N586D2	Ridgeton, sandy substratum-Eden Prairie complex, 12 to 20 percent slopes, moderately ero	HEL	5	0.2	86	20	130	4.65
MN049	N590C2	Tama silt loam, valleys, 6 to 12 percent slopes, moderately eroded	HEL	5	0.37	56	8	200	1.4
MN049	N590D2	Tama silt loam, valleys, 12 to 18 percent slopes, moderately eroded	HEL	5	0.37	56	14	100	2.29
MN049	N591A	Port Byron silt loam, 0 to 2 percent slopes	NHEL	5	0.32	48	1	250	0.17
MN049	N591B	Port Byron silt loam, 2 to 6 percent slopes	NHEL	5	0.32	48	4	200	0.53
MN049	N591C2	Port Byron silt loam, 6 to 12 percent slopes, moderately eroded	HEL	5	0.32	48	7	150	1.01
MN049	N592B	Cresent-Eden Prairie complex, 2 to 6 percent slopes	NHEL	3	0.2	86	3	200	0.48
MN049	N593B	Sparta loamy sand, 0 to 6 percent slopes	NHEL	5	0.17	134	2	200	0.31
MN049	N593C	Sparta loamy sand, 6 to 12 percent slopes	PHEL	5	0.17	134	12	125	2.02
MN049	N594B	Chelsea loamy sand, 2 to 6 percent slopes	NHEL	5	0.17	134	8	200	1.4
MN049	N594C	Chelsea loamy sand, 6 to 12 percent slopes	PHEL	5	0.17	134	8	200	1.4
MN049	N594E	Chelsea loamy sand, 12 to 35 percent slopes	HEL	5	0.17	134	20	200	5.77
MN049	N596B	Eleva sandy loam, 2 to 6 percent slopes	NHEL	4	0.24	86	4	150	0.47
MN049	N596C2	Eleva sandy loam, 6 to 12 percent slopes, moderately eroded	PHEL	4	0.24	86	12	100	1.8
MN049	N596D2	Eleva sandy loam, 12 to 18 percent slopes, moderately eroded	PHEL	4	0.24	86	12	100	1.8
MN049	N597C2	Waucoma-Winneshiek complex, 6 to 12 percent slopes, moderately eroded	HEL	4	0.32	48	8	125	1.11
MN049	N598D2	Winneshiek-Waucoma complex, 12 to 18 percent slopes, moderately eroded	HEL	3	0.32	48	14	125	2.57
MN049	N598E	Winneshiek-Waucoma complex, 18 to 35 percent slopes	HEL	3	0.32	48	25	125	6.59
MN049	N599B	Winneshiek loam, sinkhole karst, 2 to 6 percent slopes	NHEL	3	0.32	48	4	125	0.44
MN049	N599C2	Winneshiek loam, sinkhole karst, 6 to 12 percent slopes, moderately eroded	HEL	3	0.32	48	8	125	1.11
MN049	N600C2	Eleva-Alvin complex, 6 to 12 percent slopes, moderately eroded	PHEL	4	0.24	86	12	100	1.8
MN049	N601C2	Oak Center-Hersey complex, 6 to 12 percent slopes, moderately eroded	HEL	5	0.37	56	8	100	0.99
MN049	N601D2	Oak Center-Hersey complex, 12 to 18 percent slopes, moderately eroded	HEL	5	0.37	56	14	100	2.29
MN049	N602A	Joy silt loam, 1 to 3 percent slopes	NHEL	5	0.28	56	2	250	0.33
MN049	N603C2	Lilah-Billett complex, 6 to 12 percent slopes, moderately eroded	HEL	3	0.2	86	15	100	2.56
MN049	N603D2	Lilah-Billett complex, 12 to 18 percent slopes, moderately eroded	HEL	3	0.2	86	15	100	2.56
MN049	N604B	Billett sandy loam, 2 to 6 percent slopes	NHEL	4	0.2	86	4	200	0.67
MN049	N604C2	Billett sandy loam, 6 to 12 percent slopes, moderately eroded	PHEL	4	0.2	86	8	100	0.99
MN049	N605B	Rasset sandy loam, strath terrace, 2 to 6 percent slopes	NHEL	4	0.2	86	4	200	0.67
MN049	N605C2	Rasset sandy loam, strath terrace, 6 to 12 percent slopes, moderately eroded	PHEL	4	0.2	86	8	125	1.11
MN049	N606A	Tama silt loam, sandy substratum, 0 to 3 percent slopes	NHEL	5	0.32	56	1	250	0.17
MN049	N607A	Meridian silt loam, 0 to 3 percent slopes	NHEL	4	0.32	56	2	250	0.33
MN049	N607C2	Meridian silt loam, 6 to 12 percent slopes, moderately eroded	HEL	4	0.32	56	12	100	1.8
MN049	N607D2	Meridian silt loam, 12 to 18 percent slopes, moderately eroded	HEL	4	0.32	56	12	100	1.8
MN049	N608A	Malardi loam, 0 to 3 percent slopes	NHEL	3	0.2	56	1	250	0.17
MN049	N608C2	Malardi loam, 6 to 12 percent slopes, moderately eroded	HEL	3	0.2	56	12	100	1.8
MN049	N609D	Hawick sandy loam, 12 to 18 percent slopes	HEL	3	0.2	56	12	100	1.8
MN049	N609E	Hawick sandy loam, 18 to 45 percent slopes	HEL	3	0.1	86	25	100	5.89
MN049	N610B	Waucoma loam, 2 to 6 percent slopes	NHEL	4	0.32	48	4	200	0.53
MN049	N611A	Calco silt loam, ponded, 0 to 1 percent slopes, frequently flooded	NHEL	5	0.28	86	0	250	0.3
MN049	N612A	Calco silt loam, 0 to 2 percent slopes, frequently flooded	NHEL	5	0.28	86	1	250	0.17
MN049	N613A	Calco-Udifluvents, loamy complex, 0 to 18 percent slopes, frequently flooded	NHEL	5	0.28	86	1	250	0.17
MN049	N614A	Kalmarville-Radford complex, 0 to 3 percent slopes, frequently flooded	NHEL	5	0.28	48	1	250	0.17
MN049	N615A	Otter silt loam, 0 to 2 percent slopes, occasionally flooded	NHEL	5	0.28	48	1	250	0.17

proposed home site

proposed home site

MN049	N616A	Littleton silt loam, 0 to 2 percent slopes, occasionally flooded	NHEL	5	0.28	48	1	250	0.17
MN049	N617A	Kennebec silt loam, 0 to 2 percent slopes, occasionally flooded	NHEL	5	0.28	48	1	250	0.17
MN049	N618A	McPaul silt loam, 0 to 3 percent slopes, frequently flooded	NHEL	5	0.32	86	2	250	0.33
MN049	N619A	Kennebec-Lawson, channeled, complex, 0 to 3 percent slopes, flooded	NHEL	5	0.32	48	1	250	0.17
MN049	N620B	Chaseburg silt loam, 2 to 12 percent slopes, frequently flooded	NHEL	5	0.37	56	3	200	0.48
MN049	N621B	Udifluvents, loamy, 2 to 12 percent slopes, frequently flooded	NHEL	4	0.2	56	4	200	0.67
MN049	N622A	Ankeny-Zumbro complex, 0 to 3 percent slopes, occasionally flooded	NHEL	5	0.15	134	2	250	0.33
MN049	N623B	Burkhardt sandy loam, 0 to 6 percent slopes	NHEL	3	0.2	86	2	200	0.25
MN049	N624B	Lilah sandy loam, 0 to 6 percent slopes	NHEL	3	0.2	86	2	200	0.25
MN049	N624C2	Lilah sandy loam, 6 to 12 percent slopes, moderately eroded	HEL	3	0.2	86	15	100	2.56
MN049	N625B	Coloma loamy sand, 0 to 6 percent slopes	NHEL	5	0.15	134	3	200	0.48
MN049	N626C	Plainfield loamy sand, 6 to 12 percent slopes	PHEL	5	0.17	134	12	125	2.02
MN049	N626D	Plainfield loamy sand, 12 to 18 percent slopes	PHEL	5	0.17	134	12	125	2.02
MN049	N627A	Billett fine sandy loam, 0 to 4 percent slopes	NHEL	4	0.24	86	2	250	0.33
MN049	N628A	Burkhardt sandy loam, very gravelly substratum, 0 to 3 percent slopes	NHEL	3	0.2	56	3	300	0.46
MN049	N629F	Mt. Carroll and Timula soils, 20 to 40 percent slopes	HEL	5	0.43	86	25	100	5.89
MN049	N630B	Schapville-Shullsburg complex, 2 to 6 percent slopes	PHEL	4	0.37	48	4	200	0.53
MN049	N630C2	Schapville-Shullsburg complex, 6 to 12 percent slopes, moderately eroded	PHEL	4	0.32	38	6	150	0.82
MN049	N631D2	Schapville silt loam, 12 to 18 percent slopes, moderately eroded	HEL	4	0.32	38	14	150	2.81
MN049	N631E	Schapville silt loam, 18 to 35 percent slopes	HEL	1	0.24	56	25	100	5.89
MN049	N632G	Brodale, flaggy-Schapville complex, 18 to 80 percent slopes	HEL	1	0.24	56	60	200	32.7
MN049	N633C2	Massbach silt loam, 6 to 12 percent slopes, moderately eroded	HEL	4	0.37	56	8	100	0.99
MN049	N633D2	Massbach silt loam, 12 to 18 percent slopes, moderately eroded	HEL	4	0.37	48	14	125	2.57
MN049	N634E	Massbach-Schapville complex, 18 to 35 percent slopes	HEL	4	0.37	48	20	125	4.56
MN049	N635B	Frankville-Nasset-Downs complex, 2 to 6 percent slopes	NHEL	4	0.37	48	4	200	0.53
MN049	N635C2	Frankville-Nasset-Downs complex, 6 to 12 percent slopes, moderately eroded	HEL	4	0.37	56	8	100	0.99
MN049	N635D2	Frankville-Nasset-Downs complex, 12 to 18 percent slopes, moderately eroded	HEL	4	0.37	48	14	125	2.57
MN049	N635E	Frankville-Nasset-Downs complex, 18 to 35 percent slopes	HEL	4	0.37	48	20	125	4.56
MN049	N636A	Houghton muck, ponded, 0 to 1 percent slopes	NHEL	3	0.02	134	0	250	0.3
MN049	N637B	Klossner muck, seepy, 1 to 8 percent slopes	NHEL	2	0.02	134	4	200	0.67
MN049	N638G	Brodale, flaggy-Bellechester complex, 30 to 70 percent slopes	HEL	5	0.17	134	60	200	32.7
MN049	N639F	Frontenac-Lacrescent complex, 20 to 45 percent slopes	HEL	4	0.32	48	55	200	29
MN049	N639G	Frontenac-Lacrescent complex, 30 to 70 percent slopes	HEL	4	0.32	48	55	200	29
MN049	N640G	Lacrescent, flaggy-Frontenac-Rock outcrop complex, 45 to 90 percent slopes	HEL	4	0.32	48	55	200	29
MN049	N641F	Brodale channery loam, 20 to 45 percent slopes, flaggy	HEL	5	0.17	56	25	100	5.89
MN049	N642E	Frankville-Nasset complex, Oneota formation, 18 to 35 percent slopes	HEL	4	0.37	48	20	125	4.56
MN049	N643B	Port Byron-Dinsmore complex, 2 to 6 percent slopes	NHEL	5	0.32	48	4	200	0.53
MN049	N643C2	Port Byron-Dinsmore complex, 6 to 12 percent slopes, moderately eroded	HEL	5	0.32	48	7	150	1.01
MN049	N644A	Abscota loamy sand, 0 to 3 percent slopes, occasionally flooded	NHEL	5	0.17	134	2	250	0.33

Driveway →